

Good Health

28 November 2018

Optimum Nutrition Test

## Contact us

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## Optimum Nutrition Test

Thank you for choosing our testing service for your Optimum Nutritional Test. Before you continue reading through this report, we would like to share some important information with you regarding vitamin, mineral and heavy metal testing. This will help you to better understand your results and the explanations in the report that follows.

Nutrients are essential to one's health and well-being. Imbalances in certain nutrients may contribute to a range of illnesses. Nutritional imbalances may contribute to problems in the following areas:

- Hormone Function
- Neurotransmitter Function
- Food Digestion
- Skin Health
- Bone Formation
- Energy Production
- Antioxidant Function

Most of the nutrients that our bodies require are essential. This means that we cannot manufacture them and need to obtain them from our diet. Processed foods and modern agricultural practices tend to deplete essential nutrients from food and therefore many of today's diets lack an adequate complement of essential nutrients. Living in a modern world has delivered the body an array of new challenges: increased stress, nutritionally-low convenience foods and a chemical-laden environment. All these factors impact negatively on our vitality and place additional strain on the body, increasing its nutritional requirements. Research has consistently shown that maintaining adequate levels of essential nutrients allow the body to function at an optimal level and aids good health and recovery.

Heavy metals and toxic elements are ubiquitous in the environment and exposure can contribute to a wide range of different health conditions. One can be exposed to toxic compounds by active exposure (direct contact or occupational exposure) or passive exposure (occupational exposure, environmental exposure - pesticide and herbicide sprays - and exposure through the consumption of contaminated foods).

Excessive exposure to toxins may lead to their accumulation in the body. They tend to deposit and store in fat and glandular tissue, and it is therefore difficult to determine their actual levels unless they are provoked and released from these sites of storage. The liver is the main detoxifying organ of the body and is responsible for the clearing of these compounds. If the toxic burden becomes too high for the liver to cope with, the toxins will spill back into the bloodstream where they circulate and store in different parts of the body, particularly in fat and glandular tissue. Their presence, in the long-term may lead to disruptions in the normal function of these glands and contribute to disease.

The Allergenics testing method uses a unique energy measurement technology that can detect disruptions to normal energy patterns in the body. Each nutrient has a particular energy pattern that can be measured. When levels of a particular nutrient are unbalanced in the body i.e. there is too little (deficiency) or too much (excess) it may cause a change to the body's normal function, causing stress to the body. Using special energy measurement technology, these changes can be measured and the particular nutrient can be identified. This helps to provide information on nutritional health and how to balance deficiencies and excesses.

Please note: This test does not provide physiological levels of nutrients, heavy metals and toxic elements in the body. It may only provide information on whether a nutrient is in a state of imbalance in the body, and whether or not a heavy metal or toxic element is causing a stress to the body.

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# What we test for

Environmental Compounds	2,4,5 T, DDT, Dioxins, Endosulfan, Paraquat, Roundup.
Essential Fatty Acids	Omega 3, Omega 6.
Heavy Metals	Aluminium, Beryllium, Cadmium, Cobalt, Gold, Lead, Mercury, Nickel, Platinum, Silver, Thallium, Tin, Titanium.

Minerals	Boron, Calcium, Chromium, Copper, Iodine, Iron, Magnesium, Manganese, Phosphorus, Potassium, Selenium, Sodium, Zinc.
Specialised Nutrients	Coenzyme Q10.
Vitamins	Biotin, Folic Acid, P5P, Vitamin A, Vitamin B1, Vitamin B12 (Methylcobalamin), Vitamin B2, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin C, Vitamin D, Vitamin E, Vitamin K.

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## Your Test Results

This section provides you with the results of your test. It will tell you which of your nutrients are in a state of imbalance thus causing a stress to your body. It will also provide you with information on your exposure to heavy metals and environmental compounds. Please note that there is a difference in the results scales for nutrients, heavy metals and environmental compounds.

