

VITAMIN/MINERAL/FATTY ACID NEED

A high score in this category tells us that you may be deficient in some nutrients. Many of questions in the category are about symptoms caused by specific deficiencies. When taken as a whole, we know there are deficiencies but not what they are specifically.

In 2015 the New York State attorney general's office accused four major retailers of selling fraudulent herbal supplements. Most products (80%) from GNC, Target, Walgreens and Wal-Mart did not contain ANY of the herbs listed on their labels. We have looked into the quality of supplements and can help you avoid fraud and find effective, quality products.

The *Roadmap to Health* diet is very high in trace nutrients and will help to improve your score. You can further improve the score by taking a good multiple vitamin and an essential fatty acid supplement. A more targeted approach, however, may be a better way to address this issue. During a consultation we can help you to determine which nutrients you need the most.

Why do doctors prescribe drugs? Why do people take them? The answer is to change the body's chemistry in order to correct a symptom. Anti-

depressants are given to chemically increase neurotransmitter activity. Anti-inflammatory drugs biochemically reduce inflammation, giving relief from pain. Antibiotics chemically kill bacteria. Drugs exist to create chemical changes in order to bring a symptom under control. All drugs have side effects.

Nutrition is another way to affect the body's biochemistry. Unlike drug therapy, nutritional therapies have few, if any, side effects. Every activity in the body, digestion, muscle action, oxygen utilization, and even thought is the result of chemical reactions. Vitamins and minerals are the co-factors that enable these chemical reactions to occur. Generally, in chronic conditions, nutrition, herbs, homeopathy, and other natural therapies are effective. Drug therapy is usually indicated in acute or life-threatening conditions.

The challenge of the modern diet is three-fold. First, people tend to eat a lot of food-like substances that are full of chemicals and depleted in nutrients. Second, soil erosion and modern farming techniques tend to grow foods that are deficient in many trace nutrients. Third, a diet full of processed foods impairs digestion and reduces the absorption of nutrients.

IF YOU SIMPLY FOLLOW THE ROADMAP TO HEALTH DIET FOR 30 DAYS, YOU WILL NOTICE AN IMPROVEMENT IN YOUR SCORE WHEN YOU RETAKE THE SYMPTOM QUIZ. CONTACT OUR OFFICE FOR A COPY.

Many herbal and nutritional therapies are well-researched. The traditional medical establishment is becoming increasingly interested in herbs and vitamins; they are safe, and they get the job done.

Nutrients are effective in treating illness because nutrient deficiency is responsible for many symptoms. Often the deficiency is subclinical, a concept that few doctors understand. Unfortunately, people try to use nutrients like drugs—addressing specific symptoms. Patients are continually saying things like, “I heard vitamin E will help my virility” or “I heard that vitamin B will give me more energy”. Using vitamins to address specific symptoms doesn’t always work. If your fatigue is caused by a B vitamin deficiency, taking B vitamins will increase your energy. If you are deficient in vitamin E, taking vitamin E may increase your virility.

We commonly hear doctors say the vitamins can’t cure disease, and they are right. There is one important exception, vitamins cure the disease of vitamin deficiency. So, while it looks like vitamins and minerals are “curing” a health problem, what is really happening is the nutrient is enabling the body to function normally. Keeping that in mind here are some examples of problems caused by nutritional deficiency:

- Vitamin B₆ deficiency can cause you to react to MSG (Chinese restaurant syndrome).
- Hay fever sufferers with itchy eyes are frequently deficient in vitamin A.
- Molybdenum deficiency may cause you to be sensitive to smoke and perfume.
- Deficiencies of folic acid or B₁₂ can be a source of infertility.
- Deficiency of B₁₂ can cause memory problems and even dementia in older people--sometimes symptoms are so severe that it is mistaken for Alzheimer’s disease.
- Zinc deficiency can cause immune system problems, sugar cravings, or skin problems.

