WHAT CONDITIONS CAN BE AFFECTED BY NUTRIENT STATUS?

- Diabetes
- Fatigue
- Mood Disorders
- Weight Management
- Sports Nutrition
- Osteoporosis
- Cardiovascular Disease
- Migraines
- Women's Health
- Hypertension
- Inflammation
- Stress Tolerance
- Many other common conditions

TEST COMPONENTS:

**VITAMINS**
- Vitamin A
- Vitamin B1
- Vitamin B2
- Vitamin B3
- Vitamin B6
- Vitamin B12
- Vitamin C
- Vitamin D
- Vitamin K
- Biotin
- Folate
- Pantothenate

**MINERALS**
- Calcium
- Magnesium
- Copper
- Manganese

**AMINO ACIDS**
- Asparagine
- Glutamine
- Serine

**SPECTROX® FOR TOTAL ANTIOXIDANT FUNCTION**

**ANTIOXIDANTS**
- Alpha Lipoic Acid
- Coenzyme Q10
- Cysteine
- Glutathione
- Selenium
- Vitamin E

**CARBOHYDRATE METABOLISM**
- Chromium
- Fructose Sensitivity
- Glucose-Insulin Metabolism

**FATTY ACIDS**
- Oleic Acid

**METABOLITES**
- Choline
- Inositol
- Carnitine

**IMMUNIDEXTM**
- Immune Response Score

Get your micronutrient test today – it may be the most important decision you make about your health.

Are you getting the nutrients you need?

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WHY IS NUTRIENT STATUS IMPORTANT?
Vitamin, mineral and antioxidant deficiencies have been shown to suppress immune system function, which can contribute to a variety of degenerative processes such as arthritis, cancer, cardiovascular disease, and diabetes, to name a few. You may be micronutrient deficient and not even know it!

University research shows that 50% of people taking multivitamins are nutritionally deficient, despite supplementation!

STANDARD SERUM TESTS MEASURE NUTRIENT LEVELS, BUT THEY DO NOT PROVIDE INFORMATION ABOUT HOW WELL NUTRIENTS ARE ACTUALLY BEING UTILIZED.
SpectraCell Laboratories' exclusive, patented micronutrient test measures intracellular vitamin, mineral, antioxidant, and amino/fatty acid status within your white blood cells, which does convey how well nutrients are utilized at the cellular level. Our innovative micronutrient test is therefore a more meaningful measure of nutrient status than all other nutritional testing.

But I eat a balanced diet, exercise and take a multivitamin...

If this statement describes all or part of your lifestyle, read on. Many people lead healthy lifestyles, yet they struggle with deficiencies. Why?

BIOCHEMICAL INDIVIDUALITY
Because each of us is metabolically and biochemically unique, the micronutrient requirements for one person may be quite different from the requirements of another.

ABSORPTION
Although you may eat a balanced diet, you may have micronutrient deficiencies if you do not properly absorb vitamins, minerals and/or antioxidants.

CHRONIC ILLNESS
Health conditions such as arthritis, cancer, cardiovascular disease, diabetes, fatigue and multiple sclerosis, to name a few, can be affected, directly or indirectly, by micronutrient deficiencies.

AGING
Our micronutrient requirements at age 30 are quite different from our requirements at ages 40, 50, and beyond. Reduced absorption (for example, B12) is common as we age.

LIFESTYLE
Excessive physical activity, prescription drugs, smoking, alcohol, sedentary habits, and physical/emotional/environmental stressors all impact micronutrient status and demands.

Sample Results

Micronutrient test results provide the information needed to create your personalized supplementation and repletion program.

ASK YOUR PROVIDER FOR MORE INFORMATION TODAY!

