# **Testing Kits for Kinesiologists & Natural Therapists**

# Important note to Test Kit Customers, especially those who have purchased LWP kits in the past:

The pandemic (mainly 2020-2021) severly affected the supply of LWP Test Kits and the range went throughout a transition in 2022-23.

In essence there were 2 changes:

• the vial size change - from 10 x 40mm to 10 x 50mm - one cm longer

• the kits are now supplied with flat tray storage boxes (for kits with less 20 vials it may be optional to buy with or without a box - that being without a box is cheaper)

Note that our empty vials are still available (10 x 40mm and 11 x 40mm) that fit our previous bullet boxes (50 & 100 vials) and our 72 vial flat tray box.

Over this period the prices have flunctuated due to these changes and other matters, so this manual does carry any the prices as it once did - but go to our website for all the latest price details on kits.

Other details:

- Individual vials can be ordered but there is quite a wait for supply.
- Ongoing popular single vials & update vials are more readily available
- see website single vials page:

https://www.kinesiologyshop.com/single-testing-vials/

# Testing Kit Boxes & Empty Vials:

Our usual empty boxes are generally in good stock after the chaos of the pandemic: 50 vial bullet boxes style

100 vial bullet box style

72 vial brown flat cardboard tray style

See our Test Kit Accessories page on the website for details & prices: https://www.kinesiologyshop.com/test-kit-accessories/

# Pathology & Histology Testing Kits

A Range of Kinesiological Testing Kits for Anatomy & Pathologies of the Body Organs & Systems (contents lists page 3).

# www.kinesiologyshop.com - from there go to our test kits category

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# Overview of the range of Test Kits

For people interested in food sensitivity/allergy testing there are three extensive food kits and two food additive test kits. There are additional food test kits that have added over time that contain less common foods. Plus there is food phenolic kit and kits on themes such as milk & milk solids, vegetable oils, pluses and flours.

Environmental sensitivities can cause serious problems for some people and a wide range of chemicals can be found in the chemical and inhalant test kit, and industrial and environmental test kit 1 through 4. There are pesticides test kits plus moulds, pollens, animal hair etc. are covered in the two pollens kits.

There is also a dental test kit containing many of the substances used routinely in dental work, and a fragrance kit which covers some of the most common fragrances used in perfumes, personal care products and household products.

Some people have issues with vitamins, minerals or amino acids (the building blocks of protein). For these people nutritional test kit 1 & 2, a common metals test kit (for the minerals - however this kit also includes heavy metals) and the amino acid test kit.

Bacteria, viruses, fungi and parasites feature in a number of complementary test kits, giving a wide range of invasive organisms. The bacteria test kit particularly appropriate for people who have serious, long-standing respiratory problems. This test kit includes many organisms that are commensurable of the human body. This means that they are naturally present and are thought normally not to be harmful. However, for some people this is clearly not the case.

Although hormones, enzymes etc. are naturally occurring in the body, they can produce problems when the body does not adequately recognize them. This can result in hormonal or enzyme imbalance and a myriad of health problems. There are several kits relevant for this: hormones, digestive enzymes and the various body biochemical test kits.

There are two homeopathic test kits and some flower and gem remedy test kits. These provide a low-cost way of establishing which remedies a client needs to take, and they can also be used as part of kinesiology procedures too.

There are 22 pathology/histology kits . These contain vials of both healthy & diseased tissues. Please read the comments about their use at the beginning of the section that outlines these kits. There is also a separate histology kit containing most the healthy tissues from the 22 kits. Please be aware if you buy this kit and then subsequently buy any of the Histology/Pathology kits you will have a lot of duplicate vials.

# The Vials

The samples are in small glass vials. Glass is preferred because some people test unreliably through plastic. The Bach Flower test kit contains actual samples from one of the producers. The homeopathic test kits contain 2 tablets from a highly respected U.K. homeopathic supplier (Helios). These are in the potency 30C. The other samples are prepared radionically in the 30th homeopathic potency and so have (as far as we know) an indefinite shelf life.

The range consists of over 100 different kits. New ones are added from time to time as research and availability allow.

Many of the test kits contain energy patterns in brandy and water or just sterile-filtered water made up in homeopathic potencies generated using a homeopathic simulator. There are three main reasons for this. Food test kits, amino acids, essential oils etc. have a longer life in this form. Some of the Body Biochemicals have to kept frozen, when not in the homeopathic form. The vials are 1-ml glass vials, approximately a third full, ample for testing purposes.

# Storage

It is important to store these kits out of direct sunlight, away from strong smells (such as aromatherapy oils, herbs, etc.) and away from magnets. However, some practitioners use magnets in their testing procedures, and so far this has not caused any problem with the vials. Short exposure is OK, it is where you store the vials that is the main consideration. Such is also the case when traveling through airports etc. Think long term care with the vials, not short term experience.

There are no problems about storing different kits in the same box, although you might want to organise them in a particular way for other reasons, e.g. it is fine to store bacteria vials and flower remedies in the same box, although you might want to store all your flower remedies together for logical reasons.

Some people seem concerned about bacteria, parasite and similar vials in some way 'contaminating' other vials, because such vials have a 'bad' energy. This concern is completely unnecessary, and, in fact, labeling test kit vials as containing 'bad' or 'good' energies does not stand up to any scrutiny at all. There are many bacteria that are helpful to the human body, e.g. gut bacteria make some B vitamins and vitamin K; other bacteria help the skin maintain its protective acid mantle. Homeopathic remedies are often made from lethal substances, e.g. snake venom or a highly toxic metal. A homeopathic remedy made from a 'benign' substance can cause much upset when used inappropriately. Many flower remedies are made from highly toxic material, e.g. monkshood or mistletoe.

Perhaps more importantly, viewing vials as 'bad' can lead you subconsciously to be nervous of using these vials, thus depriving clients of the most efficient way to help them.

The energy of these vials should not be viewed as 'good' or 'bad', but merely as 'appropriate' or inappropriate' at this time for this person.

# Which Test Kits Should I Buy?

We sell over 100 test kits and, if you bought them all, it would cost you many thousands. Occasionally people do this, but for most it is not an option. So the question often asked is: Which kits should I buy first? There's no single answer to this, but below is some guidance by asking you questions:

# Do you have a method for correcting any problems you find?

If not at all, the first thing suggested it to buy the Energy Mismatch book and read that. (To use this book you need to have some method of testing, e.g. kinesiology or EAV.)

#### What type of people are you working with?

If the answer is children, you may look at buying Food Additive A, Food Additive B and Vaccination kits. If you mainly work with women, the best kits to buy are probably Personal Care, Hormones and Body Biochemicals 1, 2, 3, 4 and 5.

#### What interests you?

There are probably lots of different ways to achieve the same results with people, even just thinking in terms of test kits. So, if you're fascinated by allergy problems, think about buying Food A, B and C, Food Additives A and B, Chemical and Inhalants, Industrial and Environmental 1 and 2, and the Personal Care and Fragrance Kits.

If you're interested in 'bugs', consider Parasites 1 and 2, Virus, Bacteria and Fungus 1 and 2 & Lyme kits.

If you feel that no matter what the problem, it's important to get nutrition sorted out, choose Digestive Enzymes, Nutrition 1 and 2 and the Common Metals Kits. If your training and reading emphasise the importance of Candida, you will probably want to buy the Fungus 1 kit or the Candida Kit.

# Are you drawn to a particular test kit?

Sometimes people say they feel drawn to a particular test kit without being able to explain why. If you feel this way, it is recommended you buy the kit whatever it is.

Alternatively you could buy the most popular kits. Here's the favourite kits:

Hormones	Food Kits A, B & C
Vaccination	Pollens Dust & Moulds 1
Virus 1	Parasites 1
Invasive Organisms	Amino Acids
Common Metals (Metals & Minerals)	Lyme Plus Kit (more recently)

# If you have any queries please do not hesitate to email.

# Acupuncture Meridian Test Kit 14 vials

These energy signatures were produced originally by an experienced acupuncturist stimulating the meridian and taking an EAV reading.

- AM 01 Central Meridian
- AM 02 Governing Meridian
- AM 03 Stomach Meridian
- AM 04 Spleen Meridian
- AM 05 Heart Meridian
- AM 06 Small Intestine Meridian
- AM 07 Bladder Meridian
- AM 08 Kidney Meridian
- AM 09 Circulation-Sex/ Pericardium Meridian
- AM 10 Triple Warmer Meridian
- AM 11 Gall Bladder Meridian
- AM 12 Liver Meridian
- AM 13 Lung Meridian
- AM 14 Large Intestine Meridian

# Amino Acid Test Kit 21 vials

Energy patterns of the 20 main individual amino acids plus one mixed sample.

Amino acids are divided into essential (cannot be manufactured by the body and, therefore, must be taken in food) and non-essential. Amino acids are the building blocks of protein, including human protein.

#### Other amino acids are in the body biochemical kits.

In nature more than 100 amino acids are found, but only 20 are used in humans. The reason for this is that these 20 provide all the chemical and size groups needed to make a very large number of proteins. (Once again nature or God is being economical.) These 20 different amino acids join up in a variety of ways to make approximately 250,000 different human proteins. The same amino acid can occur many times along a chain making up a specific protein.

Proteins consist of amino acids that always contain carbon, hydrogen, oxygen and nitrogen. Proteins are giant molecules made by linking large numbers of amino acids, end to end, so they form a chain.

# A1 Arginine

Stimulates human growth hormone which stimulates defence function; accelerates wound healing; detoxifying ammonia; normal sperm count; glucose control mechanism in blood; enhances fat metabolism; involved in insulin production; arthritis; inhibition of tumour development; premature ageing; overweight; fatigue; memory.

#### A2 Aspartic Acid

Protects liver; detoxification of ammonia; promotes uptake of trace elements in the gut; involved in the energy cycle; involved in transportation of magnesium and potassium to cells; fatigue.

#### A3 Carnitine

Sperm motility; protects heart; major role in transferring fatty acids into cells where used as energy sources; mobilising fatty deposits in obesity; removal of ketones from blood; reduction of triglycerides in the blood; reduces surface fats in cellulite; circulatory problems; fatigue; muscle weakness; alcohol damage to liver; glucose tolerance in diabetics; cardiac disease; angina.

# A4 Citrulline

Can be made from ornithine by body; can be converted in body to arginine; detoxifies ammonia (nitrogen) in blood; fatigue; stimulates immune system.

#### A5 Cyseine

Derived from methionine or serine in the liver; powerful antioxidant; major detoxifying agent; part of glucose tolerance factor; using B6; strength of hair; factor in insulin production; most chronic diseases; removing heavy metals; protects against alcohol, cigarette smoking and pollution; in iron deficiency; prevention of cataracts.

# A6 Cystine

Part of insulin molecule; heavy metal chelator; psoriasis; eczema; tissue healing after surgery.

# A7 Glutamine

Dominant amino acids in cerebro-spinal fluid and serum; passes through blood/brain barrier; powerful "brain fuel"; gives rise to GABA which is a calming agent; helps maintain body's nitrogen level; used in production of other non-essential amino acids; protects from alcohol; reduces desire for alcohol and sometimes sugar; heals peptic ulcers; depression; blunts carbohydrate craving; hypoglycaemia; schizophrenia; senility; fatigue; memory improvement; concentration; smoking.

# A8 Glutathione

Inhibits free radical damage to fat cells; retards ageing process; neutralises petro-carbons and chlorine; detoxifying; in short supply in diabetics; protects liver against alcohol; protects against radiation; chelates heavy metals; regression of tumours in animals; arthritis; skin problems.

#### A9 Histidine

Metabolised into histamine which is important for smooth muscle function and contraction and expansion of blood vessels; sexual arousal; auditory nerve function; stimulates production of red and white blood cells; schizophrenia; protects against radiation damage; chelates toxic metals; rheumatoid arthritis; digestive tract ulcers; nausea during pregnancy; hearing problems; allergies; anxiety; low stomach acid; smoking.

# A10 Isoleucine

Chronically sick; formation of haemoglobin; energy production; reduces tremors and twitching in animals; body building.

# A11 Leucine

Chronically sick; essential for growth; wound healing of skin and bones; energy production; Parkinson's disease; enhances effects of endorphins.

# A12 Lysine

Often low in vegetarian diets; important for children's growth and development; involved in synthesis of carnitine, so important in fat metabolism; formation of antibodies; dietary deficiency leads to increased calcium excretion; herpes simplex; concentration; fatigue; dizziness; anaemia; visual disorders; nausea; hypoglycaemia.

# A13 Methionine

Antioxidant preventing free radical damage; helps produce choline, adrenaline, lecithin and B12; assists gallbladder function; precursor of taurine, cystine and cysteine. Heavy metal and histamine detoxifier; strengthens hair follicles; detoxifies liver; affects selenium bio-availability; arthritic and rheumatoid symptoms; detoxification; antioxidation; retards cataracts; Parkinson's disease; schizophrenia; gallbladder problems resulting from use of contraceptive oestrogen; poor skin tone; hair loss; anaemia; retarded protein synthesis; atherosclerosis; herpes; memory; premature ejaculation.

# A14 Ornithine

Stimulates growth hormone production by pituitary gland; increases metabolism of fat and enhances transportation of amino acids to cells; ammonia detoxification in urea cycle; enhances wound healing; stimulates immune system; may be useful in auto immune diseases; memory.

# A15 Phenylalanine

Precursor of tyrosine and therefore dopamine, norepinephrine (noradrenaline) and epinephrine (adrenaline), so affects heart rate, blood pressure, oxygen consumption, blood sugar levels, fat metabolism; important for brain; necessary for thyroid; shortage predisposes children to eczema; weight control; antidepressant; pain killer; MS; Parkinson's disease; memory; concentration and mental alertness; rheumatoid arthritis; vitiligo; emotional disorders; circulatory problems; drug addiction; tremors.

# A16 Taurine

Interacts with bile salts to maintain their solubility and cholesterol; helps conserve potassium and calcium in the heart muscle; influences insulin and blood sugar levels; increase needed under stress; helpful in some types of epilepsy; gallbladder disease; eye problems; atherosclerosis; angina; circulation; tremors; compromised immune function; claimed to enhance IQ in Downs syndrome children.

# A17 Threonine

Necessary for formation of teeth enamel protein, elastin and collagen; minor role controlling fat build up in liver; precursor of glycine and serine; immune stimulating as promotes thymus growth and activity; digestive and intestinal tract functioning; indigestion; malabsorption; irritability; personality disorders.

# A18 Tryptophan

Synthesis of B3; precursor of serotonin; mood stabiliser; vascular migraine, anti depressant; weight control; sleep enhancer; menopausal depression; pain killer; restless leg syndrome; rheumatoid arthritis; tardive dyskinesia; mental disturbances, depression, brittle finger nails; poor skin colouring and tone; indigestion; carbohydrate craving. May aggravate bronchial asthma and lupus.

# A19 Tyrosine

Derived from phenylalanine; precursor of thyroid hormones, dopa, dopamine, norepinephrine and epinephrine; aids normal brain function; Parkinson's disease; depression; increasing brain neurotransmitter levels; alleviating hay fever and grass allergies; drug addiction; tremors; low blood pressure.

# A20 Valine

Helpful in treating addictions; deficiency may affect myelin covering of nerves; energy; muscle building and co ordination; liver and gallbladder disease; mental function; nervousness; poor sleep patterns; excess gives skin crawling sensations and hallucinations.

# A21 Lamberts Protein Deficiency Formula

Contains alanine, arginine, aspartic acid, cysteine, cytrulline, glutamic acid, glutamine, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tyrosine, taurine, valine.

# Anaesthetic & Pain Test Kit 48 vials

Drugs used in anaesthesia (local, general, epidural) and also sometimes for pain including Codeine, Bupivacaine, Diamorphine, Diazepam, Fentanyl, Levobupivacaine, Ketamine and Procaine.

# AN1 Alfentanil

Used for anaesthesia in surgery Other Names: Alfentanil General Anaesthetic

# AN2 Amethocaine

Mainly used topically in ophthalmology and as an antipruritic, also used in spinal anaesthesia. Other Names:Tetracaine, Pontocaine, Dicaine Local Anaesthetic

# AN3 Bupivacaine

Often is administered by epidural injection before total hip arthroplasty. Injected into surgical wound sites to reduce pain for up to 20 hours after the surgery.

Other Names: Marcain, Marcaine, Sensorcaine, Vivacaine

Local and Epidural Anaesthetic

# AN4 Buprenorphine

For pain relief. Other Names: Subutex, Suboxone, Temgesic, Buprenex, Norspan and Butrans Pain Relief

# AN5 Butorphanol

For balanced general anaesthesia, and management of pain during labour. Management of migraine using intranasal spray. General Anaesthetic and other uses.

# AN6 Chloroprocaine

Given by injection during surgical procedures and labour and delivery. Other Names: Nesacaine, Nesacaine-MPF Local Anaesthetic

# AN7 Citanest with Octapressin

Used in dentistry. Local Anaesthetic

# AN 8 Clonidine

Tratment of some types of neuropathic pain, opioid detoxification, insomnia, menopausal symptoms, anxiety, panic disorder and ADHD. Also used as a veterinary anaesthetic drug. Pain Relief

# AN9 Cocaine

Mainly used for nasal and lacrimal duct surgery. Local Anaesthetic

# AN10 Codeine / 3-Methylmorphine

Used to treat mild to moderate pain and to relieve coughing. Pain Relief

# AN11 Desflurane

Determined to be damaging to the kidneys and liver in 1973, so usage stopped except for in Australia where still used as an emergency analgesic, and for brief painful procedures such as changing of wound dressings or for transport of injured people.

General Inhaled Anaesthetic

# AN12 Dexmedetomidine

Used for sedation of critically ill or injured patients in an intensive care unit setting. Also sedation before surgery for short-term procedures. Other Names: Precedex

# AN13 Diamorphine / Heroin / Diacetylmorphine

Typically used to treat severe pain, such as that resulting from a heart attack. Pain Relief

# AN14 Diazepam

Used before certain medical procedures (such as endoscopies) to reduce tension and anxiety, and in some surgical procedures to induce amnesia. Used for treating anxiety, insomnia, seizures, muscle spasms, alcohol and benzodiazepine withdrawal, etc. Other Names: Valium, Antenex General Intravenous Anaesthetic

# AN15 Dibucaine

Used in a cream to treat signs of hemorrhoids or rectal irritation and to ease the pain caused by sunburn and skin irritation. Other Names: Cinchocaine, Cincain, Nupercainal, Nupercaine, Sovcaine Local Anaesthetic

# AN16 Enflurane

Commonly used during the 1970s and 1980s. General Inhaled Anaesthetic

# AN17 Etomidate

A short acting anaesthetic used for the induction of general anaesthesia and for sedation for short procedures. Other Names: Amidate General Intravenous Anaesthetic

# AN18 Fentanyl

Has been used to treat breakthrough pain and is commonly used in pre-procedures as a pain reliever as well as an anaesthetic in combination with a benzodiazepine. Other Names: Sublimaze, Actiq, Durogesic, Dura-

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gesic, Fentora, Onsolis, Instanyl, Abstral, Lazanda General Intravenous Anaesthetic

# AN19 Halothane

A core medicine in the World Health Organization's "Essential Drugs List, although its use in developed countries has been almost entirely superseded by newer anaesthetics. General Inhaled Anaesthetic

# AN20 Hydromorphone /Dihydromorphinone

Used to relieve moderate to severe pain and severe, painful dry coughing

Other Names: Hydal, Dimorphone, Sophidone LP, Dilaudid, Hydrostat, Hydromorfan, Hydromorphan, Hymorphan, Laudicon, Hymorphan, Opidol, Palladone

Injections, tablets, syrup, suppositories

# AN21 Isoflurane

Use in human medicine is now starting to decline, but still frequently used for veterinary anaesthesia. General Inhaled Anaesthetic

# AN22 Ketamine

Used for the induction and maintenance of general anaesthesia, usually in combination with a sedative.

Other Names: Ketanest, Ketaset, Ketalar General Intravenous Anaesthetic

# AN23 Levobupivacaine

Used for nerve blocks, ophthalmic, epidural and intrathecal anaesthesia in adults; and local analgesia in children.

Other Names: Chirocaine Local Anaesthetic

# AN24 Levorphanol

Used to treat severe pain Other Names: Levo-Dromoran

# AN25 Lidocaine

Used as a dental anaesthetic or as a local anaesthetic for minor surgery. Often combined with Prilocaine as a preparation for dermal anaesthesia. Other Names: Xylocaine, Lignocaine Local and Epidural Anaesthetic

# AN26 Lignospan with Adrenalin

Used in dentistry. Local Anaesthetic

# AN27 Lorazepam

Used as premedication and for the short-term treatment of anxiety, insomnia, acute seizures including status epilepticus and sedation of hospitalised patients, as well as sedation of aggressive patients.

Other Names: Ativan, Temesta General Intravenous Anaesthetic

# AN28 Mepivacaine

Used in dentistry. Other Names: Carbocaine, Polocaine Local Anaesthetic

# AN29 Methohexital

Has been commonly used to induce deep sedation, "twilight sleep" or general anaesthesia for oral surgery and dentistry. It is also used to induce anaesthesia prior to ECT (electroconvulsive therapy). Other Names: Brevital General Intravenous Anaesthetic

# AN30 Methoxyflurane

Used from 1960 until around 1974. Other Names: Penthrane General Inhaled Anaesthetic

# AN31 Midazolam

Used as a premedication. And also for treatment of acute seizures, moderate to severe insomnia, and for inducing sedation and amnesia before medical procedures.

Other Names: Dormicum, Hypnovel, Versed General Intravenous Anaesthetic

# AN32 Morphine

Used to relieve severe or agonizing pain and suffering.

Other Names: MS Contin, MSIR, Avinza, Kadian, Oramorph, Roxanol, Kapanol Can be used as epidural

# AN33 Nalbuphine

For the relief of moderate to severe pain. It can also be used as a supplement to balanced anaesthesia, for preoperative and postoperative analgesia, and for obstetrical analgesia during labour and delivery.

Other Names: Nubain

# AN34 Nitrous Oxide

Used in surgery and dentistry. Other Names: Laughing Gas, Sweet Air General Inhaled Anaesthetic

# AN35 Oxycodone

Effective for managing moderate to moderately severe acute or chronic pain Pain Relief

# AN36 Oxymorphone

A preoperative medication to alleviate apprehension, maintain anaesthesia, and as an obstetric analgesic

Other Names: Opana, Numorphan, Numorphone

# AN37 Pentazocine

Used to treat moderate to moderately severe pain Other Names: Fortral, Talwin NX

# AN38 Pethidine / Meperidine

Used for the treatment of moderate to severe pain.

Other Names: Demerol, isonipecaine, lidol, pethanol, piridosal, Algil, Alodan, Centralgin, Dispadol, Dolantin, Mialgin, Petidin Dolargan, Dolestine, Dolosal, Dolsin, Mefedina

In tablets, as a syrup, or by intramuscular or intravenous injection.

#### AN39 Prilocaine

Used in dentistry. Also often combined with Lidocaine as a preparation for dermal anaesthesia. Other Names: Citanest Local Anaesthetic

# AN40 Procaine

Used primarily to reduce the pain of intramuscular injection of penicillin; used to be used in dentistry. Other Names: Novocain, Novocain Local Anaesthetic

# AN41 Propofol

Uses include the induction and maintenance of general anaesthesia, sedation for mechanically ventilated adults, and procedural sedation. Commonly used in veterinary medicine. Other Names: Diprivan General Intravenous Anaesthetic

#### AN42 Remifentanil

Given to patients during surgery to relieve pain and as an adjunct to an anaesthetic. Other Names: Ultiva General Intravenous Anaesthetic

#### AN43 Ropivacaine

Used for nerve block, epidural and intrathecal anaesthesia in adults and children over 12 years. It is also indicated for peripheral nerve block and caudal epidural in children 1–12 years for surgical pain. Other Names: Naropin Local and Epidural Anaesthetic

# AN44 Scandonest 3% plain

Used in dentistry. Local Anaesthetic

# AN45 Sevoflurane

Used for induction and maintenance of general anaesthesia. Other Names: Fluoromethyl Hexafluoroisopropyl Ether General Inhaled Anaesthetic

#### AN46 Sufentanil

Used when pain relief is required for a short period of time. May also be used with other compounds in general anaesthesia. Other Names: R-30730, Sufenta General Intravenous Anaesthetic

#### AN47 Thiopental

Rapid-onset short-acting barbiturate general anaesthetic. A core medicine in the World Health Organization's "Essential Drugs List", which is a list of minimum medical needs for a basic healthcare system.

Other Names: Sodium Pentothal, Thiopentone Sodium, Trapanal General Intravenous Anaesthetic

#### AN48 Xenon

Although it is expensive, anaesthesia machines that can deliver xenon are about to appear on the European market, because advances in recovery and recycling of xenon have made it economically viable, although rarely used. General Inhaled Anaesthetic

# Animals: Canine Test Kit 60 vials

A range of vials specifically related to dogs, including healthy tissues, diseases, tumours, parasites, vaccinations and others.

- AC 01 Bladder Healthy Tissue
- AC 02 Cardiac Muscle Healthy Tissue
- AC 03 Duodenum Healthy Tissue
- AC 04 Ileum Healthy Tissue
- AC 05 Kidney Healthy Tissue
- AC 06 Liver Healthy Tissue
- AC 07 Lymph Node Healthy Tissue
- AC 08 Oesophagus/Esophagus Healthy Tissue

AC 09 Pyloric stomach Healthy Tissue

#### AC 10 Basal Cell Carcinoma Tumour

Develop at the outer layer of skin; fairly common, especially in middle-aged and older animals; usually benign, but occasionally malignant.

#### AC 11 Histiocytoma Tumour

A benign skin tumour that originates in the Langerhans cells, immune cells that function to provide protective immunity to the tissues that are in contact with the outer environment -- the nose, stomach, intestines and lungs, but mainly the skin's surface.

AC 12 Mammary Cancer Tumour

#### AC 13 Keratoacanthoma Tumour

Benign tumour of the hair follicle.

#### AC 14 Mast Cell Tumour Tumour

Tumour on or under the skin. Boxers, bulldogs, pugs, and Boston terriers appear to be more susceptible than other breeds.

# AC 15 Melanoma Tumour

Can be either malignant or benign; common sites are mouth or toes. Male dogs and some breeds (Scottish terriers, Cocker Spaniels, Gordon Setters, Chow Chows, and Golden retrievers) appear to be more susceptible.

# AC 16 Osteocarsoma Tumour

The most common bone tumour found in dogs. Bone cancer can affect any breed of dog, but it is more commonly found in the larger breeds.

#### AC 17 Sebaceous Adenoma Tumour

Benign tumour of the skin.

# AC 18 Squamous Cell Carcinoma Tumour

Malignant skin cancer.

#### AC 19 Distemper / Hardpad Nosode

Affects the gastrointestinal, respiratory, and central nervous systems; can cause an abnormal enlargement or thickening of the pads of an animal's feet.

# AC 20 Hepatitis, Canine Nosode

An acute liver infection in dogs caused by canine adenovirus type-1 (CAV-1); spread in the faeces, urine, blood, saliva, and nasal discharge of infected dogs.

# AC 21 Kennel Cough / Infectious Tracheobronchitis Nosode

Respiratory infection caused by Bordetella bronchiseptica and canine parainfluenza virus. These pathogens attack the cilia lining the respiratory tract and cause inflammation of the upper airway.

AC 22 Kennel Cough, Distemper, Leptospirosis, Parvovirus Infection, Hardpad and Hepatitis Nosode

#### AC 23 Ringworm Nosode

# AC 24 Canine Parvovirus Type 2 / CPV2 Virus

A highly contagious virus that causes acute gastroenteritis.

#### AC 25 Microsporum Canis Fungus

Common cause of ringworm; 20% of ringworm cases in the USA are due to this organism.

#### AC 26 Microsporum Gypseum Fungus

Very common cause of ringworm; 70% of ringworm cases in the USA are due to this organism.

#### AC 27 Trichophyton mentagrophytes Fungus

Causes ringworm; 10% of ringworm cases in the USA are due to this organism.

#### AC 28 DHLPPi Vaccination Vaccination

Against Canine Distemper, Hepatitis, Leptospirosis, Parvovirus and Parainfluenza.

#### AC 29 DHPPi Vaccination Vaccination

Against Canine Distemper, Hepatitis, Parvovirus and Parainfluenza.

#### AC 30 Leptospirosis Vaccination Vaccination

Leptosirosis is caused by a bacteria spread through soil, water, and the urine of infected animals, and if not caught early it can be deadly.

#### AC 31 Kennel Cough Vaccination Vaccination

AC 32 Lyme Disease Vaccination Vaccination

AC 33 Parvovirus Vaccination Vaccination

AC 34 Rabies Vaccination Vaccination

#### AC 35 Ancylostoma Caninum / Hookworm, Adult Parasite

One of the most common intestinal parasites; found in warm and temperate climates. Can cause severe disease including aneemia and serious diarrhoea; growth in young animals is stunted, and the hair coat may appear dull and dry. In severe infestations, animals may cough. or develop pneumonia.

#### AC 36 Angiostrongylus Vasorum / Dog Lungworm / French Heartworm Parasite

Usually causes progressively worsening signs of cardiac and respiratory disease, as well as causing haemorrhages in lungs, liver, intestine, eyes and spinal cord; if left untreated, it can be fatal in severe cases.

#### AC 37 Babesia Canis Parasite

Fever, weakness, lethargy, pale gums and tongue, red or orange urine, jaundice, enlarged lymph nodes and enlarged spleen.

# AC 38 Babesia Gibsoni Parasite

Fever, weakness, lethargy, pale gums and tongue, red or orange urine, jaundice, enlarged lymph nodes and enlarged spleen.

# AC 39 Babesia Vulpes / Babesia Microti / Theieria Microti Parasite

Anemia as the immune system destroys infected red blood cells, but Babesia can have other effects throughout the body as well. Found in North America and Europe.

# AC 40 Clonorchis Sinensis Parasite

Clinical signs in dogs are usually absent, but migration of immature flukes can cause acute hepatitis and pancreatitis. Mainly S E Asia.

# AC 41 Cryptosporidium Parvum Parasite

Causes fever and diarrhoea; dogs may also display intolerance for food, exhibit lethargy, intolerance for exercise and weakness.

# AC 42 Ctenocephalides Canis / Dog Flea Parasite

Causes fever and diarrhoea; dogs may also display intolerance for food, exhibit lethargy, intolerance for exercise and weakness. Found worldwide.

#### AC 43 Demodex Canis / Dog Mange Mite Parasite

Microscopic normal inhabitants of dog skin; usually not a problem, but sometimes leads to the skin condition mange or demodicosis.

# AC 44 Dipylidium Caninum / Tapeworm, Eggs, Immature and Mature Proglottid Parasite

Most common tapeworm in dogs; in puppies heavy tapeworm infestation can cause lack of growth, anaemia and occasionally intestinal blockages; dogs may scoot anus across the ground because of the irritation.

#### AC 45 Dirofilaria Immitis / Dog Heartworm Parasite

Causes damage to heart and lungs, usually as a result of a bite from an infected mosquito.

# AC 46 Echinococcus Granulosus / Hydatid Worm / Hyper Tape-Worm / Dog Tapeworm Parasite

Symptoms include itching / licking around the anus, weight loss, lethargy and painful abdomen; distributed world-wide. It is especially prevalent in parts of Eurasia, north and east Africa, Australia, and South America.

# AC 47 Echinococcus Multilocularis / Tapeworm Parasite

Mostly without clinical signs, unless in case of very heavy infections, which are unusual.

#### AC 48 Giardia Lamblia, Cysts and Trophozoites Parasite

Causes diarrhoea, although majority of dogs are symptom-free.

#### AC 49 Heterodoxus Spiniger / Dog Chewing Louse Parasite

Female lice attach their eggs (nits) to the hairs of the host dog; once hatched the nymphs, bite and feed on blood. Lice can also feed on dead skin and hair. This feeding activity affects the dog by causing hair loss, reduced skin integrity and itching.

#### AC 50 Isospora Spp./Cystoisospora Spp., Oocysts and Adult Parasite

infect the intestines in dogs and can cause disease (intestinal or enteric coccidiosis); can cause bloody or watery diarrhea, weight loss, dehydration, and, in more serious cases, anorexia, vomiting, and depression. In severe cases, intestinal coccidiosis can be fatal.

#### AC 51 Leishmania Donovani Parasite

Symptoms may include sores, loss of weight, bald patches, conjunctivitis, , nasal discharge, muscular atrophy, inflammation, swelling, and organ failure, including mild heart attacks.

#### AC 52 Otodectes Cynotis / Ear Mite Parasite

Tiny parasite that lives out their life cycle mostly inside the ear canal. They are quite common and can cause severe irritation and itchiness of the ears.

#### AC 53 Sarcoptes Scabiei Parasite

A highly contagious mite infestation, causing intense itching.

#### AC 54 Strongyloides Stercoralis Parasite

Symptoms include rash, cough, diarrhoea, blood and mucous in stools.

#### AC 55 Taenia Psiformis / Tapeworm Parasite

Normally no clinical signs seen for low to moderate infections; in highly infected cases the dog will experience blockage in the intestines.

#### AC 56 Toxascaris Leonina, Egg and Larvae Parasite

A common parasitic roundworm; may show no symptoms; may have diarrhoea, vomiting, loss of appetite, experience thinning, dull coats, and in puppies, can develop distended abdomens.

# AC 57 Toxocara Canis / Dog Roundworm, Cysts and Trophozoites Parasite

Can be fatal in puppies, but adult dogs are usually symptom-free.

#### AC 58 Trichodectes Cani / Dog Biting Louse / Canine Chewing Louse Parasite

Found throughout the world; often asymptomatic, but can be very irritating in heavy infestations; may be a carrier of dog tapeworm.

#### AC 59 Trichuris Trichiura Parasite

May be symptom free; weight loss, diarhoea, mucous or blood in the stools and anaemia.

# AC 60 Trichuris Vulpis / Whipworm, Eggs Parasite

Eggs hatch in small intestine, and dog asymptomatic; in adult form causes bloody diarrhoea, weight loss, dehydration, and anaemia.

# Animals: Equine Test Kit 30 Vials

# Healthy and diseased tissues, virus, vaccinations and parasites.

AE 01	Kidney	Healthy Tissue	
AE 02	Testicle	Healthy Tissue	
AE 03	Uterus	Healthy Tissue	
AE 04	Equine Melanoma	Tumour	The third most common type of skin cancer in horses.
AE 05	Equine Sarcoid	Tumour	the most common skin tumour in horses and ponies and, although they may look like warts, they are locally destructive and are therefore considered by many vets as a form of skin cancer.
AE 06	Equine Herpes	Nosode	Highly contagious.
AE 07	Equine Toxoplasma	Nosode	Usually occurs without symptoms.
AE 08	Glanders/Farcy	Nosode	Caused by infection with the bacterium Bur- kholderia mallei; symptoms include nodular lesions in the lungs and ulceration of the mucous membranes in the upper respira- tory tract. The acute form results in cough- ing, fever, and the release of an infectious nasal discharge, followed by septicaemia and death within days. In the chronic form, nasal and subcutaneous nodules develop, eventually ulcerating. Death can occur with- in months, while survivors act as carriers.
AE 09	Grease / Dermatitis Verrucosa / Seborrheic Dermatitis / Mud Fever	Nosode	Dermatitis of the heel that occurs in spring and autumn.
AE 10	Equine Streptococcus	Bacteria	Causes Strangles, upper respiratory tract inflammation, a muco-purulent nasal dis- charge, and inflammation of the regional lymph nodes, followed by abscesses; highly contagious, and horses can be carriers and shed the infection, although they them- selves may show no outward clinical signs.
AE 11	Equine Herpesvirus 1	Virus	Causes rhinopneumonitis; the most impor- tant viral cause of respiratory infection in foals; causes a lifelong latent infection in affected animals.
AE 12	Equine Herpesvirus 4	Virus	Causes rhinopneumonitis; the most impor- tant viral cause of respiratory infection in foals; causes a lifelong latent infection in affected animals.
AE 13	Equine Papilloma Virus	Virus	Causes warts.
AE 14	Equine Ehrliche Risticii Vacc	Vaccination	Vaccine against Potomac Horse Fever.
AE 15	Equine Encephalo-Myelitis & Tetanus Vaccination	Vaccination	Equine Encephalomyelitis (Eastern,Western, Venezuelan, killed virus) & Tetanus Vaccine
AE 16	Equine Flu & Tetanus Vacc	Vaccination	ProteqFlu
AE 17	Equine Influenza (A1/A2) Vacc	Vaccination	Vaccine made from killed A1 and A2 strains of the equine influenza virus

AE 18	Equine Rhino-Pneumonitis	Vaccination	Herpes 1/4"EquiVac EHV-1/4") Equine Rhinopneumonitis vaccine made from killed strains of type 1 and type 4 viruses.
AE 19	West Nile Equine Vaccination	Vaccination	
AE 20	Anoplocephala Magna	Parasite	Tapeworm; In light infections, no signs of disease are present; in heavy infections, GI disturbances may be seen. Failure to thrive and anaemia may also occur.
AE 21	Anoplocephala Perfoliata	Parasite	Tapeworm; In light infections, no signs of disease are present; in heavy infections, GI disturbances may be seen. Failure to thrive and anaemia may also occur.
AE 22	Cyathostome Spp.	Parasite	May cause lethargy, sudden weight loss, debilitation, and diarrhoea.
AE 23	Draschia Spp.	Parasite	Produces tumour-like enlargements filled with necrotic material and a large number of worms; the enlargements are covered by intact epithelium, except for a small open- ing through which the eggs pass. Rarely, these nodules rupture and cause fatal peritonitis.
AE 24	Habronema Spp.	Parasite	Produces tumour-like enlargements filled with necrotic material and a large number of worms; the enlargements are covered by intact epithelium, except for a small open- ing through which the eggs pass. Rarely, these nodules rupture and cause fatal peritonitis.
AE 25	Oxyuris Equi	Parasite	Chronically infected horses have a very poor appearance and may cause severe irritability and itching. Severe cases can lead to nervousness and anorexia. Rubbing and scratching at the perianal region cause irritation, dull hair coat, and loss of hair.
AE 26	Strongylus Edentatus	Parasite	In mild cases can cause diarrhoea, weak- ness and anaemia if there is significant blood loss, and abdominal discomfort; in severe cases can show signs of having severe colic, rupture of the intestines, and death.
AE 27	Strongylus Equinus	Parasite	In mild cases can cause diarrhoea, weak- ness and anaemia if there is significant blood loss, and abdominal discomfort; in severe cases can show signs of having severe colic, rupture of the intestines, and death.
AE 28	Strongylus Vulgaris	Parasite	Common parasite; in mild cases can cause diarrhoea, weakness and anaemia if there is significant blood loss, and abdominal discomfort; in severe cases can show signs of having severe colic, rupture of the intes- tines, and death.
AE 29	Trichostrongylus	Parasite	Produce a chronic catarrhal gastritis, which may result in weight loss.
AE 30	Tridontophorus	Parasite	May cause ulceration of the colon.

# Animals: Feline Test Kit ONE 85 Vials

# Histology and pathology specifically related to domestic cats. Please note these tissues come from cats, not other animals or humans. Also available is Feline Kit 2 - see following pages

AF1 01	Adrenal Gland	Healthy Tissue	
AF1 02	Artery & Vein, Small	Healthy Tissue	
AF1 03	Bladder	Healthy Tissue	
AF1 04	Cardiac Muscle	Healthy Tissue	An involuntary, striated muscle that is found in the walls of the heart.
AF1 05	Cardio-Oesophageal Junc- tion	Healthy Tissue	The abrupt transition from oesophageal mucosa to that of the cardiac portion of stomach, demar- cated internally in the living by the z-line, and ap- proximated externally by the cardiac notch.
AF1 06	Cerebellum	Healthy Tissue	Involved in physical coordination, balance and posture.
AF1 07	Cerebral Cortex	Healthy Tissue	Plays a key role in memory, attention, perception, cognition, awareness and thought.
AF1 08	Corneo-Sclerotic Junction	Healthy Tissue	Junction between cornea and sclera.
AF1 09	Diaphragm, Striated Muscle	Healthy Tissue	
AF1 10	Duodenum	Healthy Tissue	First section of small intestine.
AF1 11	Epididymis	Healthy Tissue	A tube located at the back of the testicles that stores and carries sperm.
AF1 12	Fundic Gland	Healthy Tissue	Found in the fundus and body of the stomach. They are simple almost straight tubes, two or more of which open into a single duct. Oxyntic means acid-secreting and they secrete hydrochlo- ric acid (HCI) and intrinsic factor.
AF1 13	Gall Bladder	Healthy Tissue	
AF1 14	Ganglion, Autonomic	Healthy Tissue	A cluster of nerve cell bodies (a ganglion) in the autonomic nervous system.
AF1 15	Ganglion, Spinal	Healthy Tissue	
AF1 16	Head, Foetal	Healthy Tissue	
AF1 17	lleum	Healthy Tissue	Third portion of small intestine.
AF1 18	Intestine, Columnar Epithe- lium	Healthy Tissue	These cells secrete mucous for lubrication.
AF1 19	Intestine, Involuntary Muscle	Healthy Tissue	Muscles that relax and contract to move food down the intestine.
AF1 20	Jaw, Kitten	Healthy Tissue	
AF1 21	Jejunum	Healthy Tissue	Second part of small intestine.
AF1 22	Kidney	Healthy Tissue	
AF1 23	Large Intestine	Healthy Tissue	
AF1 24	Lip, Tactile Papillae	Healthy Tissue	Nerve endings in lips giving a sense of touch.
AF1 25	Liver	Healthy Tissue	
AF1 26	Liver and Bile Capillaries	Healthy Tissue	
AF1 27	Lung	Healthy Tissue	
AF1 28	Lung, Foetal	Healthy Tissue	
AF1 29	Lymph Gland	Healthy Tissue	

AF1 30	Lymph Gland, Reticular Cells	Healthy Tissue	The reticular cell network distributes key mole- cules and provides a structure for immune cells to move around on. (During infections, the network can suffer damage.)
AF1 31	Mammary Gland, Active	Healthy Tissue	Lactating breast.
AF1 32	Medulla Oblongata	Healthy Tissue	Located in the brainstem; responsible for auto- nomic (involuntary) functions ranging from vomit- ing to sneezing.
AF1 33	Mesentery	Healthy Tissue	A fold of the peritoneum which attaches the stom- ach, small intestine, pancreas, spleen, and other organs to the posterior wall of the abdomen.
AF1 34	Muscle, Skeletal	Healthy Tissue	
AF1 35	Nerve	Healthy Tissue	
AF1 36	Oesophagus / Esophagus	Healthy Tissue	Also known as food pipe or gullet.
AF1 37	Olfactory Epithelium, Kitten	Healthy Tissue	A specialised epithelial tissue inside the nasal cavity that is involved in smell.
AF1 38	Olfactory Mucosa	Healthy Tissue	Located in the upper region of the nasal cavity and is made up of the olfactory epithelium and the underlying lamina propria, connective tissue containing fibroblasts, blood vessels, Bowman's glands and bundles of fine axons from the olfac- tory neurons.
AF1 39	Optic Nerve	Healthy Tissue	
AF1 40	Ovary	Healthy Tissue	
AF1 41	Pancreas	Healthy Tissue	
AF1 42	Pancreas, Kitten	Healthy Tissue	
AF1 43	Pancreas, Pacinian / La- mellar Corpuscle, Nerve Endings	Healthy Tissue	Pancian corpuscle cells detect vibration and pos- sibly very low frequency sounds.
AF1 44	Parathyroid	Healthy Tissue	Four small glands in the neck that control the body's calcium levels.
AF1 45	Parotid Gland / Salivary Gland	Healthy Tissue	Makes saliva.
AF1 46	Pars Optica Retinae	Healthy Tissue	The posterior part of the retina with its specialised neurons (rods and cones, bipolar and ganglion cells) and supporting cells.
AF1 47	Pituitary	Healthy Tissue	
AF1 48	Prostate	Healthy Tissue	
AF1 49	Pyloro-Duodenal Junction	Healthy Tissue	The opening from the stomach into the duode- num.
AF1 50	Pylorus	Healthy Tissue	The futhest part of the stomach that connects to the duodenum.
AF1 51	Rectum, Unstriated Muscle	Healthy Tissue	Muscles in the rectum that contract without con- scious control.
AF1 52	Sciatic Nerve	Healthy Tissue	Begins in the lower back and runs through the buttock and down the rear leg; provides the con- nection to the nervous system for nearly the whole of the skin of the leg, the muscles of the back of the thigh, and those of the leg and paw.
AF1 53	Small Intestine	Healthy Tissue	
AF1 54	Small Intestine, Kitten	Healthy Tissue	
AF1 55	Soft Palate	Healthy Tissue	The fleshy, flexible part towards the back of the roof of the mouth.
AF1 56	Spinal Chord, Cervical	Healthy Tissue	
AF1 57	Spinal Chord, Lumbar	Healthy Tissue	

AF1 58	Spinal Chord, Sacral	Healthy Tissue	
AF1 59	Spinal Chord, Thoracic	Healthy Tissue	
AF1 60	Spinal Ganglion / Dorsal Root Ganglion / Posterior Root Ganglion	Healthy Tissue	A cluster of nerve cell bodies in a dorsal root of a spinal nerve.
AF1 61	Spleen	Healthy Tissue	
AF1 62	Stomach	Healthy Tissue	
AF1 63	Stomach, Cardia	Healthy Tissue	First part of the stomach.
AF1 64	Sublingual Gland	Healthy Tissue	Major salivary glands.
AF1 65	Submaxillary Gland	Healthy Tissue	A salivary gland inside the lower jaw on either side that produces most of the nocturnal saliva; dis- charges saliva into the mouth under the tongue.
AF1 66	Testis	Healthy Tissue	
AF1 67	Thymus, Kitten	Healthy Tissue	
AF1 68	Tongue	Healthy Tissue	
AF1 69	Tooth in Jaw	Healthy Tissue	
AF1 70	Tooth, Developing, Kitten	Healthy Tissue	
AF1 71	Trachea	Healthy Tissue	Wind pipe.
AF1 72	Trachea & Thyroid	Healthy Tissue	
AF1 73	Trachea, Hyaline Cartilage	Healthy Tissue	Hyaline cartilage provides support and flexibility.
AF1 74	Ureter	Healthy Tissue	The duct by which urine passes from the kidney to the bladder.
AF1 75	Urethra and Penis	Healthy Tissue	
AF1 76	Uterus and Placenta	Healthy Tissue	
AF1 77	Vas Deferens	Healthy Tissue	The duct which conveys sperm from the testicle to the urethra.
AF1 78	Vein, Large	Healthy Tissue	
AF1 79	Feline Gingivitis	Nosode	Inflammation of the gums and tooth problems in cats. The most commonly known causes of feline gingivitis are feline immunodeficiency virus and feline leukemia.
AF1 80	Feline Infectious Enteritis / FIE	Nosode	A disease caused by infection with feline parvo- virus (FPV), also known as feline panleukopenia virus.
AF1 81	Feline Infectious Peritonitis	Nosode	An uncommon, but usually fatal, aberrant immune response to infection with feline coronavirus.
AF1 82	Feline Influenza/ Upper Respiratory Infection	Nosode	A very common disease that can vary consider- ably in severity, and on occasions can even be life-threatening.
AF1 83	Feline Leukaemia	Nosode	Symptoms include loss of appetite, poor coat con- dition, uneven pupils, infections of the skin, blad- der, and respiratory tract, oral disease, seizures, swollen lymph nodes, skin lesions, fatigue, fever, weight loss, gingivitis, recurring bacterial and viral illnesses, anaemia, diarrhoea and jaundice. Can be transmitted from infected cats via saliva or nasal secretions.
AF1 84	Feline Nosode Combina- tion	Nosode	Feline Enteritis, Rhinotracheitis, Leukaemia, Flu and Aids Nosodes
AF1 85	Feline Rhinotracheitis	Nosode	Herpesvirus disease of cats, characterised by sneezing, inflammation of the nasal passages, fever, and eye infection; inflammation of the wind- pipe or trachea sometimes occurs.

# Animals: Feline Test Kit TWO 33 Vials

Vaccines, parasites etc. specific to cats. Please note these tissues come from cats, not other animals or humans.

AF2 01	Feline Immunodeficiency Virus	Virus	Compromises the immune system.
AF2 02	Campylobacter Jejuni	Bacteria	Causes problems most often in cats younger than 6 months, shelter cats, or immunocompromised cats. The bacteria can also be found in healthy cats showing no symptoms. Cats may develop se- vere disease for three to seven days, with diarrhea and decreased appetite.
AF2 03	Clostridium Perfringens	Bacteria	Causes diarrhoea.
AF2 04	Microsporum Canis	Fungus	Common cause of ringworm in cats as well as dogs.
AF2 05	Microsporum Gypseum	Fungus	Common cause of ringworm in cats.
AF2 06	Trichophyton Mentagro- phytes	Fungus	Causes ringworm.
AF2 07	Chlamydia Psittaci / Chla- mydophila Psittaci	Chlamydia	Causes chylamydiosis, symptoms include signs of an upper respiratory infection, such as watery eyes, runny nose, and sneezing.
AF2 08	Feline Leukaemia / FeLV	Vaccination	PUREVAX® FeLV/RCP Vaccine
AF2 09	Feline Leukaemia & Rhino- tracheitis	Vaccination	PUREVAX® FELV/RCP Vaccine
AF2 10	Feline RCPL	Vaccination	Purevax® RC. Combined vaccine for feline Rhino- tracheitis, Feline Caliciviris, Feline Panleucopenia and Feline Leukaemenia.
AF2 11	Feline Tricat Vaccine	Vaccination	Combined feline viral rhinotracheitis, calici virus and panleucopenia vaccines.
AF2 12	Ancylostoma Caninum / Hookworm	Parasite	One of the most common intestinal parasites; found in warm and temperate climates. Can cause severe disease including aneemia and serious diarrhoea; growth in young animals is stunted, and the hair coat may appear dull and dry. In severe infestations, animals may cough. or develop pneu- monia
AF2 13	Ancylostoma Duodenale / Hookworm, Eggs and Adult	Parasite	One of the most common intestinal parasites of cats (especially kittens), and can cause severe disease including anAemia and serious diarrhOea.
AF2 14	Ancylostoma Tubaeformae	Parasite	A hookworm that infects cats worldwide; infection can occur by penetration of the skin, eating other hosts such as birds, or by directly consuming it; causes anaemia and compromises the immune system; causes dermatitis in humans.
AF2 15	Babesia Cati	Parasite	Anorexia and lethargy.
AF2 16	Babesia Felis	Parasite	Anorexia and lethargy.
AF2 17	Ctenocephalides Canis / Dog Flea	Parasite (External)	Dog fleas can also live on cats; can spread Dipy- lidium caninum.
AF2 18	Ctenocephalides Felis / Cat Flea / Feline Flea	Parasite (External)	Found on cats (and also dogs); can cause flea allergy dermatitis; can cause dehydration if large infestation.

AF2 19	Cryptosporidium Parvum	Parasite	Healthy cats may be symptom free; in immuno- compromised or kittens, diarrhoea, loss of appe- tite, low-grade fever and dehydration can develop.
AF2 20	Dipylidium Caninum / Tape- worm, Eggs, Immature and Mature Proglottid	Parasite	The most common tapeworm of the cat, causes few problems in the adult host but can result in digestive upsets and stunting of growth in kittens.
AF2 21	Dirofilaria Immitis / Dog Heartworm	Parasite	Causes heartworm disease in cats; present in many countries particularly the USA, Canada, and southern Europe.
AF2 22	Felicola Subrostratus / Feli- cola Subrostrata on ear	Parasite	Louse found in Australia, Europe and North America; found in large numbers only on elderly or sick cats especially if they are long-haired
AF2 23	Isospora Spp./Cystoisospo- ra Spp., Oocysts and Adult	Parasite	Infect the intestines in cats and can cause dis- ease, referred to as intestinal or enteric coccidio- sis; can cause bloody or watery diarrhea, weight loss, dehydration, and, in more serious cases, anorexia, vomiting, and depression. In severe cases, intestinal coccidiosis can be fatal.
AF2 24	Otodectes Cynotis / Ear Mite	Parasite (External)	Tiny parasite that lives out their life cycle mostly inside the ear canal. They are quite common and can cause severe irritation and itchiness of the ears.
AF2 25	Physaloptera Spp.	Parasite	Can be asymptomatic, or may have gastric symp- toms, particularly vomiting.
AF2 26	Spirometra Erinaceieuro- paei	Parasite	Often asymptomatic.
AF2 27	Strongyloides Stercoralis	Parasite	Causes bloody diarhoea. Found worldwide, espes- cially in warmer regions in South America and southeast Asia.
AF2 28	Taenia Taeniaeformis in liver	Parasite	Parasitic tapeworm; often no symptoms.
AF2 29	Toxascaris Leonina, Egg and Larvae	Parasite	a common parasitic roundworm; may show no symptoms; may have diarrhoea, vomiting, loss of appetite, experience thinning, dull coats, and in kit- tens, can develop distended abdomens.
AF2 30	Toxocara Cati / Feline Roundworm	Parasite	One of the most common nematodes of cats; in adult cats, the infection – which is called toxocariasis – is usually asymptomatic, but in juvenile cats can be fatal.
AF2 31	Toxoplasma Gondii, Cysts and Trophozites	Parasite, Protozoa	Primary hosts; may be symptom-free or have leth- argy, depression, fever, weight los, etc.
AF2 32	Trichuris Trichiura / Cat Whipworm	Parasite	Diarrhoea, weight loss and dehydration.
AF2 33	Trichuris Vulpis / Cat Whip- worm	Parasite	Diarrhoea, weight loss and dehydration.

# Bach Flower Test Kit 39 vials

These ever popular flower remedies in a convenient test kit. This kit is not suitable for dispensing purposes.

# BF1 Agrimony

The jovial, cheerful, humorous people who love peace and are distressed by argument or quarrels, to avoid which they will agree to give up much. Though generally they have troubles and are tormented and restless and worried in mind or in body, they hide their cares behind their humour and jesting and are considered very good friends to know. They often take alcohol or drugs in excess, to stimulate themselves and help themselves bear their trials with cheerfulness.

# BF2 Aspen

Vague unknown fears, for which there can be given no explanation, no reason. Yet the patient may be terrified of something terrible going to happen, he knows not what. These vague unexplainable fears may haunt by night or day. Sufferers are often afraid to tell their trouble to others.

# BF3 Beech

For those who feel the need to see more good and beauty in all that surrounds them. And, although much appears to be wrong, to have the ability to see the good growing within. So as to be able to be more tolerant, lenient and understanding of the different way each individual and all things are working to their own final perfection.

# **BF4** Centuary

Kind, quiet, gentle people who are over-anxious to serve others. They overtax their strength in their endeavours. Their wish so grows upon them that they become more servants than willing helpers. Their good nature leads them to do more than their own share of work, and in so doing they may neglect their own particular mission in life.

# BF5 Cerato

Those who have not sufficient confidence in themselves to make their own decisions. They constantly seek advice from others, and are often misguided.

# BF6 Cherry Plum

Fear of the mind being over-strained, of reason giving way, of doing fearful and dreaded things, not wished and known wrong, yet there comes the thought and impulse to do them.

# BF7 Chestnut Bud

For those who do not take full advantage of observation and experience, and who take a longer time than others to learn the lessons of daily life. Whereas one experience would be enough for some, such people find it necessary to have more, sometimes several, before the lesson is learnt. Therefore, to their regret, they find themselves having to make the same error on different occasions when once would have been enough, or observation of others could have spared them even that one fault.

# BF8 Chicory

Those who are very mindful of the needs of others they tend to be over-full of care for children, relatives, and friends, always finding something that should be put right. They are continually correcting what they consider wrong, and enjoy doing so. They desire that those for whom they care should be near them.

# **BF9** Clematis

Those who are dreamy, drowsy, not fully awake, no great interest in life. Quiet people, not really happy in their present circumstances, living more in the future than in the present; living in hopes of happier times, when their ideals may come true. In illness some make little or no effort to get well, and in certain cases may even look forward to death, in the hope of better times; or maybe, meeting again some beloved one whom they have lost.

# BF10 Crab Apple

This is the remedy of cleansing. For those who feel as if they had something not quite clean about themselves. Often it is something of apparently little importance: in others there may be more serious disease that is almost disregarded compared to the one thing on which they concentrate. In both types they are anxious to be free from the one particular thing which is greatest in their minds and which seems so essential to them that it should be cured. They become despondent if treatment fails. Being a cleanser, this remedy purifies wounds if the patient has reason to believe that some poison has entered which must be drawn out.

# BF11 **Elm**

Those who are doing good work, are following the calling of their life and who hope to do something of importance, and this often for the benefit of humanity. At times there may be periods of depression when they feel that the task they have undertaken is too difficult, and not within the power of a human being.

# BF12 Gentian

Those who are easily discouraged. They may be progressing well in illness or in the affairs of their daily life, but any small delay or hindrance to progress causes doubt and soon disheartens them.

#### BF13 Gorse

Very great hopelessness, they have given up belief that more can be done for them. Under persuasion or to please others they may try different treatments, at the same time assuring those around that there is so little hope of relief.

#### BF14 Heather

Those who are always seeking the companionship of anyone who may be available, as they find it necessary to discuss their own affairs with others, no matter whom it may be. They are very unhappy if they have to be alone for any length of time.

#### BF15 Holly

For those who are sometimes attacked by thoughts of such kind as jealousy, envy revenge, suspicion. For the different forms of vexation. Within themselves they may suffer much, often when there is no real cause for their unhappiness.

#### BF16 Honeysuckle

Those who live much in the past, perhaps a time of great happiness, or memories of a lost friend, or ambitions which have not come true. They do not expect further happiness such as they have had.

#### BF17 Hornbeam

For those who feel that they have not sufficient strength, mentally or physically, to carry the burden of life placed upon them; the affairs of every day seem too much for them to accomplish; though they generally succeed in fulfilling their task. For those who believe that some part, of mind or body, needs to be strengthened before they can easily fulfil their work.

#### **BF18** Impatiens

Those who are quick in thought and action and who wish all things to be done without hesitation or delay. When ill they are anxious for a hasty recovery. They find it very difficult to be patient with people who are slow, as they consider it wrong and a waste of time. And they will endeavour to make such people quicker in all ways. They often prefer to work and think alone, so that they can do everything at their own speed.

#### BF19 Larch

For those who do not consider themselves as good or capable as those around them, who expect failure, who feel that they will never be a success, and so do not venture or make a strong enough attempt to succeed.

# BF20 Mimulus

Fear of worldly things, illness, pain, accidents, poverty, of dark, of being alone, of misfortune. The fears of everyday life. These people quietly and secretly bear their dread; they do not freely speak of it to others.

#### BF21 Mustard

Those who are liable to times of gloom, or even despair, as though a cold dark cloud overshadowed them and hid the light and the joy of life. It may not be possible to give any reason or explanation for such attacks. Under these conditions it is almost impossible to appear happy or cheerful.

# BF22 Oak

For those who are struggling and fighting strongly to get well, or in connection with the affairs of their daily life. They will go on trying one thing after another, though their case may seem hopeless.

#### BF23 Olive

Those who have suffered much mentally or physically and so exhausted and weary that they feel they have no more strength to make any effort. Daily life is hard work for them, without pleasure.

#### BF24 Pine

For those who blame themselves. Even when successful they think they could have done better, and are never content with their efforts or the results. They are hard-working and suffer much from the faults they attach to themselves. Sometimes if there is any mistake it is due to another, but they will claim responsibility even for that.

#### BF25 Red Chestnut

For those who find it difficult not to be anxious for other people. Often they have ceased to worry about themselves, but Rock Rosefor those of whom they are fond they may suffer much, frequently anticipating that some unfortunate thing may happen to them.

#### BF26 Rock Rose

The Remedy of emergency. For cases where there even appears no hope. In accident or sudden illness, or when the patient is very frightened or terrified. If the patient is not conscious the lips may be moistened with the remedy.

# BF27 Rock Water

Those who are very strict in their way of living; they deny themselves many of the joys and pleasures of life because they consider it might interfere with their work. They are hard masters to themselves. They wish to be well and strong and active, and will do anything that they believe will keep them so. They hope to be examples that will appeal to others who may then follow their ideas and be better as a result.

# BF28 Scleranthus

Those who suffer much from being unable to decide between two things, first one seeming right then the other. They are usually quiet people, and bear their difficulty alone, often refusing to discuss it with others.

# BF29 Star Of Bethlehem

For those in great distress under conditions which for a time produce great unhappiness. The shock of serious news, the loss of someone dear, the fright following an accident, and such like. For those who for a time refuse to be consoled, this remedy brings comfort.

# BF30 Sweet Chestnut

For those moments which happen to some people when the anguish is so great as to seem to be unbearable. When the mind or body feels as if it had borne to the uttermost limit of its endurance, and that now it must give way. When it seems there is nothing but destruction and annihilation left to face.

# BF31 Vervain

Those with fixed principles and ideas, which they are confident, are right, and which they very rarely change. They have a great wish to convert all around them to their own views of life. They are strong of will and have much courage when they are convinced of those things that they wish to teach. In illness they struggle on long after many would have given up their duties.

# BF32 Vine

Very capable people, certain of their own ability, confident of success. Being so assured, they think that it would be for the benefit of others if they could be persuaded to do things as they themselves do, or as they are certain is right. Even in illness they will direct their attendants. They may be of great value in emergency.

# BF33 Walnut

For those who have definite ideals and ambitions in life and are fulfilling them, but on rare occasions are tempted to be led away from their own ideas, aims and work by the enthusiasm, convictions or strong opinion of others. The remedy gives constancy and protection from outside influences.

# BF34 Water Violet

For those who in health or illness like to be alone. Very quiet people, who move about without noise, speak little, and then gently. Very independent, capable and self-reliant. Almost free of the opinions of others. They are aloof, leave people alone and go their own way. Often clever and talented.

# BF35 White Chestnut

For those who cannot prevent thoughts, ideas, arguments which they do not desire from entering their minds. Usually at such times when the interest of the moment is not strong enough to keep the mind full. Thoughts that worry and will remain, or if for a time thrown out, will return. They seem to circle round and round and cause mental torture. The presence of such unpleasant thoughts drives out peace and interferes with being able to think only of the work or pleasure of the day.

# BF36 Wild Oat

Those who have ambitions to do something of prominence in life, who wish to have much experience, and to enjoy all that which is possible for them, to take life to the full. Their difficulty is to determine what occupation to follow; as although their ambitions are strong, they have no calling which appeals to them above all others. This may cause delay and dissatisfaction.

# BF37 Wild Rose

Those who without apparently sufficient reason become resigned to all that happens, and just glide through life, take it as it is, without any effort to improve things and find some joy. They have surrendered to the struggle of life without complaint.

# BF38 Willow

For those who have suffered misfortune and find these difficult to accept, without complaint or resentment, as they judge life much by the success which it brings. They feel that they have not deserved so great a trial and they become embittered. They often take less interest in those things of life which they had previously enjoyed.

# BF39 Rescue Remedy

A combination of Cherry Plum, Clematis, Impatiens, Rock Rose, Star of Bethlehem. All purpose emergency composite for effects of anguish, examinations, going to the dentist, etc. Comforting, calming and reassuring to those distressed by startling experiences.

# Bacteria 1 Test Kit 56 vials

The energy patterns of MRSA, staphylococcus aureus, streptococcus pneumoniae and pyrogenes, mycobacterium tuberculosis, whooping cough, meningitis, escherichia coli, clostridium difficile etc. Many more of the bacteria associated with Lyme's disease are available in the Lyme Plus Kit.

Bacteria are abundant in air, soil and water. Some are beneficial (e.g. those living in intestine and breaking down food) and some are harmless to humans. Bacteria that are harmful are known as pathogens.

Three main categories: cocci (spherical), bacilli (rod-shaped) and spirochaetes or spirilla (spiral-shaped). Bacteria can grow in an inert medium. Susceptible to antibiotics.

Commensal = a bacteria which normally lives in or on the body and is considered medically to be harmless Nosocomial infection: contracted in hospital

In the popular mind viruses are often seen as being more deadly than bacteria, but most of the most intransigent illnesses are as a result of bacterial infection.

It is easy to think solely of bacteria in relation to acute infection, food poisoning and respiratory problems, but bacteria can have much wider implications than that. For example, streptococcus mutans is implicated in tooth decay, and helicobacter pylori in peptic ulcers.

Some bacteria are beneficial. There are bacteria in the gut that produce some B vitamins and vitamin K. Some bacteria provide a protective acid mantle on the skin.

#### BCT1 Acinetobacter

Respiratory symptoms, nosocomial infections; ubiquitous in environment.

#### BCT2 Actinomyces

Liver abscess, fever, abdominal pain, actinomycosis; Actinomyces Israelii commensal of human mouth.

#### BCT3 Bacilli Gram Positive and Negative

#### BCT4 Bacillus Megaterium

Meningitis; present in the throats of about 10% of the population.

#### BCT5 Bacillus Subtilus

Produces sticky yellow patches on bread.

#### BCT6 Bordetella Pertussis

Whooping cough.

#### BCT7 Borrelia Burgdorferi

Lyme disease (Lyme Borreliosis) vector is a tick which is dependent on wild rodents and deer.

#### BCT8 Brucella Abortus

Influenza- like symptoms, fever, arthritis, headaches, irritability, insomnia and confusion, septicemia from cattle; unpasteurised dairy products.

#### BCT9 Campylobacter

Food poisoning, diarrhoea; on increase. Types C. jejuni and c. fetus; found in raw meat, untreated water and unpasteurised dairy products.

#### BCT10 Clostridium Botulinum

Botulism, muscle paralysis, vomiting, tiredness, food poisoning caused by the neurotoxin of CB.

#### BCT11 Clostridium Tetani

Muscle rigidity followed by spasmodic muscle contraction with pallor and sweating; found in soil.

BCT12 **Clostridium Welchii** Cellulitis

BCT13 Cocci Gram Pos and Neg

#### BCT14 Corynebacterium Diphtheriae

Diphtheria, tonsillitis/ pharyngitis, croup.

#### BCT15 Escherichia Coli

Meningitis in babies, diarrhoea, liver abscess, fever, abdominal pain, urinary tract infection; commensal of human intestine; popularly known as E. Coli; found in raw and undercooked meat, raw vegetables and unpasteurised milk.

#### BCT16 Gardnerella Vaginalis

Occasionally slightly smelly, non-itchy discharge; commensal of female vagina.

#### BCT17 Haemophilus Influenzae

Conjunctivitis, difficulty in breathing, sinusitis, otitis media, pneumonia, meningitis in children; commensal in human upper respiratory tract. 6 types; type b causes meningitis.

#### BCT18 Helicobacter Pylori

Gastritis, dyspepsia, peptic ulcer, possibly gastric cancer.

#### BCT19 Legionella Pneumophila

Respiratory symptoms, pus in lungs, lung abscess, Legionnaires' disease, hepatitis; nosocomial infection; a widespread naturally occurring aquatic organism, transmitted by airborne droplets often from air-conditioning units.

#### BCT20 Leptospiria

High fever, headache, myalgia, conjunctivitis, Weil's disease transmitted by rodents and infected water; 2 sub-species.

#### BCT21 Listeria Monocytogenes

Meningitis in babies; from unpasteurised dairy products and inadequately cooked meat, ubiquitous in soil.

#### BCT22 Mycobacterium Bovis

Pneumonia, tuberculosis.

#### BCT23 Mycobacterium Leprae

Leprosy endemic in Africa, India, SE Asia, Central and South America.

#### BCT24 Mycobacterium Tuberculosis

T.B., conjunctivitis, sinusitis, pneumonia, childhood pneumonia, tuberculosis, chronic hepatitis, urinary tract infection.

#### BCT25 Mycoplasma Pneumoniae

Croup, otitis media, pus in lungs, childhood pneumonia, acute hepatitis; commensal of human respiratory tract.

#### BCT26 Neisseria Gonorrhoea

Gonorrhea, conjunctivitis, tonsillitis/ pharyngitis, pain on passing urine, discharge, pain in abdomen.

#### BCT27 Neisseria Meningitidis /Meningococcus

Conjunctivitis, tonsillitis/ pharyngitis, pneumonia, meningitis, meningitis in children in western countries group B is predominant organism followed by C. Group A in parts of Africa, Middle East and India.

#### BCT28 Pseudomonas Aeruginosa

Urinary tract infection, respiratory symptoms, otitis media, lung abscess, meningitis in babies, wound infection; commensal of human intestinal flora.

#### BCT29 Salmonella

Food poisoning, diarrhoea; on increase; found in raw meat, poultry, eggs, raw unwashed vegetables, unpasteurised dairy products.

#### BCT30 Salmonella Paratyphi

Typhoid.

#### BCT31 Salmonella Typhi

Typhoid fever, liver abscess, fever, abdominal pain, food poisoning.

#### BCT32 Shigella

Diarrhoea, bacillary dysentery 4 sub-groups: S. dysenteriae (developing countries), S. flexneri (developing countries), S. boydii, S. sonnei (endemic in developed countries).

#### BCT33 Staphylococcus Aureus

Respiratory symptoms, conjunctivitis, styes, difficulty in breathing, otitis media, pus in lungs, pneumonia, childhood pneumonia, breathlessness, chest pain, endocarditis, meningitis in elderly, brain abscess, cellulitis, food poisoning, liver abscess, fever, abdominal pain, urinary tract infection; common skin commensal; some strains are now becoming antibiotic resistant.

#### BCT34 Staphylococcus Epidermidis

Breathlessness, chest pain, endocarditis, urinary tract infection.

#### BCT35 Streptococcus Lactis

#### BCT36 Streptococcus Agalaciae

Neonatal infection, septicaemia, meningitis, nosocomial infection; commensal in intestine and female genital tract.

#### BCT37 Streptococcus Mutans

Dental caries.

#### BCT38 Streptococcus Pneumoniae

Conjunctivitis, difficulty in breathing, sinusitis, otitis media, pus in lungs, pneumonia, childhood pneumonia, meningitis, meningitis in elderly and children, brain abscess; commensal of human upper respiratory tract.

#### BCT39 Streptococcus Pyogenes

Sore throat, tonsillitis/ pharyngitis, difficulty in breathing, sinusitis, otitis media, pus in lungs, lung abcess, pneumonia, rheumatic fever, scarlet fever, impetigo, cellulitis, liver abscess, fever, abdominal pain, toxic shock, septicaemia.

#### BCT40 Streptococcus Viridans

Breathlessness, chest pain, endocarditis.

#### BCT41 Vibrio Cholera

Cholera growing problem in S America, Middle East, Africa and Asia.

# BCT42 Yersinia Pestis

Pneumonia, plague.

#### BCT43 Anthrax

Affects the skin and lungs; spread from livestock; extremely rare in developed countries; but a possible agent of biological warfare.

#### BCT44 MRSA/ Methicillin Resistant Staphylococcus Aureus

A version of staph aureus that is resistant to antibiotics; can cause death particularly in weakened people most cases occur in hospital patients.

#### BCT45 Bacillus Cereus

Food poisoning often associated with fried rice that has been cooked and then held at warm temperatures for several hours.

#### BCT46 Clostridium Perfingens

Pneumonia; widely distributed in the environment and frequently occurs in the intestines of humans and many domestic and feral animals.

#### BCT47 Enterobacter Aerogenes

Found in human digestive tract.

#### BCT48 Klebsiella Pneumoniae

Urinary tract infections; pneumonia and urinary tract infections; tends to affect people with underlying diseases, particularly in hospital.

#### BCT49 Micrococcus Luteus

Inhabits mammalian skin; opportunistic infection.

#### BCT50 Proteus Vulgaris

Urinary tract infections.

#### BCT51 Salmonella Enteritidis

Fever, abdominal cramps, and diarrhoea; from contaminated eggs.

#### BCT52 Streptococcus Mitis

Found in saliva, sputum and faeces.

#### BCT53 Borrelia Vincent

Causes severe ulcerating gingivitis (trench mouth); typically found in those with poor oral hygiene but can also occur as a result of stress, cigarette smoking and poor nutrition; also can be found in those with serious illnesses.

#### BCT54 Clostridium Difficile

Diarrhoea, colitis, peritonitis; often after normal gut flora is eradicated by the use of antibiotics; infection often occurs in hospital and in nursing homes; some adults have low numbers of the bacteria without any symptoms; common in the intestine of babies and infants, but does not cause disease because its toxins do not damage their immature intestinal cells.

#### BCT55 Mycobacterium Paratuberculosis

Found in the intestinal tract of some people with Crohn's disease (about 7.5% of those studied); found in less than 1% of healthy individuals (Food Safety Authority of Ireland); in the USA, 40% of large dairy herds are infected with Mycobacterium paratuberculosis; can survive pasteurisation.

#### BCT56 Neisseria Catarrhalis/ Moraxella Catarrhalis / Micrococcus Catarrhalis / Branhamella Catarrhalis

A common cause of otitis media and sinusitis and an occasional cause of laryngitis; causes bronchitis or pneumonia in children and adults with underlying chronic lung disease commensal in nasopharyx.

# Bacteria 2 Test Kit next page......

# Bacteria 2 Test Kit 37 vials

This kit includes 2 salmonella strains, Staphylococcus Saprophyticus (linked to cystitis), Propionibacterium Acnes (acne), Mycoplasma Fermentans (Gulf war syndrome) and two Vibrio strains (gastrointestinal illness from shellfish). It also includes bacteria that cause opportunistic infections when the immune system is compromised and bacteria that are part of or affect the normal human flora.

#### BCT57 Actinomyces Viscosus

Part of the human oral flora, occurring around the teeth, gums and throat in healthy humans. Causes dental caries particularly of the roots of teeth. Can cause abscesses in the mouth, lungs, or the gastrointestinal tract.

#### BCT58 Aggregatibacter Actinomycetemcomitans / Actinobacillus Actinomycetemcomitans

Part of the human oral flora; also found in severe infections in the oral cavity, mainly the periodontium.

#### BCT59 Bacteroides Fragilis

Involved in 90% of anaerobic peritoneal infections of the abdominal cavity.

#### BCT60 Burkholderia Cepacia

Tends to affect people who have weakened immune systems or chronic lung diseases, particularly cystic fibrosis; a known cause of infections in hospitalised patients.

#### BCT61 Clostridium Septicum

Causes gangrene. Generally associated with gastrointestinal or hematologic malignancies. An association exists with colon carcinoma.

#### BCT62 Eikenella Corrodens

A commensal of the human mouth and upper respiratory tract. An opportunistic human pathogen, leading to serious diseases such as periodontitis, osteomyelitis, meningitis, empyema, and endocarditis.

#### BCT63 Enterococcus Faecalis / Streptococcus Faecalis

Can cause life-threatening infections in humans, especially in the hospital environment. Frequently found in root canaltreated teeth. Can cause endocarditis and bacteremia, urinary tract infections, meningitis, and other infections. Among the main constituents of some probiotic food supplements.

#### BCT64 Enterococcus Faecium

Can be commensal in the human intestine, but it may also be pathogenic, causing diseases such as neonatal meningitis.

#### BCT65 Fusobacterium Nucleatum

Found in the mouth and upper respiratory tract. A key component of dental plaque. Possible role in periodontal disease. Occasional cause of abscesses and blood infections.

#### BCT66 Gemella Morbillorum / Streptococcus Morbillorum

Part of the normal mouth flora.

#### BCT67 Group A Streptococcus / GAS

Often found in the throat and on the skin. Illnesses include strep throat and occasionally invasive GAS disease. People may be carriers and experience no health problems themselves

#### BCT68 Group B Streptococus /GBS

In new-borns most commonly causes sepsis (infection of the blood), pneumonia and sometimes meningitis. In adults causes bloodstream infections, pneumonia, skin and soft-tissue infections, and bone and joint infections.

#### BCT69 Mycobacterium Abscessus

Causes infections of the skin and the soft tissues under the skin. Also a cause of serious lung infections in those with various chronic lung diseases, such as cystic fibrosis. Has been known to contaminate medications and products, including medical devices.

#### BCT70 Mycobacterium Intracellulare

Causes lung diseases.

#### BCT71 Mycobacterium Marinum

Causes opportunistic infections in humans when the immune system (for example) is compromised already.

#### BCT72 Mycoplasma Fermentans

Has been linked to Gulf War Syndrome and rheumatoid arthritis.

#### BCT73 Mycoplasma Genitalium

Can be transmitted between partners during unprotected sexual intercourse. Role in genital diseases is still unclear. Believed to be involved in pelvic inflammatory diseases.

#### BCT74 Mycoplasma Hominis

Found in the vagina; unclear if it is part of the normal flora. Found in the genito-urinary tract and is considered to be an opportunistic pathogen. Has been associated with post-abortion and post-partum fever.

#### BCT75 Mycoplasma Penetrans

Found in the urogenital and respiratory tracts. Has been linked to HIV infections.

#### BCT76 Mycoplasma Salivarium

Found in the human mouth; not regarded usually as pathogenic.

#### BCT77 Porphyromonas Gingivalis / Bacteroides Gingivalis

Part of the normal flora of the mouth, intestine and urogenital tract. Found in periodontal lesions and associated with adult gingivitis, periodontal disease and mouth abscesses.

# BCT78 Prevotella Intermedia / Bacteroides Intermedia / Bacteroides Melaninogenicu

Involved in periodontal infections, including gingivitis and periodontitis.

#### BCT79 Propionibacterium Acnes

Lives on the skin and is linked to the skin condition acne. Largely commensal and part of the skin flora present on most healthy adult human skin.

#### BCT80 Proteus Mirabilis

Causes 90% of all Proteus infections in humans. Approximately 25% of people have this bacteria in their faeces. Causes problems when urinary tract is disturbed (e.g. after catheterisation).

#### BCT81 Salmonella Enterica / Salmonella Choleraesuis

Causes salmonellosis; family members working with cattle or in a veterinary clinic can be source.

# BCT82 Salmonella Typhimurium/ Salmonella Choleraesuis Serotype Typhimurium / Salmonella Typhi-Murium/ Bacillus Typhimurium /Salmonella Typhi-Murium

Causes gastroenteritis.

#### BCT83 Serratia Marcescens / Bacterium Prodigosum

Found on the sub-gingival biofilm of teeth. Commonly found in the respiratory and urinary tracts of hospitalised adults and in the gastrointestinal system of children. May cause pneumonia and urinary tract infections. Often found growing in bathrooms as a pink discoloration and slimy film.

#### BCT84 Staphylococcus Saprophyticus

Often implicated in urinary tract infections and cystitis.

# BCT85 Stomatococcus Mucilaginosus /Micrococcus Mucilaginosus / Staphylococcus Salivarius

Part of the normal human oral flora and upper respiratory tract flora.

#### BCT86 Streptococcus Salivarius

The principal commensal bacterium of the oral cavity and a normal inhabitant of the upper respiratory tract. The first bacterium that colonises dental plaque, creating favourable conditions for other bacteria.

#### BCT87 Treponema Pallidum

Causes diseases such as syphilis.