#### Reactive scale Nutrients



Reactive scale Heavy Metal and Environmental Compounds



### **Nutrients**

### **Vitamins**



#### **Minerals**



## **Essential Fatty Acids**



## Heavy Metal and Environmental Compounds

## **Heavy Metals**

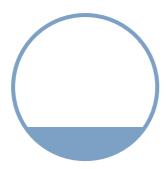


## **Environmental Compounds**



## Deep dive into your significant results

#### Vitamin B1



Vitamin B1 (thiamine) is important for carbohydrate, branched-chain amino acid and fatty acid metabolism. Main food sources include wheat and wheatgerm, rice, legumes, nuts, seeds and pork. Individuals with a high carbohydrate diet, high raw fish and seafood intake and high alcohol intake have an increased requirement for this nutrient. Oral contraceptive, antibiotic, diuretic medications may deplete Vitamin B1.

## **What This Means**

Your reactivity: Score -2.5: Low

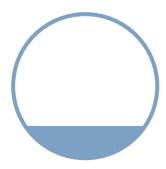
Low Vitamin B1: Low levels of Vitamin B1 may result from poor dietary habits (high refined grain intake, alcohol consumption, high tea and coffee consumption), loss through diuretic medication use. Severe deficiency leads to a condition known as beriberi. Mild deficiency symptoms include weakness and fatigue.

**High Vitamin B1:** High levels of Vitamin B1 may be due to excessive supplementation of this nutrient. No adverse effects from Vitamin B1 excess have been reported.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

#### lodine



lodine is a mineral important for thyroid gland function where it is required for the synthesis of thyroid hormones T4 (thyroxine) and T3 (triiodothyronine). Thyroid hormones stimulate the body's basal metabolic rate, increase oxygen consumption and heat production, and influence the activity of most organs. The iodine content of food will vary depending on the region in which it is found. Food sources include fish (mainly marine fish), milk, eggs, legumes, grains and iodised salt.

Goitrogens are compounds found in cruciferous vegetables such as cabbage, cauliflower and broccoli. These compounds may compete with the uptake of iodine into cells. Cooking these foods can greatly reduce the effect of these goitrogens. Individuals not consuming iodine-rich foods or iodised salt may be at risk of low iodine levels.

## Your reactivity: Score -2.5: Low

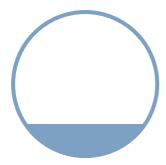
#### What This Means

Low lodine: Low iodine levels are present in many communities around the world. It may result in a condition known as goitre (swelling of the thyroid gland) and hypothyroidism. In children it can cause a condition known as cretinism which is characterised by severe brain damage.

**High lodine**: High levels of iodine may rapidly lead to over-active thyroid gland function or hyperthyroidism (greater than 500mcg/day long term). Symptoms include weight loss, rapid heart beat, increased sweating, muscle weakness and fatigue.

### What To Do Next

#### Potassium



Potassium is important in maintaining electrolyte and pH balance (acid-alkaline balance in the body). It also has a role in influencing muscle contraction and nerve stimulation. It is found predominantly inside the cells of the body. Main food sources include raw foods, banana, melons, mango, prune juice, papaya, avocado, green leafy vegetables, legumes, nuts and seeds. Individuals suffering with alcoholism, diarrhoea, anorexia nervosa and bulimia, may have a higher requirement for potassium.

## Your reactivity: Score -2.5: Low

### **What This Means**

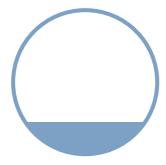
Low Potassium: Low potassium levels go mainly unnoticed due to the fine control that the body has in maintaining a balance. Symptoms of deficiency include fatigue, muscle weakness, cramps, intestinal paralysis and cardiac problems (especially if sodium levels are elevated). Main causes of low potassium include alcoholism, chronic diarrhoea and magnesium depletion. Diuretic medication use in individuals with high blood pressure, may also lead to potassium depletion.

