

SpectraCell's Patented Technology

SpectraCell's micronutrient testing offers a unique means to scientifically assess the intracellular requirements of micronutrients that play an important role in the overall health and wellness of your patients. Our tests measure the biological function of vitamins, minerals, amino acids and antioxidants, providing a powerful clinical assessment tool for your practice.

SpectraCell's patented chemically defined control media contains the minimal amount of each essential micronutrient that is needed to support optimal lymphocyte growth or mitogenic response. The functional intracellular status of micronutrients involved in cell metabolism is evaluated by manipulation of the individual micronutrients in the media, followed by mitogenic stimulation and measurement of DNA synthesis.

The same technology also provides a total antioxidant function test (SPECTROX™) which assesses the ability of cells to resist damage caused by free radicals and other forms of oxidative stress. Due to the considerable number of cellular antioxidants with extensive interactions, redundancies, repair and recharging capabilities, measuring total function is the most accurate and clinically useful way to assess your patients' capacity to resist oxidative damage.

The reported Immunidex™ score is used to evaluate a person's cell-mediated immune system performance. Specifically, it measures T-cell lymphocyte proliferation. Since immune function is a systematic measure of general health, a higher Immunidex™ score is generally desired since it means a person can respond efficiently not only to exogenous threats such as pathogens or allergens, but also to endogenous threats such as malignancies.

SpectraCell Labs - Micronutrient Testing	Other Nutritional Assays
Direct measurement of micronutrients in living cells	Assess metabolic pathways and assume deficiency or measures static non-functional levels
Measures cellular function in T-lymphocytes	No functional capabilities Testing performed using urine, serum, hair
Measures absorption and utilization of the nutrient	Do NOT measure absorption and functional performance of nutrients
Provides a 4 – 6 month window of nutritional balance	Do NOT provide broad assessment - only snapshot of status
Measures cell mediated immune function and provides Immunidex™ score	Do NOT measure immune function
Spectrox™ measures total antioxidant function	Do NOT measure total antioxidant function
Measures T-cell proliferation in response to challenge	Do NOT measure cell proliferation or response to challenge
Measures biochemical individuality	Do NOT assess biochemical individuality

<h2>Micronutrient Testing</h2>	<ul style="list-style-type: none"> ▪ Uses active peripheral lymphocytes instead of serum ▪ Measures the end point of DNA synthesis ▪ Reflects nutrient status over the last 4-8 months ▪ Measures how micronutrients and antioxidants are actually functioning within the white blood cells ▪ Reflects total metabolic function rather than isolated biochemical pathways ▪ Demonstrates the intracellular function of micronutrients simultaneously ▪ Gives physicians the ability to tailor treatment plans to each patient's specific requirements rather than to "norms"
<h2>Testing Lymphocytes</h2>	<ul style="list-style-type: none"> ▪ Provides a more accurate measurement of long term functional nutritional levels ▪ Are host to cell-mediated immune system ▪ Possesses metabolic pathways common to other cells ▪ Contains nucleus which permits rapid DNA synthesis and cell growth ▪ Measures DNA synthesis and cell growth ▪ Are easily available in large numbers from a standard blood draw ▪ Indicates if nutrients are being absorbed and functioning properly
<h2>Clinical Applications</h2>	<ul style="list-style-type: none"> ▪ Knowing nutritional risk factors and treating their causes can contribute to the arrest or prevention of many degenerative conditions ▪ Patients derive significant benefits from personalized treatment and repletion ▪ Allows for early intervention to correct deficiencies and promote health ▪ Micronutrient testing provides important baseline tests to identify deficiencies
<h2>Tests for B6, B12, Folate & Homocysteine</h2>	<ul style="list-style-type: none"> ▪ Gives the physicians an overall informative cardiovascular program, not just a lab number ▪ Combines Micronutrient testing and HPLC methodology for Homocysteine ▪ Examines the cellular function of each individual to find out what is needed to fix the homocysteine problem and reduce risk, cardiovascular disease and stroke
<h2>SPECTROX™ - Antioxidant Testing</h2>	<ul style="list-style-type: none"> ▪ Percentage gives a total antioxidant and immune function measurement, not just one or two specific values ▪ Measures ability of cells to withstand attack from free radicals and other oxidative stresses (antioxidant reserve)
<h2>IMMUNIDEX™ Immune Response Score</h2>	<ul style="list-style-type: none"> ▪ Evaluates cell mediated immune system performance ▪ General measurement of how one's system will respond to exogenous and endogenous threats
<h2>Easy Sample Collection</h2>	<ul style="list-style-type: none"> ▪ No refrigeration or freezing ▪ Complete test kit and transportation provided ▪ No centrifugation
<h2>Report Interpretation</h2>	<ul style="list-style-type: none"> ▪ Easy to read reports for clinicians and the patient ▪ Numerical and graphic representation of each result ▪ Repletion suggestions provided