#### BCT88 Ureaplasma Parvum

Can cause male urethritis, supperative arthritis, adverse pregnancy outcomes, chorioamnionitis (inflammation of membranes in the fetus), surgical wound infections, neonatal meningitis, pelvic inflammatory diseases and pyelonephritis.

#### BCT89 Ureaplasma Urelyticum

Part of the normal genital flora of both men and women. It is found in about 70% of sexually active humans. Has been linked to (but not confirmed) non-specific urethritis, infertility, chorioamnionitis, stillbirth, premature birth, and, in the perinatal period, pneumonia, bronchopulmonary dysplasia and meningitis.

#### BCT90 Vancomycin-Resistant Enterococci/ VRE

Can live in the human intestines and female genital tract without causing disease; sometimes can cause infections of the urinary tract, the bloodstream, or of wounds associated with catheters or surgical procedures.

#### BCT91 Vancomycin-Resistant Staphylococcus / VRSA

A problem for people with other underlying health conditions (such as diabetes and kidney disease), tubes going into their bodies (such as catheters), previous infections with methicillin-resistant Staphylococcus aureus (MRSA), and recent exposure to vancomycin, etc.

#### BCT92 Vibrio Parahaemolyticus

Found in brackish saltwater and causes gastrointestinal illness (watery diarrhoea often with abdominal cramping, nausea, vomiting, fever and chills). Most people become infected by eating raw or undercooked shellfish, particularly oysters.

#### BCT93 Vibrio Vulnificus

Causes an infection (gastrointestinal illness, fever, or shock) often after eating seafood, especially oysters or exposing an open wound to sea water.

# Bacteria 3 Test Kit next page.....

# Bacteria 3 Test Kit 56 vials

#### More bacteria including some that are important in the human biome and others that are drug-resistant.

**BCT 94** Acinetobacter Baumannii Opportunistic pathogen, affecting people with compromised immune systems, but it is becoming increasingly important as a hospital-derived (nosocomial) infection. Referred to as 'Iraqibacter' due to its seemingly sudden emergence in military treatment facilities during the Iraq War; has continued to be an issue for veterans and soldiers who served in Iraq and Afghanistan.

**BCT 95** Acinetobacter Baumannii, Multi-Drug Resistant (MDR-AB) A multi-drug resistant strain (MDR-AB) A. baumannii is an opportunistic pathogen, affecting people with compromised immune systems, and is becoming increasingly important as a hospital-derived (nosocomial) infection.

**BCT 96** Actinomyces Israelii Found in the vagina, colon, and mouth. Infection is established first by a breach of the mucosal barrier during various procedures (dental, gastrointestinal), aspiration, or pathologies such as diverticulitis; causes actinomycosis (formation of painful abscesses in the mouth, lungs, or gastrointestinal tract).

**BCT 97** Actinomyces Odontolyticus Part of the oral flora; also found in dental plaque and in deep dental caries. Causes actinomycosis - a granulomatous infection with the formation of abscesses in the mouth, lungs, or the gastrointestinal tract. Oral actinomycosis may occur due to trauma such as a tooth extraction or bleeding gums.

**BCT 98** Aeromonas Hydrophila Mainly found in areas with a warm climate. Can cause gastroenteritis, mostly in young children and people who have compromised immune systems or growth problems; also associated with cellulitis. Can cause myonecrosis and eczema in people with compromised or suppressed immune systems, or in rare cases necrotising fasciitis.

**BCT 99 Bacteroides Thetaiotaomicron** The most common bacterium found in the human colon / intestinal tract; considered an opportunistic pathogen, frequently associated with peritonitis, septicemia, and wound infections; capable of causing very serious infections, such as intra-abdominal sepsis and bacteraemia.

**BCT 100 Bifidobacterium Animalis** Found in the large intestines and important for healthy digestion; used in some probiotic foods, e.g. yoghourt.

**BCT 101 Bifidobacterium Sp.** Present in the gastrointestinal tract, mouth and vagina; responsible for suppressing pathogenic microorganisms and are rarely pathogenic themselves. Used as probiotics.

**BCT 102 Bordetella Holmesii** Associated with septicaemia, endocarditis, and respiratory illness, especially in immunocompromised patients, such as asplenic or AIDS patients; often seen in conjunction with whooping cough; can cause septic arthritis.

**BCT 103** Burkholderia Pseudomallei / Pseudomonas Pseudomallei infects humans and animals and causes the disease melioidosis (pain in chest, bones, or joints; cough; skin infections, lung nodules and pneumonia), particularly in Thailand and northern Australia.

**BCT 104 Campylobacter Jejuni** Commonly found in animal faeces, so infection through contaminated water and food; the most common causes of bacterial infections in humans worldwide, causing gastroenteritis and food poisoning; has been linked with subsequent development of Guillain–Barré syndrome, which usually develops two to three weeks after the initial illness.

BCT 105 Campylobacter Rectus Involved with periodontal disease and can cause abscesses in the mouth.

**BCT 106 Capnocytophaga Canimorsus** Transmission may occur through bites, licks, or even close proximity with animals. Can cause severe illness in persons with pre-existing conditions. Symptoms include mild flu-like symptoms, fever, vomiting, diarrhoea, malaise, abdominal pain, myalgia, confusion, dyspnoea, headaches, and skin rashes such as exanthema. More severe cases of endocarditis, disseminated intravascular coagulation and meningitis have been reported.

**BCT 107 Capnocytophaga Ochracea** Found in the oral cavity; contributes to early plaque formation on teeth by being a physical intermediate link between several Streptococcus species and F. nucleatum; also found in some animal bite wounds.

**BCT 108 Capnocytophaga Sputigena** Found in the oral cavity; also found in some animal bite wounds.an opportunistic pathogen in humans, especially in immunocompromised patients.

**BCT 109** Cardiobacterium Hominis Normally present in the mouth and upper part of the respiratory tract such as nose and throat; very rarely causes endocarditis, an infection of the heart valves.

**BCT 110 Citrobacter Freundii** As an opportunistic pathogen, responsible for a number of significant infections; known to be the cause of nosocomial infections of the respiratory tract, urinary tract and blood. C. Represents about 29% of all opportunistic infections.

**BCT 111 Clostridium Cadaveris** Usually considered non-pathogenic; unlike other species of Clostridium, it does not produce toxins. Normal component of the human intestinal tract.

**BCT 112 Clostridium Sporogenes** Present in the human gastrointestinal tract in some people; in the intestine, it uses tryptophan to synthesize indole and subsequently 3-indolepropionic acid (IPA), which serves as a potent antioxidant within the human body and brain.

**BCT 113 Clostridium Tertium** Traditionally been considered non-pathogenic, but increasingly being reported as a human pathogen. Has been associated with bacteraemia, meningitis, septic arthritis, enterocolitis, spontaneous bacterial peritonitis, post-traumatic brain abscess, and pneumonia.

**BCT 114 Cronobacter Sakazakii** / **Enterobacter Sakazakii** In infants can cause bacteraemia, meningitis and necrotising enterocolitis; can cause wound infections or urinary tract infections; people with immunocompromising conditions and the elderly may also develop bloodstream infection. Has been found in a variety of dry foods, including powdered infant formula, skimmed milk powder, herbal teas, and starches; also been found in wastewater. Cronobacter illnesses are rare, but they are frequently lethal for infants and can be serious among people with immunocompromising conditions and the elderly.

**BCT 115 Eikenella Corrodens / Bacteroides Corrodens** Found in the oral cavity (dental plaque) and the intestinal and genital tracts.

**BCT 116** Enterobacter Cloacae Part of the normal gut flora of many humans; not usually a primary pathogen, but is sometimes associated with urinary tract and respiratory tract infections.

**BCT 117** Enterococcus Faecium - Vancomycin Resistant (VRE) Found in the human intestine, but can be pathogenic, causing diseases such as neonatal meningitis or endocarditis. Vancomycin-resistant enterococci is resistant to the antibiotic vancomycin; sometimes called a "superbug".

**BCT 118** Escherichia Coli - Carbapenem Resistant (CRE) E coli strain resistant to carbapenem antibiotics; found in hospitals, nursing homes, and other healthcare settings.

**BCT 119 Escherichia Hermannii** Generally considered non-pathogenic but has been isolated from human wounds, eye infections, periodontal lesions, and blood.

BCT 120 Eubacterium Yurii Possibly involved in periodontal disease.

**BCT 121** Francisella Tularensis Can cause Rat bite fever and Haverhill fever; classified as a potentially bioterrorism agent by the US government. Humans can become infected through tick and deer fly bites, skin contact with infected animals, exposure to contaminated water, inhalation of contaminated aerosols or agricultural dusts.

**BCT 122** Haemophilus Ducreyi Causes the sexually transmitted disease chancroid, a major cause of genital ulceration in developing countries characterized by painful sores on the genitalia.

**BCT 123** Klebsiella Granulomatis / Calymmatobacterium Granulomatis Causes the sexually transmitted disease granuloma inguinale (or donovanosis).

**BCT 124** Kocuria Rosea Implicated in occasional urinary tract infections in immunocompromised patients; peritonitis.

**BCT 125** Lactobacillus Acidophilus Occurs naturally in the intestine, mouth, and vagina; helps protect the vagina from pathogenic infection. Also produces enzyme lactase that breaks down milk sugar (lactose) into simple sugars. People who are lactose intolerant do not produce this enzyme. The most commonly used probiotic.

**BCT 126** Lactobacillus Bulgaricus Occurs naturally in the human gastrointestinal tract; helpful to people suffering from lactose intolerance. Used as a probiotic supplement.

**BCT 127** Lactobacillus Plantarum Part of the normal flora -mouth, vagina, and intestinal tract; has significant antioxidant activities and also helps to maintain the intestinal permeability; also able to suppress the growth of gas producing bacterium in the intestines; may cause endocarditis, neonatal meningitis and bacteraemia. Used as a probiotic.

**BCT 128** Lactobacillus Salivarius Lives in the gastrointestinal tract; helps to suppress pathogenic bacteria. Used as a probiotic supplement.

**BCT 129 Methanobrevibacter Smithii** Note: this is no longer classified as a bacteria but as an archaeon; the predominant archaeon in the human gut, playing an important role in the efficient digestion of polysaccharides (complex sugars) by consuming the end products of bacterial fermentation.

**BCT 130 Moraxella Osloensis** Part of the human flora, especially the upper respiratory tract and occasionally of the skin and urogenital tract; has been implicated in conjunctivitis, wound sepsis, vaginal discharges, meningitis, brain abscess, septicaemia, endocarditis, arthritis osteomyelitis and urethritis.

**BCT 131** Mycobacterium Avium Complex /MAC Commensal organisms in humans, living predominantly in the mouth, skin, gastrointestinal, vagina and urinary tracts, and compose a portion of the bacterial gut flora. Can become pathogenic and cause respiratory problems.

**BCT 132** Mycobacterium Tuberculosis, Drug Resistant (MDR-TB And XDR-TB) Drug- resistant strains of M tuberculosis, the bacteria that causes TB: Multidrug Resistant TB bacteria (MDR-TB) and Extensively Drug Resistant TB bacteria (XDR-TB).

**BCT 133** Neisseria Mucosa Part of the normal human nasopharyngeal flora and infrequently causes infections, including meningitis.

**BCT 134** Neisseria Subflava Found in the human upper respiratory tract; generally non-pathogenic, but can in rare cases cause post-operative meningitis.

**BCT 135 Peptosstreptococcus** Lives predominantly in the mouth, skin, gastrointestinal, vagina and urinary tracts, and compose a portion of the bacterial gut flora. Can cause brain, liver, breast, and lung abscesses, as well as generalized necrotizing soft tissue infections.

BCT 136 Plesiomonas Shigelloides Can cause diarrhoea/gastroenteritis.

**BCT 137 Prevotella Copri** Helps in the digestion of food as well as helping to keep harmful bacteria at bay; a correlation with the development of rheumatoid arthritis.

**BCT 138 Prevotella Melaninogenica** Part of the oral and vaginal flora, particularly in those who eat a lot of carbohydrates and fibre; may cause pneumonia, lung abscesses, and chronic otitis media and sinusitis.

BCT 139 Shigella FlexneriCauses diarrhoea.

BCT 140 Shigella Sonnei Causes diarrhoea.

**BCT 141** Staphylococcus Haemolyticus, Vancomycin Resistant / VRSH Strain that resists the antibiotic vancomycin. S haemolyticus is part of the skin flora; infection often associated with the insertion of medical devices, e.g. catheters; has tendency to form biofilms.

**BCT 142** Staphylococcus Warneri Part of the skin flora; rarely causes disease, but may occasionally cause infection in patients whose immune system is compromised.

**BCT 143** Stenotrophomonas Maltophilia, Multiple Drug Resistant A multiple drug resistant strain (MDR). Infection often associated with the insertion of medical devices, e.g. catheters; a relatively unusual cause of pneumonia, urinary tract infection, or bloodstream infection; an increasing problem for people with cystic fibrosis.

BCT 144 Streptobacillus Moniliformis Causes rat bite fever and Haverhill fever.

**BCT 145 Streptococcus Pneumoniae, PRSP And DRSP** Penicillin-resistant (PRSP) and drug-resistant strain (DRSP). S pneumoniae found in the nasopharynx of healthy carriers, who do not experience any symptoms; causes bronchitis, pneumonia, rhinitis, acute sinusitis, otitis media, conjunctivitis, meningitis, bacteraemia, sepsis, osteomyelitis, septic arthritis, endocarditis, peritonitis, pericarditis, cellulitis, and brain abscesses.

**BCT 146** Streptococcus Sanguinis / Streptococcus Sanguisa normal inhabitant of the healthy mouth where it is particularly found in dental plaque, where it modifies the environment to make it less hospitable for other strains of Streptococcus that cause cavities, such as Streptococcus mutans. The most common cause of subacute bacterial endocarditis.

**BCT 147 Treponema Denticola** Part of the microbial community within the mouth; associated with periodontal disease. Has also been isolated from women with bacterial vaginosis.

**BCT 148** Veillonella Part of the microbuial community within mouth and intestine. Very occasionally implicated in cases of osteomyelitis and endocarditis.

**BCT 149** Yersinia Enterocolitica Causes the disease yersiniosis; cquired usually by insufficiently cooked pork or contaminated water, meat, or milk; symptoms may include watery or bloody diarrhea and fever, resembling appendicitis or salmonellosis or shigellosis.

# Biofilms Test Kit

Biofilms can make bacteria in the body difficult to find and counteract. A biofilm can also "HIDE" other organisms too.

Bacteria living in a biofilm usually have significantly different properties from free-floating bacteria of the same species, as the dense and protected environment of the film allows them to cooperate and interact in various ways.

A biofilm is any group of microorganisms in which cells stick to each other on a surface. These adherent cells are frequently embedded within a self-produced matrix of extracellular polymeric substance (EPS). Biofilm extracellular polymeric substance, which is also referred to as slime (although not everything described as slime is a biofilm), is a polymeric conglomeration generally composed of extracellular DNA, proteins, and polysaccharides. Microbes form a biofilm in response to many factors, which may include cellular recognition of specific or non-specific attachment

sites on a surface, nutritional cues, or in some cases, by exposure of planktonic cells to subinhibitory

concentrations of antibiotics.

Biofilms have been found to be involved in a wide variety of microbial infections in the body, by one estimate 80% of all infections. Infectious processes in which biofilms have been implicated include

common problems such as urinary tract infections, catheter infections, middle-ear infections, formation of dental plaque,gingivitis, coating contact lenses, and less common but more lethal processes such as endocarditis, infections in cystic fibrosis, and infections of permanent indwelling devices such as joint prostheses and heart valves. More recently it has been noted that bacterial biofilms may impair cutaneous wound healing and reduce topical antibacterial efficiency in healing or treating infected skin wounds.

**BIO 01 BIO 09 Bacillus Subtilis Biofilm** Pseudomonas Aeruginosa Biofilm **BIO 02 BIO 10** Candida Albicans Biofilm Salmonella Enteritidis Biofilm **BIO 03 BIO 11** Dental Plaque with Bacilli Biofilm Serratia Liquefaciens Biofilm **BIO 04 BIO 12** Dental Plaque with Bacteria and Yeast Serratia Marcescens Biofilm **BIO 05 BIO 13** Dental Plaque with Cocci Biofilm Staphylococcus Aureus Biofilm **BIO 06 BIO 14** Dental Plaque with Fungi & Bacteria Staphylococcus Epidermidis Biofilm **BIO 15 BIO 07** Escherichia Coli bacteria starting to develop Staphylococcus Sp. Biofilm. a biofilm **BIO 08** Proteus Mirabilis Biofilm

# Body Biochemical 1 Test Kit 25 vials

The energy patterns of neurotransmitters, peptides, histamine, urea, cholesterol, substance P, complement C7, interferon alpha, etc. 25 vials.

# BB1 Acetylcholine/ Ach

At all nerve-muscle junctions as well as many other sites in the nervous system; contraction of skeletal muscles, control of sweat glands and heart beat; transmits messages between neurons in the brain and spinal cord.

Myasthenia gravis and Alzheimer's disease; nicotine mimics this neurotransmitter.

# BB2 Angiotensin I

Converted by angiotensin converting enzyme into angiotensin II; ACE inhibitor drugs work by reducing the conversion of angiotensin I to angiotensin II.

# BB3 Angiotensin II

Produced from renin released by kidneys; stimulates thirst; promotes release of aldosterone, which increases the rate of salt and water re-absorption from the kidneys; vasoconstriction of aerioles to increase blood pressure ACE inhibitor drugs work by reducing the conversion of angiotensin I to angiotensin II.

# BB4 Bilirubin

Yellow pigment that is one of the end products of hemoglobin breakdown in the liver, spleen and bone marrow and is excreted as a waste material in the bile; associated with jaundice products formed from the breakdown of bilirubin are responsible for the brown colour of stools.

# BB5 Bombesin

Stimulates release of gastric and pancreatic hormones; contraction of the smooth muscles in gastric and urinary tract, and in the uterus; can inhibit the secretion of growth hormone; itching and lowered body temperature.

# BB6 Cathepsin C

Found in skin and bone cells, activates several of the chemicals controlling local immune and inflammatory responses; gum health; Papillon-Lefèvre syndrome (warty thickened skin, principally on hands and soles of feet; periodontitis and gingivitis).

# **BB7** Cholesterol

From food and also synthesized in liver; most abundant steroid in animal tissue; synthesis of steroid hormones and bile salts; stabilizing cell membranes.

# BB8 Complement C7

Part of non-specific resistance and immunity; enhance allergic and inflammatory reactions; with other complement proteins forms large holes in the microbe, allowing fluid to flow in and the microbe then bursts.

# **BB9** C-Reactive Protein

Elevated levels indicate an increased risk of heart attack and stroe in the future; necessary for acute stage of inflammation but inappropriate for chronic stage; effective against bacteria, parasites and immune complexes; synthesized by liver.

# BB10 Cyclic Adenosine-3',5' - monophospate/Cyclic AMP

Formed from ATP by action of adenylate cyclase5; serves as second messenger for some hormones; increase in cAMP causes adipose cells to break down triglycerides and release fatty acids more rapidly; stimulates thyroid cells to secrete more thyroid hormone.

# BB11 Cyclic Guanosine-3',5' - monophospate/ Cyclic GMP

Mediation of certain hormones and neurotransmitters such as acetylcholine, prostaglandins and histamine; involved in light/dark adaptation of the eye.

# BB12 Dopamine/Da

In parts of the brain that control subconscious movement of skeletal muscles; regulating muscle tone; increases the efficiency of the heartbeat and helps return the blood pressure to normal; involved in emotional responses; decreased levels associated with Parkinson's disease; may be involved with schizophrenia, ADD, autism, and La Tourette's syndrome.

# BB13 Dynorphin A

In brain and small intestine; may be related to controlling pain and registering emotions.

# BB14 Beta Endorphin

In brain, spinal cord, pancreas and testes; control of sensitivity to pain by inhibiting substance P; control of body's response to stress; regulation of contraction of intestinal wall; affects mood; may also regulate the release of hormones from the pituitary gland; may have a role in memory and learning, sexual activity and control of body temperature; morphine has a similar chemical structure; linked to depression and schizophrenia.

# BB15 Histamine

Biogenic amine; in cells, mainly mast cells throughout the body, released during an allergic reaction and inflammation; narrows bronchi in lungs, increases permeability of blood vessels, lowers blood pressure, causes itching and stimulates production of acid in the stomach; secretion of digestive juices; Carl Pfeiffer has suggested too much histamine is involved in some forms of alcoholism. May be implicated in some types of schizophrenia.

# BB16 Hyaluronic Acid

Extra-cellular, viscous material that binds cells together, lubricates joints and maintains shape of the eye ball; may help phagocytes migrate through connective tissue during development and wound healing; co-factors are N-acetyl glucosamine and glucuronic acid.

# BB17 Hydrochloric Acid

Produced by gastric glands in the stomach to aid protein digestion by preparing proteins for the later stages of digestion; also prevents bacterial growth in the stomach excessive acid production may be stimulated by stress or tobacco smoking.

# BB18 Interferon/ alpha-interferon,/ Intron A

Fights infection; made by certain white blood cells; naturally produced by virus-infected host cells that induce unaffected cells to synthesize antiviral proteins and so stops many viruses from replicating within body cells; has been used to treat cancer, immunodeficiency disorders, chronic infection with hepatitis B & C and chronic genital herpes; 2 other types: beta and gamma.

# BB19 Myoglobin

Found only in muscle fibres; binds oxygen molecules that are needed for ATP production within mitochondria.

# BB20 Pyruvic Acid

A by-product of glycolysis (production of ATP from glucose); may be converted into lactic acid, alanine or oxaloacetic acid.

# BB21 Serotonin/ 5-Ht

In parts of the brain, blood platelets, lining of digestive tract; concerned with conscious processes, involved in controlling states of consciousness and mood; sensory perception; temperature regulation; released at site of bleeding to constrict small blood vessels and control blood loss; inhibits gastric secretion and stimulates smooth muscles in the intestinal wall; inducing sleep; inhibits release of prolactin; decreases carbohydrate cravings; provides a feeling of fullness; enhances mood; action in brain disrupted by some hallucinogenic drugs, particularly LSD; excess serotonin implicated in Raynaud's disease

# BB22 Serum Amyloid P Component

Accumulates in extra-cellular spaces of many organs in association with different disease processes; inhibits elastase (enzyme concerned with breakdown of protein); necessary for acute stage of inflammation but inappropriate for chronic stage; removes cholesterol and lipid debris from areas of trauma; causes thickening of connective tissue; implicated in Alzheimer's disease.

# BB23 Substance P

In sensory nerves, spinal cord and parts of brain associated with pain; enhances perception of pain; stimulates motility of the intestines; stimulates saliva production and inflammatory responses in tissues; endorphins inhibit Substance P; counters the effect of certain nerve-damaging chemicals, so may prove useful as treatment for nerve degeneration.

# BB24 Transferrin

Protein in blood, transports iron; inhibits the growth of certain bacteria by reducing the amount of available iron.

# BB25 Urea

Waste product of the breakdown of proteins; the main nitrogenous constituent of urine; formed in the body from the break down of cell proteins; used in some creams and ointments to moisturise and soften the skin.

# Body Biochemical 2 Test Kit 25 vials

The energy patterns of more neurotransmitters, enzymes, body proteins, weight control hormones, etc.

# BB26 Acetone / Dimethyl ketone / 2-propanone / Beta-ketopropane

Produced primarily during excessive fat metabolism, although some levels present in virtually every organ and tissue, and the blood contains some acetone; occurs naturally in plants, trees, volcanic gases and forest fires. Present in vehicle exhaust, tobacco smoke, and landfill sites; also manufactured and used widely in industry as a solvent in paints and lacquers and for cellulose plastics.

# BB27 Adenosine

Affects central nervous system and peripheral nervous system; constituent of ATP and ADP; may be involved with asthma; stimulatory effect of tea and coffee because inhibit adenosine.

# BB28 Adenylate Cyclase

Converts ATP into cAMP2 within the cell.

# BB29 Albumin/Albumen

Produced by liver; most abundant (54%) and smallest of plasma proteins; regulates osmotic pressure of plasma and therefore fluid retention; carrier for metals, ions, fatty acids, amino acids, bilirubin2, enzymes and drugs – prevents them being filtered out by the kidneys and excreted in urine.

# BB30 Antithrombin III

Blocks action of clotting agents (factors XII, XI, IX, X and II).

# BB31 Atrial Natriuretic Peptide /ANP/ Atriopeptin

Produced in upper chambers of heart; increases excretion of sodium in urine; increases urine output and decreases blood volume; causes blood vessels to dilate; inhibits aldosterone1 production and lowers blood pressure; children with congenital heart disease have high levels of ANP.

# BB32 Calcitriol

Aids in absorption of dietary calcium and phosphorus; secreted by kidneys; it is the active hormonal form of vitamin D

# BB33 Cortisol/

Hydrocortisone hormone the principal glucocorticoid1; increases blood glucose levels by increasing cellular utilization of proteins and fats as energy sources thus conserving glucose; stimulates liver cells to produce glucose from amino acids and fats; secretion controlled by ACTH1 from anterior pituitary; counteracts the inflammatory response also used as a drug for inflammatory or allergic conditions

# BB34 Endothelin-1

Found in brain, intestines, kidneys and heart; most potent vasoconstrictor known; regulates salt transport in intestine; may be implicated in migraine; increased levels in diabetic and non-diabetic coronary artery disease; increased levels in micro-vascular angina.

# BB35 **B-Estradiol/17B-Estradiol**

Synthesized from cholesterol in ovaries; predominant oestrogen hormone in non-pregnant women; promotes development and maintenance of female reproductive structures; increases protein anabolism; lowers blood cholesterol; moderate levels inhibit release of the hormones GnRH, FSH1 and LH1.

# BB36 Estriol

One of the oestrogen hormones; promotes development and maintenance of female reproductive structures; increases protein anabolism; lowers blood cholesterol; moderate levels inhibit release of the hormones GnRH, FSH1 and LH1.

# BB37 Estrone

One of the oestrogen hormones; promotes development and maintenance of female reproductive structures; increases protein anabolism; lowers blood cholesterol; moderate levels inhibit release of the hormones GnRH, FSH1 and LH1.

# BB38 Gamma-aminobutyrate acid/GABA

Most widely distributed inhibitory neurotransmitter; blocks noradrenaline1 and dopamine2; deficiencies found in hypertension and seizures; a target for anti-anxiety drugs.

#### BB39 Gamma Globulin

Approximately 38% of blood plasma proteins; carrier for antibodies and so has a role in infection and allergies given as an injection to prevent viral hepatitis.

#### BB40 Glucagon

Raises blood sugar levels by accelerating breakdown of glycogen into glucose in the liver, converting other nutrients into glucose in the liver, and releasing glucose into the blood – opposes the action of insulin1; may stimulate the secretion of water and electrolytes by the mucosa of small intestine given by injection in the emergency treatment of people with diabetes mellitus who are unconscious as a result of hypoglycaemia.

#### BB41 Glutamic Acid/ Glutamate

Can be manufactured by the body; precursor of proline, ornithine3, arginine3 and polyamines; a stimulatory neurotransmitter; can be converted in body into GABA; nearly all excitatory neurons in the CNS and possibly half of the synapses in the brain communicate via glutamate; visual adaptation to light and dark; many epileptics have increased levels of glutamic acid; part of the acute reaction to withdrawal from drug addiction includes increase production of glutamate.

#### BB42 Glycine

Can be synthesized from other amino acids (serine and threonine3); acts as an inhibitory neurotransmitter; assists in manufacture of DNA, glycerol, phospholipids, collagen, glutathione3 and cholesterol2 conjugates; essential for one of key liver detoxification pathways; stimulates secretion of glucagons; in spinal cord (inhibitory action) and in retina; Parkinson's disease; low levels often found in manic-depressives and epileptics; people with motor neurone disease may have impaired glycine metabolism.

#### BB43 Gonadotropin Releasing Hormone (GnRP)

Secreted by hypothalamus; stimulates release of LH1 and FSH1.

#### BB44 Leptin

Released by fat cells as they synthesize triglycerides; reduces appetite; believed to inhibit neuropeptide Y; role in central control of bone mass and so possibly osteoporosis; onset of puberty; believed to have an immune system role through support of helper T cells non-insulin dependent diabetes, high blood pressure

#### BB45 Neuropeptide Y

Present in many parts of the brain and autonomic nervous system; enhances effect of norepinephrine1; stimulates appetite; causes increased storage of ingested food as fat; regulation of circadian rhythms, sexual functioning, anxiety and stress response, peripheral vascular resistance and contractility of heart; reduces energy expenditure: high circulating levels with severe exercise a gene in roundworms (closely related to the neuropeptide Y receptor gene in humans) increases social contact and interaction; research is being carried out to produce a drug for epilepsy based on this.

#### BB46 Neurotensin

Release stimulated by fatty acids; inhibits gastrointestinal motility and increases ileal blood flow; regulation of LH1 and prolactin1; blocks stimulation of acid and pepsin by the vagus nerve low levels may be involved in schizophrenia, Alzheimer's disease, Parkinson's disease.

#### BB47 Somatostatin

This was inadvertently included twice in two different test kits; it has now been removed from this kit and can be found in the hormone kit (H13).

#### BB47a Protein Tyrosine Phosphatase / PTP1B

Inhibits signaling of leptin and insulin1; may explain resistance to leptin and insulin likely to be important in obesity and type 2 diabetes; drug research now being carried out to find drugs to inhibit PTP1B.

#### BB48 Thyroxine/Tetraiodothyronine/T4

Converted into T31; growth and normal development; increase rate at which cells release energy from carbohydrates; enhance protein synthesis; stimulate nervous system.

#### BB49 3,3',5'-Triiodothyronine/ Reverse T3

Reverse T3 and T31 are secreted in an inverse relationship allowing the thyroid to adjust the amount of thyroid activity; blocks the action of T31 by binding with the receptor sites acute and chronic diseases and malnutrition also shift the T31 balance to Reverse T3.

#### BB50 Val-Pro-Asp-Pro-Arg

Appetite suppressant in rats.

## Body Biochemicals 3 Test Kit 25 vials

The energy patterns of 4 types of collagen, body chemicals involved in the non-specific immune response, anadamide, tumour necrosis factor alpha, more weight control hormones, etc.

#### BB51 n-Acetyl-D-Glucosamine

Builds and maintains the matrix of collagen6 and connective tissue that forms the ground substance of cartilage inflammatory bowel disease; Crohn's disease.

#### BB52 Anandamide

Pain control; may be used by the brain as a central fine-tuner of electrical activity; inhibits movement; involved with mood; short-term memory; male fertility (high levels slow speed of sperm); acts as a chemical messenger between the embryo and uterus during implantation of the embryo in the uterine wall; may control coughing and various respiratory functions; may increase appetite also known as "the bliss molecule" (ananda is Sanskrit for bliss) and the body's own cannabis (cannabis binds to the same receptors as anandamide); chocolate contains anandamide; may be involved in crohn's disease, Parkinson's disease, drug addiction, schizophrenia, autism and Gilles de la Tourette's syndrome.

#### BB53 Collagen Type I

90% of the collagen in human body; present in bone, skin (associated with type III collagen6) and tendons; in foetal and diseased tissue, type I collagen has been reported as having a different structure.

#### BB54 Collagen Type II

30% of hyaline and elastic cartilage is composed of type II collagen; present in inter-vertebral discs and the vitreous body of the eye.

#### BB55 Collagen Type III

The major collagen found in skin, blood vessels and internal organs such as the smooth muscle layers of the gastrointestinal tract.

#### BB56 Collagen Type V

A minor collagen as it is present in less than 10% of the total collagen in any tissue; usually found with type I6 collagen and type III6 collagen in bone, tendon, cornea, skin, blood vessels and lungs; during foetal development, basement membranes originally contain type V collagen before being replaced to type IV collagen.

#### BB57 Complement C3

Part of non-specific immune response; turned into complement 3b which enhances phagocytosis (ingestion and destruction of cell debris, microbes and other foreign matter); most abundant of complement proteins; low levels of C3 often seen in gram negative septicemia, shock, lupus, fungal infections and some parasitic infections such as malaria; increased complement activity seen in cancer and ulcerative colitis; decreased complement activity in hepatitis and liver cirrhosis.

#### BB58 Complement C5a

Part of non-specific immune response; contributes to the development of inflammation by dilating arterioles and causing release of histamine; increased complement activity seen in cancer and ulcerative colitis; decreased complement activity in hepatitis and liver cirrhosis.

#### BB59 Complement Factor B

protein part of non-specific immune response; activates complement C3 and so the immune response; increased complement activity seen in cancer and ulcerative colitis; decreased complement activity in hepatitis and liver cirrhosis.

#### BB60 Complement Factor D

protein part of non-specific immune response; activates complement C3 and so the immune response; increased complement activity seen in cancer and ulcerative colitis; decreased complement activity in hepatitis and liver cirrhosis.

#### BB61 Complement Factor I

protein part of non-specific immune response; recognizes repetitive sugar structures found in cell membranes of bacteria and viruses but not in humans; triggers reactions that activate complement C3 and C5 and so the immune response; increased complement activity seen in cancer and ulcerative colitis; decreased complement activity in hepatitis and liver cirrhosis.

#### BB62 Complement Factor P / Properdin

protein part of non-specific immune response; activates complement C3 and so the immune response; increased complement activity seen in cancer and ulcerative colitis; decreased complement activity in hepatitis / cirrhosis.

#### BB63 Elastin

With fibrillin forms elastic fibres which are strong but can be stretched up to 150% of their relaxed length without breaking; form a network within tissues particularly skin, blood vessel walls and lung tissue; with age thickens, fragments and acquires an affinity for calcium so may also be associated with development of atherosclerosis.

#### BB64 Erythropoietin/ EPO

Hormone produced by kidneys; formed from a plasma protein, stimulates red blood production; increased blood levels in anaemia.

#### BB65 Exendin(9-39)

Reduces glucose levels; competes for the same brain receptors as GLP1 and so blocks the effect of GLP1 and stimulates appetite; has been shown to acutely increase food intake and promote weight gain in long-term rodent studies; influence on type 2 diabetes.

#### BB66 Glucagon-Like Peptide 1/ GLP1

Produced in intestinal endocrine cells; stimulates production of insulin1; inhibits production of glucagon3 and gastric emptying; reduces appetite; lowers blood glucose in people with diabetes; biological activity is arrested by Dipeptidyl Peptidase IV.

#### BB67 Glucosamine-6-phosphate

The form that occurs in the body; "glues" structures together; forms an integral part of cell membranes; influences cell to cell communication; important for joint surfaces, tendons, ligaments, synovial fluid, skin, bone, nails and mucus secretions of the digestive, respiratory and urinary tracts; important in osteorathritis and cartilage health generally; the supplement glucosamine sulphate may be used when the body is short of this.

#### BB68 Glutathione Peroxidase

Enzyme involved in conversion of hydrogen peroxide within the body; protection against free radical damage; reduces the production of inflammatory prostaglandins and leukotrienes; children with asthma have significantly reduced blood levels; may be involved in schizophrenia; levels reduced if selenium deficiency.

#### BB69 Nociceptin/ Orphanin FQ2

Peptide present in many areas of the CNS; believed to play a role in pain transmission; amplifies pain and enhances harmless stimuli into painful sensations.

#### BB70 Nocistatin

Peptide that counteracts the effect of nociceptin.

#### BB71 Orexin B

Generated when blood sugar levels drop, so acting as a trigger to eat people who over-eat may possibly produce too much orexin; lack of orexin has been linked to narcolepsy (sleep disorder characterized by sudden sleeping).

#### BB72 Phosphatidyl-Inositol

Important component of biological membranes; supervises division of cells and metabolism; in some skincare products and lipsticks.

#### BB73 Superoxide Dismutase/ SOD

Antioxidant produced naturally in the body; combats the damage to cells caused by the superoxide radical; supplementation of SOD has been shown to exert strong regenerative effects on tissues that have become hardened or fibrotic because of age, disease, or injury; may be anti-ageing.

#### BB74 Tumour Necrosis Factor Alpha

Produced by macrophages, which engulf and destroy bacteria, viruses, and other foreign substances; role in regulating inflammatory and immune responses throughout the body and particularly in relation to some parasites; asthma, eczema, psoriasis, psoriatic arthritis, rheumatoid arthritis, AIDS, multiple sclerosis, cancer; may be involved in septicaemia, and the weight loss associated with parasitic infection or cancer.

#### BB75 Ubiquitin/APF-1

Essential for protein degradation and cell cycling; DNA repair; cellular stress responses; various enzymes attach ubiquitin to body proteins; these enzymes are known as ubiquitin ligases.; when a protein bears many ubiquitin molecules, it is targeted for degradation by the proteasome, a huge enzyme complex; when few ubiquitins are attached, they may serve structural, regulatory, or trafficking functions.

## Body Biochemicals 4 Test Kit 25 vials

The energy patterns of the DNA bases, more hormones involved in weight loss, two enkephalins and chemicals involved in blood clotting.

#### BB76 Acetyl Coenzyme A

Synthesized in the mitochondria of all cells and is used to generate ATP in the Krebs cycle; involved in the synthesis of Ach in some nerve cells.

#### BB77 Actin

In order for muscle to contract myosin and actin must interact; actin-myosin interaction activates actomyosin ATPase which extracts energy from ATP for contraction.

#### BB78 Adenine

One of the bases of DNA & RNA.

#### BB79

Replaced with BB79a as BB79 was an unintentional duplicate of BB28

#### BB79a Calcineurin

Speeds up the rate at which electrical signals in the brain die away, so affects long-term memory; may have a role in dementia; post-traumatic stress syndrome and heart failure.

# BB80 Calmodulin/ modulator protein/ (CaM)/ Phosphodiesterase 3':5'- Cyclic Nucleotide Activator

Calcium-binding protein found within cells; many different biochemical processes known to be regulated by calmodulin, although the interactions of calmodulin with its various target enzymes are only poorly understood; has a regulatory effect on contraction and relaxation of smooth muscles; involved in gene regulation, protein synthesis, inflammation, short term memory, the immune response, viral penetration, and the cell cycle implicating it in AIDs, Alzheimer's, certain cancers and other diseases.

#### BB81 Carbonic Anhydrase

Present in red blood cells and kidney cells; controls the elimination of carbon dioxide from the body and the pH of urine; facilitates the transfer of carbon dioxide from the tissues to the blood and from the blood to the alveoli (air sacs) of the lungs; involved in production of gastric acid.

#### BB82 Catalase

The decomposition of hydrogen peroxide8 into water and oxygen.

#### BB83 Cytosine

One of the bases of DNA & RNA.

#### BB84 Dipeptidyl Peptidase IV

Arrests biological activity of GLP1 and Substance P.

#### BB85 Fibrin

Essential to blood clotting; formed from fibrinogen by the action of thrombin.

#### BB86 Fibrinogen

A clotting factor in blood plasma that is converted to fibrin; produced by liver and plasma cells; approximately 7% of blood plasma proteins.

#### BB87 Glycogen

The principal carbohydrate storage material in the body; plays an important role in controlling blood sugar levels.

#### BB88 Glycogen Phosphorylase A

Involved in converting glycogen to glucose.

#### BB89 Glycogen Synthase

Involved in converting glucose to glycogen.

#### BB90 Guanine

One of the basis of DNA & RNA.

#### BB91 Homocysteine

Formed from the breakdown of methionine; should exist only briefly before being broken down into cysta-

thione and then cysteine; if does not happen efficiently then raised blood levels of homocysteine can occur; linked to atherosclerosis; and Alzheimer's disease; homozygous homocysteine (rare condition).

#### BB92 Keratin

Produced in the skin epidermis; helps protect skin and underlying tissues from heat, microbes and chemicals.

#### BB93 Leucine Enkephalin

Produced in the adrenal medulla; inhibits pain impulses by suppressing release of Substance P2; increased secretion into the blood stream when stressed; morphine stimulates enkephalin receptors.

#### BB94 Methionine Enkephalin

Produced in the adrenal medulla; sedative effect; inhibits pain impulses by suppressing release of Substance P2; increased secretion into the blood stream when stressed in alcohol- and cocaine-pre-ferring mouse strains, methionine enkephalin is lower in the hypothala¬mus; morphine stimulates enkephalin receptors.

#### BB95 Myosin

In order for muscle to contract, myosin and actin must interact.

#### BB96 Prothrombin/Factor II

Inactive protein synthesized by the liver, released into the blood, and converted to active thrombin in the process of blood clotting.

#### BB97 Terminal Transferase

A DNA polymerase that does not require a primer; catalyses the addition of nucleotides to DNA (involved in cell division).

#### BB98 Thrombin

Active enzyme produced from prothrombin; acts to covert fibrinogen to fibrin.

BB99 **Thymine** One of the DNA bases.

### BB100 Uracil

One of the bases of RNA.

# Body Biochemicals 5 Test Kit 25 vials

The energy patterns of more weight loss hormones, most of the enzymes involved in glycolysis and six prostaglandins.

#### BB101 Aldolase

Involved in 4th step in process of glycolysis.

#### BB102 CART/Cocaine- and Amphetamine Related Transcript

Modulates the action of leptin5 and neuropeptide Y5 and so reduces appetite; cocaine and amphetamines stimulate its production.

#### BB103 Elastase

Pancreas, activated from proelastase by trypsin4; turns peptides into proteins.

#### BB104 Enolase

Involved in 9th step in process of glycolysis.

#### BB105 Galanin

Inhibits release of acetylcholine2 and glutamic acid5; decreases excitability of spinal neurons; stimulates the appetite; may be involved in Alzheimer's disease.

#### BB106 Ghrelin

Increases appetite; may be a hormonal link between stomach, hypothalamus and pituitary and so regulate energy balance; regulates growth hormone secretions; may signal to the hypothalamus when an increase in metabolic efficiency is necessary; blood levels are elevated in anorexics and return to normal after partial weight recovery.

#### BB107 Glyceraldehyde-3-Phosphate Dehydrogenase

Involved in 6th step in process of glycolysis.

#### BB108 Hexocinase

Involved in 1st step in process of glycolysis.

#### BB109 Melatonin

Secreted by pineal gland; may inhibit reproductive activities and promote sleep; regulation of body's biological clock.

#### BB110 Neuromedin B

Present in the central nervous system and gastrointestinal tract; binds to corticotropin releasing factor receptors; involved in smooth muscle contraction, blood pressure, blood glucose, body temperature and cell growth; suppresses the appetite.

#### BB111 2-Phenylethylamine/ PEA/ Beta-Phenethylamine

Chemical which plays a critical role in the limbic system known to give a feeling of bliss; 60% of depressed patients have a PEA deficit; a natural ingredient in chocolate; MAOI anti-depressants increase concentrations of this in the brain.

#### BB112 Phosphoglucose Isomerase

Involved in 2nd step in process of glycolysis.

#### BB113 Phospho-Fructokinase

Involved in 3rd step in process of glycolysis.

#### BB114 Prostaglandin A1/ PGA1

Relaxes the muscles in the walls of blood vessels, acting as powerful vasodilators and so lowering blood pressure; may protect against peptic ulcers.

#### BB115 Prostaglandin D2/ PGD2

Stimulates inflammation.

#### BB116 Prostaglandin E1/PGE1

Dilates blood vessels and so reduces blood pressure; seems to be elevated in manic-depressive disorders; used as a treatment for erectile dysfunction in men.

#### BB117 Prostaglandin E2/ PGE2

Promotes platelet adhesiveness; promotes sodium retention; promotes inflammation; widens airways; stimulates contraction of uterus; protects against peptic ulcers; acts on adenylate cyclase to enhance the production of cyclic AMP; used as a treatment for erectile dysfunction in men.

#### BB118 Prostaglandin F2/ PGF2

Stimulates contraction of uterus; narrows airways.

#### BB119 Prostaglandin I2/ PGI2

Reduces platelet stickiness; women who develop pre-eclampsia have low levels of this.

#### BB120 Purine

Used in the process producing proteins; converts the energy produced by the oxidation of food molecules to a form which the cell can use to satisfy its energy needs; involved in nerve conduction and muscle contraction; rids cells of excess nitrogen; protects the cell from cancer-causing agents; increased levels raise the levels of uric acid in the blood and cause gout.

#### BB121 Pyruvate Kinase

Involved in 10th step in process of glycolysis.

#### BB122 Serine

Can be made in human body from glycine; used to make substances such as choline, phospholids, phospholidylserine; present in all cell membranes ; plays a key role in membrane stability.

#### BB123 Triosephosphate Isomerase

Involved in 5th step in process of glycolysis.

#### BB124 Uric Acid

Waste product of the breakdown of nucleic acid in cells; formed primarily in the liver and excreted by the kidney into the urine; over-production leads to uric acid crystal deposits in the joints (gout); low levels in people with multiple sclerosis.

BB125 **Urocortin** Inhibits appetite.

## Body Biochemicals 6 Test Kit 25 vials

The 6th of the Body Biochemical Test Kits, containing more hormones, cytokines, including DHEA, Gastrin, Peptide YY, Fibroblast Growth Factors, etc. 25 vials for AK Practitioners, Bioresonance Practitioners, NAET,

etc.

#### BB 126 Amphiregulin/AREG

A member of the epidermal growth factor family. Interacts with the EGF/TGF-alpha receptor to promote the growth of normal epithelial cells and inhibits the growth of certain aggressive carcinoma cell lines.

#### BB 127 Androstenedione

A steroid hormone produced in the adrenal glands and the gonads as an intermediate step in the biochemical pathway that produces the testosterone, estrone and estradiol.

#### BB 128 Dehydroepiandrosterone / DHEA

A steroid hormone; the most abundant circulating steroid in humans, in whom it is produced in the adrenal glands, the gonads, and the brain, where it functions predominantly as a metabolic intermediate in the biosynthesis of the androgen and oestrogen sex steroids.

#### BB 129 Epidermal Growth Factor

Stimulates cell growth, proliferation, and differentiation. Can be found in platelets, macrophages, urine, saliva, human milk, and plasma.

#### BB 130 Fibroblast Growth Factor 1 /FGF-1

Growth factors involved in angiogenesis, wound healing, and embryonic development; promotes endothelial cell proliferation and the physical organization of endothelial cells into tube-like structures; stimulates angiogenesis and the proliferation of fibroblasts that give rise to granulation tissue, which fills up a wound space/cavity early in the wound-healing process. Seems to be involved in the regulation of synaptic plasticity and processes attributed to learning and memory, at least in the hippocampus.

#### BB 131 Fibroblast Growth Factor 2 / FGF-2

Growth factors involved in angiogenesis, wound healing, and embryonic development. Promotes endothelial cell proliferation and the physical organization of endothelial cells into tube-like structures. Stimulate angiogenesis and the proliferation of fibroblasts that give rise to granulation tissue, which fills up a wound space/cavity early in the wound-healing process. Adult neurogenesis within the hippocampus depends greatly on FGF-2. Seems to be involved in the regulation of synaptic plasticity and processes attributed to learning and memory, at least in the hippocampus.

#### BB 132 Fibroblast Growth Factor 10 / FGF-10

Growth factors involved in angiogenesis, wound healing, and embryonic development.

#### BB 133 Fibroblast Growth Factor 23 / FGF-23

Main function seems to be regulation of phosphate concentration in plasma. Secreted by osteoblasts and osteoclasts in response to elevated calcitriol. Acts on kidneys, where it decreases the expression of NPT2, a sodium-phosphate cotransporter in the proximal tubule, so decreases the reabsorption and increases excretion of phosphate.

#### BB 134 Gastrin

A peptide hormone that stimulates secretion of gastric acid (HCI) by the parietal cells of the stomach and aids in gastric motility.

#### BB 135 Granulocyte Colony-Stimulating Factor / G-CSF

A glycoprotein, growth factor and cytokine produced by a number of different tissues to stimulate the bone marrow to produce granulocytes and stem cells, and then stimulates the bone marrow to release them into the blood. Also stimulates the survival, proliferation, differentiation, and function of neutrophil precursors and mature neutrophils.

#### BB 136 Granulocyte Macrophage Colony-Stimulating Factor / GM-CSF

A protein secreted by macrophages, T cells, mast cells, NK cells, endothelial cells and fibroblasts. Functions as a white blood cell growth factor. Stimulates stem cells to produce granulocytes (neutrophils, eosinophils, and basophils) and monocytes.

#### BB 137 Growth-Hormone Releasing Hormone / Growth-Hormone-Releasing Factor /GRF/ GHRF / Somatoliberin / Somatocrinin

Stimulates growth hormone secretion; (growth hormone is required for normal postnatal growth, bone growth, regulatory effects on protein, carbohydrate, and lipid metabolism); promotes slow-wave sleep;

#### BB 138 Insulin-Like Growth Factor 1 / IGF-1/ Somatomedin C

A hormone similar in molecular structure to insulin; plays an important role in childhood growth and continues to have anabolic effects in adults.

#### BB 139 Insulin-Like Growth Factor 2/ IGF 2

A hormone similar in molecular structure to insulin; has growth-regulating, insulin-like and mitogenic activities; believed to be a major foetal growth factor.

#### BB 140 Interferon-Gamma

Critical for innate and adaptive immunity against viral and intracellular bacterial infections and for tumor control. An important activator of macrophages. Aberrant IFN-? expression is associated with a number of autoinflammatory and autoimmune diseases.

#### BB 141 Lipopolysaccharide / LPS

Found in the outer membrane of Gram-negative bacteria, act as endotoxins and elicit strong immune responses. Produced by gut bacteria, so source of many inflammatory reactions including autoimmunity.

#### BB 142 Neuregulin 1 / NRG1

Induce the growth and differentiation of epithelial, neuronal, glial, and other types of cells. Essential for the normal development of the nervous system and the heart. Thought to play a role in schizophrenia. Part of the EGF family of proteins.

#### BB 143 Neuregulin 2 / NRG2

Induces the growth and differentiation of epithelial, neuronal, glial, and other types of cells. Part of the EGF family of proteins.

#### BB 144 Neuregulin 3 / NRG3

Linked to a susceptibility to schizophrenia and Hirschsprung's disease.Part of the EGF family of proteins.

#### BB 145 Neuregulin 4 / NRG4

Activates type-1 growth factor receptors to initiate cell-to-cell signaling through tyrosine phosphorylation. Loss of expression of NRG4 is frequently seen in advanced bladder cancer while increased NRG4 expression correlates to better survival.

#### BB 146 Peptide YY / PYY / Peptide Tyrosine Tyrosine

Released by cells in the ileum and colon in response to eating; appears to reduce appetite (by slowing the gastric emptying); inhibits gastric motility and increases water and electrolyte absorption in the colon; increases efficiency of digestion and nutrient absorption after a meal; may also suppress pancreatic secretion.

#### BB 147 Platelet-Derived Growth Factor / PDGF-R

Plays a significant role in blood vessel formation (angiogenesis), the growth of blood vessels from alreadyexisting blood vessel tissue. Uncontrolled angiogenesis is a characteristic of cancer.

#### BB 148 Pregnenolone

A steroid the body makes as a precursor to other steroid hormones, such as progesterone, DHEA, mineralocorticoids (which regulate electrolyte balance), corticosteroids (which influence inflammation and metabolism), estrogens, and androgens.

#### BB 149 Transforming Growth Factor-Alpha / TGF Alpha

Seems to play a role in mediation of cell-cell adhesion and in juxtacrine stimulation of adjacent cells. Expression of TGF-alpha is widespread in tumors and transformed cells. TGF-alpha is also expressed in normal tissues during embryogenesis and in adult tissues, including pituitary, brain, keratinocytes and macrophages.

#### BB 150 Transforming Growth Factor-Beta / TGF-Beta

A protein that controls proliferation, cellular differentiation, and other functions in most cells. A type of cytokine which plays a role in immunity, cancer, bronchial asthma, heart disease, diabetes, Marfan syndrome, Loeys–Dietz syndrome, Parkinson's disease and AIDS.

## Body Biochemicals 7 Test Kit 25 vials

More body biochemicals including plasmin, plasminogen. HDL, LDL, VLDL, etc.

#### BB 151 Alanine

A non-essential amino acid, high levels linked to high blood pressure. Alterations in the alanine cycle that increase the levels of serum alanine aminotransferase (ALT) is linked to the development of type II diabetes. Good sources in the diet include beans, nuts, seeds, soy, whey, brewer's yeast, brown rice, bran, corn, legumes, whole grains.

#### BB 152 Amyloid Beta Peptide / Beta Amyloid

The main component of amyloid plaques (extracellular deposits found in the brains of patients with Alzheimer's disease); similar plaques appear in some variants of Lewy body dementia and in inclusion body myositis (a muscle disease); also form the aggregates that coat cerebral blood vessels in cerebral amyloid angiopathy.

#### BB 153 ATP / Adenosine Triphosphate

Transports chemical energy within cells for metabolism; one of the end products of photophosphorylation, cellular respiration, and fermentation and used by enzymes and structural proteins in many cellular processes, including biosynthetic reactions, motility, and cell division.

#### BB 154 Catechol-O-Methyl-Transferase/COMT

One of several enzymes that inactivate dopamine, epinephrine, and norepinephrine. Also shortens the biological half-lives of certain neuro-active drugs, like L-DOPA, alpha-methyl DOPA and isoproterenol.

#### BB 155 Glutathione Reductase

Plays an important role in protecting haemoglobin, red cell enzymes, and biological cell membranes against oxidative damage by increasing the level of reduced glutathone (GSSGR) in the process of aerobic glycolysis; can act as a scavenger for hydroxyl radicals, singlet oxygen, and various electrophiles.

#### BB 156 Hydrogen Peroxide

Trace quantities released from immune cells (e.g. neutrophils and monocytes) as they come into contact with different bacteria or fungi.

#### BB 157 Intrinsic Factor Gastric Intrinsic Factor / GIF

Produced by the parietal cells of the stomach; necessary for the absorption of vitamin B12 (cobalamin) later on in the small intestine.

#### BB 158 L-Dopa

Made and used as part of the normal biology; the precursor to the neurotransmitters dopamine, norepinephrine and epinephrine. As a drug it is used in the clinical treatment of Parkinson's disease and dopamine-responsive dystonia.

#### BB 159 Lipoprotein High-Density / HDL

Enable the transportation of lipids, such as cholesterol and triglycerides, within the water around cells, including the bloodstream. Remove fats, including cholesterol, from cells, including within artery wall atheroma and transport it back to the liver for excretion or re-utilization. Often informally called good cholesterol.

#### BB 160 Lipoprotein Lipase

Enzyme produced by many tissues, including adipose tissue, cardiac and skeletal muscle, islets, and macrophages; hydrolyses triglycerides in lipoproteins, such as those found in chylomicrons and very low-density lipoproteins (VLDL), into two free fatty acids and one monoacylglycerol molecule; also involved in promoting the cellular uptake of chylomicron remnants, cholesterol-rich lipoproteins, and free fatty acids; contributes in a pronounced way to normal lipoprotein metabolism and many aspects of metabolism, including energy balance, insulin action, body weight regulation, and atherosclerosis.

#### BB 161 Lipoprotein Low-Density / LDL

Enable transport of multiple different fat molecules, as well as cholesterol, within the water around cells and within the water-based bloodstream. Transport cholesterol into the artery wall, retained there by arterial proteoglycans and attract macrophages that engulf the LDL particles and start the formation of plaques; increased levels are associated with atherosclerosis. Often informally called bad cholesterol.

#### BB 162 Lipoprotein Very Low-Density / VLDL

Made by the liver; enable fats and cholesterol to move within the water-based solution of the bloodstream.

VLDL is assembled in the liver from triglycerides, cholesterol, and apolipoproteins. VLDL is converted in the bloodstream to low-density lipoprotein.

#### BB 163 Motilin

Hormone produced from endocrine cells of the duodenal mucosa to help regulate motility of the digestive tract. Called "housekeeper of the gut" because it improves peristalsis in the small intestine and clears out the gut to prepare for the next meal.

#### BB 164 Nicotinamide Adenine Dinucleotide / NAD

The coenzyme form of the vitamin niacin; found in all living cells; has a crucial roles in many cellular processes, both as a coenzyme for redox reactions and as a substrate to donate ADP-ribose units; involved in age-associated diseases, including diabetes, cancer and neurodegenerative diseases.

#### BB 165 Nitric Oxide

Serves as a neurotransmitter between nerve cells, part of its general role in redox signalling (helping cells protect themselves, detect damage and then either repair or replace damaged cells). Also of critical importance as a mediator of vasodilation in blood vessels, so playing a key role in renal control of extracellular fluid homeostasis, the regulation of blood flow and blood pressure, and in erection of the penis.

#### BB 166 Pancreatic Polypeptide

Secreted by the pancreas to regulate pancreatic secretion activities (endocrine and exocrine); also has effects on hepatic glycogen levels and gastrointestinal secretions; secretion is stimulated by eating, exercising, and fasting; can inhibit gallbladder contraction; elevated in anorexia nervosa and reduced in conditions associated with increased food intake.

#### BB 167 Peroxynitrite / Peroxonitrite

Produced in the body in inflammation, cardiovascular disease, neurodegeneration, diabetes, and other pathologies.

#### BB 168 Plasmin

Enzyme present in blood that degrades many blood plasma proteins, most notably, fibrin clots; activates collagenases, some mediators of the complement system and weakens the wall of the Graafian follicle (leading to ovulation).

#### BB 169 Plasminogen

The inactive enzyme precursor of plasmin.

#### BB 170 Proline

A non-essential amino acid; involved in tissue repair, collagen formation, arteriosclerosis prevention and blood pressure maintenance.

#### BB 171 Quinolinic Acid /2,3-Pyridinedicarboxylic Acid

A downstream product of the kynurenine pathway which metabolizes the amino acid tryptophan; implicated in mood disorders, schizophrenia, conditions related to neuronal death, amyotrophic lateral sclerosis, Alzheimer's disease, brain ischemia, HIV associated neurocognitive disorder, Huntington's disease, Parkinson's disease and Lyme disease with CNS involvement.

#### BB 172 Thrombopoietin / Megakaryocyte Growth And Development Factor

A glycoprotein hormone produced by the liver and kidney which regulates the production of platelets; stimulates the production and differentiation of megakaryocytes, the bone marrow cells that bud off large numbers of platelets.

#### BB 173 Tissue Plasminogen Activator

A protein involved in the breakdown of blood clots; as an enzyme, it catalyzes the conversion of plasminogen to plasmin. Used in clinical medicine to treat only embolic or thrombotic stroke. Use is contra-indicated in hemorrhagic stroke and head trauma.

#### BB 174 Triglycerides

A blood lipid that help enable the bidirectional transference of adipose fat and blood glucose from the liver. High levels of triglycerides in the bloodstream have been linked to atherosclerosis and, by extension, the risk of heart disease and stroke.

#### BB 175 Vasoactive Intestinal Peptide

Produced in many tissues including the gut, pancreas, and suprachiasmatic nuclei of the hypothalamus in the brain; stimulates contractility in the heart, causes vasodilation, increases breakdown of glucose, lowers arterial blood pressure and relaxes the smooth muscle of trachea, stomach and gall bladder.

# Body Biochemicals 8 Test Kit 25 vials

More body biochemicals including plasmin, plasminogen. HDL, LDL, VLDL, etc.

More hormones and other body biochemicals particularly ones associated with the Citric Acid Cycle (Krebs Cycle).

Citric Acid Cycle is also known as the TCA cycle (tricarboxylic acid cycle) or the Krebs cycle. It is a series of chemical reactions used by all aerobic organisms to release stored energy through the oxidation of acetyl-CoA derived from carbohydrates, fats, and proteins, into adenosine triphosphate (ATP) and carbon dioxide. In addition, the cycle provides precursors of certain amino acids, as well as the reducing agent NADH, that are used in numerous other reactions. Its central importance to many biochemical pathways suggests that it was one of the earliest established components of cellular metabolism and may have originated abiogenically. Even though it is branded as a 'cycle', it is not necessary for metabolites to follow only one specific route; at least three segments of the citric acid cycle have been recognised. (Wikipedia).

#### BB 176 Aconitase

An essential enzyme in the citric acid cycle and iron regulatory protein 1 interacts with messenger RNA to control the levels of iron inside cells.

#### BB 177 Alkaline Phosphatase / ALP

Present in all tissues throughout the entire body, but is particularly concentrated in liver, bile duct, kidney, bone, and the placenta; high levels can occur if the bile ducts are obstructed, in Paget's Disease of bone and in untreated coeliac disease.

#### BB 178 Alpha-Ketoglutarate Dehydrogenase

Part of citric acid cycle; catalyses the conversion of  $\alpha$ -ketoglutarate to succinyl-CoA and produces NADH directly providing electrons for the respiratory chain.

#### BB 179 Alpha-Ketoglutaric Acid (AKA)

A key intermediate in the citric acid cycle, coming after isocitrate and before succinyl CoA.

#### BB 180 Asparagine

An amino acid required for development and function of the brain; also plays an important role in the synthesis of ammonia.

#### BB 181 Cis-Aconitic Acid

An intermediate in the isomerisation of citrate to isocitrate in the citric acid cycle.

#### BB 182 Citrate Synthase

An enzyme active in all cells, where it is most often responsible for catalysing the first reaction of the citric acid cycle (the condensation of acetyl-CoA and oxaloacetate to form citrate).

#### BB 183 Creatinine

A waste product that comes from the normal wear and tear on muscles of the body.

#### BB 184 Dihydrotestosterone / DHT / Androstanolone / Stanolone

Involved in sexual differentiation of the male genitalia during embryogenesis, maturation of the penis and scrotum at puberty, growth of facial, body, and pubic hair, and development and maintenance of the prostate gland and seminal vesicles. It is produced from testosterone, a less potent hormone, by the enzyme  $5\alpha$ -reductase in select tissues.

#### BB 185 Fumarase / Fumarate Hydratase

Participates in two metabolic pathways (citric acid cycle and reductive citric acid cycle); is also important in renal cell carcinoma.

#### BB 186 Human Chorionic Gonadotropin / hCG

A hormone produced by the placenta after implantation; its presence of hCG is detected in some pregnancy tests (HCG pregnancy strip tests); also produced by some cancer tumours.

#### BB 187 Isocitrate

Involved in citric acid cycle.

#### BB 188 Isocitrate Dehydrogenase

Involved in the citric acid cycle; responsible for catalysing the reversible conversion of isocitrate to alpha-ketoglutarate and CO2 in a two-step reaction.

#### BB 189 Lipotropin

Hormone secreted by the anterior pituitary gland which promotes the release of fat reserves from the liver into the bloodstream.

#### BB 190 Malate Dehydrogenase

An enzyme in the citric acid cycle that catalyses the conversion of malate into oxaloacetate (using NAD+) and vice versa.

#### BB 191 NADH / Nicotinamide Adenine Dinucleotide

Involved in citric acid cycle; a co-enzyme required for the production of energy in cells. Its effects include the stimulation of dopamine, noradrenaline, and serotonin receptors, by which mechanism it is thought to increase mental alertness and clarity and improve concentration.

#### BB 192 Nagalase / α-N-acetylgalactosaminidase

An extracellular matrix-degrading enzyme that is secreted by cancerous cells in the process of tumour invasion. It is also an intrinsic component of the envelope protein of various virions, such as HIV and the influenza virus. Thus, it is also secreted from virus-infected cells.

#### BB 193 Oxaloacetate / Oxalacetic Acid

A metabolic intermediate in many processes that occur in the body, including gluconeogenesis, urea cycle, glyoxylate cycle, amino acid synthesis, fatty acid synthesis and citric acid cycle.

#### BB 194 Phenylalanine Hydroxylase

An enzyme that catalyses the hydroxylation of the aromatic side-chain of phenylalanine to generate tyrosine.

#### BB 195 Proglucagon

A precursor of glucagon, and several other components; generated in the alpha cells of the pancreas and in the intestinal L cells in the distal ileum and colon.

#### BB 196 Proinsulin

The prohormone precursor to insulin made in the beta cells of the islets of Langerhans, specialized regions of the pancreas: There are higher concentrations of proinsulin after meals and lower levels when a person is fasting. Increased levels of proinsulin in the circulatory system relative to mature insulin concentrations can indicate impending insulin resistance and the development of type 2 diabetes.

#### BB 197 Selenocysteine

Amino acid present in several enzymes (for example glutathione peroxidases, tetraiodothyronine 5' deiodinases, thioredoxin reductases, formate dehydrogenases, glycine reductases, and some hydrogenases).

#### BB 198 Succinate

Part of citric acid cycle; also used as a supplement for symptoms related to menopause such as hot flushes and irritability.

# BB 199 Succinyl-Coenzyme A Synthetase /Succinyl-CoA synthetase / Succinate Thiokinase / Succinate-CoA Ligase

The only enzyme in the citric acid cycle that catalyses a reaction in which a nucleoside triphosphate (GTP or ATP) is formed by substrate-level phosphorylation. Defective SCS has been implemented as a cause of Fatal Infantile Lactic Acidosis.

#### BB 200 Tetrahydrobiopterin

Used in the degradation of phenylalanine and in the biosynthesis of some neurotransmitters (serotonin, melatonin, dopamine, norepinephrine, epinephrine); also a cofactor for the production of nitric oxide (NO) by the nitric oxide synthases.

# Bowel Nosodes Test Kit 11 vials

Bowel nosodes are prepared from cultures of non-lactose fermenting flora of the intestinal tract.

For additional information see:

https://hpathy.com/materia-medica/bowel-nosodes/

https://cleverhthemag.com/2015/06/01/the-bowel-nosodes-of-bach-paterson/ http://www.interhomeopathy.org/fr-bowel-nosodes-a-group-of-neglected-remedies

### Name & Indications:

BN 01	Bacillus No. 7	Paterson	Mental and physical fatigue; old rheumatism.
BN 02	Bacillus No. 10	Paterson	Fair, florid, dark, pale, anxious and active, ir ritable and depressed; warts and lipomas.
BN 03	Dys. Co.	Bach	Anticipatory nervous anxiety.
BN 04	Faecalis	Bach	Appears to be no specific indications for this.
BN 05	Gaertner	Bach	Malnutrition and malignancy; inability to digest fat; over-active brain.
BN 06	Morgan	Bach	Congestion, vertigo, introspection, depression. Itchy eruptions.
BN 07	Morgan Gaertner	Paterson	Skin and liver conditions, but likely to be more useful where there is evidence of acute inflam matory attack. E.g. colic.
BN 08	Morgan Pure	Paterson	Marked symptom of skin eruption or distur bance of the liver; bilious headache, or actual presence of gallstones.
BN 09	Mutabile	Paterson	Where there is alteration of symptoms, e. g. where skin eruption alternates with asthmatic symptoms; food allergies of all types.
BN 10	Proteus	Bach	Symptoms relative to the central or peripheral nervous systems and symptoms which appear with degree of suddenness and violence.
BN 11	Sycotic Co.	Paterson	Irritability of mind and membranes; anaemic looking.

# Bugs, Ticks & Mites Test Kit 41 vials

Bugs, ticks, midges, mites, mosquito and other biting organisms. It includes 3 house dust mite species, 4 horse flies, 4 mosquito, 8 ticks, 2 biting ants, 4 bees, 4 wasps, etc. All oganisms that can cause allergic and other reactions for human beings. Some also affect animals.

anninais.				
Code	Latin Name	Common Names	Comments	
<b>BTM 01</b> America.	Ant: Solenopsis Invicta	Red Fire Ant North,	Central and Southern	
BTM 02 found acro	<b>Ant:</b> Tetraponera Rufonigra ss Asia, and Africa.	Bi-coloured Arboreal	Ant	
BTM 03 gions of th	<b>Bed Bug:</b> Cimex Lectularius e globe.	Common Bed Bug Be	ed bugs occur in all re-	
BTM 04	Bee: Apis Mellifera,	Female Eurpean Bee	/Western Honey Bee	
<b>BTM 05</b> hamas, Cι	Bee: Lasioglossum Eleutherense	e, Female Sweat Bee	Southern Florida, Ba-	
<b>BTM 06 Bee:</b> Lasioglossum Leucozonium/ Lasioglossum Similis, Female Sweat Bee North America, Europe, Asia, and parts of northern Africa.				
<b>BTM 07</b> European	<b>Bee:</b> Xylocopa Violacea, species of carpenter bee.	Female Violet Carper	ter Bee The common	
<b>BTM 08</b>	Flea: Pulex Irritans Human Flea	Common Flea		
BTM 09 Horned Cle	Horse Fly: Haematopota Pluviali eg-Fly/ Common Horse Fly	s, Female Cleg / Cleg	Fly / Horse Fly /Notch-	
<b>BTM 10</b> Horse Fly: Hybomitra Bimaculata Female Hairy-legged Horsefly Distributed widely in Europe, Russia, Mongolia, China and Japan.				
<b>BTM 11</b> Europe, Ne	<b>Horse Fly:</b> Tabanus Bromius, orth Africa and in the Near East.	Female Band-Eyed B	rown Horse Fly	
BTM 12 widesprea	<b>Horse Fly:</b> Tabanus Sudeticus, F d in Europe.	emale Dark Giant Hor	se Fly Common and	
BTM 13	Louse: Pediculus Humanus Cap	itisHead Lice/ Head Lo	ouse	
BTM 14 Louse / Bo	<b>Louse:</b> Pediculus Humanus Hum ody Lice	nanus / Pediculus Hum	anus Corporis; Body	
BTM 15	Louse: Pthirus Pubis Pubic Lous	e / Pubic Lice/Crabs		
BTM 16 countries i	<b>Midge:</b> Culicoides Impunctatus ncluding the Netherlands and Sco		Northern European	
<b>RTM 17</b>	Midge: Culicoides Impunctatus a	nd Culicoides Pulicario	s Biting Midge / Sand	

**BTM 17** Midge: Culicoides Impunctatus and Culicoides Pulicaris Biting Midge / Sand Fly/ Gnats / No-see-ums /Punkies

**BTM 18** Midge: Culicoides Ornatus Mangrove Biting Midge Breeds in mangrove swamps, but then can be carried on the wind 500km plus. Found in Australia and India.

**BTM 19** Mite: Demodex Brevis Feeds off oil from sebum glands; found all over the body but particularly on chest and neck.

**BTM 20** Mite: Demodex Folliculorum Eyelash Mite Feed on dead skin cells around the lashes as well as other areas of the eye; everyone has small amounts of these very small mites; large quantities can cause skin irritation and eye inflammation.

**BTM 21** Mite: Dermatophagoide with faecal pellet. Dust mite and faecal pellet

**BTM 22** Mite: Dermatophagoides Farinae; American House Dust Mite; Worldwide.

**BTM 23** Mite: Dermatophagoides Pteronyssinus European House Dust Mite; Worldwide.

**BTM 24** Mite: Euroglyphus Maynei House Dust Mite Common in homes in Europe, the southern United States, and other parts of the world.

**BTM 25** Mite: Trombiculidae, Larvae Chiggers / Red Bugs /Harvest Bugs / Harvest Mite; It's larvae stage that is the problem; do not actually "bite", but instead form a hole in the skin and chew up tiny parts of the inner skin, causing severe irritation and swelling.

BTM 26 Mosquito: Aedes Albopictus, Female Asian Tiger Mosquito / Forest Mosquito

**BTM 27 Mosquito:** Anopheles Stephensi, Female Mosquito, Female Bites during the day; widespread global distribution.

**BTM 28 Mosquito:** Culex Pipiens, Female Common House Mosquito / Northern House Mosquito / Common Gnat / House Gnat; Middle East, the Indian subcontinent and China.

**BTM 29 Mosquito:** Culiseta Annulata /Theobaldia Annulata, Female Banded house mosquito, Banded mosquito, Ring-footed gnat; Occurs in Europe, USA, Asia, Australia and Middle East.

**BTM 30** Tick: Amblyomma Americanum, Female Lone Star Tick United States and northern Mexico. May carry Rocky Mountain spotted fever and Lyme disease.

**BTM 31** Tick: Dermacentor Andersoni, Female Rocky Mountain Wood Tick / Wood Tick North America; may carry Colorado tick fever or Rocky Mountain Spotted Fever or Tularemia.

**BTM 32** Tick: Dermacentor Marginatus, Female Ornate Sheep Tick Morocco, Spain, Italy, Southern France, Switzerland, Western Germany and Poland. Can carry Rickettsia slovakato (humans) and Babesia canis (dogs), as well as other infections.

**BTM 33** Tick: Dermacentor Variabilis, Female American Dog Tick United States. May carry Rocky Mountain spotted fever and tularemia.

**BTM 34** Tick: Ixodes Holocyclus, Female Paralysis Tick / Grass Tick / Seed Tick / Bush Tick Australia.

**BTM 35** Tick: Ixodes Pacificus, Female Western Balck-Legged Tick; North America. May carry Lyme disease.

**BTM 36** Tick: Ixodes Ricinus, Female Castor Bean Tick / European sheep tick; Found across Europe and into neighbouring parts of North Africa and the Middle East.

**BTM 37** Tick: Ixodes Scapularis, Female Deer Tick / Black-Legged Tick; North America; may carry Lyme disease, babesiosis and human granulocytic anaplasmosis.

**BTM 38** Wasp: Dolichovespula Maculata, Female Bald-Faced Hornet / Bald Hornet / White-Faced Hornet / White-Tailed Hornet / Spruce Wasp / Blackjacket / Bull Wasp

**BTM 39** Wasp: Dolichovespula Saxonica, Female Saxon Wasp Commonly found in most of Europe and in northern and central Asia.

**BTM 40** Wasp: Vespa Crabro, Female European Hornet / Brown Hornet; Widely distributed in Europe; also found in Eastern China and eastern North America.

**BTM 41 Wasp:** Vespula Vulgaris, Female Common Wasp / European Wasp; Found in various regions of the world including the United Kingdom, Germany, India, China, New Zealand, and Australia

# Cancer Drugs Test Kit 62 vials

Drugs used in the treatment of cancer.

Code	Name	Alt Name	Main Oncology Uses	
CD 01	5-Fluorouracil	5FU / Adrucil	Colon cancer, oesophageal cancer, stomach cancer, pancreatic cancer, breast cancer, and cervical cancer. As a cream it is used for actinic keratosis and basal cell carcinoma.	
CD 02	Abiraterone	Zytiga	Prostate cancer that has spread to other parts of your body.	
CD 03	Bendamustine	Treanda	Chronic lymphocytic leukaemia (CLL), multiple myeloma, and non- Hodgkin's lymphoma.	
CD 04	Bevacizumab	Avastin	Colon cancer, lung cancer, glioblastoma, and renal-cell carcinoma.	
CD 05	Bleomycin		Hodgkin's lymphoma, non-Hodgkin's lymphoma, testicular cancer, ovarian cancer, and cervical cancer among others.	
CD 06	Bortezomib	Velcade / Chemobort / Bortecad	Multiple myelomas.	
CD 07	Busulphan	Busilvex / Myl- eran	With cyclophosphamide or fludarabine/clofarabine as a conditioning agent prior to bone marrow transplantation, especially in chronic my- elogenous leukaemia (CML) and other leukaemias, lymphomas, and myeloproliferative disorders.	
CD 08	Capecitabine	Xeloada	Breast and colorectal cancers.	
CD 09	Carboplatin	Paraplatin	Ovarian cancer, lung cancer, head and neck cancer, brain cancer, and neuroblastoma.	
CD 10	Carmustine	BiCNU	Lymphomas, myeloma and brain tumours.	
CD 11	Cetuximab	Erbitux	Metastatic colorectal cancer, metastatic non-small cell lung cancer and head and neck cancer.	
CD 12	Chlorambucil	Leukeran	Chronic lymphocytic leukaemia, Hodgkin lymphoma, and non-Hodgkin lymphoma.	
CD 13	Cisplatin	Platinol	Testicular, ovarian, bladder, head and neck, and non-small cell lung cancer.	
CD 14	Cyclophospha- mide	Cytophosphane	Lymphomas, leukaemias, myeloma, lung cancer and breast cancer. Also used to suppress an overactive immune system in conditions including lupus, myositis and vasculitis.	
CD 15	Dacarbazine	Imidazole Carboxamide / DTIC-Dome	Melanoma and Hodgkin's lymphoma.	
CD 16	Dactinomycin	Cosmegen Lyovac	Wilms tumour, rhabdomyosarcoma, Ewing's sarcoma, trophoblastic neoplasm, testicular cancer, and certain types of ovarian cancer.	
CD 17	Daunorubicin	Daunomycin	Acute myeloid leukaemia (AML) and acute lymphocytic leukaemia (ALL).	
CD 18	Denosumab	Prolia / Xgeva	Metastases to bone, and giant cell tumours of bone.	
CD 19	Dexamethasone		Reduce sickness from chemotherapy and/or improve appetite.	
CD 20	Docetaxel	Taxotere	Breast, prostate, non-small cell lung cancer, stomach and head and neck cancers.	
CD 21	Doxorubicin	Adriamycin	Breast cancer, bladder cancer, Kaposi's sarcoma, lymphoma, and acute lymphocytic leukaemia.	
CD 22	Epirubicin	Pharmorubicin	Many different types of cancer.	
CD 23	Erlotinib	Tarceva	Non-small cell lung cancer, pancreatic cancer and several other types of cancer.	
CD 24	Estramustine	Emcyt	Prostate cancer that has progressed or spread.	
CD 25	Etoposide	Etopophos / Vepesid	Small cell lung cancer, ovarian cancer, testicular cancer, leukaemia and lymphoma.	
CD 26	Everolimus	Afinitor	Kidney cancer, advanced pancreatic neuroendocrine cancer and breast cancer that has spread.	
CD 27	Folinic Acid	Leucovorin	Decrease the toxic effects of methotrexate and pyrimethamine; also used in combination with 5-fluorouracil to treat colorectal cancer.	