**High Potassium**: High potassium levels from normal or dietary sources is rare due to the fine control mechanism that the body has in maintaining a balance. High potassium may be the result of excessive supplementation of this mineral or a disturbance in the sodium-potassium balance.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

#### Selenium



Selenium is an important trace mineral. It forms part of important antioxidant enzymes and provides defence against free radical damage, including cancer. It helps tissue elasticity and may counteract the toxic effects of mercury. It works with vitamin E to help heart and liver function, and assists in antibody production. Main food sources include Brazil nuts, tuna, sunflower seeds, oysters, chicken liver, wholegrains, organ meats and Brewer's/savoury yeast. Environmental sources include some paints and plastics, anti-dandruff shampoos, fungicides and some types of glass.

Low selenium content in soils, food processing and overcooking contribute to low food levels. Individuals with liver disease, alcoholism and chemical exposure have a greater requirement for selenium.

What This Means

Your reactivity: Score -3: Low

**Low Selenium:** Low levels of selenium may be linked to prostate and liver problems, depression, fatigue, premature ageing, poor immunity and cardiovascular disease.

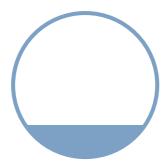
High Selenium: High levels of selenium may result from excessive supplementation (greater than 400mcg/day long term) or from environmental exposure. Early signs of excess include a garlic odour on the breath and a metallic taste in the mouth. Changes to the health of the hair, skin and nails may also be evident. Intakes of 800mcg/day of selenium long term may contribute to selenium toxicity.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

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## Vitamin B12 (Methylcobalamin)



Methylcobalamin is a coenzyme form of Vitamin B12. This means that it functions in numerous enzyme pathways that require Vitamin B12. Methylcobalamin is efficiently taken up into most tissues of the body and stored more effectively than other forms of Vitamin B12. Besides providing a Vitamin B12, methylcobalamin acts as a cofactor in the transfer of methyl groups for the regeneration of methionine from homocysteine.

## Your reactivity: Score -3: Low

#### What This Means

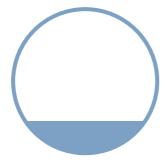
Low Methylcobalamin: A low reading is indicative of low tissue stores of Vitamin B12. Causes include gastritis and malabsorption syndromes. Symptoms of deficiency include neurological symptoms (numbness and tingling in the extremities), mood changes, difficulty walking and dementia. Individuals with low stomach acid, bile and other digestive disorders, vegetarians - especially on a vegan diet, users of antacids, anti-gout and anticoagulant medications have an increased requirement for Vitamin B12.

**High Methylcobalamin:** A high reading may be indicative of excessive supplementation with this nutrient. No adverse effects from high Vitamin B12 levels have been reported. It appears to be well-tolerated in high levels.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

#### Vitamin B5



Vitamin B5 (pantothenate) is an essential water-soluble vitamin that is mainly involved in the formation of energy by the cells. It is also required for the function of certain proteins and for the production of fatty acids. It is found in many pant and animal foods. Main food sources include organ meats, fish, shellfish, dairy products, eggs, avocado, legumes and sweet potato. Consumption of caffeine, sulphur medications and antibiotics may increase the requirement for this nutrient. Individuals with digestive and metabolic disorders, and chronic stress disorders may have an increased requirement for this nutrient.

## What This Means

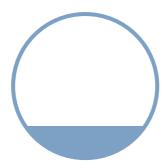
Your reactivity: Score -3: Low

**Low Vitamin B5:** Low levels of Vitamin B5 due to inadequate dietary intake is rare. If present, symptoms of deficiency may include headache, fatigue, insomnia, intestinal disturbances, numbness and tingling in the hands and feet.

**High Vitamin B5:** High levels of Vitamin B5 may be due to excessive supplementation. No adverse effects from increased Vitamin B5 intake have been reported. High intake of supplemental Vitamin B5 may cause nausea, heartburn and diarrhoea.

#### What To Do Next

#### Vitamin D



Vitamin D is a fat-soluble vitamin that can be synthesised by the skin on exposure to sunlight. It acts as a hormone-like regulator or calcium and phosphorus in bone integrity. It also has effects on the immune, endocrine and cardiovascular systems. Main food sources include fatty fish (salmon, mackerel, sardines), fish liver oils, and fortified foods. Insufficient fat in the diet, insufficient sun on skin, liver, kidney or parathyroid disorders, use of barbiturates medications may all affect vitamin D levels in the body.

