Client Test Report

Report Prepared for
Joe Bloggs
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Vitamin and Mineral Assessment
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Thank you for choosing our testing service for your vitamin and mineral assessment. Before you continue reading through this report, we would like to share some important information with you regarding vitamins and mineral 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 and deficiencies in certain nutrients may contribute to a range of illnesses. Nutritional deficiencies may contribute to problems in the following areas:
- Hormone Function
- Neurotransmitter Function
- Food Digestion
- Skin Health
- Bone Formation
- Energy Production
- Antioxidant Function

Most nutrients are supplied to us through food and water, and are used by the body in its day to day activities. Most of the nutrients that our bodies require are “essential”. This means that our bodies cannot manufacture them and need to obtain them from the 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 lifestyles and place additional strain on the body, increasing its nutritional requirements. Research has consistently shown that adequate levels of essential nutrients allow the body to function at an optimal level and aid good health and recovery.

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 one with information on their nutritional health and how to balance deficiencies and excesses.

The Vitamin and Mineral Assessment is recommended for individuals of all ages. It is able to provide information on the nutritional state of a person, detecting the presence of vitamins, minerals and essential fatty acids in the body.

**Please note:** This test does not provide physiological levels of nutrients in the body. It may only provide information on whether a nutrient is deficient, in balance or in excess.
What we test for

<table>
<thead>
<tr>
<th>Vitamins</th>
<th>Vitamin A</th>
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<tbody>
<tr>
<td></td>
<td>Vitamin B1 (Thiamin)</td>
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<td></td>
<td>Vitamin B2 (Riboflavin)</td>
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<tr>
<td></td>
<td>Vitamin B3 (Niacin)</td>
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<tr>
<td></td>
<td>Vitamin B5 (Pantothenic Acid)</td>
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<tr>
<td></td>
<td>Vitamin B6 (Riboflavin)</td>
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<tr>
<td></td>
<td>Folic Acid</td>
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<td></td>
<td>Biotin</td>
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<td>Vitamin C</td>
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<td>Vitamin D</td>
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<td>Vitamin E</td>
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<td></td>
<td>Vitamin K</td>
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<table>
<thead>
<tr>
<th>Minerals</th>
<th>Boron</th>
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<tbody>
<tr>
<td></td>
<td>Calcium</td>
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<td></td>
<td>Chromium</td>
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<td></td>
<td>Copper</td>
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<td>Iodine</td>
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<td>Iron</td>
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<td>Magnesium</td>
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<td>Manganese</td>
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<td>Potassium</td>
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<td>Selenium</td>
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<tr>
<td></td>
<td>Sodium</td>
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<td></td>
<td>Zinc.</td>
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<tr>
<th>Essential Fatty Acids</th>
<th>Omega 3 Fatty Acids</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Omega 6 Fatty Acids</td>
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</table>
Your Results

Vitamin and Mineral Assessment

Vitamin C: -2.5
Omega 3 Fatty Acids: -2.5
Vitamin A: -3.5

Mineral Graph:
- Boron: -2.5
- Iron: -2.5
- Chromium: -3
- Iodine: -3
- Potassium: -3.5
- Magnesium: -4.5
The scores for your Vitamin and Mineral Assessment are explained below:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Sensitivity Level</th>
<th>Score Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2 to 2</td>
<td>Normal</td>
<td>Scores within this range are normal. Nutrients levels within this range are considered to be normal.</td>
</tr>
<tr>
<td>-10 to -2</td>
<td>Deficiency</td>
<td>Scores within this range indicate chronic stress of a particular nutrient in the body. This is may be indicative of a deficiency of the nutrient. The lower the score, the higher the deficiency level. Supplementation with the nutrient may be required.</td>
</tr>
<tr>
<td>2 to 10</td>
<td>Excess</td>
<td>Scores within this range indicate acute stress of a particular nutrient in the body. This may be indicative of an excess of the nutrient. The higher the score, the higher the excess level. Please see the individual test profiles for more information.</td>
</tr>
</tbody>
</table>
The following elements were tested for and found to have normal or neutral results:

- Calcium
- Vitamin K
- Biotin
- Vitamin D
- Omega 6 Fatty Acids
- Folic Acid
- Vitamin B12 (Cyanocobalamin)
- Vitamin B1 (Thiamin)
- Vitamin E
- Vitamin B6 (Pyridoxine)
- Vitamin B5 (Pantothenic Acid)
- Niacin
- Riboflavin (Vitamin B-2)
- Zinc
- Sodium
- Selenium
- Manganese
- Copper
**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 cofactor, it is involved in collagen, carnitine and catecholamine synthesis. As 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, rosehip, sweet red peppers, kiwifruit, strawberry and broccoli.

**Deficiency:** Vitamin C deficiency may result in increased nose and gum bleeds, frequent bruising, frequent infections, slow wound healing, collagen disorders, cardiovascular disorders and fatigue. Severe Vitamin C deficiency causes a condition known as scurvy.

**Excess:** 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.

**Depleted By / Factors Increasing Demand:** Storing, cooking, processing, illness, infection, smoking, stress, excess alcohol consumption and cardiovascular disease may increase an individual’s requirement for Vitamin C. The long-term use of analgesic, oral contraceptives, antidepressants and steroids medications may deplete body stores of Vitamin C.

**Boron**

Boron is a mineral that is involved in reproduction, embryo development; bone formation and cell membrane function. Main food sources include fruits, vegetables, nuts, legumes, avocado, peanuts, pecan nuts, grapes, raisins and wine. Non-food or environmental sources include enamel and glass; light weight components; antibiotics; antacid medication; lipstick; lotions; creams; soaps; water (depending on location).