Code	Name	Alt Name	Main Oncology Uses	
CD 28	Floxuridine	FUDR, Fluorode- oxyuridine	Colorectal cancer.	
CD 29	Gemcitabine	Gemzar	Breast cancer, ovarian cancer, non-small cell lung cancer, pancreatic cancer, and bladder cancer.	
CD 30	Goserelin Acetate	Zoladex	Breast and prostate cancer.	
CD 31	lbrutinib	Imbruvica	B cell cancers like mantle cell lymphoma, chronic lymphocytic leukae- mia, and Waldenström's macroglobulinemia.	
CD 32	Idarubicin	Zavedos	I.eukaemia and advanced breast cancer.	
CD 33	lfosfamide	Mitoxana	Testicular cancer, sarcomas (soft tissue and bone sarcomas) and some types of lymphoma.	
CD 34	Imatinib	Cleevec	Chronic myelogenous leukaemia and acute lymphocytic leukaemia.	
CD 35	lpilimumab	Yervoy	Advanced melanoma.	
CD 36	Irinotecan	Camptoth- ecin-11, CPT-11, Camptosar	Metastatic colon or rectal cancer.	
CD 37	Lenalidomide	Revlimid	Myeloma and blood disorders called myelodysplastic syndromes.	
ÇD 38	Liposomal Doxo- rubicin	Caelyx, Myocet	Ovary or breast cancer, myeloma and Aids-related Kaposi's sarcoma.	
CD 39	Lomustine	CCNU	Brain tumours, melanomas, lung cancer or lymphoma.	
CD 40	Melphalan	Alkeran	Myeloma, melanoma and ovarian cancer.	
CD 41	Methotrexate	Maxtrex / MTX	Breast cancer, leukaemia, lung cancer, lymphoma, and osteosarcoma	
CD 42	Mitomycin	Mitomycin C Kyowa	Breast, bladder, gullet (oesophagus), stomach, pancreas, lung and liver cancers.	
CD 43	Mitoxantrone		Acute myeloid leukaemia, non-Hodgkin lymphoma, advanced breast and advanced primary liver cancer.	
CD 44	Nilotinib	Tasigna	Chronic myeloid leukaemia.	
CD 45	Oxaliplatin	Eloxatin	Colorectal cancer and cancer of the gullet (oesophagus).	
CD 46	Paclitaxel	Taxol	Ovarian, breast and non-small cell lung cancer.	
CD 47	Pegfilgrastim	Neulasta	Used to stimulate the growth of healthy white blood cells in the bone marrow, once chemotherapy is given.	
CD 48	Pemetrexed	Alimta	Pleural mesothelioma and non-small cell lung cancer.	
CD 49	Prednisolone		A steroid drug used to treat the cancer itself, reduce inflammation, reduce the immune response (for example, after a bone marrow transplant), help reduce sickness when having chemotherapy and/or improve appetite.	
CD 50	Procarbazine		Hodgkin lymphoma and some other types of cancer.	
CD 51	Raltitrexed	Tomudex	Bowel cancer.	
CD 52	Rituximab	Rituxan / Mab- Thera	Non-Hodgkin's lymphoma and chronic lymphocytic leukaemia.	
CD 53	Sorafenib	Nexavar	Renal cell sarcoma and liver cancer.	
CD 54	Sunitinib Malate	Sutent	Gastrointestinal stromal tumour, pancreatic cancer and renal cell carci- noma.	
CD 55	Temozolomide	Temodal	Brain tumour called a glioma.	
CD 56	Trastuzumab	Herceptin	HER2 breast cancer, stomach and oesophagus cancers.	
CD 57	Treosulfan		Ovarian cancer.	
CD 58	Trofosfamide	Ixoten	Ependymomas, medulloblastomas, sarcoma, soft tissue, supratento- rial PNETs, and recurrent brain tumours.	
CD 59	UFT .	UFUR	Contains Tegafur and Uracil. Primarily bowel cancer.	
CD 60	Vinblastine Sul- phate		Hodgkin's disease; non-Hodgkin's lymphoma; carcinoma of the breast; methotrexate-resistant choriocarcinoma; renal cell carcinoma; testicu- lar teratoma and seminoma; histiocytosis X.	
CD 61	Vincristine Sul- phate		Leukaemias, malignant lymphomas, multiple myeloma, solid tumours and idiopathic thrombocytopenic purpura.	
CD 62	Vinorelbine	Navelbine / NVB	Breast cancer and non-small cell lung cancer.	

## Chemical & Inhalents Test Kit 39 vials

The energy patterns of ammonia, bee sting, butyl, carbon tetrachloride, coal tar, creosote, crude oil, diesel fumes, formaldehyde, house dust mite, mosquito bite, perfumes, petrol fumes, phenol, PVC, wasp sting, etc.

#### CI1 Ammonia

Household cleaners, disinfectants, deodorants, hair bleaches, permanent wave solutions, rheumatic liniments, used to make fertilisers, plastics and nylon; cigarette smoke.

#### CI2 Bee Sting

Anaesthetic & Pain Test Kit

#### CI3 Bitumen

Damp proof courses, flat roofs, rust treatments, sealant, carpet tile backing, pesticide, adhesive.

#### Cl4 Brake & Clutch Fluid

#### CI5 Brush Cleaner with Xylene

Brush cleaners, damp start products sprayed on car engines; spray paints, adhesives in flooring material. Xylene can cause irritability, tiredness, dizziness, light-headedness and agitation.

#### Cl6 Butyl

Solvent that can cause eye irritation, headache, dizziness and dermatitis.

#### CI7 Carbon Tetrachloride

Dry cleaning fluid, some old DIY products.

#### CI8 Chlorine Bleach

Bleach, antiseptics, disinfectants, tap water, swimming pool water, mould inhibitors, bleached papers. Can cause irritation to eyes, throat and lungs.

#### CI9 Coal Tar

Coal tar derivatives (some food additives, phenol, asphalt, benzene, creosote), eczema and psoriasis treatment creams, shampoo.

#### CI10 Creosote

Wood preservative, cough mixtures; probably carcinogenic.

#### CI11 Crude Oil

Many plastics and chemicals are derived from crude oil.

#### CI12 Dental Anaesthetic

#### CI13 Diesel Fumes

#### CI14 Formaldehyde/ Formalin

Cavity wall insulation, printing ink, textile and fabric finishes (minimum iron etc.), chipboard, adhesives, photographic chemicals, preservatives in cosmetics and toiletries, treatments for warts and verrucas, throat lozenges, cleaning products, artificial silk, slow-release fertilisers, vaccines. A skin irritant and a very common allergen.

#### CI15 General Purpose Oil

#### CI16 House Dust Mite

Mainly found in bedding, carpets and upholstery. Allergic reactions can cause eczema, asthma.

#### CI17 Kapok

Cushions, soft toys.

#### CI18 Lanolin

Cosmetics, toiletries, soap, woolen clothes, some medicinal ointments and creams. A very common allergen.

#### CI 19 Latex

Protective gloves, contraceptives (condoms, diaphragm and cap), hot water bottles, baby bottle teats, shoes, mattresses, pillows, balloons, rubber bands, elastic and finger stalls.

#### CI 20 Lycra fabrics, elastic, sewing thread

#### CI21 Methylated Spirits

#### CI22 Mixed Nylon clothing, tights and stockings, carpets and furnishings

#### CI23 Mosquito Bite

#### Cl24 Moss Killer with Diclorophen

diclorophen is a moss and algae killer, control of fungi and moulds on walls cramps, diarrhoea, skin and eye irritation

#### Cl25 Neoprene

waterproof fabrics, wet suits

# Cl26 Paraffin/ Kerosene paraffin heaters, toiletries, hair creams, hand creams, Vaseline, ointment bases

#### CI27 Perfumes and Aftershaves

CI28 Petrol Fumes/

Gas Fumes (USA)

# Cl29 Phenol/ carbolic acid fungicides, disinfectants, wood preservatives, synthetic fibres, vaccinations, floor leveling resins (a common allergen)

#### CI30 Polyurethane paint, foamed plastics for insulation, cushions and upholstery, varnish

#### CI31 Polybutylene

#### Cl32 Polyvinyl chloride / PVC third most common plastic.

Typical uses include raincoats, car/automobile interiors, furnishings (as mock leather), food wrappings (becoming less common), plastic bottles for drinks and personal care products, coatings for paper, shoe soles, plastic pipes and building materials. In hospitals also used for catheters, blood bags and tubing.

#### CI33 Solid Fuel Fumes

#### CI34 Stain Removers

#### CI35 Turpentine

Cosmetics, polishes, varnishes, thinners, pine scented products, indigestion mixtures, irritant skin applications (rubefacient) CNS damage, irritation of skin and mucus membranes

#### CI36 Wasp Sting / Yellow Jacket

#### CI37 Mixed Vial of 31 Inhalant

and Contact Items contains: acrylic, aerosol propellant, chalk, calor gas fumes, mixed carpets, cat hair, cigarette smoke, tobacco, coal tar, crude oil, diesel, diesel fumes, dog hair, ethanol, formaldehyde, granite, mixed grasses, house dust, house dust mite, mixed moss, mixed lichens, nickel, north sea gas, petrol fumes, feathers, mixed plastics, sheep's wool, solid fuel fumes, mixed washing powders

#### CI38 Colophony

A pine resin found in paper, cosmetics, varnishes, paint, polishes, fly papers, adhesive tapes, epilating waxes, solder flux, etc. . this is often included in medical tests for allergy

#### CI39 Triphenyl Phosphate

A flame retardant added to many plastics such as TV's and computer monitors; when the appliance heats up as it does in use small amounts of this chemical vapourize into the air

Coxsackie Test Kit 10 vials				
The energy pattern of 10 different Coxsackie strains.				
Coxsackie A2	Coxsackie A7	Coxsackie B5		
Coxsackie A3	Coxsackie B1	Coxsackie B6		
Coxsackie A4	Coxsackie B3			
Coxsackie A5	Coxsackie B4			

# Candida Test Kit

Although Candida albicans is the main strain that causes problems, some of the other strains are on the increase and can be implicated for some people.

Please note this is NOT a home testing kit

#### CA01 Candida Albicans

A normal constituent of the human flora. Is a commensal of the skin and the gastrointestinal and genitourinary tracts. It is responsible for the majority of Candida bloodstream infections (candidemia).

#### CA02 Candida Dubliniensis

Most commonly found from in immuno-compromised individuals, such as AIDS, chemotherapy, or organ transplant patients.

#### CA03 Candida Glabrata / Torulopsis glabrata

Was considered a relatively nonpathogenic part of the human flora, but now problems from it on increase particularly among immuno-compromised individuals.

#### CA04 Candida Guillermondi

Sometimes found on human skin; found in infections of the skin in immuno-compromised individuals.

#### CA05 Candida Krusei

On the increase. Most common in hospital environment. Used in the manufacture of chocolate.

#### CA06 Candida Lusitaniae

Affects people with other major health problems, e.g. bone marrow transplants and chemotherapy.

#### CA07 Candida Parapsilosis

Part of the normal flora of mucous membranes of the mouth, gut and vagina. One of the fungi most frequently isolated from the human hands. A significant cause of sepsis and of wound and tissue infections in immuno-compromised patients.

#### CA08 Candida Pseudotropicalis / Candida Kefyr

A rare cause of candidiasis. Usually associated with superficial cutaneous manifestations rather than systemic disease. It has been isolated from nails and lungs.

#### CA09 Candida Rhodotorula

Has been found on the skin between the toes.

#### CA10 Candida Rugosa

Possibly on increase.

#### CA11 Candida Sitophila

Uncommon infection in humans. Has been found at the sites of conjunctivitis and peritonitis.

#### CA12 Candida Stellatoida

Sometimes found in the human vaginal tract with or without symptoms of vaginitis.

#### CA13 Candida Tropicalis

Part of the normal human flora.When flora unbalanced, can get excessive gas, constipation, diarrhoea, indigestion, abdominal pain, and a variety of sudden and intense food sensitivities or allergies.

# Coagulation Test Kit <sup>8 vials</sup>

Body substances involved in blood coagulation.

#### G 01 Antithrombin III

An anti-coagulant. Blocks action of clotting agents (factors XII, XI, IX, X and II).

#### CG 02 Fibrin

Insoluble; essential to blood clotting; formed from fibrinogen by the action of thrombin.

#### CG 03 Fibrinogen

A clotting factor in blood plasma that is converted to fibrin; produced by liver and plasma cells; approximately 7% of blood plasma proteins.

#### CG 04 Plasmin

Enzyme present in blood that degrades many blood plasma proteins, most notably, fibrin clots. It activates collagenases, some mediators of the complement system and weakens the wall of the Graafian follicle (leading to ovulation).

#### CG 05 Plasminogen

The inactive enzyme precursor of plasmin.

# CG 06 Prothrombin/Coagulation Factor II

Inactive protein synthesized by the liver, released into the blood, and converted to active thrombin in the process of blood clotting.

#### CG 07 Thrombin

The active enzyme produced from prothrombin; acts to covert fibrinogen to fibrin.

# CG 08 Tissue PlasminogenActivator / tPA / PLAT

A protein involved in the breakdown of blood clots. As an enzyme, it catalyzes the conversion of plasminogen to plasmin. Because it works on the clotting system, tPA is used in clinical medicine to treat only embolic or thrombotic stroke. Use is contraindicated in hemorrhagic stroke and head trauma.

# Cytokine & Immune Test Kit 40 vials

Developed in collaboration with Dr Wally Schmitt, contains cytokines, including fibroblast growth factors, immunoglobulins, interleukins, etc.

#### <u>NOTE:</u> Do not buy the Interleukin Kit or the Immunoglobulin Kit if buying this kit, as the vials from these kits are included in this one.

#### CY 01 Amphiregulin/AREG

A member of the epidermal growth factor family. Interacts with the EGF/TGF-alpha receptor to promote the growth of normal epithelial cells and inhibits the growth of certain aggressive carcinoma cell lines.

#### CY 02 Epidermal Growth Factor

Stimulates cell growth, proliferation, and differentiation. Can be found in platelets, macrophages, urine, saliva, human milk, and plasma.

#### CY 03 Fibroblast Growth Factor 1 /FGF-1

Growth factors involved in angiogenesis, wound healing, and embryonic development. Promotes endothelial cell proliferation and the physical organization of endothelial cells into tube-like structures. Stimulate angiogenesis and the proliferation of fibroblasts that give rise to granulation tissue, which fills up a wound space/ cavity early in the wound-healing process. Seems to be involved in the regulation of synaptic plasticity and processes attributed to learning and memory, at least in the hippocampus.

#### CY 04 Fibroblast Growth Factor 2 / FGF-2

Growth factors involved in angiogenesis, wound healing, and embryonic development. Promotes endothelial cell proliferation and the physical organization of endothelial cells into tube-like structures. Stimulate angiogenesis and the proliferation of fibroblasts that give rise to granulation tissue, which fills up a wound space/ cavity early in the wound-healing process. Adult neurogenesis within the hippocampus depends greatly on FGF-2. Seems to be involved in the regulation of synaptic plasticity and processes attributed to learning and memory, at least in the hippocampus.

#### CY 05 Fibroblast Growth Factor 10 / FGF-10

Growth factors involved in angiogenesis, wound healing, and embryonic development.

#### CY 06 Fibroblast Growth Factor 23 / FGF-23

Main function seems to be regulation of phosphate concentration in plasma. Secreted by osteoblasts and osteoclasts in response to elevated calcitriol. Acts on kidneys, where it decreases the expression of NPT2, a sodium-phosphate cotransporter in the proximal tubule, so decreases the reabsorption and increases excretion of phosphate.

#### Granulocyte Colony-Stimulating Factor / G-CSF CY 07

A glycoprotein, growth factor and cytokine produced by a number of different tissues to stimulate the bone marrow to produce granulocytes and stem cells, and then stimulates the bone marrow to release them into the blood. Also stimulates the survival, proliferation, differentiation, and function of neutrophil precursors and mature neutrophils.

#### CY 08 Granulocyte Macrophage Colony-Stimulating Factor/ GM-CSF

A protein secreted by macrophages, T cells, mast cells, NK cells, endothelial cells and fibroblasts. Functions as a white blood cell growth factor. Stimulates stem cells to produce granulocytes (neutrophils, eosinophils, and basophils) and monocytes.

#### CY 09 IaA

Found in mucosal areas, such as the gut, respiratory tract and urogenital tract, and prevents colonization by pathogens. Also found in saliva, tears, and breast milk.

#### CY 10 IaD

Functions mainly as an antigen receptor on B cells that have not been exposed to antigens. Has been shown to activate basophils and mast cells to produce antimicrobial factors.

#### CY 11 IgE

Binds to allergens and triggers histamine release from mast cells and basophils, and is involved in allergy. Also protects against parasitic worms.

#### CY 12 IgG

Provides the majority of antibody-based immunity against invading pathogens. The only antibody capable of crossing the placenta to give passive immunity to the foetus.

#### CY 13 IgM

Eliminates pathogens in the early stages of B cell mediated (humoral) immunity before there is sufficient IgG.

#### CY 14 Interferon-Alpha

Produced by leukocytes. They are mainly involved in innate immune response against viral infection.

#### CY 15 Interferon-Gamma

Critical for innate and adaptive immunity against viral and intracellular bacterial infections and for tumor control. An important activator of macrophages. Aberrant IFN-γ expression is associated with a number of auto-inflammatory and auto-immune diseases.

#### CY 16 Interleukin-1

Stimulates the growth and action of immune system cells that fight disease, by participating in the regulation of immune responses, inflammatory reactions, and hematopoiesis (development of mature blood cells). Also helps leukocytes pass through blood vessel walls to sites of infection and causes fever by affecting areas of the brain that control body temperature.

#### CY 17 Interleukin-2

Induces the proliferation of responsive T-cells, and acts on some B-cells, via receptor-specific binding, as a growth factor and antibody production stimulant. Linked to pruritus (itching).

#### CY 18 Interleukin-3

Regulates blood-cell production by controlling the production, differentiation and function of granulocytes and macrophages, so enhances the immune system's ability to fight tumor cells.

#### CY 19 Interleukin-4

Enhances the immune system's ability to fight tumor cells; has an important function in B-cell responses. A key regulator in humoral and adaptive immunity.

#### CY 20 Interleukin-5

Regulates eosinophil growth and activation, and thus plays an important role in diseases associated with increased levels of eosinophils, including asthma and allergic rhinitis.

#### CY 21 Interleukin-6

A biomarker for inflammation and chronic disease. Plays an essential role in the final differentiation of B-cells into IG-secreting cells, as well as inducing myeloma/plasmacytoma growth, nerve cell differentiation, and, in hepatocytes, acute-phase reactants. Involved in diabetes, atherosclerosis, depression Alzheimer's disease, systemic lupus erythematosus, prostate cancer and rheumatoid arthritis.

#### CY 22 Interleukin-7

Enhances the immune system's ability to fight tumor cells. IL-7 is made by cells in the bone marrow, and can stimulate T cells and B cells to grow. Promotes acute lymphoblastic leukemia, T cell lymphoma. Elevated levels of IL-7 have also been detected in the plasma of HIV-infected patients.

#### CY 23 Interleukin-8

Induces chemotaxis in target cells, primarily neutrophils but also other granulocytes, causing them to migrate toward the site of infection. Also induces phagocytosis once they have arrived. Known to be a potent promoter of angiogenesis (growth of new blood vessels from existing ones, and necessary for tumours to grow). Often associated with inflammation (e.g. in gingivitis and psoriasis). If a pregnant mother has high levels, there is an increased risk of schizophrenia in her offspring. High levels have also been shown to reduce the likelihood of positive responses to antipsychotic medication in schizophrenia.

#### CY 24 Interleukin-9

Serves as a growth factor for early lymphoid cells of both B- and T-cell lineages. supports IL-2 independent and IL-4 independent growth of helper T-cells.

#### CY 25 Interleukin-10

Inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF, and GM-CSF produced by activated macrophages and by helper T cells. Mice studies suggest it is an essential immuno-regulator in the intestinal tract; may be relevant in Crohn's disease.

#### CY 26 Interleukin-11

Stimulates megakaryocytopoiesis, resulting in increased production of platelets, as well as activating osteoclasts, inhibiting epithelial cell proliferation and apoptosis, and inhibiting macrophage mediator production. May reduce toxicity to the gastrointestinal system resulting from cancer therapy.

#### CY 27 Interleukin-12

Enhances the ability of the immune system to kill tumor cells and may interfere with blood flow to the tumor. Involved in the stimulation and maintenance of Th1 cellular immune responses, including the normal host defence against various intracellular pathogens, such as Leishmania, Toxoplasma, measles virus, and HIV. Also has an important role in pathological Th1 responses, such as in inflammatory bowel disease and multiple sclerosis.

Administration of IL-12 to people suffering from autoimmune diseases was shown to worsen the autoimmune phenomena. This is believed to be due to its key role in induction of Th1 immune responses.

#### CY 28 Interleukin-17A

A cytokine that acts as a potent mediator in delayed-type reactions by increasing chemokine production in various tissues to recruit monocytes and neutrophils to the site of inflammation, similar to Interferon gamma. Has been shown to have a pro-inflammatory role in asthma.

#### CY 29 Interleukin-23

Potently enhances the expansion of T helper type 17 cells, so involved in many of the inflammatory autoimmune responses.

#### CY 30 Lipopolysaccharide / LPS

Found in the outer membrane of Gram-negative bacteria, act as endotoxins and elicit strong immune responses. Produced by gut bacteria, so source of many inflammatory reactions including autoimmunity.

#### CY 31 Neuregulin 1 / NRG1

Induce the growth and differentiation of epithelial, neuronal, glial, and other types of cells. Essential for the normal development of the nervous system and the heart. Thought to play a role in schizophrenia. Part of the EGF family of proteins.

#### CY 32 Neuregulin 2 / NRG2

Induces the growth and differentiation of epithelial, neuronal, glial, and other types of cells. Part of the EGF family of proteins.

#### CY 33 Neuregulin 3 / NRG3

Linked to a susceptibility to schizophrenia and Hirschsprung's disease. Part of the EGF family of proteins.

#### CY 34 Neuregulin 4 / NRG4

Activates type-1 growth factor receptors to initiate cell-to-cell signaling through tyrosine phosphorylation. Loss of expression of NRG4 is frequently seen in advanced bladder cancer while increased NRG4 expression correlates to better survival.

#### CY 35 Platelet-Derived Growth Factor / PDGF-R

Plays a significant role in blood vessel formation (angiogenesis), the growth of blood vessels from alreadyexisting blood vessel tissue. Uncontrolled angiogenesis is a characteristic of cancer.

#### CY 36 Transforming Growth Factor-Alpha / TGF Alpha

Seems to play a role in mediation of cell-cell adhesion and in juxtacrine stimulation of adjacent cells. Expression of TGF-alpha is widespread in tumors and transformed cells. TGF-alpha is also expressed in normal tissues during embryogenesis and in adult tissues, including pituitary, brain, keratinocytes and macrophages.

#### CY 37 Transforming Growth Factor-Beta / TGF-Beta

A protein that controls proliferation, cellular differentiation, and other functions in most cells. A type of cytokine which plays a role in immunity, cancer, bronchial asthma, heart disease, diabetes, Marfan syndrome, Loeys–Dietz syndrome, Parkinson's disease and AIDS. May also be involved in allergic reactions.

#### CY 38 Tumor Necrosis Factor-Alpha

Produced by macrophages, which engulf and destroy bacteria, viruses, and other foreign substances; role in regulating inflammatory and immune responses throughout the body and particularly in relation to some parasites. Implicated in arthritis, rheumatoid arthritis, AIDS, multiple sclerosis, cancer; may be involved in septicaemia, and the weight loss associated with parasitic infection or cancer.

#### CY 39 Combined IL2 plus TGF-Beta

Screening for T Regulatory cell issues; helps direct T Regulatory synthesis.

#### CY 40 Combined IL23 plus TGF-Beta

Screening for Autoimmune issues.

# Cytokine & Immune Test Kit 2

These are additional cytokines and immune regulating substances based on newer findings related to immune assessment.

#### NOTE:

# The cost of this kit reflects the difficulty of obtaining high-quality starter material. As with Kit ONE, this kit has been eveloped in collaboration with Dr Wally Schmitt

#### CY 41 Interleukin-1 Alpha / Hematopoietin 1

Produced mainly by activated macrophages, as well as neutrophInterleukins, epithelial cells, and endothelial cells; possesses metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses; on the pathway that activates tumour necrosis factor-alpha.

#### CY 42 Interleukin-1 Beta / Leukocytic Pyrogen/ Leukocytic Endogenous Mediator/ Mononuclear Cell Factor/ Lymphocyte Activating Factor

Key mediator of the inflammatory response; essential for the host-response and resistance to pathogen; also exacerbates damage during chronic disease and acute tissue injury.

#### CY 43 Interleukin-17F

May be implicated in asthma and autoimmune diseases including rheumatoid arthritis, multiple sclerosis and inflammatory bowel diseases.

#### CY 44 Interleukin-18 / Interferon-Gamma Inducing Factor

Produced by macrophages and other cells; important role in the innate immune response; able to induce severe inflammatory reactions, which suggests its role in certain inflammatory disorders including adenomyosis and Hashimoto's thyroiditis; has also been found to increase the Alzheimer's disease-associated amyloid-beta production in human neuron cells; also a role in age-related macular degeneration.

#### CY 45 Interleukin-21

Has potent regulatory effects on cells of the immune system, including natural kInterleukinler cells and cytotoxic T cells that can destroy virally infected or cancerous cells; may have a role in controlling hyper-sensitive allergic responses.

#### CY 46 Interleukin-22

Initiates innate immune responses against bacterial pathogens especially in epithelial cells such as respiratory and gut epithelial cells; probably plays a role in the coordinated response of both adaptive innate immune systems, auto-immunity and tissue regeneration; can contribute to immune disease through the stimulation of inflammatory responses.

#### CY 47 Interleukin-24 / Melanoma Differentiation-Associated 7

Mainly released by activated monocytes, macrophages and T helper 2; performs important roles in wound healing, arthritis, psoriasis and cancer.

#### CY 48 Interleukin-25 (also known as Interleukin-17E)

Induces the production of other cytokines, including Interleukin-4, Interleukin-5 and Interleukin-13 in multiple tissues, which stimulate the expansion of eosinophInterleukins; helps to control immunity of the gut; has been implicated in chronic inflammation of the gastrointestinal tract; potent anti-tumour activity including in melanoma, breast, lung, colon, and pancreatic cancers.

#### CY 49 TSLP (Thymic Stromal Lymphopoietin)

Produced mainly by non-hematopoietic cells such as fibroblasts, epithelial cells and different types of stromal or stromal-like cells in regions where TSLP activity is required; plays an important role in the maturation of T cell populations through activation of antigen presenting cells; linked to many disease states including asthma, inflammatory arthritis, atopic dermatitis, eczema, eosinophInterleukinic esophagitis and other allergic states.

#### CY 50 NFkB p50

Implicated in cell proliferation and differentiation, inflammatory and immune response, cell survival and apoptosis, cellular stress reactions and the development of tumours.

#### CY 51 NFkB p65 / RelA

Plays a crucial role in inflammatory and immune responses.

#### CY 52 HIF-1 α N-terminal activation domain (530-698)

Considered as the master transcriptional regulator of cellular and developmental response to hypoxia (oxygen deficiency in cells); stimulates tumour growth and metastases.

#### CY 53 STAT5 / Signal Transducer And Activator Of Transcription 5, His tagged

Plays a major role in TH2 expression and Regulatory T cell expression; involved in cytosolic signalling and in mediating the expression of specific genes; closely connected to a wide range of human cancers.

# Dental Test Kit 50 vials

# The energy patterns of amalgam, glues, resins, filling & crown material, three local anaesthetics, a periodontal nosode, etc.

#### The three dental anaesthetics in this kit are also included in the Anaesthetic & Pain Test Kit

- DT1 Amalgam: contains mercury, copper, tin, silver and zinc
- DT2 Apexit root filling sealer
- DT3 Bite registration
- DT4 Carboxylate liquid
- DT5 Carboxylate powder
- DT6 Cavalite cavity lining
- DT7 Coltosol temporary filling
- DT8 Composite filling material
- DT9 Core material: for crowns
- DT10 Cresophene root canal antiseptic
- DT11 Crown impression putty
- DT12 Dyract compound filling
- DT13 Fissure sealant -Biz GMA
- DT14 Fluoride varnish
- DT15 Fuji II LC filling material
- DT16 Glass lonomer cement for crowns
- DT17 I.R.M. temporary filling
- DT18 Kalzinol temporary filling
- DT19 Ledermix cement: steroid and antibiotic
- DT20 Lining material for fillings
- DT21 Local anaesthetic: citanest with octapressin
- DT22 Local anaesthetic: lignospan with adrenalin
- DT23 Local anaesthetic: scandonest 3% plain
- DT24 Microprime cavity lining
- DT25 Mouth wash tablet
- DT26 Orange oil
- DT27 Periodontal nosode: contains bacteria, blood, plaque and toxins from people with gingivitis and peri-
- odontal disease
- DT28 Polishing paste
- DT29 Polishing paste: Minerva
- DT30 Prime 'n' bond dentine bonding agent
- DT31 Root filling material
- DT32 Surface anaesthetic
- DT33 Syntac dentine bonding agent
- DT34 Temporary cement for fittings
- DT35 Temporary dressing material
- DT36 Tubliseal root filling sealer
- DT37 Zinc oxide liquid for resin
- DT38 Zinc phosphate cement for crowns
- DT39 GC Fuji Bond LC: a commonly used dental bonding material
- DT40 GC Fuji IX GP: a composite resin used in place of amalgam
- DT41 Tetric Cream: a composite resin used in place of amalgam
- DT42 Belle Glass: used for inlays, onlays and crowns
- DT43 Cercon: core material for crowns and bridges
- DT44 Cercon S: porcelain that goes on top of DT 42
- DT45 Cerpress: ceramic crown material without metal, also used in inlays
- DT46 Duceram Plus: porcelain for crowns
- DT47 Herculite: filling material which is very strong and used for back teeth
- DT48 Maxi Bond Metal: precious metal alloy which goes under porcelain crowns
- DT49 Presciano: crown material, contains gold but no other metals
- DT50 Solo Bond: adhesive for fillings

# Digestive Enzyme Test Kit 16 vials

The energy patterns of carboxypeptidase, enterokinase, lactase, lipase, lysozyme, maltase, pepsinogen, pepsin, peptidase, amylase, sucrase, trypsin, etc.

An enzyme: "A substance that affects the speed of chemical changes; an organic catalyst, usually a protein"

Gerard J Tortora Introduction To The Human Body

There are more enzymes in Body Biochemical test kits.

#### DE1 Carboxypeptidase

Function: peptides into other peptides and amino acids (protein digestion)

#### DE2 Chymotrypsin

Function: protein into peptides (protein digestion)

#### DE3 Deoxyribonuclease

Function: converts deoxyribonucleic acid nucleotides(DNA) into pentoses and nitrogenous bases.

#### DE4 Enterokinase

Function: converts inactive trypsinogen into active trypsin in small intestine (protein digestion).

#### DE5 Galactosidase/ Lactase

Function: converts lactose into glucose and galactose.

#### DE6 Lipase

Function: converts fat into fatty acids and glycerol (fat digestion).

#### DE7 Lysozyme

Function: destroys bacteria and so helps prevent tooth decay; works to limit the growth of the bacteria that cause infections and diarrhoea, and encourage the growth of good bacteria.

#### DE8 Maltase

Function: converts maltose into glucose.

#### DE9 Pepsinogen

Function: converted by hydrochloric acid into pepsin (protein digestion).

#### DE10 Pepsin

Function: converts proteins into peptides (protein digestion).

#### DE11 Peptidase

Function: peptides into amino acids (protein digestion).

#### DE12 Rennin

Function: milk protein into casein which allows pepsin to act on it.

#### DE13 Ribonuclease

Function: converts ribonucleic acid (RNA) into pentoses and nitrogeous bases.

#### DE14 Salivary Amylase (Ptyalin)

Function: polysaccharides into maltose (disaccharide) (carbohydrate digestion).

#### DE15 Sucrase

Function: sucrose into glucose and fructose.

#### DE16 Trypsin

Function: protein into peptides; activates procarboxypeptidase into carboxypeptidase (protein digestion).

## Drinks Alcoholic A Test Kit 26 vials

The energy patterns of beer, lager, cider, brandy, gin, whisky, whiskey, rum, wines, sherry, etc.

DAA1 Bacardi White Rum DAA2 Beer DAA3 Beer & Lager, alcohol free DAA4 Beer, wheat DAA5 Benedictine DAA6 Bourbon DAA7 Brandy DAA8 Campari DAA9 Champagne DAA10 Cider DAA11 Cointreau DAA12 Gin DAA13 Grand Marnier DAA14 Lager DAA15 Rum DAA16 Sherry DAA17 Southern Comfort DAA18 Tia Maria DAA19 Vodka DAA20 Whiskey, American DAA21 Whiskey, Canadian DAA22 Whiskey, Irish DAA23 Whisky, Scotch DAA24 Wine, Red DAA25 Wine, Rose DAA26 Wine, White

## Drinks Alcholic B Test Kit 21 vials

The energy patterns of absinthe, advocaat, calvados, drambuie, grappa, ouzo, sake, vermouth, etc.

DAB27 Absinthe DAB28 Advocaat DAB29 Amaretto DAB30 Baileys Irish Cream DAB31 Calvados DAB32 Crème de Cassis DAB33 Crème de Menthe DAB34 Curaco, blue DAB35 Drambuie DAB36 Grappa DAB37 Malibu DAB38 Ouzo DAB39 Pernod DAB40 Pimm's No 1 DAB41 Port DAB42 Sake DAB43 Sambuca DAB44 Schnapps, Cinnamon DAB45 Tequila DAB46 Underberg DAB47 Vermouth

# Earth Energies Test Kit

Balance, comfort, energy and realism, inner wisdom, need, pain and space based on the energies of place, time, weather and mood developed by Jane Thurnell-Read.

#### This is a test kit; ESSENCE dispensing bottles are available upon enquiry.

#### EE1 Balance

For the times when we need more balance in our lives; when we find our energies easily disturbed and drained by other people and by our environment. Over-sensitivity, fragility and moodiness could indicate a need for this remedy.

Collected from a rock protruding out into the rushing stream which runs through the magical Trevaylor Woods. It was a damp and misty day in winter with water dripping from the leaves, ferns and mosses which grew everywhere in great profusion.

#### EE2 Comfort

For times when energy and a willingness to persist are hard to find. It brings a feeling of gentle warmth into our lives. Feeling lost, vulnerable, defenseless and abandoned could indicate a need for this remedy.

Collected at Godrevey, standing on a cliff overlooking the sea. The cliffs were carpeted with blue and yellow flowers. Although it was early June it was cold and overcast, but the underside of the lower clouds shone with a promise of better things to come. The sea seemed timeless as the waves broke on the shore. It was early evening and there were still people about, but they seemed frozen in their activity: two men fishing off one of the rocks, surfers in the sea and couples sitting in their cars and gazing into the distance.

#### EE3 Energy & Realism

Gives energy and stamina. It helps to bring realism to our activities, so that tasks can be started and accomplished in a balanced manner. Both obsessive and unfocussed behaviour become less extreme. Feeling frantic and indecisive could indicate a need for this remedy.

Collected by perching on a hump of granite, partly surrounded by spring water emerging from rock-strewn moorland between Bosigran Cliffs and the towering Carn Calver. This was collected on the same day as "Need", when the earlier bright skies had clouded over, giving the wind even more bite.

#### EE4 Inner Wisdom

For times when we are lacking discernment and discipline in our lives. We may feel that life is chaotic and uncertain, even while we present an air of power, wisdom and competence to others. The inner life does not correspond with the outer world's perception. Often our energy levels will appear to others to be high, but this mirage is maintained at great cost to ourselves.

Collected from a wide fissure in a massive rock outcrop on the north coast of Cornwall between Zennor and Morvah. It was a cold, bright day. From this place high on the cliffs, the long Atlantic swells could be seen and heard breaking over the rocks below, and gulls soared over the cliffs.

#### EE5 Need

Helping us to distinguish between needs and wants; it gives the quiet security that our needs will be met. Feelings of jealousy, frustration, disappointment, insecurity, fearfulness and an inability to settle and be still could indicate a need for this remedy.

Collected from a partly ruinous stone circle on Bosporthennis Moor to the west of Mulfra Hill. It is thought by some to be the remains of a hut circle rather than a true stone circle, but has a great feeling of "rightness". The bright sunshine failed to warm the bitter March wind blasting across the moor.

#### EE6 Pain

For pain, bewilderment and a sense of isolation, when even feeling these emotions seems to demand too much energy. Feelings of weakness and helplessness could indicate a need for this remedy.

Collected from the seaward end of the Cot Valley. The valley is steep sided and rocky, opening to the sea between high cliffs where the stream runs into a small cove famed for its smoothly rounded boulders. On a day of seemingly interminable rain, with the land shrouded in mist, when we arrived to collect this energy the sky lightened and rain stopped. I had established several days before that the new essence would be called "Pain" and, as I climbed up towards the site, I was feeling it, having squashed my toe under a door the previous day. The place I wanted turned out to be a craggy point overlooking the Brisons Rock, where the swell heaved and broke fitfully.

#### EE7 Space

For times when we need physical, emotional, mental or spiritual space. When things press in on us so that we cannot think clearly or see our way forward, this essence helps to create the possibility for much needed change. It helps us to find vision and continuity within our roots. Feeling overwhelmed or inadequate could indicate a need for this remedy.

This essence was collected from high on the sides of Carn Calver. A strong wind blustered off the wide Atlantic to the west and open moorland stretched to distant carns on the other sides. The area was strewn with lumps of granite tumbled from the summit like some giant's toy building blocks. A great weather-sculpted slab of rock provided the focus of the energy.

# Electromagnetic Test Kit 25 vials

Electrical and electro-magnetic frequencies, including mobile phones, television emissions, high voltage electricity, ELFs, etc.

This kit was updated ealry 2019 to include vials 15 to 25 If you have the earlier EMF kit of 14 vials, you can buy the 11 new vials.

# EM 01 Computer Monitor / Visual Display Unit Emissions

#### **EM 02 Electricity**

#### **EM 03 Electricity High Voltage**

The way electricity is transported from power stations to sub-stations near populations. This reduces the amount of energy lost in longdistance transmission.

#### EM 04 Electro-Magnetic Field

The field can be viewed as the combination of an electric field and a magnetic field. The electric field is produced by stationary charges, and the magnetic field by moving charges (currents); these two are often described as the sources of the field. Any device connected to an electrical outlet, even if the device is not switched on, will have an associated electric field.

# EM 05 Extremely Low Frequency Radiation (ELF)

ELF fields are defined as those having frequencies up to 300 Hz. Emitted by power lines, electrical wiring and common appliances (e.g. electric blankets, televisions, hair-dryers, computers, etc.). Naturally occurring ELF fields are associated with atmospheric processes such as ionospheric currents, thunderstorms and lightning.

#### **EM 06 Fluorescent Light**

#### EM 07 Microwave 750 MHz

Used for telecommunications and heating food. Able to pass through many things including human body.

#### EM 08 Mobile Phone 900 MHz

EM 09 Mobile Phone 1200 MHz

EM 10 Mobile Phone 1800 MHz

#### EM 11 Mobile Phone Mast G3

# EM 12 Satellite Television Radio Waves (UK)

Radio waves, despite their name, are used for television transmissions.

#### EM 13 Tetra Mast Radiation

Terrestrial Trunked Radio (formerly known as Trans-European Trunked Radio). TETRA was specifically designed for use by government agencies, emergency services, (police forces, fire departments, ambulance) for public safety networks, rail transportation staff for train radios, transport services and the military. Used by countries in Western Europe, Eastern Europe, Middle East, Africa, Asia Pacific, Caribbean and Latin America.

- **EM 14 Television Emissions**
- EM 15 Broadband Radiation
- EM 16 Cordless (DECT) Phone Radiation
- EM 17 Gamma Rays
- EM 18 Halogen Light
- EM 19 Laser Beam (2940 nm)
- EM 20 LED Light (White)
- EM 21 Ultra Violet Light
- EM 22 Ultrasound

EM 23 Visible Light Spectrum / Full Colour Rainbow

- EM 24 Wifi Radiation
- EM 25 X-Rays

## Elements Test Kit 84 vials

The energy patterns of 84 elements in the periodic table. NOTE: Thius kit includes all vials in the Common Metals test kit. If one already has this kit you can purchase a 'Partial Elements' kit to make up the difference.

#### Aluminium

Dietary Sources: In some food additives. In food cooked in aluminium pans or stored in aluminium foil.

Non-Dietary Sources: Cigarette smoke, fireworks, table salt & baking powder; aluminium cans; antacids; bleached flour; mains water treatment (aluminium sulfate); some food additives; deodorants; acid rain leaches aluminium out of the soil and into the ground water.

Possible Toxicity Signs: Contact dermatitis; skeletal demineralization; slow learning; interference with calcium and phosphorus metabolism, neurofibrillary tangles in the brain; possibly linked to Alzheimer's disease.

#### Americum

Non-Dietary Sources: Concentrated in the areas used for the atmospheric nuclear weapons tests conducted between 1945 and 1980, as well as at the sites of nuclear incidents, such as the Chernobyl disaster.

#### Antimony

Non-Dietary Sources: Fireworks, fire retardants; used as an alloy with lead and tin; in solders; compounds used in matches.

#### Argon

Non-Dietary Sources: Constitutes 0.934% by volume and 1.288% by mass of the Earth's atmosp here.

#### Arsenic

Dietary Sources: High levels may be found in rice, as a result of water used in growing the crop, being contaminated with arsenic from arsenic-based-pesticides even though use may have been stopped many years ago).

Non-Dietary Sources: Cigarette smoke, wood preservative; pesticide; leather, termite treated lumber, rat poisoning, pesticides, herbicides, pigments. Drinking water in areas where there are arsenic deposits. (More than 140 million people worldwide and 4 million Americans chronically ingest arsenic in their drinking water).

Possible Toxicity Signs: Edema of face and eyelids; generalised itching; sore mouth; inflammation of the eyes and nasal membranes; loss of appetite; nausea; vomiting; diarrhoea; dry skin; loss of hair and nails; may reduce intelligence in children. There are also well-documented risks of cancer, heart disease, and reduced lung function; may lead to stem cell dysfunction that impairs muscle healing and regeneration

#### Barium

Non-Dietary Sources: Fireworks, medical contrast media, paper products, jet fuel, pigments.

Possible Toxicity Signs: Vomiting; colic; diarrhoea; slow irregular pulse; high blood pressure; convulsive tremors; muscular paralysis; a neuro-toxin, liver degeneration, cardiac, renal and respiratory damage.

#### Beryllium

Non-Dietary Sources: Light structural material; beryllium oxide is used in ceramics, naturally found in tobacco; some dental alloys.

Possible Toxicity Signs: Reduces stores of magnesium; reduces organ function; shortness of breath; coughing; lung inflammation; tinnitus.

#### **Bismuth**

Non-Dietary Sources: Used in cosmetics, pigments, and a few pharmaceuticals.

Possible Toxicity Signs: Deterioration of mental ability; confusion; tremor; impaired co-ordination.

#### Boron

Non-Dietary Sources: Fiberglass (insulation), polymers, ceramics, fertilizer, insecticides, laundry detergent.

Possible Deficiency Signs: Arthritis, allergies, weak muscles, low testosterone, brain health.

Possible Toxicity Signs: Reproductive infertility, eye, nose, and throat irritation.

#### Bromine

Non-Dietary Sources: Flame retardants; some epilepsy drugs; used in production of some fizzy drinks (soda) commercial bread making.

Possible Deficiency Signs: A necessary cofactor in the biosynthesis of collagen IV.

Possible Toxicity Signs: Fatigue; weakness; irritability; disturbed sleep; slow mental processes; poor memory.

#### Cadmium

Non-Dietary Sources: Cigarette smoke, e-cigarette vapour, galvanised iron; pesticides; plastics; fertilisers; tyres; plating; component in alloys and solders; PVC stabiliser, pigments, paints, pottery. Cadmium from industrial waste can leach back into soil and water and isn't degraded and so enters the food chain.

Possible Toxicity Signs: Disrupts the transport of the essential metals manganese and zinc into and out of cells; anaemia; kidney damage; probably carcinogenic; high blood pressure; lung damage; atherosclerosis; leg pain in children & adults; arthritis; Alzheimer's disease.

#### Caesium / Cesium

Non-Dietary Sources: A relatively rare element estimated to average 3 parts per million in the Earth's crust.

Possible Toxicity Signs: Hypokalemia, arrhythmia, and acute cardiac arrest (from higher doses than normally encountered).

#### Calcium

Dietary Sources: Dairy products, eggs, canned fish with bones (salmon, sardines), green leafy vegetables, nuts, seeds, tofu, thyme, oregano, dill, cinnamon.

Non-Dietary Sources: Preparation of other metals; calcium oxide important in chemical industry; present in hard water; fireworks; used to reduce the radar signature of exhaust plumes in the SR-71 Blackbird military aircraft.

Possible Deficiency Signs: Reduction in peak bone mass; increased risk of osteoporosis in later life; nerve sensitivity; insomnia; chronic depression; synthesis and release of neurotransmitters.

Possible Toxicity Signs: Depressed nerve function, drowsiness, extreme lethargy, calcium deposits, kidney stones.

#### Carbon

Non-Dietary Sources: Essential to all known living systems; many biological and chemical compounds. Graphite, charcoal, carbon steel, diamonds, propellant in fireworks, printing ink, laser print toner, water purification, kitchen extractor hoods; in medicine to absorb toxins, poisons, or gases from the digestive system.

#### Cerium

Possible Toxicity Signs: Often occurs together with calcium in phosphate minerals, and bones are primarily calcium phosphate, cerium can accumulate in bones in small amounts that are not considered dangerous.

#### Chlorine

Dietary Sources: Table salt (as sodium chloride)

Non-Dietary Sources: Manufacture of chemicals, plastics, paper, purification of water and sewage, fireworks. Sodium chloride used to de-ice roads.

#### Chromium

Dietary Sources: Broccoli, grape juice (especially red), meat, whole grain products.

Non-Dietary Sources: Cigarette smoke, e-cigarette vapour, dental work; metal plating & anodizing aluminium; stainless steel; hip replacements; leather tanning; paints; dyes; explosives; cement.

Possible Deficiency Signs: Diabetes; hypoglycemia; alcohol intolerance; irritability; weakness.

Possible Toxicity Signs: Lung disease, anaemia, cerebral oedema, eczema, headaches gastric ulcers.

#### Cobalt

Non-Dietary Sources: Manufacture of tungsten carbide; hip replacements.

Possible Deficiency Signs: Anaemia.

Possible Toxicity Signs: Goitre; hypothyroidism; heart failure; tremors; polycythemia.

#### Copper

Dietary Sources: Liver, seafood, oysters, nuts, seeds; some: whole grains, legumes.

Non-Dietary Sources: Copper water pipes (particularly in soft water areas); some medicines; pesticides; fungicides; brake linings; wiring; some contraceptive devices; dental amalgam; coins, algicides in hot tubs, fireworks. Blood copper levels raised by the contraceptive pill.

Possible Deficiency Signs: Rheumatoid arthritis; cardiovascular disease; impaired immune system; affects bone & blood formation in infants; possible role in cardiovascular disease.

Possible Toxicity Signs: Rheumatoid arthritis; cardiovascular disease; gastro-intestinal irritation (similar to deficiency signs). Zinc deficiency symptoms.

#### Dysprosium

Non-Dietary Sources: Never found in nature as a free element, though it is found in many minerals, including xenotime, fergusonite, gadolinite, euxenite, polycrase, blomstrandine, monazite and bastnäsite.

#### Erbium

Non-Dietary Sources: Always found in chemical combination with other elements.

#### Europium

Non-Dietary Sources: Not found in nature as a free element. Many minerals contain europium, with the most important sources being bastnäsite, monazite and xenotime.

#### Fluorine

Non-Dietary Sources: Herbicides and fungicides; some drugs; inhaled anaesthetics; radioactive tracers for PET scanning; fluoride toothpastes; in some water naturally and added to some other water supplies.

Possible Toxicity Signs: Highly toxic.

#### Gadolinum

Non-Dietary Sources: MRI contrast agent, iron & chromium production, nuclear reactor shielding.

Possible Toxicity Signs: Kidney disorders, decreased white blood cell count, tremors, pain (muscle, bone, burning, tingling, sharp, etc.), hair loss, ocular issues, edema, etc.

#### Gallium

Non-Dietary Sources: Drugs; radionuclide scanning for malignant diseases; used in the production of artificial gadolinium gallium garnet for jewellery.

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#### Germanium

Non-Dietary Sources: Used in electronic devices; fibre-optics; chemotherapy drugs; fly ash of power plants fuelled from coal deposits that contain germanium.

#### Gold

Non-Dietary Sources: Dental work; jewellery; gold salts for treating rheumatoid arthritis.

Possible Toxicity Signs: Mouth ulceration; itching; eczema; seborrheic dermatitis; alopecia; inflamed gums; gastritis; colitis; blood abnormalities; kidney damage (from the effect of gold salts).

#### Hafnium

Non-Dietary Sources: Found in many zirconium minerals; used in filaments and electrodes.

#### Helium

Non-Dietary Sources: Balloons; used as a shielding gas in arc welding processes; used as a protective gas in some industrial processes.

#### Holmium

Dietary Sources: Humans typically consume about a milligram of holmium a year from plants.

Non-Dietary Sources: Found in the minerals monazite and gadolinite; in high-strength magnets.

#### Hydrogen

Non-Dietary Sources: Most abundant chemical substance in the Universe.

#### Indium

Non-Dietary Sources: Used in the semiconductor industry.

#### lodine

Dietary Sources: Seaweed, grains, eggs, iodised salt.

Possible Deficiency Signs: Goitre, reduced growth.

Possible Toxicity Signs: Excess salivation, sneezing, conjunctivitis, headaches, laryngitis, bronchitis, skin rashes; low sperm count.

#### Iridium

Non-Dietary Sources: Electronics-related applications; used in devices that must withstand extremely high temperature; used for painting porcelain an intense black.

#### Iron

Dietary Sources: Meat, seafood, nuts, beans, dark chocolate

Non-Dietary Sources: Metal for building; steel, toner for photocopiers and printers, food additive, stainless steel, cast iron cookware; cosmetics (as iron oxide), fireworks.

Possible Deficiency Signs: Anaemia; fatigue; cracking at corner of mouth; recurrent mouth ulcers; sore tongue; poor hair growth; brittle nails; generalized itching.

Possible Toxicity Signs: Abdominal pain; arthritis; loss of libido; damage to liver, heart and pancreas;

people with certain neuro- degenerative disorders such as Parkinson's disease and dementia show excessive accumulation of iron in the brain.

#### Krypton

Non-Dietary Sources: Used in lighting and photography; concentration in the atmosphere is about 1 ppm.

#### Lanthanum

Non-Dietary Sources: Numerous applications as catalysts, additives in glass, carbon arc lamps for studio lights and projectors, ignition elements in lighters and torches, electron cathodes, scintillators, GTAW electrodes, and other things. Lanthanum carbonate is used as a phosphate binder in cases of renal failure.

#### Lead

Dietary Sources: Present in all foods, generally at very low levels.

Non-Dietary Sources: Leaded petrol fumes; old water pipes; leaded paint; lead plumbing; solder; improperly glazed pottery; cigarette ash; cigarette smoke, e-cigarette vapour, lipstick, pewter; lead crystal ware.

Possible Toxicity Signs: Loss of appetite; constipation; headache; weakness; blue or black line on gums; anaemia; irritability; vomiting; poor co- ordination; unsteady gait; visual disturbances; delirium; paralysis; kidney failure; mainly deposited in bones and teeth.

#### Lithium

Non-Dietary Sources: Glass, ceramics, steel & aluminium production, lithium batteries, iron additives, fireworks.

Possible Deficiency Signs: Depression, bipolar episodes.

#### Lutetium

Non-Dietary Sources: Very difficult to separate from other elements; few commercial uses.

#### Magnesium

Dietary Sources: Spinach, legumes, nuts, seeds, whole grains, peanut butter, avocado.

Non-Dietary Sources: Present in hard water; alloys; batteries; fireworks; glass; ceramics; fillers; flocculating agents; magnesium sulphate used in sugar refining. Indian coins.

Possible Deficiency Signs: Muscle dysfunction; irritability & tension; fatigue; pre-menstrual syndrome; apathy.

Possible Toxicity Signs: Muscle weakness; fatigue; sleepiness; hyper-excitability.

#### Manganese

Dietary Sources: Grains, legumes, seeds, nuts, leafy vegetables, tea, coffee.

Non-Dietary Sources: Cigarette smoke, e-cigarette vapour, textile bleaching, glass manufacture, fertil-

izers, compounds used in unleaded petrol and pesticides, pottery glazes. US dollar coin.

Possible Deficiency Signs: Joint pains; dizziness; schizophrenia.

Possible Toxicity Signs: Lethargy; involuntary movements; impairment of voluntary movements; changes in muscle tone.

#### Mercury

Dietary Sources: Fish.

Non-Dietary Sources: Cigarette smoke, dental amalgam; pesticides; fungicides; cystitis from coalburning power stations, contaminated fish, vaccines, volcanic emissions, vaccines.

Possible Toxicity Signs: Tremor; muscle instability; sensory disturbances; gastro-intestinal symptoms; dermatitis; liver and kidney damage; anaemia; mental deterioration; blue line on gums.

#### Molybdenum

Dietary Sources: Legumes, whole grains, nuts.

Non-Dietary Sources: Compounds used in lubricants.

Possible Deficiency Signs: Irritability; irregular heart beat; dental caries; male sexual impotence; cancer of the oesophagus, works as an antioxidant.

Possible Toxicity Signs: Gout; increased urinary excretion of copper.

#### Neodymium

Non-Dietary Sources: In powerful permanent magnets; used in China as fertiliser.

#### Neon

Non-Dietary Sources: Used in vacuum tubes, highvoltage indicators, lightning arresters, wave meter tubes, television tubes, and helium–neon lasers.

#### Nickel

Dietary Sources: Present naturally in foods; average diet supplies  $300-600 \ \mu g$  of nickel to the human body per day.

Non-Dietary Sources: Cigarette smoke, e-cigarette vapour, stainless steel; water boiled in a kettle with an element; clasps; jewellery; spectacles; buckles; keys; coins; diesel fumes; can be in flour because of milling; a catalyst for hydrogenating vegetable oils.

Possible Deficiency Signs: May activate certain enzymes and play a role in stabilizing chromosomal material in cell nuclei but at the moment no known diseases are associated with a nickel deficiency.

Possible Toxicity Signs: May be a factor in lung cancer; frontal headaches; vertigo; nausea; vomiting; chest pain; cough. Dermatitis from skin contact with nickel in sensitive people.

#### Niobium

Non-Dietary Sources: Used in high-grade structural steel.

#### Nitrogen

Non-Dietary Sources: Occurs in all organisms, primarily in amino acids (and thus proteins), in the nucleic acids (DNA and RNA) and in the energy transfer molecule adenosine triphosphate.

#### Osmium

Non-Dietary Sources: Often alloyed with other metals for high-wear applications (e.g. the tips of fountain pens, instrument pivots, and electrical contacts, record styli).

#### Oxygen

Non-Dietary Sources: By mass, the third-most abundant element in the universe. Used in cellular respiration and many major classes of organic molecules in living organisms contain oxygen, such as proteins, nucleic acids, carbohydrates, and fat.

#### Palladium

Non-Dietary Sources: Road dust from catalytic converters; dental work; electrical components.

Possible Toxicity Signs: Possibly carcinogenic.

#### Phosphorus

Dietary Sources: Red meat, dairy foods, fish, poultry, bread, rice, oats.

Non-Dietary Sources: Fireworks.

Possible Deficiency Signs: Debility; loss of appetite; weakness; bone pain; tingling sensations; tremor; irritability.

Possible Toxicity Signs: Prevents absorption of iron, calcium, magnesium & zinc; diarrhoea; calcification of soft tissues.

#### Platinum

Non-Dietary Sources: Jewellery, dental fillings, pacemakers, tobacco, road dust from catalytic converters, LCDs, chemotherapy agents; high quality glassware.

Possible Deficiency Signs: Platinum compounds have anti-tumor activity.

Possible Toxicity Signs: Platinum salts can cause DNA alterations, cancer, allergic reactions of the skin and the mucous membranes, damage to organs (such as intestines, kidneys and bone marrow) and hearing damage.

#### Potassium

Dietary Sources: Sweet potato, tomato, potato, beans, lentils, dairy products, seafood, banana, prune, carrot, orange

Non-Dietary Sources: Fireworks

Possible Deficiency Signs: Hypokalaemia; can be caused by diarrhoea, medications like furosemide and steroids, dialysis, diabetes insipidus, hyperaldosteronism, hypomagnesemia, and shortage in the diet.

Possible Toxicity Signs: Hyperkalaemia; usually no symptoms; occasionally when severe results in palpitations, muscle pain, muscle weakness, or numbness.

#### Praseodymium

Non-Dietary Sources: A yellow-orange "Praseodymium Yellow" stain for ceramics.

#### Radium

Non-Dietary Sources: Used in nuclear medicine.

#### Rhenium

Non-Dietary Sources: Used in parts for jet engines.

#### Rhodium

Non-Dietary Sources: Road dust from catalytic converters; white gold often plated with rhodium to improve its appearance and sterling silver is also for tarnish resistance.

#### Rubidium

Non-Dietary Sources: Fireworks.

#### Ruthenium

Non-Dietary Sources: Used in electrical contacts; being actively researched for solar energy technologies.

#### Samarium

Non-Dietary Sources: Used in magnets in small motors, headphones, and high-end magnetic pickups for guitars and related musical instruments. Radioactive isotope samarium-153 is drug used in the treatment of lung cancer, prostate cancer, breast cancer and osteosarcoma.

#### Scandium

Non-Dietary Sources: Used in high-end sports goods (baseball bats, bicycle frames and components, and Lacrosse sticks). Some Smith & Wesson semi-automatic pistols and revolvers have frames of scandium alloy. Used to strengthen aluminium alloys.

#### Selenium

Dietary Sources: Brazil nuts, seafoods, organ meats, meats, grains, dairy products, eggs.

Non-Dietary Sources: Cigarette smoke, anti-dandruff shampoos; steel and glass additive.

Possible Deficiency Signs: Possible links with some forms of cancer & development of coronary heart disease; premature ageing.

Possible Toxicity Signs: Hair loss, nail changes and loss, fatigue, irritability, nausea, gastrointestinal problems, joint inflammation, "garlic breath", dental caries; skin depigmentation; irritability.

#### Silicon

Non-Dietary Sources: Granite dust; sand, cement, porcelain, semiconductor electronics; ingredient in some toothpastes.

Possible Deficiency Signs: Poor skin, nails, hair and bone density. Needed for synthesis of elastin and collagen, of which the aorta contains the greatest quantity in the human body.

Possible Toxicity Signs: Inhalation of crystalline silica dust may lead to silicosis, an occupational lung disease marked by inflammation and scarring in the form of nodular lesions in the upper lobes of the lungs.

#### Silver

Non-Dietary Sources: Dental amalgam; jewellery; food colouring (E174); electrical components; silver compounds used in photography.

Possible Toxicity Signs: Argyria (blue-gray/ashen gray darkening of the eyes, nose, throat, skin and nasal septum), kidney damage.

#### Sodium

Dietary Sources: As sodium chloride (salt); monosodium glutamate (MSG), sodium nitrite, sodium saccharin, baking soda (sodium bicarbonate), and sodium benzoate.

Non-Dietary Sources: Sodium compounds used to produce glass, paper, soap, fireworks, and textiles. Most important sodium compounds are table salt (NaCI), soda ash (Na2CO3), baking soda (NaHCO3), caustic soda (NaOH), sodium nitrate (NaNO3), di- and tri-sodium phosphates, sodium thiosulfate (Na2S2O3·5H2O), and borax (Na2B4O7·10H2O).

Possible Deficiency Signs: Muscle cramps; fatigue; nausea. (Sodium is an essential mineral that regulates blood volume, blood pressure, osmotic equilibrium and pH.)

Possible Toxicity Signs: Hypertension; fluid retention

#### Strontium

Dietary Sources: Spices, whole grains, leafy green vegetables such as spinach and kale, seafood, root vegetables like carrots and parsnips, and legumes like beans, lentils and peas.

Non-Dietary Sources: Fireworks. Glass for colour television cathode ray tubes.

Possible Toxicity Signs: In the human body, most of the absorbed strontium is deposited in the bones.

#### Sulphur / Sulfur

Non-Dietary Sources: Natural gas, petroleum, fertilizer, insecticides, fireworks, matches, wood pulping, rubber vulcanisation, products for treating acne, dandruff, psoriasis etc.

Possible Deficiency Signs: Detoxification, proper insulin function, Vitamins B1 and B7 activation, mitochondrial function.

Possible Toxicity Signs: Digestive issues, flatulence, hives, fatigue.

#### Tantalum

Non-Dietary Sources: Production of electronic components, mainly capacitors and some high-power resistors.

#### Tellurium

Non-Dietary Sources: In copper and steel alloys.

#### Terbium

Non-Dietary Sources: Used in fluorescent lamps and television and monitor cathode ray tubes.

#### Thallium

Non-Dietary Sources: Found in association with potassium-based minerals in clays, soils, and granites; by-product of zinc & lead production; some glass; jewellery; dyes; pigments; elecronics; recreational drug contaminant.

Possible Toxicity Signs: Polyneuritis; fatigue; weight loss; possibly reduced immunity; leg pain in adults; arthritis; MS; Alzheimer's; pepolyneuritis; fatigue; weight loss; possibly reduced immunity; leg pain in adults; arthritis; MS; Alzheimer's disease; probably carcinogenic.

#### Thulium

Non-Dietary Sources: Widely used in laser technology in military applications, medicine, and meteorology.

#### Tin

Non-Dietary Sources: Dental amalgam; canning; solder in iron & copper pipes; compounds used in fungicides and glass coatings.

Possible Toxicity Signs: Nausea; colic; headache; weakness; fever; muscle pain; joint pain; tinnitus.

#### Titanium

Non-Dietary Sources: Dental work; surgical metal in hip replacements etc.; jewellery; sunscreen, fireworks, filler in many prescription and OTC medicines, cosmetics (as titanium dioxide).

Possible Toxicity Signs: Possible effects on respiratory system and the brain; may be carcinogenic.

#### Tungsten / Wolfram

Non-Dietary Sources: Used to produce tungsten carbide, alloys and steel.

#### Uranium

Non-Dietary Sources: Nuclear power plants and weapons.

#### Vanadium

Dietary Sources: Some mineral water springs.

Non-Dietary Sources: Catalytic converters; chemical catalyst.

Possible Deficiency Signs: Sugar cravings, inability to lose weight.

Possible Toxicity Signs: Bipolar disorder.

#### Xenon

Non-Dietary Sources: Found in the Earth's atmosphere in trace amounts. Used in flash lamps, arc lamps, and as a general anesthetic.

#### Ytterbium

Non-Dietary Sources: Used in nuclear medicine and atomic clocks.

#### Yttrium

Non-Dietary Sources: Red component of color television cathode ray tubes; synthetic garnets; in some drugs to treat cancer.

#### Zinc

Dietary Sources: Oysters, red meat, poultry, nuts, whole grains, dairy products.

Non-Dietary Sources: Cigarette smoke, galvanised iron; brass; solder; die-casting; tires; zinc oxide is used in paints, rubber, textiles, fireworks, sunscreens, cosmetics and plastics.

Possible Deficiency Signs: Persistent leg ulcers & pressure sores; red, greasy skin on face; skin problems, poor hair growth; dandruff; night blindness; brittle nails; white spots on nails.

Possible Toxicity Signs: Impaired copper & iron absorption; gastro-intestinal disturbances; masklike fixed expression; difficulty in walking; slurred speech; hand tremor; involuntary laughter.

#### Zirconium

Non-Dietary Sources: Dental implants, nuclear power, ceramics, glassware, antiperspirants, skin lotion, synthetic dyes, etc.

Possible Toxicity Signs: Pulmonary fibrosis, general pulmonary issues, granulomata.

### Emotional States Composite Test Kit 10 vials

This is a kit of ten primary or broad-spectrum emotions or states of being. There are thousands of different emotions, so making an emotions test kit was always going to be a challenge. The way in which these countless emotions have been distilled and categorised has been established through kinesiology testing and the study of anthropological and psychological research in this field.

Each of these ten emotional states encompasses many other emotions of varying intensity. The other emotions are listed under the primary emotion.

Positive emotions can be as problematic as negative emotions. People can feel they do not deserve to be happy or that happiness is boring. Some people will have problems with two opposing emotions, for example, happiness and sadness, and vacillate between them, sabotaging themselves when they are happy and when they are unhappy.

It could be argued that there are no completely positive or negative emotional states; emotions are appropriate or inappropriate depending on circumstances and in order to be full human beings we need to be able to experience all the emotions at different times.

#### EC 01 Anger Hard

Abrasive Abhorrent Abusive Acrimonious Aggressive Aggrieved Angry Annoyed Antagonistic Antagonized Argumentative Belligerent Bitchy Bitter **Boisterous** Brutal Bugged Bullying Burning Caustic Chaotic Choleric Cranky Cross Cruel Cynical Defensive Defiant Demanding Destructive Disgusted Displeased Enraged Exasperated Explosive Fed-up Ferocious Fierce Fiery Forceful Frustrated Fuming Furious Gruff Grumpy

Harsh Hated Heartless Hostile Hot-headed Hot-tempered Impatient Ill humoured Ill tempered Incandescent Incensed Indignant Inflamed Infuriated Inhuman Insensitive Insulted Irascible Irate Irritable Irritated Jealous Livid Mad Malevolent Mean Merciless Murderous Offended On fire Out of sorts Outraged Peevish Petulant Piqued Pissed off Pissed (American usage) Pushy Upset Pitiless Provoked Quarrelsome Raging Raving

Rebellious Resentful Resistant Revolted Riled Rough Rude Ruthless Sabotaging Sadistic Sarcastic Savage Seething Severe Sharp Simmerina Smouldering Spiteful Steely Stern Stubborn Sulky Sullen Unkind Unrelenting Up in arms Resentful Vehement Vengeful Vicious Violent Wicked Wild Wilful Wrathful

### EC 02 Apathy Alienated Alone Bored Cold Cool Cut off Dead Defeated Depressed Doomed Drained

Demoralised Discouraged Disillusioned Emotionless Empty Helpléss Hopeless Impassive Inattentive Indifferent Lazy Listless Lost Low Negative Numb Overwhelmed Passive Pessimistic Phlegmatic Pointless Powerless Resigned Self-defeating Spaced out Spacey Stoned Stuck Tired Unemotional Unfeeling Unfocussed Uninterested Unmoved Unresponsive Useless Vague Worthless

## EC 03 **Bravery**

Adventurous Alert Alive Anticipating Assured Aware Bold Brave Capable Centred Certain Competent Confident Creative Courageous Daring Decisive Determined Dynamic Eager Enthusiastic Excited Exhilarated Exuberant Fearless Flexible Focussed Gallant Heroic Honourable Independent Intrepid Invincible Motivated Optimistic Plucky Positive Purposeful Resilient Resolute Secure Self-sufficient Strong Sure Tireless Undaunted Valiant Vigorous Visionary Willing Zealous Copyright LWP 2024

EC 04 Fear

Afraid Alarmed Anxious Apprehensive Ashamed Awed Baffled Bashful Bewildered Bothered Careful Cautious Clammv Concerned Conflicted Confused Cowardly Cowed Cowering Cringing Daunted Defensive Degraded Dismayed Dissatisfied Distraught Distressed Distrustful Disturbed Doubtful Dread Edgy Embarrassed Evasive Faint-hearted Fearful Foreboding Frantic Frightened Guiltv Hesitant Horrified Hot and bothered Humiliated Hysterical Ill at ease In suspense In turmoil Inhibited Insecure

(Fear	EC 05	Good-natured		EC 06	Love			EC	07 Lust
(Fear Continued) Intimidated Irrational Miserable Mixed-up Nervous Neurotic On edge On tenter- hooks Overwrought Panicky Panic-stricken Paralysed Paranoid Perplexed Paranoid Perplexed Petrified Phobic Puzzled Reluctant Restless Scared Shaky Shocked Shy Skulking Soft Stressed	Happiness Affable Agreeable Alert Alive Amiable Amused Animated Anticipating Appreciated Blessed Blissful Blithe Carefree Charming Cheerful Comfortable Congenial Content Contented Delighted Eager Ecstatic Elated Encouraged Enthusiastic Excited Exhilarated	Good-natured Gratified Happy Happy-go-lucky Hopeful Jolly Joyful Joyous Jubilant Kind Kindly Laughing Light-hearted Lively Merry Nonchalant On cloud nine Optimistic Overjoyed Over the moon Patient Playful Pleasant Pleased Radiant Rapt Relieved Satisfied Sparkling Sunny Sure		EC 06 Love Accepted Accepting Adored Adoring Affectionate Appreciated Aroused Blessed Blissful Cared for Caressed Caring Cherished Cherishing Comforted Compassionate Connected Consoled Consoling Doting Embraced Enchanted		Esteemed Friendly Gentle Helpful Included Including Intimate Light-hearted Liked Loved Loved Lovely Loving Needed Nurtured Nurturing Obsessed Respected Savoured Smitten Sociable Tender Warm Welcoming Easy-going Harmonious Intuitive Light Mellow		EC 07 Lust Ardent Carnal Compulsive Craving Demanding Desiring Driven Envious Fixated Frustrated Gluttonous Greedy Hungry Impatient Lascivious Lecherous Libidinous Licentious Lustful Manipulative Miserly Obsessed Over indulgent Passionate Possessive Predatory Pushy Randy	
Stressed Sullen Superstitious Suspicious Tense Terrified Threatened Timid Tormented Torn Trapped Trembling Troubled	Exuberant Floating on air Full of life Gay Glad Glowing Good-hu- moured	Sweet Sweet-tempered Thrilled Vibrant Vital Vivacious Worthy	1	Apprecia At ease At peace Balancec Beautiful Benevole Benign Blissful Blithe Calm Carefree Easy	ł	Plac Quie Rela Res Sere Still Trar Und Unr	et axed tful ene	Rec Sch Sel Ser Sey Vor Wa	nsual
Uncertain Uncomfortable Uneasy Upset Vulnerable Wary Weak Worried Yellow	Aloof Arroga Bigote Boast Cleve Close Comp Conce	ed Hypo ful Icy r Impe d Inflex placent Isola eited Judg mptuous Narro al Opin	isti iting ght ocri ario xibl itec gem ow	cal P g P tical R us S e S l S nental S -minded S nated S	atronising ious rejudiced roud ighteous igid elf-respe elf-satisfi elfish mug nobbish nooty	tant	Special Stoical Stubborn Stuck up Supercilio Superior Uncompro Unfeeling Unforgivir Unyielding Vain	omising 1g	
EC 10 Sadness Abandoned Abject Abused Anguished Upset Apologetic Bad Bereaved Betrayed Bleak Blue	Burdened Cheated Dark Defeated Dejected Desolate Despairing Desperate Despondent Disappointed Disconsolate Discontented Discounted	Disheartened G Distraught G Dismal G Dispirited H Displeased H Dissatisfied H Doleful H Down In Downcast In Downhearted In Forlorn In Gloomy In Glum In	riev irim uilt eav eav urt i de i ad icol icol icol icol icol icol icol icol	y t broken /y /y-hearted espair e dumps equate nsolable	Joyless Left out Lonely Longing Martyre Regretfi Melanch Miserab Morose Mournfu Needy Oppress Pathetic Pensive Pessimi	i d ul nolic ile ul sed	Pitiable Pitiful Regret Rejected Sad Sombre Sorrowful Sorry Stuck Suicidal Tearful Tormented Tortured	Uni Uni Uni Uni Uni Uni Vui Vui Wois Wois	nerable

# Essential Oil A Test Kit 37 vials

The energy patterns of bergamot, camomile (2 types), cinnamon, clove, cyprus, dill, eucalyptus, frankincense, ginger, jasmine, lavender, lemon (2 types), lemon grass, etc.

- EO1 Angelica Angelica archangelica
- EO2 Aniseed Pimpernella anisum
- EO3 Basil Ocimum basilicum
- EO4 Benzoin Styrax tokinensis benzoin
- EO5 Bergamot Citrus bergamia
- EO6 Cajeput Melaleuca leucadendron
- EO7 Caraway Carum carvi
- EO8 Cardamom Elettaria cardamomum
- EO9 Cedar, Atlas Cedrus atlantica
- EO10 Chamomile Matricaria chamomilla
- EO11 Chamomile, Roman Anthemis nobilis
- EO12 Cinnamon Cinnamomum zeylanicum
- EO13 Clove Eugenia caryophylata
- EO14 Coriander Coriandrum sativum
- EO15 Cumin Cuminum cyminum
- EO16 Cypress, Mediterranean Cupressus sempervirens
- EO17 Dill Anethum (Peucedanum) graveolens
- EO18 Elemi Canarium luzonicum
- EO19 Eucalyptus, Tasmanian Blue Gum Eucalyptus globulus
- EO20 Fennel Foeniculum vulgaris var.dulce
- EO21 Fir Abies maritima
- EO22 Frankincense Boswellia carterii
- EO23 Galbanum Ferula galbaniflua
- EO24 Garlic Alium sativum
- EO25 Grapefruit, white Citrus x paradisi
- EO26 Ginger Zingiber officinalis
- EO27 Hyssop Hyssopus officinalis
- EO28 Jasmine Jasminum grandiflorum
- EO29 Juniper, Common Juniperus communis
- EO30 Juniper (Pencil Cedar) Juniperus virginiana
- EO31 Lavender, Dutch Lavandula vera
- EO32 Lemon, Green Citrus limon
- EO33 Lemon, Yellow Citrus limon
- EO34 Lemongrass Cymbopogon flexuosus
- EO35 Lime Citrus aurantifolia
- EO36 Mandarin, Green Citrus reticulata
- EO37 Mandarin, Red Citrus madurensis

# Essential Oil B Test Kit 37 vials

The energy patterns of marigold (French), marjoram (2 types) melissa, myrrh, patchouli, rose ( 2 types), rosemary, sandalwood, etc.

- EO38 Marigold, French Tagetes patula
- EO39 Marjoram, Wild Origanum vulgare
- EO40 Marjoram, Sweet Origanum marjoram
- EO41 May Chang Litsea cubeba
- EO42 Melissa Melissa officinalis
- EO43 Mint, Common Mentha arvensis
- EO44 Myrrh Commiphora myrrha
- EO45 Myrtle, Common Myrtus communis
- EO46 Nutmeg Myristica fragrans
- EO47 Orange, Sweet Citrus (aurantium.)sinensis
- EO48 Orange, Bitter Citrus aurantium
- EO49 Patchouli Pogostemon patchouli
- EO50 Pelargonium (Geranium) Pelargonium graveolens
- EO51 Pennyroyal Mentha pulegia
- EO52 Petitgrain Citrus bigaradia
- EO53 Pepper, Black Piper nigrum
- EO54 Peppermint Mentha piperita
- EO55 Pine, Arolla Pinus cembra
- EO56 Rock Rose (Sun Rose) Cistus ladanifer
- EO57 Rose, Damask Rosa damascena
- EO58 Rose, Provence Rosa centifolia
- EO59 Rosemary Rosmarinus officinalis
- EO60 Sage Salvia officinalis
- EO61 Sage, Clary Salvia sclarea
- EO62 Sandalwood Santalum album
- EO63 Savory, Summer Satureja hortensis
- EO64 Spearmint Mentha spicata
- EO65 Tea Tree Melaleuca alternifolia
- EO66 Tarragon Artemisia dranuculus
- EO67 Thuja Thuja occidentalis
- EO68 Thyme, Red Thymus vulgaris
- EO69 Thyme, White Thymus vulgaris
- EO70 Verbena, Lemon scented Lippia citriodora
- EO71 Vetiver Vetiveria zizanoides
- EO72 Wintergreen Gaultheria procumbens
- EO73 Yarrow Alchemilla millefolium
- EO74 Ylang Ylang Cananga odorata

# Fertility (IVF) Drugs Test Kit 14 vials

The energy pattern of drugs used to help women to conceive a child.

- IF 01 Buserelin (Suprecur®)
- IF 02 Cabergoline (Dostinex®)
- IF 03 Cetrorelix (Cetrotide®)
- IF 04 Clomifene Citrate (Clomid®/ Serophene®)
- IF 05 Cyclogest
- IF 06 Follitropin Alpha/ Alfa (Gonal-F®)
- IF 07 Gonadorelin (Factrelle®/ Lutrepulse®/ Relisorm®)
- IF 08 Letrozole (Femara®)
- IF 09 Metformin
- IF 10 Menotropins (Menopur®)
- IF 11 Ovitrelle
- IF 12 Pergoveris
- IF 13 Progynova
- IF 14 Tamoxifen (Nolvadex®)

# Food A Test Kit 56 vials

*The energy patterns of apple, apricot, banana, beef, carrot, cauliflower, celery, cheese, chicken, egg, gar-lic, grape, lemon, lettuce, marrow, milk, peanut, pork, potato, etc.* 

	EA27 Decout			
FA1 Apple	FA37 Peanut			
FA2 Apricot	FA38 Pear			
FA3 Banana	FA39 Peppers/ Bell Peppers			
FA4 Beef	FA40 Pineapple			
FA5 Blackcurrant	FA41 Plaice			
FA6 Butter	FA42 Plum			
FA7 Carrot	FA43 Pork			
FA8 Cauliflower	FA44 Potato			
FA9 Celery	FA45 Prawns			
FA10 Cheese, Cow's	FA46 Pumpkin Seed			
FA11 Chicken	FA47 Rhubarb			
FA12 Cod	FA48 Sesame Seeds			
FA13 Courgette/Zucchini	FA49 Spinach			
FA14 Cucumber	FA50 Strawberry			
FA15 Egg	FA51 Sunflower Seeds			
FA16 Garlic	FA52 Tomato			
FA17 Grape	FA53 Tuna			
FA18 Ham	FA54 Turkey			
FA19 Hazelnut	FA55 Watercress			
FA20 Honey	FA56 One vial containing 78 mixed foods and food additives: almonds, apple, apricot, baking powder,			
FA21 Kiwi Fruit	banana, Barleycup, beef, blackcurrant, brazil nut,			
FA22 Lamb	bread (white), butter, carob, cashew, cauliflower, cheese. chicken, chocolate, coconut, coffee (in-			
FA23 Lemon	stant), corn, egg (raw in shell), flour (white), wheat,			
FA24 Lettuce	ginger, gooseberry, grapes, ham, honey, ice cream (vanilla), lemon, lentils, malt, margarine (mixed),			
FA25 Loganberry	marrow, milk, mushroom, oil (vegetable), onion,			
FA26 Marrow	orange, pea, peach, peanut, pear, pineapple, plum, potato, raspberry, salmon, soya flour, sugar (beet),			
FA27 Milk, Cow's	sultanas, saccharin, tomato, turkey, vinegar, yeast (bakers and brewers), E102, E104, E110, E123,			
FA28 Mint				
FA29 Mixed Sweets/ Mixed Candies	E127, E142, E223. E330, E500, E621, artificial colours(mixed), sweets (mixed), nuts (mixed), kiwi			
FA30 Mushroom	fruit, loganberry, sugar (icing), coal tar			
FA31 Onion				
FA32 Orange				
FA33 Parsley				
FA34 Parsnip				

- FA35 Pea
- FA36 Peach

# Food B Test Kit 52 vials

The energy patterns of almond, barley, cashew nut, chickpea, cocoa, coconut, coffee (ground), oats (2 types) rice (3 types), sugar (beet), sugar (cane), wheat flour (4 types) yeast (bakers), yeast (brewers), etc.