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<td><strong>VITAMIN B1</strong></td>
<td>VERY COMMON</td>
<td>Carbohydrate conversion, breaks down fats &amp; proteins, digestion, nervous system, skin, hair, eyes, mouth, liver</td>
<td>Pork, organ meats, whole grain and enriched cereals, brown rice, wheat germ, bran, Brewer's yeast, blackstrap molasses</td>
<td>Heart, age-related cognitive decline, Alzheimer's, fatigue</td>
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<tr>
<td><strong>VITAMIN B2</strong></td>
<td>VERY COMMON</td>
<td>Metabolism, carbohydrate conversion, breaks down fats &amp; proteins, digestion, nervous system, skin, hair, eyes, mouth, liver</td>
<td>Brewer's yeast, almonds, organ meats, whole grains, wheat germ, mushrooms, soy, dairy, eggs, green vegetables</td>
<td>Anemia, decreased free radical protection, cataracts, poor thyroid function, B6 deficiency, fatigue, elevated homocysteine</td>
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<tr>
<td><strong>VITAMIN B3</strong></td>
<td>LESS COMMON</td>
<td>Energy, digestion, nervous system, skin, hair, eyes, mouth, liver, eliminates toxins, sex/stress hormones, improves circulation</td>
<td>Beets, Brewer's yeast, meat, poultry, organ meats, fish, seeds, nuts</td>
<td>Cracking, scaling skin, digestive problems, confusion, anxiety, fatigue</td>
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<tr>
<td><strong>VITAMIN B6</strong></td>
<td>COMMON</td>
<td>Enzyme, protein metabolism, RBC production, reduces homocysteine, nerve &amp; muscle cells, DNA/RNA, B12 absorption, immune function</td>
<td>Poultry, tuna, salmon, shrimp, beef liver, lentils, soybeans, seeds, nuts, avocados, bananas, carrots, brown rice, bran, wheat germ, whole grain flour</td>
<td>Depression, sleep and skin problems, confusion, anxiety, fatigue</td>
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<tr>
<td><strong>VITAMIN B12</strong></td>
<td>VERY COMMON</td>
<td>Healthy nerve cells, DNA/RNA, red blood cell production, iron function</td>
<td>Fish, meat, poultry, eggs, milk, milk products</td>
<td>Anemia, fatigue, constipation, loss of appetite/ weight, numbness and tingling in the hands and feet, depression, dementia, poor memory, oral soreness</td>
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<td><strong>BIOTIN</strong></td>
<td>LESS COMMON</td>
<td>Carbohydrates, fat, amino acid metabolism (the building blocks of protein)</td>
<td>Salmon, meats, vegetables, grains, legumes, lentils, egg yolks, milk, sweet potatoes, seeds, nuts, wheat germ</td>
<td>Depression, nervous system, premature graying, hair, skin</td>
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<tr>
<td><strong>FOLATE</strong></td>
<td>VERY COMMON</td>
<td>Mental health, infant, DNA/RNA, adolescence &amp; pregnancy, with B12 to regulate RBC production, iron function, reduce homocysteine</td>
<td>Supplementation, fortified grains, tomato juice, green vegetables, black-eyed peas, lentils, beans</td>
<td>Anemia, immune function, fatigue, insomnia, hair, high homocysteine, cardiovascular disease</td>
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<td><strong>PANTOTHENATE</strong></td>
<td>LESS COMMON</td>
<td>RBC production, sex and stress-related hormones, immune function, healthy digestion, helps use other vitamins</td>
<td>Meat, vegetables, whole grains, legumes, lentils, egg yolks, milk, sweet potatoes, seeds, nuts, wheat germ, salmon</td>
<td>Stress tolerance, wound healing, skin problems, fatigue</td>
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<td><strong>VITAMIN A</strong></td>
<td>LESS COMMON</td>
<td>Eyes, immune function, skin, essential cell growth and development</td>
<td>Milk, eggs, liver, fortified cereals, orange or green vegetables, fruits</td>
<td>Night blindness, immune function, zinc deficiency, fat malabsorption</td>
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<td><strong>VITAMIN C</strong></td>
<td>COMMON</td>
<td>Enzyme activation, second messenger roles (transmitting hormonal information), blood clotting, cell and cell organelle membrane function, nerve impulse transmission and muscular contraction, tone and irritability</td>
<td>Supplementation, broccoli, brussel sprouts, cantaloupe, cauliflower, citrus, guava, kiwi, papaya, parsley, peas, potatoes, peppers, rose hips, strawberries and tomatoes</td>
<td>Muscular and nervous irritability, muscle spasms, muscle cramps and tetany, tooth decay, periodontal disease, depression, possibly hypertension</td>
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<tr>
<td><strong>VITAMIN D</strong></td>
<td>VERY COMMON</td>
<td>Calcium and phosphorus levels, calcium absorption, bone mineralization</td>
<td>Sunlight, milk, egg yolks, liver, fish</td>
<td>Osteoporosis, calcium absorption, thyroid</td>
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<td><strong>VITAMIN E</strong></td>
<td>LESS COMMON</td>
<td>Aids in the formation of clotting factors and bone proteins and the formation of glucose into glycogen for storage in the liver</td>
<td>Kale, green tea, turnip greens, spinach, broccoli, lettuce, cabbage, beef liver, asparagus, watercress, cheese, oats, peas, whole wheat</td>
<td>Excessive bleeding, a history of bruising, appearance of ruptured capillaries or menorrhagia (heavy periods)</td>
