

Navigating the supplement maze

How to make the right choices



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Your first trip to the local natural health store's supplements aisle can be overwhelming. The myriad of nutrient and herbal helpers that populate the shelves can make it difficult to navigate your way to just the right supplements for your own good health.

You've read and heard all manner of good things about the benefits of B vitamins, antioxidants for heart health, calcium and vitamin D for bone health, and the list goes on. But how do you make the decision about exactly what supplements you and your family need to maintain optimum

health? Let's take a look at the main categories of supplements: vitamins, minerals, fats, and proteins.

Vitamins

Needed for a number of processes in our bodies, such as growth, digestion, mental alertness, and resistance to



Supplements in a nutshell

Supplement
Vitamins
Major minerals
Trace minerals
EFAs
Protein
Hormones
Enzymes

What to look for
Organic, full complexes, food based
Worry more about magnesium than calcium
Ionic or colloidal
Cold-pressed oils
Spirulina, chlorella, yellow pea, and rice proteins are preferable
Natural in ratios that mirror the human body
Both digestive with food and proteolytics without food

infection, vitamins are also necessary for our bodies to synthesize carbohydrates, fats, and proteins and act as catalysts to speed up chemical reactions.

Natural or synthetic First, try to avoid all synthetic vitamins such as beta-carotene made from acetylene gas, as they are the least bioactive of forms. Second, when choosing supplements made from naturally derived isolates, use the most active form. The most effective forms of B₁₂ include hydroxocobalamin, adenosylcobalamin, and methylcobalamin.

Organic Next, you should understand the term “organic” and its use in the world of supplements. When applied to supplements, organic means that the molecule contains at least one carbon atom (as in organic chemistry). A supplement, therefore, can be labeled 100-percent organic and not be natural. Check with your natural

health store for the most natural brands of supplements.

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Complex or isolate Overall, the best vitamin supplements are full complexes that mimic their natural origins; these full complex vitamins are best absorbed into the body. Vitamin E is usually sold as d-alpha-tocopherol, but vitamin E naturally exists as a complex of at least eight components—four tocopherols and four tocotrienols. Likewise, vitamin C exists not as ascorbic acid, but as a complex that includes bioflavonoids and calcium.

What this means is that much of the value of vitamins is in the complex, not the isolate, so make sure your vitamins are part of complex supplements.

Minerals

The main components of teeth and bones, minerals serve as building blocks for other cells and enzymes. They also help in regulating our bodies’ balance of fluids and control the movement of nerve impulses. Major minerals are required in larger amounts—more than 250 mg per day—than trace minerals, which are required in fewer than 20 mg (see sidebar).

Calcium or magnesium When we think of major minerals, we often think of calcium, which is not surprising since we often hear health reminders to “Get your daily calcium!”

But although we need calcium, the true deficiency may be magnesium, which balances the calcium. Magnesium is the activating mineral for close to 400 different enzyme reactions in the body—more than any other mineral. Too little magnesium negatively impacts your body in literally hundreds of ways, including hardening of the arteries, arthritis, diabetes, and dementia.

Magnesium is much harder for your body to absorb and utilize than calcium. Based on absorption, the ratio provided by most supplements is much closer to 6:1 or even 8:1 in favour of calcium. To make sure you get enough magnesium, look for at least 200 to 600 mg of elemental magnesium per day in the form of water-soluble magnesium citrate.

Trace minerals Traditionally, eating fresh grains, fruits, and vegetables grown in nutrient-rich soil and drinking mineral-rich water have been the primary sources for the full spectrum of ionically charged trace minerals. Naturally occurring, nutrient-rich soil is becoming less available on high-

output commercial farms; however, eating local organic produce can help alleviate this deficiency.

Recently, science has shown interest in minerals such as selenium for preventing cancer, boron for preventing osteoporosis, and chromium for regulating blood sugar levels.

Mineral absorption How do you decide which form of minerals your body can best utilize? Keep in mind that you benefit from minerals when two things happen:

1. You absorb the minerals in your intestinal tract.

2. Your cells then utilize those absorbed minerals.

Minerals are charged elements, so they are better absorbed in an acidic environment. As people age, they tend to produce less stomach acid, which means they also tend to absorb fewer minerals.

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Also of interest when considering mineral absorption is the fact that plants contain compounds (including phytates, fibre, and oxalates) that lower mineral absorption, particularly calcium, iron, magnesium, and zinc. Phytates found in unfermented soy products and unprocessed whole-grain products bind minerals and lower absorption. Oxalates found in spinach and rhubarb can reduce calcium absorption—in some cases to as little as three to five percent.

The iron found in meat is two to three times more absorbable than plant-based iron salts. However, instead of eating more meat for minerals, which can lead to other problems, look for ionically charged nonfood-bound minerals which are far more

Major minerals	Trace minerals
calcium phosphorus magnesium sodium potassium sulphur chloride	chromium fluoride iodine iron manganese copper molybdenum selenium zinc

absorbable since they avoid many of the binding problems associated with food. These can be found in ionic or colloidal mineral supplements.

Fats

Supplement with fats? It's essential. Certain fats, such as essential fatty acids (EFAs) are essential to sustain human life and good health. They play a key role in the construction and maintenance of nerve cells and the hormone-like substances called prostaglandins. They also help decrease cholesterol and triglyceride levels in the blood.

Most of us get enough EFAs, but we often get them in the wrong ratios. The ideal ratio is 1:1 omega-6 to omega-3, and at the most a ratio of 2:1. Because of diets rich in vegetable oils and grain-fed beef, however, the ratio in our modern Western diet can run as high as 20:1, 30:1, even 50:1. This imbalance has been linked to many of today's afflictions and diseases including hair loss, lack of energy, skin problems, heart and circulatory problems, and immune disorders (including arthritis).

Ensure a good ration of omega-6 to omega-3 EFAs by consuming grass-fed (rather than grain-fed) beef, and supplementing with cold-pressed flaxseed oil or fish oil.

Proteins

A great deal is made about the need

for protein, but the fact is that our protein requirements are easy to fill. To determine your daily protein requirement, just divide your weight in half and eat 0.5 g of protein per pound of body weight. In other words, if you weigh 150 pounds (68 kg), you need approximately 2 1/2 ounces (75 g) of protein per day.

Some of the best protein sources are actually vegetarian. Spirulina, chlorella, and combinations of pea and rice protein are not only higher in actual percentage of protein than animal sources (60 to 80 percent versus 20 to 25 percent for animal sources) but are also more bioavailable.

Probiotics, enzymes, natural hormones

It is also highly recommended that we supplement with probiotics to replace the beneficial bacteria destroyed by chlorine and antibiotics in our water and food. In addition, stress, meat consumption, as well as cooked and processed foods require enzyme supplementation for digestion. Hormonal supplementation repairs imbalances caused by constant exposure to chemical estrogens in the environment. All of these supplements will raise your “baseline of health” to a level that allows your body to heal itself.

If you're a little overwhelmed with the choices in the supplements aisle, be sure to take this primer on essential supplements with you when you visit your natural health store, and take advantage of the proprietors' knowledge to guide you in making your optimum choice. **a**

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