- Magnesium deficiency can cause muscle spasms or heart arrhythmias.
- Essential fatty acid deficiency can cause skin problems, muscle fatigue or tension headaches.
- Vitamin B complex deficiencies can cause fatigue or depression.
- Folic acid deficiency can cause depression, anemia and a low white cell count.
- Anemias that don't respond to iron supplementation may indicate a need for folic acid, B₁₂, vitamin A, protein, copper, or HCl.
- Deficiencies in magnesium, calcium, or essential fatty acids can be a source of menstrual cramps.
- Adequate selenium is necessary to effectively fight a viral infection.
- Vitamin A deficiency can cause vision, immune system, or skin problems.
- People with many allergies are commonly deficient in trace minerals.

These are just some of the problems caused by nutritional deficiency, the tip of the iceberg. Virtually every function in the human body--including thought--is the result of a biochemical reaction. Good nutrition ensures good biochemical function.

Not all immune system problems are caused by zinc deficiency and not all muscle spasm is the result of magnesium deficiency. This is the reason that one person can begin to take zinc and stop having colds and another takes zinc with seemingly no benefit. Zinc fixes a zinc deficiency, not the immune system (unless the immune problem is caused by the zinc deficiency).

Vitamins and minerals act as cofactors for enzymes. If an enzyme is an automobile, the vitamin or mineral is the ignition key that enables it to start. The enzyme, alkaline phosphatase, necessary for bone repair, needs zinc to function, for example. Minerals are also important to structure. Calcium in the bone comes to mind, although many minerals are important for the strength and structure of bone,

including manganese and magnesium. Iron is necessary for the structure of the hemoglobin molecule. Iodine is necessary for thyroid hormone. There are many other examples. Sodium and potassium are necessary to maintain osmotic pressure and kidney function.

The Importance of Fats and Oils

Most Americans are deficient in essential fatty acids. Most of the oil used for salads and cooking have no nutritional value. Extra virgin olive oil is the best choice for cooking and salad dressing, but it does not provide enough omega-6 and omega-3 fatty acids. Omega-3 fatty acids from fish oil has been extensively studied. They are shown to promote cardiovascular health (Fitoterapia. 2017 Nov;123:51-58), (Cell Biochem Biophys. 2015 May;72(1):77-81), (Lipids Health Dis. 2016 Jul 22;15(1):118), (Atherosclerosis. 2017 Jul;262:51-54). They help with muscle function and sports performance (Mar Drugs. 2015 Nov 19;13(11):6977-7004). They reduce the risk of dementia (Neurosci Biobehav Rev. 2015 Jan;48:1-9). They can improve mental function, including reading and learning in children (J Child Psychol Psychiatry. 2017 Jan;58(1):83-93), (Nutrients. 2016 Jan 2;8(1)),(Eur Neuropsychopharmacol. 2017 Dec;27(12):1319-1330). They may be helpful to patients suffering from depression (Ann Pharmacother. 2016 Oct;50(10):797-807). Pregnant women taking omega-3 fatty acids can reduce the chances of having a child with allergies (Acta Paediatr. 2016 Nov;105(11):1337-1347). Omega-3 fatty acids are

also important for the integrity of the skin (Arch Dermatol Res. 2016 Oct;308(8):563-74), (World Rev Nutr Diet. 1991;66:425-35).

Does Everyone Need Fish Oil?

What about fish oil? Fish oil has received a lot of publicity over the last few years. It is an omega 3 fatty acid and has been used to reduce inflammation, improve cholesterol levels, and help with blood sugar control. Flax oil also contains omega 3 fatty acid. also does these things, but there are some advantages to using flax oil:

- The oceans are full of dioxin, mercury, and plastic. You have to really trust the manufacturer; many fish oil products are impure.
- While fish oil is a more “active” omega 3 oil, much of the research supporting it is short term. Most Americans eat a ratio of 30:1 omega 6 to omega 3 oils (and much of the oils are refined and toxic). This is way out of balance; it should be 3:1. So a strong omega 3 oil gets favorable results quickly. The problem is that long term use of fish oil may be harmful.

Omega-6 fatty acids are also necessary. Their value has been crowded out by the interest in fish oil. There are balanced fatty acid products that contain both omega 6 and omega 3 fatty acids (some even contain omega 9 fatty acids, which are found in extra virgin olive oil). These products are a better long-term solution. Call for a consultation to learn more.

CONTACT US FOR A CONSUTATION