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<td><strong>VITAMIN E</strong></td>
<td>VERY COMMON</td>
<td>Antioxidant, regulates oxidation reactions, stabilizes cell membrane, immune function, protects against cardiovascular disease, cataracts, macular degeneration</td>
<td>Wheat germ, liver, egg, nuts, seeds, cold-pressed vegetable oils, dark leafy greens, sweet potatoes, avocados, asparagus</td>
<td>Skin, hair, rupturing of red blood cells, anemia, bruising, PMS, hot flashes, eczema, psoriasis, cataracts, wound healing, muscle weakness, sterility</td>
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<td><strong>CALCIUM</strong></td>
<td>VERY COMMON</td>
<td>Bones, teeth, helps heart, nerves, muscles, body systems work properly, needs other nutrients to function</td>
<td>Dairy, wheat/soy flour, molasses, Brewer’s yeast, Brazil nuts, broccoli, cabbage, dark leafy greens, hazelnuts, oysters, sardines, canned salmon</td>
<td>Osteoporosis, osteomalacia, osteoarthritis, muscle cramps, irritability, acute anxiety, colon cancer risk</td>
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<td><strong>CHROMIUM</strong></td>
<td>COMMON</td>
<td>Assists insulin function, increases fertility, carbohydrate/fat metabolism, essential for fetal growth/development</td>
<td>Supplementation, Brewer’s yeast, whole grains, seafood, green beans, broccoli, prunes, nuts, potatoes, meat</td>
<td>Metabolic syndrome, insulin resistance, decreased fertility</td>
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<tr>
<td><strong>MAGNESIUM</strong></td>
<td>VERY COMMON</td>
<td>300 biochemical reactions, muscle/nerve function, heart rhythm, immune system, strong bones, regulates calcium, copper, zinc, potassium, vitamin D</td>
<td>Green vegetables, beans, peas, nuts, seeds, whole unprocessed grains</td>
<td>Appetite, nausea, vomiting, fatigue cramps, numbness, tingling, seizures, heart spasms, personality changes, heart rhythm</td>
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<td><strong>SELENIUM</strong></td>
<td>COMMON</td>
<td>Antioxidant, works with vitamin E, immune function, prostaglandin production</td>
<td>Brewer’s yeast, wheat germ, liver, butter, cold water fish, shellfish, garlic, whole grains, sunflower seeds, Brazil nuts</td>
<td>Congestion to heart/pancreas, sore muscles, fragility of red blood cells, immune system</td>
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<td><strong>ZINC</strong></td>
<td>MOST COMMON</td>
<td>Supports enzymes, immune system, wound healing, taste/smell, DNA synthesis, normal growth &amp; development during pregnancy, childhood and adolescence</td>
<td>Oysters, red meat, poultry, beans, nuts, seafood, whole grains, fortified breakfast cereals, dairy</td>
<td>Growth retardation, hair loss, diarrhea, impotence, eye &amp; skin lesions, loss of appetite, taste, weight loss, wound healing, mental lethargy</td>
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<td><strong>CO Q10</strong></td>
<td>COMMON</td>
<td>Powerful antioxidant, stops oxidation of LDL cholesterol, energy production, important to heart, liver and kidneys</td>
<td>Oily fish, organ meats, whole grains</td>
<td>Congestive heart failure, high blood pressure, angina, mitral valve prolapse, fatigue, gingivitis, immune system stroke, cardiac arrhythmias</td>
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<td><strong>CARNITINE</strong></td>
<td>LESS COMMON</td>
<td>Energy, heart function, oxidize amino acids for energy, metabolize ketones</td>
<td>Red meat, dairy, fish, poultry, tempeh (fermented soybeans), wheat, asparagus, avocados, peanut butter</td>
<td>Elevated cholesterol, liver function, muscle weakness, reduced energy, impaired glucose control</td>
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<td><strong>N - ACETYL CYSTEINE (NAC) &amp; GLUTATHIONE</strong></td>
<td>MOST COMMON</td>
<td>Glutathione production, lowers homocysteine, lipoprotein (a), heal lungs, inflammation, decrease muscle fatigue, liver detoxification, immune function</td>
<td>Meats, ricotta, cottage cheese, yogurt, wheat germ, granola, oat flakes</td>
<td>Free radical overload, elevated homocysteine, cancer risk, cataracts, muscular degeneration, immune function, toxin elimination</td>
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<td><strong>ALPHA LIPOIC ACID</strong></td>
<td>COMMON</td>
<td>Energy, blood flow to nerves, glutathione levels in brain, insulin sensitivity, effectiveness of vitamins C, E, antioxidants</td>
<td>Supplementation, spinach, broccoli, beef, Brewer’s yeast, some organ meats</td>
<td>Diabetic neuropathy, reduced muscle mass, atherosclerosis, Alzheimer’s, failure to thrive, brain atrophy, high lactic acid</td>
</tr>
<tr>
<td><strong>COPPER</strong></td>
<td>LESS COMMON</td>
<td>Bone formation, involved in healing process, energy production, hair and skin coloring, taste sensitivity, stimulates iron absorption, helps metabolize several fatty acids</td>
<td>Oysters, seeds, dark leafy vegetables, organ meats, dried legumes, whole grain breads, nuts, shellfish, chocolate, soybeans, oats, blackstrap molasses</td>
<td>Osteoporosis, anemia, baldness, diarrhea, general weakness, impaired respiratory function, myelopathy, decreased skin pigment, reduced resistance to infection</td>
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