**Deficiency:** Boron deficiency may lead to reduced mental alertness, increased calcium and magnesium requirements, decreased bone density and a greater risk for prostate cancer.

**Excess:** Boron excess may result from excessive supplementation (greater than 20mg/day long term). Acute symptoms may include nausea, vomiting, diarrhoea, lethargy and dermatitis. Chronic toxicity is rare but symptoms may include the above together with weight loss and poor appetite.

**Depleted By / Factors Increasing Demand:** The ageing process and excessive intakes of supplemental manganese and calcium may increase the requirement for boron.

**Omega 3 Fatty Acids**

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.

**Deficiency:** Omega 3 deficiency 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.

**Excess:** Omega 3 excess is uncommon and toxicity has not been reported. Side effects of excessive intake may include nausea, heartburn and diarrhoea in sensitive individuals.

**Depleted By / Factors Increasing Demand:** Omega 3 EFAs are generally depleted by western diet. Individuals with neurological disorders, developmental problems, cardiovascular disease, diabetes and depression may have a higher requirement for it.
Iron
Iron is an essential mineral. It is involved in numerous processes in the body including red blood cell production, oxygenation of cells, energy and enzyme production, immunity and growth. Food sources include seaweed, seeds, wheatgerm, molasses, liver, chickpeas, pistachios, lentils, walnuts, mussels, oysters, red meat, cashews, figs, spinach, prunes, raisins, egg yolk and chicken.

Possible Signs/Effects of Deficiency: Signs of deficiency include pale skin and nails, mental and physical fatigue, cracked lips and tongue, inflamed mouth, hair loss or brittle hair, difficulty swallowing and poor growth in children.

Possible Signs/Effects of Excess: Iron excess may result from excessive iron supplementation (greater than 100mg daily) or Haemochromatosis, an hereditary iron storage syndrome that leads to a build-up of iron in the body. Symptoms are usually absent until iron levels get too high. An excess of iron in the body can lead to chronic fatigue, joint pain, abdominal pain, liver disease, diabetes, irregular heart rhythm, skin colour changes (red-bronze colour). Males tend to experience iron excess syndromes more than females.

Depleted By/Factors Increasing Demand: Insufficient stomach acid, Vitamin C consumption, calcium or copper, excessive menstrual loss, drinking tea with meals, excessive exercise, zinc or phosphorus, pregnancy, antibiotics, antacids.

Chromium
Chromium is a mineral that is involved in several metabolic processes in the body. It increases cell sensitivity to insulin, helping to stabilise blood sugar levels, it raises HDL or 'good' cholesterol and assists heart, blood vessel and brain function. Main food sources include Brewer's/savoury yeast, yeast, oysters, broccoli, wholegrains, mushrooms, beer and wine. A balanced diet provides enough chromium for the body's needs.

Deficiency: Chromium deficiency may contribute to hypoglycaemia, diabetes, obesity, anxiety, fatigue and cardiovascular disease.

Excess: Chromium excess may result from excess supplementation however, no adverse effects of excess chromium are known.

Depleted By/Factors Increasing Demand: Individuals with a high sugar and refined carbohydrate diet, obesity and insulin resistance have a higher requirement for chromium. High intensity sports activities and the ageing process may also increase requirement for chromium.

Iodine
Iodine 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 grown (i.e. soil content). Food sources include fish (marine fish have a higher content than freshwater fish), milk, eggs, legumes, grains and iodised salt.

Deficiency: Iodine deficiency is 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.

Excess: Iodine excess 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. The

Depleted By/Factors Increasing Demand: 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 iodine deficiency.
**Vitamin A**

Vitamin A (retinol, retinal and retinoic acid) is a fat-soluble vitamin involved in the growth and specialisation of all cells. It is important for foetal development, foetal organ development, normal immune function, eye development and vision. Main animal food sources of preformed Vitamin A include dairy products, liver and fish oil. Plant sources of provitamin A carotenoids include oranges, green vegetables and sweet potato.

**Deficiency:** Vitamin A deficiency, in its most extreme form, can lead to blindness. An inadequate intake of meats, fruits and vegetable may lead to deficiency. Intestinal inflammation and malabsorption syndromes are also causes of deficiency. Deficiency may also contribute to lowered immunity, thyroid dysfunction and night blindness.

**Excess:** Vitamin A excess results from the excessive intake of Vitamin A supplements. It is considered to be toxic if taken in high doses, causing a condition known as hypervitaminosis A. Acute toxicity symptoms are rare but may include nausea, fatigue, headache, loss of appetite and dry skin. Signs of chronic toxicity include the above together with enlarged liver and spleen, anorexia and weight loss. The upper intake level for an adult is currently set at 10 000IU per day.

**Depleted By/Factors Increasing Demand:** Poor dietary choices, high refined carbohydrate diet, prolonged heating of food sources, laxative use and antibiotic use may increase the requirement for this nutrient. Pregnant women and newborn babies have an increased requirement for this nutrient.

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**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.

**Deficiency:** Potassium deficiency (hypokalaemia) goes 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 deficiency include alcoholism, chronic diarrhoea and magnesium depletion. Diuretic medication use in individuals with high blood pressure, may also lead to potassium depletion.

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

**Depleted By/Factors Increasing Demand:** Individuals with alcoholism, diarrhoea, anorexia nervosa and bulimia, may have a higher requirement for potassium.

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**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.

**Deficiency:** Magnesium deficiency may result in hyper-excitable nerves and muscles, sleep maintenance problems, muscle cramps, confusion, quivering tongue, abnormal heart rhythms and contribute to cardiovascular disease.

**Excess:** 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.

**Depleted By/Factors Increasing Demand:** 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.