FB57 Almonds	FB92 Runner bean
FB58 Baking powder	FB93 Rye
FB59 Barley: pearl barley	FB94 Salmon
FB60 Beetroot	FB95 Soya bean: flour
FB61 Blackberry: wild	FB96 Sugar: beet
FB62 Brazil nut	FB97 Sugar: cane
FB63 Broad Beans	FB98 Sugar: demerara
FB64 Brussel Sprout	FB99 Sultana
FB65 Buckwheat	FB100 Vinegar: malt
FB66 Cabbage	FB101 Vinegar: white wine
FB67 Carob	FB102 Walnut
FB68 Cashew nut	FB103 Wheat flour: white, plain
FB69 Chickpea	FB104 Wheat flour: white plain organic, un-
FB70 Cocoa	bleached
FB71 Coconut	FB05 Wheat flour: white, self raising
FB72 Coffee: ground	FB106 Wheat flour: wholemeal, organic
FB73 Corn: sweet corn	FB107 Yeast: Bakers
FB74 Cornflour / Corn Starch	FB108 Yeast: Brewers
FB75 Date	
FB76 Fig	

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FB77 Glucose FB78 Grapefruit

FB79 Hops

FB81 Malt

FB83 Millet FB84 Oats

FB82 Melon: Galia

FB85 Oats: organic FB86 Oil: olive FB87 Radish

FB88 Raspberry

FB89 Rice: long grain, white FB90 Rice: short grain, white

FB91 Rice: long grain, brown, organic

FB80 Lentil: brown whole

# Food C Test Kit 50 vials

*The energy patterns of gluten, goat's milk, cow's milk yoghurt, quinoa, blueberry, okra, pak choi, mango, etc.* 

FC109 Anchovy in brine FC110 Aubergine / Egg Plant FC111 Avocado FC112 Basil FC113 Blueberry FC114 Broccoli FC115 Celeriac FC116 Cheese, vegetarian FC117 Cherries FC118 Chili, red and green FC119 Cinnamon FC120 Chocolate FC121 Coriander / Cilantro FC122 Crab FC123 Cranberry FC124 Cumin FC125 Endive FC126 Ginger, fresh FC127 Gluten FC128 Goat's milk FC129 Haddock FC130 Lambs Lettuce FC131 Leek FC132 Lemongrass FC133 Lobster

FC134 Mackerel in brine FC135 Mango FC136 Mussel FC137 Mustard FC138 Okra / Lady's Finger FC139 Pak Choi FC140 Paw Paw/ Papaya FC141 Pecan FC142 Pepper, black and white FC143 Quinoa, organic FC144 Raddichio FC145 Rocket / Arugula FC146 Sage, fresh FC147 Sardines in brine FC148 Sorrel FC149 Spelt flour, organic FC150 Squash, butternut FC151 Squid FC152 Sweet Potato FC153 Tarragon, fresh FC154 Thyme, fresh FC155 Trout FC156 Turmeric FC157 Yam FC158 Yoghurt: Cow's Milk

# Food D Test Kit 42 vials

The energy patterns of many extra herbs, spices, nuts, fruit and vegetables.

FD159 Asparagus	FD180	Mace
FD160 Bay Leaf	FD181	Mandarin
FD161 Caraway	FD182	Marjoram
FD162 Cardamom	FD183	Nutmeg
FD163 Cayenne	FD184	Oregano
FD164 Chestnut	FD185	Paprika
FD165 Chives	FD186	Passion Fruit
FD166 Clementine	FD187	Physalis/Cape Gooseberry
FD167 Cloves	FD188	Pine Nut
FD168 Dill	FD189	Pistachio Nut
FD169 Fennel	FD190	Pomegranate
FD170 Globe Artichoke	FD191	Poppy Seeds Blue and White
FD171 Gooseberry	FD192	Red Cabbage
FD172 Greengage	FD193	Red Currant
FD173 Horseradish	FD194	Rosemary
FD174 Jerusalem Artichoke	FD195	Saffron
FD175 Kale	FD196	Satsuma
FD176 Kohl Rabi	FD197	Star Anise
FD177 Kumquat	FD198	Star Fruit / Carambola
FD178 Lime	FD199	Tangerine
FD179 Macadamia Nut	FD200	Water Melon

# Food E Test Kit 25 vials

The energy patterns of more fish, maple syrup, sheep's milk, tofu and more.

FE201 Cheese, Goats	FE214 Olives in brine
FE202 Cheese, Sheep	FE215 Oyster
FE203 Crayfish	FE216 Pilchard in olive oil
FE204 Duck	FE217 Pollock
FE205 Eggs: Quail	FE218 Red Mullet
FE206 Goji Berry	FE219 Scallops
FE207 Halibut	FE220 Sea Bass
FE208 Hemp Seeds	FE221 Sea Bream
FE209 John Dory	FE222 Sheep's Milk
FE210 Linseed	FE223 Sheep's Milk Yoghurt
FE211 Maple Syrup	FE224 Tofu
FE212 Molasses, organic	FE225 Venison
FE213 Monk Fish	

# Food F Test Kit 25 vials

*The energy patterns of "superfoods", (including spirulina, raw chocolate, guarana) and sweeteners (including xylitol and yacon syrup).* 

FF226 Acai Berry, Organic An Amazonian berry

FF227 Agave Nectar / Syrup, Raw, Organic Low glycaemic index sweetener from the agave, a succulent.

FF228 Apricot Kernel The kernels inside the apricot stone.

FF229 Barley Grass Powder Young barley leaves, juiced and dried.

FF230 Bee Pollen Pollen from flowers collected by bees.

FF231 Blue Green Algae Fresh water algae chiefly harvested from Upper Klamath Lake, USA

FF232 Broccoli Seed Powder, Sprouted, Organic Broccoli seeds sprouted and then dried and powdered.

FF233 Cacao (Cocoa) Nibs, Organic Edible part of the cocoa bean.

FF234 Chlorella, Organic A green algae

FF235 Cocoa Butter / Theobroma Oil / Theobroma Cacao, Raw, Organic A raw vegetable fat extracted from the cocoa bean.

FF236 Coconut Oil, Raw, Virgin, Cold Pressed Extracted from coconuts; heat stable so good for cooking. Non-organic, hydrogenated variety also used in non-dairy creamers and snack foods.

FF237 Durian From Monthong variety of durian.

FF238 Guarana, Raw Organic From Brazil. A stimulant - high caffeine content.

FF239 Hemp Protein Powder, Organic From the Cannabis group of trees, but does not have a narcotic effect.

FF240 Lucuma, Raw Organic A South American sub-tropical fruit.

FF241 Maca Powder A South American root; also known as Peruvian ginseng.

FF242 Manuca Honey New Zealand honey from bees fed on manuca (tea tree) bush ; has anti-bacterial properties

FF243 Mesquite Powdered pod from tree found in N Mexico and SW USA.

FF244 Nopal Cactus Dried Mexican cactus

FF245 Propolis Natural bee resin

FF246 Royal Jelly Secreted by nurse bees and fed to queen bee throughout her life. FF247 Spirulina Powder A freshwater algae

FF248 Wheat Grass Powder, Organic Young wheat leaves juiced and dried.

FF249 Xylitol Made from birch tree; just over half calories of sugar; GI of 8; scientific research shows may help prevent tooth decay.

FF250 Yacon Syrup, Raw, Organic The syrup from a South American tuber.

# Food G Test Kit 50 vials

Focussing on Asian cuisine, including seaweeds, fruits and vegetables. Many of the items in this kit are regarded as superfoods, although the term is not accepted by conventional scientists and medical people.

FG 251 Acacia Leaves FG 252 Agar / Kanten FG 253 Bamboo Shoot FG 254 Banana Leaves FG 255 Beansprout FG 256 Black Fungus / Cloud Ear Fungus / Wood Ear Fungus / Tree Ear Fungus FG 257 Candle Nut / Kemiri FG 258 Cao Guo / Chinese Black Cardamom/ Tsaoko Fruit/ Chao Kuo/ Amomum Tsao-Ko FG 259 Chinese Chives / Kow Choi / Garlic Chives FG 260 Chinese Leaves /Chinese Cabbage / Nappa Cabbage / Celery Cabbage FG 261 Choy Sum /Chinese Flowering Cabbage FG 262 Daikon / Mooli / White Radish FG 263 Dragon Fruit FG 264 Drumsticks FG 265 Galangal FG 266 Guava FG 267 Jackfruit FG 268 Kaffir Lime Leaves FG 269 Kudzu / Kuzu FG 270 Lily Bulb FG 271 Longan FG 272 Lotus Leaf FG 273 Lotus Root FG 274 Lotus Seed FG 275 Lychee FG 276 Mirin - ingredients may vary slightly so this is only a guide. FG 277 Paan Leaf /Pan /Betel Leaf FG 278 Pak Che Farang / Culantro / Mexican Coriander / Long Coriander / Ergium / Thai Parsley FG 279 Pandan Leaves / Rampe/ScrewPine/Pandanus FG 280 Parval / Parwal / Pointed Gourd FG 281 Persimmon FG 282 Rambutan FG 283 Red Fermented Bean Curd FG 284 Sansyo/Japanese Pepper FG 285 Seaweed, Arame FG 286 Seaweed, Dulse FG 287 Seaweed, Hijiki FG 288 Seaweed, Kombu / Konbu / Dashima / Haidai

- FG 289 Seaweed, Nori
- FG 290 Seaweed, Wakame
- FG 291 Shaoxing Rice Wine
- FG 292 Sichuan Pepper/ Szechwan Pepper / Szechuan Pepper
- FG 293 Sushi-Su Vinegar/Seasoned Rice Vinegar ingredients may vary slightly so this is only a guide.
- FG 294 Takuan Taro / Pickled Daikon Radish
- FG 295 Tamarind
- FG 296 Tapioca / Casava / Manioc
- FG 297 Tatsoi / Spinach Mustard
- FG 298 Wasabi
- FG 299 Water Chestnut
- FG 300 Yuzu Powder

# Food - Mushrooms 14 vials

- FM 01 Mushroom, Buna Shimeji / Brown Beech
- FM 02 Mushroom, Chanterelle
- FM 03 Mushroom, Chestnut
- FM 04 Mushroom, Cultivated, White Button
- FM 05 Mushroom, Enoki
- FM 06 Mushroom, Morel
- FM 07 Mushroom, Oyster Grey and White
- FM 08 Mushroom, Porcini /Porcino /Cep
- FM 09 Mushroom, Portobello Cremini are baby Portobello
- FM 10 Mushroom, Shiro Shimeji
- FM 11 Mushroom, Shitake /Chinese Black
- FM 12 Truffle, Black /Tuber Melanosporum / Perigord / Norcia Pregiato
- FM 13 Truffle, Summer /Tuber Uncinatum
- FM 14 Truffle, White / Tuber Magnatum

# Food - Milk & Milk Substitutes 18 vials

Many people have problems with regular cow's milk. Some of these may be able to tolerate one of the three alternative cow's milks

1. unpasteurised milk/raw milk

2. organic cow's milk

3. lactose-free milk

4. A2 milk (not available in some countries); most cows now produce A1 protein in their milk. Historically it was A2 protein that was more common

Many of the milk substitutes are made by several different manufacturers and may contain different additional ingredients. So testing a milk substitute vial can only act as a guide to suitability because a milk vial may test as suitable, but be unsuitable from a specific manufacturer because of additional ingredients (e.g. emulsifiers, sweeteners, etc.)

Or

A milk vial may test as unsuitable, but this is because of additional ingredients included by some manufacturer. It may be wise to do some general testing using this test kit and then ask your client to bring in a specific brand for testing.

#### MK 01 Milk, Almond

Also contains agave syrup, corn maltodextrin.

MK 02 Milk, Buffalo

#### MK 03 Milk, Coconut

Also contains grape juice concentrate, calcium phosphate, Sucrose ester, sea salt, natural carotene, vitamins

(D2 and B12)

MK 04 Milk, Cow

MK 05 Milk, Cow, Organic

MK 06 Milk, Cow, A2

MK 07 Milk, Cow, Lactose-Free

#### MK 08 Milk, Cow, Unpasteurised/Raw

MK 09 Milk, Goat

#### MK 10 Milk, Hazelnut

Also contains agave syrup, corn maltodextrin, sugar, tri-calcium phosphate, sea salt, locust bean gum, gellan gum, sunflower lecithin, vitamins (B2, B12, E, D2).

#### MK 11 Milk, Hemp

Also contains fruit extract from apple, calcium from seaweed, emulsifier, sucrose ester, sea salt, vitamin D2.

#### MK 12 Milk, Kamut

Also contains sunflower oil, safflower oil, sea salt.

MK 13 Milk, Oat

Also contains canola/rapeseed oil, salt, sea salt, vitamins (D2, riboflavin, folic acid and B12), calcium.

#### MK 14 Milk, Quinoa

Also contains agave syrup, corn maltodextrin.

#### MK 15 Milk, Rice

Also contains sunflower oil, safflower oil, sea salt, calcium phosphate, vitamins (D2 and B12).

#### MK 16 Milk, Sesame

Also contains agave syrup, corn maltodextrin, sunflower oil.

#### MK 17 Milk, Sheep

#### MK 18 Milk, Soya

Also contains sugar, tricalcium phosphate, maltodextrin, sea salt, gellan gum, vitamins (B2, B12, D, E), potassium iodide.

# Food: Flours Test Kit 41 vials

# A comprehensive list of flour including many gluten-free ones.

F FL 01 Almond Flour, Organic

F FL 02 Amaranth Flour / Szarlat, Organic

F FL 03 Barley Flour Contains gluten.

F FL 04 Buckwheat Flour Buckwheat is in the rhubarb botanical family, so does not contain gluten, in spite of its name.

F FL 05 Buckwheat Flour, Organic Buckwheat is in the rhubarb botanical family, so does not contain gluten, in spite of its name.

F FL 06 Cassava Flour

Tapioca and cassava flour both originate from the cassava root. Tapioca flour only comes from the starch of the root and is then bleached. Cassava contains more vitamin C and is less processed overall.

- F FL 07 Chestnut Flour, Organic
- F FL 08 Chia Flour
- F FL 09 Chickpea / Garbanzo / Gram Flour
- F FL 10 Coconut Flour, Organic

F FL 11 Coffee Flour

From the fruit of the coffee bean; can be used to make bread, cakes, etc.

- F FL 12 Corn Flour/ Corn Meal, Yellow
- F FL 13 Corn Flour/ Corn Meal, Yellow, Organic
- F FL 14 Green Banana Flour
- F FL 15 Hemp Seed Flour

F FL 16 Lupin Flour, Raw, Organic

Carries the same protein that causes allergic reactions/anaphylaxis to peanut or legumes, which makes it unsuitable for people with peanut or legume allergies e.g. soybeans.

F FL 17 Millet Flour

F FL 18 Oat Flour

Normally gluten-free, unless contaminated during processing.

- F FL 19 Peanut Flour, Reduced Fat
- F FL 20 Potato Flour, Organic
- F FL 21 Quinoa Flour, Organic
- F FL 22 Rice Flour, Brown, Organic
- F FL 23 Rice Flour, White

F FL 24 Rice Flour, White, Organic

F FL 25 Rye Flour Contains gluten.

F FL 26 Rye Flour, Dark, Organic Contains gluten.

F FL 27 Sesame Flour, Organic

F FL 28 Sorghum Flour / Juwar Flour / Jowar Flour

F FL 29 Soya Bean Flour / Soy Flour

F FL 30 Spelt Flour, Organic Contains gluten.

F FL 31 Spelt Flour, Wholemeal, Organic Contains gluten.

F FL 32 Tapioca Flour, Organic Tapioca and cassava flour both originate from the cassava root. Tapiocaflour only comes from the starch of the root and is then bleached. Cassava contains more vitamin C and is less processed overall.

- F FL 33 Teff Flour, Brown
- F FL 34 Teff Flour, Brown Organic
- F FL 35 Teff Flour, White
- F FL 36 Teff Flour, White, Organic
- F FL 37 Tiger Nut Flour

F FL 38 Wheat Flour, White Contains gluten.

F FL 39 Wheat Flour, White, Organic, Unbleached Contains gluten.

F FL 40 Wheat Flour, Wholemeal Contains gluten.

F FL 41 Wheat Flour, Wholemeal, Organic Contains gluten.

# Food - Pulses Test Kit 19 vials

16 beans/pulses plus soya bean (in two forms) plus a mixed vial containing all of them.3 of the vials are also found in Foods A to E. The price of this kit takes that into account.

- FPU1 Azuki/Adzuki Bean
- FPU2 Black Eyed Bean
- FPU3 Black Turtle Bean
- FPU4 Brown Bean
- FPU5 Butter Bean
- FPU6 Cannelleni Bean
- FPU7 Chana Dal
- FPU8 Chickpea
- FPU9 Flageolet Bean
- FPU10 Haricot Bean
- FPU11 Kidney Bean / Red Bean
- FPU12 Lentil: Brown Whole
- FPU13 Lima Bean
- FPU14 Mung Bean
- FPU15 Pigeon Pea / Gungo Pea / Cajan
- FPU16 Pinto Beans
- FPU17 Soya Bean, Flour
- FPU18 Soya Bean, Organic
- FPU19 Mixed vial containing all of above

# Food Toxins Test Kit 10 vials

# This kit is based on the work of Michael Lebowiitz, DC

#### Albumin / Ovalubin

Egg protein, highly allergic.

#### Caffeine

Potentially toxic stimulants found in coffee, tea, chocolate, cola, guarana, yerba mate, acai berries.

#### Casein

Dairy protein, highly allergic.

#### Gliadin

Component of gluten that is problematic for a high % of the population.

#### Lactose

Sugar found mainly in milk; many people are lactose intolerant.

#### Paraxanthine/ 1,7-Dimethylxanthine

Potentially toxic stimulants found in coffee, tea, chocolate, cola, guarana, yerba mate, acai berries.

#### Solanine/Alpha Solanine

Naturally occurring neuro-toxin in members of the nightshade family, acts as an acetylcholinesterase inhibitor.

#### Theobromine

Potentially toxic stimulants found in coffee, tea, chocolate, cola, guarana, yerba mate, acai berries.

#### Theophylline

Potentially toxic stimulants found in coffee, tea, chocolate, cola, guarana, yerba mate, acai berries.

#### Zein

Corn protein, highly allergic.

# Food: Vegetable Oils Test Kit

29 vials

Various oils used in cooking and processed food, including corn oil, groundnut oil, sunflower oil and rapeseed/canola oil.

Products sold as "vegetable oil" sold in supermarkets can come from various sources. Manufacturers will use different combinations of oils at different times.

#### Many of the oils are also used as carrier oils in massage.

#### VO 1 Almond Oil

Limited use in cooking, but also used as amassage oil and in skin care preparations.

VO 2 Almond Oil, Sweet Organic

#### VO 3 Argan Oil

Used in cooking especially in Morocco, also in cosmetics and taken as a nutritional supplement.

VO 4 Avocado Oil

Used in cooking and in personal care products and cosmetics.

#### VO 5 Coconut Oil

Used in baked goods, pastries, confectionery, and sautés. Also used in non-dairy creamers and snack foods including popcorn. Has become increasingly popular in health and natural food circles.

VO 6 Coconut Oil, Virgin, Organic

#### VO 7 Corn Oil

One of the most common cooking oils; also used in salad dressing, margarine, mayonnaise, prepared goods like spaghetti sauce and baking mixes, and to fry prepared foods like potato chips and French fries.

#### VO 8 Cottonseed Oil

A major food oil, often used in industrial food processing. Margarine, shortening, salad dressings, commercially fried products.

#### VO 9 Ghee

Clarified butter that originated in India and is commonly used in South Asian (Indian, Bangladeshi, Nepali, Sri Lankan, and Pakistani) cuisine and ritual. (Not strictly a vegetable oil, but used in the same way in some countries.)

VO 10 Grapeseed Oil Used in cooking and cosmetics.

VO 11 Groundnut Oil / Peanut Oil / Arachis Oil Often used in Chinese, South Asian and Southeast Asian cuisine. Used to make soap.

VO 12 Hazelnut Oil

VO 13 Macadamia Oil

Used in cooking (particularly in Australia); also used in cosmetics.

VO 14 Mustard Seed Oil Often used for cooking in North India, Eastern India, Nepal, Bangladesh and Pakistan.

VO 15 Olive Oil Used in cooking, cosmetics and soaps.

VO 16 Olive Oil, Organic

VO 17 Palm Oil

Widely used in the commercial food industry. A common home cooking ingredient in the tropical belt of Africa, Southeast Asia and parts of Brazil.

VO 18 Rapeseed/Canola Oil One of the most widely used cooking oils.

VO 19 Rice Bran Oil

Popular as a cooking oil in several Asian countries, including Japan and China. Also used in cosmetics, confectionery, shoe creams and polishing compounds. Used in the preparation of vegetable (non-butter) ghee.

VO 20 Safflower Oil

VO 21 Safflower Oil, Organic

VO 22 Sesame Oil

Used as a cooking oil in South India, it is often used as a flavor enhancer in Chinese, Japanese, Middle Eastern, Korean, and Southeast Asian cuisine. Used in Ayurvedic medicine.

VO 23 Sesame Oil, Organic

VO 24 Sesame Oil, Toasted

VO 25 Soybean Oil/ Soya Bean Oil Accounts for about half of worldwide edible oil production. Also used as a base for some printing inks and oil paints.

VO 26 Soybean Oil/ Soya Bean Oil, Organic

VO 27 Sunflower Oil A common cooking oil.

VO 28 Sunflower Oil, Organic

VO 29 Walnut Oil Mainly used in cold dishes and salad dressings.

# Food Test Kit Vials arranged alphabetically

FA = Food A; FB = Food B; FC = Food C; FD = Food D; FE = Food E; FF = Food F; FG = Food G FPU = Food Pulse; MK =Milks; FM = Mushrooms, FT = Food Toxins, VO = Vegetable Oils, FL = Flours

FG 251 Acacia Leaves FF 226 Acai Berry, Organic FG 252 Agar FF 227 Agave Nectar FT 01 Albumin / Ovalubin MK 01 Almond Milk F FL 01 Almond Flour, Organic VO 1 Almond Oil VO 2 Almond Oil, Sweet Organic FB 57 Almonds F FL 02 Amaranth Flour / Szarlat, Organic FG 258 Amomum Tsaoko FC 109 Anchovy in brine FA 1 Apple FA 2 Apricot FF 228 Apricot Kernel VO 11 Arachis Oil / Groundnut Oil / Peanut Oil VO 3 Argan Oil FD 159 Asparagus FC 110 Aubergine FC 111 Avocado VO 4 Avocado Oil FPU 01 Azuki Bean FB 107 Bakers Yeast FB 58 Baking powder FG 253 Bamboo Shoot FA 3 Banana FG 254 Banana Leaves FB 59 Barley F FL 03 Barley Flour FF 229 Barley Grass Powder FC 112 Basil FD 160 Bay Leaf FG 255 Beansprout FF 230 Bee Pollen FA 4 Beef FB 60 Beetroot FA 39 Bell Pepper /Peppers FG 277 Betel Leaf FPU 02 Black Eyed Bean FG 256 Black Fungus FPU 03 Black Turtle Bean FB 61 Blackberry: wild FA 5 Blackcurrant FF 231 Blue Green Algae FC 113 Blueberry Bonsoy Soy Milk 8091

FB 62 Brazil nut FB 108 Brewers Yeast FB 63 Broad Beans FC 114 Broccoli FF 232 Broccoli Seed Powder FPU 04 Brown Bean FB 64 Brussel Sprout FB 65 Buckwheat F FL 04 Buckwheat Flour F FL 05 Buckwheat Flour, Organic MK 02 Buffalo Milk FA 6 Butter FPU 05 Butter Bean FC 150 Butternut Squash FB 66 Cabbage FF 233 Cacao Nibs FT 02/FEB 32 Caffeine FA 29 Candies. Mixed FG 257 Candle Nut FPU 06 Cannelleni Bean VO 18 Canola/Rapeseed Oil FG 258 Cao Guo FD 187 Cape Gooseberry FD 198 Carambola FD 161 Caraway FD 162 Cardamom FB 67 Carob FA 7 Carrot FG 296 Casava FT 03 Casein F FL 06 Cassava Flour FB 68 Cashew nut FA 8 Cauliflower FD 163 Cavenne FC 115 Celeriac FA 9 Celery FG 260 Celery Cabbage FPU 07 Chana Dal FG 258 Chao Kuo FA 10 Cheese, Cow's FE 201 Cheese, Goat's FE 202 Cheese, Sheep FC 116 Cheese, vegetarian FC 117 Cherries FD 164 Chestnut F FL 07 Chestnut Flour, Organic F FL 08 Chia Flour

FA 11 Chicken FB 69/FPU 08/F FL09 Chickpea / Garbanzo / Gram Flour FC 118 Chili, red and green FG 258 Chinese Black Cardamom FG 260 Chinese Cabbage FG 259 Chinese Chives FG 261 Chinese Flowering Cabbage FG 260 Chinese Leaves FD 165 Chives FF 234 Chlorella, Organic FC 120 Chocolate FG 261 Choy Sum FC 119 Cinnamon FD 166 Clementine FG 256 Cloud Ear Fungus FD 167 Cloves FB 70 Cocoa FF 235 Cocoa Butter FB 71 Coconut F FL 10 Coconut Flour, Organic MK 03 Coconut Milk FF 236/ VO 5 Coconut Oil VO 6 Coconut Oil, Virgin, Organic FA 12 Cod FB 72 Coffee: ground F FL 11 Coffee Flour FC 121 Coriander FB 73 Corn: sweet corn FB 74/ F FL 12 Corn Flour/Corn Meal, Yellow F FL 13 Corn Flour/Corn Meal, Yellow, Organic VO 7 Corn Oil VO 8 Cottonseed Oil FA 13 Courgette/Zucchini MK 04 Cow Milk MK 06 Cow Milk, A2 MK 07 Cow Milk, Lactose-Free MK 05 Cow Milk, Organic MK 08 Cow Milk, Unpasteurised/Raw FC 158 Cow's Milk Yoghurt FC 122 Crab FC 123 Cranberry FE 203 Crayfish FA 14 Cucumber FG 278 Culantro FC 124 Cumin FG 262 Daikon FG 288 Dashima FB 75 Date FD 168 Dill FG 263 Dragon Fruit FG 264 Drumsticks (Vegetable) FE 204 Duck

FF 237 Durian FA 15 Egg FC 110 Egg Plant FE 205 Eggs: Quail FC 125 Endive FG 278 Ergium FD 169 Fennel FB 76 Fig FPU 09 Flageolet Bean FB 69/FPU 08/F FL09 Garbanzo/Gram Flour/Chickpea FG 265 Galangal FB 82 Galia Melon FA 16 Garlic FG 259 Garlic Chives VO 9 Ghee FC 126 Ginger, fresh FT 04 Gliadin FD 170 Globe Artichoke FB 77 Glucose FC 127 Gluten MK 09 Goat Milk FE 201 Goat's Cheese FC 128 Goat's Milk FE 206 Goji Berry FD 171 Gooseberry FB 69/FPU 08/F FL09 Gram Flour/Chickpea/Garban-70 FA 17 Grape FB 78 Grapefruit VO 10 Grapeseed Oil F FL 14 Green Banana Flour FD 172 Greengage VO 11 Groundnut Oil/Peanut Oil/Arachis Oil FF 238 Guarana FG 266 Guava FC 129 Haddock FG 288 Haidai FE 207 Halibut FA 18 Ham FPU 10 Haricot Bean FA 19 Hazelnut MK 10 Hazelnut Milk VO 12 Hazelnut Oil MK 11 Hemp Milk FF 239 Hemp Protein Powder F FL 15 Hemp Seed Flour FE 208 Hemp Seeds FA 20 Honey FB 79 Hops FD 173 Horseradish FG 267 Jackfruit FG 284 Japanese Pepper

FD 174 Jerusalem Artichoke FE 209 John Dory F FL 28 Juwar Flour/Jowar Flour/Sorghum Flour FG 268 Kaffir Lime Leaves FD 175 Kale MK 12 Kamut Milk FG 252 Kanten FG 257 Kemiri FPU 11 Kidney Bean FA 21 Kiwi Fruit FD 176 Kohl Rabi FG 288 Konbu FG 259 Kow Choi FG 269 Kudzu FD 177 Kumquat FG 269 Kuzu FT 05 / FEB 34 Lactose FC 138 Lady's Finger FA 22 Lamb FC 130 Lambs Lettuce FC 131 Leek FA 23 Lemon FC 132 Lemongrass FB 80 Lentil: brown whole FA 24 Lettuce FG 270 Lily Bulb FPU 13 Lima Bean FD 178 Lime FE 210 Linseed FC 133 Lobster FA 25 Loganberry FG 278 Long Coriander FG 271 Longan FG 272 Lotus Leaf FG 273 Lotus Root FG 274 Lotus Seed FF 240 Lucuma F FL 16 Lupin Flour, Raw, Organic FG 275 Lychee FF 241 Maca Powder FD 179 Macadamia Nut VO 13 Macadamia Oil FD 180 Mace FC 134 Mackerel in brine FB 81 Malt FB 100 Malt Vinegar FD 181 Mandarin FC 135 Mango FG 296 Manioc FF 242 Manuca Honey FE 211 Maple Syrup FD 182 Marjoram FA 26 Marrow

FB 82 Melon: Galia FF 243 Mesquite FG 278 Mexican Coriander FA 27 Milk, Cow's FC 128 Milk, Goat's FB 83 Millet F FL 17 Millet Flour FA 28 Mint FG 276 Mirin FA 29 Mixed Sweets FE 212 Molasses, organic FE 213 Monk Fish FG 262 Mooli FPU 14 Mung Bean FA 30 Mushroom FM 01 - FM11 Mushrooms FC 136 Mussel FC 137 Mustard VO 14 Mustard Seed Oil FG 260 Nappa Cabbage FF 244 Nopal Cactus FD 183 Nutmeg F FL 18 Oat Flour MK 13 Oat Milk FB 84 Oats FB 85 Oats, Organic FB 86/ VO 15 Olive Oil VO 16 Olive Oil, Organic FC 138 Okra FE 214 Olives in brine FA 31 Onion FA 32 Orange FD 184 Oregano FT 01 Ovalubin/Albumin FE 215 Oyster FG 277 Paan Leaf FG 278 Pak Che Farang FC 139 Pak Choi VO 17 Palm Oil FG 277 Pan FG 279 Pandan Leaves FG 279 Pandanus FC 140 Papaya FD 185 Paprika FT 06 Paraxanthine/1,7-Dimethylxanthine FA 33 Parslev FA 34 Parsnip FG 280 Parval FG 280 Parwal FD 186 Passion Fruit FC 140 Paw Paw FA 35 Pea FA 36 Peach

FA 37 Peanut F FL 19 Peanut Flour, Reduced Fat VO 11 Peanut Oil/Arachis Oil/Groundnut Oil FA 38 Pear FB 59 Pearl Barley FC 141 Pecan FC 142 Pepper, black and white FA 39 Peppers FG 281 Persimmon FD 187 Physalis FG 294 Pickled Daikon Radish FPU 15 Pigeon Pea FE 216 Pilchard in olive oil FD 188 Pine Nut FA 40 Pineapple FPU 16 Pinto Beans FD 189 Pistachio Nut FA 41 Plaice FA 42 Plum FG 280 Pointed Gourd FE 217 Pollock FD 190 Pomegranate FD 191 Poppy Seeds Blue and White FA 43 Pork FA 44 Potato F FL 20 Potato Flour, Organic FA 45 Prawns FF 245 Propolis FA 46 Pumpkin Seed F FL 21 Quinoa Flour, Organic MK 14 Quinoa Milk FC 143 Quinoa, Organic FC 144 Raddichio FB 87 Radish FG 282 Rambutan FG 279 Rampe VO 18 Rapeseed/Canola Oil FB 88 Raspberry FD 192 Red Cabbage FD 193 Red Currant FG 283 Red Fermented Bean Curd FE 218 Red Mullet FA 47 Rhubarb FB 89 Rice, Long Grain, White FB 90 Rice, Short Grain, White FB 91 Rice, Long Grain, Brown, Organic VO 19 Rice Bran Oil F FL 22 Rice Flour, Brown, Organic F FL 23 Rice Flour, White F FL 24 Rice Flour, White, Organic MK 15 Rice Milk FC 145 Rocket FD 194 Rosemary

FF 246 Royal Jelly FB 92 Runner bean FB 93 Rye F FL 25 Rye Flour F FL 26 Rye Flour, Dark, Organic VO 20 Safflower Oil VO 21 Safflower Oil, Organic FD 195 Saffron FC 146 Sage, fresh FB 94 Salmon FG 284 Sansyo FC 147 Sardines in brine FD 196 Satsuma FE 219 Scallops FG 279 ScrewPine FE 220 Sea Bass FE 221 Sea Bream FG 293 Seasoned Rice Vinegar FG 285 Seaweed, Arame FG 286 Seaweed, Dulse FG 287 Seaweed, Hijiki FG 288 Seaweed, Kombu FG 289 Seaweed, Nori FG 290 Seaweed, Wakame F FL 27 Sesame Flour, Organic MK 16 Sesame Milk VO 22 Sesame Oil VO 23 Sesame Oil, Organic VO 24 Sesame Oil, Toasted FA 48 Sesame Seeds FG 291 Shaoxing Rice Wine MK 17 Sheep Milk FE 202 Sheep's Cheese FE 222 Sheep's Milk FE 223 Sheep's Milk Yoghurt FG 292 Sichuan Pepper FT 07 Solanine/Alpha Solanine F FL 28 Sorghum Flour/Juwar Flour/Jowar Flour FC 148 Sorrel FPU 18 Soya Bean, Organic FB 95 / F FL 29 Soya Bean Flour/Soy Flour VO 25 Soybean Oil/Soya Bean Oil VO 26 Soybean Oil/Soya Bean Oil, Organic MK 18 Soya Milk FC 149 / F FL 30 Spelt Flour, Organic F FL 31 Spelt Flour, Wholemeal, Organic FA 49 Spinach FG 297 Spinach Mustard FF 247 Spirulina Powder FC 150 Squash, butternut FC 151 Squid FD 197 Star Anise

FD 198 Star Fruit

FA 50 Strawberry FB 96 Sugar: beet FB 97 Sugar: cane FB 98 Sugar: demerara FB 99 Sultana VO 27 Sunflower Oil VO 28 Sunflower Oil, Organic FA 51 Sunflower Seeds FG 293 Sushi-Su Vinegar FB 73 Sweet Corn FC 152 Sweet Potato F FL 02 Szarlat/Amaranth Flour, Organic FG 292 Szechuan Pepper FG 292 Szechwan Pepper FG 294 Takuan Taro FG 295 Tamarind FD 199 Tangarine FG 296 Tapioca F FL 32 Tapioca Flour, Organic FC 153 Tarragon, fresh FG 297 Tatsoi F FL 33 Teff Flour, Brown F FL 34 Teff Flour, Brown Organic F FL 35 Teff Flour, White F FL 36 Teff Flour, White, Organic FG 278 Thai Parsley FT 08 Theobromine FT 09 Theophylline FC 154 Thyme, fresh F FL 37 Tiger Nut Flour FE 224 Tofu FA 52 Tomato FG 256 Tree Ear Fungus FC 155 Trout FM 12 -FM14 Truffle FG 258 Tsaoko Fruit FA 53 Tuna FA 54 Turkey FC 156 Turmeric FEB 35 Vanillin FE 225 Venison FB 100 Vinegar: malt FB 101 Vinegar: white wine FB 102 Walnut VO 29 Walnut Oil FG 298 Wasabi FG 299 Water Chestnut FD 200 Water Melon FA 55 Watercress FB 103 -106 Wheat flour Wheat Flour, White FB 103 / F FL 38 Wheat Flour, White, Or-FB 104 / F FL 39 ganic, Unbleached

FB105 Wheat flour, White, Self-raising F FL 40 Wheat Flour, Wholemeal FB 106 / F FL 41 Wheat Flour, Wholemeal, Organic FF 248 Wheat Grass Powder FG 262 White Radish FB 101 White wine vinegar FG 256 Wood Ear Fungus FF 249 Xylitol FF 250 Yacon Syrup FC 157 Yam FB 107 Yeast: Bakers FB 108 Yeast: Brewers FC 158 Yoghurt: Cow's Milk FG 300 Yuzu Powder FT 10 Zein

FA 13 Zucchini/Courgette

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# Food Phenolic Compounds Test Kit 14 vials

The energy patterns of phenolics. An allergy to a whole range of foods may be an allergy to an underlying food phenolic.

Phenolic food compounds (also known as aromatic food compounds) occur naturally in all foods: they give the food colour and flavour and help to prevent premature decomposition.

### FP1 Apiol

Occurences: beef, cheese, chocolate, milk, oranges, peas, black pepper, soybeans, tomatoes, almonds, carrot, celery, lettuce, parsley, walnut, bay leaf, lemon.

Correlations: irregular menses, amenorrhea, menopausal flushing, breast tenderness, itching of skin, obesity, chronic fatigue, elbow pain.

#### FP2 Caffeic Acid

Occurences: grass pollen, apple, artichoke, beans, carrot, cauliflower, grape, lettuce, olives, coffee. Correlations: sinus congestion, headache, indigestion, joint pains, dizziness and tingling and numbness of extremities.

#### FP3 Cinnamic Acid

Occurences: fruit, cheese, lettuce, tomatoes, clover pollen, sagebrush pollen; used as a flavouring, and in perfumes, cosmetics and medicinal products to give a spicy, oriental perfume; also used to make synthetic indigo dye.

Correlations: acne, eczema, psoriasis, bladder problems, chronic fatigue, hypoglycaemia, chest constriction, craving for fruit, headache, indigestion, sore throat.

#### FP4 Coumarin

Occurences: wheat, rice, barley, corn, soy, cheese, beef, eggs, clover pollen, grass pollen. Correlations: asthma, arthritis, low back pain, cervical neck pain, non-specific pruritis, chronic fatigue, abdominal bloating, ear congestion.

#### FP5 Eugenol

Occurences: foods, perfumes, dental practice including in analgesics, cloves, cinnamon, pimento. Correlations: chronic urticaria.

#### FP6 Gallic Acid

Occurences: milk, apple, apricot, banana, barley, beans, beer, cashew nut, cheese, cocoa, egg, crab, cucumber, garlic, ginger, grape, olives, papaya, peach, peanut, pear, pineapple, potato, tea, tomato, wheat, yeast, food colourings.

Correlations: hyperactivity, ADH, dyslexia, arthritis, low back problems, sciatica, chronic severe chest pain, nasal congestion, allergic rhinitis, sinusitis, headaches, dyspepsia, itching, chronic fatigue.

#### FP7 Indole

Occurences: in all complete proteins, especially milk, clover pollen.

Correlations: bowel problems, asthma, sinus problems, mental disorientation, craving for milk, headaches, chronic fatigue.

# FP8 Kaempferol

Occurences: grass pollen, some flower pollens, widely distributed in fruit, tomatoes.

#### FP9 Phenyl Isothiocyanate

Occurences: chicken, eggs, beef, cheese, lamb, peanuts.

Correlations: chronic arrhythmia, hypertension, arteriosclerosis, migraine headaches, hyperthyroidism, shoulder bursitis, burning arm pains, joint pains, chest constriction, heartburn, headaches, sinus congestion, tingling arms and legs.

#### FP10 Phloridzin / Phlorizin / Phloridzite

Occurences: beef, cheese, beet sugar, soy, apples, strawberries.

Correlations: diabetes, collagen disease, active cancer, mood swings, light headedness, low back pain, headaches, shoulder pain, drowsiness and tiredness.

#### FP11 Piperine

Occurences: beef, beet sugar, chicken, eggs, lamb, milk, tuna, turkey, yeast, black pepper, tomato, potato.

Correlations: arthritis, burning skin and face, chest congestion, sneezing.

# FP12 Pyrrole / Pyrole

Occurences: found in chlorophyll so widely distributed in plants.

Correlations: chronic abdominal discomfort, mood swings, anxiety, depression, multiple sclerosis, skin rashes.

#### FP13 Rutin

Occurences: clover pollen, grass pollen, ragweed pollen.

Correlations: joint pain, bruising, sinus congestion, constipation, hay fever, irritability.

#### FP14 Tyramine

Occurences: beer, red wines, some cheese, bananas, red plums, figs, raisins, avocados, some beans, aubergine / eggplant, pickled herring, canned meats, salami, yoghurt, soup cubes, commercial gravies, chocolate, and soy sauce. Correlations: migraine.

# Food Additive A Test Kit 31 vials

The energy patterns of artificial food colourings, preservatives, monosodium glutamate, antioxidants, artificial sweeteners, etc.

# FEA1 E102 Tartrazine / FD & C Yellow No 5 / Food Yellow 4 / Cl 19140

Typical products: soft drinks, ice cream, confectionery, fish fingers, cakes, biscuits, perfume, shampoo, skin care products and cosmetics.

FEA2 E104 **Quinoline Yellow/ Food Yellow 13 /CI 470005** Typical products: confectionery, soft drinks.

FEA3 E110 Sunset Yellow / Orange Yellow 5 / FD & C Yellow No. 6 / Food Yellow 3 / CI 15985 Typical products: confectionery, yoghurts, packet bread crumbs, jam.

FEA4 E122 **Carmosine / Azorubine / Food Red 3 / Cl 14720** Typical products: confectionery, yoghurts, ices.

FEA5 E123 Amaranth / FD & C Red 2 / Food Red 9 / Cl 16185 Typical products: confectionery.

FEA6 E124 **Ponceau 4R / Cochineal Red / Food Red 7 / Cl 16255** Typical products: confectionery.

FEA7 E127 **Erythrosine / FD & C Red 3 / Food Red 14 / CI 45430** Typical products: glacé cherries, custard mix, tinned meat.

FEA8 E128 **Red 2G** Typical products: sausages, jams.

FEA9 E131 **Patent Blue V / Food Blue 5 / Cl 42051** Typical products: scotch eggs.

FEA10 E132 Indigo Carmine / Indigotine / FD & C Blue No 2 / Food Blue 1 / CI 73015 Typical products: confectionery.

FEA11 E133 Brilliant Blue FCF / FD & C Blue No 1 / Cl 42090 Typical products: confectionery, tinned processed peas, perfume and cosmetics.

FEA12 E142 Green S / Acid Brilliant Green BS / Lissamine Green / Food Green 4 /Cl 44090 Typical products: confectionery, tinned peas, packet bread crumbs, mint jelly.

FEA13 E151 Black PN / Brilliant Black BN / Food Black 1 / Cl 28440 Typical products: black currant cheese cake, brown sauce, chocolate mousse.

FEA14 E154 **Brown FK / Chocolate Brown FK** Typical products: kippers, smoked mackerel, crisps, cooked ham.

FEA15 E155 Brown HT / Chocolate Brown HT / Cl 20285

Typical products: chocolate flavour cakes.

# FEA16 E160a Beta-Carotene

Typical products: tinned soup, soft drinks, salad cream, mayonnaise, ice cream, margarine.

# FEA17 E202 Potassium Sorbate

Typical products: soft drinks, cakes, ready prepared sandwiches, wine.

# FEA18 E210 Benzoic Acid

Typical products: jam, beer, salad cream, margarine, manufacture of sodium benzoate, alkyd resins, plasticizers, dyestuffs pharmaceuticals.

# FEA19 E211 Sodium Benzoate

Typical products: soft drinks, salad dressing, barbecue sauce, body wash, shampoo, mouth wash.

# FEA20 E223 Sodium Metabisulphate

Typical products:lemon juice, pickles, orange squash, carton salad, alcohol, home brewing and wine making.

# FEA21 E296 Malic Acid

Typical products: soft drinks, cereal bars, fruit pie fillings.

#### FEA22 E320 Butylated Hydroxyanisole/ BHA

Typical products: confectionery, stock cubes, mayonnaise, mascara.

#### FEA23 E321 Butylated Hydroxytoluene/ BHT

Typical products: body wash, face wash cream, perfume, blusher, mascara, shaving cream, after shave.

#### FEA24 E330 Citric Acid

Typical products: soft drinks, instant potato, jams, jellies, mustard, confectionery, yoghurt, cereal bars, cheese & onion rolls, hair conditioner, shampoo, body wash, baby bath, cleanser, foundation, after shave, cough mixtures, cough lozenges, descaling cleaners.

#### FEA25 E331 Sodium Citrate

Typical products: jams, jellies, soft drinks, confectionery, shampoo.

#### FEA26 E334 Tartaric Acid

Typical products: cakes, baking powder, jams.

#### FEA27 E466 Sodium Carboxy Methylcellulose

Typical products: ice cream, cakes, puddings, soft drinks, toothpaste, suspending and dispersing agent in drugs.

#### FEA28 E500 Sodium Bicarbonate

Typical products: biscuits, cakes, antacids.

#### FEA29 E621 Monosodium Glutamate

Typical products: processed meat products, gravy powder, stock cubes, tinned soup, packet sauce, crisps

#### FEA30 E951 Aspartame

Typical products: fruit squash, fizzy drinks, low-calorie foods.

#### FEA31 E954 Saccharin

Typical products: fruit squash, fizzy drinks, low-calorie foods, pot noodles, toothpaste.

# Food Additive B Test Kit 25 vials

The energy patterns of caffeine, lactose, sorbitol, pectin, vanillin, titanium dioxide, guar gum, gum acacia, xanthan gum, etc. 25 vials.

#### FEB32 Caffeine

Typical products: soft drinks, sports drinks, tea, coffee, cola drinks, pain relief drugs, tonics.

#### FEB33 Dimethyl Dicarbonate

Typical products: soft drinks.

#### FEB34 Lactose

Typical products: cows milk, goats milk, sheep's milk, packet sauce, chocolate, antacid preparations.

#### FEB35 Vanillin

Typical products: chocolate, cakes, desserts, yoghurt, perfume.

#### FEB36 Wood Distillate

Typical products: smoke flavour foods.

#### FEB 37 E100 Curcumin

Typical products: ice cream, confectionery, margarine.

# FEB38 E171 Titanium Dioxide

Typical products:nconfectionery, toothpaste, sunscreen, gelatine capsules for nutritional supplements, lipstick, foundation, mascara, paint pigment, printing ink, filler for paper and plastics.

# FEB39 E222 Sodium Hydrogen Sulphite

Typical products: instant potato.

#### FEB40 E250 Sodium Nitrite

Typical products: tinned meat products.

### FEB41 E260 Acetic Acid

Typical products: chutney, cakes, cough tincture, rheumatic liniment, antiseptic skin applications, wart and corn ointment, fumes from silicone sealants curing.

#### FEB42 E270 Lactic Acid

Typical products: meat extracts, pickled onions, margarine, cheese & onion roll, cleansing lotion, toning lotion, eye gel, shampoo, pre-shave lotion, vaginal douches, wart treatments, sports drinks, a chemical intermediate, in textile finishing and in leather tanning, manufacture of a bread additive.

#### FEB43 E300 Ascorbic Acid/ Vitamin C

Typical products: instant potato, soft drinks, mustard, bread.

#### FEB44 E322 Lecithin

Typical products: cakes, confectionery, gravy granules, margarine, cereal bars, instant powdered products.

#### FEB45 E338 Phosphoric Acid

Typical products: soft drinks, rust remover.

#### FEB46 E400 Alginic Acid

Typical products: ice cream, cheese, milk shakes, salad dressings, coating for fish and meat, stabilise fruit juice and foam on beer, medicines, dressing on textiles.

#### FEB47 E401 Sodium Alginate

Typical products: cakes, ice cream, cereal bars, stabilise fruit juice and foam on beer.

#### FEB48 E407 Carrageenan

Typical products: salad dressings, ice cream, cakes, toothpaste, shaving cream.

# FEB49 E410 Locust Bean Gum/ Carob Gum

Typical products: ice cream, soft cheese, sausages.

#### FEB50 E412 Guar Gum

Typical products: ice cream, salad cream, mayonnaise, milk shakes.

#### FEB51 E414 Gum Acacia

Typical products: soft drinks, emulsifying and suspending agent in drugs, manufacture of plasters, as an adhesive.

#### FEB52 E415 Xanthan Gum

Typical products: soft drinks, mustard, salad dressings, mayonnaise, sauces, confectionery, hot chocolate drinks, cereal bars, moisturiser, cleansing lotion, foundation, toothpaste.

#### FEB53 E420(i) Sorbitol

Typical products: medicinal syrups and cough mixtures, low-calorie foods, toothpaste, manufacture of ascorbic acid, various surface active agents, pharmaceuticals, cosmetics, adhesives, polyure-thane foams, etc.

#### FEB54 E440(a) Pectin

Typical products: jam, jellies, biscuits, yoghurt, frozen desserts, salad dressings, dental adhesives, diarrhoea preparations, cosmetics.

#### FEB55 E491 Sorbitan Monostearate

Typical products: dried yeast, cakes, desserts, liquid tea concentrates.

#### FEB56 E903 Carnauba Wax

confectionery, furniture polish and varnish, mascara.

# Fragrance Test Kit 27 vials

The energy patterns of synthetic fragrances used in perfumes, personal care products and household products.

Exposure to perfume occurs not only because of perfume the person uses themselves, but also those used by other people, and encountered in shops and household products.

It is easy to think of perfumes as only being used in perfumes, air fresheners and similar products, but perfumes (often a mixture of many different synthetic products) are added to a whole range of products: cosmetics, personal care products, detergents and household cleaning agents, etc.

The finished product will not necessarily have a strong smell, because the perfume may have been added to disguise the unpleasant smell of active ingredients, e.g. in hair dyes.

Many chemicals used as fragrances are also used as flavourings in food, drink and medicines.

95% of chemicals used in fragrances are synthetic compounds derived from petroleum. Although natural sources of some of the chemicals are listed below this does not mean that industrial production is normally from natural sources.

# FR1 Allantoin

Found naturally in:comfrey. In perfume and some personal care products.

#### FR2 Amylcinnamaldehyde

Floral or apple fragrance; a commonly used synthetic perfume present in a wide range of personal care and household products.

#### FR3 Balsam Of Peru

A flavouring used in tobacco, drinks and food, and a fixative and fragrance in perfumes; gives a pine fragrance; may cause contact dermatitis.

#### FR4 Benzaldehyde

Sweet, bitter, sharp, almond and cherry fragrance; many synthetic perfumes are derived from this chemical.

# FR5 Benzophenome Diphenylmethanone/ Phenyl ketone/Diphenyl ketone/ Benzoylbenzene A rose or geranium-like fragrance; widely used.

#### FR6 Benzyl Acetate

Found naturally in: jasmin. Widely used in perfumed products to give a 'floral smell'.

#### FR7 Benzyl Alcohol / Phenylmethanol

Found naturally in: jasmine, hyacinth, ylang-ylang.

Used in manufacture of synthetic perfumes and flavourings; found in cosmetics, personal care products and in ointments; also used as a photographic developer for colour film, as an embedding material in microscopy, and as an industrial solvent; used as a preservative for injectable drugs, and in contact lens cleaners.

#### FR8 Camphor

Gives a spicy, minty or woody perfume; also used as a plasticiser.

#### FR9 Cineole/ Eucalyptol

Eucalyptus, minty, herbal, rosemary fragrance; also used to mask unpleasant odours.

#### FR10 **b-Citronellol**

Found naturally in: basil, citronella, eucalyptus, geranium, lemon zest,melissa, rose. A common artificial perfume; Found in personal care products, cosmetics and household products.

#### FR11 Diethyl Maleate

Fragrance of green apples; may cause contact dermatitis.

#### FR12 Ethyl Acetate

Dry, fruity, musty, pineapple fragrance; found in perfumes, perfumed products, nail polishes, and nail polish removers; also used industrially as a solvent for varnishes, lacquers and nitrocellulose, and in the manufacture of rayon and leather and photographic films; used in decaffeination of tea and coffee; in Australia, allowed as a carrier for food flavourings.

# FR13 Geraniol

Found naturally in: citronella, coriander, eucalyptus, geranium, melissa, neroli.

A synthetic chemical used as a general purpose perfume (rose and geranium) and flavouring (apple, blueberry, cherry, grapefruit, lemon, lime, orange, peach, pineapple, watermelon) in food, personal care products, cosmetics and household products.

#### FR14 Hydroxycitronellal

Widely used to impart a floral perfume in personal care products and cosmetics; also used as a flavouring in food; may be found in some antiseptics and insecticides; may cause contact dermatitis.

#### FR15 Isoeugenol

Used to give a blossom-like or oriental-type fragrance; commonly used perfume in personal care products; also used in the manufacture of vanillin.

#### FR16 Isopropyl Acetate

Used as a solvent for perfume; found in cleaning fluids, printing ink, cosmetics and personal care products.

#### FR17 Limonene

Found naturally in: angelica, grapeferuit, juniper, mandarin, orange.

Lemon-orange fragrance; used as a raw material for the chemical synthesis of terpene, adhesives and flavourings (e.g. menthol), so a common ingredient in perfumed products.

#### FR18 Linalool

Found naturally in: basil, bergamot, cinnamon, laurel, lavender, clary sage, coriander, neroli, petitgrain, rose-wood, thyme, ylang ylang.

A floral scent with a touch of spiciness; one of the most frequently used perfumes; may be from natural sources or synthetic; found in personal care products, cosmetics and household products.

#### FR19 Methyl Salicylate

Found naturally in: wintergreen, birch. Used in perfume; also found in artificial flavours, sports rubs and pain relief creams.

#### FR20 Myrcene

Found naturally in: bay, juniper, lemongrass, spearmint, hops, orange zest. Widely used in personal care products.

# FR21 Nerol

Found naturally in: clove, neroli. Widely used in personal care products.

#### FR22 Oak Moss

A 'masculine' perfume derived from lichen; used in men's personal care products and earthy, woody perfumes.

#### FR23 Ocimene

A widely used perfume in cosmetics, personal care products and household products.

#### FR24 Phenethyl Alcohol

Found naturally in: rose, neroli, ylang-ylang,carnation,geranium. Used extensively in perfumed products and in soap.

#### FR25 Pinene

Found naturally in: frankincense, juniper, marjoram, nutmeg, parsley, pine needles, rosemary, carrot seed. Fresh, sweet, pine, woody fragrance; widely used in personal care products.

#### FR26 Terpinene

Widely used in personal care products.

#### FR27 Terpineol

Found naturally in: cajuput, eucalyptus, lime zest, marjoram, rosewood. Widely used in perfumed products.

# Fungi 1 Test Kit (including Protozoa, Rickettsia & Chlamydia) 30 vials

The energy patterns of 3 types of candida, chlamydia psittaci, giardia lamblia, malaria, trichomonas vaginalis, 2 types of aspergillus, the fungi which cause athlete's foot and ringworm, etc.

More Candida species are available in the Candida Test Kit.

Some definitions.

#### Fungus:

Simple parasitic life forms which cause illness by direct poisoning, toxic by-products, allergic reactions and/or colonisation of body tissues.

#### Protozoa:

The simplest, most primitive type of animal, consisting of a single cell.

#### **Rickettsia:**

A type of parasitic micro-organism. They resemble bacteria but are only able to replicate by invading the cells of another life form; rickettsiae are parasites of ticks, lice, etc., which can transmit the rickettsiae to humans via their bite or contaminated faeces.

#### Chlamydia:

Micro-organisms are bigger than viruses and smaller than bacteria; like viruses they can only multiply by first invading the cells of another life-form; otherwise more like bacteria and are susceptible to antibiotics.

Nosocomial infection: contracted in hospital.

**Mycotoxins:** produced by moulds & have the potential for both acute and chronic health effects via ingestion, skin contact, and inhalation. These toxins can enter the blood stream and the lymphatic system. They inhibit protein synthesis, damage macrophage systems, inhibit particle clearance of the lung, and increase sensitivity to bacterial endotoxin. We also sell a Mycotoxin Test Kit.

#### FU1 Aflatoxins

Medically recognized possible symptoms & effects: acute liver damage, liver cirrhosis, liver cancer. Poisonous alkaloids produced by aspergillus flavus. Exposure usually via contaminated grain, dried fruit and peanuts, but can also be on animal products. Carcinogenic to humans.

#### FU2 Aspergilla Fumigatus

Medically recognized possible symptoms & effects coughing and wheezy attacks, bronchiectasis, aspergilloma, invasive aspergillosis.

Fungus

Found in soil, dust and decaying vegetable matter.

#### FU3 Aspergilla Niger

Medically recognized possible symptoms & effects: coughing and wheezy attacks, bronchiectasis, aspergilloma, invasive aspergillosis.

Fungus

Found in soil, dust and decaying vegetable matter. Used in the production of citric acid, E310, E311 and E312.

# FU4 Balantidium Coli

Medically recognized possible symptoms & effects: asymptomatic, diarrhoea. Protozoa

# FU5 Candida Albicans

Medically recognized possible symptoms & effects: most commonly affects the vagina (thick, white discharge), but also affects other mucous membranes, such as inside the mouth (sore, raised patches), or moist skin.( itchy red rash with flaky white patches); may also affect the intestinal tract.

Fungus

Diabetes and the hormonal changes in pregnancy or when taking oral contraceptives may encourage it; some women with vaginal candida have no symptoms.

# FU6 Chlamydia Psittaci / Chlamydophila Psittaci

Medically recognized possible symptoms & effects: psittacosis, pneumonia, hepatitis, possibly linked to heart disease.

Chlamydia

Inhalation of dust from faeces of contaminated birds.

# FU7 Chlamydia Trachomatis

Medically recognized possible symptoms & effects: non-specific urethritis, fever, tonsillitis/ pharyngitis, otitis media, conjunctivitis, pneumonia, chronic salpingitis, possibly linked to heart disease. Chlamydia

### FU8 Coxiella Burnetii

Medically recognized possible symptoms & effects: Q fever, acute and chronic hepatitis. Transmitted by rickettsia

#### FU9 Entamoeba Histolytica

Medically recognized possible symptoms & effects: liver abscess, fever, abdominal pain. Protozoa

#### FU10 Epidermophyton Floccosum

Medically recognized possible symptoms & effects: tinea cruris (ringworm of crotch). Fungus

#### FU11 Giardia Lamblia

Medically recognized possible symptoms & effects: acute diarrhoea, generalised weakness, abdominal distension, nausea. Chronically can cause malabsorption. Protozoa

Also infects cattle, cats and dogs; most commonly reported protozoa world wide

#### FU12 Leishmania Donovani

Medically recognized possible symptoms & effects: Leishmaniasis (ulcerating skin lesions). Protozoa Reservoir of dogs and humans. India and E Africa.

#### FU13 Microsporum Glypsium

Medically recognized possible symptoms & effects: tinea capitis. Fungus Prevalent in S. Africa.

# FU14 Mixed Protozoa

Protozoa

# FU15 Plasmodium Falciparum

Malaria protozoa Africa and New Guinea, South East Asia, South America and Oceania.

# FU16 Plasmodium Vivax

# Malaria protozoa

India, Pakistan, Bangladesh, Sri Lanka, SE Asia, Central and South America, Oceania.

# FU17 Rocky Mountain Spotted Fever

Rickettsia From rabbits and other small mammals by tick bites; North and South America.

# FU18 Trichomonas Vaginalis

Medically recognized possible symptoms & effects: vaginitis in woman; occasionally in men, affecting urethra, but usually asymptomatic. Protozoa

Usually sexually transmitted.

#### FU19 Trichophyton Rubrum

Medically recognized possible symptoms & effects: tinea pedis (athlete's foot), tinea cruris (groin). Fungus

# FU20 Trichophyton Terrestre

Medically recognized possible symptoms & effects: Tinea. Fungus

#### FU21 Trypanosoma Brucei

Medically recognized possible symptoms & effects: African Trypanosomiasis, sleeping sickness. protozoa

Africa

# FU22 Candida Glabrata/ Torulopsis Glabrata

Medically recognized possible symptoms & effects: similar vaginal symptoms to candida albicans. Fungus

Appears to be on the increase.

#### FU23 Candida Krusei

a form of candida particularly present in men, and those who have a compromised immune system, such as in HIV.

Fungus

Appears to be on the increase.

#### FU24 Chlamydia Pneumoniae / Chlamydophila Pneumoniae

Medically recognized possible symptoms & effects: pneumonia, bronchitis pharyngitis, laryngitis, and sinusitis.

Chlamydia

By Age 20 years, 50% of population have evidence of past infection. Re-infection throughout life appears to be common. Studies have shown that people infected by this chlamydia are 4.5 times more likely to have a stroke than matched controls who show no sign of having encountered it. Links have also been proposed with Alzheimer's disease, asthma, and some forms of arthritis.

#### FU25 Cryptosporidium

Medically recognized possible symptoms & effects: diarrhoea, (usually watery), abdominal cramping, nausea, vomiting, fever, headache and loss of appetite; some people are asymptomatic. Protozoa

Serological surveys indicate that 80% of the US population has had cryptosporidiosis.

#### FU26 Entamoeba Coli, Cysts

Medically recognized possible symptoms & effects: liver abscess, fever, abdominal pain. Protozoa

#### FU27 Iodamoeba Butschliii, Trophozoites

Commensal in large intestine.

#### FU28 lodamoeba Butschlii, Cysts

Commensal in large intestine.

#### FU29 Leishmania Tropica

Medically recognized possible symptoms & effects: tropical sore, with infection usually localised to the site where the sandfly bite occurs.

Found in Ethiopia, India, European Mediterranean region, Middle East, Kenya, North Africa; some troops deployed in the Gulf have exhibited unusual symptoms (including fever, nausea, and fatigue).

#### FU30 Pneumocystis Carnii in Human lung

Medically recognized possible symptoms & effects: pneumonia. Fungus.

# Fungi 2 Test Kit 30 vials

The energy patterns of acremonium, curvularia specifera, rhizoplus stolonifer plus some vials containing various strains from the same family (alternaria mix, aspergillus mix, penicillium mix, phoma mix, etc.)

#### FU231 Acremonium/bCephalosporium Mix

Causes respiratory infections and fungal nail infections. Particularly found on wheat, but also on dead plant material and soil.

#### FU232 Alternaria Mix

A common allergen; infections mainly in the immuno-suppressed.

A widespread airborne mould occurring both indoors and out; particularly abundant in decaying plant matter, indoor horizontal surfaces and window frames.

# FU233 Aspergillus Mix

common allergen; opportunistic infections when immuno-suppressed, mainly affecting lungs; can produce symptoms that resemble asthma.

Produces a mycotoxin called gliotoxin; commonly isolated from soil, plant debris including compost heaps, and indoor air environment; used to culture soy foods such as miso and is a source for 'vegetable based' digestive enzymes.

# FU234 Aureobasidium Pullulans/ Pullularia

Allergic reactions common.

Pink or black mildew found where moisture accumulates indoors; also found in/on soil, forest soils, fresh water, aerial portion of plants, fruit, marine estuary sediments and wood.

#### FU235 Botrytis Cinerea

Allergic reactions possible. Found on stored fruit and vegetables, on decaying plants and in soil.

#### FU236 Chaetomium Globosum

Opportunistic infections when immuno-suppressed; may cause nail infections. Found in soil, air, plant debris and dung.

#### FU237 Cladosporium Mix

Common allergen widely distributed in air and rotten organic material; frequently isolated as a contaminant on foods; a common airborne mould on the US east coast.

#### FU238 Curvularia Specifera

May cause infections in both humans and animals found on soil, plants, and cereals particularly in tropics and sub-tropics.

#### FU239 Epicoccum Mix

Common allergen mould widely distributed and commonly isolated from air, soil and foodstuff; also found on textiles.

#### FU240 Fusarium Mix

Allergic reactions; infections in the immuno-suppressed.

Produces mycotoxins; widely distributed on plants and in the soil; found in normal mycoflora of commodities, such as rice, bean, soybean, and other crops.

#### FU241 Geotrichum Candidum

Lung infections have been reported, and less commonly infections of mouth, vagina, skin and digestive tract. Part of normal human flora, can be isolated from sputum and faeces; very common; found worldwide in soil, water, air, and sewage, as well as in plants, cereals, and dairy products.

#### FU242 Gliocladium Fimbriatum

Worldwide distribution in soil and on plant debris.

FU243 artrazineMoulds of grasses.

#### FU244 Microsporum Canis

Tinea capitis and tinea corporis (ringworm) in humans. Also affects cats and dogs.

#### FU245 Monotospora Brevis

#### FU246 Mucor Mix

Common allergen; uncommon infection in immuno-suppressed. Fungus found in soil, plants, decaying fruits and vegetables.

#### FU247 Mycogone Sp

Causes disease in commercial mushrooms.

#### FU248 Neurospora Sitophila

Pink mould found on mushrooms.

#### FU249 Penicillium Mix

#### Allergies and pneumonitis.

Produces mycotoxins; widespread; found in soil, decaying vegetation, and the air; common contaminants on food; found in house dust, wallpaper, moist chipboard and water-damaged fabrics.

# FU250 Phoma Mix

Allergies and pneumonitis. Soil and plant material; on shower curtains, walls, tiles and reverse side of linoleum; may be found on foods such as rice and butter.

# FU251 Rhizopus Stolonifer

Allergies and lung problems. Found in soil, wood mills, decaying fruit and vegetables, animal dung, and old bread.

### FU252 Rhodotorula Rubra

Found in air, soil, lakes, ocean water, and dairy products.

#### FU253 Scopulariopsis Sp

May cause infections in both humans and animals soil, plant material, feathers, and insects.

#### FU254 Spondylocladium Atrovirens

Problem on potatoes.

#### FU255 Sporobolomyces

Allergies; may cause infections in both humans and animals. Air, tree leaves, and orange peel.

# FU256 Sporotrichum Pruinosum

Widely distributed in decaying wood and soil.

### FU257 Stemphylium Mix

Allergies and (but rarely) sinusitis. Widely distributed on decaying vegetation, wood and in the soil; rare indoors.

#### FU258 Trichoderma Mix

Allergies; opportunistic infections in immuno-suppressed; becoming more of a problem widely distributed in the soil, plant material, decaying vegetation, and wood; paper and unglazed ceramics.

#### FU259 Trichophyton Mix

One of the leading causes of hair, skin, and nail infections in humans (ringworm, athlete's foot etc.). Found in the soil; also affects animals.

#### FU260 Verticillium Albo-Atrum

A rare agent of mycotic keratitis (an eye infection). Decaying vegetation and soil; affects trees (particularly maples).

# Fungi 3 Test Kit 24vials

Additional important fungi, many of which produce mycotoxins that are dangerous for human health. We often think viruses are the most important threat, but fungal infections, while often less dramatic, can have profound and long lasting effects on health. The fungus can have a direct effect (e.g. an allergic reaction) or they can affect health through the mycotoxins they produce. We also have a Mycotoxins Test Kit.

#### FU3 61 Aspergillus Carneus

Produces mycotoxin citrinin.

#### FU3 62 Aspergillus Clavatus

Commonly isolated from soil, plant debris, and indoor air environment. Produces the mycotoxins cytochalasin and patulin.

#### FU3 63 Aspergillus Flavus

Commonly isolated from soil, plant debris, and indoor air environment. Produces the mycotoxins aflatoxin B and cyclopiazonic acid. A rare cause of pulmonary disease.

#### FU3 64 Aspergillus Glaucus

Commonly isolated from soil, plant debris, and indoor air environment.

#### FU3 65 Aspergillus Nidulans

Commonly isolated from soil, plant debris, and indoor air environment. Produces the mycotoxin sterigmatocystin.

#### FU3 66 Aspergillus Ochraceus

Common indoors. Produces mycotoxins ochratoxin A and penicillic acid.

#### FU3 67 Aspergillus Ustus

Found in the soil and also on cardboard, paper, rubber, birds, and in dried fruits, nuts, cheeses, citrus fruits, seeds and grains. Produces mycotoxins ausdiol, austamide, austocystin and brevianamide.

#### FU3 68 Aspergillus Versicolor

Commonly found on mattresses and carpets and in cellars/basements. Produces mycotoxin sterigmatocystin. Prevalent in over 5% of fungal infections of toenail, particularly involving big toe.

#### FU3 69 Bipolaris

Linked to allergic and chronic sinusitis and chest infections. Produces mycotoxins cytochalasin, sterigmatocystin and sporidesmin.

#### FU3 70 Blastomyces Dermatitidis

Found primarily in the Mid-West and Northern United States and Canada. Causes blastomycosis (lung infection, chest pains, coughs, fever, painless sores). Produces mycotoxins cytochalasin, sporidfesmin and sterigmatocystin.

#### FU3 71 Coccidiodes Immitis

Most commonly seen in the desert regions of the southwestern United States, and in Central and South America. It can cause a disease called coccidioidomycosis (Valley Fever).

#### FU3 72 Cryptococcus Neoformans

Found in soil throughout the world. Can cause lung infections (cryptococcosis).

#### FU3 73 Cylindrocarpon

Found in wet indoor environments. Produces mycotoxin trichothecene.

#### FU3 74 Memnoniella

Found in soil and plant debris but also inside buildings, especially on cellulose-based materials. Often found growing with Stachybotrys, but smaller so enters lungs more easily. Most typical symptoms are throat irritation, eye and nose itchiness and rashes. Produces mycotoxins trichothecenes.

#### FU3 75 Myrothecium

Often found on materials such as paper, textiles, canvas and cotton. Produces mycotoxin trichothecene.

#### FU3 76 Penicillium Aurantiogriseum

Commonly found on mattresses and carpets. Produces mycotoxin Penicillic acid.

#### FU3 77 Penicillium Chrysogenum

Commonly found on mattresses and carpets.

#### FU3 78 Penicillium Nordicum

Commonly isolated from fermented meat products such as cured ham and dairy products. Produces mycotoxin ochratoxin A.

#### FU3 79 Penicillium Verrucosum

Found on cereals (e.g. wheat, barley). Produces mycotoxin citrinin and ochratoxin A.

#### FU3 80 Pithomyces

Often found growing in soil, decaying leaves and grasses. Produces mycotoxin sporidesmin.

#### FU3 81 Rhizopus

Found on mature fruits and vegetables, jellies, syrups, bread, peanuts, leather and tobacco. Produces myco-toxin rhizonin.

#### FU3 82 Sporothrix Schenkii

Found throughout the world in soil, plants, and decaying vegetation. Skin lesions characteristically following lymphatic pathways.

#### FU3 83 Stachybotrys Chartarum /Stachybotrys Atra, Stachybotrys Alternans Or Stilbospora Chartarum

Also known as black mould. Commonly found on wallpapers. Also on paper, cardboard, wallboard, wall framing when persistently wet. Linked to sick building syndrome. Produces mycotoxins roridin E, satratoxin G & H and trichothecene.

#### FU3 84 Wallemia

Found worldwide, and typically contaminate low-moisture foods, carpets and mattresses. Produces mycotoxin walleminol.

# Human Histology Test Kit 75 vials

The energy patterns of healthy body parts from the 17 histology/pathology kits. e.g. kidney, lung, liver, bone, muscles, nerves, ovary, prostate, pancreas, mast cells, etc.

#### Please only order this kit if you are unlikely ever to order the pathology/histology kits PH1-17. Otherwise you will end up with duplicates.

#### HIST1 Adrenal gland/Suprarenal Gland

Organs responsible for producing steroid and other hormones essential for life.

#### HIST2 Aorta

The large arterial trunk that carries blood from the heart to be distributed by branch arteries through the body.

#### HIST3 Artery

Tubular branching muscular- and elastic-walled vessels that carry blood from the heart through the body.

#### HIST4 Artery, Superior Mesenteric

A large artery that arises from the aorta and supplies the greater part of the small intestine, the cecum, the ascending colon, and the right half of the transverse colon.

#### HIST5 Bladder

Organ in which urine collects before evacuation from the body.

#### HIST6 Bone

#### HIST7 Bone Marrow

Soft, sponge-like tissue in the centre of most large bones, producing white blood cells, red blood cells, and platelets.

#### HIST8 Breast/ Mammary Gland

Glands that produce milk for young.

#### HIST9 Cardiac Muscle/Heart Muscle

The principal tissue in the heart wall.

#### HIST10 Cartilage, Elastic

Provides strength and elasticity; found in external ear, epiglottis and auditory tubes.

#### HIST11 Cartilage, Fibrocartilage.

Cushions and protects, such as intervertebral discs, pads in knee joints and pad between two pubic bones.

#### HIST12 Cartilage, Hyaline

Most abundant cartilage in the body, providing flexibility and support.

#### HIST13 Cerebellum

The portion of the brain in the back of the head between the cerebrum and the brain stem; it controls balance for walking and standing, and other complex motor functions.

#### HIST14 Cerebrum

The largest part of the brain, controlling muscle functions speech, thought, emotions, reading, writing, and learning.

#### HIST15 Cervix

The lower part and neck of the uterus.

# HIST16 Collagenous Fibre/White Fibrous Tissue

Strong, flexible but only slightly elastic, found in tendons and ligaments.

#### HIST17 Colon

The part of the large intestine that extends from the end of the small intestine to the rectum.

#### HIST18 Corpus Albicans

Once the corpus luteum degenerates it becomes the corpus albicans.

#### HIST19 Corpus Luteum

Endocrine gland in ovary formed when ovum discharged; if the ovum impregnated, the corpus luteum increases in size and persists for several months, (secretes estrogens, progesterone, relaxin and inhibin); otherwise degenerates and shrinks.

### HIST20 Duodenum

The first part of the small intestine connecting the stomach and the ileum.

#### HIST 21 Epididymis

The duct in which sperm undergo maturation.

#### HIST22 Esophagus

The muscular tube through which food passes from the throat to the stomach.

#### HIST23 Fallopian Tube

The tube through which eggs pass from the ovaries to the uterus.

#### HIST24 Gallbladder

The pear-shaped organ found below the liver that concentrates and stores bile.

#### HIST25 Hippocampus

Part of the limbic system of the brain, involved in emotions and memory.

#### HIST26 Ileum

The last part of the small intestine.

# HIST27 Intervertebral Disk, Fibrous Cartilage Spinal Disc

# HIST28 Jejunum

Portion of the small intestine that extends from the duodenum to the ileum.

### HIST29 Kidney

A pair of organs which function to filter the blood and control the level of some chemicals in the blood such as hydrogen, sodium, potassium, and phosphate; they eliminate waste in the form of urine.

#### HIST30 Kidney Cortex

One of the main functional parts of the kidney (outer zone).

#### HIST31 Kidney Medulla

One of the main functional parts of the kidney (inner zone) containing the renal pyramids.

#### HIST32 Liver

The largest organ in the body; carries out many important functions, e.g. making bile, changing food into energy, and cleaning alcohol and poisons from the blood.

#### HIST33 Lung

Main organ of respiration, lying either side of heart.

#### HIST34 Lymph gland/ lymph node

Lymph nodes filter lymph and store lymphocytes (white blood cells).

### HIST35 Mast Cell

Produce histamine, which dilates small blood vessels; involved in body's reaction to injury and infection.

#### HIST36 Medulla Oblongata

Lower part of brain stem; controls autonomic functions; relays nerve signals between the brain and spinal cord.

#### HIST37 Muscle, Involuntary

Smooth muscles not ordinarily under the control of the will, activated by the autonomic nervous system.

#### HIST38 Muscle, Voluntary

Muscle that can be made to contract or relax by conscious control.

#### HIST39 Nerve

A bundle of fibers that uses electrical and chemical signals to transmit sensory and motor information from one body part to another.

#### HIST40 Nerve, Peripheral

The nerves outside of the brain and spinal cord; they contain non-neuronal cells and connective tissue as well as axons.

#### HIST41 Ovary

Female reproductive glands in which the ova, or eggs, are formed, located in the pelvis, one on each side of the uterus.

#### HIST42 Pancreas

A glandular organ located in the abdomen; it makes

pancreatic juices, which contain enzymes that aid in digestion, and it produces several hormones, including insulin.

# HIST43 Parotid Gland

Salivary gland below and just in front of the ear.

#### HIST44 Penis

The external male reproductive organ, containing a tube called the urethra, which carries semen and urine to the outside of the body.

### HIST45 Pineal gland/ Epiphysis Cerebri

Attached to the roof of the third ventricle near its junction with the mid-brain; secretes melatonin; full function is unclear.

#### HIST46 Pituitary gland/ Hypophysis

The main endocrine gland, producing hormones that control other glands and many body functions, especially growth.

#### HIST47 Prostate Gland

A gland just below the bladder.; surrounds part of the urethra, the canal that empties the bladder, and produces a fluid that forms part of semen.

#### HIST48 Prostate Gland, Senile

A prostate showing deterioration that comes with age.

# HIST49 Pyloric Sphincter/Pyloro-Duodenal Junction

The junction between the stomach and the small intestine.

#### HIST50 Pylorus/Pyloric Region

The region of the stomach that connects with the duodenum (first part of small intestine).

#### HIST51 Rectum

The last part of the large intestine.

HIST52 **Renal Artery & Vein** The main artery and vein of the kidney.

HIST53 Seminal Vesicle

Glands that help produce semen.

#### HIST54 **Skin, Negroid and Caucasian** Outermost covering of the body.

HIST55 **Sperm/ Spermatozoa** Mature male germ cells that fertilise the ovum.

HIST56 **Spinal Chord, Cervical** The spinal column in the region of the neck.

HIST57 **Spinal Chord, Lumbar** The spinal chord between the ribs and the pelvis.

HIST58 **Spinal Chord, Thoracic** The spinal column in the region of the ribs.

#### HIST59 Spleen

Located on the left side of the abdomen near the stomach; produces lymphocytes, filters the blood, stores blood cells, and destroys old blood cells.

# HIST60 Stomach

Part of the digestive system; helps in the digestion of food by mixing it with digestive juices and churning it into a thin liquid.

#### HIST61 Sympathetic Ganglion

A group of nerve cell bodies either close to the spinal column or close to the large abdominal arteries.

#### HIST62 Testis/ Testicle

The two egg-shaped glands found inside the scrotum that produce sperm and male hormones.

#### HIST63 Thalamus

A large mass of gray matter deeply situated in the forebrain; relays information received from various brain regions to the cerebral cortex.

#### HIST64 Thymus

In the chest behind the breastbone; an organ that is part of the lymphatic system, in which T lymphocytes grow and multiply.

#### HIST65 Thyroid

A gland located beneath the voice box (larynx) that produces thyroid hormone. The thyroid helps regulate growth and metabolism.

#### HIST66 Tonsil

Small masses of lymphoid tissue on either side of the throat.

#### HIST67 Trachea

Airway that leads from the larynx to the lungs.

#### HIST68 Umbilical chord/ Umbilical cord

A cord arising from the navel that connects the fetus with the placenta and contains the two umbilical arteries and the umbilical vein.

#### HIST69 Ureter

The tube that carries urine from the kidney to the bladder.

#### HIST70 Urethra

The tube that carries urine from the bladder and out through the penis.

#### HIST71 Uterus/Womb

The small, hollow, pear-shaped organ in a woman's pelvis; this is the organ in which an unborn child develops.

#### HIST72 Vagina/ Birth canal

The muscular canal extending from the uterus to the exterior of the body.

HIST73 Vas Deferens/ Deferent Canal/ Deferent Duct / Spermatic Duct / Spermiduct / Testicular Duct / Ductus Deferens

A coiled tube that carries the sperm out of the testes.

#### HIST74 Vein

A tube carrying blood from the capillaries towards the heart.

#### HIST75 Vena Cava

Two large veins which take deoxygenated blood into the right atrium of heart for delivery to the lungs.