## Your reactivity: Score -3: Low

#### What This Means

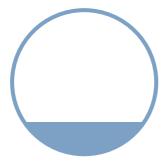
Low Vitamin D: Low levels of Vitamin D may result from environmental and cultural practises. Low sunlight exposure is the single main cause of Vitamin D deficiency. Low levels can lead to a decrease in bone integrity (due to calcium loss from bones), muscle weakness and pain, and severe deficiency in children leads to rickets.

**High Vitamin D:** High levels of Vitamin D may result from excessive supplementation (greater than 10 000 IU per day). Vitamin D toxicity may lead to elevated levels of calcium in the blood (hypercalcaemia).

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

## Vitamin B6



Vitamin B6 (pyridoxine) is an essential water-soluble vitamin that is involved in haemoglobin and amino acid biosynthesis, and fatty acid metabolism. It is important for nervous system function, hormone function and nucleic acid (DNA and RNA) synthesis. Main food sources include fish, poultry, nuts, legumes. potato and banana. Alcohol consumption, a deficiency of magnesium or Vitamin B2, excessive protein intake, excessive heating of food sources and pregnancy may all increase the requirement for this nutrient. Oral contraceptive, anti-Parkinsonian, non-steroidal anti-inflammatory, hormone replacement and antibiotic medications may interfere with Vitamin B6 metabolism.

## Your reactivity: Score -3.5: Low

## **What This Means**

Low Vitamin B6: Low levels of Vitamin B6 may result from insufficient dietary intake of this nutrient. Mild deficiency may present with neurological symptoms including irritability, depression and confusion. Other symptoms include tongue inflammation, mouth ulcers and ulcer in the corners of the mouth. Heavy alcohol consumption may contribute to Vitamin B6 deficiency.

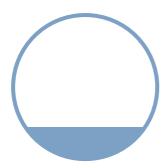
**High Vitamin B6:** High levels of Vitamin B6 may result from excessive supplementation. High doses (greater than 500mg per day long term) may cause a condition called sensory neuropathy. Symptoms include pain and numbness in the extremities, stiffness and difficulty in walking.

### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

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#### Folic Acid



Folic acid, folate or Vitamin B9 is a water-soluble vitamin that is important for the metabolism of nucleic acids (DNA and RNA), metabolism of several amino acids, as well as in methylation reactions. Main food sources include fortified foods, green leafy vegetables (spinach), lentils, chick peas, asparagus and avocado. Genetic variations in the MTHFR gene (resulting in low folic acid and high homocysteine levels) may increase one's requirement for this nutrient. Pregnancy, elevated homocysteine levels, cardiovascular disease, chronic alcoholism and smoking increases an individual's requirement for this nutrient.

## Your reactivity: Score -3.5: Low

#### What This Means

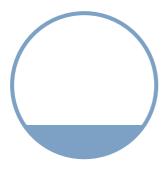
Low Folic Acid: Low folic acid levels are often caused by dietary insufficiency. Other causes include chronic alcoholism, smoking and malabsorption syndromes. Symptoms include megaloblastic anaemia, weakness, fatigue, poor growth in children, mouth ulcers, sore tongue, cracked corners of the mouth and increased homocysteine levels. Deficiency in pregnancy can cause neural tube defects in babies.

**High Folic Acid:** High levels of folic acid is usually due to excessive supplementation with this nutrient. No adverse effects have been reported with excessive consumption of this nutrient. Excess folic acid supplementation in individuals with megaloblastic anaemia may mask an underlying Vitamin B12 deficiency.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

### P5P



Pyridoxal 5-Phosphate (P5P) is the metabolically active coenzyme form of Vitamin B6. Vitamin B6 is converted to P5P in the liver, after which it is ready to be used in a number of important enzyme reactions. P5P is the most important indicator of Vitamin B6 levels in the body. P5P is involved in hormone and neurotransmitter synthesis, haemoglobin and amino acid biosynthesis and fatty acid metabolism. It is also important for nervous system function, hormone function and nucleic acid (DNA and RNA) synthesis.

