Four Tests Lay the Foundation for An Effective Supplement Regimen

Chris D. Meletis, ND (with permission from cpmedical.net, access pin: 587556)

Individuals who want to make a stronger commitment to enhancing their health in 2008 as well as newcomers to the healthy aging supplement field, can dramatically improve the success of their regimen by first taking a series of tests. Beginning a supplement regimen without taking the tests mentioned below is a little like trying to navigate the streets of an unfamiliar city without a road map. I always tell my patients "Tests Don't Guess."

In this article, I will explain the different testing options available and how individuals can use the results to either build a new supplement program or refine an existing supplement regimen to enhance overall health.

Organic Acid Testing

One of the most underutilized tests, organic acid testing is a crucial step in determining exactly which vitamins and minerals a person's body needs. Perhaps the reason why this test has been underutilized is simply because its relevance to personal health is not understood. Yet, it is one of the easiest ways to determine which supplements are right for each individual. It truly takes the guesswork out of creating the foundation for a personal customized supplement program. I tell my patients it provides a glimpse of their "own biochemical thumbprint." Anyone who asks the questions "Where do I begin?" or "Now that I'm taking the basic supplements, what other nutrients do I need to improve my overall health?" will find the answers they're looking for in the results of the organic acid testing.

We are all unique biochemical creatures. Therefore, each of us has different supplement needs. Some individuals may be deficient in vitamin E while others need extra coenzyme Q10, regardless of apparent cardiac issues or concerns. Everyone has inherent strengths and weaknesses within their personal biochemistry that determines how much of a particular nutrient—or even if that particular nutrient—will be of benefit to their bodies. Organic acid testing can help pinpoint the vitamin, mineral, and amino acid deficiencies present in each patient. The lack of proper nutritional sufficiency relative to your own "biochemical individuality" will play a pivotal role when it comes to expressing genetic strengths or weaknesses.

Organic acid tests are important for both those seeking to fine tune or increase a supplement program's effectiveness and anyone beginning a supplement regimen. The clinical benefits seen when the body's unique needs are addressed can be the difference between modest clinical results versus a significant metamorphosis.

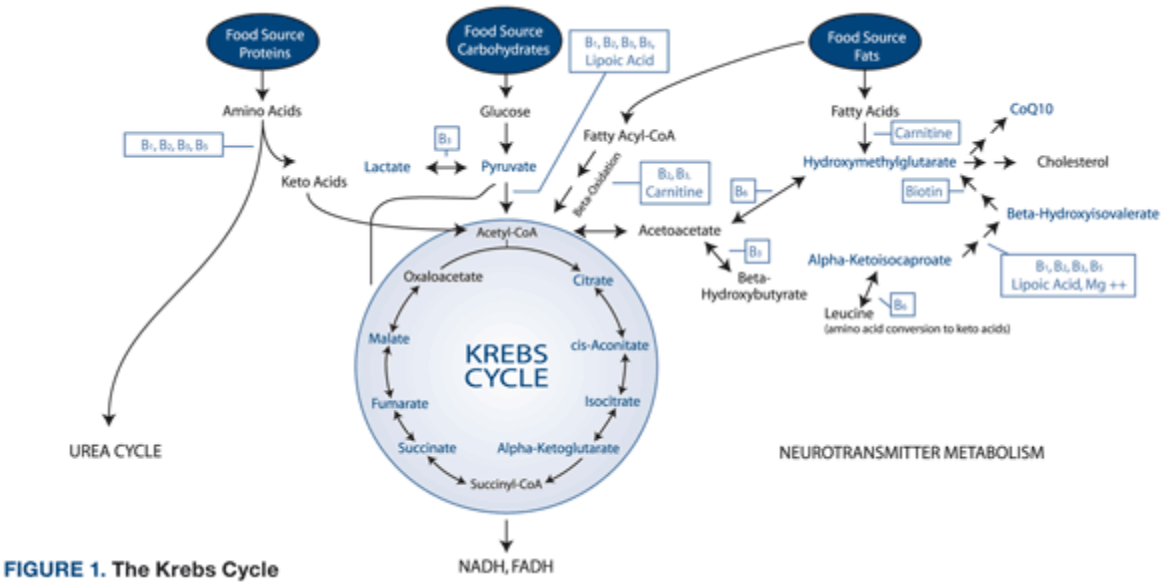

FIGURE 1. The Krebs Cycle

Organic acids are key compounds of many biochemical pathways. Organic acid testing provides critical insights into the functioning of the Krebs cycle in the mitochondria. The Krebs cycle is comprised of nine organic acids and eight enzymes and is the main way that all dietary fuel sources—including carbohydrates, proteins, and fats—are metabolized (Figure 1). Because the Krebs cycle provides the energy required for the body to function, any disruption in its flow can be disastrous to health.