# Homoeopathic A Test Kit 54 vials

Homeopathic remedies, include arnica, arsen alb, hepar sulph, lachesis, lycopodium, merc sol, nux vom, petroleum, rhus tox, sulphur, thuja, etc. Each vial contains 2 tablets (30C potency).

#### HPA1 Acid Nit

Irritability. Pains as from splinters. Worse cold climate and hot weather. Warts.

#### HPA2 Acid Phos

Poor memory. Frequent urination at night. Pressure behind the sternum.

#### HPA3 Aconite

Rapid onset of colds and flu. Sore throat. Red rashes. Measles. Earache. Effect of fear and fright.

#### HPA4 Antim Tart

Cough with white, coated tongue. Unable to raise phlegm. Acute bronchitis.

#### HPA5 Argent Nit

Acidity. Headache. Conjunctivitis. Mental strain. Nervous anticipation. Colds. Diarrhoea. Nappy rash.

# HPA6 Arnica

After injury. Mental and physical shock. Before operations. Visits to the dentist. Exhaustion.

#### HPA7 Arsen Alb

Stomach upsets from food poisoning. Diarrhoea. Vomiting.

# HPA8 Avena Sativa

Exhaustion. Sleeplessness. Poor muscle tone. Loss of appetite after illness. Calcium loss in bones and teeth.

#### HPA9 Bacillinum

Tuberculosis. Humid asthma. Ringworm. Mucopurulent expectoration.

#### HPA10 Baptisia

Confusion. Offensive discharges. Stupor. Dark red face. Aching and soreness all over. Gastric flu.

#### HPA11 Belladonna

Hot, flushed face. Sore throat. Neuralgia. Throbbing headache. Earache. Boils. Fever. Mumps. Chicken pox.

#### HPA12 Berberis

Itchy skin eruptions. Improved by cold compresses. Infantile eczema.

# HPA13 Bryonia

Chesty colds. Dry cough. Muscular pain - better when resting. Acute bronchitis.

# HPA14 Calc Carb

Sensitive. Easily embarrassed. Profuse periods in young girls. Catches colds easily. Acne rosacea.

#### HPA15 Calc Fluor

Thick catarrh. Bleeding piles. Cracking joints. Indecision.

#### HPA16 Calc Phos

Severe stomach pain after eating. Early periods. Acne. Growing pains. Brain fag.

#### HPA17 Carbo Veg

Indigestion with excessive flatulence. Hoarseness. Acne. Debility.

#### HPA18 Chamomilla

Teething. Whining, demanding children. Frantic, unbearable pain. Nightmares. Irritability.

#### HPA19 China

Convalescence. Haemorrhage. Diarrhoea. PMT. Congestive headaches. Copious periods with dark clots.

# HPA20 Cocculus

Irritability. Profound sadness. Constipation. Headaches with nausea. Period problems.

# HPA21 Drosera

Hoarse barking cough. Constant tickling cough. Whooping cough. Ganglia.

#### HPA22 Euphrasia

Watering eyes. Streaming nose. Inflamed eyes. Conjunctivitis. Measles.

#### HPA23 Ferrum Phos

Fear. Greatly varying appetite. Flushes easily. Nose bleed. Acute bronchitis. Acute earache.

#### HPA24 Gelsemium

Influenza. Nervous anxiety. Sick headache. Sore throat. Runny nose. Measles. Examination nerves.

#### HPA25 Graphites

Chapped, unhealthy skin. Cracked weeping eczema. Backwardness at school. Apathetic and overweight.

#### HPA26 Hamamelis

Varicose veins. Piles. Bruised soreness. Chilblains. Nose bleed.

#### HPA27 Hepar Sulph

Skin sensitive to touch. Injuries tend to suppurate. Wheezing. Abscesses. Boils. Croup. Aggressiveness.

#### HPA28 Hypericum

Very painful cuts and wounds. Blows to fingers or toes. Horse-fly bites. Painful bleeding piles.

#### HPA29 Ignatia

Weepiness. Bereavement. Hysteria. Headache. Effects of anger and fear. Insomnia. Tobacco antidote.

#### HPA30 Ipecac

Any illness where there is constant nausea and sickness. Morning sickness. Nose bleed. Spasmodic cough.

#### HPA31 Kali Bich

Catarrh. Stringy sputum. Pain at the root of the nose. Measles. Cough.

#### HPA32 Kali Phos

Nervous exhaustion. Nervous indigestion. Giddiness from exhaustion and weakness after flu.

#### HPA33 Lachesis

Jealousy, fear, suspicion. Worse from sleep. Sleeplessness. Cystitis. Mastitis. Thin, offensive stools. PMT.

#### HPA34 Lycopodium

Fear of failure. Excessive or lack of appetite. Flatulence. Craving sweet foods. Dyslexia. Aggressiveness.

#### HPA35 Mag Carb

Acidity. Sensitive to least touch. Periods late and scanty.

#### HPA36 Mag Phos

Anti-spasmodic. Neuralgic pains. Toothache. Better for heat. Flatulent colic. Menstrual colic. Angina.

#### HPA37 Medorrhinum

Chronic rheumatism. Intolerable pain. Trembling all over. Intense itching of anus. Offensive periods. Sterility.

#### HPA38 Merc Cor

Iritis. Sore, swollen throat. Desire to pass stools not relieved by passing stools.

#### HPA39 Merc Sol

Bad breath. Body odour. Sore throats. Diarrhoea. Abscesses. Chicken pox. Mumps. Abnormal sweat.

#### HPA40 Nux Vom

Nervous indigestion. Early morning liverishness. Indigestion 2-3 hours after food. Hangover.

#### HPA41 Petroleum

Oozing skin eruptions. Fiery blisters. Infantile eczema.

#### HPA42 Phosphorus

Bronchitis. Dry cough. Hypersensivity. Nose bleed.

#### HPA43 Psorinum

Extreme sensitivity to cold. Offensive discharges. Always hungry. Intolerable itching. Worse for coffee.

#### HPA44 Pulsatilla

Weepiness, particularly in children. Menstrual problems. Styes. Change of life. Adenoids.

#### HPA45 Rhus Tox

Strains of joints or tendons. Rheumatism. Lumbago. Sciatica. Herpes of lips. Burns. Chicken pox.

#### HPA46 Ruta Grava

Bruised bones. Fractures. Dislocations. Eye strain. Eyes burn and ache. Housemaid's knee.

#### HPA47 Sepia

Periods suppressed or delayed. Change of life. Morning sickness. Bearing down pain in the abdomen.

#### HPA48 Silica

Boils. Abscesses. Chronic headaches. Sinus trouble. Rickets. Thinness. Tonsillitis. Sleep walking.

#### HPA49 Sulphur

Itching skin. Skin troubles. Eczema. Boils. Burning and itching piles.

#### HPA50 Symphytum

Non-union of fractures. Pricking pain. Pain in eye after a blow.

#### HPA51 Syphilinum

Utter prostration in the morning. Hopeless. Chronic eruptions. Rheumatism.

#### HPA52 Thuja

Warts. Brittle nails. Morning headaches. Absence of appetite in the morning. Antidote to vaccinations.

#### HPA53 Tuberculinum

Incipient T.B. Symptoms constantly changing. Emaciated. Fear of animals. Dysmenorrhea. Enlarged tonsils.

#### HPA54 Zincum Met

Convulsions. Sensitive to noise. Lethargic, stupid. Squinting. Very hungry. Varicose veins. Soles sensitive.

# Homoeopathic B Test Kit 50 vials

Homeopathic remedies include actaea rac, alumina, antim crud, apis mel, cantharis, helleborus, lilium tig, nat mur, podophyllum, etc. Each vial contains 2 tablets of the 30C potency.

#### HPB55 Actaea Rac

Depression, headaches, neuralgia. Worse for cold, damp and movement.

#### HPB56 Agaricus Musc

Itching and burning extremities. Hands and feet red and swollen. Chilblains.

#### HPB57 Aletris Far

Heaviness in lower part of abdomen with false labour pains.

#### HPB58 Alfalfa

Heavy head. Poor appetite. Excessive thirst. Desire for sweets. Fatigue. Poor sleep.

#### HPB59 Allium Cepa

Hay fever; frequent sneezing. Watery nasal secretions. Head colds. Neuralgia. Better in open air.

#### HPB60 Alumina

Hurried. Moody. Dry mucous membranes. Abnormal cravings. Constipation.

HPB61 **Antim Crud** Oozing blisters. Thick hard scabs. Impetigo.

HPB62 **Apis Mel** Insect stings. Burning stinging pains. Burns. Cystitis. Arthritis. Jealousy. Awkward.

#### HPB63 Baryta Carb

Delayed mental and physical development. Sore throats. Nail biting. Tonsillitis.

#### HPB64 Bellis Perennis

Black-and-blue spots, painful to touch. Bruising. Fatigue after a blow or fall.

#### HPB65 Borax

Dread of downward motion. Nervous. Sensitive to noise. Impatience. Hot flushes.

#### HPB66 Cactus Grand

Spasmodic pain. Constrictions. Congestive headache. Dysmenorrhea. Iron band round chest.

#### HPB67 Caladium

Depression and fatigue. Memory loss. Irritability at least noise. Tobacco antidote.

#### HPB68 Calendula

Extreme sores with or without loss of skin. Bee and wasp stings. Burns. Bruises.

#### HPB69 Cantharis

Burns. Burning pains. Cystitis. Gnat bites. Itchy blisters.

#### HPB70 Causticum

Intensely sympathetic. Depression, apprehension, timidity. Paralysis. Skin dirty.

#### HPB71 Chelidonium

Tooth ache. Jaundice. General lethargy. Worse for change of weather.

#### HPB72 Cicuta Virosa

Spasmodic contractions of muscles. Stiffness of neck. Contortions. Convulsions.

#### HPB73 Cina

Irritability. Dark rings round eyes. Insatiable hunger. Insomnia. Intestinal parasites.

## HPB74 Colocynth

Intestinal colic. Cramp. Dysentery-type stools.

# HPB75 Conium Mac

Dizziness. Numbness. Weakness. Trembling. Sweating.

#### HPB76 **Cuprum Met** Cramps. Nausea and vomiting. Metallic taste in mouth.

HPB77 **Eupatorium Perf** Aching and stiffness of bones and muscles. Pain in eyeballs. Flu.

#### HPB78 Helleborus

Sees, hears, tastes imperfectly. Muscular weakness. Sinking sensation. Sighing.

### HPB79 Hydrastis Can

Thick and yellow mucous. Itching of vulva.

HPB80 Iris Vers Sick headache. Pancreas affected. Goitre. Burning of alimentary canal.

#### HPB81 **Kali Carb** Irritable. Sensitive to pain, noise and touch. Intolerance of cold weather.

#### HPB82 Kreosotum

Stupid, forgetful, irritable. Offensive discharges. Worse open air, cold, rest.

#### HPB83 Ledum Pal

Pain travelling upwards. Black eye. Puncture wounds. Intense coldness.

#### HPB84 **Lilium Tigrinum** Profound depression. Aimless. Better fresh air. Vaginal itching.

#### HPB85 Merc Cyanatus

Thick greyish coating of mouth. Tongue white with fetid breath. Thrush.

#### HPB86 Mezereum

Ulceration of skin. Itchy blisters. Impetigo.

#### HPB87 Natrum Mur

Sneezing. Sinus. Eczema. Thrush. Incontinence. Vertigo. Exhaustion. Craves salt.

#### HPB88 Nux Moschata

Sleepiness. Fainting fits. Changeable moods. Dryness of mucous membranes.

#### HPB89 **Oscillococcinum** Flu. Common cold

HPB90 Opium

Heavy sleep. Sweaty skin. Loss of consciousness. Snoring. Noisy breathing.

#### HPB91 **Phytolacca Dec** Glandular swellings with heat and inflammation.

HPB92 **Platina** Arrogant. Numbness and coldness.

#### HPB93 Podophyllum

Biliousness. Talkative. Depression. Worse in hot weather.

#### HPB94 Pyrogen

Septic states. Offensive discharges. Restless. Dry tongue.

## HPB95 Ranunculus Bulb

Effects of alcohol. Soreness of chest. Burning and intense itching of skin.

#### HPB96 Rumex Crispus

Enlarged lymph glands. Tickling in throat. Dry cough. Raw pain under clavicle.

#### HPB97 Sabina

Violent pulsations. Worse least motion. Risk of miscarriage.

# HPB98 **Sambucus Nigra**

Sudden waking at night with feeling of suffocation. Infantile asthma.

#### HPB99 **Secale Cornutum** Debility. Anxiety. Better from cold.

HPB100 **Senna** 

Nausea and vomiting with yellowish diarrhoea. Aromatic smell to breath.

#### HPB101 Staphisagria

Styes. Inflammation and itchiness of corner of eye.

### HPB102 Taraxacum

Coated, mapped tongue. Constipation.

#### HPB103 **Urtica Urens** Superficial burns with skin irritation.

HPB104 Veratrum Alb

#### Collapse with extreme coldness. Cold perspiration. Vomiting. Cramps in extremities.

# Hormone Test Kit 30 vials

The energy patterns of insulin, progesterone, oestrogen, testosterone, TSH, antidiruetic hormone, calcitonin, FSH, cortisone,noradrenaline, ACTH, etc.

## Other hormones are in Body Biochemicals 1-5.

Hormones are chemicals produced by the body in one organ that are transported around the body and have an effect elsewhere. They act as messenger molecules.

#### H1 Adrenocorticotropic (ACTH)

Stimulates adrenal cortex to secrete other hormones.

#### H2 Aldosterone

Increases re-absorption of sodium from urine and stimulates excretion of potassium.

#### H3 Androgen

A group of hormones that contribute to development of male reproductive system, e.g. testosterone.

#### H4 Antidiuretic Hormone (ADH)/ Vasopressin Hypothalamus

Affects urine volume, stored in posterior pituitary.

#### H5 Calcitonin (CT)

Homeostasis of blood calcium and phosphate levels.

#### H6 Cholecystokinin (CCK)

Inhibits secretion of gastric juice, decreases movement of GI tract, stimulates secretion of pancreatic juice rich in digestive enzymes, causes ejection of bile from gall bladder and opening of sphincters at common duct, and induces a feeling of satiety; may regulate feeding as a "stop eating" signal.

#### H7 Corticosterone

Converted to aldosterone by aldosterone synthase.

#### H8 Corticotropin Releasing Hormone (CRH)

Stimulates release of ACTH involved in the regulation of food intake, energy homeostasis and stress response.

#### H9 Cortisone/Cortisol

Breaks down muscle. See also glucocorticoids.

#### H10 Epinephrine/Adrenaline

Helps body resist stress by increasing heart rate, constricting blood vessels, accelerating respiration, decreasing digestion, increasing efficiency of muscular contractions, increasing blood sugar, stimulating cellular metabolism.

#### H11 Follicle-Stimulating Hormone (FSH)

Stimulates production of eggs and sperm.

#### H12 Glucocorticoids

Resistance to stress. 3 of them: cortisol, corticosterone, and cortisone. Makes sure enough energy is available; conversion of non-carbohydreates into energy; makes blood vessels more sensitive to vessel-constricting chemicals, anti-inflammatory.

#### H13 Growth Hormone Inhibiting Hormone (GHIH) / Somatostatin

Inhibits secretion of acid and pepsin and release of gastrin, insulin and glucagons; inhibits motility of the gall bladder and intestine; suppresses secretion of lipase by the pancreas; slows absorption of nutrients from the gastro-intestinal tract.

#### H14 Insulin

Decreases blood sugar levels; prevents muscle from being broken down.

#### H15 Luteinizing Hormone

Stimulates sexual reproduction activities.

#### H16 Melanocyte-stimulating Hormone (MSH)

Increases skin pigmentation. Inhibits fever and peripheral inflammation. Suppresses appetite.

#### H17 Norepinephrine/Noradrenaline (NE)

As epinephrine.

#### H18 Oestrogen

Develops and maintains female reproductive structures, especially endometrial lining of uterus, and secondary sex characteristics, including the breasts. Contributes to fluid and electrolyte balance. Important for bone density in both women and men. (See also Body Bio 2 test kit.)

#### H19 Oxytocin (OT)

Contraction of uterus and mammary glands, breast feeding, orgasm, autonomic control of emotions. Stored in posterior pituitary. Lowers steroid synthesis in testes.

#### H20 Parathyroid Hormone (PTH)

Helps to control homeostasis of calcium and phosphates in the blood.

#### H21 Progesterone (PROG)

Helps prepare endometrium for implantation of fertilised ovum and mammary glands for milk secretion. Can inhibit GnRH & PRL.

#### H22 Prolactin (PRL)

Initiates milk production by mammary glands. Excess prolactin can lead to absence of ovulation, lack of periods, excessive or spontaneous secretion of milk in women, and decreased sex drive, decreased sperm production and impotence in men. Women who cannot conceive often have high levels of prolactin. Enhances dopamine secretion. May be involved in the immune system.

#### H23 Relaxin (RLX)

Relaxes symphysis pubis & dilates cervix towards end of pregnancy.

#### H24 Secretin

Inhibits secretion of gastric juices, decreases movement of GI tract, stimulates secretion of pancreatic juice rich in sodium bicarbonate ions, stimulates secretion of bile by hepatic cells of liver.

#### H25 Testosterone

Produces male characteristics. Builds up muscles in males and females.

#### H26 Thymosin

Maturation of T lymphocytes.

#### H27 Thyroid-stimulating Hormone (TSH)

Stimulates thyroid gland to produce its hormones.

#### H28 Thyrotropin Releasing Hormone (TRH)

Stimulates anterior pituitary to secrete TSH.

#### H29 Triiodothyronine/ T3

Regulates metabolism by stimulating carbohydrate and fat breakdown, growth and development, and regulate activity of nervous system resulting in increased and more forceful heart beat, increased motility of GI tract, increased nervousness.

#### H30 Human Growth Hormone/Somatotropin

Increases the growth rate of the skeleton and skeletal muscles in children and teenagers. In adults helps to maintain muscle and bone mass and promote healing of injuries and tissue repair; speeds up the breakdown of liver glycogen into glucose; excess production may cause diabetes mellitus.

# Immunoglobulin Test Kit 5 vials

Immunoglobulin (Ig), also known as an antibody (Ab), is a large Y-shaped protein produced by B-cells that is used by the immune system to identify and neutralize foreign objects such as bacteria and viruses. The antibody recognizes a unique part of the foreign target, called an antigen. Each tip of the "Y" of an antibody contains a paratope (a structure analogous to a lock) that is specific for one particular epitope (similarly analogous to a key) on an antigen, allowing these two structures to bind together with precision. Using this binding mechanism, an antibody can tag a microbe or an infected cell for attack by other parts of the immune system, or can neutralize its target directly (for example, by blocking a part of a microbe that is essential for its invasion and survival). The production of antibodies is the main function of the humoral immune system.

The five immunoglobulin or antibodies involved in the immune system. 5 testing vials for natural therapists.

#### IG 01 IgA

Found in mucosal areas, such as the gut, respiratory tract and urogenital tract, and prevents colonization by pathogens. Also found in saliva, tears, and breast milk.

#### IG 02 IgD

Functions mainly as an antigen receptor on B cells that have not been exposed to antigens. Has been shown to activate basophils and mast cells to produce antimicrobial factors.

#### IG 03 IgE

Binds to allergens and triggers histamine release from mast cells and basophils, and is involved in allergy. Also protects against parasitic worms.

#### IG 04 **IgG**

Provides the majority of antibody-based immunity against invading pathogens. The only antibody capable of crossing the placenta to give passive immunity to the foetus.

#### IG 05 **IgM**

Eliminates pathogens in the early stages of B cell mediated (humoral) immunity before there is sufficient IgG.

# Industrial & Environment 1 Test Kit 25 vials

The energy patterns of many of the chemicals which we do not know by name but are widely present in the environment: acetaldehyde, chlorobenzene, chlorohexane, nitrobenzene, polyvinyl acetate, styrene, toluene, xylene, etc.

This kit contains powerful chemicals that are present throughout our environment, so that we are frequently in contact with them as we go about our daily business. They may be in the air we breathe, the food we eat, the water we drink, things we touch, the beauty products we use,etc.

#### IE11 Acetaldehyde/Ethanal

Common uses: chemical intermediary. Flammable; carcinogenic category 3.

#### IE12 Chlorobenzene

Common uses: phenol, DDT, aniline, paint solvent.

#### IE13 p-Cresol / 4-Hydroxytoluene

Common uses: starting material for pesticides and herbicides, phenolic resins, disinfectants, antioxidants, plasticizers, degreasers.

Toxic.

#### IE14 Cyanuric Chloride/ Trichloro-s-Triazene

Common uses: dyestuffs, pharmaceuticals, herbicides, plastics, explosives, bleaches, disinfectants.

#### IE15 Cyclohexane

Common uses: nylon, solvent for oils, fats and waxes, paint remover, solid fuel for camping stoves.

#### IE16 Cyclohexanone

Common uses: nylon, adipic acid, nitrocellulose lacquers, celluloid, artificial leather, printing ink.

#### IE17 Diethanolamine/ Di-(2-Hydroxyethyl)Amine

Common uses: detergents, emulsifying agents, manufacture of cosmetics, toiletries, bactericidal and herbicidal products.

#### IE18 Diethyleneglycol/ 2,2'-Dihydroxydiethyl Ether

Common uses: softening agent for textiles, solvent for dyes, moistening agent for glues, paper, cork, sponge and tobacco, solvents and plasticizers in lacquers, photography, stain removers, anti-freeze.

#### IE19 Glycerol/ Glycerin/ 1,2,3-Trihydroxypropane

Common uses: manufacture of synthetic resins and ester gums, moistening agent for tobacco, inks, lubricants, manufacture of explosives and cellulose films, toothpaste, moisturiser, hair mousse, hair gel, conditioner, conditioner hand and body lotion, shower gel, body wash, mouth wash, gelatine capsules for supplements, cleansing lotion, toning lotion, eye gel, after shave, foundation, sweetening agent in medicines, ear drops, cough mixture, cereal bars, soft-scoop ice cream. Synthesised from propylene or as a by-product of soap manufacture.

#### IE110 Hydrazine

Common uses: derivatives used as blowing agents for foam plastics, antioxidants, herbicides, rocket fuel.

#### IE111 Hydrogen Peroxide

Common uses: chemical production, pollution control, textile and paper industries, cleaning products, food bleaching.

In the body involved in destruction of pathogens by white blood cells.

#### IE112 Methanol/ Methyl Alcohol/ Wood Spirit / Wood Naptha

Common uses: industrial solvent, manufacture of methanal, methanoic acid and chloromethane, denaturant for ethyl alcohol, antifreeze, paints, duplicating fluids, paint removers, varnishes, shoe polishes, extraction of animal and vegetable oils, fuel for camping stoves, pharmaceutical solvent.

#### IE113 Naphthalene

Common uses: dyestuff intermediates, plasticizers, alkyd resins, polyesters, moth balls.

#### IE114 Nitrobenzene

Common uses: dyestuffs, manufacture of aniline, soaps, shoe polish.

#### IE115 Polyethylene Glycol (PEG)

Common uses: solvents, pharmaceuticals, textiles, cosmetics, lubricating oils, paint, paper.

#### IE116 Polyvinyl acetate

Common uses: adhesives, thickeners, solvents, plasticizers, in textiles, in concrete additives, production of polyvinyl alcohol.

#### IE117 Poly(Vinylpyrrolidone)/ PVP

Common uses: adhesives, toiletries, hair spray, detergents, pharmaceuticals and in textile industry for fibre treatment, blood replacement.

#### IE118 Propanone/ Acetone/ Dimethyl Ketone

Common uses: solvent, manufacture of various chemicals, glues, adhesives, polystyrene cements, dyes, nail polish removers, wood hardeners, storage of acetylene gases. In small quantities in normal human urine, in larger amounts in that of diabetics.

#### IE119 Pyridine

Common uses: solvent particularly for plastics, manufacture of nicotinic acid, various drugs and rubber chemicals.

Very smelly, causes temporary sterility in males.

#### IE120 Sodium Hydroxide/ Caustic Soda

Common uses: pulp production for paper, viscose and cellulose, manufacture of other chemicals, vegetable oils, aluminium, petrochemicals, textiles, soap, detergents, oven cleaners and drain cleaners.

#### IE121 Styrene/ Ethenylbenzene/ Vinylbenzene

Common uses: manufacture of polymers particularly polystyrene and synthetic rubber, stabilising agent, dental filling component, food packaged in polystyrene, floor waxes, paints, adhesives, putty, metal cleaners, car fillers, two-part fillers, cigarette smoke.

Possibly carcinogenic to humans.

#### IE122 Toluene

Common uses: high-octane aviation and motor fuel, solvent, manufacture of benzene, caprolactam, phenol and dyestuffs, damp treatments, glues, inks, paints, lacquers, perfumes, nail varnish, furniture polish, extraction of various principles from plants, adhesives.

#### IE123 Triethanolamine/ Tri-(2-Hydroxyethyl)Amine

Common uses: detergents, emulsifying agents, Manufacture of cosmetics, toiletries, bactericidal and herbicidal products.

#### IE124 Vinyl Acetate/ Ethenyl Ethanoate/ Vinyl Ethanoate

Common uses: manufacture of adhesives, paints, coatings, paper and textile finishes, moulding components.

#### IE125 o-Xylene

Common uses: industrial solvent, petrol ingredient, phthalic anhydride, sterilising catgut.

# Industrial & Environment 2 Test Kit 25 vials

The energy patterns of more chemicals including benzene, several phthalates, etc.

#### IE226 Abietic Acid

Common uses: plastics, paints, varnishes, paper size, detergents. Used extensively.

#### IE227 Aniline

Common uses:antioxidants, rubber manufacture, dyes and pharmaceuticals.

#### IE228 Aviation Gasoline

In air pollution.

#### IE229 Benzene

Common uses: Industrial pollution - given off when petrol put into cars, industrial solvent, ethylbenzene, cumene, cyclohexane, styrene, phenol, nylon, synthetic detergents, dyes, paints, varnish removers, adhesives, pharmaceuticals

#### IE230 Bromomethane/ Methyl Bromide

Common uses:fumigates soil, commodities, grain, warehouses and mills. Very toxic, widely used.

#### IE231 Capryl Alcohol/ 1-Octanol/ Secondary Octyl Alcohol

Common uses: foam-reducing agent, plasticizers, perfumery, cosmetics, solvent, chemical intermediate.

#### IE232 Cellulose Acetate

Common uses: fibres for clothing and furnishing, lacquer, cellophane, cigarette filters, magnetic tape, spectacle frames, screwdriver handles.

#### IE233 Cetyl Alcohol/ Hexadecanol

Common uses: extensively used in pharmaceutical and cosmetics, gel stabiliser for greases.

#### IE234 Chloromethane/ Methyl Chloride

Common uses: silicones, anti-knock additive in petrol, butyl rubber manufacture, methyl cellulose, blowing agent for polystyrene foam.

#### IE235 Decyl Alcohol/ Decanol

Common uses: plasticizers, detergents. Commercially important.

#### IE236 1,2-Diaminoethane/ Ethylenediamine

Common uses: detergents, emulsifying agents, industrial solvent, textiles, paper, coatings, films, adhesives, rubber formulation.

#### IE237 1,2-Dibromoethane/ Ethylene Dibromide

Common uses: leaded petrol, fumigant for stored products, nematocide.

#### IE238 Dichloromethane/ Methylene Chloride

Common uses: industrial solvent, paint remover, degreaser, aerosol propellant.

#### IE239 Diesel Range Organics

Air pollution

Contains n-decane, n-dodecane, n-tetradecane, n-hexadecane, n-octadecane, n-eicosane, n-docosane, n-tetracosane, n-hexacosane, n-hexane.

#### IE240 Dimethylamine

Common uses: manufacture of other chemicals, including solvents, herbicides, fungicides and rubber accelerators.

#### IE241 Dioctyl Phthalate

Common uses: plastics. Most commonly used plasticiser; can migrate into food from packaging.

#### IE242 Ethanol/ Ethyl Alcohol/ Alcohol/ Spirits of Wine

Common uses: starting point for many other chemicals, in foodstuffs, as solvent, cosmetics, alcoholic drinks, methylated spirit, surgical spirit.

#### IE243 bis(2-Ethylhexyl) Phthalate

Common uses: one of most common phthalates found in food samples. Carcinogenic in mice and rats.

#### IE244 Glycolic Acid/ Hydroxyethanoic Acid/ Hydroxyacetic Acid

Common uses: textile and leather processing, cleaning (metals and dairy sanitation); used in cosmetics and personal care preparations, particularly skin peel preparations.

#### IE245 Halazone

Common uses: sterilisation of drinking water.

#### IE246 Jet Turbine Fuel

Air pollution

#### IE247 Methanoic Acid/ Formic Acid

Common uses: textile dyeing and finishing, leather tanning, intermediate for other chemicals.

#### IE248 Monoethanolamine/ 2-AminoEthyl Alcohol/ 2-Hydroxyethylamine

Common uses: detergents, emulsifying agents, manufacture of cosmetics, toiletries, bactericidal and herbicidal products.

Great commercial importance.

#### E249 Nitric Acid

Common uses: fertilisers, explosives, dyestuffs, wart preparations .

#### IE250 Phthalic Anhydride

Common uses: dyestuffs, plasticizers, alkyd resins.

# Industrial & Environment 3 Test Kit 25 vials

The energy patterns of more chemicals including bisphenol A, PCB's and various plastics, etc.

There are many chemicals in the environment. Avoiding chemicals in food doesn't mean that you are not routinely exposed to chemicals. What is particularly worrying is that many of these chemicals are found in breast milk so that even new born babies are exposed to them, but breast feeding is still the best start for babies. This kit includes 4 of these chemicals.

Of particular concern for everyone is Bisphenol A, which is a major constituent of plastics and is used in dental materials.

The kit also includes a Phthalate Mix. Phthalates increase the flexibility of plastics and can migrate into foods and drinks from plastic containers. There are serious health concerns about phthalates.

#### IE51 Adipic Acid

Used in the manufacture of nylon, polyester, polyurethane, polypropylene and PVC. Also used in detergents.

#### IE52 Aluminium Hydroxide / Aluminium Trihydrate / Aluminium Hydrate

Used in vaccines, manufacture of glass and glazes, as a flame retardant in plastics, in paper manufacture, printing inks, detergents, for waterproofing fabrics, in mouthwashes and deodorants. Also used as a carrier of artificial colourings particular for uses involving colouring oils and fats, or where the product does not contain sufficient water to dissolve the colour. (Would not need to be shown in the list of ingredients when used as a colour carrier.

#### IE53 Bisphenol A / BPA

Major constituent of plastics. Also used as a sealant and in adhesives including in dentistry. An endocrine disruptor, which can mimic body's own hormones. Worrying levels found in breast milk and in people generally.

In 2007, a consensus statement by 38 experts on bisphenol A concluded that average levels in people are above those that cause harm to animals in laboratory experiments. In utero exposure to Bisphenol-A may adversely affect male genital development, according to a Kaiser Permanente study published online in the journal Birth Defects Research (August 2011)

#### IE54 1,3-Butadiene

An important industrial chemical used as in the production of synthetic rubber.

#### IE55 2-Chloro-1,3-Butadiene / Chloroprene

Involved in the production of polychloroprene/neoprene.

#### IE56 Dibromacetic Acid / DBA

Found in drinking water when chlorine disinfectants combine with naturally occurring organic matter.

#### IE57 Ethylene Dichloride / 1,2-Dichloroethane

Used in the manufacture of vinyl chloride. Also an additive in petrol and so found in vehicle exhaust fumes.

#### IE58 Glutaraldehyde

Glutaraldehyde-based disinfectants used for cleaning and sterilising equipment and surfaces in hospitals, dentists, etc. Used in manufacture of paper packaging that will be in contact with food.

#### IE59 Heptane

A solvent used in the production of oils, and in manufacture of adhesives.

#### IE60 Hexachlorobenzene / Perchlorobenzene

A chemical intermediate and a solvent for pesticides. Has been identified in breast milk. Research suggests it may be carcinogenic for humans.

#### IE61 Hexane

A widely used industrial chemical used, for example, in pesticide manufacture, as a cleaning agent in the printing industry, and as a solvent for varnishes and adhesives.

#### IE62 Perfluorononanoic Acid / PFNA

Used in industrial processes; some industrial chemicals may degrade into this chemical. A developmental toxicant and an immune system toxicant.

#### IE63 Perfluorooctanesulfonic Acid / PFOS / Perfluorooctane Sulfonate / Heptadecafluorooctanesulfonic Acid

Used to make fire-fighting foams, in textiles, paper, and leather; in wax, polishes, paints, varnishes, and cleaning products for general use; in metal surfaces, and carpets.

#### IE64 Perfluorooctanoic Acid / PFOA / C8/ Perfluorocaprylic Acid

Used in mixing process for dyes, detergents and personal care products; non-stick cookware and stain- and water-resistant coatings for carpets and fabrics.

Detected in the blood of general populations in the low parts per billion range where single studies have associated it with infertility, higher cholesterol, and thyroid disease. In highly exposed groups, some studies have associated PFOA exposure with birth defects, increased cancer rates, and changes to lipid levels, the immune system and the liver.

#### IE65 Phthalate Mix

Used to make plastics softer and more flexible. Wide spread health concerns. This vial contains Benzyl butyl phthalate, Bis(2-ethylhexyl) adipate, Bis(2-ethylhexyl) phthalate, Dibutyl phthalate, Diethyl phthalate, Dimethyl phthalate and Dioctyl phthalate.

#### IE66 Polychlorinated Biphenyls (PCB) Mixed

A group of chemicals that have been banned but are still found in the environment, electrical equipment, wall coverings, paints and plastic. Have been found in breast milk. This vial contains 2-Chlorobiphenyl, Deca-chlorobiphenyl, 3,3'-Dichlorobiphenyl, 2,2',3,4',5,5',6-Heptachlorobiphenyl, 2,2',3,3',6,6'-Hexachlorobiphenyl, 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl, 2,2',3,3',4,4',5,5'-Octachlorobiphenyl, 2,3',4,5',6-Pentachlorobiphenyl, 2,2',4,4'-Tetrachlorobiphenyl and 2,4,5-Trichlorobiphenyl.

#### IE67 Polyethylene / Polythene / PE

Most common plastic. This vial contains high-density polyethylene (HDPE) and low-density polyethylene (LDPE). Used to make milk bottles, washing up liquid bottles, children's toys, carrier bags, bin liners and industrial bags, Also used extensively for consumer packaging including shrink film and squeezy bottles for food, personal care products, etc.. Also found as carpet backing and in joint replacements.

#### IE68 Polyethylene Terephthalate/ Polyester / PET / PETE

Beverage, food and other liquid containers.Used in synthetic fibers. Trade names include Dacron, Diolen, Tergal, Terylene, Trevira, Cleartuf, Eastman PET, Polyclear, Hostaphan, Melinex and Mylar.

#### IE69 Polylactic acid / Polylactide / PLA

Biodegradable so use likely to increase. Beverage cups, microwavable disposable trays, deli containers, sandwich packaging, medical sutures and stents.

#### IE70 Polymethylpentene

Coating for paper food containers for microwave and conventional ovens; used for gas permeable packaging, autoclavable medical and laboratory equipment, microwave components, and cookware.

#### IE71 Polypropylene/ Polypropene / PP

Second most common plastic. Used for dishwasher-safe and microwavable food containers, drinking straws, yoghurt pots and margarine tubs, confectionery and tobacco packaging. Used for carpets under the trade names of Olefin, Astra, Zylon and Charisma. Other uses include toys, drinking straws, car/automobile interiors, artificial grass, bristles for brushes and brooms, thermal and cold weather sports clothing, and toner for photocopiers and printers.

#### IE72 Polystyrene/ PS

Yoghurt pots, egg boxes, plastic cutlery and foam drink cups; protective packaging and insulation.

#### IE73 Polytetrafluoroethylene / PTFE / Teflon

Used in non-stick cookware, plumbers' jointing tape, and as an additive in lubricants.

#### IE74 Tetrachloroethylene / Perchloroethylene / PCE / Ethylene Tetrachloride/ PERC

A solvent commonly used in dry-cleaning fluid, spot removers, aerosols, shoe polishes and typewriter correction fluid. Also used by car/automobile mechanics. High levels found in breast milk.

#### IE75 Trichloroethylene

A solvent used to remove grease from textiles and metal parts, and in the extraction of vegetable oils. Restrictions on levels in drinking water.

# Industrial & Environment 4 Test Kit

More environmental chemicals including flame retardants, water fluoridation chemicals, some of the toxic substances found in cigarette smoke and Disperse Blue a dark clothing dye known to be highly allergenic.

#### IE 4 76 Acrolein

Primarily used as an intermediate in the synthesis of acrylic acid and as a biocide; may be formed in cigarette smoke, from burning oil (including cooking oil), from the breakdown of certain pollutants in outdoor air, vehicle exhaust fumes, and forest and wild fires. Toxic and is a strong irritant for the skin, eyes, and nasal passages.

#### IE 4 77 Acrylonitrile

In cigarette smoke; used in the manufacture of acrylic and modacrylic fibres; also used as a raw material in the manufacture of plastics; may be released to the air during its manufacture and use; also from landfills, and through incineration of sewage sludge.

#### IE 4 78 Carbon Monoxide / CO

Produced from the partial oxidation of carbon-containing compounds, forming when there is not enough oxygen to produce carbon dioxide, such as when operating a stove or an internal combustion engine in an enclosed space. Natural sources of CO include volcanoes, forest fires, and other forms of combustion. Produced in normal metabolism in low quantities, and is thought to have some normal biological functions.

#### IE 4 79 Chloroform

May be released into the air from a large number of sources related to its manufacture and use, including pulp and paper mills, hazardous waste sites, and sanitary landfills; also formed in the chlorination of water (drinking, waste and swimming pools); chlorinated drinking water releases chloroform when hot water is used in the home.

#### IE 4 80 Decabromodiphenyl Ether / Pentabromophenyl Ether

Flame retardant; used in soft furnishings, some synthetic curtains and the backs of televisions.

#### IE 4 81 Disperse Blue 106 and 124

Two dark blue textile dyes found in fabrics coloured dark blue, brown, black, purple, and some greens; frequently found in acetate and polyester liners of clothing, and in lycra exercise clothing in these colours; also in dark nylon stockings / panty hose. Known to cause dermatitis.

#### IE 4 82 Fluorosilicic Acid / Hexafluorosiliicic Acid / Silicofluoric acid

The most commonly used chemical for water fluoridation.

### IE 4 83 1,2,5,6,9,10-Hexabromocyclododecane / HBCD / HBCDD

A flame retardant; primary application is in extruded and expanded polystyrene foam that is used as thermal insulation in the building industry; also used in upholstered furniture, automobile interior textiles, car cushions and insulation blocks in trucks, packaging material, video cassette recorder housing and electric and electronic equipment.

#### IE 4 84 Hexachlorobutadiene / Hexachloro-1,3-Butadeine / HCBD

Used mainly as an intermediate in the manufacture of rubber compounds; also used in the production of lubricants, as a fluid for gyroscopes, as a heat transfer liquid, and in hydraulic fluids. Small amounts found in the air and in drinking water.

#### IE 4 85 Hydrocarbon Mix

Contains decane, hexadecane, tetratriacontane and pentacontane; the major part of diesel and aviation fuel, part of lubricating oils and anti-corrosive agents.

#### IE 4 86 Indoor Air Pollution Mix

50 chemicals commonly found (and of concern) in indoor air pollution including 2-propanol, n-undecane, styrene, acetone, m-xylene, etc.

#### IE 4 87 Isoprene / 2-methyl-1,3-Butadiene

Produced and emitted by many species of trees into the atmosphere (major producers are oaks, poplars, eucalyptus, and some legumes). Cigarette smoke.

### IE 4 88 Isopropanol / Isopropyl Alcohol

One of the most widely used solvents in the world; also used as a chemical intermediate.

### IE 4 89 n-Butanol / 1-Butanol / Butyl Alcohol

Present in many foods and beverages; a permitted artificial flavourant in the United States; an ingredient in perfumes and used as a solvent for the extraction of essential oils; used in the manufacture of antibiotics, hormones, and vitamins; as a solvent for paints, coatings, natural resins, gums, synthetic resins, dyes, alkaloids, and camphor; acts as a swelling agent in textiles, as a component of hydraulic brake fluids, cleaning formulations, degreasers, and repellents, and as a component of ore floation agents, and of wood-treating systems.

#### IE 4 90 Polycyclic Aromatic Hydrocarbons / PAH Mix

Produced when coal, oil, gas, petrol, wood, garbage, forming small particles in the air. High temperature cooking will form PAHs in meat and in other foods. Cigarette smoke contains PAHs. The United States Environmental Protection Agency has designated 32 PAH compounds as priority pollutant. Exposure linked to decreased lung function, neurological disorders, cancer, heart attacks, low birth weight, premature births and childhood developmental delay.

#### IE 4 91 Potassium Dichromate

Most commonly found in cement and leather; also found in chemicals used to etch/clean glass, photography and photographic screen printing. Common allergen.

#### IE 4 92 **Propylene Dichloride / 1,2-Dichloropropane**

Used as a chemical intermediate in the production of chlorinated organic chemicals, as an industrial solvent, in ion exchange manufacture, in toluene diisocyanate production, in photographic film manufacture, for paper coating, and for petroleum catalyst regeneration. Propylene dichloride is also emitted from landfills.

#### IE 4 93 Quinoline

Used mainly as an intermediate in the manufacture of other products; also used as a catalyst, a corrosion inhibitor, in metallurgical processes, in the manufacture of dyes, as a preservative for anatomical specimens, in polymers and agricultural chemicals, and as a solvent for resins and terpenes. It is also used as an antimalarial medicine. A potential source of very low exposure to quinoline includes the inhalation of ambient air contaminated by emissions from petroleum refining, quenching and coking, and wastewater processing.

- IE 4 94 **Sodium Fluoride** Used in water fluoridation.
- IE 4 95 Sodium Fluorosilicate Used in water fluoridation.

#### IE 4 96 Sodium Sulphite

Used in water treatment and to reduce chlorine levels in pools, and in the pulp and paper industry; used in photographic developing and in the textile industry and the leather trade. Used as a preservative to prevent dried fruit from discolouring and for preserving meats.

#### IE 4 97 Sulphur Dioxide

Major air pollutant, particularly after a volcanic eruption. Can cause breathing difficulty for people with asthma; long-term exposure causes respiratory illness and aggravates cardiovascular diseases; linked to infant death, ischemic stroke, respiratory disease, and premature death. Used as a preservative for dried fruit; used in wine making.

IE 4 98 **3,3',5,5'-Tetrabromobisphenol A / TBBPA / 4,4'-Isopropylidenebis(2,6-dibromophenol)** A flame retardant used in televisions and printed circuit boards; an endocrine disruptor and immunotoxicant; structurally mimics the thyroid hormone thyroxin (T4) and can bind more strongly to the transport protein transthyretin than T4 does, likely interfering with normal T4 activity.

#### IE 4 99 Trihalomethanes Mix

Many trihalomethanes find uses in industry as solvents or refrigerants. THMs are also environmental pollutants, and many are considered carcinogenic. Formed as a by-product predominantly when chlorine is used to disinfect water for drinking.

#### IE 4 100 Vinyl Chloride

Found in cigarette smoke, used to make PVC plastic and vinyl products. Sources of emissions include the discharge of exhaust gases from factories that manufacture or process vinyl chloride, landfills, or evaporation from areas where chemical wastes are stored.

# Interleukins Test Kit 14 vials

Interleukins are substances that are normally produced by leukocytes (white blood cells) and other cells in the body and help the immune system fight infection and cancer.

#### IL01 Interleukin-1

Stimulates the growth and action of immune system cells that fight disease, by participating in the regulation of immune responses, inflammatory reactions, and hematopoiesis (development of mature blood cells). Also helps leukocytes pass through blood vessel walls to sites of infection and causes fever by affecting areas of the brain that control body temperature.

#### IL02 Interleukin-2

Induces the proliferation of responsive T-cells, and acts on some B-cells, via receptor-specific binding, as a growth factor and antibody production stimulant. Linked to pruritus (itching).

#### IL03 Interleukin-3

Regulates blood-cell production by controlling the production, differentiation and function of granulocytes and macrophages, so enhances the immune system's ability to fight tumor cells.

#### IL04 Interleukin-4

Enhances the immune system's ability to fight tumor cells; has an important function in B-cell responses. A key regulator in humoral and adaptive immunity.

#### IL05 Interleukin-5 / Eosinophil Differentiation Factor/ EDF

Regulates eosinophil growth and activation, and thus plays an important role in diseases associated with increased levels of eosinophils, including asthma and allergic rhinitis.

#### IL06 Interleukin-6 / B-Cell Stimulatory Factor-2 /BSF-2

A biomarker for inflammation and chronic disease. Plays an essential role in the final differentiation of B-cells into IGsecreting cells, as well as inducing myeloma/plasmacytoma growth, nerve cell differentiation, and, in hepatocytes, acutephase reactants. Involved in diabetes, atherosclerosis, depression Alzheimer's disease, systemic lupus erythematosus, prostate cancer and rheumatoid arthritis.

#### IL07 Interleukin-7

Enhances the immune system's ability to fight tumor cells. IL-7 is made by cells in the bone marrow, and can stimulate T cells and B cells to grow. Promotes acute lymphoblastic leukemia, T cell lymphoma. Elevated levels of IL-7 have also been detected in the plasma of HIV-infected patients

#### IL08 Interleukin-8 / Neutrophil Chemotactic Factor

Induces chemotaxis in target cells, primarily neutrophils but also other granulocytes, causing them to migrate toward the site of infection. Also induces phagocytosis once they have arrived. Known to be a potent promoter of angiogenesis (growth of new blood vessels from existing ones, and necessary for tumours to grow). Often associated with inflammation (e.g. in gingivitis and psoriasis). If a pregnant mother has high levels, there is an increased risk of schizophrenia in her offspring. High levels have also been shown to reduce the likelihood of positive responses to antipsychotic medication in schizophrenia.

#### IL09 Interleukin-9

Serves as a growth factor for early lymphoid cells of both B- and T-cell lineages. supports IL-2 independent and IL-4 independent growth of helper T-cells.

#### IL10 Interleukin-10 / Human Cytokine Synthesis Inhibitory Factor/ CSIF

Inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF, and GM-CSF produced by activated macrophages and by helper T cells. Mice studies suggest it is an essential immuno-regulator in the intestinal tract.; may be relevant in Crohn's disease.

#### IL11 Interleukin-11 / Adipogenesis Inhibitory Factor / AGIF

Stimulates megakaryocytopoiesis, resulting in increased production of platelets, as well as activating osteoclasts, inhibiting epithelial cell proliferation and apoptosis, and inhibiting macrophage mediator production. May reduce toxicity to the gastrointestinal system resulting from cancer therapy.

#### IL12 Interleukin-12

Enhances the ability of the immune system to kill tumor cells and may interfere with blood flow to the tumor. involved in the stimulation and maintenance of Th1 cellular immune responses, including the normal host defence against various intracellular pathogens, such as Leishmania, Toxoplasma, Measles virus, and HIV. Also has an important role in pathological Th1 responses, such as in inflammatory bowel disease and multiple sclerosis. Administration of IL-12 to people suffering from autoimmune diseases was shown to worsen the autoimmune phenomena. This is believed to be due to its key role in induction of Th1 immune responses.

#### IL 17A Interleukin- 17A

Acts as a potent mediator in delayed-type reactions by increasing chemokine production in various tissues to recruit monocytes and neutrophils to the site of inflammation, similar to Interferon gamma. Has been shown to have a pro-inflammatory role in asthma.

#### IL 23 Interleukin-23

Potently enhances the expansion of T helper type 17 cells, so involved in many of the inflammatory autoimmune responses.

# Invasive Organisms Test Kit <sup>8</sup> vials

Vials representing the essential energy pattern of bacteria, viruses, internal parasites, each group composited in one vial.

# The starting point for these vials was the individual organisms listed overleaf, but each vial represents more than just the sum total of these organisms: they represent the essential energy pattern of each category.

#### Bacteria:

Abundant in air, soil and water. Some are beneficial (e.g. those living in intestine and breaking down food) and some are harmless to humans. Bacteria which are harmful are known as pathogens. Three main categories: cocci (spherical), bacilli (rod-shaped) and spirochaetes or spirilla (spiral-shaped). Bacteria can grow in an inert medium. Susceptible to antibiotics.

#### Chlamydia:

Micro-organisms which are intermediate in size between viruses and bacteria; like viruses they can only multiply by first invading the cells of another life-form; otherwise more like bacteria and are susceptible to antibiotics.

#### **Fungus:**

Simple parasitic life forms which cause illness by direct poisoning, toxic by-products, allergic reactions and/or colonisation of body tissues. Fungi can be divided into moulds which reproduce by sporing and yeasts which reproduce by budding.

#### Parasite:

Any organism living in or on any other living creature and deriving advantage from doing so, while causing disadvantage to the host. Internal parasites are commonly acquired by eating contaminated meat, swallowing eggs on food, contaminating fingers with faecal material or through contact with infected water. Scolex is the part of the tapeworm attached by suckers and hooks to gut wall of host; sometimes called head. Proglottides is the segment-like units of the tapeworm body which, when mature, leave the gut of the primary host in the faeces; they are budded off from the scolex.

The life stages of the roundworm: egg larva adult The life stages of the tapeworm: egg larva encased by body in a cyst adult The life stages of the fluke: egg miracidia redia cercaria metacercaria adult

#### Protozoa:

The simplest, most primitive type of animal, consisting of a single cell. Resistant to antibiotics.

#### **Rickettsia:**

A type of parasitic micro-organism. They resemble bacteria but are only able to replicate by invading the cells of another life form; rickettsiae are parasites of ticks, lice, etc. These animals can transmit the rickettsiae to humans via their bite or contaminated faeces.

#### Viruses:

The smallest known type of infective agent. Outside of living cells viruses are inert. They invade living cells, take them over and make copies of themselves. Not susceptible to antibiotics.

#### **IV1: BACTERIA** Acinetobacter

Actinomyces

Bacillus Megaterium **Bacillus Subtilus** 

Bordetella Pertussis

Borrelia Burgdorferi **Brucella Abortus** 

Clostridium Botulinum

Campylobacter

Clostridium Tetani Clostridium Welchii

Bacilli gram positive and negative

Cocci Gram Positive and Negative

Corynebacterium Diptheriae

Escherichia Coli/ E.Coli

Haemophilus Influenzae

Legonella Pneumophila

Listeria Monocytogenes

Mycobacterium Leprae/ Leprosy

Mycobacterium Tuberculinum

Mycoplasma Pneumoniae Neisseria Gonorrhoea

Pseudomonas Aeruginosa

Mycobacterium Bovis

Neisseria Meningitidis

Staphylococcus Aureus

Streptococcus Agalaciae

Streptococcus Lactis

Streptococcus Mutans

Staphylococcus Epidermidis

Streptococcus Pneumoniae

Streptococcus Pyogenes Streptococcus Viridans

Gardnerella Vaginalis

Helicobacter Pylori

Leptospira

Salmonella

Shigella

Salmonella Typhi Salmonella Paratyphi

- Ancylostoma Caninum
- Ancylostoma Egg
- Ancylostoma Female
- Ascaris Female
- Ascaris Male
- Clonorchis Sinensis
- **Dipylidium Mature & Gravid Proglottides**
- Echinococcus Granulosus
- **Enterobius Vermicularis**
- Fasciloa
- Fasciola Cercaria
- Fasciola Egg
- Fasciola Redia
- Necator Americanus Eggs **Onchocerca Volvulus**
- Paragonimus Westermani Eggs
- Schistosoma Mansoni Adult Female
- Schistosoma Mansoni Caercariae
- Schistosoma Mansoni Egg
- Schistosoma Mansoni Miracidia
  - Taenia Scolex
- Taenia Scolex Immature, Mature & Gravid Pro glottides
- Trichinella Spiralis Female
- Trichinella Spiralis Male
- **Trichuris Trichiura**
- Trichuris Trichiura Egg
- Xenopsylla Cheopsis

## **IV6: PROTOZOA**

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- **Balantidium Coli**
- Entamoeba Histolytica
- Giardia Lamblia
- Leishmani Donovani
- Mixed Protozoa
- Plasmodium Falciparium Plasmodium Vivax
- Trichomonas Vaginalis
- Trypanosoma Brucei

# **IV7: RICKETTSIA**

- Coxiella Burnetii/ Q Fever
- Rocky Mountain Spotted Fever

## **IV8: VIRUSES**

- Coxsackie
- Cytomegalovirus
- Epstein-Barr
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Herpes Simplex 1
- Herpes Simplex 2
  - Herpes Zoster/ Shingles
  - HIV
  - Influenza (Shangdong A, Singapore A,
    - Panama B, Sichnan A, Beijing A, Yamagata B)
  - Measles
  - Mumps
    - Papilloma Human Virus
- Polio
  - **Respiratory Syncytial Virus**
  - Rubella/ German Measles
  - Smallpox
  - Varicella Zoster/ Chickenpox
    - Yellow Fever Virus

- **IV5: PARASITES: EXTERNAL** Cimex
- Culex Imago Female
- Pediculus Humanus Capitis
- Xenopsylla Cheopsis

- Trichophyton Rubrum
- Trichophyton Terrestre

**IV3: FUNGI** Aflatoxin

Vibrio Cholera

Yersinia Pestis

**IV2: CHLAMYDIA** 

- Candida
- Epidermorphyton Flocossum
- Microsporum Glypsium

Chlamydia Trachomatis

Chlamydia Psittaci

- - Aspergillus Fumigatus
- Aspergillus Niger

# Lectins Test Kit 7 vials

Lectins are found in plants and milk. Lectins are sticky and so interact with the lining of the throat and the digestive tract when we eat them. 7 vials / ampules for use in testing by AK practioners and other kinesiologists, bioresonace practitioners, etc.

Lectins are carbohydrate-binding proteins (not to be confused with glycoproteins, which are proteins containing sugar chains or residues). Lectins in plants are a defence against microorganisms, pests, and insects. If an animal eats a lot of the plant it gets digestive disturbances when the sticky lectins bind to the lining of the digestive system. Lectins may also have evolved as a way for seeds to remain intact as they passed through animals' digestive systems, for later dispersal. Lectins are resistant to being broken down as part of the digestive process in humans.

Foods with high concentrations of lectins, such as beans, cereal grains, seeds, nuts, and potatoes, may be harmful if consumed in excess in uncooked or improperly cooked form. Soaking, sprouting and fermenting helps to break down lectins in food, but much modern food is cooked as quickly as possible, so does not break down the lectins before they are ingested. Some people are also more sensitive to lectins than others.

Because we don't digest lectins, we often produce antibodies to them. Almost everyone has antibodies to some dietary lectins in their body. This means our responses vary. Some individual can have full blown allergic reactions. Certain foods can become intolerable to someone after an immune system change or the gut is injured from another source.

Adverse effects may also include nutritional deficiencies (through damage to the villi in the small intestine). Lectins may also cause leptin resistance, which may translate into diseases, particularly weight loss issues in individuals who have high levels of leptin.

Lectins may also be responsible in part for 'leaky gut syndrome'. Plant lectins have been found attached to other organs indicating that some may get through the gut wall. Lectins appear to aggravate existing inflammatory such as rheumatoid arthritis.

References (all web based ones accessed 20th November 2013):

Wikipedia entry on Lectins

Do dietary lectins cause disease? British Medical Journal 1999; 318 (http://www.ncbi.nlm.nih.gov/pmc/ articles/PMC1115436/)

http://www.marksdailyapple.com/lectins/#axzz2lAyL7h00

http://www.precisionnutrition.com/all-about-lectins

http://www.vrp.com/digestive-health/digestive-health/lectins-their-damaging-role-in-intestinal-health

- LC 01 Lectins from Dairy
- LC 02 Lectins from Egg
- LC 03 Lectins from Fruit
- LC 04 Lectins from Nightshade
- LC 05 Lectins from Nuts
- LC 06 Lectins from Soya Bean
- LC 07 Lectins from Wheat

# Lyme Plus Test Kit 61 vials

14 different babesia species, 24 different bartonella species, 21 different borrelia species, 2 ehrlichia.

Some of the species included have only ever been documented in animals, but because differentiation of the various species is time-consuming and not always carried out when people present with symptoms, these species have been included.

There is some indication of countries where a particular species has been found, but this does not mean that it is only present in the countries listed.

#### **Cat Scratch Disease**

Lymph nodes, especially those around the head, neck, and upper limbs, become swollen. Additionally, a person with CSD may experience fever, headache, fatigue, and a poor appetite.

#### Lyme Disease

Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system.

#### **Relapsing Fever**

Relapsing or recurring episodes of fever, often accompanied by headache, muscle and joint aches and nausea.

#### LY01 Anaplasma Phagocytophilum / Ehrlichia Phagocytophilum

Causes human granulocytic anaplasmosis. Symptoms may include fever, severe headache, muscle aches (myalgia), chills and shaking, similar to the symptoms of influenza. GI symptoms occur in less than half of patients and a skin rash is seen in less than 10% of patients. It is also characterized by thrombocytopenia, leukopenia, and elevated serum transaminase levels in the majority of infected patients.

#### LY02 Babesia Bigemina

North and South America, Southern Europe, Africa, Asia and Australia

#### LY03 Babesia Bovis

Infects cattle and occasionally humans. Eradicated from the United States by 1943, but is still present in Mexico and much of the world's tropics.

#### LY04 Babesia Canis

#### LY05 Babesia Cati

#### LY06 Babesia Divergens

Has been found in Turkey, Spain, Canary Islands, Tunisia, Austria, France and Norway. Infections have a much higher fatality rate (42%) than with other strains and present with the most severe symptoms: haemoglobinuria followed by jaundice, a persistently high fever, chills and sweats. If left untreated, can develop into shock-like symptoms with pulmonary oedema and renal failure.

#### LY07 **Babesia Duncani** Can infect humans.

Can infect numans.

LY08 Babesia Felis

LY09 Babesia Gibsoni

LY10 Babesia Herpailuri

#### LY11 Babesia Jakimoni

#### LY12 Babesia Major

LY13 **Babesia Microti / Theileria Microti** Common in US. For 25% of cases in adults and half of cases in children, the disease is asymptomatic or mild with flu-like symptoms. Symptoms are characterized by irregular fevers, chills, headaches, general lethargy, pain and malaise.

- LY14 Babesia Ovate
- LY15 Babesia Pantherae
- LY16 Bartonella Alsaticca
- LY17 Bartonella Arupensis

#### LY18 Bartonella Bacilliformis

Causes Carrion's disease (Oroya fever, Verruga peruana).

#### LY19 Bartonella Berkhoffii

Becoming more important particularly for immunocompromised individuals.

- LY20 Bartonella Birtlesii
- LY21 Bartonella Bovis
- LY22 Bartonella Capreoli

#### LY23 Bartonella Clarridgeiae

Found in domestic cats and can give humans Cat Scratch Disease

LY24 Bartonella Doshiae

May cause Cat Scratch Disease.

#### LY25 Bartonella Elizabethae / Rochalimaea Elizabethae

Endocarditis. Particularly among homeless IV drug users.

#### LY26 Bartonella Grahamii

Endocarditis and Neuroretinitis

# LY27 Bartonella Henselae / Rochalimaea Henselae

Can cause bacteremia, endocarditis, bacillary angiomatosis, and peliosis hepatis. Causes cat-scratch disease.

#### LY28 Bartonella Koehlerae

Human infection may be from infected cats.

#### LY29 Bartonella Melophagi

Discovered in 2007 and known to infect humans.

#### LY30 Bartonella Muris

#### LY31 Bartonella Peromyscus

#### LY32 Bartonella Quintana / Rochalimaea Quintana / Rickettsia Quintana

Causes trench fever. Can start out as an acute onset of a febrile episode, relapsing febrile episodes, or as a persistent typhoidal illness. Commonly seen are maculopapular rashes, conjunctivitis, headache and myalgias, with splenomegaly being less common. Most patients present with pain in the lower legs (shins), sore muscles of the legs and back, and hyperaesthesia of the shins.

#### LY33 Bartonella Rochalimae

Carrion's disease-like symptoms.

#### LY34 Bartonella Schoenbuchii

LY35 Bartonella Talpae

LY36 Bartonella Taylorii

LY37 Bartonella Tribocorum

# LY38 Bartonella Vinsonii / Rochalimaea vinsonii

On increase. Causes endocarditis, arthralgia, myalgia, headaches and fatigue.

#### LY39 Bartonella Washoensis

May cause fever and myocarditis.

#### LY40 Borrelia Afzelii

Has been found in Europe, USA, Singapore, Australia and New Zealand.

#### LY41 **Borrelia Berbera** Found in Algeria, Tunisia and Libyia.

LY42 **Borrelia Burgdorferi** Found in USA, Europe, Australia, New Zealand

# LY43 Borrelia Carteri

Uncommon but has been found in humans in India.

#### LY44 **Borrelia Caucasica** Found in Europe and Asia.

#### LY45 Borrelia Duttonii

Found in Europe and Africa. Causes Central African relapsing fever.

#### LY46 Borrelia Garinii

Has been found in Europe.

#### LY47 Borrelia Hermsii

Associated with relapsing fever. The primary cause of tick-borne relapsing fever in North America. Also found in Europe.

#### LY48 Borrelia Hispanica

Found in Spain, Portugal, Morocco and central Africa.

#### LY49 Borrelia Kochis

#### LY50 Borrelia Miyamotoi

Symptoms of relapsing fever. Found in Russia, Japan, Europe and North America.

#### LY51 Borrelia Morganii

LY52 **Borrelia Novyi** Found in the Americas.

LY53 **Borrelia Parkeri** Human infection.

LY54 **Borrelia Persica** Found in Europe and Asia.

#### LY55 **Borrelia Recurrentis** Found in England, Ireland, USA, Canada, Mexico, Central and South America, central Asia, Africa, and around the Mediterranean.

LY56 **Borrelia Tillae** Found in Europe.

#### LY57 **Borrelia Turicatae** Found in Europe.

LY58 **Borrelia Valaisiana** Causes Lyme's disease.

#### LY59 **Borrelia Venezuelensis** Causes relapsing fever in central and south America.

#### LY60 Borrelia Vincentii

Exists normally in the human mouth in low concentrations and safe proportions. Causes severe ulcerating gingivitis (trench mouth); typically found in those with poor oral hygiene but can also occur as a result of stress, cigarette smoking and poor nutrition; also can be found in those with serious illnesses.

#### LY61 Ehrlichia Chaffeensis / Human Monocytic Ehrlichiosis

Causative agent of human monocytic ehrlichiosis.

# Medicinal Herbs Test Kit 50 vials

50 common medicinal herbs including Milk Thistle, Agnus Castus, Korean Ginseng, Golden Rod, Vervain . There is some overlap with the Medicinal Herbs For Women Test Kit, but the price of the two kits reflects this.

#### MH01 Agnus Castus / Chaste Berry/ Monks' Pepper

Vitex agnus castus Hot flushes, and for premenstrual syndrome, period pains and teenage acne. Promotes fertility.

#### MH02 Agrimony

#### Agrimony eupatoria

Astringent tonic for digestive system. Pain especially of the urinary system. Sore throat and gums. Used as an ointment for bruises and wounds.

#### MH03 Berberis /Barberry

Berberis vulgaris Digestive problems; gentle liver tonic and laxative.

#### MH04 Bearberry / Uva-Ursi

Arctostaphylos uva-ursi Cystitis and urinary tract infections.

#### MH05 Burdock

Arctium lappa Liver and skin problems. Hot flushes.

#### MH06 Cascara Segrada Bark

Rhamnus purshiana Chronic constipation.

### MH07 Chamomile

Matricaria recutita and Anthemis nobilis Relaxes nerves and eases digestive complaints. Good for insomnia, skin rashes and burns, sore throats and menstrual cramps.

#### MH08 Chickweed

Stellaria media Cuts, wounds, itching and skin irritation.

#### MH09 Cinnamon

Cinnanomum sp. May enhance insulin sensitivity; digestive stimulant, may reduce menstrual bleeding.

#### MH10 Cleavers / Clivers

Galium aparine Mild diuretic and blood and lymph cleanser. Used for psoriasis and other skin complaints, swollen glands and bladder infections.

#### MH11 Cramp Bark

Viburnum opulus For muscular tension, spasms and cramp. Menstrual cramp and excessive blood loss during periods.

#### MH12 Dandelion Root & Leaf

Taraxacum officinale

Strengthens liver function and stimulates digestion. Safe diuretic for fluid retention.

#### MH13 Devil's Claw

Procumbens harpagophytum Anti-inflammatory so useful for arthritis, sports injuries, fibromyalgia and tendonitis.

### MH14 Dong Quai (as tincture)

Angelica sinensis Hot flushes and menstrual cramps.

#### MH15 Echinacea / Eastern Purple Coneflower

Echinacea angustifolia and E. purpurea Stimulates the immune system and wards off coughs, colds and other infections. Sinusitis, thrush, urinary tract infection and middle ear infections.

#### MH16 Eucalyptus Leaves

Eucalyptus globulus

Anti-microbial and an expectorant. Gingivitis, fevers and infections, especially of the respiratory system.

#### MH17 Eyebright

Euphrasia officinalis Mucus membrane problems, catarrh, sinusitis, hay fever, conjunctivitis and blepharitis.

#### MH18 Feverfew

Tanacetum parthenium Migraine headaches. Helps digestion. Pain relief including period pains.

#### MH19 Ginkgo Biloba

#### Ginkgo biloba

Aids memory and concentration. May slow down the progress of Alzheimer's disease; lessen depression and anxiety in the elderly. Coldness in the extremities (Raynaud's disease). Tinnitus, dizziness (vertigo), leg cramps and chilblains.

#### MH20 Ginseng Korean

#### Panax ginseng Combats stress, boosts vitality, enhances immunity. May lower blood sugar levels.

#### MH21 Ginseng Siberian

Eleutherococcus Senticosus

Reduces stress and fatigue. Enhances immune function, reduces cortisol levels and inflammatory response, and it promotes improved cognitive and physical performance. A female tonic useful for the menopause.

#### MH22 Golden Rod

Solidago Virgaurea Upper respiratory problems, sinusitis, hay fever, influenza, flatulence and cystitis.

### MH23 Golden Seal

Hydrastis canadensis Mouth ulcers, cold sores and eye infections. Helps digestion and the immune system.

#### MH24 Hawthorne Berry

Crataegus oxyacantha Heart tonic - high and low blood pressure, angina and anxiety.

#### MH25 Horse Chestnut

Aesculus hippocastanum Varicose veins, haemorrhoids, phlebitis and poor blood circulation.

#### MH26 Hyssop

Hyssopus officinalis Common cold, bronchitis, chronic catarrh.

#### MH27 Liquorice

Glycyrrhiza glabra Benefits the adrenal glands. Catarrh, bronchitis and coughs, abdominal colic. Hormonal tonic herb.

#### MH28 Marshmallow Leaf & Root

Althaea officinalis Soothes mucous membranes, especially those of the digestive and urinary system.

#### MH29 Milk Thistle / Silymarin

Silybum marianum Strengthens and repairs the liver. Aids fat metabolism. Helps prevent gall stones. Skin diseases.

#### MH30 Mistletoe

Viscum album High blood pressure, nervous tachycardia and headaches.

#### MH31 Mugwort

Artemesia vulgaris Digestive stimulant and can help depression and tension. Menstrual problems.

#### MH32 Nettle

Urtica dioica Inflamed joints and arthritis. Eczema and hay fever. Iron deficiency.

#### MH33 Passion Flower

Passiflora incarnata Nerve pains, shingles and insomnia. Calming sedative.

#### MH34 Pau D'Arco

Tabebuia imposignosa Anti-bacterial, anti-fungal and anti-viral particularly for nose, mouth, throat and digestive system. Immune tonic.

#### MH35 Peppermint

Mentha piperata Digestive relaxant. Irritable bowel and colicky pains.

#### MH36 Plantain Leaf

Plantago major and Plantago lanceolata Anti-infective, anti-inflammatory, anti-histamine - for cuts, bites, stings and wounds.

#### MH37 Raspberry Leaf

Rubus lidaeus Diarrhoea, mouth ulcers, bleeding gums and sore throats. Uterine tonic for pregnancy or heavy periods.

#### MH38 Red Clover

Trifolium pratense Eczema and psoriasis, coughs, bronchitis, swollen lymph glands. Menopausal hot flushes.

#### MH39 Saw Palmetto

Sabal serrulata, Serenoa repens Enlarged prostate, male pattern baldness, impotence, frequent night time urination.

MH40 **Senna Pods** Cassia angustifolia Constipation.

#### MH41 Skullcap

Scutellaria lateriflora Nervous tension including premenstrual tension. Nervous system tonic.

#### MH42 Slippery Elm Bark

Ulma fulva Digestive problems such as gastritis, colitis and ulcers.

#### MH43 St Johns Wort / Hypericum

Hypericum perforatum Depression and anxiety disorders, seasonal effective disorder. Irritable bowel syndrome, migraine, insomnia, cramps and spasms. Viral infections.

#### MH44 Valerian

Valeriana officinalis Restlessness, insomnia, migraine, pain, stomach cramps and colic. A muscle relaxant.

#### MH45 Vervain

Verbena officinalis Depression. Early stages of fevers. Hot flushes. Nerve pains.

#### MH46 Walnut: Leaves, Bark And Hulls

Juglans regia Skin problems including herpes and eczema. Anti fungal. Gentle laxative.

#### MH47 White Willow Bark

Salix alba Chronic pain and arthritis. May lower fevers. If have aspirin allergy, may also be allergic to this herb. MH48 **Wild Yam** 

Dioscorea villosa Menstrual cramps and endometriosis. Reduces

inflammation. Digestive colic and pain.

#### MH49 Yellow Dock

Rumex crispus Liver and lymph cleanser. Gentle laxative.

#### MH50 Yarrow

Achillea millefolium Menstrual problems especially heavy periods. Circulatory system remedy. Fever, flu and colds.

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# Medicinal Herbs for Women Test Kit

25 vials

Herbs specifically for women including Black Cohosh, Angelica, Shepherds Purse and Mugwort. There is some overlap with the Medicinal Herbs Test Kit, but the price of the two kits reflects this.

#### MHW1 Angelica

Angelica archangelica Pelvic congestion. PMS. Low oestrogen. Warming digestive bitter tonic. Urinary and vaginal irritation.

#### MHW2 Black Cohosh

Cimicifuga racemosa

Painful periods, low oestrogen,menopausal hot flushes, vaginal dryness, PMS with irritability. Can cause headaches and liver problems - low doses only.

#### MHW3 Butchers Broom

Ruscus aculeatus Painful & heavy periods, menopause, PMS, mastalgia.

#### MHW4 Chaste Berry / Agnus Castus

Vitex agnus castus Regulates oestrogen/progesterone balance. PMS, irregular menses, menopausal problems, infertility.

#### MHW5 Cinnamon

Cinnamomum spp. Painful periods, fibroids, endometriosis.

#### MHW6 Cramp Bark

Viburnum opulus Painful and heavy periods. Ovulation pain. Endometriosis. PCOS. Uterine congestion.

#### MHW7 Damiana

Turnera aphrodisiaca Low libido especially in menopause, inflammatory uterine problems. PMS. Fibrocystic breasts. Bladder tonic.

#### MHW8 Dong Quai

Angelica sinensis

General female tonic. Painful periods, uterine congestion, uterine tonic, PMS. Not to be taken while menstruating or with heavy periods.

#### MHW9 Fenugreek

Trigonella foenum-graecum Oestrogenic, gentle laxative, warming digestive. Benefits lactation. Aphrodisiac.

#### MHW10 Jasmine

Jasminium grandiflorum Uterine congestion. Heavy and painful periods. Aphrodisiac. PMS. Stress, insomnia, anxiety.

#### MHW11 Lady's Mantle

Alchemilla vulgaris Irregular, painful or heavy periods. Fertility. Menopause.

#### MHW12 Liquorice

Glycyrrhiza glabra Normalises and regulates hormone production. Adrenal tonic. Not with high blood pressure.

#### MHW13 Motherwort

Leonorus cardiaca Uterine stimulant and sedative. PMS. Menopausal hot flushes, palpitations.

#### MHW14 Mugwort

Artemisia vulgaris Uterine stimulant. Restores menstrual cycle. Liver congestion. Warming digestive bitter.

#### MHW15 Oats

#### Avena sativa

Fatigue, stress, anxiety, depression, insomnia, PMS. Lactation.

#### MHW16 Paeony

Paeonia lactiflora Uterine congestion. Heavy and painful periods. PMS. Menopausal hot flushes.

#### MHW17 Pasque Flower

Anemone pulsatilla

Small doses only. Not long term use. Painful periods. PMS with depression. Menopausal anxiety, hot flushes.

#### MHW18 Raspberry Leaf

Rubus idaeus Uterine tonic. Use in pregnancy and childbirth. Nutritional especially calcium and iron. Heavy periods.

#### MHW19 Sage

Salvia officinalis

Low oestrogen, menopausal hot flushes, PMS with fatigue and irritability, promotes and regulates menstruation. Can cause headaches - low doses only.

#### MHW20 Shatavari

Asparagus racemosus Uterine tonic. Infertility. Improves lactation. Menopausal hot flushes, irritability and dryness.

#### MHW21 Shepherds Purse

Capsella bursa pastoris Heavy periods. Post partum bleeding.

#### MHW22 Siberian Ginseng

Eleutherococcus senticosis Balances hormones, regulates menstruation, infertility, fatigue, stress.

#### MHW23 Vervain

Verbena officinalis Relieves tension and pain – uterine, headaches, nerves. Promotes menstruation and lactation. Menopausal hot flushes especially with stress.

#### MHW24 Wild Yam

Dioscorea villosa Hormone balancing. Menstrual problems, infertility, menopause, endometriosis.

#### MHW25 Yarrow

Achillea millefolium Heavy and painful periods. Post partum bleeding.

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# Metals & Minerals Test Kit 32 vials

Vials representing minerals and metals that people encounter in food a a and the environment.

(This is an updated kit in 2018 & replaces what was the Common Metals Test Kit.)

Code	Name	Food Sources	Non-Food Sources	Possible Deficiency	Toxicity
CE 01	Aluminium		aluminium cooking pans; aluminium foil; table salt & baking powder; aluminium cans; antacids; bleached flour; mains water treatment (aluminium sulfate); some food additives; deodorants; acid rain leaches aluminium out of the soil and into the ground water.		Contact dermatitis; skeletal demineralization; slow learning; interfer- ence with calcium and phosphorus metabolism, neurofibrillary tangles in the brain.
CE 02	Arsenic		Wood preservative; pesticide; leather, termite treated lumber, rat poisoning, pesticides, herbicides, pigments. Drink- ing water in areas where there are arsenic deposits (More than 140 million people worldwide and 4 million Americans chronically ingest arsenic in their drink- ing water). High levels may be found in rice, as a result of water used in growing the crop, being contaminated with arsenic from arsenic-based-pesticides even though use may have been stopped many years ago)		Edema of face and eye- lids; generalised itching; sore mouth; inflamma- tion of the eyes and nasal membranes; loss of ap- petite; nausea; vomiting; diarrhoea; dry skin; loss of hair and nails; may reduce intelligence in children. There are also well-documented risks of cancer, heart disease, and reduced lung func- tion; may lead to stem cell dysfunction that impairs muscle healing and regeneration.
CE 03	Beryllium		Light structural material; beryllium oxide is used in ceramics, naturally found in tobacco; some dental alloys.		Reduces stores of magne- sium; reduces organ func- tion; shortness of breath; coughing; lung inflamma- tion; tinnitus.
CE 04	Boron		Fiberglass (insulation), polymers, ce- ramics, fertilizer, insecticides, laundry detergent.	Arthritis, al- lergies, weak muscles, low testosterone, brain health.	Reproductive infertility, eye, nose, and throat irritation.
CE 05	Cadmium		Cigarette smoke, galvanised iron; pesti- cides; plastics; fertilisers; tyres; plating; component in alloys and solders; PVC sta- biliser, pigments, paints, pottery. Cadmi- um from industrial waste can leach back into soil and water and isn't degraded and so enters the food chain.		Disrupts the transport of the essential metals manganese and zinc into and out of cells; anaemia; kidney damage; probably carcinogenic; high blood pressure; lung damage; atherosclerosis; leg pain in children & adults; arthritis; Alzheimer's disease.

CE 06	Calcium	Dairy products, eggs, canned fish with bones (salmon, sardines), green leafy veg- etables, nuts, seeds, tofu, thyme, oregano, dill, cin- namon.	Preparation of other metals; calcium oxide important in chemical industry; present in hard water.	Reduction in peak bone mass; in- creased risk of osteopo- rosis in later life; nerve sensitivity; insomnia; chronic depression; synthesis and release of neuro-trans- mitters.	Depressed nerve func- tion, drowsiness, extreme lethargy, calcium depos- its, kidney stones.
CE 07	Chlorine	Table salt (as sodium chloride)	Manufacture of chemicals, plastics, paper, purification of water and sewage. Sodium chloride used to de-ice roads.		
CE 08	Chromium	Broccoli, grape juice (es- pecially red), meat, whole grain products	Dental work; metal plating & anodizing aluminium; stainless steel; hip replace- ments; leather tanning; paints; dyes; explosives; cement.	Diabetes; hypoglyce- mia; alcohol intolerance; irritability; weakness.	Lung disease, anaemia, cerebral oedema, ec- zema, headaches gastric ulcers.
CE 09	Cobalt		Manufacture of tungsten carbide; hip replacements	Anaemia.	Goitre; hypothyroidism; heart failure; tremors; polycythemia.
CE 10	Copper	Liver, seafood, oysters, nuts, seeds; some: whole grains, legumes	Copper water pipes (particularly in soft water areas); some medicines; pesticides; fungicides; blood copper levels raised by the contraceptive pill; brake linings; wir- ing; some contraceptive devices; dental amalgam; coins, algicides in hot tubs.	Rheumatoid arthritis; cardiovascu- lar disease; impaired immune system; af- fects bone & blood formation in infants; pos- sible role in cardiovascu- lar disease.	Rheumatoid arthritis; cardiovascular disease; gastro-intestinal irrita- tion (similar to deficiency signs). Zinc deficiency symptoms.
CE 11	Gold		Dental work; jewellery; gold salts for treating rheumatoid arthritis.		Mouth ulceration; itching; eczema; sebor- rheic dermatitis; alopecia; inflamed gums; gastritis; colitis; blood abnormali- ties; kidney damage (from the effect of gold salts).
CE 12	lodine	Seaweed, grains, eggs, iodised salt		Goitre, reduced growth.	Excess salivation, sneez- ing, conjunctivitis, headaches, laryngitis, bronchitis, skin rashes; low sperm count.