## Your reactivity: Score -3.5: Low

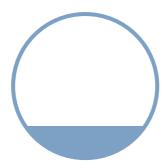
#### What This Means

Low P5P: A low reading is indicative of low Vitamin B6 levels. Symptoms may include irritability, depression and confusion. Other symptoms include tongue inflammation, mouth ulcers and ulcers in the corners of the mouth. Alcohol consumption, a deficiency of magnesium or Vitamin B2, excessive protein intake and pregnancy may all increase the requirement for this nutrient. Certain medications may also interfere with Vitamin B6 metabolism.

**High P5P:** A high P5P reading is usually indicative of supplementation with Vitamin B6 or P5P. High doses of Vitamin B6 (greater than 500mg per day long term) may cause a condition called sensory neuropathy. Symptoms include pain and numbness in the extremities, stiffness and difficulty in walking.

#### What To Do Next

#### Vitamin C



Vitamin C is a water-soluble vitamin and an essential nutrient that needs to be obtained from the diet. Its two main roles in the body are as enzyme cofactor and antioxidant. As an antioxidant, it helps detoxification and excretion of a wide range of toxic chemicals and helps recycle other antioxidants. It also enhances the absorption of iron. Main food sources include citrus fruits, rosehips, sweet red peppers, kiwifruit, strawberry and broccoli.

## Your reactivity: Score -3.5: Low

#### What This Means

Low Vitamin C: Low levels may result in increased nose and gum bleeds, frequent bruising, frequent infections, slow wound healing, collagen disorders, cardiovascular disorders and fatigue. Illness, infection, smoking, stress and excess alcohol consumption may increase an individual's requirement for Vitamin C. The long-term use of analgesic, oral contraceptives, antidepressants and steroids medications may deplete Vitamin C levels

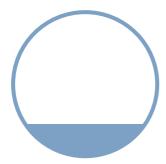
**High Vitamin C:** Vitamin C excess may result from excessive use of Vitamin C supplements. No toxicity effects of excessive Vitamin C intakes are known (greater than 10g per day), but side effects from excessive use may include digestive upsets and kidney stone formation in certain individuals.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

## Your reactivity: Score -3.5: Low

### Zinc



Zinc is a mineral that is involved in numerous processes in the body. It is important in the synthesis of enzymes, insulin, DNA and RNA for cell growth and repair, activation of vitamin A in the eyes. It is an important antioxidant. Food sources include oysters, herrings, turkey, wheatgerm, pumpkin and sesame seeds, Brewer's/savoury yeast, molasses, liver, maple syrup, soybeans, sunflower seeds, lamb, bacon, chicken, coconut, pork, beef, beetroot and wholewheat.

Vegetarians are at risk of zinc depletion. Consumption of refined grains, excess calcium supplementation, oral contraceptives, pregnancy, diarrhoea, kidney disease, diabetes, and phytates found in wheatbran and oats may increase the requirement for zinc.

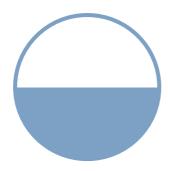
#### What This Means

**Low Zinc:** Low levels of zinc may result in poor sense of taste and smell, slow wound healing, poor night vision, changes to the nails (thin, peeling, white spots), acne, infertility, prostate and immunity problems, low birth weight and defects, slow growth.

High Zinc: High zinc levels may result from excessive supplementation (greater than 200mg/day) or through exposure to environmental sources (paints, rubbers, dyes and certain pesticides). Chronic toxicity symptoms include low copper status, disturbed copper metabolism, impaired digestive enzyme function, reduced levels of good cholesterol and cardiac disturbances.

#### What To Do Next

## Omega 3



Omega 3, or alpha-linolenic acid (ALA) is a long-chain essential fatty acid (EFA) that is an important structural component of cell membranes, particularly cells of the retina and nervous system. The two main EFAs are eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). Both can be synthesised by the body from ALA, but the rate of conversion is low. EPA and DHA are important for neurological development and healthy neurotransmitter function. Main food sources of ALA include flaxseed and flaxseed oil, chia seeds, walnuts and walnut oil, canola oil and soybean oil. Main food sources of EPA and DHA include herring, salmon, sardines, krill, certain seaweed and algae.