Abnormal organic acid metabolism, therefore, can indicate that an individual is deficient in a number of nutrients or is simply not using those nutrients effectively.

Supplementation of specific vitamins and nutrients can help balance altered and imbalanced metabolic pathways, but it's impossible to know which nutrients to give which patients unless an organic acid test is completed

Organic acid tests can now be done in the convenience of your home. Easily collected urine samples are sent to an internationally recognized and nationally certified laboratory. By taking this test, you can have a better understanding of your own unique health needs.1-5

Salivary Hormone Testing

Another important way to get serious about building a supplement regimen tailored to an individual's own needs is salivary hormone testing.

There are several ways to test hormones (saliva, serum and urine), but the state-of-the-art testing is through saliva. This is because it measures only the active portions of hormones and it is these portions that determine how a patient feels.

The five hormones monitored through saliva testing are testosterone, progesterone, estrogen (estradiol), cortisol and DHEA. As we age, levels of these hormones often become imbalanced. Using a saliva test as a blueprint for proper supplementation with these hormones can make a dramatic difference in patients' health.

Testosterone is important for both men and women. In males, the decline in testosterone commonly referred to as andropause often begins in the early 30s and eventually hits a crescendo when symptoms are unmistakable in the 50s and 60s. A progressive decline in testosterone in men starting at age 30 is well documented with a free testosterone decline of 1 percent per year. After age 60, 25 percent of men are clinically overtly hypogonadal (low in testosterone). Overt testosterone deficiency occurs in about 24 percent of men aged 50-60 years and 40 percent in men aged 60-80.6 Yet, subclinically, low testosterone levels are likely prevalent in nearly double these very conservative estimates. Furthermore, SHBG (sex hormone binding globulin) increases with age, binding up more free testosterone.

Low testosterone levels in men are linked to low energy, decreased libido, decreased concentration, insomnia, night sweats, depression, infertility and, surprisingly, even hot flashes.

Balanced testosterone levels are important in females as well, with lower than normal levels associated with a reduced sex drive.7 Testosterone is considered the “desire hormone” due to its ability to enhance libido. Women, however, often tend to have an excess of prolactin, the “anti-desire” hormone.8 In addition, with age, and especially after menopause, testosterone levels in women decline.7

Salivary hormone tests also are used to measure levels of estradiol, one of the main forms of estrogen found in the female body. Levels of this hormone drop dramatically during perimenopause and menopause and its deficiency is associated with vaginal dryness, hot flashes, and the many other symptoms of menopause. It is also thought that when estrogen levels plummet during menopause, it increases the risk of cardiovascular disease and high cholesterol. Excessively high estrogen levels, on the other hand, have been associated with an increased risk of breast cancer.

In males, estrogen levels are important to monitor since testosterone often can be converted into excess amounts of estrogen. Estrogen also tends to decrease testosterone production, creating a vicious circle.

Progesterone is another important hormone to have tested. During premenopause and menopause, the drop in progesterone levels is associated with estrogen dominance. Even before premenopause a progesterone deficiency can cause PMS, breast tenderness, and a host of other symptoms. Furthermore, groundbreaking work by Dr. John Lee noted that prostate problems in men can be associated with low progesterone levels.9

Cortisol and DHEA are important because of their role in adrenal health. Cortisol levels that are too low or too high can be a sign that a patient is suffering from adrenal exhaustion, a common cause of fatigue, weight gain and many other health problems. Imbalanced DHEA levels also can be a sign of exhausted adrenals. Like many other hormones, DHEA, which is associated with skin elasticity, well being, and cardiovascular health, drops dramatically with age. In some cases, however, individuals with impaired adrenals can produce excessive amounts.