CE 13	Iron	Meat, seafood, nuts, beans, dark chocolate	Metal for building; steel, toner for photo- copiers and printers, food additive, stain- less steel, cast iron cookware.	Anaemia; fa- tigue; crack- ing at corner of mouth; recurrent mouth ulcers; sore tongue; poor hair growth; brittle nails; generalized itching.	Abdominal pain; arthritis; loss of libido; damage to liver, heart and pancreas; people with certain neu- ro- degenerative disorders such as Parkinson's dis- ease and dementia show excessive accumulation of iron in the brain.
CE 14	Lead		Leaded petrol fumes; old water pipes; leaded paint; lead plumbing; solder; improperly glazed pottery; cigarette ash; pewter; lead crystal ware.		Loss of appetite; con- stipation; headache; weakness; blue or black line on gums; anaemia; irritability; vomiting; poor co- ordination; unsteady gait; visual disturbances; delirium; paralysis; kidney failure; mainly deposited in bones and teeth.
CE 15	Magnesium	Spinach, legumes, nuts, seeds, whole grains, peanut butter, avocado	Present in hard water; alloys; batteries; glass; ceramics; fillers; flocculating agents; magnesium sulphate used in sugar refin- ing.	Muscle dysfunction; irritability & tension; fatigue; pre- menstrual syndrome; apathy.	Muscle weakness; fatigue; sleepiness; hyper- excitability.
CE 16	Manganese	Grains, legumes, seeds, nuts, leafy vegeta- bles, tea, coffee	Textile bleaching, glass manufacture, fertilizers, compounds used in unleaded petrol and pesticides, pottery glazes.	Joint pains; dizziness; schizo-phre- nia.	Lethargy; involuntary movements; impairment of voluntary movements; changes in muscle tone.
CE 17	Mercury		Dental amalgam; pesticides; fungicides; cystitis from coal- burning power stations, contaminated fish, vaccines, volcanic emissions, vaccines.		Tremor; muscle instabil- ity; sensory disturbances; gastro-intestinal symp- toms; dermatitis; liver and kidney damage; anaemia; mental deterioration; blue line on gums.
CE 18	Molybde- num	Legumes, whole grains, nuts	Compounds used in lubricants.	Irritabil- ity; irregular heart beat; dental caries; male sexual impotence; cancer of the oesophagus, works as an antioxidant.	Gout; increased urinary excretion of copper.

CE 19	Nickel		Stainless steel; water boiled in a kettle with an element; clasps; jewellery; spec- tacles; buckles; keys; coins; diesel fumes; can be in flour because of milling; a cata- lyst for hydrogenating vegetable oils.	May activate certain enzymes and play a role in stabilizing chromosom- al material in cell nuclei but at the moment no known diseases are associated with a nickel deficiency.	May be a factor in lung cancer; frontal head- aches; vertigo; nausea; vomiting; chest pain; cough. Dermatitis from skin contact with nickel in sensitive people.
CE 20	Palladium		Road dust from catalytic converters; dental work; electrical components.		Possibly carcinogenic.
CE 21	Phosphorus	Red meat, dairy foods, fish, poul- try, bread, rice, oats.		Debility; loss of appetite; weakness; bone pain; tingling sensations; tremor; ir- ritability.	Prevents absorption of iron, calcium, magne- sium & zinc; diarrhoea; calcification of soft tis- sues.
CE 22	Platinum		Jewellery, dental fillings, pacemakers, to- bacco, road dust from catalytic converters, LCDs, chemotherapy agents; high quality glassware.	Platinum compounds have anti- tumor activ- ity.	Platinum salts can cause DNA alterations, cancer, allergic reactions of the skin and the mucous membranes, damage to organs (such as intes- tines, kidneys and bone marrow) and hearing damage.
CE 23	Potassium	Sweet potato, tomato, potato, beans, lentils, dairy products, seafood, banana, prune, carrot, orange		Hypo-kalae- mia; can be caused by diarrhoea, medications like furose- mide and steroids, dial- ysis, diabetes insipidus, hyper-aldo- steronism, hypomagne- semia, and shortage in the diet.	Hyperkalaemia; usually no symptoms; occasion- ally when severe results in palpitations, muscle pain, muscle weakness, or numbness.
CE 24	Selenium	Brazil nuts, seafoods, organ meats, meats, grains, dairy products, eggs	Anti-dandruff shampoos; steel and glass additive.	Possible links with some forms of cancer & development of coro- nary heart disease; premature ageing.	Hair loss, nail changes and loss, fatigue, irritabil- ity, nausea, gastroin- testinal problems, joint inflammation, "garlic breath", dental caries; skin depigmentation; ir- ritability.

CE 25	Silicon		Granite dust; sand, cement, porcelain, semiconductor electronics; ingredient in some toothpastes.	Poor skin, nails, hair and bone density. Needed for synthesis of elastin and collagen, of which the aorta contains the greatest quantity in the human body.	Inhalation of crystalline silica dust may lead to silicosis, an occupational lung disease marked by inflammation and scarring in the form of nodular lesions in the upper lobes of the lungs.
CE 26	Silver		Dental amalgam; jewellery; food color- ing (E174); electrical components; silver compounds used in photography.		Argyria (blue-gray/ashen gray darkening of the eyes, nose, throat, skin and nasal septum), kid- ney damage.
CE 27	Sulphur / Sulfur		Natural gas, petroleum, fertilizer, insec- ticides, matches, wood pulping, rubber vulcanisation, products for treating acne, dandruff, psoriasis etc.	Detoxifica- tion, proper insulin function, Vitamins B1 and B7 activation, mitochondri- al function.	Digestive issues, flatu- lence, hives, fatigue.
CE 28	Thallium		Found in association with potassium- based minerals in clays, soils, and granites; by-product of zinc & lead production; some glass; jewellery; dyes; pigments;elecronics; recreational drug contaminant.		Polyneuritis; fatigue; weight loss; possibly re- duced immunity; leg pain in adults; arthritis; MS; Alzheimer's; pepolyneu- ritis; fatigue; weight loss; possibly reduced immu- nity; leg pain in adults; arthritis; MS; Alzheimer's disease; probably carci- nogenic.
CE 29	Tin		Dental amalgam; canning; solder in iron & copper pipes; compounds used in fungi- cides and glass coatings.		Nausea; colic; headache; weakness; fever; muscle pain; joint pain; tinnitus.
CE 30	Titanium		Dental work; surgical metal in hip re- placements etc.; jewellery; sunscreen, filler in many prescription and OTC medi- cines, cosmetics (as titanium dioxide).		Possible effects on re- spiratory system and the brain; may be carcino- genic.
CE 31	Zinc	Oysters, red meat, poultry, nuts, whole grains, dairy products	Galvanised iron; brass; solder; die-casting; tires; zinc oxide is used in paints, rubber, textiles, sunscreens and plastics.	Persistent leg ulcers & pressure sores; red, greasy skin on face; skin problems, poor hair growth; dan- druff; night blindness; brittle nails; white spots on nails.	Impaired copper & iron absorption; gastro-intes- tinal disturbances; mask- like fixed expression; dif- ficulty in walking; slurred speech; hand tremor; involuntary laughter.
CE 32	Zirconium		Dental implants, nuclear power, ceram- ics, glassware, antiperspirants, skin lotion, synthetic dyes, etc.		Pulmonary fibrosis, general pulmonary issues, granulomata.

# Mycotoxins Test Kit 27 vials

*Mycotoxins are produced by molds. One mold species may produce many different mycotoxins, and the same mycotoxin may be produced by several species.* 

Mycotoxins have the potential for both acute and chronic health effects via ingestion, skin contact, and inhalation. These toxins can enter the blood stream and the lymphatic system. They inhibit protein synthesis, damage macrophage systems, inhibit particle clearance of the lung, and increase sensitivity to bacterial endotoxin.

There is evidence that they can cause cancers, kidney damage, gastrointestinal disturbances, reproductive disorders and suppression of the immune system.

#### MT01 Aflatoxins

#### Produced by Aspergillus

Symptoms include anorexia, lethargy, muscle weakness, liver problems (haemorrhages, necrosis and cancer) and engorged kidneys.

#### MT02 Alternariol

#### Produced by Alternaria

A toxic metabolite of the Alternaria fungi. Naturally occurs on fruits, vegetables, and cereals, such as apples, tomatoes, and wheat. Inhibited by light. Highly toxic. May be mutagenic.

#### MT03 Altertoxin

Produced by Alternaria

#### MT04 Brevianamide

Produced by Aspergillus sp. (particularly Aspergillus ustus); Penicillium sp. Causes inflammatory response in lung cells.

#### MT05 Chaetoglobosin A,B,C

Produced by Chaetomium, Penicillium discolor Found in water-damaged houses and in air-conditioning systems.

#### MT06 Citreoviridin

Produced by Aspergillus terreus, Penicillium toxicarium, Penicillium ochrosalmoneum It is believed to be the cause of the acute cardiac Beri-Beri disease.

#### MT07 Citrinin

Produced by Aspergillus carneus, Penicillium citrinum, Penicillium expansum, Penicillium verrucosum Occurs mainly in stored grains, but also in other plant products such as beans, fruits, fruit and vegetable juices, herbs and spices, and also in spoiled dairy products; the cause of yellow rice disease in Japan. Has been shown to result in enlarged kidneys and livers in young broiler chicks.

#### MT08 Cladosporic Acid

Produced by Cladosporium

#### MT09 Cyclopiazonic Acid

Produced by Aspergillus flavus, Aspergillus versicolor, Penicillium camemberti, Penicillium commune, Penicillium griseofulvum, Penicillium palitans

#### MT10 Cytochalasin

Produced by Aspergillus clavatus, Bioploaris, Phoma, Zygosporium Inhibits cellular processes such as cell division,

#### MT11 Diplodiatoxin

Produced by Diplodia

#### MT12 Fumonisins

Produced by Fusarium moniliforme Found in wheat and maize. Also to a lesser extent in rice, sorghum and navy beans. Implicated in oesophagal cancers.

#### MT13 Gliotoxin

Produced by Penicillium, Aspergillus, Alternaria, Trichoderma, Gliocladium Possesses immunosuppressive properties. May be implicated in autism.

#### MT14 Ochratoxin A

Produced by Aspergillus niger, Aspergillus ochraceus, Penicillium verrucosum, Penicillin nordicum Found as a contaminant of a wide range of commodities including beer, wine, grains and cereal products, dried vine fruit, coffee, grape juice, processed cereal based foods and baby foods. Most European pork has trace amounts of ochratoxin. May be a human carcinogen (particularly urinary tract cancers) and also kidney disorders.

#### MT15 Ochratoxin Mix

Produced by Found as a contaminant of a wide range of commodities including beer, wine, grains and cereal products, dried vine fruit, coffee, grape juice, processed cereal based foods and baby foods. May be a human carcinogen.

#### MT16 Patulin

Produced by Paecilomyces, Penicillin sp., Aspergillus sp. Associated with a range of mouldy fruits and vegetables, in particular rotting apples (but not cider) and figs.

#### MT17 Penicillic Acid

Produced by Aspergillus ochraceus, Penicillium aurantiocandidum, Penicillium brasilanum, Penicillium melanoconidium, Penicillium polonicum, Penicillium veridicatum

Toxic and carcinogenic.

#### MT18 Roridin E

Produced by Stachybotrys chartarum Found in water-damaged houses.

#### MT19 Rubratoxin

Produced by Penicillium crateiforme Found on cereal grains.

#### MT20 Satratoxin G & H

Produced by Stachybotrys chartarum

Found in water-damaged houses; toxic to humans and animals. Possible symptoms are a rash that becomes a moist dermatitis, nosebleeds, chest pain, pulmonary haemorrhage, hyperthermia (raised temperature), headaches and fatigue.

#### MT21 Sporidesmin

Produced by Bioploaris, Pithomyces chartarum Facial eczema in animals.

#### MT22 Sterigmatocystin

Produced byAspergillus nidulans, Chaetomium, Emericella nidulans, Bioploaris Found in water-damaged buildings and some food. Found at significant frequency in urine and blood of patients with gastric or liver cancer; Helicobacter pylori facilitates Sterigmatocystin induced gastric cancer. Highly toxic and carcinogenic.

#### MT23 Tenuazonic acid

Produced by Alternaria, Phoma

Found in grain and grain-based products, vegetables (particularly tomato products), fruits and fruit products, wine, beer, sunflower seeds and sunflower oil. It inhibits the protein synthesis machinery.

#### MT24 Trichothecene

Produced by Myrothecium, Memnoniella, Phomopsis. Stachybotrys chartarum, Trichotheclum, Cylindrocorpon, Fusarium

-Synthesised by around 300 fungal species, infecting the grain of developing cereals such as wheat and maize. Reduces immune response.

#### MT25 Viriditoxin

Produced by Aspergillus brevipes, Aspergillus fumigatus, Aspergillus viridinutans, Paecilomyces Inhibits cell division.

#### MT26 Walleminol

Produced by Wallemia

Found on cereals, pulses, dried fruit, cakes, confectionary, conserves. Toxic for some animals.

#### MT27 Zearalenone

Produced by Fusarium

Commonly found in maize but can be found also in other crops such as wheat, barley, sorghum and rye, particularly during cool, wet growing and harvest seasons. Has been found in bread. A naturally occurring oestrogen that is well recognised as causing hormonal effects in animals.

# Neurotransmitter Test Kit 13 vials

Important neurotransmitters that affect breathing, digestion, mood and much else.

All these vials are available in other kits (Body Biochemicals and Hormone and Amino Acids Test Kits). This kit simply brings the most important neurotransmitters together in one place.

#### N1 01 Acetylcholine / ACh

Acts on both the peripheral nervous system and central nervous system and is the only neurotransmitter used in the motor division of the somatic nervous system. Also the principal neurotransmitter in all autonomic ganglia. In cortex increases responsiveness to sensory stimuli; decreases heart rate and contraction strength, dilates blood vessels, increases peristalsis in the stomach and digestive contractions, decreases bladder capacity, increases voluntary voiding pressure; also affects the respiratory system and stimulates secretion by all glands that receive parasympathetic nerve impulses. Important in memory and learning and is deficient in the brains of those with late-stage Alzheimer disease. May be involved in myasthenia gravis; nicotine binds to same receptors.

#### N1 02 Adenosine

In general has an inhibitory effect in the central nervous system. Involved in regulating blood flow to various organs through vasodilation; believed to play a role in promoting sleep and suppressing arousal. Affects central nervous system and peripheral nervous system; constituent of ATP and ADP. May be involved with asthma; stimulatory effect of tea and coffee because inhibits adenosine.

#### N1 03 Anandamide

Pain control; may be used by the brain as a central fine-tuner of electrical activity; inhibits movement; involved with mood; short-term memory; male fertility (high levels slow speed of sperm); acts as a chemical messenger between the embryo and uterus during implantation of the embryo in the uterine wall; may control coughing and various respiratory functions; may increase appetite. Also known as the bliss molecule ('ananda' is Sanskrit for bliss); also called the body's own cannabis (cannabis binds to the same receptors as anandamide); chocolate contains anandamide; may be involved in Crohn's disease, Parkinson's disease, drug addiction, schizophrenia, autism and Gilles de la Tourette's syndrome.

#### N1 04 L-Aspartate

Also an amino acid. Stimulates NMDA receptors, the predominant molecular device for controlling synaptic plasticity and memory function; involved in conveying pain messages.

#### N1 05 Dopamine

In parts of the brain that control subconscious movement of skeletal muscles; regulating muscle tone; increases the efficiency of the heartbeat and helps return the blood pressure to normal; involved in emotional responses, such as reward-seeking behaviour; most responsible for cognitive alertness. Decreased levels associated with Parkinson's disease; increased levels with schizophrenia; may be involved with ADD, autism, La Tourette's syndrome and depression. All drugs that create a dependency artificially increase the amount of dopamine in the reward circuits.

#### N1 06 Epinephrine / Adrenalin

Helps body resist stress by increasing heart rate, constricting blood vessels, accelerating respiration, decreasing digestion, increasing efficiency of muscular contractions, increasing blood sugar, stimulating cellular metabolism.

#### N1 07 GABA / Gamma-Aminobutyrate Acid

An amino acid. The chief inhibitory neurotransmitter in the central nervous system; plays the principal role in reducing neuronal excitability throughout the nervous system; blocks noradrenaline and dopamine. Deficiencies found in hypertension and seizures; a target for anti-anxiety drugs.

#### N1 08 Glutamic Acid/ Glutamate

Also an amino acid. Can be manufactured by the body; precursor of proline, ornithine, arginine and polyamines; a stimulatory neurotransmitter; can be converted by the body into GABA; the most common neurotransmitter in the brain; always excitatory; nearly all excitatory neurons in the CNS and possibly half of the synapses in the brain communicate via glutamate; involved in visual adaptation to light and dark; involved in conveying pain messages. Associated with learning and memory. May be involved in Alzheimer's disease. Many epileptics have increased levels of glutamic acid; part of the acute reaction to withdrawal from drug addiction includes increased production of glutamate.

#### N1 09 Glycine

Also an amino acid. Can be synthesized from other amino acids (serine and threonine); acts as an inhibitory neurotransmitter in the central nervous system, especially in the spinal cord, brainstem, and retina; assists in manufacture of DNA, glycerol, phospholipids, collagen, glutathione and cholesterol conjugates; essential for one of key liver detoxification pathways; stimulates secretion of glucagons. Implicated in Parkinson's disease; low levels often found in manic-depressives and epileptics; people with motor neurone disease may have impaired glycine metabolism.

#### N1 10 Histamine

Involved in sleep-wake regulation, by increasing wakefulness and prevent sleep; also protects against the susceptibility to convulsion, drug sensitization, denervation super-sensitivity, ischemic lesions and stress; may controls the mechanisms by which memories and learning are forgotten; may be involved in some forms of alcoholism. Released during an allergic reaction and inflammation; narrows bronchi in lungs, increases permeability of blood vessels, lowers blood pressure, causes itching and stimulates production of acid in the stomach; secretion of digestive juices. May be implicated in some types of schizophrenia and multiple sclerosis.

#### N1 11 Nitric Oxide

Serves as a neurotransmitter between nerve cells, part of its general role in redox signalling (helping cells protect themselves, detect damage and then either repair or replace damaged cells). Also of critical importance as a mediator of vasodilation in blood vessels, so playing a key role in renal control of extracellular fluid homeostasis, the regulation of blood flow and blood pressure, and in erection of the penis.

#### N1 12 Norepinephrine/ Noradrenaline

Most responsible for vigilant concentration and underlies flight-fight response; helps body resist stress by increasing heart rate, constricting blood vessels, accelerating respiration, decreasing digestion, increasing efficiency of muscular contractions, increasing blood sugar, stimulating cellular metabolism.

#### N1 13 Serotonin / 5-Hydroxytryptamine /5-HT

Primarily found in the gastrointestinal tract, platelets, and the central nervous system; concerned with conscious processes, involved in controlling states of consciousness and mood; sensory perception; induces sleep; temperature regulation; released at site of bleeding to constrict small blood vessels and control blood loss; involved in conveying pain messages; inhibits gastric secretion and stimulates smooth muscles in the intestinal wall; decreases carbohydrate cravings; provides a feeling of fullness; inhibits release of prolactin. Action in brain disrupted by some hallucinogenic drugs, particularly LSD; excess serotonin implicated in Raynaud's disease. Also found in insect venoms, plant spines and in many seeds and fruits.

# Nutrition 1 Test Kit 21 vials

The energy patterns of a range of vitamins and essential fatty acids.

#### NT1 Vitamin A / Retinol

Found in: liver, eggs, milk & dairy products, fish liver oil, enriched margarine.

Functions: growth and repair of body tissues; bone and tooth formation; vision in dim light; keeps mucus membranes healthy; protection from some cancers.

Deficiency symptoms : reduced night vision; dry eyes; loss of vision due to gradual damage of cornea; reduced resistance to infection due to loss of integrity of skin and mucus membranes; follicular hyperkeratosis. Excess symptoms: headaches; drowsiness; skin changes; anorexia; weight loss; muscle pain; chronic liver disease; itchy and flakey skin; loss of body hair; brittle nails; increased risk of birth defects in pregnant women.

#### NT2 VitaminB1/ Thiamin

Found in: wheat germ, yeast, liver, whole grains, nuts, oranges, fish, poultry, beans, pork. Functions: carbohydrate metabolism; appetite maintenance; nerve function; growth and muscle tone. Deficiency symptoms: tiredness; depression; irritability; inability to concentrate; poor memory; muscle weakness; gastrointestinal disturbances; numbness and tingling in hands and feet; reduced pain tolerance; disturbed sleep; poor growth in children

#### NT3 Vitamin B2 / Riboflavin

Found in: fortified breakfast cereals, meat, eggs, green leafy vegetables, offal.

Functions: fat, carbohydrate and protein metabolism; formation of antibodies and red blood cells Deficiency symptoms: sore tongue and lips; cracks in skin around nose and mouth; eye irritation; burning feet; red and greasy skin but also dryness and flaking; scrotal and vulval dermatitis

#### NT4 Vitamin B3 /Niacin/ / Nicotinic Acid /Nicotinamide

Found in: meat, poultry, fish, liver, milk products, peanuts, almonds, potatoes, yeast extract. Functions: fat, carbohydrate and protein metabolism; health of skin, tongue and digestive system; blood circulation.

Deficiency symptoms: irritability; headaches; poor memory; emotional instability; redness, scaling & pigmentation of skin in light-exposed areas; sore & fissured tongue; diarrhoea

Excess symproms: flushing; peptic ulcers; liver dysfunction; gout; arrhythmia; hyperglycaemia.

#### NT5 Vitamin B5 / Pantothenic Acid

Found in: meat, whole grains, legumes, yeast.

Functions: converts nutrients into energy; formation of some fats; vitamin utilisation.

Deficiency symptoms: tiredness; headaches; weakness; emotional swings; muscle cramps; nausea.

#### NT6 Vitamin B6 / Pyridoxine

Found in: fish, poultry, lean meat, nuts, pulses, whole grain cereals.

Functions: fat, carbohydrate and protein metabolism; formation of antibodies; maintains sodium/ potassium balance.

Deficiency symptoms: exacerbates anaemia; irritability; nervousness; insomnia; seborrhoeic dermatitis on face; acne-like rash on forehead; red and greasy skin but also dryness and flaking; sore tongue; prominent taste buds.

Excess symptoms: impairment of sensory nerve function; diminished tendon reflexes; numbness and loss of sensations in hands and feet; difficulty in walking.

#### NT7 Vitamin B12 / Cyanoco-balamin

Found in: offal, eggs, milk, oily fish, cheese.

Functions: fat, carbohydrate and protein metabolism; maintains health of nervous system; blood cell formation; folate synthesis.

Deficiency symptoms: mental confusion; tiredness; pale skin; recurrent mouth ulcers.

#### NT8 Biotin / Vitamin H

Found in: yeast, offal, eggs, milk, cheese

Functions: fat, carbohydrate and protein metabolism; helps utilise B vitamins.

Deficiency symptoms: Scaly dermatitis; tiredness; weakness; severe cradle cap in infants.

#### NT9 Choline

Found in: widely available; can be synthesised from glycine. Functions: part of formation of acetyl-choline; emulsifies fats.

#### NT10 Folic Acid

Found in: green leafy vegetables, offal, melons, pumpkins, beans, carrots, egg yolk, apricots, avocado. Functions: red blood cell formation; protein metabolism; growth and cell division.

Deficiency symptoms: megaloblastic anaemia; neural tube defects where mother's intake not adequate; poor growth in children; cracks at corners of mouth; painful sore tongue; mouth ulcers; depression. Excess symptoms: insomnia, irritability.

#### NT11 Vitamin C / Ascorbic Acid

Found in: citrus fruit, nectarines, melons, vegetables, tomatoes, potatoes.

Functions: helps heal wounds; strengthens blood vessels; collagen maintenance; resistance to infection; required for production of adrenal hormones; helps detoxification and excretion of a wide range of toxic chemicals.

Deficiency symptoms: scurvy; poor wound healing; lowered resistance to infection; bleeding gums; fragile capillaries; damage to bone & connective tissue; dry and scaly skin; dandruff.

Excess symptoms: kidney stones because of increased excretion of water and oxolate; impairment of white cell function; decreased B12 and increased iron absorption.

#### NT12 Vitamin D2 / Ergocalciferol

Found in:Often used in supplements; made in body when skin exposed to sunlight.

Functions: calcium and phosphorus metabolism (bone formation); heart action; nervous system maintenance.

Deficiency symptoms: inadequate calcification of bones; skeletal deformity, migraine, hearing loss. Excess symptoms: hypercalcaemia; renal stones; hypertension; excessive thirst; diarrhoea; nausea; weakness.

#### NT13 Vitamin D3 / Cholecalciferol

Found in: oily fish, egg yolks, offal, fortified margarine; made in body when skin exposed to sunlight. Functions: calcium and phosphorus metabolism (bone formation); heart action; nervous system maintenance.

Deficiency symptoms: inadequate calcification of bones; skeletal deformity, psoriasis, migraine, hearing loss. Excess symptoms: hypercalcaemia; renal stones; hypertension; excessive thirst; diarrhoea; nausea; weakness.

#### NT14 Vitamin E / Tocopherol

Found in: vegetable oils, green vegetables, wheat germ, offal, eggs.

Functions: protects membrane and red blood cells; inhibits coagulation of blood; protects fat soluble vitamins; cellular respiration; protects cells from free radical damage.

Deficiency symptoms: increased risk of coronary heart disease and some cancers; acceleration of some degenerative diseases (e.g. cataracts, rheumatoid arthritis);

acceleration of ageing; menopausal hot flushes; reducing scarring.

Excess symptoms: raised blood pressure; minor gastrointestinal upsets.

#### NT15 Vitamin K1 / Phylloquinone

Found in: green leafy vegetables, fruits, cereals; also synthesised in gut.

Functions: important in formation of blood clotting agents, involved in energy metabolism, protein formation in bone tissue.

Deficiency symptoms: increased blood clotting time, haemorrhagic disease in new born which can be fatal. Excess symptoms: prolonged clotting time.

#### NT16 Vitamin K2 / Menaquinone

Found in: dairy products, meat; also synthesised in gut.

Functions: important in formation of blood clotting agents, involved in energy metabolism, protein formation in bone tissue.

Deficiency symptoms: increased blood clotting time, haemorrhagic disease in new born which can be fatal. Excess symptoms: prolonged clotting time.

#### NT17 Vitamin K3 / Menadione

Found in:dairy products, meat; also synthesised in gut.

Functions: important in formation of blood clotting agents, involved in energy metabolism, protein formation in bone tissue.

Deficiency symptoms: increased blood clotting time, haemorrhagic disease in new born which can be fatal. Excess symptoms: prolonged clotting time.

#### NT18 Arachidonic Acid

Can be formed from linoleic acid.

Omega 6 series polyunsaturated fatty acid, precursor of prostoglandins and leukotrienes.

Deficiency symptoms: inflammation, blood vessel constriction, blood pressure, arthritis, pain, blood clotting, allergies, asthma, eczema, psoriasis, dry skin, migraine, fertility, PMT (especially breast tenderness), dry eye syndrome, behavioural problems.

#### NT19 Eicosapentaenoic Acid

Found in: fish oils, flax seed oil, pumpkin seeds.

Omega 3 series polyunsaturated fatty acid.

Deficiency symptoms:inflammation, blood clotting, rheumatoid arthritis, behavioural problems, muscle weakness, visual impairment.

#### NT20 Linoleic Acid

Omega 6 series polyunsaturated fatty acid, precursor of prostoglandins and leukotrienes.

Deficiency symptoms: inflammation, blood vessel constriction, blood pressure, arthritis, pain, blood clotting, allergies, asthma, eczema, psoriasis, dry skin, migraine, fertility, PMT (especially breast tenderness), dry eye syndrome, behavioural problems.

#### NT21 Linolenic Acid

Omega 6 series polyunsaturated fatty acid, precursor of prostoglandins and leukotrienes.

Deficiency symptoms: inflammation, blood vessel constriction, blood pressure, arthritis, pain, blood clotting, allergies, asthma, eczema, psoriasis, dry skin, migraine, fertility, PMT (especially breast tenderness), dry eye syndrome, behavioural problems.

# Nutrition 2 Test Kit 25 vials

The energy patterns of substances commonly used as supplements, including DHA, SOD, quercetin, creatine, etc. The vials in this kit contain the pure energy pattern of the substances without all the fillers, tableting agents and capsules that are there if you test supplements.

#### NT22 5-Hydroxytryptophan / 5 HTP / Oxitriptan

Involved in the synthesis of the neurotransmitters serotonin and melatonin from tryptophan.

#### NT23 Alpha Lipoic Acid / ALA Found in every cell of the body.

It is an antioxidant that can work in both water and fat, and is used by the body to neutralise free radicals. May help metabolic syndrome and insulin resistance, enabling insulin to work more effectively in the body.

#### NT24 Beta Carotene / Provitamin A / 160a

A red-orange pigment abundant in plants and fruits. Can be converted in the body into Vitamin A. Used as a natural food colouring (usually extracted using hexane).

#### NT25 Betaine Hydrochloride

Supports digestive system when stomach acid is low.

#### NT26 Bromelain

Extracted from pineapples. Aids protein digestion. Also used to reduce inflammation associated with infection and injuries. Can be used in cooking as a meat tenderiser.

#### NT27 Capsules, Gelatin

Gelatin is derived by boiling animal bones, hooves, tendons, etc. Glycerine may be added to soften the capsule shell.

#### NT28 Capsules, Vegetarian

Made from hydroxypropyl methylcellulose.

#### NT29 Coenzyme Q10 / Ubiquinone / Ubidecarenone

A vitamin-like substance that is present in all human cells and is responsible in part for the production of the body's own energy. Body's production declines with age, so may lead to increased tiredness. Shortage associated with gum disease and heart problems. May have important role in Alzheimer's, migraine and Parkinson disease. People with heart problems and the obese may have low levels.

#### NT30 Conjugated Linoleic Acid /CLA

Found mainly in the meat and dairy products. May have anti-cancer properties. May have a positive effect on weight management through a reduction in total body fat and an increase in lean body mass.

#### NT31 Creatine

A component of skeletal muscle. Produced in the human body from amino acids primarily in the kidney and liver. Used by sports people to gain muscle mass.

#### NT32 Curcumin / E100

Responsible for the yellow colour and beneficial effect of turmeric. May be beneficial for irritable bowel syndrome, ulcerative colitis and arthritis. It has been shown to be particularly useful if you suffer from shoulder, knee and elbow pain and stiffness.

#### NT33 Docosahexaenoic Acid / DHA

An omega-3 fatty acid. From fish oils and commercially manufactured from microalgae. May reduce the risk of heart disease. Below-normal levels associated with Alzheimer's disease.

#### NT34 Fructooligosaccharides / FOS / Oligofructose / Oligofructan

Extracted from fruits and vegetable. Helps keep the stools soft and easy to pass and stimulates the growth of friendly bacteria through its prebiotic effect. Promotes calcium absorption in the gut.

#### NT35 Glucosamine Hydrochloride

An essential role in the repair of cartilage in the joints. No major food sources except for crabs, oysters and the shells of prawns. This form of glucosamine is from corn/maize vegetables that undergo a special fermentation process.

#### NT36 Inulin

Belongs to a class of fibres known as fructans. Can be used to replace sugar, fat, and flour particularly in reduced calorie products. Also sold as a supplement. Increases calcium absorption and possibly magnesium absorption, while promoting the growth of intestinal bacteria.

#### NT37 Lutein / Xanthophyll

Found in green leafy vegetables such as spinach and kale. Also found in egg yolks and animal fats. High levels in the retina. Used to improve eye health. Can cause bronzing of the skin.

#### NT38 Lycopene / E160d

Phytochemical found in tomatoes and other red fruits and vegetables. Used as a natural food colouring (E160d). May protect against cancer and cardiovascular disease.

#### NT39 Magnesium Silicate / Talc / Florisil

Used as a coating on tablets. Also used in paper making, plastic, paint and coatings, rubber, food, electric cable, pharmaceuticals, cosmetics, ceramics, etc.

#### NT40 Methylsulphonylmethane / MSM / DMSO2 / Methyl Sulfone / Dimethyl Sulfone

A key component of cartilage and plays an important part in joint health.

#### NT41 Papain / Papaya Proteinase I

A digestive enzyme from papaya. Used to aid digestion.

#### NT42 Psyllium Husks / Plantago Ovta

A source of fibre, so bulk up stools and help with constipation.

#### NT43 Quercetin

Inhibits the production and release of histamine, which is involved in allergic and inflammatory reactions.

#### NT44 Resveratrol

Found naturally in grapes, red wine, purple grape juice, peanuts, and some berries. May be beneficial for the heart and have anti-cancer properties.

#### NT45 Superoxide Dismutase / SOD

An enzyme that promotes the rejuvenation and repair of cells, while reducing the damages caused by free radicals.

#### NT46 Vitamin B17 / Laetrile / Amygdalin

Originally isolated from bitter almond. Has been used as a naturopathic cancer treatment, but is greeted with scepticism by mainstream scientific/medical community.

# Parasite 1 Test Kit 31 vials

The energy patterns of tapeworms, pinworms, roundworms and liver flukes.

Parasite: "any organism living in or on any other living creature and deriving advantage from doing so, while causing disadvantage to the host" - BMA Complete Family Health Encyclopaedia

Parasites are commonly acquired by eating contaminated meat, swallowing eggs on food, contaminating fingers with faecal material or through contact with infected water.

Parasites are divided into the following categories:

- **1.** flatworms (also called platyhelminths)
- a) tapeworms (also called cestodes)
- b) flukes (also called trematodes)
- 2. roundwormsa) threadwormsb) pinwormsc) hookworms

Life stages

Roundworms: egg to larva to adult

Tapeworms: egg to larva to encased by body in a cyst to adult

Fluke: egg to miracidia to redia to cercaria to metacercaria to adult

Scolex = part of tapeworm attached by suckers and hooks to gut wall of host; sometimes called head Proglottides = segment-like units of the tapeworm body which, when mature, leave the gut of the primary host in the faeces; they are budded off from the scolex

#### The descriptions below are Latin name, common name, symptoms & comments in that order

#### PA1 Ancylostoma Caninum

Hookworm

Damage to intestinal walls, anemia, itchy skin, dizziness, pneumonitis, anorexia. Tropical parasite; usual host is dogs.

#### PA2 Ancylostoma, Egg

Hookworm

Tropical parasite; picked up from working barefoot amongst faeces or eating contaminated food.

#### PA3 Ancylostoma, Female

Hookworm

Tropical parasite; picked up from working barefoot amongst faeces or eating contaminated food.

#### PA4 Ascaris, Female

Human roundworm

Sometimes asymptomatic; urticaria; mild to acute colicky pain with distension; reduced appetite; larvae in lungs can provoke pneumonia the most common worm infection. World wide, particularly in developing countries; commonly found in dogs and cats.

#### PA5 Ascaris, Male

#### Human roundworm

Commonly found in cats and dogs sometimes asymptomatic; urticaria; mild to acute colicky pain with distension; reduced appetite; larvae in lungs can provoke pneumonia.

The most common worm infection world wide, particularly in developing countries.

#### PA6 Cimex

Bed bug Itchy, painful bites which can lead to bacterial infection. Lives in plaster, walls, furniture, bed frames.

#### PA7 Clonorchis Sinensis

Human oriental liver fluke. Chronic liver disease; death if left untreated. Widespread in China, Japan, Korea, Taiwan and Vietnam; via domestic dogs and cats.

#### PA8 Culex Imago, Female

Gnat/ mosquito

#### PA9 Dipylidium, Scolex Mature & Gravid Proglottides

Tapeworm

Grows in segments; the end can be uterus packed with eggs.

# PA10 Echinococcus Granulosus

Tapeworm Affects liver, lungs, brain and bones. From sheep and cattle.

# PA11 Enterobius Vermicularis

Threadworm Often cause itching of the anus; may provoke appendicitis. The most common worm infection in U.K.; lives in upper part of large intestine; children particularly affected.

# PA12 Fasciola

Liver fluke

# PA13 Fasciola, Cercaria

Liver fluke Mainly lives in liver of sheep.

# PA14 Fasciola, Egg

Liver fluke Mainly in liver of sheep.

# PA15 Fasiola, Redia

Liver fluke

Lice

# PA16 Necator Americanus, Eggs

Hookworm Symptoms can include coughing and wheezing, but may be asymptomatic. Common infection in the Americas, sub-Saharan Africa, South Asia and the Pacific.

# PA17 Onchocerca Volvulus

Filarial worm Asymptomatic until worm dies when causes inflammation and itching. Predominantly Africa, but also South America and Yemen.

# PA18 Paragonimus Westermani, Eggs

Lung fluke Coughing, chest pains, fever, night sweats. Most important lung fluke affecting humans, widespread in the Far East and SE Asia.

# PA19 Pediculus Humanus Capitis

Itching can spread other diseases such as typhus and trench fever.

# PA20 Schistosoma Mansoni, Adult Female

Blood fluke Common tropical fluke, responsible for bilharzia. Found in Africa, parts of S. America, the Caribbean and Arabia.

# PA21 Schistosoma Mansoni, Cercariae

Blood fluke Common tropical fluke, responsible for bilharzia. Found in Africa, parts of S. America, the Caribbean and Arabia.

# PA22 Schistosoma Mansoni, Egg

Blood fluke Common tropical fluke, responsible for bilharzia. Found in Africa, parts of S. America, the Caribbean and Arabia.

# PA23 Schistosoma Mansoni, Miracidia

Blood fluke Common tropical fluke, responsible for bilharzia. Found in Africa, parts of S. America, the Caribbean and Arabia

# PA24 Taenia, Scolex

Tapeworm Hunger, weakness, weight loss. From eating uncooked meat; common in tropical countries.

# PA25 Taenia, Scolex Immature, Mature & Gravid Proglottids

Tapeworm Hunger, weakness, weight loss. From eating uncooked meat; common in tropical countries.

# PA26 Trichinella Spiralis, Encysted Larvae

Intestinal nematode/ pork-worm Abdominal pain and diarrhoea followed by muscle and joint pain and fever. Found in Europe, sub-Saharan Africa and the Arctic, main sources are undercooked pork and wild meat

# PA27 Trichinella Spiralis, Female

Intestinal nematode/ pork-worm Abdominal pain and diarrhoea followed by muscle and joint pain and fever. Found in Europe, sub-Saharan Africa and the Arctic, main sources are undercooked pork and wild meat.

# PA28 Trichinella Spiralis, Male

Intestinal nematode/ pork-worm Abdominal pain and diarrhoea followed by muscle and joint pain and fever. Found in Europe, sub-Saharan Africa and the Arctic, main sources are undercooked pork and wild meat.

# PA29 Trichuris Trichiura

Whipworm Asymptomatic but can cause dysentery-like illness. World-wide distribution.

# PA30 Trichuris Trichiura, Egg

Whipworm Asymptomatic but can cause dysentery-like illness. World-wide distribution

# PA31 Xenopsylla Cheopsis

Rat flea Transmits plague, typhus and two tape worms.

# Parasite 2 Test Kit 35 vials

The energy patterns of various forms of hookworms, tapeworms, roundworms, blood flukes, liver flukes, lung flukes, blastocystis hominis, endomilax nana, etc. It does not duplicate parasite test kit 1, but contains some completely different parasites and some of the same parasites but at different life stages.

# PA32 Amblyomma Americanum

Lone star tick A major carrier of Rocky Mountain spotted fever and Lyme disease.

# PA33 Ancylostoma Braziliense

Human hookworm Severe skin itching.

# PA34 Ancylostoma Duodenale, Male

Human hookworm Itching, gastrointestinal bleeding, iron deficiency. Common in north Africa, northern India, northern parts of the Far East and the Andean region of South America.

# PA35 Ascaris Lumbricoides, Eggs

Human roundworm Sometimes asymptomatic; urticaria; mild to acute colicky pain with distension; reduced appetite; larvae in lungs can provoke pneumonia. Commonly found in cats and dogs.

# PA36 Blastocystis Hominis

Watery or loose stools, diarrhea, abdominal pain, anal itching, weight loss, and excess gas. Common microscopic parasitic organism found throughout the world.

# PA37 Chilomastix Mesnili, Cysts

An amoeba found in intestine. Viewed as harmless by the medical profession.

# PA38 Chilomastix Mesnili, Trophozoites

An amoeba found in intestine. Viewed as harmless by the medical profession.

# PA39 Clonorchis Sinensis, Eggs

Human oriental liver fluke Chronic liver disease; death if left untreated. Widespread in China, Japan, Korea, Taiwan and Vietnam; via domestic dogs and cats.

# PA40 Ctenocephalides Felis, Adult

Cat flea

# PA41 Dermacentor Andersoni, Nymph

Tick which carries Rocky Mountain fever

# PA42 Dermacentor Variabilis, Male

American dog tick Transmits spotted fever; carries Lyme disease bacteria, but unclear if can transmit it to humans.

# PA43 Dientamoeba Fragilis

Found in large intestine; abdominal pain, gas and mild diarrhoea.

# PA44 Diphyllobothrium, Eggs

Broadfish tapeworm Found in small intestine from eating raw or undercooked fish. Prevalent in Scandanavia and around American Great Lakes.

# PA45 Dirofilaria Immitis

Dog heartworm In dogs & cats, rarely in humans.

# PA46 Endolimax Nana, Cyst

An amoeba found in intestine. Viewed as harmless by the medical profession.

# PA47 Enterobius Vermicularis, Eggs

Threadworm

Often cause itching of the anus; may provoke appendicitis; lives in upper part of large intestine. The most common worm infection in U.K.; children particularly affected.

# PA48 Fasciolopsis Buski, Eggs

Chronic infections may lead to inflammation, ulceration, hemorrhage, and abscesses of the small intestine. Found in S E Asia.

# PA49 Hymenolepis Nana / Vampirolepis Nana, Eggs

#### Dwarf tapeworm

Often no symptoms; headaches, dizziness, anorexia, abdominal pain, diarrhea. A particular problem in humans in areas of high population density and close contact, and where sanitary conditions are poor; most common tapeworm worldwide.

# PA50 Isospora, Oocysts

Infection causes acute, non bloody diarrhea with crampy abdominal pain, which can last for weeks and result in malabsorption and weight loss.

# PA51 Necator Americanus, Adult

New world hookworm Symptoms can include coughing and wheezing, but may be asymptomatic. Common infection in the Americas, sub-Saharan Africa, South Asia and the Pacific.

# PA52 Necator Americanus, Infective Larvae

New world hookworm

Symptoms can include coughing and wheezing, but may be asymptomatic. Common infection in the Americas, sub-Saharan Africa, South Asia and the Pacific

# PA53 Paragonimus Westermanii, Adult

Oriental lung fluke Coughing, chest pains, fever, night sweats. Most important lung fluke affecting humans, widespread in the Far East and SE Asia.

# PA54 Paragonimus Westermanii, Cercaria

Oriental lung fluke Coughing, chest pains, fever, night sweats. Most important lung fluke affecting humans, widespread in the Far East and SE Asia.

# PA55 Paragonimus Westermanii, Metacercaria

Oriental lung fluke Coughing, chest pains, fever, night sweats. Most important lung fluke affecting humans, widespread in the Far East and SE Asia.

# PA56 Paragonimus Westermanii, Redia

Oriental lung fluke Coughing, chest pains, fever, night sweats. Most important lung fluke affecting humans, widespread in the Far East and SE Asia.

#### PA57 **Pulex Irritans, Adult** Human flea

Common flea

# PA58 Sarcoptes Scabiel

Itch mite, mange mite Scabies.

# PA59 Schistosoma Haematobium, Eggs

Blood fluke Urinary tract infection, bilharzia. Found in Africa and Middle East.

# PA60 Schistosoma Haematobium, Female

Blood fluke Urinary tract infection, bilharzia. Found in Africa and Middle East.

# PA61 Schistosoma Japonicum, Eggs

Blood fluke Fever, bloody diarrhoea, bilharzia. Found in Far East, but eradicated in Japan.

# PA62 Schistosoma Japonicum, Male

Blood fluke Fever, bloody diarrhoea, bilharzia. Found in Far East, but eradicated in Japan.

# PA63 Schistisoma Mansoni, Male

Blood fluke Bilharzia. Found in Africa, parts of S. America, the Caribbean and Arabia.

# PA64 Strongyloides Parasitic, Female

Often asymptomatic, but heavy infestation leads to bloody diarrhoea, anaemia and abdominal pain. Tropical and subtropical countries, particularly South East Asia, Brazil and Columbia.

# PA65 Strongyloides, Larvae

Often asymptomatic, but heavy infestation leads to bloody diarrhoea, anaemia and abdominal pain. Tropical and subtropical countries, particularly South East Asia, Brazil and Columbia.

# PA66 Toxocara, Eggs

# Cat and dog roundworm

Permanent partial loss of vision; heavier, or repeated can lead to fever, coughing, asthma, or pneumonia. Spread from dogs and cats.

# Parasite 3 Test Kit

# 28 vials

# More parasites, including different life stages of parasites in other kits.

#### PA3 67 Ancylostoma Duodenale / Old World Hookworm, Eggs

Lives in the small intestine of hosts such as humans, cats and dogs; abundant throughout the world, including in the following areas: southern Europe, north Africa, India, China, southeast Asia, some areas in the United States, the Caribbean, and South America.

#### PA3 68 Brugia Malayi / Brugian Filariasis, Microfilaria

A nematode (roundworm), one of the three causative agents of lymphatic filariasis (elephantiasis) in humans; restricted to South and South East Asia.

#### PA3 69 Capillaria Hepatica / Hepaticola Hepatica / Calodium Hepaticum, Eggs

Causes hepatic capillariasis; found in rats, a wide variety of other wild and domestic mammals, and occasionally humans; has been found in temperate and tropical zones on every continent.

#### PA3 70 Dicrocoelium Dendriticum / Sheep Liver Fluke

Usually infects the bile duct; in heavier infections, bile ducts and the biliary epithelium may become enlarged in addition to the generation of fibrous tissue surrounding the ducts, and as a result, causing an enlarged liver (hepatomegaly) or inflammation of the liver (cirrhosis); worldwide distribution particularly in grazing land near forest areas (good for molluscs) and dry pastures with little other biodiversity (good for the ants) both increased parasite prevalence (molluscs and ants are hosts). Humans can become hosts after accidentally ingesting infected ants.

#### PA3 71 Diphyllobothrium Latum,Immature Proglottid

Tapeworm causing Diphyllobothriasis in humans through consumption of raw or undercooked fish; native to Scandinavia, western Russia, and the Baltics, though it is now also present in North America, especially the Pacific Northwest.

#### PA3 72 Diphyllobothrium Latum, Mature Proglottid

Tapeworm causing Diphyllobothriasis in humans through consumption of raw or undercooked fish; native to Scandinavia, western Russia, and the Baltics, though it is now also present in North America, especially the Pacific Northwest.

#### PA3 73 Dipylidium Caninum, Eggs

Infects organisms afflicted with fleas and canine chewing lice, including dogs, cats, and sometimes human petowners, especially children; most infections are asymptomatic, but sometimes mild diarrhoea, abdominal colic, anorexia, restlessness, constipation, rectal itching and pain due to emerging proglottids through the anal cavity.

#### PA3 74 Dipylidium Caninum, Immature Proglottid

Infects organisms afflicted with fleas and canine chewing lice, including dogs, cats, and sometimes human petowners, especially children; most infections are asymptomatic, but sometimes mild diarrhoea, abdominal colic, anorexia, restlessness, constipation, rectal itching and pain due to emerging proglottids through the anal cavity.

#### PA3 75 Dipylidium Caninum, Mature Proglottid

Infects organisms afflicted with fleas and canine chewing lice, including dogs, cats, and sometimes human petowners, especially children; most infections are asymptomatic, but sometimes mild diarrhoea, abdominal colic, anorexia, restlessness, constipation, rectal itching and pain due to emerging proglottids through the anus.

#### PA3 76 Dirofilaria Immitis, Microfilariae

A parasitic roundworm that is spread from host to host through the bites of mosquitoes; definitive host is the dog, but it can also infect cats, wolves, coyotes, foxes and other animals and under very rare circumstances, humans. (Microfilariae are live young that circulate in the bloodstream for as long as two years, waiting for the next stage in their life cycles in the gut of a bloodsucking mosquito.)

#### PA3 77 Echinococcus Granulosus / Hydatid Worm / Hyper Tapeworm / Dog Tapeworm, Cyst

First document in Alaska but is distributed world-wide; especially prevalent in parts of Eurasia, north and east Africa, Australia, and South America. Most prevalent in sheep farming communities.

#### PA3 78 Fasciola Hepatica / Common Liver Fluke, Eggs

Infects the livers of various mammals, including humans; human infections occur in parts of Europe, northern Iran, northern Africa, Cuba, South America, especially the Altiplano regions of the Peruvian and Bolivian Andes; also an emerging problem in Vietnam and Cambodia.

#### PA3 79 Hymenolepis Nana / Vampirolepis Nana / Dwarf Tapeworm

One of the most common intestinal worms infecting humans, especially children; common in temperate zones. Most people who are infected do not have any symptoms. Those who have symptoms may experience nausea, weakness, loss of appetite, diarrhea, and abdominal pain. Young children, especially those with a heavy infection, may develop a headache, itchy bottom, or have difficulty sleeping. Sometimes infection is misdiagnosed as a pinworm infection.

#### PA3 80 Loa Loa / Eye Worm

Found in Africa and India; travels from the entry site through subcutaneous tissues, causing inflammation in the skin wherever they travel.

#### PA3 81 Macracanthorhynchus Hirudinaceus, Eggs

Lives in the intestines of pigs, and very occasionally in humans or dogs. It causes enteritis, gastritis or peritonitis.

#### PA3 82 Macracanthorhynchus Hirudinaceus, Eggs

Found in Africa and tropical Americas, spread by biting midges or blackflies; usually asymptomatic.

#### PA3 83 Schistosoma Japonicum, Cercaria

Found in China, but now eradicated in Japan; often asymptomatic, but may experience fever, cough, abdominal pain, diarrhoea, hepatosplenomegaly, and eosinophilia. Occasionally central nervous system lesions occur: cerebral granulomatous disease may be caused by ectopic S. japonicum eggs in the brain.

#### PA3 84 Schistosoma Japonicum, Female

Found in China, but now eradicated in Japan; often asymptomatic, but may experience fever, cough, abdominal pain, diarrhoea, hepatosplenomegaly, and eosinophilia.

#### PA3 85 Schistosoma Japonicum, Miracidium

Found in China, but now eradicated in Japan; often asymptomatic, but may experience fever, cough, abdominal pain, diarrhoea, hepatosplenomegaly, and eosinophilia.

#### PA3 86 Schistosoma Japonicum, Sporocyst

Found in China, but now eradicated in Japan; often asymptomatic, but may experience fever, cough, abdominal pain, diarrhoea, hepatosplenomegaly, and eosinophilia.

#### PA3 87 Schistosoma Mansoni, Male

Causes intestinal schistosomiasis; present in many countries, predominantly in South America and the Caribbean, Africa including Madagascar, and the Middle East.

#### PA3 88 Spirometra Mansoni, Egg

Occurs worldwide in distribution, although most human cases of sparganosis are recorded from southeast Asian countries. Sparganosis is endemic in animals throughout North America, although human cases from this area are rare.

#### PA3 89 Spirometra Mansoni, Immature Proglottid

Occurs worldwide in distribution, although most human cases of sparganosis are recorded from southeast Asian countries. Sparganosis is endemic in animals throughout North America, although human cases from this area are rare.

#### PA3 90 Spirometra Mansoni, Mature Proglottid

Occurs worldwide in distribution, although most human cases of sparganosis are recorded from southeast Asian countries. Sparganosis is endemic in animals throughout North America, although human cases from this area are rare.

#### PA3 91 Taenia Saginata / Beef Tapeworm, Immature Proglottid

Cattle are the intermediate hosts, where larval development occurs, while humans are definitive hosts harbouring the adult worms; found globally and most prevalently where cattle are raised and beef is consumed. It is relatively common in Africa, some parts of Eastern Europe, Southeast Asia, South Asia, and Latin America.

#### PA3 92 Taenia Solium / Pork Tapeworm, Eggs

Found throughout the world, and is most prevalent in countries where pork is eaten; usually asymptomatic, but in severe cases leads to intestinal irritation, anaemia, and indigestion.

#### PA3 93 Toxocara Canis / Dog Roundworm

Humans can be infected just by stroking an infected dog's fur and accidentally ingesting infective eggs that may be present on the dog's fur; results in hepatomegaly, myocarditis, respiratory failure and vision problems.

#### PA3 94 Tunga Penetrans / Chigoe Flea / Jigger

Native to Central and South America, but now also found sub-Saharan Africa; breeding females burrow into exposed skin on the feet and remain there for two weeks while developing eggs, during which time they swell dramatically, sometimes causing intense irritation; if the flea is left within the skin, dangerous complications can occur including secondary infections, loss of nails, and toe deformation.

# Pathology & Histology Test Kits

There are some omissions from these test kits. This is usually because a suitable sample was not available from which to make the test vials.

These kits are not intended for diagnosis of medical conditions.

Testing may indicate a vial for various reasons:

1. A diseased tissue may be indicated, even though the disease is not present, because the test kits do not contain a suitable example of a healthy tissue

2. A vial may be indicated, not because it is wanted in its entirety, but because it contains a particular cell or cells, e.g. there are various types of epithelium (the lining of organs etc), so testing may indicate a particular organ, not because that organ is in any way defective, but because the sample contains a particular type of epithelium tissue

3. The exact match is not available, so the energy system is choosing the nearest match

4. A chronic disease vial may be indicated, not because the person has that disease but because they have the miasm / inherited taint represented by the chronic disease, e.g. the tubercular and syphilitic miasms are well known among homeopaths; these do not indicate the presence of the disease, but indicate a chronic tendency to manifest particular symptoms: the person with a tubercular miasm is always nervous and tired; the person with the syphilitic miasm tends to be sulky, depressed and stupid, with problems with teeth and bones, etc. (Consult homeopathic texts for more information on this. A Study Course In Homeopathy by Phyllis Speight offers an excellent introduction to this fascinating topic.)

# PH 1: Respiratory System Test Kit 25 vials

The energy patterns of various healthy and diseased tissues, e.g. lung, trachea, pneumonia, lung oedema, TB, emphysema and various cancers.

# PH101 Bronchitis, Chronic

Inflammation of one or more bronchi, usually secondary to infection.

# PH102 Broncho-Pneumonia / Bronchial Pneumonia / Bronchoalveolitis / Bronchopneumonitis / Lobular Pneumonia

Inflammation of the lungs which usually begins in the terminal bronchioles.

# PH103 Carcinoma, Bronchoalveolar

Malignant tumour of the bronchioles and alveoli in the lungs.

# PH104 Diphtheria, Larynx

The voice box showing changes brought about by diphtheria (acute contagious bacterial infection marked by the formation of a false membrane in the throat and other air passages causing difficulty in breathing).

#### PH105 Emphysema

A lung condition featuring an abnormal accumulation of air in the lung's many tiny air sacs (alveoli), leading to abnormally large air spaces, lack of lung elasticity and scarring.

# PH106 Giant Cell Carcinoma

A variant of large cell carcinoma that is particularly aggressive.

#### PH107 Influenza, Lung

An acute highly contagious virus disease that is caused by various strains of orthomyxoviruses; symptoms include fever, prostration, severe aches and pains, and progressive inflammation of the respiratory mucous membrane.

# PH108 Large Cell Carcinoma, Lung

Cancer originating in the peripheral part of the lung; the cells are large and look abnormal under a microscope.

# PH109 Lung

Main organ of respiration, lying either side of heart.

# PH110 Lung Cancer, Secondary, Unknown Primary

Secondary lung cancer as a result of cancer metastasising from an unknown site.

# PH111 Lung, Heart Failure

Congestion of the blood vessels in the lungs due to some defect in the pumping action of the heart.

# PH112 Oedema, Lung

Fluid accumulation in the lungs.

# PH113 Pleural Endothelioma, Malignant

A malignant tumour which is formed from tissues of the serous membranes covering the lungs.

### PH114 Pleurisy, Acute

Inflammation of the pleura (protective membrane of lung).

#### PH115 Pneumonia

An infection that occurs when fluid and cells collect in the lung.

#### PH116 Pulmonary Bland Infarct, New

A new infarct (an area of tissue death due to a local lack of oxygen), without any sign of infection.

# PH117 Pulmonary Hypertension, Lung

Lung tissue showing evidence of abnormally elevated blood pressure within the pulmonary circuit.

# PH118 Small Cell Carcinoma / Bronchogenic Cancer / Lung Cancer / Oat Cell Cancer A fast-growing, malignant tumor of the lungs.

#### PH119 Smoker's Lung

Lung showing changes brought about by smoking cigarettes.

#### PH120 Squamous Cell Carcinoma

This cancer forms in cells lining the airways; most common lung cancer in men.

# PH121 Streptococci In Lung

Lung tissue showing evidence of infection with strep bacteria.

#### PH122 Trachea

Airway that leads from the larynx to the lungs.

# PH123 Tuberculosis, Lung

Chronic disease that is caused by the tubercle bacillus and by mycobacterium bovis.

# PH124 Tuberculosis, With Bacteria, Pulmonary Cavity

Tuberculosis evident in the cavity in which the lungs are situated.

# PH125 Venous Congestion, Chronic, Lung

Overfilling and distention of the veins with blood as a result of mechanical obstruction or heart problems.

# PH 2: Lower Digestive System Test Kit 28 vials

The energy patterns of various healthy and diseased tissues, e.g. colon, rectum, endometriosis in the colon, appendicitis, colitis, papilloma, vaculitis and cancers.

# PH201 Adenocarcinoma, Colon

A malignant tumor originating in glandular epithelium of the colon; the main type of colon cancer.

# PH202 Adenocarcinoma, Mucinous, Colon

A malignant tumor originating in the glandular tissue of the colon; the cancer cells secrete significant amounts of mucin.

# PH203 Adenoma With Lymphoma, Colon

A benign and a cancerous tumour in the colon.

# PH204 Adenomatous Polyp With Cancer, Colon

A polyp that consists of abnormal but benign tissue growth, derived from glandular epithelium.

# PH205 Amoebic Colitis, Colon

Diarrhoea, inflammation and ulceration of the colon, as a result of infection with entamoeba histolytica.

# PH206 Appendicitis, Acute

Inflammation of the vermiform appendix.

# PH207 Appendicitis, Chronic Obliterative

Inflammation of the vermiform appendix inflammation of the vermiform appendix with collapse of some tissues.

# PH208 Appendicitis, Mucoid Degeneration With Fatty Infiltration Of Submucosa

Degenerative disease of appendix, with excess amounts of fat.

# PH209 Appendicitis, Necrotic

Inflammation of the vermiform appendix with dying tissue.

# PH210 Carcinoid Tumour, Appendix

A tumour which secretes excessive amounts of the hormone serotonin (90% found in appendix).

# PH211 Carcinoma, Mucoid, Fat In Sub-Mucosa, Rectum / Colorectal Cancer

A malignant tumour arising from the cells lining the rectum, secreting significant amounts of mucin, with fat in the connective tissue.

# PH212 Colitis, Chronic, Colon

Chronic inflammation of the colon.

# PH213 Colon

The part of the large intestine that extends from the end of the small intestine to the rectum.

# PH214 Colon Wall With Balantidium Coli

Colon wall showing presence of balantidium coli, a parasite usually harmless in man but may invade and ulcerate the intestinal wall, producing a colitis resembling amoebic dysentery.

# PH215 Dysentery, Amoebic, Colon

Colon wall showing presence of entamoeba histolytica, with ulcerative inflammation.

# PH216 Dysentery, Bacillary, Colon

An infection of the bowel caused by a bacterium called shigella.

# PH217 Endometriosis, Colon

The presence and growth of functioning ovarian endometrial tissue in the colon s that often results in severe pain and infertility.

# PH218 Juvenile Polyp, Colon

A smoothly rounded mucosal hamartoma which may be multiple and cause rectal bleeding, especially in the first decade of life; not pre-cancerous.

# PH219 Leiomyoma, Colon

A benign tumor consisting of smooth muscle fibres.

# PH220 Melanoma, Degenerative, Rectum

A malignant tumour of the rectum.

# PH221 Papilloma, Colon

Benign tumour originating in epithelial cells of the colon.

# PH222 Papilloma, Rectum

Benign tumour of epithelium of the rectum.

# PH223 Rectal Smear

A smear taken from the rectum, containing faeces, bacteria etc.

# PH224 Rectum

The last part of the large intestine.

# PH225 Tuberculous Lesions, Colon

Abnormal changes in the colon as a result of tuberculosis.

# PH226 Ulcerative Colitis, Colon

Chronic inflammation of the colon that produces ulcers in its lining; symptoms include abdominal pain, cramps, and loose discharges of pus, blood, and mucus from the bowel.

# PH227 Vasculitis, Chronic, Colon Wall Chronic Angiitis

Chronic inflammation of a blood or lymph vessel of the bowel wall.

# PH228 Vasculitis, Colon Wall Angiitis

Inflammation of a blood or lymph vessel of the bowel wall.

# PH 3: Upper Digestive System Test Kit 31 vials

The energy patterns of various healthy and diseased tissues, e.g. duodenum, esophagus, stomach, pyloric sphincter, gastritis, ulcers, Crohn's disease and cancers.

# PH301 Adenocarcinoma, Mucinous, Stomach

Cancer arising from glandular tissue in the stomach; the cancer cells produce mucin in significant amounts.

# PH302 Adenocarcinoma, Stomach / Gastric Cancer / Gastric Carcinoma / Stomach Cancer Cancer arising from glandular tissue in the stomach.

#### PH303 Barrett's Disease With Severe Dysplasia, Esophagus

A condition in which the cells lining the lower part of the esophagus have changed or been replaced with many abnormal cells that could lead to cancer of the esophagus.

#### PH304 Carcinoma, Mucinous, Stomach / Colloid Carcinoma Of Stomach

Cancer that began in the tissues that line the stomach; the cancer cells secrete conspicuous quantities of mucin.

#### PH305 Carcinoma, Small Intestine

Cancer that began in the tissues that line the small intestine.

# PH306 Celiac Disease / Sprue / Coeliac Disease

An inherited disease where the intestinal lining is inflamed in response to a protein known as gluten.

# PH307 Crohn's Disease, Small Intestine / Inflammatory Bowel Disease / Regional Enteritis / Ileitis / Granulomatous Ileocolitis

Inflammation and ulceration and thickening of wall as a result of a chronic autoimmune disease.

# PH308 Duodenum

The first part of the small intestine connecting the stomach and the ileum.

# PH309 Enterititis, Subacute

Inflammation of the small intestine, with characteristics between acute and chronic.

#### PH310 Esophagus

The muscular tube through which food passes from the throat to the stomach.

# PH311 Esophagus - Viral Changes And Fungus (HIV Positive)

Changes in the tissue of the esophagus brought about by viral and fungal infections in someone who is HIV positive.

# PH312 Esophagus, Middle Region / Eosophagus

Middle region of the tube connecting the pharynx and the stomach.

# PH313 Gastritis With Helicobacter, Stomach

Inflammation of the stomach with the bacterium helicobacter present.

# PH314 Gastritis, Acute And Chronic, Stomach

Inflammation of the stomach, showing both acute and chronic changes.

# PH315 Gastritis, Early Hypertrophic

Inflammation of the stomach, showing early signs of increase in cell size.

# PH316 Herpes, Esophagus

The esophagus showing tissue changes as a result of infection with herpes.

### PH317 lleum

The last part of the small intestine.

### PH318 Jejunum

Portion of the small intestine that extends from the duodenum to the ileum.

# PH319 Leiomyosarcoma, Small Intestine

A tumor of the muscles in the small intestine.

### PH320 Linitis Plastica

Malignant infiltration of the gastric wall, usually involving the deep layers of the stomach.

# PH321 Peptic Ulcer, Chronic Gastric Ulcer Of Stomach

An ulcer in the wall of the stomach or duodenum resulting from the action of the gastric juice on the mucous membrane.

### PH322 Polyp, Inflamed, Stomach

An inflamed projecting growth in the stomach, usually benign.

# PH323 Pyloric Sphincter / Pyloro-Duodenal Junction

The junction between the stomach and the small intestine.

# PH324 Pylorus Pyloric Region

The region of the stomach that connects with the duodenum (first part of small intestine).

#### PH325 Stomach

Part of the digestive system; helps in the digestion of food by mixing it with digestive juices and churning it into a thin liquid.

# PH326 Stomach, Cardiac Region

Region surrounding the superior opening of the stomach.

# PH327 Stomach, Fundic Region

The part of the stomach that is furthest away from its opening with the esophagus.

# PH328 Ulcer With Candida, Benign, Stomach

Non-malignant ulcer showing presence of candida in stomach.

# PH329 Ulcer With Repair, Benign, Esophagus

Non-malignant ulcer showing evidence of repair in esophagus.

# PH330 Ulcer, Tuberculous, Small Intestine

Ulcer in stomach caused by tuberculosis.

# PH331 Ulcer, Typhoid, Small Intestine

Ulcer in small intestine caused by typhoid.

# PH 4: Endocrine System Test Kit 27 vials

The energy patterns of various healthy and diseased tissues, e.g.adrenal gland, pancreas, thyroid, myxoedema, goitre, Addison's disease and cancers.

# PH401 Addison's Disease, Adrenal Glands / Adrenocortical Hypofunction / Chronic Adrenocortical Insufficiency/ Adrenal Insufficiency

Adrenocortical hormone deficiency because of damage to the adrenal cortex; the damage may be caused by the immune system attacking the gland, TB, cancer, infection, etc.

# PH402 Adenocarcinoma, Pancreas

A cancer arising in the glandular tissue of the pancreas; the most common form of pancreatic cancer.

# PH403 Adenoma, Adrenal Gland / Suprenal Adenoma

A benign tumour of the adrenal gland.

# PH404 Adenoma, Parathyroid Gland

A benign tumour of the parathyroid glands, which are located in the neck and help to regulate calcium metabolism.

# PH405 Adenoma, Pituitary Gland

A tumour of the anterior lobe of the pituitary gland.

# PH406 Adrenal Gland Suprarenal

Organs responsible for producing steroid and other hormones essential for life.

# PH407 Colloid Goitre, Thyroid

Swelling of the thyroid gland in which the follicles of the gland are distended and filled with colloid (a gelatinous or mucinous substance).

# PH408 Cyst, Parathyroid Gland

A closed sac having a distinct membrane and developing abnormally in the parathyroid gland.

# PH409 Diabetes Mellitus, Pancreas

Pancreas showing changes of diabetes mellitus.

# PH410 Fatty Infiltration, Atrophy, Pancreas

Infiltration of the tissues of the pancreas with excess amounts of fat, and wasting away of tissue.

# PH411 Follicular Adenoma, Thyroid

A benign tumour of the thyroid gland.

# PH412 Follicular Carcinoma, Thyroid

A type of thyroid cancer affecting the follicular cells which make thyroid hormone.

# PH413 Grave's Disease

An autoimmune disease that causes overactivity of the thyroid gland.

# PH414 Hashimoto's Disease / Hashimoto's Thyroiditis / Hashimoto's Struma / Struma Lymphomatosa

A chronic autoimmune disease that leads to thyroid enlargement, etc.

# PH415 Islet Cell Tumour, Pancreas

Cancer arising from cells in the islets of Langerhans (hormone-producing cells in the pancreas).

# PH416 Large Cell Carcinoma, Adrenal Gland

A cancer of the adrenal glands in which the cells are large and look abnormal under a microscope.

# PH417 Myasthenia Gravis, Thymus

An autoimmune disease that causes muscle weakness.

# PH418 Myxoedema / Myxedema

A condition in which the thyroid gland fails to produce enough thyroid hormone.

# PH419 Pancreas

A glandular organ located in the abdomen; it makes pancreatic juices, which contain enzymes that aid in digestion, and it produces several hormones, including insulin.

# PH420 Papillary Carcinoma, Thyroid

The most common thyroid gland carcinoma, often occurring before age 40 and much more common in women than in men.

# PH421 Parathyroid Gland

Glands embedded in the thyroid gland; regulate calcium and phosphate levels in the blood.

# PH422 Phagocytosis, Pancreas

Phagocytes devouring bacteria in the pancreas.

# PH423 Pituitary Gland Hypophysis

The main endocrine gland, producing hormones that control other glands and many body functions, especially growth.

# PH424 Radiation Change, Thyroid

Changes to the thyroid gland brought about by radiation treatment to it.

# PH425 Thyroid

A gland located beneath the voice box (larynx) that produces thyroid hormone. The thyroid helps regulate growth and metabolism.

# PH426 Goitre / Goiter

Enlarged thyroid gland.

# PH427 Pineal Gland / Epiphysis Cerebri

Attached to the roof of the third ventricle near its junction with the mid-brain; secretes melatonin; full function is unclear.

# PH 5: Gall Bladder & Liver Test Kit 28 vials

The energy patterns of various healthy and diseased tissues, e.g. liver, gallbladder, Weil's disease, liver abscess, fatty degeneration of the liver, hepatoma, sarcoma of the liver, and cirrhosis.

# PH501 Abscess, Liver

A condition where there is a pus-filled cavity in the liver secondary to a bacterial infection.

#### PH502 Acute Yellow Atrophy, Liver

A severe usually fatal disorder in which the liver degenerates and is reduced in size as a result of toxic chemicals, infection, or other agents.

#### PH503 Adenocarcinoma, Fatty Infiltrations, Liver

Cancer of the liver with abnormal accumulation of fat droplets in the cytoplasm of cells.

#### PH504 Adenocarcinoma, Gallbladder

Cancer originating in the cells lining the gallbladder.

#### PH505 Adenocarcinoma, Hepatic Metastasis

A malignant tumor originating in glandular epithelium, metastastised to liver.

# PH506 Biliary Cirrhosis, Liver

Cirrhosis of the liver due to inflammation or obstruction of the bile ducts resulting in the accumulation of bile in the liver.

# PH507 Biliary Obstruction, Liver

Blockage of the bile ducts that can occur as a result of stones, tumours, bile duct inflammation, bile duct cysts, trauma, etc.

#### PH508 Carcinoid, Secondary, Liver

A cancer in the liver metastasised as a result of one in the mucosa of the gastrointestinal tract.

#### PH509 Carcinoma, Secondary, Liver

A carcinoma that has metastasised in the liver as a result of one elsewhere in the body.

#### PH510 Cholecystitis, Chronic Active, Gallbladder

Inflammation of the gallbladder that occurs most commonly because of obstruction of the cystic duct.

# PH511 Fatty Degeneration, Liver / Steatosis

Abnormal formation of microscopically visible droplets of fat in the cytoplasm of cells of the liver, as a result of injury.

# PH512 Gallbladder

The pear-shaped organ found below the liver that concentrates and stores bile.

#### PH513 Hemangioma, Liver / Haemangioma

A tangle of abnormal vessels that forms an abnormal communication between the arterial and venous systems, in this case of the liver.

# PH514 Hepatic Septic Infarcts

An area of necrosis resulting from vascular obstruction due to emboli comprised of clumps of bacteria or infected material, in this case in the liver.

# PH515 Hepatoma

A liver tumor (usually malignant).

# PH516 Inflammation, Chronic, Gallbladder

Chronic inflammation of the gallbladder.

# PH517 Liver

The largest organ in the body; carries out many important functions, e.g. Making bile, changing food into energy, and cleaning alcohol and poisons from the blood.

# PH518 Liver Congestion, Fatty Degeneration, Cloudy Swelling

Swelling of liver cells due to injury to the membranes leading to an an accumulation of intracellular water; also abnormal formation of microscopically visible droplets of fat in the cytoplasm of the cells.

# PH519 Liver, Cloudy Swelling, Dilation Of Capillaries

Swelling of liver cells due to injury to the membranes leading to an an accumulation of intracellular water; also showing capillaries dilating.

# PH520 Necrosis, Sub Acute, Liver

Dying tissue, showing characteristics between acute and chronic.

# PH521 Papillary Tumour, Gallbladder

A tumour shaped like a small mushroom with its stem attached to the inner lining of the gallbladder.

# PH522 Sarcoma, Secondary Melanotic, Liver

A secondary cancer in the liver that has metastasised as a result of one in the supportive tissues such as bone, cartilage, fat or muscle.

#### PH523 Syphilitic Cirrhosis, Liver

Widespread disruption of normal liver structure by syphilis.

#### PH524 Tuberculosis, Miliary, Liver

Acute tuberculosis in which minute tubercles are formed in the liver by tubercle bacilli usually spread by way of the blood.

# PH525 Tumour, Malignant, Gallbladder

A cancerous tumour in the gallbladder.

# PH526 Venous Congestion, Early, Liver

Early signs of overfilling and distention of the veins with blood as a result of mechanical obstruction or heart problems.

# PH527 Venous Congestion, Late Chronic, Liver

Extensive overfilling and distention of the veins with blood as a result of mechanical obstruction or heart problems.

# PH528 Weil's Disease, Liver / Spirochaetosis

Liver showing signs of infection by leptospira with an illness whose symptoms include chills, fever, muscle pain, and hepatitis.

# PH 6: Brain & Nervous System Test Kit 25 vials

The energy patterns of various healthy and diseased tissues, e.g. cerebrum, cerebellum, thalamus, hippocampus, nerve, meningioma, encephalitis and infarcts.

# PH601 Abscess, Cerebellum

A localised collection of pus caused by suppuration in the cerebellum.

# PH602 Cerebellum

The portion of the brain in the back of the head between the cerebrum and the brain stem; it controls balance for walking and standing, and other complex motor functions.

# PH603 Cerebral Hemorrhage / Cerebral Haemorrhage

A sudden and abrupt bleeding into the tissue of the brain; usually occurs as the result of a weakened artery from the effects of high blood pressure and atherosclerosis.

#### PH604 Cerebral Softening

A localised softening of the brain substance due to inflammation or haemorrhage.

# PH605 Cerebrum

The largest part of the brain, controlling muscle functions speech, thought, emotions, reading, writing, and learning.

# PH606 Dementia, Paralytica / Paralytic Dementia

Dementia and paralysis resulting from a chronic syphilitic meningoencephalitis.

### PH607 Encephalitis, Post-Vaccinal

Inflammation of the brain as a result of vaccination.

#### PH608 Glioblastoma Multiforme

A malignant brain tumour that accounts for 75% of glial tumours (arising from glial cells in the brain).

#### PH609 Hippocampus

Part of the limbic system of the brain, involved in emotions and memory.

### PH610 Infarct, Cortical, Brain

Tissue death due to a local lack of oxygen in the cerebral cortex (outer layer that covers the cerebrum, functions chiefly in coordination of sensory and motor information).

#### PH611 Infarct, Old, Cerebellum

An old area of tissue death due to a local lack of oxygen in the cerebellum (concerned especially with the coordination of muscles and the maintenance of bodily equilibrium).

#### PH612 Medulla Oblongata

Lower part of brain stem; controls autonomic functions; relays nerve signals between the brain and spinal cord.

#### PH613 Meningioma, Brain

Common benign brain tumour that originates in the cells of the outer covering of the brain (meninges).

#### PH614 Meningioma, Brain, Malignant

Malignant tumour the cells of the outer covering of the brain (meninges).

#### PH615 Meningitis With Cortical Oedema

Inflammation of the meninges with fluid retention in the cortex.

# PH616 Meningitis, Pneumococcal

Inflammation of the meninges of the brain as a result of infection by strep pneumoniae.

#### PH617 Meningitis, Tuberculous

Inflammation of the meninges of the brain as a result of tuberculosis.

#### PH618 Nerve

A bundle of fibers that uses electrical and chemical signals to transmit sensory and motor information from one body part to another.

#### PH619 Nerve, Peripheral

The nerves outside of the brain and spinal cord; they contain non-neuronal cells and connective tissue as well as axons

#### PH620 Neuroblastoma

Cancer that arises in immature nerve cells and affects mostly infants and children.

#### PH621 Neurofibroma

A benign tumor that develops from the cells and tissues that cover nerves.

#### PH622 Pilocytic Astrocytoma, Brain / Juvenile Astrocytoma

A nerve-tissue tumor composed of astrocytes; the most common brain tumor in children.

#### PH623 Sympathetic Ganglion

A group of nerve cell bodies either close to the spinal column or close to the large abdominal arteries.

#### PH624 Thalamus

A large mass of gray matter deeply situated in the forebrain; relays information received from various brain regions to the cerebral cortex.

#### PH625 Toxoplasmosis, Brain

Brain showing symptoms caused by toxoplasma gondii, often contacted via cat faeces.

# PH 6B: more Brain & Nervous System Test Kit 50 vials

More healthy brain parts including amygdala, hypothalamus, prefrontal cortex and the primary motor cortex.

# PH 6B 26 Amygdala

Groups of nuclei located deep and medially within the temporal lobes of the brain; considered part of the limbic system; performs a primary role in the processing of memory, decision-making and emotional reactions; controls the way we react to certain stimuli, or an event that causes an emotion, that we see as potentially threatening or dangerous.

# PH 6B 27 Auditory Association Area

An area in the temporal lobe of the brain within Wernicke's area near the lateral cerebral sulcus, which is critical for processing acoustic signals so they can be interpreted as speech, music or other sounds.

# PH 6B 28 Auditory Cortex

Located bilaterally, roughly at the upper sides of the temporal lobes. The part of the cerebral cortex that processes auditory information, performing basic and higher functions in hearing.

# PH 6B 29 Basal Ganglia / Basal Nuclei

Comprise multiple subcortical nuclei at the base of the forebrain. Strongly interconnected with the cerebral cortex, thalamus, and brainstem, as well as several other brain areas. Associated with a variety of functions including: control of voluntary motor movements, procedural learning, routine behaviours or habits such as bruxism (teeth grinding), eye movements, cognition and emotion.

# PH 6B 30 Brain Stem

The posterior part of the brain, adjoining and structurally continuous with the spinal cord; provides the main motor and sensory innervation to the face and neck via the cranial nerves; the nerve connections of the motor and sensory systems from the main part of the brain to the rest of the body pass through the brainstem. Also plays an important role in the regulation of cardiac and respiratory function, and also regulates the central nervous system, and is pivotal in maintaining consciousness and regulating the sleep cycle.

# PH 6B 31 Brain Stem Reticular Formation

Essential for governing some of the basic functions; involved in multiple tasks such as regulating the sleep-wake cycle and filtering incoming stimuli to discriminate irrelevant background stimuli.

# PH 6B 32 Caudate Nucleus

One of three basic structures that make up the basal ganglia; responsible largely for voluntary movement.

# PH 6B 33 Cerebellar Nuclei

Clusters of grey matter lying within the white matter at the core of the cerebellum. Give rise to nerve fibres that carry impulses from cerebellum to other parts of brain and to the spinal column.

# PH 6B 34 Cerebral Cortex

Grey matter that is outermost to the cerebrum; plays a key role in memory, attention, perceptual awareness, thought, language, and consciousness.

# PH 6B 35 Cerebral Hemisphere, Left

Concerned with spoken and written language, numerical and scientific skills, ability to use and understand language, reasoning.

# PH 6B 36 Cerebral Hemisphere, Right

Concerned with musical and artistic awareness, space and pattern perception, recognition of faces and emotional content of facial expressions, generating emotional content of language, generating mental images to compare spatial relationships.