## Your reactivity: Score -4: Low

#### What This Means

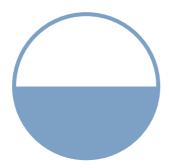
Low Omega 3: Low levels of Omega 3 may lead to problems with neurological development and cognitive function. It may also lead to decreased neurotransmitter function and contribute to depression and other neurotransmitter-based disorders. EFA deficiency in general may lead to dry scaly skin, skin rashes, increased susceptibility to infections and problems with wound healing.

**High Omega 3**: High levels of Omega 3 may be due to excessive supplementation. Excess however is uncommon and toxicity has not been reported. Side effects of excessive intake may include nausea, heartburn and diarrhoea in sensitive individuals.

#### What To Do Next

Low score indicates the possible need for supplementation with this nutrient. A high score indicates the need to reduce exposure to oral and environmental forms of this nutrient.

## Omega 6



Omega 6, or linoleic acid (LA) is an essential polyunsaturated fatty acid (EFA) that cannot be synthesised by the body. It is an important structural component of cell membranes and is important for cell growth. It serves as a source of energy and a precursor for inflammatory compounds of the immune system, such as prostaglandins and leokotrienes. It may also support the transmission of nerve impulses and support the nervous system. Main food sources include safflower oil – the richest natural source, sunflower oil, corn oil, sesame oil, hemp oil, pumpkin oil, soybean oil, walnut oil, wheatgerm oil and evening primrose oil.

## Your reactivity: Score -4: Low

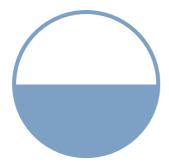
#### What This Means

Low Omega 6: Low EFA levels in general may lead to dry scaly skin, skin rashes, increased susceptibility to infections and problems with wound healing. Omega 6 deficiency in general may contribute to inflammation, blood vessel constriction, 'high' blood pressure, arthritis, allergies, psoriasis, migraines, infertility, premenstrual syndrome (especially breast tenderness), dry eye syndrome and behavioural problems.

**High Omega 6:** High levels of Omega 6 may result from excessive use of Omega 6 supplements. Long term use of high doses of Omega 6 (greater than 3000mg per day) may worsen inflammatory conditions.

#### What To Do Next

## Magnesium



Magnesium is an essential mineral. Is is required for the relaxation phase of muscles, nerve transmission, the conversion glycogen to glucose, bone formation, hard tooth enamel and assists calcium and potassium uptake. Main food sources include molasses, sunflower seeds, wheatgerm, almonds, most fish, seafood, soybeans, peanuts, pistachios, hazelnuts, oats, rice, dark leafy greens and most legumes.

Individuals with gastrointestinal disorders (chronic diarrhoea, Crohn's disease, malabsorption syndromes, coeliac disease, intestinal surgery), alcoholism, kidney disease (due to diabetes or hypertension) and the elderly, have a increased requirement for magnesium.

## Your reactivity: Score -4.5: Low

#### What This Means

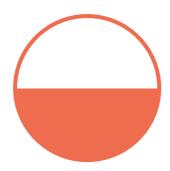
Low Magnesium: Low magnesium levels may result in hyperexcitable nerves and muscles, sleep maintenance problems, muscle cramps, confusion, quivering tongue, abnormal heart rhythms and contribute to cardiovascular disease.

High Magnesium: High levels of magnesium excess may result from the excessive intake of supplemental magnesium. The most common sign of this is diarrhoea, especially with magnesium salts (levels exceeding 350mg/day). Continued high dosing of magnesium may lead to muscle weakness, lethargy, low blood pressure and breathing distress.

#### What To Do Next

## Deep dive into your significant results

#### **Aluminium**



Aluminium can be found in varying amounts in cooking pans, aluminium foil, aluminium cans, table salt, baking powder, bleached flour, antacid medication, mains water treatment (aluminium sulphate), some food additives, deodorants (antiperspirant activity), soil (acid rain leaches aluminium out of the soil).

