

# New Test Kits April 2013

## ● Milk & Milk Substitutes Test Kit

Includes lactose-free cows' milk, A2 cow's milk, sheep's milk, buffalo milk, goat's milk as well as almond, rice, soya and oat milks. **18 vials, \$55**

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.

## ● Mushrooms Test Kit

Various mushrooms including Chestnut, Shitake, Porcini, Oyster, White Button and truffles. **14 vials, \$44**

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

## ● Acupuncture Meridians Test Kit

The 14 acupuncture meridians. The energy signatures were produced originally by an experienced acupuncturist stimulating the meridian and taking an EAV reading. **14 vials, \$44**

- 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

## ● Fungi Test Kit: Number 3

Additional important fungi, many of which produce mycotoxins that are dangerous for human health. This is one of three Fungus Kits. 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. **24 vials, \$77**

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.

### **Fungi Test Kit # 3 Continued.....**

#### **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, sporidifesmin and sterigmatocystin.

#### **FU3 71 Coccidioides 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 mycotoxin 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 wallemiol.

## ● Interleukins Test Kit

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. **12 vials, \$44**

### IL 01 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.

### IL 02 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).

### IL 03 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.

### IL 04 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.

### IL 05 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.

### IL 06 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 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.

### IL 07 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

### IL 08 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.

### IL 09 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.

### IL 10 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.

### IL 11 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.

### IL 12 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.

## ● Mycotoxins Test Kit

Mycotoxins are produced by moulds. One mould 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, gastro-intestinal disturbances, reproductive disorders and suppression of the immune system. **27 vials, \$88**

### MT 01 Aflatoxins

Produced by *Aspergillus*

Symptoms include anorexia, lethargy, muscle weakness, liver problems (haemorrhages, necrosis and cancer) and engorged kidneys.

### MT 02 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.

### MT 03 Alvertoxin

Produced by *Alternaria*

### MT 04 Brevianamide

Produced by *Aspergillus* sp. (particularly *Aspergillus ustus*); *Penicillium* sp.

Causes inflammatory response in lung cells.

### MT 05 Chaetoglobosin A,B,C

Produced by *Chaetomium*, *Penicillium discolor*

Found in water-damaged houses and in air-conditioning systems.

### MT 06 Citreoviridin

Produced by *Aspergillus terreus*, *Penicillium toxicarium*, *Penicillium ochrosalmoneum*

It is believed to be the cause of the acute cardiac Beri-Beri disease.

### MT 07 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.

### MT 08 Cladosporic Acid

Produced by *Cladosporium*

### MT 09 Cyclopiazonic Acid

Produced by *Aspergillus flavus*, *Aspergillus versicolor*, *Penicillium camemberti*, *Penicillium commune*, *Penicillium griseofulvum*, *Penicillium palitans*

### MT 10 Cytochalasin

Produced by *Aspergillus clavatus*, *Bioploaris*, *Phoma*, *Zygosporium*

Inhibits cellular processes such as cell division,

### MT 11 Diplodiatoxin

Produced by *Diplodia*

### MT 12 Fumonisin

Produced by *Fusarium moniliforme*

Found in wheat and maize. Also to a lesser extent in rice, sorghum and navy beans. Implicated in oesophageal cancers.

### MT 13 Gliotoxin

Produced by *Penicillium*, *Aspergillus*, *Alternaria*, *Trichoderma*, *Gliocladium*

Possesses immunosuppressive properties. May be implicated in autism.

### MT 14 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.

#### MT 15 Ochratoxin Mix

Produced by *Fusarium* 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.

#### MT 16 Patulin

Produced by *Paecilomyces*, *Penicillium* sp., *Aspergillus* sp.

Associated with a range of mouldy fruits and vegetables, in particular rotting apples (but not cider) and figs.

#### MT 17 Penicillic Acid

Produced by *Aspergillus ochraceus*, *Penicillium aurantiocandidum*, *Penicillium brasilianum*, *Penicillium melanoconidium*, *Penicillium polonicum*, *Penicillium veridicatum*

Toxic and carcinogenic.

#### MT 18 Roridin E

Produced by *Stachybotrys chartarum*

Found in water-damaged houses.

#### MT 19 Rubratoxin

Produced by *Penicillium crustosum*

Found on cereal grains.

#### MT 20 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.

#### MT 21 Sporidesmin

Produced by *Bioploaris*, *Pithomyces chartarum*

Facial eczema in animals.

#### MT 22 Sterigmatocystin

Produced by *Aspergillus 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.

#### MT 23 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.

#### MT 24 Trichothecene

Produced by *Myrothecium*, *Memnoniella*, *Phomopsis*, *Stachybotrys chartarum*, *Trichothecium*, *Cylindrocorynium*, *Fusarium*

Synthesised by around 300 fungal species, infecting the grain of developing cereals such as wheat and maize. Reduces immune response.

#### MT 25 Viriditoxin

Produced by *Aspergillus brevipes*, *Aspergillus fumigatus*, *Aspergillus viridinutans*, *Paecilomyces*

Inhibits cell division.

#### MT 26 Walleminol

Produced by *Wallemia*

Found on cereals, pulses, dried fruit, cakes, confectionary, preserves. Toxic for some animals.

#### MT 27 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.

## ● Sweeteners Test Kit

Various natural and artificial sweeteners including sugar, honey, fructose, corn syrup, stevia, aspartame, sucralose, sorbitol, malssses, maple syrup and xylitol, for example. **24 vials, \$77**

SW 01 Acesulfame Potassium / Acesulfame K / Ace K / E950

An artificial sweetener. Often blended with other sweeteners (usually sucralose or aspartame).

SW 02 Agave Syrup

SW 03 Aspartame / E951

An artificial sweetener.

SW 04 Barley Malt / Pure Malt / Malt

SW 05 Date Syrup

SW 06 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.

SW 07 Fructose

SW 08 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.

SW 09 Honey

SW 10 Mannitol / E421

Used in diabetic foods, also hard candies/sweets, dried fruits, chewing gum and chewable tablets. Made from fructose.

SW 11 Maple Syrup

SW 12 Molasses

By-product of the refining of sugarcane, grapes, or sugar beets into sugar.

SW 13 Monk Fruit / Lou Han / Buddha Fruit

From the vine *Siraitia grosvenorii*.

SW 14 Neotame / E961

An artificial sweetener.

SW 15 Palm Sugar/ Jaggery Goor

SW 16 Rice Syrup /Brown Rice Syrup

SW 17 Saccharin / E954

An artificial sweetener.

SW 18 Sodium Cyclamate / Cyclamate/ E952

Approved as a sweetener in over 55 countries, but banned in USA. Often used with other artificial sweeteners, especially saccharin.

SW 19 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.

SW 20 Stevia Leaf Powder  
From the stevia plant.

SW 21 Sucralose / E955  
An artificial sweetener widely used throughout the world.

SW 22 Sugar, Beet  
Accounts for almost 20% of sugar produced. In the same botanical food family as spinach and chard.

SW 23 Sugar, Cane  
Accounts for 80% of sugar produced. . In the same botanical food family as wheat, barley, etc.

SW 24 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.