# PH 6B 37 Cerebrospinal Fluid

A clear colourless bodily fluid found in the brain and spine; produced in the choroid plexus of the brain; acts as a cushion for the brain's cortex, providing basic mechanical and immunological

protection to the brain inside the skull, and it serves a vital function in cerebral auto-regulation of cerebral blood flow.

# PH 6B 38 Cingulate Gyrus

Receives inputs from the thalamus and the neocortex, and projects to the entorhinal cortex via the cingulum; forms part of the limbic system, which is associated with mood and emotions; helps people to be flexible in learning and processing new situations; highly important in disorders such as depression and schizophrenia.

# PH 6B 39 Claustrum

A thin, irregular, sheet of neurons which is attached to the underside of the neocortex in the centre of the brain; full range of functions unclear but plays a strong role in communication between the two hemispheres of the brain, specifically between cortical regions controlling attention.

# PH 6B 40 Cochlear Nuclei

Collections of neurons in the brainstem that receive input from the cochlear nerve, that carries sound information from the cochleae. The outputs from the cochlear nuclei are received in higher regions of the auditory brainstem.

# PH 6B 41 Corpus Callosum

A wide, flat bundle of neural fibres that connects the left and right cerebral hemispheres and facilitates inter-hemispheric communication.

# PH 6B 42 Dura Mater

A thick membrane that is the outermost of the three layers of the meninges that surround the brain and spinal cord; it is responsible for keeping in the cerebrospinal fluid.

# PH 6B 43 Epithalamus

A segment of the diencephalon; includes the habenula, the habenular commissure, the stria medullaris and the pineal body. Its function is the connection between the limbic system to other parts of the brain.

# PH 6B 44 Forebrain / Prosencephalon

Contains the thalamus, hypothalamus and the cerebrum; functions including receiving and processing sensory information, thinking, perceiving, producing and understanding language, and controlling motor functions.

# PH 6B 45 Frontal Lobe, Left

Considered our emotional control centre and home to our personality; involved in motor function, problem solving, spontaneity, memory, language, initiation, judgement, impulse control, and social and sexual behaviour; involved in controlling language related movement.

# PH 6B 46 Frontal Lobe, Right

Considered our emotional control centre and home to our personality; involved in motor function, problem solving, spontaneity, memory, language, initiation, judgement, impulse control, and social and sexual behaviour; plays a role in non-verbal abilities.

# PH 6B 47 Globus Pallidus / Paleostriatum

Part of the basal ganglia; involved in the regulation of voluntary movement; if the globus pallidus is damaged, it can cause movement disorders.

# PH 6B 48 Hindbrain / Rhombencephalon

Includes the cerebellum, the pons and the medulla oblongata, which function collectively to support vital bodily processes.

# PH 6B 49 Hypothalamus

Located below the thalamus, just above the brainstem; responsible for certain metabolic processes and other activities of the autonomic nervous system; synthesises and secretes certain neurohormones, and these in turn stimulate or inhibit the secretion of pituitary hormones; controls body temperature, hunger, important aspects of parenting and attachment behaviours, thirst, fatigue, sleep, and circadian rhythms.

# PH 6B 50 Inferior Colliculus

The principal midbrain nucleus of the auditory pathway; receives input from several peripheral brainstem nuclei in the auditory pathway, as well as inputs from the auditory cortex.

# PH 6B 51 Inferior Olivary Nucleus

The largest nucleus in the olivary body, part of the medulla oblongata; closely associated with the cerebellum, so is involved in control and coordination of movements, sensory processing and cognitive tasks.

# PH 6B 52 Insula / Insular Cortex / Insulary Cortex / Insular Lobe

A portion of the cerebral cortex folded deep within the lateral sulcus, the fissure separating the temporal and the frontal lobes; believed to be involved in consciousness and play a role in diverse functions usually linked to emotion or the regulation of the body's homeostasis.

# PH 6B 53 Internal Capsule

Contains all of the pathways that allow information to be transferred between the cerebral cortex and the spinal cord, brainstem, and subcortical structures (ie: thalamus, basal ganglia).

# PH 6B 54 Midbrain / Mesencephalon

A portion of the central nervous system associated with vision, hearing, motor control, sleep/wake, arousal (alertness), and temperature regulation.

# PH 6B 55 Motor Cortex

Comprises the primary motor cortex, premotor cortex, and supplementary motor area. the region of the cerebral cortex involved in the planning, control, and execution of voluntary movements.

# PH 6B 56 Occipital Lobe, Left

Is the visual processing centre of the brain containing most of the anatomical region of the visual cortex; receives visual input from the retina.

# PH 6B 57 Occipital Lobe, Right

Is the visual processing centre of the brain containing most of the anatomical region of the visual cortex; receives visual input from the retina.

# PH 6B 58 Parietal Lobe, Left

Part of the cerebral cortex; has to be able to process sensory information within seconds. The parietal lobe is where information such as taste, temperature, pain and touch are integrated, or processed. Several portions of the parietal lobe are important in language processing.

# PH 6B 59 Parietal Lobe, Right

Part of the cerebral cortex; has to be able to process sensory information within seconds. The parietal lobe is where information such as taste, temperature, pain and touch are integrated, or processed. Several portions of the parietal lobe are important in language processing.

# PH 6B 60 Pons

Area of the hindbrain that sits directly above the medulla; serves as a message station between several areas of the brain; helps relay messages from the cortex and the cerebellum. Without the pons, the brain would not be able to function because messages would not be able to be transmitted, or passed along; also plays a key role in sleep and dreaming.

# PH 6B 61 Precentral Gyrus

Part of the primary motor cortex; the location of the primary somatosensory cortex, the main sensory receptive area for the sense of touch.

# PH 6B 62 Prefrontal Cortex / PFC

The anterior part of the frontal lobes of the brain; has been implicated in planning complex cognitive behaviour, personality expression, decision making and moderating social behaviour; the basic activity of this brain region is considered to be orchestration of thoughts and actions in accordance with internal goals.

# PH 6B 63 Premotor Cortex

Functions of the premotor cortex are diverse and not fully understood; projects directly to the spinal cord and therefore may play a role in the direct control of behavior, with a relative emphasis on the

trunk muscles of the body. May also play a role in planning movement, in the spatial guidance of movement, in the sensory guidance of movement, in understanding the actions of others, and in using abstract rules to perform specific tasks.

# PH 6B 64 Primary Motor Cortex / Brodmann'S Area 4

Located in the posterior portion of the frontal lobe; works in association with other motor areas to plan and execute movements.

# PH 6B 65 Purkinje Neurons In Cerebellum

Some of the largest neurons in the human brain; send inhibitory projections to the deep cerebellar nuclei, and constitute the sole output of all motor coordination in the cerebellar cortex.

# PH 6B 66 Putamen

Located at the base of the forebrain; main function is to regulate movements and influence various types of learning. Employs GABA, acetylcholine, and enkephalin to perform its functions. Involved in degenerative neurological disorders, such as Parkinson's disease.

# PH 6B 67 Red Nucleus / Nucleus Ruber

Located in the midbrain and involved in motor coordination; controls crawling of babies, arm swinging in normal walking; may play an additional role in controlling muscles of the shoulder and upper arm; also has limited control over hands.

# PH 6B 68 Somatosensory Cortex

The main sensory receptive area for the sense of touch, including specific sensitivity to pain and temperature, and the proprioception system, which monitors the body's place in space.

# PH 6B 69 Stellate Cells/ Stellate Neurons from the V1 Region In The Visual Cortex

Receive excitatory synaptic fibres from the thalamus and process feed forward excitation to the visual cortex pyramidal cells.

# PH 6B 70 Substantia Nigra

Located in the mesencephalon/midbrain that plays an important role in reward, addiction, and movement. Parkinson's disease is characterized by the death of dopaminergic neurons in the substantia nigra pars compacta.

# PH 6B 71 Subthalamic Nucleus / STN

Part of the basal ganglia system; exact function unknown, but considered to be one of the main regulators of motor function related to the basal ganglia. STN dysfunction has been shown to increase impulsivity in individuals presented with two equally rewarding stimuli.

# PH 6B 72 Superior Colliculus

On the dorsal aspect of the midbrain; plays a role in helping orient the head and eyes to all types of sensory stimuli.

# PH 6B 73 Temporal Lobe, Left

The temporal lobes are involved in the retention of visual memories, processing sensory input, comprehending language, storing new memories, emotion, and deriving meaning.

# PH 6B 74 Temporal Lobe, Right

The temporal lobes are involved in the retention of visual memories, processing sensory input, comprehending language, storing new memories, emotion, and deriving meaning.

# PH 6B 75 Visual Cortex

Located in the occipital lobe; part of the cerebral cortex responsible for processing visual information.

# PH 6C: yet more Brain & Nervous System Test Kit 26 vials

More brain histology including grey and white matter, choroid plexus, and parts of the ventricular system. 26 vials for use by chiropractic physicians, kinesiologists, EAV practitioners, etc.

# PH 6C 76 Abducens Nucleus

Nuclei in pons providing motor impulses that control eyeball movement via the abducens (VI cranial) nerves.

# PH 6C 77 Arachnoid Villi / Granulations

Small protrusions of the arachnoid (the thin second layer covering the brain) through the dura mater (the thick outer layer); allow cerebrospinal fluid to exit the sub-arachnoid space and enter the blood stream; act as one-way valves.

# PH 6C 78 Calcarine Fissure / Calcarine Sulcus

Located on the medial surface of the occipital lobe and divides the visual cortex into two.

# PH 6C 79 Central Sulcus

A prominent landmark of the brain, separating the parietal lobe from the frontal lobe and the primary motor cortex from the primary somatosensory cortex.

# PH 6C 80 Cerebral Aqueduct

Contains cerebrospinal fluid, and connects the third ventricle in the diencephalon to the fourth ventricle within the region of the mesencephalon and metencephalon.

# PH 6C 81 Choroid Plexus

A structure in the ventricles of the brain where cerebrospinal fluid is produced.

# PH 6C 82 Diencephalon

Located on top of the brain stem; consists of the thalamus, the subthalamus, the hypothalamus, and the epithalamus.

# PH 6C 83 Facial Motor Nucleus / Facial Nucleus

A collection of neurons in the brainstem that belong to the facial nerve (cranial nerve VII); they innervate the muscles of facial expression and the stapedius.

# PH 6C 84 Fourth Ventricle

Extends from the cerebral aqueduct to the obex, and is filled with cerebrospinal fluid.

# PH 6C 85 Grey Matter / Gray Matter

A major component of the central nervous system, consisting of neuronal cell bodies, neuropil (dendrite, myelinated and unmyelinated axons), glial cells (astroglia and oligodendrocytes) and capillaries; includes regions of the brain involved in muscle control, and sensory perception such as seeing and hearing, memory, emotions, speech, decision making, and self-control.

# PH 6C 86 Hypoglossal Nucleus

In the medulla oblongata; the nucleus of origin of the hypoglossal nerve (the twelfth cranial nerve that innervates muscles of the tongue).

# PH 6C 87 Lateral Sulcus / Sylvian Fissure / Lateral Fissure

Divides both the frontal lobe and parietal lobe above from the temporal lobe below.

# PH 6C 88 Lateral Ventricle

The right and left lateral ventricles are structures within the brain that contain cerebrospinal fluid; part of the body's ventricular system, which acts as a continuation of the central canal of the spinal cord; contains cerebrospinal fluid.

# PH 6C 89 Medial Lemniscus / Reil's Band / Reil's Ribbon

An ascending spinal tract, carrying sensory information to the thalamus.

# PH 6C 90 Medial Longitudinal Fasciculus

A longitudinal bundle of fibres extending from the mesencephalon into the cervical segments of the spinal cord; involved in inervating the external eye muscles, and inervating the musculature of the neck.

# PH 6C 91 Nucleus Ambiguus

Contains the cells bodies of nerves that innervate the muscles of the soft palate, pharynx, and larnyx which are strongly associated with speech and swallowing.

# PH 6C 92 Oculomotor Nucleus

In the midbrain; the nerve controls most of the eye muscles.

# PH 6C 93 Pia Mater

The delicate innermost layer of the meninges, which encloses the cerebrospinal fluid and so helps to protect and cushion the brain; allows blood vessels to pass through and nourish the brain. The space created between blood vessels and pia mater functions as a lymphatic system for the brain.

# PH 6C 94 Pontine Tegmentum

A part of the pons of the brain involved in the initiation of REM sleep.

# PH 6C 95 Pretectal Nucleus

Part of the subcortical visual system; involved primarily in mediating behavioural responses to acute changes in ambient light such as the pupillary light reflex, the optokinetic reflex, and temporary changes to the circadian rhythm.

# PH 6C 96 Pyramidal Neuron, Hippocampus

The primary excitation units of the prefrontal cortex and the corticospinal tract; also found in the cerebral cortex and the amygdala.

# PH 6C 97 Subarachnoid Cavity / Subarachnoid Space

The space between the arachnoid membrane and pia mater that is occupied by spongy tissue consisting of trabeculae (delicate connective tissue filaments) and intercommunicating channels in which the cerebrospinal fluid is contained.

# PH 6C 98 Superior And Inferior Parietal Lobules

The superior parietal lobule is involved with spatial orientation, receiving visual input as well as sensory input from the hands; also involved with other functions of the parietal lobe in general. Inferior parietal lobe involved in the perception of emotions in facial stimuli, and interpretation of sensory information.

# PH 6C 99 Third Ventricle

One of four connected cavities comprising the ventricular system within the human brain, containing cerebrospinal fluid.

# PH 6C 100 Trochlear Nucleus

Nuclei in midbrain provide motor impulses that control eyeball movement, via the trochlear nerves (IV cranial nerves).

# PH 6C 101 White Matter / Arbor Vitae

In the brain and superficial spinal cord, consisting mostly of glial cells and myelinated axons that transmit signals from one region of the cerebrum to another and between the cerebrum and lower brain centres.

# PH 6D: Cranial Nerves 26 vials

Cranial nerves are the nerves that emerge directly from the brain (including the brainstem), in contrast to spinal nerves (which emerge from segments of the spinal cord). Cranial nerves relay information between the brain and parts of the body, primarily to and from regions of the head and neck.

PH6D 01 PH6D 02	Cranial Nerve I Cranial Nerve I	Left Right	Olfactory Nerve Olfactory Nerve		ed in the sense of smell. ed in the sense of smell.
PH6D 03 PH6D 04	Cranial Nerve II Cranial Nerve II	Left Right	Optic Nerve Optic Nerve		ed in transmitting visual information. ed in transmitting visual information.
PH6D 05 PH6D 06	Cranial Nerve III Cranial Nerve III	Left Right	Oculomotor Nerv Oculomotor Nerv		ed in eye movement. ed in eye movement.
PH6D 07 PH6D 08	Cranial Nerve IV Cranial Nerve IV	Left Right	Trochlear Nerve Trochlear Nerve		ed in eye movement. ed in eye movement.
PH6D 09	Cranial Nerve V	Left	Trigeminal Nerve		ed in sensation to the skin of the
PH6D 10	Cranial Nerve V	Right	Trigeminal Nerve	e Involv	so controls the muscles of chewing. ed in sensation to the skin of the so controls the muscles of chewing.
PH6D 11 PH6D 12	Cranial Nerve VI Cranial Nerve VI	Left Right	Abducens Nerve Abducens Nerve		ed in eye movement. ed in eye movement.
PH6D 13 PH6D 14	Cranial Nerve VII Cranial Nerve VII	Left Right	Facial Nerve Facial Nerve		le facial expression le facial expression
PH6D 15 PH6D 16	Cranial Nerve VIII Cranial Nerve VIII	Left Right	Vestibulocochlea Vestibulocochlea		Involved in hearing and balance. Involved in hearing and balance.
PH6D 17	Cranial Nerve IX	Left	Glossopharynge	ossopharyngeal Nerve Involved in oral sensation, taste, and salivation.	
PH6D 18	Cranial Nerve IX	Right	Glossopharyngeal Nerve Involved in oral sensation, taste and salivation.		
PH6D 19	Cranial Nerve X	Left	•	Involved in pa lungs and dige	arasympathetic control of the heart,
PH6D 20	Cranial Nerve X	Right	Vagus Nerve	Involved in parasympathetic control of the heart, lungs and digestive tract.	
PH6D 21	Cranial Nerve XI	Left	Accessory Nerve		ed in shoulder elevation and turning
PH6D 22	Cranial Nerve XI	Right	Accessory Nerve	e Involv	ed in shoulder elevation and turning
PH6D 23	Cranial Nerve XII	Left	Hypoglossal Ner		ed in tongue movement.
PH6D 24	Cranial Nerve XII	Right	Hypoglossal Ner	ve invoiv	ed in tongue movement.
PH6D 25	Cranial Nerve XIII	Left		-	r to be vestigial, so without function, s. Also called Nerve N, / NT
PH6D 26	Cranial Nerve XIII	Right	Zero Nerve	Thought eithe	r to be vestigial, so without function, s. Also called Nerve N, / NT
		y De l'eld	ica io ine sensilly	or prieromone	5. AISO CAILEY MELVE IN, / IN I

# PH 7: Skeletal System Test Kit 25 vials

The energy patterns of various healthy and diseased tissues, e.g. bone, spinal chord, juvenile rheumatism nodule, chordoma, rickets, osteochondroma and oseosarcoma.

# PH701 Bone

### PH702 Bone, Healing Fracture

A break in a bone that is healing.

### PH703 Bone, Long, Showing Compact And Cancellous Tissue

Compact tissue has a dense structure without small cavities or cells, whereas cancellous has these cavities and cells (providing space for blood vessels).

#### PH704 Bone, Spongy

Cancellous Bone Makes up most of the bone tissue of short, flat and irregular shaped bones, and also a narrow rim around the marrow cavity and the ends of long bones.

#### PH705 Chondrosarcoma

Cancer of cartilage cells; the second most common primary bone cancer.

### PH706 Chordoma

A malignant tumor that is derived from remnants of the embryonic notochord and occurs along the spine attacking especially the bones at the base of the skull or near the coccyx.

#### PH707 Disseminating Sclerosis, Spinal Chord

A pathological condition in which a tissue has become hard, as in multiple sclerosis.

#### PH708 Ewing's Sarcoma Ewing's Tumour / Primitive Neuroectodermal Tumor

A type of bone cancer that usually forms in the middle (shaft) of large bones; the third most common form of primary bone cancer.

#### PH709 Femur, Ossifying

Ossification of the large thigh bone.

# PH710 Fibrous Dysplasia, Bone

A chronic disorder of the skeleton that causes expansion of one or more bones due to abnormal development of fibrous tissue within the bone.

#### PH711 Giant Cell Sarcoma

A bone cancer in which the cells look large under a microscope (produced by the fusion of many cells).

#### PH712 Gouty Tophus

A deposit of urates around a joint typical of people with gout.

# PH713 Intervertebral Disk, Fibrous Cartilage

Spinal disc.

# PH714 Juvenile Rheumatism Nodule / Still's Disease

A chronic, inflammatory disease that may cause joint or connective tissue damage. The onset occurs before age 16.

# PH715 Leg Fracture With Fat Embolism

Fractured leg bone showing the occurrence of fat globules in the bloodstream that occur after the fracture of a long bone.

#### PH716 Ossification

The formation of bone or of a bony substance, the conversion of fibrous tissue or of cartilage into bone or a bony substance.

#### PH717 Osteochondroma

A benign cartilaginous tumour, often occurring near the ends of long bones.

# PH718 Osteosarcoma / Osteogenic Sarcoma

A cancer of the bone that usually affects the arms, legs and pelvis; the most common primary bone cancer.

# PH719 Paget's Disease, Bone / Osteitis Deformans / Osteodystrophia Deformans

A chronic disease of bones involving the replacement of normal bone marrow with vascular and fibrous tissue.

# PH720 Poliomyelitis, Spinal Chord

Spinal chord showing the affects of the viral disease poliomyelitis.

# PH721 Rheumatoid Arthritis, Joint

A disease in which the body recruits new blood vessels to the joints, causing swelling and inflammation.

### PH722 Rickets, Costochondral Junction

The point where the ribs articulate with the sternum showing signs of rickets (vitamin D deficiency leading to disturbance in normal ossification).

# PH723 Spinal Chord, Cervical

The spinal column in the region of the neck.

# PH724 Spinal Chord, Lumbar

The spinal chord between the ribs and the pelvis.

# PH725 Spinal Chord, Thoracic

The spinal column in the region of the ribs.

# PH 7B: Vertebrae Test Kit 34 vials

The vertebral column, also known as backbone or spine, is a bony structure found in vertebrates. It is formed from individual bones called vertebrae (singular: vertebra).

In human anatomy, the vertebral column usually consists of 24 articulating vertebrae, and nine fused vertebrae in the sacrum and the coccyx. It is situated in the dorsal aspect of the torso, separated by intervertebral discs. It houses and protects the spinal cord in its spinal canal, and hence is commonly called the spine, or simply backbone.

This kit consists of 34 vials to include the 5th coccygeal vertebra which is occasionally present.

- V 01 Cervical Vertebra 1/C1/Atlas
- V 02 Cervical Vertebra 2 /C2/Axis
- V 03 Cervical Vertebra 3/C3
- V 04 Cervical Vertebra 4/C4
- V 05 Cervical Vertebra 5/C5
- V 06 Cervical Vertebra 6/C6
- V 07 Cervical Vertebra 7/C7/Vertebra Prominens
- V 08 Thoracic Vertebra 1/T1
- V 09 Thoracic Vertebra 2/T2
- V 10 Thoracic Vertebra 3/T3
- V 11 Thoracic Vertebra 4/T4
- V 12 Thoracic Vertebra 5/T5
- V 13 Thoracic Vertebra 6/T6
- V 14 Thoracic Vertebra 7/T7
- V 15 Thoracic Vertebra 8/T8
- V 16 Thoracic Vertebra 9/T9
- V 17 Thoracic Vertebra 10/T10
- V 18 Thoracic Vertebra 11/T11
- V 19 Thoracic Vertebra 12/T12

- V 20 Lumbar Vertebra 1/L1
- V 21 Lumbar Vertebra 2/L2
- V 22 Lumbar Vertebra 3/L3
- V 23 Lumbar Vertebra 4/L4
- V 24 Lumbar Vertebra 5/L5
- V 25 Sacral Vertebra 1/S1
- V 26 Sacral Vertebra 2 /S2
- V 27 Sacral Vertebra 3/S3
- V 28 Sacral Vertebra 4/S4
- V 29 Sacral Vertebra 5/S5
- V 30 Coccygeal Vertebra 1
- V 31 Coccygeal Vertebra 2
- V 32 Coccygeal Vertebra 3
- V 33 Coccygeal Vertebra 4 (occasionally not present)
- V 34 Coccygeal Vertebra 5 (very often not present)

# PH 8: Muscle & Connective Tissues Test Kit 26 vials

The energy patterns of various healthy and diseased tissues, e.g. adipose tissue, cartilage, voluntary and involuntary muscles, lipoma, sarcomas, cellulitis and chondroma.

#### PH801 Adipose Tissue

Connective tissue in which fat is stored and which has the cells distended by droplets of fat.

#### PH802 Cartilage, Elastic

Provides strength and elasticity; found in external ear, epiglottis and auditory tubes.

# PH803 Cartilage, Fibrocartilage

Cushions and protects, such as intervertebral discs, pads in knee joints and pad between two pubic bones.

#### PH804 Cartilage, Hyaline

Most abundant cartilage in the body, providing flexibility and support.

#### PH805 Cellulitis, Acute, Thigh Muscle

An acute, spreading infection of the deep tissues of the skin and muscle that causes the skin to become warm and tender.

#### PH806 Chondroma

Tumour composed in part of cartilage.

#### PH807 Clear Cell Sarcoma, Muscle

A cancer in a muscle.

#### PH808 Collagenous Fibre / White Fibrous Tissue

Strong, flexible but only slightly elastic, found in tendons and ligaments.

#### PH809 Fat Necrosis, Omentum

A benign condition where fatty tissue swells or becomes tender, can occur spontaneously or as the result of an injury; here affecting the omentum (layers of peritoneum that give fat to abdomen).

#### PH810 Fibroma

A benign (non-cancerous) tumour which consists of fibrous tissues or connective tissue.

#### PH811 Fibrosarcoma

A type of soft tissue sarcoma that begins in fibrous tissue, which holds bones, muscles, and other organs in place.

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# PH812 Giant Cell Tumour, Tendon

A usually benign tumour where the cells look large under the microscope microscope (produced by the fusion of many cells).

# PH813 Hyaline Degeneration, Muscle

Tissue degeneration in which structural elements of muscle cells are replaced by homogeneous translucent material.

# PH814 Inflammation, Acute, Omentum

Inflammation of a fold of the peritoneum (the thin tissue that lines the abdomen) that surrounds the stomach and other organs in the abdomen.

# PH815 Leiomyosarcoma, Muscle

A cancer composed in part of smooth muscle cells.

# PH816 Lipoma

A benign tumour consisting of fatty or adipose tissue.

# PH817 Muscle, Involuntary

Smooth muscles not ordinarily under the control of the will, activated by the autonomic nervous system.

# PH818 Muscle, Voluntary

Muscle that can be made to contract or relax by conscious control.

# PH819 Muscular Dystrophy, Pseudohypertrophic

A group of heridtary diseases characterised by progressive degeneration and/or loss of muscle fibres without nervous system involvement.

# PH820 Myositis, Muscle, From Rheumatoid Arthritis

Muscular inflammation caused by rheumatoid arthritis.

# PH821 Peritoneum

The smooth serous membrane which lines the cavity of the abdomen.

# PH822 Peritonitis, Intestine, Acute

Inflammation of the smooth serous membrane which lines the cavity of the abdomen.

# PH823 Peritonitis, Mesentery, Acute

Acute inflammation of the mesentry (a fold of the peritoneum surrounding the small intestine and binding it to the posterior abdominal wall).

# PH824 Spindle Cell Sarcoma

A type of connective tissue cancer in which the cells are spindle-shaped when examined under a microscope.

# PH825 Spindle Cell Sarcoma With Necrosis

A type of connective tissue cancer in which the cells are spindle-shaped when examined under a microscope, showing tissue death.

# PH826 Synovial Sarcoma, Tendon

A malignant tumour that develops in the synovial membrane of the joints.

# PH 9: Kidney & Urinary System Test Kit 33 vials

The energy patterns of various healthy and diseased tissues, e.g. kidney, bladder, urethra, ureter, kidney abscess, nephritis and cancers.

# PH901 Abscess, Hemorrhage, Cloudy Swelling, Kidney

A localised collection of pus surrounded by inflamed tissue, with bleeding, swelling and cellular oedema.

# PH902 Angiomyolipoma

Hamartoma (a mass resembling a tumour, but not a true tumour) in the kidney containing fat, muscle, vessels.

# PH903 Bladder

Organ in which urine collects before evacuation from the body.

# PH904 Cirrhosis, Kidney

Chronic interstitial inflammation of the tissues of the kidney.

# PH905 Clear Cell Carcinoma, Kidney / Adenocarcinoma Of Kidney / Renal Adenocarcinoma / Hypernephroid Carcinoma / Hypernephroma / Grawitz's Tumor

A rare type of kidney cancer. Can spread from the kidney to other organs, most commonly the bone, but also including the lungs, brain, and soft tissues of the body.

### PH906 Diabetic Kidney

Kidney tissue showing signs of changes brought about by long-term diabetes.

### PH907 Interstitial Cystitis, Bladder

A bladder condition caused by chronic inflammation leading to difficulties with urination.

# PH908 Inverted Papilloma, Bladder / Transitional Cell Papilloma, Inverted Type

A benign tumour of the bladder.

#### PH909 Kidney

A pair of organs which function to filter the blood and control the level of some chemicals in the blood such as hydrogen, sodium, potassium, and phosphate; they eliminate waste in the form of urine.

#### PH910 Kidney Cortex

One of the main functional parts of the kidney (outer zone).

#### PH911 Kidney Medulla

One of the main functional parts of the kidney (inner zone) containing the renal pyramids.

# PH912 Kidney, Bleeding

Kidney tissue showing signs of bleeding.

# PH913 Kidney, Cloudy Swelling

Kidney tissue showing signs of cellular oedema.

#### PH914 Kidney, Post-Hypertensive

Kidney tissue showing signs resulting from high blood pressure.

# PH915 Malacoplakia, Bladder / Malakoplakia

Inflammation of the mucous membrane of the bladder characterised by the formation of soft granulomatous lesions.

# PH916 Nephritis, Acute

Acute inflammation of the kidney.

# PH917 Nephritis, Chronic / Chronic Glomerulonephritis

Chronic inflammation of the kidney.

# PH918 Nephritis, Subacute / Subacute Glomerulonephritis

Inflammation of the kidney somewhere between acute and chronic.

#### PH919 Papilloma, Bladder

A benign tumour often resembling a wart arising from cells lining the bladder.

# PH920 Pyelonephritis, Chronic

Inflammation of the kidney and its pelvis, beginning in the interstitium and rapidly extending to involve the tubules, glomeruli and blood vessels, due to bacterial infection.

#### PH921 Renal Artery & Vein

The main artery and vein of the kidney.

#### PH922 Renal Atrophy, Hydronephrotic

Abnormal enlargement of a kidney, which may be caused by blockage of the ureter (such as by a kidney stone) or chronic kidney disease that prevents urine from draining into the bladder.

#### PH923 Renal Cell Carcinoma

The most common form of kidney cancer which occurs when the cells lining the renal tubule undergo cancerous changes.

# PH924 Renal Cortical Necrosis, Symmetrical

Dying tissue in the outer portion of the kidney.

# PH925 Renal Failure

A slow decline in kidney function over time; chronic renal failure may be caused by a number of disorders which include long-standing hypertension, diabetes, congestive heart failure, lupus or sickle cell anaemia.

# PH926 Renal Infarct, Recent Bland

Kidney showing area of recent tissue death due to a local lack of oxygen, but with no sign of infection.

#### PH927 Transitional Cell Cancer, Bladder

Cancer of the soft cuboidal cells of the bladder; these cells allow the bladder to stretch to collect urine.

### PH928 Tuberculosis, Kidney

Kidney showing signs of tissue changes due to tuberculosis.

#### PH929 Ureter

The tube that carries urine from the kidney to the bladder.

#### PH930 Urethra

The tube that carries urine from the bladder and out through the penis.

#### PH931 Venous Congestion, Kidney

Overfilling and distention of the veins of the kidney with blood as a result of mechanical obstruction or right ventricular failure.

### PH932 Venous Congestion, Chronic, Kidney

Chronic overfilling and distention of the veins of the kidney with blood as a result of mechanical obstruction or right ventricular failure.

#### PH933 Wilm's Tumour

Childhood cancer of the kidney.

# PH 10: Lymph, Blood & Immune System Test Kit 37 vials

The energy patterns of various healthy and diseased tissues, e.g. blood, bone marrow, lymph gland, anaemia, infarcts, leukemia and other cancers.

# PH1001 Anaemia, Folate Deficiency / Folic Acid Deficiency / Megoblastic Anaemia

A blood disorder characterized by anemia, with red blood cells that are larger than normal, resulting from a deficiency of folic acid.

# PH1002 Anaemia, Iron Deficiency

Anemia A condition in which the blood is deficient in red blood cells, in hemoglobin, or in total volume, as a result of iron deficiency.

#### PH1003 Anaemia, Pernicious

A blood disorder caused by a lack of vitamin B12, as a result of lack of intrinsic factor production in the stomach.

### PH1004 Anaemia, Sickle Cell

Chronic anemia occurring primarily in individuals of African descent.

#### PH1005 Blood

Red blood cells, white blood cells, platelets, and other substances suspended in fluid called plasma; blood takes oxygen and nutrients to the tissues, and carries away wastes.

#### PH1006 Blood Film Increased Neutrophils (Many Young Forms)

Blood showing many neutrophils; this may indicates bacterial infection, burns, stress or inflammation.

#### PH1007 Bone Marrow

Soft, sponge-like tissue in the centre of most large bones, producing white blood cells, red blood cells, and platelets.

# PH1008 Cancer, Metastatic Prostate Cancer, Lymph Gland

Prostate cancer that has produced secondaries in a lymph node.

# PH1009 Eosinophilia, Blood

Type of white blood cells.

# PH1010 Hodgkin's Disease, Lymph Gland

Cells in the lymphatic system grow abnormally and may spread beyond the lymphatic system; with time compromises the body's ability to fight infection.

# PH1011 Infarct, Bland, Spleen

An uninfected area of necrosis in the spleen produced by sudden blockage in an artery.

# PH1012 Infarct, Older, Spleen

Death of an area of tissue caused by lack of blood supply.

# PH1013 Inflammatory Reaction, Lymph Gland

Lymph gland showing signs of inflammation.

# PH1014 Leukemia, Acute Lymphocytic (Blood Sample)

Acute Lymphoblastic Leukemia, Acute Lymphoid Leukemia,

Acute Lymphatic Leukemia Most common form of childhood leukemia; a quickly progressing disease in which too many immature white blood cells are found in the blood and bone marrow.

# PH1015 Leukemia, Acute Myelocytic (Blood Sample)

A rapidly progressing cancer that starts in blood-forming tissue such as the bone marrow, and causes large numbers of white blood cells to be produced and enter the blood stream.

# PH1016 Leukemia, Acute Myelocytic (Bone Marrow Sample)

Involving uncontrolled proliferation of white blood cells.

# PH1017 Leukemia, Chronic Lymphocytic / Chronic Lymphatic Leukemia / Chronic Lymphoid Leukemia

Most common form of leukemia, a slowly progressing disease in which too many white blood cells (lymphocytes) are found in the body.

# PH1018 Leukemia, Chronic Myeloid / Chronic Myelogenous Leukemia / Chronic Granulocytic Leukemia

Leukemia affecting granulocytes, monocytes, red blood cells or platelets; these are usually mature in appearance but do not function properly.

# PH1019 Leukemia, Hairy Cell, Spleen / Leukemic Reticuloendotheliosis

A cancer of lymphocytes (B cells) that leads to low blood counts; relatively uncommon.

# PH1020 Liposarcoma, Fat

A sarcoma arising from immature fat cells of the bone marrow.

# PH1021 Lymph Gland / Lymph Node

Lymph nodes filter lymph and store lymphocytes (white blood cells).

# PH1022 Lymph Gland Cancer, Secondary

A cancer in the lymph gland which has metastasised from elsewhere.

# PH1023 Lymph Gland, Focal Necrosis, Active Congestion

Lymph gland showing dead tissue, and active congestion.

# PH1024 Lymph Gland, Reactive

A lymph gland that is enlarged because it is trying to fight off an infection.

# PH1025 Lymph Gland, Reactive HIV Positive

A lymph gland that is enlarged because it is trying to fight off an infection as a result of HIV.

# PH1026 Multiple Myeloma, Bone Marrow

Cancer of bone marrow, cells that normally make antibodies and other substances to fight infection.

# PH1027 Myelofibrosis, Bone Marrow

A disorder in which the bone marrow is replaced by fibrous tissue.

# PH1028 Non-Hodgkin's Lymphoma, Lymph Gland / Lymphocytic Lymphoma / Histiocytic Lymphoma / Lymphoblastic Lymphoma

Malignancy of lymph cells that have migrated outside the bone marrow to a lymph gland.

# PH1029 Phagocytosis, Lymph Gland

Lymph gland showing phagocytes devouring bacteria.

# PH1030 Spleen

Located on the left side of the abdomen near the stomach; produces lymphocytes, filters the blood, stores blood cells, and destroys old blood cells.

# PH1031 Thymoma, Thymus

A cancer originating within the epithelial cells of the thymus.

# PH1032 Thymus

In the chest behind the breastbone; an organ that is part of the lymphatic system, in which T lymphocytes grow and multiply.

# PH1033 Thymus, Child

In the chest behind the breastbone; an organ that is part of the lymphatic system, in which T lymphocytes grow and multiply.

# PH1034 Tuberculosis, Lymph Gland

Lymph gland showing signs of the chronic disease TB.

# PH1035 Tuberculosis, Spleen

Spleen showing signs of TB.

# PH1036 Venous Congestion, Spleen

Spleen showing signs of congestion in veins (as a rsult of mechanical obstruction or heart problems).

# PH1037 Mast Cells

Produce histamine, which dilates small blood vessels; involved in body's reaction to injury and infection.

# PH 11: Heart & Circulatory System Test Kit 27 vials

The energy patterns of various healthy and diseased tissues, e.g. aorta, artery, vein, myocarditis, temporal arteritis, atheroma, arteriosclerosis and endocarditis.

# PH1101 Aorta

The large arterial trunk that carries blood from the heart to be distributed by branch arteries through the body.

# PH1102 Arterial Thrombus, Recent

A recently formed blood clot in an artery.

# PH1103 Arteriosclerosis, Medial, Femoral Artery

A chronic disease in which muscle and elastic fibres are replaced by fibrous tissue; here affecting the main artery in the thigh.

# PH1104 Artery

Tubular branching muscular- and elastic-walled vessels that carry blood from the heart through the body.

# PH1105 Artery, Superior Mesenteric

A large artery that arises from the aorta and supplies the greater part of the small intestine, the cecum, the ascending colon, and the right half of the transverse colon.

# PH1106 Atheroma, Aorta

An abnormal fatty deposit in the aorta.

# PH1107 Atheroma, Subclavian Artery

An abnormal fatty deposit in subclavian artery (large artery that passes to the upper arm)

# PH1108 Atherosclerosis, Artery

Disease of wall of artery where inner layer thickens, causing a decrease in the capacity of the artery to transport blood.

# PH1109 Calcification Of Artery

Abnormal deposits of calcium in an artery.

# PH1110 Cardiac Muscle / Heart Muscle

The principal tissue in the heart wall.

# PH1111 Endocarditis, Subacute Bacterial, Aortic Valve

Inflammation of the valve separating the aorta from the left ventricle that prevents blood from flowing back into the left ventricle.

# PH1112 Fatty Degeneration, Heart Muscle

Abnormal formation of microscopically visible droplets of fat in the cytoplasm of cells of the heart muscle.

# PH1113 Hypertrophy, Heart Muscle

Enlarged heart muscle.

### PH1114 Mitral Valve, Recent And Older Vegetations

Roughenings on one of heart valves usually as a result of acute rheumatism.

#### PH1115 Myocardial Fibrosis

Heart muscle scarred from chronic disease.

# PH1116 Myocardial Infarct, Old And Recent / Heart Attack

Tissue of the heart muscle has died and is permanently damaged because of an inadequate supply of oxygen to that area.

# PH1117 Myocarditis

Inflammation of the muscular walls of the heart.

### PH1118 Myoxma

A primary heart tumour; this is uncommon as most heart tumours have spread from elsewhere in the body.

# PH1119 Post-Hypertensive Sclerosis, Peripheral Artery

Hardening of a peripheral artery as a result of high blood pressure.

# PH1120 Rheumatic Endocarditis, Mitral Valve

Inflammation of the inner most lining of the heart cavities and mitral valve.

# PH1121 Syphilis, Basilar Artery

Syphilitic changes in the artery that supplies the pons, cerebellum, posterior part of the cerebrum, and the inner ear.

# PH1122 Temporal Arteritis Inflammation of the arteries.

#### PH1123 Thrombosis, Septic, Sigmoid Sinus

A blood clot with putrefaction within a blood vessel in the sigmoid sinus cavity (skull).

# PH1124 Vasculitis, Rheumatoid Arthritis On Steroids

Inflammation of blood vessels; a symptom sometimes associated with rheumatoid arthritis.

#### PH1125 Vein

A tube carrying blood from the capillaries towards the heart.

#### PH1126 Vena Cava

Two large veins which take deoxygenated blood into the right atrium of heart for delivery to the lungs.

#### PH1127 Venous Thrombosis, Muscle

A blood clot in a vein in a muscle.

# PH12: Reproductive System - Female Breast Only Test Kit 25 vials

The energy patterns of various healthy and diseased tissues, e.g. breast, lactating breast, fibroadenoma, Paget's disease, benign tumours and various cancers.

# PH1201 Adenofibroma

A benign tumor of glandular and fibrous tissue.

# PH1202 Adenomyoma

A benign tumor composed of muscular and glandular elements.

### PH1203 Breast / Mammary Gland

Glands that produce milk for young.

### PH1204 Breast Lactating

Breast actively producing milk.

# PH1205 Breast, Cancer In Lymphatics

Breast cancer in lymph vessels.

# PH1206 Carcinoma, Medullary

An invasive breast cancer that forms a distinct boundary between tumor tissue and normal tissue (about 5% of breast cancers).

# PH1207 Carcinoma, Mucinous / Colloid Carcinoma

A rare breast cancer formed by the mucus-producing cancer cells.

# PH1208 Chondromatous Changes

A benign tumor containing the structural elements of cartilage.

#### PH1209 Comedocarcinoma

Form of breast cancer in which plugs of necrotic malignant cells may be expressed from the ducts.

# PH1210 Ductal Carcinoma And Sclerosing Adenosis / Ductal Cancer With Adenofibrosis / Fibrosing Adenomatosis / Fibrosing Adenosis

Cancer of the breast ducts with other benign lesions.

# PH1211 Ductal Carinoma In Situ Intraductal Carcinoma

The most common type of non-invasive breast cancer, is confined to the ducts of the breast.

# PH1212 Fibroadenoma

Common benign breast tumors often too small to feel by hand ..

# PH1213 Histiocytic Lymphoma

A malignant tumour of reticular tissue.

# PH1214 Infiltrating Ductal Carcinoma / Invasive Ductal Carcinoma / IDC

The most common type of invasive breast cancer, starting in the cells that line the milk ducts in the breast, grows outside the ducts, and often spreads to the lymph nodes.

# PH1215 Intraductal Fibroadenoma

A benign solid growth found in the ducts of the breast.

# PH1216 Intraductal Papillomas

Non-cancerous wart-like growths that have grown inside the breast, often involving the large milk ducts near the nipple, causing bloody nipple discharge.

# PH1217 Lobular Carcinoma In Situ / Lobular Neoplasia / Noninfiltrating Lobular Carcinoma

Non-invasive cancer that begins in the lobules (the milk-producing glands of the breast).

# PH1218 Mastitis, Chronic

Inflammation of breast tissue usually as a result of bacterial infection, most commonly occurring during lactation.

# PH1219 Paget's Disease

A form of breast cancer that begins in the milk ducts and spreads to the skin of the nipple and areola; Paget's disease of the nipple only accounts for about 1% of breast cancers.

# PH1220 Papillary Carcinoma

A malignant tumour characterised by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells.

# PH1221 Phyllodes Tumour / Phylloides Tumour

Can be either benign (non-cancerous) or malignant (cancerous); develops in the connective tissues of the breast.

# PH1222 Scirrhus Breast Cancer

A hard slow-growing malignant tumour having a preponderance of fibrous tissue.

### PH1223 Tuberculosis, Breast

Breast showing signs of tuberculosis.

#### PH1224 Tubular Adenoma

A benign tumour composed of epithelial tissue resembling a tubular gland.

#### PH1225 Tubular Carcinoma

An invasive breast carcinoma, accounting for about 2% of breast cancer diagnoses.

# PH 13: Female Reproductive Excluding Breasts Test Kit 33 vials

The energy patterns of various healthy and diseased tissues, e.g. ovary, vagina, uterus, cervix with CIN changes, ovarian cyst, genital wart, fibroids and cancers.

# PH1301 Adenocarcinoma, Cervix, Endocervix

Cancer of the mucous membrane of the cervical canal.

#### PH1302 Adenocarcinoma, Uterus

Cancer that begins in the cells that line the uterus.

#### PH1303 Carcinoma, Fallopian Tube

Carninoma Of Oviduct, Carcinoma Of Uterine Tubes Cancer of the fallopian tubes.

#### PH1304 Cervix

The lower part and neck of the uterus.

# PH1305 Cervix, CIN1 to CIS

CIN is a general term for the growth of abnormal cells on the surface of the cervix. Numbers from 1 to 3 are used to describe how much of the cervix contains abnormal cells; CIS is cancer in situ.

#### PH1306 Cervix, CIN3 to CIS

CIN is a general term for the growth of abnormal cells on the surface of the cervix. Numbers from 1 to 3 are used to describe how much of the cervix contains abnormal cells; CIS is cancer in situ.

# PH1307 Cervix, CIS

A non-invasive cancer of the cervix.

#### PH1308 Chancre, Cervix

The primary skin lesion of syphilis which begins at the site of infection after an interval of 10-30 days as a papule or red ulcerated skin lesion.

# PH1309 Clear Cell Carcinoma, Ovary

One of the subtypes of epithelial ovarian cancer. It can range from benign to aggressive, depending on grade.

#### PH1310 Corpus Albicans

Once the corpus luteum degenerates it becomes the corpus albicans.

#### PH1311 Corpus Luteum

Endocrine gland in ovary formed when ovum discharged; if the ovum impregnated, the corpus luteum increases in size and persists for several months, (secretes estrogens, progesterone, relaxin and inhibin); otherwise degenerates and shrinks.

#### PH1312 Cyst, Ovary

An abnormal lump filled with fluid or similar in the ovary.

# PH1313 Cystic & Adenaomatous Hyperplasia, Endometrium

Multiple cysts and an abnormal increase in the number of cells of glandular origin in the endometrium (the layer of tissue that lines the uterus).

# PH1314 Dysplasia, Moderate To Severe, Cervix

Cells look abnormal under a microscope but are not cancerous.

# PH1315 Dysplasia, Moderate, Cervix

Cells look abnormal under a microscope but are not cancerous.

# PH1316 Fallopian Tube

The tube through which eggs pass from the ovaries to the uterus.

# PH1317 Fibroids

Fibromyomas, Fibroleiomyomas, Leiomyoma, Simply Myomas Benign tumours of the uterus composed of smooth muscle and fibrous connective tissue.

# PH1318 Fibroids With Hyaline Degeneration / Fibromyomas / Fibromas / Fibroleiomyomas / Leiomyoma / Simply Myomas

Benign tumours of the uterus composed of smooth muscle and fibrous connective tissue, showing tissue degeneration.

# PH1319 Genital Wart / Condyloma Acuminatum / Condyloma / Venereal Wart

A wart on the skin or adjoining mucous membrane usually near the anus and genital organs.

# PH1320 Leiomyosarcoma, Uterus

A tumour of the muscles in the uterus.

# PH1321 Mixed Mullerian Tumour, Uterus / Carcinosarcoma, Mixed Mesodermal Tumour

A sarcoma that consists of both endometrial carcinoma and stromal sarcoma.

# PH1322 Ovary

Female reproductive glands in which the ova, or eggs, are formed, located in the pelvis, one on each side of the uterus.

# PH1323 Papillary Carcinoma, Endocervix

A malignant tumour of the mucous membrane of the cervical canal.

# PH1324 Salpingitis, Purulent

Inflammation of the fallopian tube with discharge of pus.

# PH1325 Salpingitis, Sub-Acute

Inflammation of the fallopian tube somewhere between acute and chronic.

# PH1326 Squamous Cell Carcinoma, Vulva

Cancer that begins in squamous cells, which are thin, flat cells that look like fish scales, in the vulva (the external part of the female genitalia).

# PH1327 Stromal Hyperplasia, Ovary

An abnormal increase in the number of connective tissue cells that hold the ovary together and those that produce the female hormones (estrogen and progesterone).

# PH1328 Teratoma, Benign Cystic, Ovary

A type of non-malignant tumour originating in germ cells (cells that produce the eggs).

# PH1329 Ulceration, Tubercular, Fallopian Tube

Fallopian tube showing signs of ulceration as a result of TB.

# PH1330 Urine, Malign Cervical Cells

Urine with cancerous cervical cells in it.

# PH1331 Uterus Womb

The small, hollow, pear-shaped organ in a woman's pelvis; this is the organ in which an unborn child develops.

# PH1332 Uterus, Active Menstruation

The uterus with the lining (the endometrium) being shed that occurs when a woman is not pregnant.

# PH1333 Vagina Birth Canal

The muscular canal extending from the uterus to the exterior of the body.

# PH 13B: More Female Reproductive 47 vials

Code	Name	Description		
PH13B 34 Adeno Carcinoma, N		Metastatic adenocarcinoma can crop up in different parts of the		
DI 1 2D 25	static	body.		
PH13B 35	Adeno Malignum	A rare variant of Adenocarcinoma of the uterine cervix.		
PH13B 36	Bartholin Cyst	A small fluid-filled sac just inside the opening of a woman's vagina.		
PH13B 37	Brenner Tumour	Uncommon subtype of the surface epithelial-stromal tumour group of ovarian tumour. The majority are benign, but some can be ma- lignant.		
PH13B 38	Cervical Polyp	Small, elongated tumours that grow on the cervix; usually benign.		
PH13B 39	Cervical Polyp, Carci- noma	Small, elongated tumours that grow on the cervix; usually benign, but here cancerous.		
PH13B 40	Cervicitis	An inflammation of the cervix; possible symptoms include bleed- ing between menstrual periods, pain with intercourse, and abnor- mal vaginal discharge, but may be without symptoms.		
PH13B 41	Cervicitis, Tuberculous	Cervix affected by TB from elsewhere in the body.		
PH13B 42	Cervix, Carcinoma, Early	Cervical cancer		
PH13B 43	Cervix, CIN1/HPV	An abnormal cervical intraepithelial growth with the human papil- loma virus.		
PH13B 44	Cervix, Nabothian Cysts	Mucous-filled cyst on the surface of the cervix, usually requiring no treatment.		
PH13B 45	Cervix, Squamous Cell Carcinoma	Squamous cells are the flat, skin-like cells covering the outer sur- face of the cervix; between 70% to 80% of cervical cancers.		
PH13B 46	Chorio Epithelioma / Chorioblastoma / Cho- riocarcinoma / Chorionic Carcinoma	A malignant, fast-growing tumour that develops from trophoblas- tic cells (cells that help an embryo attach to the uterus and help form the placenta); spreads through the blood to other organs, especially the lungs. Also called chorioblastoma, choriocarcinoma, and chorionic carcinoma.		
PH13B 47	Corpus Luteum, Cyst	Can lead to painful symptoms; may go away on their own, but some may require treatment.		
PH13B 48	Disgerminoma	A type of germ cell tumour; usually malignant and usually occurs in the ovary.		
PH13B 49	Egg / Oocyte			
PH13B 50	Egg and Sperm			
PH13B 51	Endometriosis Tubae	Endometrial tissue in the fallopian tubes.		
PH13B 52	Endometritis, Chronic	Inflammation of the inner lining of the uterus; symptoms may in- clude fever, lower abdominal pain, and abnormal vaginal bleeding or discharge.		
PH13B 53	Endometrium, Early Proliferative	The time during the menstrual cycle when a layer of endometrial cells is prepared for attachment of a fertilised egg.		
PH13B 54	Endometrium, Cancer- ous Polyp	Cancerous overgrowths of tissue cells in the lining of the uterus.		
PH13B 55	Endometrium, Decidual Change	Decidualisation is a process that results in significant changes to cells of the endometrium in preparation for, and during, pregnancy.		
PH13B 56	Endometrium, Early Pre- menstrual	The inner lining of uterus in the early premenstrual phase.		
Tosting Kit D	escription Manual 18th Editic	n Copyright LWP 2024 Page 179		

Code	Name	Description		
PH13B 57	Endometrium, Late Pre- menstrual	The inner lining of uterus in the late premenstrual phase.		
PH13B 58	Endometrium, Normal	The inner lining of uterus.		
PH13B 59	Graafian Follicle / Ter- tiary Vesicular Follicle / Mature Vesicular Follicle / Ripe Vesicular Follicle	The third stage of follicle development leading eventually to ovula- tion.		
PH13B 60	Graafian Follicle Cyst / Benign Ovarian Cyst / Functional Cyst	Mainly symptom-free and resolving without any intervention		
PH13B 61	Krukenberg Tumour	A malignant tumour in the ovary that metastasised from a primary site, often the gastrointestinal tract.		
PH13B 62	Myometrium	The middle layer of the uterine wall; main function is to induce uterine contractions.		
PH13B 63	Ovarian Serous Cystad- enoma	The most common ovarian tumour, representing 20% of ovarian neoplasms; benign.		
PH13B 64	Ovary, Chorioepithe- lioma	A malignant, fast-growing tumour; most commonly found in uterus, but a small number form in an ovary.		
PH13B 65	Ovary, Endometriosis	Tissue similar to the tissue that normally lines the inside of your uterus growing in the ovary; often very painful.		
PH13B 66	Ovary, Fibroma			
PH13B 67	Ovary, Granulosa Cell Tumour	A rare type of ovarian cancer.		
PH13B 68	Ovary, Mucinous Cystad- enofibroma	A benign ovarian tumour that generally affects women in their for- ties.		
PH13B 69	Ovary, Normal, Senile			
PH13B 70	Ovary, Sarcoma	A cancer originating in the connective tissue.		
PH13B 71	Ovary, Serous Cystad- enoma	Most common ovarian growth; benign.		
PH13B 72	Uterus, Adenoma			
PH13B 73	Uterus, Endometrial Polyp			
PH13B 74	Uterus, Sarcoma, Round Cell	Highly aggressive malignant tumour composed of relatively small and monotonous undifferentiated cells.		
PH13B 75	Vagina, Sarcoma, Pri- mary	This cancer has spread from the primary site elsewhere in the body Develops in the connective tissue cells or muscles cells in the walls of the vagina.		
PH13B 76	Vagina, Sarcoma, Sec- ondary	This cancer has spread from the primary site elsewhere in the body Develops in the connective tissue cells or muscles cells in the walls of the vagina		
PH13B 77	Vulva, Adenocarcinoma	Around 10% of vaginal cancers are adenocarcinomas.		
PH13B 78	Vulva, Epithelioma	Can be malignant or non-malignant.		
PH13B 79	Vulva, Kraurosis	Atrophy and shrinkage of the skin of the vulva often accompanied by a chronic inflammatory reaction in the deeper tissues.		
PH13B 80	Vulva, Normal	The external female sex organs.		

### PH 14: Male Reproductive System Test Kit 25 vials

The energy patterns of various healthy and diseased tissues, e.g. penis, testis, sperm, vas deferens, prostate gland and various cancers and tumours.

### PH1401 Adenocarcinoma, Prostate Gland

Cancer that began in the cells that line the prostate and have glandular properties.

### PH1402 Adenomatoid Tumour, Epidydimis

A small, circumscribed, benign tumour in the epididymis (tube where sperm mature).

### PH1403 Adenomatoid Tumour, Vas Deferens

A small, circumscribed, benign tumour of the spermatic chord (a structures that includes the vas deferens, arteries, veins, lymphatic vessels, and nerves).

### PH1404 Breast, Gynecomastia

An excessive development of the male mammary glands, even to the functional state.

### PH1405 Ductal Carcinoma In Breast, Male

A carcinoma derived from epithelium of ducts of the male breast.

### PH1406 Embryonal Carcinoma

A malignant neoplasm of the testis, composed of large cells with indistinct cellular borders.

### PH1407 Epididymis

The duct in which sperm undergo maturation.

### PH1408 Fibroadenoma, Prostate Gland

Benign tumour of the prostate gland.

### PH1409 Hypertrophy, Prostate Gland

Enlarged Prostate, Nodular Hyperplasia, Prostate Gland Increase in size of inner zone of prostate; common in men over 50.

### PH1410 Leydig Cell Tumour, Testis

The most common nongerminal tumour of the testis, derived from the leydig cells; rarely malignant.

### PH1411 Penis

The external male reproductive organ, containing a tube called the urethra, which carries semen and urine to the outside of the body.

### PH1412 Prostate Gland

A gland just below the bladder.; surrounds part of the urethra, the canal that empties the bladder, and produces a fluid that forms part of semen.

### PH1413 Prostate, Senile

A prostate showing deterioration that comes with age.

### PH1414 Prostatitis

Inflammation of the prostate gland, usually due to an infection.

PH1415 Sarcoma, Testicle

A connective tissue cancer of the testicle.

### PH1416 Seminal Vesicle

Glands that help produce semen.

### PH1478 Seminoma, Testis

A rapidly dividing cancer of the testicle which is thought to arise from primordial germ line cells while the individual is still an embryo and the testicle has not yet been sexually differentiated from the generic gonad.

### PH1418 Sperm / Spermatozoa

Mature male germ cells that fertilise the ovum.

### PH1419 Syphilis, Gumma, Testis

Late stage of syphilis.

### PH1420 Teratoma, Testis

A type of germ cell tumour that may contain several different types of tissue; not all teratomas are malignant.

### PH1421 Testis / Testicle

The two egg-shaped glands found inside the scrotum that produce sperm and male hormones.

### PH1422 Testis, Atrophic

Testicle showing signs of lessening of size of cells.

### PH1423 Testis, Inhibition Of Spermiogenesis (Hormone Disorder)

A reduction in production of sperm as a result of a hormone disorder.

### PH1424 Tuberculosis, Testis And Epididymis

Testis and epididymis showing signs of tubercular changes.

### PH1425 Vas Deferens / Deferent Canal / Deferent Duct / Spermatic Duct / Spermiduct / Testicular Duct / Ductus Deferens

A coiled tube that carries the sperm out of the testes.

### PH 15: Pregnancy & Neonatal Test Kit 21 vials

The energy patterns of various healthy and diseased tissues, e.g. bone marrow of new born, placenta, umbilical chord, pregnant uterus and chromosomes.

### PH1501 Bone Marrow, New Born

The soft, sponge-like tissue in the center of most large bones, which produces white blood cells, red blood cells, and platelets.

### PH1502 Chromosomes, Downs Syndrome

A disorder caused by the presence of an extra chromosome 21 and characterized by mental retardation and distinguishing physical features.

### PH1503 Chromosomes, Female

Female genetic material.

### PH1504 Chromosomes, Male

Male genetic material.

### PH1505 Corpus Luteum Of Pregnancy

Endocrine gland in ovary formed when ovum discharged; if the ovum impregnated, the corpus luteum increases in size and persists for several months, (secretes estrogens, progesterone, relaxin and inhibin); otherwise degenerates and shrinks.

### PH1506 Developing Cartilaginous Bone, Joint Of Human Foetus

Cartlaginuous bone is pre-formed in cartilage.

### PH1507 Erythroblastosis Fetalis, Placenta

Immune Hydrops Fetalis, Hemolytic Disease Of The Newborn Due To Rh Incompatibility A severe anemia that develops in an unborn infant because the mother produces antibodies that attack the fetus' red blood cells.

### PH1508 Fetal And Placental Tissue

The placenta allows for exchange of material by diffusion between the maternal and foetal vascular systems but without direct contact between the two blood systems.

### PH1509 Hydatid Mole, Placenta

The pregnancy goes wrong at the time of fertilisation of the egg by the sperm; the placenta grows as a series of cysts which look rather like grapes, but there is no foetus.

### PH1510 Hydatid Mole, Uterus

The pregnancy goes wrong at the time of fertilisation of the egg by the sperm; the placenta grows as a series of cysts which look rather like grapes, but there is no foetus.

### PH1511 Neonatal Hepatitis

Inflammation of the liver most usually of viral origin.

### PH1512 Neuroblastoma, New Born

Malignant tumour derived from primitive ganglion cells.

### PH1513 Peritonitis, Meconium, Colon

Inflammation of the peritoneum by meconium (bile, mucus and shed intestinal cells, normally passed just after birth), caused by bowel perforation.

### PH1514 Placenta

The organ that nourishes the developing foetus in the uterus.

### PH1515 Placental Tissue, Early

Early development of the palcenta, the organ that nourishes the developing foetus in the uterus.

### PH516 Respiratory Distress Syndrome / Hyaline Mebrane Disease

Found in premature babies and those born by Caesarean section, involves difficulty in breathing; may also occur later in life when lungs have been damaged by disease or injury.

### PH1517 Rib, Normal Of Newborn

A rib in a newborn baby that has developed normally.

### PH1518 Term Pregnancy Products

Placental tissue, blood etc. Normally expelled after a baby is born.

### PH1519 Tooth Developing, Early Tooth

A tooth in the process of development.

### PH1520 Umbilical Chord / Umbilical Cord

A cord arising from the navel that connects the fetus with the placenta and contains the two umbilical arteries and the umbilical vein.

### PH1521 Uterus Pregnant

A uterus showing the changes of pregnancy.

# PH 16: Eyes, Nose, Ears & Mouth Test Kit 25 vials

The energy patterns of various healthy and diseased tissues, e.g. cornea, optic nerve, palate, parotid gland, tongue, tonsil, tooth and malignant and benign tumours. 25 vials.

### PH1601 Carcinoma, Tongue

A cancer of the tongue.

### PH1602 Cheek, Epithelium, Squamous Buccal Mucosa

The inner lining of the cheek showing squamous cells (thin, flat cells that look like fish scales).

### PH1603 Cornea

The transparent part of the coat of the eyeball that covers the iris and pupil and admits light to the interior.

### PH1604 Ear, Internal, Foetal

The internal ear of the foetus.

### PH1605 Eye, Anterior Part

A front section of the human eye.

## PH1606 **Eyelid**

Eyelids shade and protect the eye.

### PH1607 Glioma, Optic Nerve

A cancer in the glial cells that surround and support the optic nerve (the nerve that carries messages from the retina to the brain).

### PH1608 Malignant Mixed Tumour, Palate

A cancerous tumour of the roof of the mouth consisting of at least two tissue types.

### PH1609 Malignant Mixed Tumour, Paratoid Gland

A cancerous tumour of a salivary gland consisting of at least two tissue types.

### PH1610 Mouth Smear

Contains saliva etc.

### PH1611 Mouth, Bacteria (Gram Positive And Negative)

A sample taken from the mouth showing two types of bacteria.

### PH1612 Nasal Epithelium

Lining of the nose.

### PH1613 Odontogenic Keratocyst, Mandible / Keratinizing Cyst

A jawbone cyst that develops a horny layer.

### PH1614 Optic Nerve

The nerve that carries messages from the retina to the brain.

### PH1615 Palate, Soft

The posterior portion of the roof of the mouth.

### PH1616 Parotid Gland

Salivary gland below and just in front of the ear.

### PH1617 **Retina Nervous Tunic** The posterior portion of the eyeball.

PH1618 **Salivary Gland** Glands in the mouth that produce saliva.

### PH1619 Sebaceous Carcinoma, Nose

A malignant tumour of the nose with sebaceous differentiation.

### PH1620 Squamous Cell Carcinoma, Mouth

A mouth cancer affecting the squamous cells (thin, flat cells that look like fish scales).

### PH1621 Submaxillary Gland / Mandibular Gland / Submandibular Salivary Gland / Submandibular Gland / Submaxillary Salivary Gland

A gland inside of and near the lower edge of the jawbone, which discharges saliva into the mouth under the tongue.

PH1622 Tongue A large muscle covered in mucous mebranes loacted in the mouth.

PH1623 Tonsil Small masses of lymphoid tissue on either side of the throat.

PH1624 Tonsillitis Inflammation of the tonsil.

PH1625 Tooth Calcified connective tissue embedded in the jawbone.

### PH 17: Skin Test Kit 26 vials

The energy patterns of various healthy and diseased tissues, e.g. hair, skin, malignant melanoma, lichen planus, blue nevus, ulcers and kaposi's sarcoma.

### PH1701 Abscess

An enclosed collection of pus in tissues, organs, or confined spaces in the body; a sign of infection and is usually swollen and inflamed.

### PH1702 Basal Cell Carcinoma / Rodent Ulcer, Basaloma

Most common form of the 3 major skin cancers; arises from the basal cells, small round cells found in the lower part (or base) of the epidermis, the outer layer of the skin.

### PH1703 Chondroid Syringoma / Mixed Tumour Of Skin

A benign tumour of the sweat glands.

### PH1704 Eccrine Spiradenoma

A benign but usually painful skin tumour composed of two cell types derived from the sweat glands.

### PH1705 Epithelioma, Skin

An abnormal skin growth; may be benign or malignant.

### PH1706 Hair

Hair consists of dead, keratinised cells bonded together by extracellular proteins.

### PH1707 Hemangioma, Cavernous & Capillary

A usually benign tumor made up of blood vessels; typically occurs as a purplish or reddish slightly elevated area of skin.

### PH1708 Herpes, Skin

Skin showing the effect of the herpes virus.

### PH1709 Hidradenoma, Clear Cell / Eccrine Acrospiroma / Nodular Hidradenoma

A tumour derived from eccrine sweat glands, composed of glycogen-rich clear cells.

### PH1710 Insect Bite With Acanthosis

Insect bite with an increase in the thickness of one of the cell layers of the skin.

### PH1711 Kaposi's Sarcoma

Cancer characterised by the abnormal growth of blood vessels that develop into skin lesions.

### PH1712 Keratoacanthoma

A non-cancerous, rapidly growing skin tumor that usually occurs on sun-exposed areas of the skin and that can go away without treatment.

### PH1713 Lentigo, Malignant

A malignant small melanotic spot in the skin in which the formation of pigment is unrelated to exposure to sunlight.

### PH1714 Lichen Planus

A common skin disease with small, shiny, itchy spots, often accompanied by lesions in the mouth.

### PH1715 Meissner Corpuscle

Receptors for discriminating touch, located in the skin, especially the finger tips and palms.

### PH1716 Melanoma, Malignant

One of the 3 major forms of skin cancer, and potentially the most serious; a malignant tumour arising from the melanocytic system of the skin.

### PH1717 Mole, Hairy Pigmented

An area on the skin (usually dark in color) that contains a cluster of melanocytes, with a hair follicle.

### PH1718 Nevus, Blue

A small blue or bluish black spot on the skin that is sharply circumscribed, rounded, and flat or slightly raised and is usually benign but often mistaken for a melanoma.

### PH1719 Papilloma, Skin

Benign skin tumour.

### PH1720 Scalp With Hair

Skin from the head with hair.

### PH1721 Sebaceous Carcinoma

Carcinoma of the sebaceous glands, usually occurring as a slow-growing hard yellow nodule on the eyelid.

### PH1722 Skin, Negroid And Caucasian

Outermost covering of the body.

### PH1723 Skin With Sweat Gland

Outermost covering of the body with a sweat gland.

### PH1724 Squamous Cell Carcinoma

One of the 3 major forms of skin cancer affecting the squamous cells (thin, flat cells that look like fish scales).

### PH1725 Ulcer, Granulating

An ulcer forms when the surface cells die and are cast off; here healing tissue with a translucent, red, velvety appearance is present.

### PH1726 Ulcer, Old Chronic, Healing

A long-standing ulcer.

## PH 18: Chromsomes Plus Test Kit

26 vials

### 24 chromosomes including the X and Y chromosomes, plus DNA and RNA.

PH 18 01 Chromosome 1 PH 18 02 Chromosome 2 PH 18 03 Chromosome 3 PH 18 04 Chromosome 4 PH 18 05 Chromosome 5 PH 18 06 Chromosome 6 PH 18 07 Chromosome 7 PH 18 08 Chromosome 8 PH 18 09 Chromosome 9 PH 18 10 Chromosome 10 PH 18 11 Chromosome 11 PH 18 12 Chromosome 12 PH 18 13 Chromosome 13 PH 18 14 Chromosome 14 PH 18 15 Chromosome 15 PH 18 16 Chromosome 16 PH 18 17 Chromosome 17 PH 18 18 Chromosome 18 PH 18 19 Chromosome 19 PH 18 20 Chromosome 20 PH 18 21 Chromosome 21 PH 18 22 Chromosome 22 PH 18 23 X Chromosome PH 18 24 Y Chromosome PH 18 25 DNA PH 18 26 RNA

### Periodontal Test Kit 35 Vials

Bacteria, biofilms and nosodes related to periodontal disease.

Periodontal disease has a major impact on health. It has been implicated in susceptibility to strokes, heart disease, diabetes and dementia.

*This kit brings together vials from other kits - bacteria, biofilms, cytokine and also includes some unique vials.* 

### PD 01 Actinomyces Israelii

Found in the vagina, colon, and mouth. Infection is established first by a breach of the mucosal barrier during various procedures (e.g. dental, and surgical) or pathologies such as diverticulitis; causes actinomycosis (formation of painful abscesses in the mouth, lungs, or gastrointestinal tract).

### PD 02 Actinomyces Odontolyticus

Part of the oral flora; also found in dental plaque and in deep dental caries. Causes actinomycosis.

### PD 03 Actinomyces Viscosus

Part of the human oral flora, occurring around the teeth, gums and throat in healthy humans. Causes dental caries particularly of the roots of teeth. Can cause abscesses in the mouth, lungs, or the gastro-intestinal tract.

### PD 04 Actinomycosis, with Actinomyces Viscosus

An infection with the formation of abscesses in the mouth, lungs, or the gastrointestinal tract. Oral actinomycosis may occur due to trauma such as a tooth extraction or bleeding gums.

### PD 05 Aggregatibacter Actinomycetemcomitans / Actinobacillus Actinomycetemcomitans

Part of the human oral flora; also found in severe infections in the oral cavity, mainly the periodontium.

### PD 06 Borrelia Vincent

Causes severe ulcerating gingivitis (trench mouth). Typically found in those with poor oral hygiene but can also occur as a result of stress, cigarette smoking and poor nutrition; also can be found in those with serious illnesses.

### PD 07 Campylobacter Rectus

Implicated as a pathogen in chronic periodontitis, which can cause bone loss.

### PD 08 Capnocytophaga Ochracea

Found in the oral cavity of humans and contributes to early plaque formation on teeth by being a physical intermediate link between several Streptococcus species and Fusobacterium nucleatum.

### PD 09 Capnocytophaga Sputigena

Normal inhabitants of the human oral cavity; implicated in periodontal disease.

### PD 10 Dental Floss: Bacteria, Plaque, Cheek Cells

- PD 11 Dental Floss: Bacteria, Plaque, Food
- PD 12 Dental Plaque With Bacilli Biofilm
- PD 13 Dental Plaque With Bacteria and Yeast
- PD 14 Dental Plaque With Cocci Biofilm
- PD 15 Dental Plaque With Fungal Hyphae and Bacteria

### PD 16 Eikenella Corrodens / Bacteroides Corrodens

A commensal bacteria of the human mouth and upper respiratory tract.

### PD 17 Enterococcus Faecalis / Streptococcus Faecalis

Can cause life-threatening infections in humans, especially in the hospital environment. Frequently found in root canal-treated teeth. Can cause endocarditis and bacteremia; also can be responsible for urinary tract infections, meningitis, and other infections. Among the main constituents of some probiotic food supplements.

### PD 18 Eubacterium Yurii

Causes periodontal disease.

### PD 19 Fusobacterium Nucleatum

Found in the mouth and upper respiratory tract. A key component of dental plaque. Possible role in periodontal disease and colon cancer. Occasional cause of abscesses and blood infections.

### PD 20 Gingiva

Gums.

### PD 21 Gingivitis, Acute

Inflammation of the gums, with redness, swelling and bleeding of the gums.

### PD 22 Interleukin-8

Interleukins are cytokines produced by the body as part of the immune system. This particular one often associated with inflammation (e.g. in gingivitis and psoriasis).

### PD 23 Peptostrepococcus Sp.

Commensal organisms in humans, living predominantly in the mouth, skin, gastrointestinal, vagina and urinary tracts, and compose a portion of the bacterial gut flora

### PD 24 Periodontal Ligament Fibres

A group of specialised connective tissue fibres that attach a tooth to the alveolar bone within which it sits.

### PD 25 Periodontitis caused by Porphromonas Gingivalis

### PD 26 Periodontitis caused by Prevotella Intermedia

### PD 27 Periodontitis caused by Prevotella Melaninogenica

### PD 28 Porphyromonas Gingivalis / Bacteroides Gingivalis

Bacteria that is part of the normal flora of the mouth, intestine and urogenital tract. Found in periodontal lesions and associated with adult gingivitis, periodontal disease and mouth abscesses; could be a risk factor for oesophageal cancer.

### PD 29 Prevotella Intermedia / Bacteroides Intermedia / Bacteroides Melaninogenicu

Bacteria involved in periodontal infections, including gingivitis and periodontitis.

### PD 30 Serratia Marcescens / Bacterium Prodigosum

Found on the sub-gingival biofilm of teeth. Involved in eye infections. Commonly found in the respiratory and urinary tracts of hospitalised adults and in the gastro-intestinal system of children. May cause pneumonia and urinary tract infections. Often found growing in bathrooms as a pink discoloration and slimy film.

### PD 31 Streptococcus Mutans

Commonly found in the human oral cavity and is a significant contributor to tooth decay.

### PD 32 Streptococcus Salivarius

The principal commensal bacterium of the oral cavity and a normal inhabitant of the upper respiratory tract. The first bacterium that colonises dental plaque, creating favourable conditions for other bacteria.

### PD 33 Streptococcus Sanguinis / Streptococcus Sanguis

A normal inhabitant of the healthy mouth, particularly found in dental plaque, where it modifies the environment to make it less hospitable for other strains of Streptococcus that cause cavities, such as Streptococcus mutans. The most common cause of subacute bacterial endocarditis.

### PD 34 Treponema Denticola

Part of the microbial community within the oral cavity ; associated with the incidence and severity of human periodontal disease. Having elevated T. denticola levels in the mouth is considered one of the main causes of periodontitis.

### PD 35 Veillonella

Part of the microbial community within the mouth and intestine. Very occasionally implicated in cases of osteomyelitis and endocarditis.

### Personal Care Test Kit 31 vials

The energy patterns of common ingredients in personal care products, including sodium lauryl sulphate (SLS), aloe vera, isopropyl myristate, propyl gallate, propylene glycol, cocoa butter and 3 parabens.

### PC01 Almond Oil (sweet)

Used as a carrier oil in aromatherapy, and in some personal care products.

### PC02 Aloe Vera Gel

Used in personal care products and cosmetics; also in some creams and gels to treat eczema, burns, etc.; can be taken internally to help digestive problems.

### PC03 Apricot Kernel Oil

Cheaper than almond oil, so used more often in personal care products to soften skin; used as a carrier oil in aromatherapy.

### PC04 Avocado Oil

Used as a food oil and in personal care products; used as a carrier oil in aromatherapy.

### PC05 Beeswax (unbleached)

Used to make fine candles, cosmetics, shoe polish and pharmaceuticals; also used to make bone wax, which is used to stop bone bleeding during surgical procedures (once applied it remains in place in the body; some people have experienced adverse reactions).

### PC06 Butyl Paraben / p-Hydroxybenzoic acid n-butyl ester / Butyl 4-hydroxybenzoate

A widely used preservative in creams, cosmetics, food and beverages; typical products include hand creams, body lotions, tanning lotions, shampoos, skin cleansers, skin toners, moisturisers, hair conditioners, hair dyes, eye shadows, foundations and after-shaves.

### PC07 Cocoa Butter / Theobroma Cacao

Used to make moisturisers, soaps, cosmetics and lip balms; used to make chocolate including white chocolate.

### PC08 Coconut Oil / Cocos Nucifera

Used in skin moisturisers and soap; in India and Sri Lanka used to style hair; used in vegetable oil and manufacture of processed foods.

### PC09 Dehydroacetic Acid

A preservative used in personal care products, medicinal creams, cosmetics and foods.

### PC10 Diazolidinyl Urea

Used as a preservative in cosmetics, skin care products, shampoos and conditioners, bubble baths, baby wipes and household detergents.

### PC11 Dibutyl Phthalate / Di-n-butyl phthalate / n-Butyl phthalate / DBP / Phthalic acid dibutyl ester

Used as a solvent for dyes, in cosmetics (particularly nail polish), food packaging, perfumes, skin emollients, hair spray and insect repellents; a commonly used plasticiser (makes plastics more flexible and easier to handle).

### PC12 Hydroxyethylcellulose

Found in personal care products (e.g. Hair conditioners, body toning creams, mascaras and shaving creams); also used in dry-eye medication and vaginal creams and gels.

### PC13 Imidazolidinyl Urea

A preservative found in skin, body and hair products, antiperspirants and nail polishes.

### PC14 Isopropyl Myristate

Found in hand and body lotions, moisturisers, deodorants, body sprays, pre-shave lotions, mascara, aftershave and medicinal creams; also used as a non-pesticide treatment for hair lice.

### PC15 Jojoba Oil

Extracted from a shrub; used in hair care products, cosmetics and skin care preparations; used as a carrier oil in aromatherapy.

### PC16 Methyl Paraben

A widely used preservative in creams, cosmetics, food and beverages; typical products include hand creams,

body lotions, tanning lotions, shampoos, skin cleansers, skin toners, moisturisers, hair conditioners, hair dyes, eye shadows, foundations and after-shaves.

### PC17 Nitrosamine Mix

Found in some personal care products; not intentionally added, but are formed accidentally during manufacture or storage (levels increase over time); research shows over half personal care products and cosmetics have detectable levels; also formed when nitrates (usually from food or drinking water) react with amines naturally present in food and in the human body; also in tobacco smoke

### PC18 Octyl Dodecanol

A common ingredient in cosmetics, hair conditioners, nail care products, deodorants, vaginal creams, etc.

### PC19 Oxybenzone / 2-Hydroxy-4-methoxybenzophenone Absorbs UV rays; used in sunscreens, skin care and lip balms.

### PC20 Palm Oil

Used in the manufacture of soap, cosmetics, detergents, candles and printing ink; used as a cooking oil, in baby formulas, to make margarine, and in many processed foods; used in production of biodiesel fuel.

### PC21 Paraphenylenediamine /p-phenylenediamine 1,4-Benzenediamine / 1,4-Diaminobenzene / 1,4-Phenylenediamine

Widely used as a permanent hair dye (when a reaction to hair dye occurs, this is the most likely culprit); may also be found in dark coloured cosmetics, temporary tattoos, photographic developer and lithography plates, photocopying and printing inks, black rubber, oils, greases and gasoline; also found in textile or fur dyes.

### PC22 Poly(ethylene glycol) Distearate

Widely used to make cosmetics opaque; used to make soap and medicinal ointments.

### PC23 Propyl Gallate / E310

An antioxidant used in personal care products, cosmetics, sausages, margarine, and chewing gum; used in manufacture of paper packaging that will be in contact with food.

### PC24 Propyl Paraben / 4-Hydroxybenzoic acid propyl ester / Propyl 4-hydroxybenzoate

A widely used preservative in creams, cosmetics, food and beverages; typical products include hand creams, body lotions, tanning lotions, shampoos, skin cleansers, skin toners, moisturisers, hair conditioners, hair dyes, eye shadows, foundations and after-shaves.

### PC25 Propylene Glycol /PG / Propan-1,2-diol/ Propylenglycolum

Used in the preparation of perfumes, in personal care products (e.g. Cleansers, skin creams, toothpastes, shampoos, hair conditioners, hair dyes), and cosmetics, and in drugs; used as a preservative in some food (e.g. Ice cream and sour cream); used as an anti-freeze, a solvent and a mould inhibitor; also used in artificial smoke and fog machines.

### PC26 Resorcinol / 1,3-Benzenediol /Resorcin

Used in hair dyes, anti-dandruff shampoos and sunscreens; used to treat acne and skin complaints; also used to dye fur and leather and in wood adhesives.

### PC27 Shea Butter / Butyrospermium Parkii

Widely used in cosmetics as a moisturiser and an emollient; used as a cooking oil in West Africa, as well as sometimes being used in the chocolate industry as a substitute for cocoa butter.