## What This Means

Your reactivity: Score 3.5

A positive reading indicates exposure to this heavy metal. Exposure to aluminium may lead to contact dermatitis, skeletal demineralisation, slow learning, and interference with calcium and phosphorus metabolism.

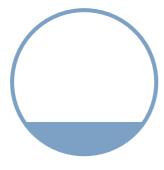
#### What To Do Next

0 to 3.5 - Low Sensitivity Scores indicate negligible or low-grade exposure. Support for the body's detoxification processes may be required.

3.6 to 6.4 - Medium Sensitivity Scores within this range indicate medium exposure. Support for the body's detoxification processes is recommended.

6.5 to 10 - High Sensitivity Scores within this range indicate medium to high exposure. Support for the body's detoxification processes is recommended.

#### **Titanium**



Titanium may be found as a constituent in dental materials and surgical metal prosthetics and parts. It may also be found in jewellery and is commonly found in sunscreens and cosmetics where is occurs as titanium dioxide.

## Your reactivity: Score 3

#### What This Means

A positive reading indicates exposure to this heavy metal. Chronic exposure to titanium may lead to seizures. The effects of titanium dioxide in sunscreen and cosmetics is under review for its possible carcinogenicity.

#### What To Do Next

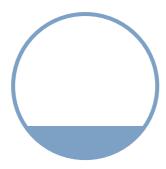
A positive reading indicates exposure to this heavy metal.

0 to 3.5 - Low Sensitivity Scores indicate negligible or low-grade exposure. Support for the body's detoxification processes may be required.

3.6 to 6.4 - Medium Sensitivity Scores within this range indicate medium exposure. Support for the body's detoxification processes is recommended.

 $6.5\ to\ 10$  - High Sensitivity Scores within this range indicate medium to high exposure. Support for the body's detoxification processes is recommended.

#### **Thallium**



Thallium is a by-product of zinc and lead production. It may also be found in small amounts in optical lenses, jewellery, dyes, pigments, and may be a recreational drug contaminant.

## Your reactivity: Score 2.7

#### What This Means

A positive reading indicates exposure to this heavy metal. Chronic exposure to thallium may result in polyneuritis (generalised damage to the nerves), fatigue, weight loss and reduced immunity.

#### What To Do Next

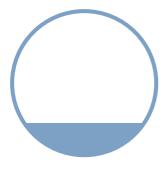
0 to 3.5 - Low Sensitivity Scores indicate negligible or low-grade exposure. Support for the body's detoxification processes may be required.

3.6 to 6.4 - Medium Sensitivity Scores within this range indicate medium exposure. Support for the body's detoxification processes is recommended.

6.5 to 10 - High Sensitivity Scores within this range indicate medium to high exposure. Support for the body's detoxification processes is recommended.

Your reactivity: Score 1.5

#### Tin



Tin may be found as a component of dental amalgams, cans, solder in iron or copper pipes and glass coatings. It is also a constituent of bronze, together with copper. It may also be found in certain fungicides.

#### What This Means

A positive reading indicates exposure to this heavy metal. Acute exposure to tin may result in nausea, abdominal colic, headache and fever, Chronic exposure to tin may result in joint and muscle pain and tinnitus.

### What To Do Next

A positive reading indicates exposure to this heavy metal.

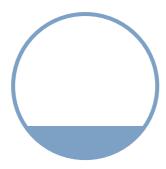
0 to 3.5 - Low Sensitivity Scores indicate negligible or low-grade exposure. Support for the body's detoxification processes may be required.

3.6 to 6.4 - Medium Sensitivity Scores within this range indicate medium exposure. Support for the body's detoxification processes is recommended.

6.5 to 10 - High Sensitivity Scores within this range indicate medium to high exposure. Support for the body's detoxification processes is recommended.

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## Roundup



Roundup (glyphosate) is a broad-spectrum herbicide used to control the growth of weeds and grasses. It is used heavily in agriculture and its use is also widespread in homes and gardens around the world. Glyphosate inhibits actively growing plants by blocking enzyme pathways used in the synthesis of certain amino acids. Roundup is widely available in New Zealand and remains one of the most popular herbicides around the world. Exposure to Roundup may come directly from exposure to the product or from consuming glyphosate-treated foods.