Salivary testing can help a patient determine which hormonal supplements are needed to counteract any detected imbalances. Progesterone cream can be used in both females and males who test low for this important hormone. BioDIM® and Extension Resveratrol can be used in males who are converting testosterone into excess estrogen. Adaptogens and special cortisol-lowering herbs known as

Relora® and Sensoril™ can be used in individuals with adrenal dysfunction while DHEA supplementation can be used to replenish the body's low supplies of this hormone. Women who have lower than normal testosterone levels can use DHEA to raise testosterone levels, since women very efficiently convert DHEA to testosterone. Many males with low testosterone find it helpful to either increase their levels pharmaceutically or use a combination of the botanicals Eurycoma longifolia jack extract, stinging nettle, and Luteolin. Finally, women with low estrogen levels can seek out bio-identical hormone replacement (BHRT).

Retesting after initiating a hormonal support regimen ensures that individuals have achieved the proper hormonal balance and that excess estrogen levels are not created as a result of therapy.

Food Allergy Testing

Clinically, one of the most important tools I use to unearth hidden factors affecting patients' health is Food Allergy Testing. This approach ensures that individuals can understand how their daily diet may be harming their health.

Food allergens can be broken down into two categories: immediate and delayed. It is the delayed or hidden food allergens that silently erode away ones health, frequently going undetected since the response is not immediate but rather delayed up to 72 hours, long after the offending food(s) were ingested. Thus, identifying and controlling food sensitivities is essential.

Hippocrates "The Father of Western Medicine" stated in 400 BC, "May Food be your Medicine and Medicine be your Food." The problem that I discover with my patients is that even supposedly healthy foods such as garlic, broccoli, grapes, and fish can be sources of extremely detrimental health signs and symptoms.

ELISA immunoassay testing for delayed food allergies helps identify delayed IgG immunoglobulin allergens. This technology is used worldwide and has now been applied to home test kits that can identify 96 different food reactions ranging from dairy, wheat, corn, fish, vegetables, fruits, sugar cane, numerous nuts, eggs and other commonly consumed foods. A simple fingerstick done at home, much like that done by diabetics, makes gaining insight into ones own personal delayed food allergies both affordable and convenient. Once collected, the sample is sent from the home to a CLIA (nationally licensed) laboratory. Within a couple of weeks, results are sent back directly to the patient's home. These results indicate low, moderate or high reactions to different foods.

The food allergy test will help individuals avoid the foods they are allergic to and will produce dramatic results in improving overall health. After understanding ones food sensitivities, Digestive Enzymes, a good probiotic supplement that includes Lactobacillus GG and Lectin Lock™ can be added to a supplement regimen to compensate for those times when people are exposed to their most common food allergens.

Anyone who is on immunosuppressant drugs, such as corticosteroids, should be aware that these drugs can alter the results of food allergy testing.

Iodine Sufficiency Test

Thyroid disorders are becoming almost epidemic in this country. Hypothyroidism is one of the most common disorders I see in my patients, who often don't realize that their weight gain, moodiness, thinning hair and other symptoms are caused by hypothyroidism.

Noted iodine expert Dr. Guy Abraham has established a link between iodine deficiency and both hypothyroidism and hyperthyroidism. Because so many dietary components—such as the bromide found in bread and baked goods and fluoride in drinking water—compete with iodine absorption, iodine deficiency has become all too common.10

A user-friendly, oral loading test can detect iodine deficiencies. Testing involves collecting urine immediately upon arising in the morning to use in what's called a spot test. Then, 50 mg. of potassium iodide and iodine (included in the test kit) is ingested. Urine is collected throughout the day until the first urine of the next morning. The samples, including the baseline spot test, are shipped to the lab.

If the body has sufficient iodine, at least 90 percent will be excreted in the urine. In iodine deficiency, however, the body will hold on to some of the iodine to compensate for the deficiency. The more iodine that remains in the body, the more a person is iodine deficient and needs to begin supplementation.

If the tests indicate an iodine deficiency, patients often begin supplementing with iodine, such as found in Iodoral®, a combination of iodide and iodine. Testing should be repeated every three to four months to monitor proper iodine doses. Working closely with your personal healthcare provider is always an important part of refining your health program.

Conclusion

Organic acid, salivary hormone, food allergy, and iodine sufficiency testing are the best way to build a supplement program that is specific for an individual's needs. In my practice, I have noted dramatic improvement in the overall quality of my patients' health after they have begun a supplement regimen based on these tests. Not using this important tool is like stumbling around in the dark when all one needs to do is turn on the flashlight that's already in his or her hand. For individuals who want to get serious about overall wellness in 2008, taking each of these tests is a crucial step toward good health.

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