### PC28 Sodium Lauryl Sulphate / SLS / Sodium dodecyl sulfate / SDS

Used in personal care products such as toothpastes, shampoos, shaving foams and bubble baths for its thickening effect and its ability to create a lather.

### PC29 Stearic Acid / Octadecanoic Acid

Found in personal care products (e.g. Moisturisers, hand creams, body lotions, tanning lotions, cream soaps, eye shadows, mascaras, hair dyes, foundation, and shaving foams); used as a lubricant in nutritional and medicinal tablets.

### PC30 (+)-a-Tocopherol Acetate / Vitamin E Acetate

Found in face wash creams, hair conditioners, hand creams, foundation, eye shadows, lipsticks, and similar products.

### PC31 Wheatgerm Oil

Used in natural personal care products, and some medicinal creams.

### Pesticides 1 Test Kit 25 vials

The energy patterns of various pesticides including lindane, parathion, paraquat, heptachlor, campheclor etc.

### PE1 2,4,5-T /Dioxin / CAS 93-76-5

Organochloride; on the EU List of 129; International Pesticide Network wishes to stop use; use being phased out; possibly carcinogenic to humans; herbicide; component of `Agent Orange´ (defoliant) in Vietnam war, during this war the US military droped 40 million kilogram on Vietnam; probably carcinogenic in humans; still in use from railway companies as a herbicide on the railway.

### PE2 Aldicarb / Temik/ CAS 116-06-3

International Pesticide Network wishes to stop use; WHO class 1a; used in cultivation of cotton, peanuts, cucumber, watermelons, potatoes, soya beans and ornamental plants; disturbs hormone equilibrium in rats.

### PE3 Amitrole /Amino-Triazol / CAS 61-82-5

Herbicide, water-soluble, not fat-soluble; used in cultivation of fruits and ornamental plants; low acute and chronical toxicity, but probably carcinogenic for humans.

### PE4 Atrazine / CAS 1912-24-9

Organochloride; on UK Red List; possibly carcinogenic to humans; herbicide; non-selective herbicide, low solubility in water, forbidden in many countries in other countries used in cultivation of suger cane, pineapple and timber; probably carcinogenic for humans; hormonal effects are similar to oestrogen.

### PE5 Bromophos / CAS 4824-78-6

WHO class 1b; organic phosphate, WHO class 1b; low to medium toxicity.

### PE6 Camphechlor / Toxaphene / CAS 8001-35-2

Banned in EU; International Pesticide Network wishes to stop use; used in cultivation of cotton, soyabeans, peanuts; most probably carcinogenic, liver damage through long term exposure to higher doses.

### PE7 Captan / CAS 133-06-2

Non-systemical fungicide, used against fungus on fruits,ornamental plants and tomatoes; also used by amateur gardeners; low acute toxicity for humans but probably carcinogenic.

### PE8 Chlormequat / CCC / CAS 999-81-5

Plant growth regulator; insecticide; used in cultivation of grains, grapes and pears; probably not carcinogenic.

### PE9 Deiquat / CAS 2764-72-9

Non-selective herbicide; plant growth regulator; used in general and specifically for sugar cane; medium toxicity for humans; kidney damage and eye cataracts through long term exposure.

### PE10 Diazinon / CAS 33-41-5

Organophospate; insecticide ; used as a sheep dip, particularly until 1990's when synethic pyrethroids (e.g. Cypermethrin and flumethrin) were introduced; widely used for pest control in cultivation of food and ornamental plants; is contained in some agents for indoor use; low to middle acute toxicity; potential mutagen; in human body it breaks down into diazoxone, which is a strong enzyme inhibitor.

### PE11 Dichlorvos / CAS 62-73-7

Organophosphate, cholinesterase inbibitor, insecticide ; used instorage rooms against flies, mites, spiders, etc., and in plant cultivation; used as a treatment against worms in humans and animals ; on uk red list; who class 1b; highly toxic by inhalation, skin contact and ingesting; usually quickly excreted by the body; mutagenic and probably carcinogenic.

### PE12 Dieldrin / CAS 60-57-1

Organochloride; banned in EU; WHO class 1b; insecticide; widely used from 1950 until early 70's against termites and beetles, for treatment of seeds, against mosquitos and the Tse-Tse-fly, on sheep, as a wool impregnating agent against moths and also as a wood impregnation; chronic effects: liver damage, disturbed immune system; carcinogenic in animal test; stored in fat tissue, difficult for the body to excret or break down.

### PE13 DNOC / Dinitrocresol / CAS 534-52-1

WHO class 1b; highly toxic; damages liver, kidneys and nervous system; leads to hyperthermia, tachycardia, dehydration and toxic psychosis.

### PE14 Endosulfan / CAS 959-98-8

Insecticide and acaricide; chlorinated carbohydron, insecticide, acaricide;fat-solubl; not allowed in Germany; on UK Red List; contact poisen for a wide range of insects and mites; high acute toxicity for humans; damage on kidneys, liver, blood chemistry and parathyroid; probably mutagenic and almost certainly carcinogenic.

### PE15 Heptachlor / CAS 76-44-8

Organochloride; banned in EU; chlorinated carbohydron, insecticide, fat-soluble; high acute toxicity for humans; stored in fat tissue; affects nerves; symptoms of acute or chronical toxicity include irritability, overstimulated salivation, lethargy, vertigo, dazed feeling, difficult breathing, muscle spasm and tremble, infertility, disturbed female cycle, liverdamage, kidneydamage, increased number of red blood cells, mutagenic, carcinogenic; affects steroid metabolism.

### PE16 Hexachlorbenzene / HCB / CAS 118-74-1

Organochloride; chlorinated carbohydron; fungicide; banned in EU; WHO class 1a; low acute toxicity; effects of higher doses include tremour, paralysis, weakness; probably carcinogenic for humans; speed of breaking down of hormones in the body is changed.

### PE17 Lindane / CAS 58-89-9

Organochloride; pesticide; no longer produced in USA; used in cultivation of sugar beet; highly toxic for humans; stimulates the central nerve system with symptoms like mental and motor regression, nerve overactivity, failure of breathing, lung oedema and dermatitis; carcinogenic for humans; change of testicles in laboratory animals.

### PE18 Maneb / CAS 12427-38-2

Fungicide; used in cultivation, transport and storage of plants and seeds; medium acute toxicity; possible chronic effects include dermatitis, tremor, weakness, depression, paralysis, mal-digestion, co-ordination problems; affected organs are thyroid, kidney and heart; disturbes hormone regulation; cooking treated vegeatbles probably increases carcinogenic effect.

### PE19 MCPA / Metaxon / CAS 94-74-6

Chlorinated carbohydron; systemic herbicide particularly for grain and grass; low acute toxicity; long term effects in animal experiments include growth obstruction, kidney damage, disturbed reproduction; in humans: muscle weakness, reversible anemia, stomach problems, slight liver problems.

### PE20 Methoxychlor / CAS 72-43-5

Organochloride; insecticide; not allowed in Germany; various uses in agriculture, and by amateurs; high increase in use since ban of DDT; relatively low toxicity and short retention time in bioloical systems; in animal experiment loss of weight and growth disturbance found on long term exposure.

### PE21 Paraquat / CAS 2074-50-2

Herbicide; banned in some Scandinavien countries; highly toxic for humans; affects lungs, kidney and liver, wide range of symptoms, possibly carcinogenic for humans; International Pesticide Network wishes to stop use.

### PE22 Parathion / CAS 56-38-2

Organophosphate; insecticide and acaricide; under consideration for the UK Red List; WHO class 1a; used in cultivation and storage of grain; highly toxic for humans; possible symptoms from acute exposure include breathing problems, nose bleeding, coughing, shortness of breath; probably carcinogenic; disturbs hormone balance.

### PE23 Pentachloro¬phenol / PCP / CAS 87-86-5

Organochloride; insecticide; fungicide; WHO class 1b; banned in Germany since 1989, but many residual pollution in buildings and importied leather goods and textiles; mainly used to protect construction wood against insects and fungus, but also in paper and clothing industries; very toxic for humans; symptoms from acute exposure include sweating, dehydration, loss of appetite, loss of weight, vertigo, uncontrolled movements, coma; chronic exposure may result in stomach-ache, vertigo, fever, breathing problems.

### PE24 Pyrethrum / CAS 8003-34-7

Natural insecticide from the chrysanthemum plant; used in sprays against lice, mosquitos (evaporation papers), flies, cockraoches, also in storage of grain, in poultry farming and on cats and dogs.

### PE25 Thomasmehl

By-product in iron smelting, used as a fertiliser.

### Pesticides 2 Test Kit 25 vials

More pesticides including some mixed vials giving you access to a lot of different pesticides and herbicides. Also the 4 pesticides that make up DDT.

### PE26 Herbicides Mix A

Atrazine, Bromacil, Butylate, Cycloate, S-Ethyl-N,N-dipropylthiocarbamate, Hexazinone, Isopropalin, Metribuzin, Molinate, Oxyfluorfen, Pebulat, Terbacil, Trifluralin.

### PE27 Herbicides Mix B

Benfluralin, Metolachlor, Oxadiazon, Profluralin, Propachlor, Propazine, Prowl (Pendimethaline), Simazine, Vernolat.

### PE28 Pesticides Mix A

a-BHC, 4,4'-DDT, Decachlorobiphenyl, Dieldrin, a-Endosulfan, Endrin, Heptachlor, Lindane, Methoxychlor, 2,4,5,6-Tetrachloro-m-xylene.

### PE29 Pesticides Mix B

Aldrin, ß-BHC, d-BHC, a-Chlordane, ?-Chlordane, 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethene, Decachlorobiphenyl, ß-Endosulfan, Endosulfan sulfate, Endrin aldehyde, Endrin ketone, Heptachlor exo-epoxide, 2,4,5,6-Tetrachloro-m-xylene.

### PE30 Pesticides Mix C

Aldrin, a-Benzene Hexachloride, ß-a-Benzene Hexachloride, d-a-Benzene Hexachloride, 1,1-Dichloro-2,2bis(4-chlorophenyl)ethane, 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethene, 4,4'-DDT, Dieldrin, a-Endosulfan, ß-Endosulfan, Endosulfan sulfate, Endrin, Endrin aldehyde, Heptachlor, Heptachlor exo-epoxide, Lindane.

### PE31 Pesticides Mix D

Azinphos-methyl, Chlorpyrifos, Dichlorvos, Disulfoton, Ethoprophos, Fenchlorphos, Parathion-methyl, Pro-thiofos.

### PE32 Carbaryl

CAS 63-25-2

Insecticide; the third most-used insecticide in the United States for home gardens, commercial agriculture, and forestry and rangeland protection.

### PE33 Carbendazim

CAS 10605-21-7 One of the most common residues found in food in the European Community.

### PE34 Chlorothalonil

### CAS 1897-45-6

Fungicide used to control mould, mildew, bacteria, algae. The third most used fungicide in the US (for peanuts, potatoes and tomatoes).

### PE35 Chlorpyrifos

### CAS 2921-88-2

One of the most widely used organophosphate insecticides. The crops with the most intense use are cotton, corn, almonds, and fruit trees including oranges and apples. Banned in U.S. households. Still widely used throughout the agricultural ind. Is associated with early childhood developmental delays, according to a study by at Columbia University's Mailman School of Public Health. U.S. EPA)and the U.S. Department of Housing collected samples (in 2009) with surface wipes from U.S. kitchen floors. Chlorpyrifos on 78%.

### PE36 Cyprodinil

CAS 121552-61-2 Fungicide. One of the most common residues found in food in the European Community.

### PE37 2,4-D / 2,4-Dichlorophenoxyacetic Acid

CAS 94-75-7

The most widely used herbicide in the world.

### PE38 4,4'-DDD / TDE / 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane CAS 72-54-8

A constituent of commercial DDT and a breakdown product of DDT. Due to its stability in fat, DDE is rarely excreted from the body, and body levels tend to increase throughout life. Substantial levels found in breast milk and in animal fat.

### PE39 4,4'-DDE / 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethene

### CAS 72-55-9

A constituent of commercial DDT and a breakdown product of DDT. Due to its stability in fat, DDE is rarely excreted from the body, and body levels tend to increase throughout life. Substantial levels found in breast milk and in animal fat. An increased risk of testicular germ cell tumours. Has been linked to diabetes.

DDT (This is not a vial in this kit but all the constituents of commercial DDT are.)

Commercial DDT is banned in most countries but is a persistent pollutant in the environment. It is a mixture of several closely–related compounds. 4,4'-DDT (77%) and 2,4'-DDT (15%) are the main chemicals with Dichlorodiphenyldichloroethylene (DDE) and dichlorodiphenyldichloroethane (DDD) making up the balance. DDE and DDD are also the major metabolites and breakdown products in the environment. All four are in this kit.

### PE40 2,4'-DDT

### CAS 789-02-6

Insecticide. Part of commercial DDT. Evidence of impaired fertility from animal studies. Banned in most countries but still found in fat tissue (both human and in animals/fish we eat) and breast milk.

# PE41 4,4'-DDT / 1,1,1-Trichloro-2,2-bis(4-chlorophenyl)ethane / 1,1-Bis(4-chlorophenyl)-2,2,2-trichloroethane

CAS 50-29-3

Insecticide. Part of commercial DDT. Evidence of impaired fertility from animal studies. Banned in most countries but still found in fat tissue (both human and in animals/fish we eat) and breast milk.

# PE42 Endrin 72-20-8 Insecticide; global ban taking affect mid 2012, but persistent in the environment. Endocrine disrupter and possibly carcinogenic.

### PE43 Glyphosate /Roundup

CAS 1071-83-6 Most used herbicide in USA. Used by public as well as in agriculture.

### PE44 Imazalil

CAS 35554-44-0 One of the most common residues found in food in the European Community.

### PE45 Imidacloprid

CAS 138261-41-3 One of the most widely used insecticides. Available in products for home use.

### PE46 Malathion

CAS 121-75-5

Insecticide; studies have shown that children with higher levels of malathion in their urine seem to be at an increased risk of attention deficit hyperactivity disorder.

### PE47 Metolachlor

CAS 51218-45-2 Evidence of it in ground and surface water. Concentrations have been found in fish.

### PE48 Parathion-Methyl

CAS 298-00-0

Insecticide. Used to control chewing and sucking insects in a wide range of crops, including cereals, fruit, vines, vegetables, ornamentals, cotton and field crops. Residues are regularly detected in a range of fruit and vegetables.

### PE49 Piperonyl Butoxide

### CAS 51-03-6

Combined with other pesticides, products with piperonyl butoxide are often used to target mosquitoes, ants, worms, beetles, mites, flies, gnats, spiders, weevils, caterpillars, grubs, moths, ticks, lice, wasps, aphids, midges. U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) collected samples (in 2009) with surface wipes from U.S. kitchen floors. Pipeonyl butoxide on 52%.

### PE50 Trifluralin

CAS 1582-09-8 One of the most widely used herbicides used to control grass and weeds.

### Pesticides 3 Test Kit 25 vials

More pesticides, including some used in the home and garden. Many of these pesticides have been shown on occasions to exceed their standard for maximum residue level in food within the European Community. There is no reason to believe the results would be different in other countries.

### PE51 Acephate

### CAS 30560-19-1

Used primarily for control of aphids, including resistant species, in vegetables (e.g. potatoes, carrots, greenhouse tomatoes, and lettuce) and in horticulture (e.g. on roses and greenhouse ornamentals).

### PE52 Acetamiprid

### CAS 135410-20-7

Crops such as leafy vegetables, citrus fruits, apples, grapes, cherry, cotton and ornamental plants. Available in products for home use.

### PE53 Aldrin

### CAS 309-00-2

Banned by the Stockholm Convention on Persistent Organic Pollutants. Although banned still found in fat tissue (both human and in animals/fish we eat) and breast milk. Aldrin exposure increases the likelihood of diabetes.

### PE54 Azinphos-Methyl /4, 4' -dichlorodiphenyltrichloroethane /4, 4' -dichlorodiphenyltrichloroethane

### CAS 86-50-0

Used on nut trees, vegetable crops, and fruit trees. Has been linked to health problems in framers who use it.

### PE55 Chlordane

### CAS 57-74-9

Banned by the Stockholm Convention on Persistent Organic Pollutants. Found in breast milk. U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) collected samples (in 2009) with surface wipes from U.S. kitchen floors. Chlordane on 74%.

### PE56 Chloropropham

### CAS 101-21-3

A plant growth regulator and herbicide. Used to control potato sprouting, and on beans, blueberries, cranberries, carrots, onions, spinach, sugar beets, tomatoes, safflower, soybeans, etc.

### PE57 Clopyralid

### CAS 1702-17-6

Used for control of broadleaf weeds, especially thistles and clovers. Was widely used in USA for weed control in lawns until prohibited in 1999.

### PE58 Cypermethrin

### CAS 52315-07-8

An insecticide in large-scale commercial agricultural applications as well as in consumer products for domestic purposes. Found in many household ant and cockroach killers. U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) collected samples (in 2009) with surface wipes from U.S. kitchen floors. Cypermethrin on 46%.

### PE59 Dimethoate

CAS 60-51-5 Widely used insecticide.

### PE60 **Diphenylamine**

CAS 122-39-4 Used on apples pre and post harvest.

### PE61 Endosulfan Sulfate

CAS 1031-07-8

The primary breakdown product of the insecticide endosulfan.

### PE62 Fenitrothion

CAS 122-14-5

Insecticide used on rice, cereals, fruits, vegetables, stored grains, cotton, to control insects in forests and for fly, mosquito, and cockroach control in public health programs.

### PE63 Fipronil

CAS 120068-37-3

Insecticide. U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) collected samples (in 2009) with surface wipes from U.S. kitchen floors. Fipronil on 40%.

### PE64 Folpet

CAS 133-07-3

Used on berries, apples, flowers, ornamentals, fruits and vegetables, and for seed- and plant- bed treatment. Also used as a fungicide in paints and plastics, and for treatment of internal and external structural surfaces of buildings

### PE65 Hexazinone

CAS 51235-04-2 Herbicide used on grasses and broadleaf and woody plants.

### PE66 Iprodione

CAS 36734-19-7

Fungicide used on fruits, vegetables and on lawns.

### PE67 Methamidophos

CAS 10265-92-6

Used on broccoli, Brussel sprouts, cauliflower, grapes, celery, sugar beets, cotton, tobacco, rice and potatoes.

### PE68 Mirex

CAS 2385-85-5

Banned by the Stockholm Convention on Persistent Organic Pollutants. Although banned still found in fat tissue (both human and in animals/fish we eat) and breast milk.

### PE69 Omethoate

CAS 1113-02-6 Used to control insects and mites in horticulture and agriculture, as well as in the home garden.

### PE70 Permethrin

### CAS 52645-53-1

U.S. Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) collected samples (in 2009) with surface wipes from U.S. kitchen floors. The most frequently detected pesticide was permethrin (89 percent). Included in creams (Nix, Lyclear)for scabies. US military uniforms and mosquito nets may be impregnated with this. May be in head lice treatment. May be carcinogenic.

### PE71 Phosmet

CAS 732-11-6 Mainly used on apple trees for control of coddling moth, though it is also used on a wide range of fruit crops,

### PE72 Simazin

CAS 122-34-9 Herbicide used to control broad-leaved weeds and annual grasses.

ornamentals, and vines for the control of aphids, suckers, mites, and fruit flies.

### PE73 Tetrachlorvinphos

CAS 22248-79-9 Organophosphate.

### PE74 Thiacloprid / Provado Ultimate Bug Killer / Baby Bio House Plant Insecticide CAS 111988-49-9

An insecticide particularly for aphids and white fly. Available in products for home use.

### PE75 Thiamethoxam

CAS 153719-23-4 An insecticide effective against aphids, beetles, termites, etc. Available in products for home use.

# Pollens, Dusts & Moulds 1 Test Kit

The energy patterns of tree pollens, weed pollens, grass pollens, house dust, tobacco smoke, pet hair, moulds etc.

PO1 **Tree Pollen 1** Alder, hazel, lilac, plane, elm, poplar, willow.

PO2 Tree Pollen 2

Birch, ash, jasmine, elder, beech, privet, robinia, oak, lime.

### PO3 Grain Pollen

Oats, barley, wheat, meadow foxtail, sweet vernal grass, couch grass, smooth-stalked meadow grass.

### PO5 Grass Pollen

Corn, redtop grass (agrostis) English rye grass, brome, dogstail, meadow fescue, meadow soft grass timothy

### PO5a Hazel Nut Pollen

PO6 **House Dust** Dust taken from various places in the house.

### PO8 Pet Hair

Dog, cat, rabbit, horse.

PO8a Dog Hair

PO8b Cat Hair

PO10 **Farming Dust** Animal hair, animal sweat, horn, stable dust, hay, etc.

### PO11 Farming Animals' Hair

Cow, pig, sheep, goat (hairs, bristle, wool).

PO11a Horse Hair

PO11b Cattle Hair

PO11c Sheep Wool

PO12 **Moulds Mix 1** Alternaria tenuis, Botrytis cinerea, Cladosporium sp., Curvularia sp., Fusarium sp., Helminthosporium hal.

PO13 **Moulds Mix 2** Aspergillus sp., Mucor mucedo, Penicillium sp., Rhizopus nigricans, Pullularia pullulans, Serpula lacrymans..

### PO14 Bedroom Dust

Dust taken from the bedroom.

### PO15 Tobacco Smoke

PO17 Carpet

### PO18 Sawdust (Various)

PO19 **Weed Pollen** Hops, dandelion, plantain, common mugwort, white goosefoot, glasswort, goldenrod.

### PO20 Household Dust

Dust taken from the living area of the house.

# Pollens, Dusts & Moulds 2 Test Kit 28 vials

The energy patterns of more pollens, dusts & moulds with the addition of fabrics.

### PO23 Air Pollution, City

Containing vehicle exhaust fumes, soot, pollens, moulds, dust of various types including from industries which may be situated many miles away, volcanic dust, etc.

### PO24 Angora Wool

Wool from the angora rabbit.

### PO25 Asbestos

Produced during building construction; in a study in New York of 3000 autopsies half had asbestos particles in their lungs.

### PO26 Cladosporium Herbarum

One of the most common airborne moulds; common on windowsills and painted walls; most common mould outdoors; often involved in asthma; world wide distribution; spores are particularly prevalent in Europe in June.

### PO27 Clay

Found in crockery, paper and board, as a coating on fertiliser pellets, in some rubbers (both synthetic and natural) and plastics, in household paint, crayons, pencils, toothpaste and cosmetics; also known as kaolin.

### PO28 Fly Ash & Soot

Produced by incinerators, forest fires, fires in the home and garden; may travel many miles.

### PO29 Guinea Pig Hair

### PO30 Hemp, Italian

Some clothing and some traditional ropes.

### PO31 Jute

Made from a plant grown in Asia; used as a backing for carpets, sacks for carrying food grain, fertilisers and cement.

### PO32 Linen / Flax

Made from the flax plant; the by-products of linen production are processed into a pulp used for banknotes or fibreboard.

### PO33 Methane

One of the greenhouse gases; main sources are coal mining, landfill, wetlands, poor management of manure, rice paddies and cattle.

### PO34 Mohair Wool

Wool from the angora goat.

### PO35 Moulds Various

Alternaria alternata, aspergillus niger, aspergillusfumigatus., fusarium sap., merulius lacrimans, mucor mucedo, penicillin, rhizopus nigricans, sporobolomyces, tricophytum rubrum, ustilago,cladosporium herbarum.

### PO36 Newsprint

### PO37 Ozone

Vehicles and industries are the major source of ground-level ozone gas emissions; also produced by photocopiers, etc. Occurs naturally in the upper layers of the atmosphere and shields the earth from the harmful ultraviolet rays of the sun.

### PO38 Pollens & Grasses Various 1

Includes alder, beech, silver birch, elm, hazel, plane, poplar, willow, broom, cocksfoot, dog's tail, false oat, meadow foxtail, rye, timothy, sweet vernal, ragweed, mugwort, rape, heather, fat hen, plantain, buttercup, nettle, etc.

### Pollens Kit 2 Continued Over.....

### PO39 Pollens Grass, Trees & Flowers 2

Bent, meadow foxtail, sweet vernal grass, false oat, meadow brome, crested dog's tail, cocksfoot, meadow fescue, common velvet grass, perennial rye grass, timothy grass, annual meadow grass, alder silver birch, hazel, beech, ash, London plane, aspen, oak, white willow, short ragweed, mugwort, rapeseed, heather, fat hen, plantain, buttercup and nettle.

### PO40 Pollens Various 3

Lily, amarylis, dwarf sunflower, ragweed, saltbush, chrysanthemum, corn, dahlia, ash, hibiscus, tiger lily, tulip tree, apple, tobacco, rose, African violet, willow, dandelion, pine, cherry, snap dragon, cat tail.

### PO41 Printer & Photocopying Toner

A mixture of plastic particles (e.g. Styrene acrylate copolymer and polypropylene), iron and pigments, such as carbon black, and paraffin wax.

### PO42 Quartz Sand

From mining operations, sandblasting, industrial grinding, and deserts and sand dunes, etc.

### PO43 Ragweed, Giant & Short/Normal

One of the main hay fever pollens in the USA from mid August to November, peaking in September; these two varieties of ragweed cause the most problems; also found in the Rhône valley in France and some areas of Eastern Europe.

### PO44 Ramie

Made from Chinese grass or rhea, a plant with fibrous leaves; used mainly with other fibres as a blend in fabrics resembling linen.

### PO45 Rapeseed Pollen / Canola Pollen

A problem for many people particularly in the UK; known as canola in North America.

### PO46 Rayon, Acetate

A fabric made from cellulose acetate fibres; resistant to staining and creasing.

### PO47 Rayon, Viscose

A fabric manufactured by treating cellulose with carbon disulfide, caustic soda, and sulphuric acid; used in clothing, furnishing and carpets; the most important of the rayons.

### PO48 Rust, Iron

The common name for an oxide of iron; occurs when iron is exposed to water and air; a lot of water supplies are contaminated by it, especially when main pipes are being repaired.

### PO49 Sulphuric Acid / Sulfuric Acid

Produced by burning fuels and volcanoes; one of the components of acid rain; used in include fertiliser manufacturing, ore processing, chemical synthesis, waste water processing and oil refining.

### PO50 Volcanic Dust

From two volcanoes: Halemaumau in Hawaii and Mt. St Helens; may travel thousands of mile.

# Protozoa Test Kit

### 37 vials

Protozoa are the simplest, most primitive type of animal, consisting of a single cell. They are resistant to antibiotics.

## A large number of the vials are unique to this kit, but the kit contains some protozoa that are also in the

# Fungus 1 Test Kit and Parasite 2 Test Kit. In addition the three most medically significant protozoa from the Lyme Plus test kit are included here.

### PZ 01 Acanthamoeba Sp., Trophozoites

Inhabit a variety of air, soil, and water environments; cause granulomatous amoebic encephalitis and amoebic keratitis and have been associated with cutaneous lesions and sinusitis.

### PZ 02 Babesia Bigemina

North and South America, Southern Europe, Africa, Asia and Australia. Causes Babesiosis /Piroplasmosis, also known as Texas cattle fever, redwater fever, tick fever, and Nantucket fever. Gives malaria-like symptoms. As a result, malaria is a common misdiagnosis for the disease; for 25% of cases in adults and half of cases in children, the disease is asymptomatic or mild with flu-like symptoms.

### PZ 03 Babesia Divergens

Has been found in Turkey, Spain, Canary Islands, Tunisia, Austria, France and Norway. Causes Babesiosis / Piroplasmosis; infections have a much higher fatality rate (42%) than with other strains and present with the most severe symptoms: haemoglobinuria followed by jaundice, a persistently high fever, chills and sweats. If left untreated, can develop into shock-like symptoms with pulmonary oedema and renal failure.

### PZ 04 Babesia Microti / Theileria Microti

Common in US; causes Babesiosis /Piroplasmosis; also known as Texas cattle fever, redwater fever, tick fever, and Nantucket fever. For 25% of cases in adults and half of cases in children, the disease is asymptomatic or mild with flu-like symptoms. Symptoms are characterized by irregular fevers, chills, headaches, general lethargy, pain and malaise.

### PZ 05 Balantidium Coli, Cysts

Common in the Philippines, but it can be found anywhere in the world, especially among those that are in close contact with pigs - main source of infection usually through water contaminated with their faeces; causes the disease Balantidiasis (diarrhoea, constipation); perforation of the colon may also occur in acute infections which can lead to life-threatening situations;

### PZ 06 Balantidium Coli, Trophozoites

Common in the Philippines, but it can be found anywhere in the world, especially among those that are in close contact with pigs - main source of infection usually through water contaminated with their faeces; causes the disease Balantidiasis (diarrhoea, constipation); perforation of the colon may also occur in acute infections which can lead to life-threatening situations.

### PZ 07 Chilomastix Mesnili, Cysts

Found more frequently in warm climates; medically considered to be non-pathogenic.

### PZ 08 Chilomastix Mesnili, Trophozoites

Found more frequently in warm climates; medically considered to be non-pathogenic.

### PZ 09 Cryptosporidium Parvum

Causes cryptosporidiosis (primary symptoms are acute, watery, and non-bloody diarrhoea); other symptoms may include anorexia, nausea/vomiting and abdominal pain; other sites include the lung, liver and gall bladder where it causes respiratory cryptosporidosis, hepatitis and cholecystitis.

### PZ 10 Dientamoeba Fragilis, Trophozoites

Causes gastrointestinal upset in some people, but not in others; an important cause of travellers' diarrhoea, chronic diarrhoea, fatigue and failure to thrive in children. No cyst stage.

### PZ 11 Endolimax Nana, Cysts

Originally thought to be non-pathogenic, but studies now suggest it can cause intermittent or chronic diarrhoea.

### PZ 12 Endolimax Nana, Trophozoites

Originally thought to be non-pathogenic, but studies now suggest it can cause intermittent or chronic diarrhoea.

### PZ 13 Entamoeba Coli, Cysts

Commonly found in the lower intestine; can cause liver abscesses, fever, abdominal pain, food poisoning.

### PZ 14 Entamoeba Coli, Trophozoites

Commonly found in the lower intestine; can cause liver abscesses, fever, abdominal pain, food poisoning.

### PZ 15 Entamoeba Gingivalis

Found near the base of the teeth, and in periodontal pockets in 95% of people with gum disease; rarely found in people with healthy gums; transmission is direct from one person to another by kissing, or by sharing eating utensils. (No known cyst stage).

### PZ 16 Entamoeba Hartmanni, Cysts and Trophozoites

Commonly found in the intestinal tract but considered non-pathogenic.

### PZ 17 Entamoeba Histolytica, Cysts

Infection can be asymptomatic; symptoms include amoebic dysentery, bloody diarrhoea, weight loss, fatigue, abdominal pain, amoeboma and amoebic liver abscess. Most common in countries with poor sanitation.

### PZ 18 Entamoeba Histolytica, Trophozoites

Infection can be asymptomatic; symptoms include amoebic dysentery, bloody diarrhoea, weight loss, fatigue, abdominal pain, amoeboma and amoebic liver abscess. Most common in countries with poor sanitation.

**PZ 19** Enterocytozoon Bieneusi Found in a wide variety of hosts including pigs, humans, and other mammals; an important and rapidly emerging opportunistic disease, occurring mainly, but not exclusively, in severely immunocompromised patients with AIDS, resulting in diarrhoea and acalculous cholecystitis (the main opening to the gallbladder gets blocked).

### PZ 20 Giardia Lamblia, Cysts

The most common pathogenic parasitic infection in humans worldwide; one of the most common parasites infecting cats, dogs and birds. Infection can occur through contaminated and food, or by the faecal-oral route through poor hygiene practices; symptoms include weakness in the body, loss of appetite, diarrhoea, loose or watery stools, stomach cramps, upset stomach, projectile vomiting, bloating, excessive gas, and burping but may be asymptomatic.

### PZ 21 Giardia Lamblia, Trophozoites

The most common pathogenic parasitic infection in humans worldwide; one of the most common parasites infecting cats, dogs and birds. Infection can occur through contaminated and food, or by the faecal-oral route through poor hygiene practices; symptoms include weakness in the body, loss of appetite, diarrhoea, loose or watery stools, stomach cramps, upset stomach, projectile vomiting, bloating, excessive gas, and burping but may be asymptomatic.

### PZ 22 Iodamoeba Butschlii,Cysts

Found worldwide; often present in large intestine; medically believed to be nonpathogenic.

### PZ 23 Iodamoeba Butschlii, Trophozoites

Found worldwide; often present in large intestine; medically believed to be nonpathogenic.

### PZ 24 Leishmania Amazonensis, Promastigotes

Found in the Americas; causes Leishmaniasis/ Leishmaniois (ulcers of the skin, mouth, and nose).

### PZ 25 Leishmania Donovani

Prevalent throughout tropical and temperate regions including Africa (mostly in Sudan), China, India, Nepal, southern Europe, Russia and South America; causes Leishmaniasis/ Leishmaniois (ulcers of the skin, mouth, and nose).

### PZ 26 Leishmania Major

Found only in Northern Africa, the Middle East, Northwestern China, and Northwestern India; causes Leishmaniasis/ Leishmaniois (ulcers of the skin, mouth, and nose).

### PZ 27 Leishmania Tropica Major

Found in Ethiopia, India, European Mediterranean region, Middle East, Kenya and North Africa; causes Leishmaniasis/ Leishmaniois (ulcers of the skin, mouth, and nose).

### PZ 28 Plasmodium Falciparum

Much more prevalent in sub-Saharan Africa than in many other regions of the world; causes the most dangerous form of malaria.

### PZ 29 Plasmodium Malariae

Widespread throughout sub-Saharan Africa, much of southeast Asia, Indonesia, on many of the islands of the western Pacific and in areas of the Amazon Basin of South America; causes the least dangerous form of malaria - benign/recurring malaria.

### PZ 30 Plasmodium Ovale

Relatively rare compared with other Plasmodium; limited to West Africa, the Philippines, eastern Indonesia, Papua New Guinea, Bangladesh, India, Cambodia, Thailand and Vietnam; causes benign/recurring malaria.

### PZ 31 Plasmodium Vivax

Found mainly in Asia and South America; the most frequent and widely distributed cause of benign /recurring malaria.

### PZ 32 Toxoplasma Gondii, Cysts

One of the most common human parasites; often from eating undercooked pork; also soil, water and food contaminated with faeces from infected animals (particularly cats); may be sexually transmitted in humans, although not yet proven; up to a third of the global population has been exposed to and may be chronically infected with it, although infection rates differ significantly from country to country; causes toxoplasmosis; acute toxoplasmosis is often asymptomatic in healthy adults, but symptoms may occur and are often influenza-like (swollen lymph nodes, or muscle aches and pains that last for a month or more); may also cause subtle behavioural or personality changes; infection with the parasite associated with attention deficit hyperactivity disorder, obsessive compulsive disorder, schizophrenia and also suicides. This online blog article has a lot of interesting information about Toxoplasma gondii.

### PZ 33 Toxoplasma Gondii, Trophozoites

One of the most common human parasites; often from eating undercooked pork; also soil, water and food contaminated with faeces from infected animals (particularly cats); may be sexually transmitted in humans, although not yet proven; up to a third of the global population has been exposed to and may be chronically infected with it, although infection rates differ significantly from country to country; causes toxoplasmosis; acute toxoplasmosis is often asymptomatic in healthy adults, but symptoms may occur and are often influenza-like (swollen lymph nodes, or muscle aches and pains that last for a month or more); may also cause subtle behavioural or personality changes; infection with the parasite associated with attention deficit hyper-activity disorder, obsessive compulsive disorder, schizophrenia and also suicides.

### PZ 34 Trichomonas Vaginalis, Trophozoite

Vaginitis in woman; occasionally in men, affecting urethra, but usually asymptomatic. Usually sexually transmitted.

### PZ 35 Trypanosoma Cruzi

Chagas disease in South America and sleeping sickness in Africa.

### PZ 36 Trypanosoma Brucei Gambiense

Causes Central African sleeping sickness.

### PZ 37 Trypanosoma Brucei Rhodesiense

Causes South African sleeping sickness.

### Recreational Drugs Test Kit 14 vials

The energy patterns of amphetamine, cannabis resin, cocaine, dihydracodein, ecstasy, heroin, LSD, magic mushroom, marijuana, mescaline, morphine sulphate, methadone, nicotine and cotinine. Ketamine is in the Anaesthetic And Pain Test Kit.

RD1 Amphetamine, also called speed, uppers, bennies.

A central nervous system stimulant. Short term effects: increases mental alertness and physical energy, decreases appetite, dryness of mouth. Depression and fatigue as drug wears off. At high doses: tremor, sweating, anxiety, headaches, palpitations and chest pains.

### RD2 Cannabis Resin: see Marijuana.

### RD3 Cocaine, also called coke, crack, nose candy, snow.

A central nervous system stimulant and local anaesthetic. Moderate doses: sense of well-being and elation, appetite reduced, increase in heart rate and blood pressure, tremors, sweating, dilation of pupils. Large doses: agitation, anxiety, hallucinations and paranoia.

### RD4 Dihydracodein

A narcotic analgesic.

### RD5 Ecstasy

A modification to the structure of amphetamines. In low doses: mental relaxation, tense muscles, increased sensitivity to stimuli and sometimes hallucinations. Higher doses: similar to amphetamines.

### RD6 Heroin, also called horse, junk, smack, scag, H.

Central nervous system depressant. Short term effects: a feeling of well-being and contentment. Breathing and heart rate slowed; cough reflex inhibited. Long term effects: constipation, reduced sexual drive, disruption of menstrual cycle, poor appetite. Often mixed with other substances. Highly addictive.

### RD7 LSD, also called lysergic acid, acid, haze.

An hallucinogenic. Restlessness, dizziness, coldness and shivering, uncontrollable desire to laugh, distortion in perception of sound and vision. Can lead to lasting mental problems. Flashbacks can occur months or years after taking the drug.

### RD8 Magic Mushroom

### RD9 Marijuana, also known as cannabis, grass, pot, dope, weed, hash, ganja.

A central nervous system depressant, hallucinogenic, anti-emetic (stops vomiting). Short term: feelings of relaxation, enhances visual and auditory perception, increases talkativeness, appetite stimulated. Impairment of short-term memory and problems with co-ordination. Long-term effect: probably increases risk of lung disorders, may reduce fertility, may lead to apathy and lethargy.

### RD10 Mescaline/Peyot, also called cactus buttons, big chief.

An hallucinogenic. Alters visual and auditory perception. Appetite reduced. Risk of unpleasant mental effects, particularly if person anxious or depressed. May also experience nausea and vomiting caused by other constituents in plant.

### RD11 Morphine Sulphate (controlled release): see Heroin.

### RD12 Methadone

A narcotic used as an analgesic to ease heroin withdrawal. Can be addictive in its own right.

### RD13 Nicotine

From cigarette smoke. Non-smokers are also exposed to this.

### RD14 Cotinine

The breakdown product from nicotine. Nicotine is broken down into this in the body. Cotinine is highly addictive. Cotinine can be detected in the blood and urine of both smokers and children and adults exposed to cigarette smoke in their environment. Cotinine has been found in the breast milk of smokers too. Cotinine persists in the system longer than nicotine.

### Salicylates Test Kit 10 vials

Salicylates occur naturally in plants and serve to protect the plants against diseases, insects, fungi, and harmful bacteria. The range of foods that have no salicylate content is very limited. Synthetic salicylates can also be found in many medications, perfumes, personal care products and preservatives.

Both natural and synthetic salicylates can cause health problems in anyone when consumed in large doses. But for those who are salicylate intolerant, even small doses of salicylate can cause adverse reactions.

If you are interested in learning more about salicylate sensitivity, go to www.salicylatesensitivity.com and http://www.feingold.org/.

This kit is not for testing salicylate levels in foods.

### S 01 Aspirin / Acetylsalicylic Acid

Often used as an analgesic to relieve minor aches and pains, as an antipyretic to reduce fever, and as an anti-inflammatory medication.

### S 02 Benzyl Salicylate

Most frequently used in cosmetics; used as a solvent for synthetic musks and as a fixative in floral perfumes such as jasmine, lilac, and lily; found in hair dyes, moisturisers, sunscreen, bubble bath cleanser and aromatic candles; has been associated with allergies and contact dermatitis.

### S 03 Ethyl Salicylate

A pleasant odour resembling wintergreen; used in perfumery and as an artificial flavour in food.

### S 04 Isoamyl Salicylate

An orchid like smell: used in perfumery.

### S 05 Isobutyl Salicylate

Used as a perfume in a range of products (aromatic, herbaceous, floral smell) and as a food flavouring (sweet aromatic; cooling, spicy with fruity nuances).

### S 06 Methyl Salicylate

Used in perfume; also found in artificial flavours, sports rubs and pain relief creams; found naturally in wintergreen and birch.

### S 07 Octyl Salicylate / Octisalate

Used as an ingredient in sunscreens and cosmetics to absorb UVB (ultraviolet) rays from the sun.

### S 08 Phenethyl Salicylate / Phenylethyl Salicylate

Used as a perfume in a range of products (medicinal, balsamic, slightly fruity-floral smell) and as a food flavour (medicinal, balsamic).Used in detergents, fabric softeners, antiperspirants and deodorants, foam bath, bleach, hard surface cleaner, shampoo and soap.

### S 09 Phenyl Salicylate

Used in the manufacture of some polymers, lacquers, adhesives, waxes and polishes. Used as an antiseptic.

### S 10 Salicylic Acid

Natural sources are unripe fruits and vegetables, particularly blackberries, blueberries, cantaloupes, dates, raisins, kiwi fruits, guavas, apricots, green pepper, olives, tomatoes, radish and chicory; also mushrooms; some herbs and spices contain quite high amounts; while meat, poultry, fish, eggs and dairy products all have little to no salicylates. Of the legumes, seeds, nuts, and cereals, only almonds, water chestnuts and peanuts have significant amounts.

## SIBO Test Kit

### (Small Intestinal Bacterial Overgrowth) 25 vials

# (NOTE: All these vials (except for the mixed vial) are available in Bacteria 1 and Bacteria 2. They have been brought together into this kit for convenience for practitioners working in this field).

Small intestinal bacterial overgrowth (SIBO) refers to a condition in which abnormally large numbers of bacteria are present in the small intestine, and the types of bacteria found in the small intestine are more like the bacteria found in the colon. Also known as small bowel bacterial overgrowth syndrome (SBBOS).

Causes include diverticulitis (where the pockets allow the build-up of bacteria), scarring from abdominal surgery (interfering with the proper movement of food and bacteria through the small intestine), Crohn's disease, scleroderma and diabetes mellitus.

Symptoms include flatulence, diarrhoea, constipation and abdominal bloating and abdominal pain. May experience body aches and/or fatigue. If the condition is severe or long-lasting, it may interferes with the proper absorption of vitamins and minerals. Weight loss may also be a problem. Symptoms occur because the bacteria produce gas, compete with their human host for the food in the small intestine, may produce toxic by-products that irritate the small intestine.

### SIBO 01 Bacteroides Fragilis

Involved in 90% of anaerobic peritoneal infections of the abdominal cavity.

### SIBO 02 Clostridium Botulinum

Botulism, muscle paralysis, vomiting, tiredness, food poisoning.

### SIBO 03 Clostridium Difficile

Diarrhoea, colitis, peritonitis. Often a problem after normal gut flora is eradicated by the use of antibiotics; infection often occurs in hospital and in nursing homes; some adults have low numbers of the bacteria without any symptoms; common in the intestine of babies and infants, but does not cause disease because its toxins do not damage their immature intestinal cells.

### SIBO 04 Clostridium Perfringens

Pneumonia. Widely distributed in the environment and frequently occurs in the intestines of humans and many domestic and feral animals.

### SIBO 05 Clostridium Septicum

Causes gangrene. Generally associated with gastro-intestinal or hematologic malignancies. An association Exists with colon carcinoma.

### SIBO 06 Clostridium Tetani

Muscle rigidity followed by spasmodic muscle contraction with pallor and sweating. Found in soil.

### SIBO 07 Clostridium Welchii

Cellulitis.

### SIBO 08 Enterococcus Faecalis / Streptococcus Faecalis

Can cause life-threatening infections in humans, especially in the hospital environment. Frequently found in root canal-treated teeth. Can cause endocarditis and bacteremia, urinary tract infections, meningitis, and other infections. Among the main constituents of some probiotic food supplements.

### SIBO 09 Enterococcus Faecium

Can be commensal in the human intestine, but it may also be pathogenic, causing diseases such as neonatal meningitis.

### SIBO 10 Escherichia Coli / E Coli

Causes meningitis in babies, diarrhoea, liver abscess, fever, abdominal pain, urinary tract infection. Commensal of human intestine; found in raw and undercooked meat, raw vegetables and unpasteurised milk.

### SIBO 11 Group A Streptococcus / GAS

Often found in the throat and on the skin. Illnesses include strep throat and occasionally invasive GAS disease. People may be carriers and experience no health problems themselves.

### SIBO 12 Group B Streptococcus / GBS

In new-borns most commonly causes sepsis (infection of the blood), pneumonia and sometimes meningitis. In adults causes bloodstream infections, pneumonia, skin and soft tissue infections, and bone and joint infections.

### SIBO 13 Klebsiella Pneumoniae

Pneumonia and urinary tract infections; tends to affect people with underlying diseases, particularly in hospital.

### SIBO 14 Staphylococcus Aureus

Respiratory symptoms, conjunctivitis, styes, difficulty in breathing, otitis media, pus in lungs, pneumonia, childhood pneumonia, breathlessness, chest pain, endocarditis, meningitis in elderly, brain abscess, cellulitis, food poisoning, liver abscess, fever, abdominal pain, urinary tract infection. Common skin commensal; some strains are now becoming antibiotic resistant.

### SIBO 15 Staphylococcus Epidermitis

Breathlessness, chest pain, endocarditis, urinary tract infection.

### SIBO 16 Staphylococcus Saprophyticus

Often implicated in urinary tract infections and cystitis.

### SIBO 17 Streptococcus Agalactiae

Neonatal infection, septicaemia, meningitis, nosocomial infection. Commensal in intestine and female genital tract.

### SIBO 18 Streptococcus Lactis

Found commonly as a contaminant in milk and dairy products; a common cause of souring and coagulation of milk; some strains produce nisin, a powerful antibiotic that inhibits growth of many other gram-positive organisms.

### SIBO 19 Streptococcus Mitis

Part of the normal mammal flora; found in mouth, throat, and nasopharynx. Can cause endocarditis.

### SIBO 20 Streptococcus Mutans

Dental caries.

### SIBO 21 Streptococcus Pneumoniae

Conjunctivitis, difficulty in breathing, sinusitis, otitis media, pus in lungs, pneumonia, childhood pneumonia, meningitis, meningitis in elderly and children, brain abscess; associated with increased risk of fatal heart complications including heart failure and heart attacks. Commensal of human upper respiratory tract.

### SIBO 22 Streptococcus Pyogenes

Sore throat, tonsillitis/ pharyngitis, difficulty in breathing, sinusitis, otitis media, pus in lungs, lung abscess, pneumonia, rheumatic fever, scarlet fever, impetigo, cellulitis, liver abscess, fever, abdominal pain, toxic shock, septicaemia.

### SIBO 23 Streptococcus Salivarius

The principal commensal bacterium of the oral cavity and a normal inhabitant of the upper respiratory tract. The first bacterium that colonises dental plaque, creating favourable conditions for other bacteria.

### SIBO 24 Streptococcus Viridians

Breathlessness, chest pain, endocarditis.

### SIBO 25 Mixed SIBO

One vial containing all of the above.

## Spider & Scorpion Test Kit

### 12 vials

### Spider and scorpion venom from around the world.

Code - Latin Name - Common Names - Geographical Spread SS 01 Atrax Robustus Funnelweb Spider / Sydney Funnel-Web Spider Found in NSW, Australia SS 02 Cheiracanthium Punctorium Yellow Sac Spider Found from central Europe to Central Asia. SS 03 Latrodectus Geometricus Brown Widow Spider / Brown Button/ Grey Widow/ Brown Black Widow/ House Button Spider / Geometric Button Spider Found in South Africa, the United States, Australia, Afghanistan, China, Japan, Tanzania, Dominican Republic, Cyprus, Costa Rica, El Salvador, United Arab Emirates, Pakistan and Thailand. SS 04 Latrodectus Hasselti Redback Spider Australia SS 05 Latrodectus Mactans Black Widow / Southern Black Widow Native to North America. SS 06 Latrodectus Tredecimguttatus Mediterranean Black Widow / European Black Widow / Steppe Spider Commonly found throughout the Mediterranean region, ranging from Portugal to south west and central Asia. SS 07 Loxosceles Reclusa Brown Recluse Spider / Fiddleback Spider/ Brown Fiddler/ Violin Spider Found in USA SS 08 Androctonus Bicolor Black Fat-Tailed Scorpion Widespread in North and West Africa and the Middle East. SS 09 Hottentotta Tamulus Indian Red Scorpion / Eastern Indian Scorpion Occurs in most of India, eastern Pakistan, the eastern lowlands of Nepal and in Sri Lanka. SS 10 Leiurus Quinquestriatis Deathstalker / Palestine Yellow Scorpion / Omdurman Scorpion/ Nagab Desert Scorpion Found in desert and scrubland habitats ranging from North Africa through to the Middle East. SS 11 Parabuthus Transvaalicus Transvaal Thick-Tailed Scorpion or Dark Scorpion Dry parts of southern Africa.

Tityus Stigmurus

SS 12

**Brazilian Scorpion** 

Brazil

### Sweeteners Test Kit 24 vials

Various natural and artificial sweeteners including sugar, honey, high fructose corn syrup, stevia, aspartame, acesulfame K and sucralose.

### SW01 Acesulfame Potassium / Acesulfame K / Ace K / E950

An artificial sweetener. Often blended with other sweeteners (usually sucralose or aspartame).

### SW02 Agave Syrup

SW03 Aspartame / E951

An artificial sweetener.

### SW04 Barley Malt / Pure Malt / Malt

### SW05 Date Syrup

SW06 **Erythritol** An artificial sweetener. Produced from glucose by fermentation with a yeast, Moniliella pollinis. Does not affect blood sugar, does not cause tooth decay, and is partially absorbed by the body, excreted in urine and faeces.

### SW07 Fructose

SW08 High Fructose Corn Syrup / Glucose–Fructose Syrup / High-Fructose Maize Syrup

Glucose syrup where some of it has been changed into fructose. Very common in processed foods and beverages in the USA.

### SW09 Honey

### SW10 Mannitol / E421

Used in diabetic foods, also hard candies/sweets, dried fruits, chewing gum and chewable tablets. Made from fructose.

### SW11 Maple Syrup

### SW12 Molasses

By-product of the refining of sugarcane, grapes, or sugar beets into sugar.

### SW13 Monk Fruit / Lou Han / Buddha Fruit

From the vine Siraitia grosvenorii.

### SW14 Neotame / E961

An artificial sweetener.

### SW15 Palm Sugar/ Jaggery Goor

### SW16 Rice Syrup /Brown Rice Syrup

SW17 Saccharin / E954

### An artificial sweetener.

### SW18 Sodium Cyclamate / Cyclamate/ E952

Approved as a sweetener in over 55 countries, but banned in USA. Often used with other artificial sweeteners, especially saccharin.

### SW19 Sorbitol / Glucitol / E420

An artificial sweetener. Often used in cosmetics (as a humectant and thickener) and in mouthwash and toothpaste. Used to sweeten processed foods, including frozen desserts, baked goods, sugar-free candies/sweets and chewing gum. Found naturally in apples, pears, peaches, and prunes.

### SW20 Stevia Leaf Powder

From the stevia plant.

### SW21 Sucralose / E955

An artificial sweetener widely used throughout the world.

### SW22 Sugar, Beet

Accounts for almost 20% of sugar produced. In the same botanical food family as spinach and chard.

### SW23 Sugar, Cane

Accounts for 80% of sugar produced. . In the same botanical food family as wheat, barley, etc.

### SW24 Xylitol / E967

Made from hardwood or maize. Actively beneficial for dental health, reducing caries to a third in regular use, and has been shown to reduce the incidence of acute middle ear infection.

### Vaccination Test Kit 58 vials

The energy patterns of most of the standard childhood vaccines, plus influenza (several strains), HPV (the cervical cancer vaccine), H1N1 and some travel vaccines. NOTE: If you have the old kit of 31 vials, you can buy the new vials plus labels for some of the existing vials. Please contact us.

Code	Vaccine	Trade Name	e Illness
VAR 01	5-In-1 Vaccine		Whooping Cough + Diphtheria + Bacterial Meningitis +
			Tetanus + Polio
VAR 02	6-in-1 / Hexavalent		Diphtheria + Tetanus + Acellular Pertussis + Haemophilus
			Influenzae Type B + Poliovirus + Hepatitis B
VAR 03	BCG / TB		Tuberculosis
VAR 04	Cholera		Cholera
VAR 05	Diphtheria		Diphtheria
VAR 06	Diphtheria + Tetanus		Diphtheria + Tetanus
VAR 07	Diphtheria + Tetanus + Polio	. Revaxis	Diphtheria + Tetanus + Polio
VAR 08	DPT	. Covaxis	Diphtheria + Whooping Cough +Tetanus
VAR 09	DPT	.U.S. Pharmacop	peial Convention (USP) Diphtheria + Whooping Cough +
			Tetanus Toxoids Adsorbed
VAR 10	DPT	. Infanrix	Diphtheria + Tetanus Toxoids + Acellular Pertussis Vaccine
VAR 11	DPT Adsorbed		Diphtheria + Acellular Whooping Cough + Tetanus Toxoids
VAR12	DPT + HIB		Diphtheria + Whooping Cough + Tetanus + Haemophilus
			Influenzae Type B
VAR 13	DPT + Polio	. Infanrix Tetra	Diphtheria + Whooping Cough +Tetanus + Polio
VAR 14	DPT + Polio	.Repevax	Diphtheria + Whooping Cough +Tetanus + Polio
VAR 15	DPT + Polio Booster	. Boostrix	Diphtheria + Whooping Cough +Tetanus + Polio
VAR 16	H1N1 Swine Flu		H1N1 Swine Flu
VAR 17	Hepatitis A		Hepatitis A
VAR 18	Hepatitis A + B		Hepatitis A + B
VAR 19	Hepatitis A + Typhoid	. Hepatyrix	Hepatitis A + Typhoid
VAR 20	Hepatitis B	. Engerix B	Hepatitis B
VAR 21	Hepatitis B	. HB VAX II	Hepatitis B
VAR 22	HIB	. ActHIB	Haemophilus Influenzae Type B (Bacterial Meningitis)
			Haemophilus Influenzae Type B (Bacterial Meningitis)
VAR 24	HIB + Meningitis C	. Menitorix	Haemophilus Influenzae Type B (Bacterial Meningitis),
			Meningitis C
			Human Papilloma Virus (genital Warts , Cervical Cancer)
			Human Papilloma Virus (genital Warts , Cervical Cancer)
			Influenza <i>(updated each year)</i>
	/AR 28Japanese Encephalitis Vaccine		
	Measles		
			Meningococcal A, C, W and Y Diseases
			Meningococcal A, C, W and Y Diseases
	Meningitis A		-
	Meningitis A + C		-
	Meningitis B		C C
	Meningitis C		C C
			Measles + Mumps + Rubella (pre 2008)
	MMR II		-
			Measles + Mumps + Rubella + Chickenpox
VAR 39	MR		Measles + Rubella

VAR 40Mumps	.Mumps				
VAR 41Pertussis	Whooping Cough				
VAR 42Pneumococcal 7 Prevenar 7	Whooping Cough				
VAR 43Pneumococcal 13 / PPSV23 . Prevenar 13 Whooping Cough					
VAR 44Pneumococcal 23 / PPV-23 Pneumovax II Whooping Cough					
VAR 45PolioSabin	Polio				
VAR 46PolioSalk	Polio				
VAR 47Rabies	Rabies				
VAR 48Rota VirusRotarix	.Rota Virus				
VAR 49Rota VirusRotaTeq	.Rota Virus				
VAR 50Rubella	.Rubella (German Measles)				
VAR 51Smallpox	•				
VAR 52TAB	.Typhoid + Paratyphoid A + Paratyphoid B				
VAR 53Tetanus	Tetanus				
VAR 54Tick-Borne Encephalitis Virus FSME-IMMUN J	unior Tick-Borne Encephalitis Virus				
VAR 55Tick-Borne Encephalitis Virus TicoVac FFMETick-Borne Encephalitis Virus					
VAR 56Typhoid					
VAR 57Varicella / Chicken Pox VarivaxVaricella / Chicken Pox / Shingles					
VAR 58Yellow Fever	Yellow Fever				

### Virus 1 Test Kit 21 vials

The energy patterns of hepatitis A, B and C, mumps, chickenpox, measles, HIV, polio, the respiratory synctial virus, hepatitis, herpes simplex and zoster, Epstein-Barr, coxsackie, etc.

### VI 01 Coxsackie

Tonsillitis/ pharyngitis, childhood pneumonia, upper respiratory tract infection, greyish ulcers of soft palate and fauces, Bornholm disease, fever, hand foot and mouth disease, flaccid paralysis, viral meningitis. 24 group A and 6 group B.

### VI 02 Cytomegalovirus (CMV)

Tonsillitis/ pharyngitis, encephalitis, hepatitis.

### VI 03 Epstein-Barr Virus (EBV)

Infectious mononucleosis, tonsillitis/ pharyngitis, glandular fever, encephalitis, hepatitis, implicated in nasopharyngeal carcinoma and lymphomas, viral meningitis.

### VI 04 Hepatitis A (HAV)

Acute hepatitis. Particularly prevalent in developing countries. In developed nations 20% of young adults show serological evidence of past infection.

### VI 05 Hepatitis B (HBV)

Acute and chronic viral hepatitis, implicated in primary liver cancer. 0.1% of UK population estimated to be carriers.

### VI 06 Hepatitis C (HCV)

Acute and chronic viral hepatitis, implicated in primary liver cancer.

### VI 07 Herpes Simplex Type 1 (HSV)

Tonsillitis/ pharyngitis, cold sores, whitlows, encephalitis, oral and genital ulcers (cold sores).

### VI 08 Herpes Simplex Type 2 (HSV) Genital ulcers.

VI -9 Herpes Zoster Shingles.

### VI 10 Human Immunodeficiency Virus (HIV)

Tonsillitis/ pharyngitis, encephalitis.

### VI 11 Influenza

Singapore A, Sichnan A, Beijing A, Shangdong A, Panama B, Yamagata B strains in this vial.

### VI 12 Measles Virus

Fever and running nose, cough followed by rash, viral meningitis.

### VI 13 Mumps Virus

Headache, sore throat and fever with enlarged salivary glands

### VI 14 Papilloma Human Virus (HPV)

Warts, verrucas, implicated in cancer of the cervix.

### VI 15 Polio Virus

Poliomyelitis. 3 types. Type 1 most virulent.

### VI 16 Respiratory Synctial Virus (RSV)

Croup, common cold, childhood pneumonia. Asthma sometimes starts after an infection with this virus.

### VI 17 Rubella Virus(German Measles)

German measles, rash.

### VI 18 Smallpox Virus

Smallpox, influenza-type illness, pus-filled blisters. It is believed that no reservoirs of this virus are now left outside of laboratories.

### VI 19 Varicella Zoster

Chickenpox.

### VI 20 Yellow Fever Virus

Hepatitis. Occurs in tropical areas of Africa and South America

### VI 21 Parvovirus

Causes slapped cheek disease (fifth disease / erythema infectiosum); a distinctive red, lacy-like rash on cheeks (and sometimes other parts of body), headache, fever; occurs most often in children; 20% to 30% symptom-free even though infected; in adults can cause joint pains and swelling, miscarriages in the first 20 weeks of pregnancy; can cause chronic anaemia in those with HIV or who have had organ transplants.

Thought that 60% of all adults in the UK have been infected with Parvovirus at some point, usually as a child (NHS Direct).

### Virus 2 Test Kit 25 vials

This kit includes Adenovirus (linked to respiratory illness), Coronavirus (the common cold), Human T-Lymphotropic Virus Type 1 and 2 (neurological illnesses and leukemia), Norovirus (gastroenteritis), four Parainfluenza strains, Rhinovirus (the common cold) and West Nile Virus. The kit also includes viruses that are of a concern from a biological warfare standpoint (e.g. SARS, Dengue and Ebola).

### VI 22 Adenovirus

Most commonly causes illness of the respiratory system, but may also cause gastroenteritis, conjunctivitis, cystitis, and rashes.

### VI 23 Astrovirus

Causes diarrhoea and viral gastroenteritis.

### VI 24 Avian Influenza Virus / H5N1

Infections have been documented among humans, sometimes causing severe illness and death.

### VI 25 Borna Virus

May play a role in some human neurological and psychiatric conditions including bipolar disorder and depression. Has been found in animals in Europe, Asia, Africa and North America.

### VI 26 Coronavirus

Primarily infects the upper respiratory and gastrointestinal tract, causing the common cold.

### VI 27 Dengue Fever

An infectious tropical disease, but seen as a potential biological warfare agent. Symptoms include fever, headache, muscle and joint pains, and a characteristic skin rash that is similar to measles.

### VI 28 Ebola Virus (REBOV and ZEBOV)

Causes Ebola hemorrhagic fever. Mainly restricted to Africa but seen as a potential biological warfare agent.

### VI 29 Echovirus

The leading causes of acute febrile illness in infants and young children, and is the most common cause of aseptic meningitis.

### VI 30 Enterovirus

Has been associated with hand, foot, and mouth disease.

### VI 31 GB Virus C / GBV-C

Formerly known as hepatitis G virus (HGV). Known to infect humans, but is not known to cause human disease.

### VI 32 Hepatitis D

Occurs only when Hepatitis B (HBV) is present, resulting in more severe complications compared to infection with HBV alone.

### VI 33 Hepatitis E

Prevalent in most developing countries, and common in any country with a hot climate.

### VI 34 Human T-Lymphotropic Virus Type 1 / HTLV-I/ Adult T-Cell Lymphoma Virus Type 1

Has been seriously implicated in several kinds of diseases, including HTLV-I-associated myelopathy and Strongyloides stercoralis, and as a virus cancer link for leukaemia.

### VI 35 Human T-Lymphotropic Virus Type 2

Associated with neurologic disorders and chronic pulmonary infections. Found predominantly in IV drug users, Native Americans, Caribbean and South American Indian groups.

### VI 36 Japanese Encephalitis Virus

Causes encephalitis. Transmitted by mosquitoes. Most prevalent in Southeast Asia and the Far East.

### VI 37 Norovirus / Norwalk Virus

Causes about half of all non-bacterial gastroenteritis cases around the world.

### VI 38 Parainfluenza Virus 1

Parainfluenza viruses are the second most common cause of lower respiratory tract infection in younger children, including croup. Also upper respiratory tract illness (a cold and sore throat).

### VI 39 Parainfluenza Virus 2

Parainfluenza viruses are the second most common cause of lower respiratory tract infection in younger children, including croup. Also upper respiratory tract illness (a cold and sore throat).

### VI 40 Parainfluenza Virus 3

Parainfluenza viruses are the second most common cause of lower respiratory tract infection in younger children, including croup. Also upper respiratory tract illness (a cold and sore throat). This strain also associated with bronchiolitis and pneumonia.

### VI 41 Parainfluenza Virus 4

Parainfluenza viruses are the second most common cause of lower respiratory tract infection in younger children, including croup. Also upper respiratory tract illness (a cold and sore throat).

### VI 42 Rhinovirus

Main cause of human common cold.

### VI 43 Rotavirus

The most common cause of severe diarrhoea among infants and young children. Can occur throughout life: the first usually produces symptoms, but subsequent infections are typically mild or asymptomatic.

### VI 44 Severe Acute Respiratory Syndrome Virus (SARS)

A viral respiratory illness; no known outbreaks since 2004. Seen as a potential biological warfare agent.

### VI 45 Swine Flu Virus / Swine Influenza Virus / H1N1 Virus

Transmission of the virus from pigs to humans is not common and does not always lead to human flu.

### VI 46 West Nile Virus

Main route of human infection is through the bite of an infected mosquito. Approximately 90% of West Nile Virus infections in humans are without any symptoms. Found in Africa, Europe, the Middle East, west and central Asia, Oceania and North America.

### Virus 3 Test Kit 25 vials

### Another 21 viruses including Zika Virus, Hanta virus, Human Herpes Virus 6, Simian Virus 40, etc.

### VI 47 BK Virus

Many people who are infected with this virus are asymptomatic. If symptoms do appear, they tend to be mild: respiratory infection or fever. Past infection with the BK virus is widespread, but significant consequences of infection are uncommon, with the exception of the immune-compromised and the immunosuppressed.

### VI 48 California Encephalitis Virus

Causes encephalitis in humans. Characterized by fever, drowsiness, and lack of mental alertness and orientation. Seizures occur in 50% of children. Focal neurologic signs such as irregular and abnormal reflexes develop in 20% of children. 10% of patients develop coma. The total duration of illness rarely exceeds 10–14 days. Recurrent unprovoked seizures occur even after the illness has passed. This develops in 20% of patients, especially those who had seizures during the acute illness. In adults, infection is asymptomatic.

### VI 49 Colorado Tick Fever Virus /CTFV

Initial symptoms include fever, chills, headaches, pain behind the eyes, light sensitivity, muscle pain, generalized malaise, abdominal pain, nausea, and vomiting, as well as a flat or pimply rash. During the second phase a high fever can return with an increase in symptoms. Found almost exclusively in the western United States and Canada, mostly in high mountain areas such as Colorado and Idaho.

### VI 50 Cowpox

Red blisters, usually through contact with diseased domestic cats, sometimes directly from rats or domesticated house mice.

### VI 51 Eastern Equine Encephalitis Virus /EEE/ Triple E

Present in North, Central and South America and the Caribbean. Symptoms include high fever, muscle pain, altered mental status, headache, meningeal irritation, photophobia, and seizures, which occur three to 10 days after the bite of an infected mosquito.

### VI 52 Everglades Virus

The virus circulates among rodents and vector mosquitoes and sometimes infects humans, causing a febrile illness with occasional neurological manifestations. Most clinical cases of infection occur in and around the city of Miami.

### VI 53 Hantavirus

Infection occurs through urine, saliva or contact with rodent waste products. May cause potentially fatal diseases in humans, such as hemorrhagic fever with renal syndrome (HFRS) and hantavirus pulmonary syndrome (HPS), but may be asymptomatic with no apparent health effects.

### VI 54 Human Foamy Virus

Has been isolated from patients with various neoplastic and degenerative diseases such as myasthenia gravis, multiple sclerosis, thyroiditis de Quervain, and Graves' disease but the role of the virus is unclear. Recent studies indicate that it is not pathogenic in humans.

### VI 55 Human Herpes Virus 6

Cause of the common childhood illness exanthem subitum (also known as roseola infantum or sixth disease). Found in some patients with neuro-inflammatory diseases such as multiple sclerosis.

### VI 56 Human Herpes Virus 8 / Kaposi's Sarcoma-Associated Herpesvirus /KSHV/HHV-8

Kaposi's sarcoma, primary effusion lymphoma, some types of multicentric Castleman's disease. Healthy individuals can be infected with the virus and show no signs or symptoms, due to the immune system's ability to keep the infection in check. Infection is of particular concern to the immunosuppressed. Cancer patients receiving chemotherapy, AIDS patients and organ transplant patients are all at a high risk of showing signs of infection.

### VI 57 JC Virus / John Cunningham Virus

Initial site of infection may be the tonsils, or possibly the gastrointestinal tract. Then remains latent in the gastrointestinal tract and can also infect the tubular epithelial cells in the kidneys, where it continues to reproduce, shedding virus particles in the urine. Very common in the general population, infecting 70 to 90 percent of humans; most people acquire JCV in childhood or adolescence. It is found in high concentrations in urban sewage worldwide, leading some researchers to suspect contaminated water as a typical route of infection.

Causes progressive multifocal leukoencephalopathy and other diseases only in cases of immunodeficiency.

#### VI 58 La Crosse Virus

Mosquito-transmitted virus that can cause encephalitis, or inflammation of the brain. Occurs in the Appalachian and Midwestern regions of the United States.

#### Lassa Virus / Lassa Fever Virus VI 59

Causes Lassa haemorrhagic fever. Endemic in West African countries.

### VI 60 Lymphocytic Choriomeningitis Virus (LCMV)

Spread by the common house mouse. During the initial phase, lasting up to a week, common symptoms include fever, lack of appetite, headache, muscle aches, malaise, nausea, and/or vomiting. Less frequent symptoms include a sore throat and cough, as well as joint, chest, and parotid pain. Second phase starts several days after recovery, and consists of symptoms of meningitis or encephalitis. Congenital infection may lead to malformations such as intracranial calcifications, hydrocephalus, microcephaly or macrocephaly, mental retardation, and seizure.

#### VI 61 **Murray Valley Encephalitis Virus**

Endemic to northern Australia and Papua New Guinea. Causal agent of Murray Valley encephalitis (previously known as Australian encephalitis); in humans can cause permanent neurological disease or death.

### VI 62 Puumala Virus

Haemorrhagic fever with renal syndrome. Found predominantly in Scandinavia and Finland, although it has also been reported elsewhere in Northern Europe, Poland and Russia.

### VI 63 Rift Valley Fever Virus

Causes fever. Mainly in sub-Saharan Africa.

### VI 64 Ross River Virus

Causes an influenza-like illness and polyarthritis. The virus is endemic to Australia, Papua New Guinea, Fiji, Samoa, the Cook Is lands, New Caledonia and several other islands in the South Pacific.

### VI 65 Simian Virus 40

Found in both monkeys and humans. Has the potential to cause tumors, but most often persists as a latent infection. Polio vaccine contaminated with it in 1960's.

#### VI 66 Sindbis Virus

Symptoms include arthralgia, rash and malaise. Most common in South and East Africa, Egypt, Israel, Philippines and parts of Australia.

### VI 67 Tick-Borne Encephalitis Virus

Most often manifests as meningitis, encephalitis, or meningoencephalitis; mild fever can also occur. Long-lasting or permanent neuropsychiatric complications are observed in 10-20% of infected patients.

### VI 68 Chikungunya

Causes fever and joint pain; other symptoms may include headache, muscle pain, joint swelling, or rash. Transmitted by mosquito. Outbreaks have occurred in countries in Africa, Asia, Europe, and the Indian and Pacific Oceans and the Caribbean. There is a risk that the virus will be imported to new areas by infected travellers.

### VI 69 Herpes 7

Often acts together with herpes virus 6; can cause a skin condition in infants known as exanthema subitum; also leads to or is associated with a number of other symptoms, including acute febrile respiratory disease, fever, rash, vomiting, diarrhoea, low lymphocyte counts, and febrile seizures, though often no symptoms present at all. Over 95% of adults have been infected and are immune to HHV-7, and over three quarters of those were infected before the age of six.

### VI 70 Parvovirus B19

Causes a mild rash illness called erythema infectiosum or Fifth Disease; more common in children than adults. People with weakened immune systems caused by leukemia, cancer, organ transplants, or HIV infection are at risk for serious complications from fifth disease.

### VI 71 Zika Virus

Most common symptoms are fever, rash, joint pain, and conjunctivitis. The illness is usually mild with symptoms lasting from several days to a week. Reports of Guillain-Barré syndrome and pregnant women giving birth to babies with birth defects and poor pregnancy outcomes have been linked to the virus. Outbreaks have occurred in areas of Africa, Southeast Asia, the Pacific Islands and South America. Transmitted by mosquitos.

### Weight Test Kit 38 vials

### This kit draws together vials that are spread across other kits. There are no vials which are unique to

*this kit.* They include hormones, enzymes, amino acids, etc. that affect metabolism, blood glucose levels, gastric emptying and appetite control. Vials include insulin, glycogen, T4, T3, reverse T3, leptin, neuropeptide Y, carnitine, etc. 38 vials

The information here just focusses on the role of these in blood sugar control, appetite management and metabolism.

### WT01 Anandamide

May increase appetite.

### WT02 Arginine

An amino acid. Involved with glucose control mechanism in blood; enhances fat metabolism; involved in insulin production; stimulates human growth hormone.

### WT03 Carnitine

An amino acid. Major role in transferring fatty acids into cells where used as energy sources; mobilising fatty deposits in obesity.

### WT04 CART

Modulates the action of leptin and neuropeptide Y and so reduces appetite.

### WT05 CCK / Cholecystokinin

Stimulates a feeling of satiety; may regulate feeding as a "stop eating" signal.

### WT06 Corticotropin Releasing Hormone / CRH

Involved in the regulation of food intake.

### WT07 Cortisol / Hydrocortisone

The principal gluccocorticoid; increases blood glucose levels by increasing cellular utilisation of proteins and fats as energy sources thus conserving glucose; stimulates liver cells to produce glucose from amino acids and fats.

### WT08 Cylic AMP / Cyclic Adenosine-3',5' - Monophospate

Causes adipose cells to break down triglycerides and release fatty acids more rapidly; stimulates thyroid cells to secrete more thyroid hormone.

### WT09 Dipeptidyl Peptidase IV

Arrests biological activity of GLP1 and Substance P.

### WT10 Epinephrine/ Adrenaline

Slows digestion, increases blood sugar.

### WT11 Exendin (9-39)

Reduces glucose levels; competes for the same brain receptors as GLP1 and so blocks the effect of GLP1 and stimulates appetite.

### WT12 Galanin

Stimulates the appetite.

### WT13 Ghrelin

Increases appetite; may be a hormonal link between stomach, hypothalamus and pituitary and so regulate energy balance; regulates growth hormone secretions; may signal to the hypothalamus when an increase in metabolic efficiency is necessary.

### WT14 Glucagon

Raises blood sugar levels by accelerating breakdown of glycogen into glucose in the liver, converting other nutrients into glucose in the liver, and releasing glucose into the blood – opposes the action of insulin.

### WT15 Glucagon-Like Peptide 1/GLP1

Stimulates production of insulin; inhibits production of glucagon and gastric emptying; reduces appetite; lowers blood glucose in people with diabetes.

### WT16 Glucocorticoids

Conversion of non-carbohydrates into energy.

### WT17 Glycogen

The principal carbohydrate storage material in the body; plays an important role in controlling blood sugar levels.

### WT18 Glycogen Phosphorylase A

Involved in converting glycogen to glucose.

### WT19 Glycogen Synthase

Involved in converting glucose to glycogen.

### WT20 Growth Hormone Inhibiting Hormone / Somatostatin

Inhibits secretion of insulin and glucagons and slows absorption of nutrients from the gastro-intestinal tract.

### WT21 Human Growth Hormone / Somatotropin

Helps to maintain muscle and bone mass and promote healing of injuries and tissue repair; speeds up the breakdown of liver glycogen into glucose; excess production may cause diabetes mellitus.

### WT22 Insulin

Decreases blood sugar levels.

### WT23 Leptin

Released by fat cells as they synthesise triglycerides; reduces appetite; non-insulin dependent diabetes.

### WT24 Melanocyte-Stimulating Hormone / MSH

Suppresses appetite.

### WT25 Neuromedin B

Involved in blood glucose control; suppresses the appetite.

### WT26 Neuropeptide Y

Stimulates appetite; causes increased storage of ingested food as fat; reduces energy expenditure.

### WT27 Orexin B

Generated when blood sugar levels drop, so acting as a trigger to eat.

### WT28 Pheylalanine

An amino acid. Precursor of tyrosine and therefore dopamine, norepinephrine (noradrenaline) and epinephrine (adrenaline), so affects blood sugar levels and fat metabolism; necessary for thyroid; involved in weight control.

### WT29 Prostaglandin E2 / PGE2

Acts on adenylate cyclase to enhance the production of cyclic AMP.

### WT30 Protein Tyrosine Phosphatase / PTP1B

Inhibits signaling of leptin and insulin1; may explain resistance to leptin and insulin; likely to be important in obesity and type 2 diabetes; drug research now being carried out to find drugs to inhibit PTP1B.

### WT31 Reverse T3 / 3,3',5'-Triiodothyronine

Reverse T3 and T3 are secreted in an inverse relationship allowing the thyroid to adjust the amount of thyroid activity; blocks the action of T3 by binding with the receptor sites.

### WT32 Serotonin

Decreases carbohydrate cravings; provides a feeling of fullness; enhances mood.

### WT33 Thyroid-Stimulating Hormone / TSH

Stimulates thyroid gland to produce its hormones.

### WT34 Thyrotropin Releasing Hormone / TRH

Stimulates anterior pituitary to secrete TSH.

### WT35 Thyroxine / Tetraiodothyronine / T4

Converted into T3; increase rate at which cells release energy from carbohydrates.

### WT36 Triiodothyronine/T3

Regulates metabolism by stimulating carbohydrate and fat breakdown.

### WT37 Urocortin

Inhibits appetite.

### WT38 Val-Pro-Asp-Pro-Arg

Research on rats indicates that this is an appetite suppressant.

## Single Vials:

### for more details go to our single vials webpage:

https://www.kinesiologyshop.com/single-testing-vials/

Also note that single vials may come in different sizes depending on the range they come from.

### EP Vial Size: 50 x 10cm

### Molluscum Contagiosum Vial

A common, yet rarely discussed skin infection. Caused by the molluscum contagiosum virus, it produces clusters of lesions or bumps to appear on the skin. While typically painless, the lesions can be unsightly and embarrassing for those affected.

The most common areas affected by molluscum contagiosum in children are the neck, arms, chest, belly, legs, buttox and genital region. Palms and soles are rarely affected. In adults, the lesions are generally located in the genital region but may infect other parts of the body.

While molluscum contagiosum will resolve on its own, it can take 16 months or even years for the lumps to go away completely. Medications and surgical treatments are available.

### • T Helper Cell

T cells are also known as T lymphocytes. The "T" stands for "thymus", the organ in which these cells mature .They are a type of white blood cell that is of key importance to the immune system and is at the core of adaptive immunity, the system that tailors the body's immune response to specific pathogens. The T cells are like soldiers who search out and destroy the targeted invaders. T cells can produce substances called cytokines such as the interleukins which further stimulate the immune response.

- 5G Radiation
- Smart Meter
- White Tailed Spider

### KTK Vial Size: 38 x 8cm

### **COVID 19 & Related Vials**

- Influenza Vaccination 2020/2021 annual update vial
- Influenza Vaccination 2021/2022 annual update vial
- COVID 19: Original Wuhan Virus Vial
- COVID 19: Delta Strain vial
- COVID 19: Omicron vial & various strains
- COVID 19 Vaccination: Astra Zeneca
- COVID 19 Vaccination: Pfizer
- COVID 19 Vaccination: Moderna
- COVID 19 Vaccination: Johnson & Johnson
- COVID 19 Vaccination: Novavax
- COVID 19 Vaccination: Sinovax
- Graphine Oxide & Graphene Hydroxide

### Spike Protein

### AND MORE:

Go To:

https://www.kinesiologyshop.com/single-testing-vials/