## Your reactivity: Score 1.5

### **What This Means**

Glyphosate alone is considered to have minimal toxic effects in humans, however, in combination with other ingredients such as surfactants and preservatives, its toxicity is greatly enhanced. Acute topical exposure may result in skin irritation and photocontact dermatitis. Oral exposure results in burning in the mouth, throat and stomach, respiratory distress, kidney damage and disturbances in cardiac function. Oral exposure in high doses may be fatal. There is currently no solid evidence that chronic exposure to glyphosate is toxic to humans. However, it is considered to be a possible carcinogen.

#### What To Do Next

0 to 3.5 - Low Sensitivity Scores indicate negligible or low-grade exposure. Support for the body's detoxification processes may be required.

3.6 to 6.4 - Medium Sensitivity Scores within this range indicate medium exposure. Support for the body's detoxification processes is recommended.

6.5 to 10 - High Sensitivity Scores within this range indicate medium to high exposure. Support for the body's detoxification processes is recommended.

## Paraquat



Paraquat (N,N'-dimethyl-4,4'-bipyridinium dichloride) is a broadspectrum, non-selective herbicide used to control the growth of weeds and grasses. Due to its high toxicity to humans, animals and the environment, its use has been restricted in many countries but it still remains one of the most popular herbicides in use. Solutions of paraquat are commercially available in various strengths and exposure to this toxin may be either from direct use or from exposure to the spray or residue. Your reactivity: Score 0.5

#### What This Means

A positive reading indicates exposure to this environmental toxin. Paraquat is highly toxic to humans. Acute inhalation or ingestion of paraquat may result in lung, liver, kidney and heart failure shortly after exposure to this toxin. Exposure may be fatal. Chronic low-grade exposure to paraquat may result in lung and eye damage. Long-term exposure has also been linked to the development of Parkinson's disease in farm workers.

#### What To Do Next

3.6 to 6.4 - Medium Sensitivity Scores within this range indicate medium exposure. Support for the body's detoxification processes is recommended.

6.5 to 10 - High Sensitivity Scores within this range indicate medium to high exposure. Support for the body's detoxification processes is recommended.

## Your Supplement Prescription

Name: Good Health

Date: 28 November 2018

Dear Good,

Upon reviewing your test results we recommend the following supplements program.

Bio-Practica — BioGaia Protectis

A Probiotic to support gastrointestinal and immune system health

Dosage: 1 chew daily for both adults and children

**Price**: \$37.43

BioMedica — BioTress 60 caps

BioMedica BioTress is a comprehensive high-potency multivitamin and multi-mineral complex with activated B-vitamins, antioxidants and mixed tocopherols. It is also suitable for vegans and vegetarians.

**Dosage**: Take 1 capsule twice daily, or as directed by a healthcare practitioner.

Price: \$41.00

BioMedica - Omega Ease 90s

BioMedica Omega Ease is a premium quality omega-3 supplement, containing highly purified oil from certified sustainable sources.

Dosage: Children: take 1-4 capsules daily. Adults: take 2-3 capsules daily, with food.

Price: \$48.00

To order your prescription please contact Natasha on <a href="info@qhealth.co.nz">info@qhealth.co.nz</a> who will take care of this process for you. If you would like assistance with interpreting your results or additional dietary advice, please feel free to contact us to make an appointment at <a href="team@allergenics.co.nz">team@allergenics.co.nz</a>

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## What To Do Next

## 1. Order Your Prescription

You may have received a nutritional supplement prescription with your test report. The recommended prescription may assist in bringing your body back into balance, together with all other recommendations in your report. Please order your prescription by contacting Natasha on <a href="mailto:info@qhealth.co.nz">info@qhealth.co.nz</a>

### 2. Consult With A Healthcare Practitioner

If you would like to further discuss your test results with a qualified healthcare professional, please contact us for a list of practitioners in your area.

## 3. Retesting

We recommend retesting at least 6 months after first implementing any dietary or nutritional changes. Please contact us if you require any further information on retesting.