

Top 10 Supplement Facts You Probably Didn't Know

[By Joe Cannon](#)

It is ironic that in this age of information, people continue to be confused about supplements. While in America alone, about 20 billion dollars annually are spent on vitamins, minerals, herbs, amino acids and other nutritional products, studies still show that people in all walks of life (including fitness professionals) need a good foundation in basic supplement information to help them make informed decisions about which products might best suit their individual needs. Because of this, the following is a list of what I feel are the top 10 supplements facts that can help save you time and money - and get the most out of the products you use.

Fact #1. Natural vitamins are not better than synthetic vitamins.

A common mistake made not only by the general public but also by many fitness professionals as well is that vitamins made in nature are superior to synthetically-made vitamins. The fact is that the chemical structure of synthetic and natural vitamins is basically identical. In other words, synthetic vitamin C looks the same as natural vitamin C. This means that your body cannot tell the difference between them. In some instances, the absorption of vitamins can differ between natural and synthetic, but this does not always favor natural vitamins. For example, folic acid, common among prenatal vitamins, is actually the synthetic version of the B vitamin, folate. Folic acid is used in prenatal vitamins because it is better absorbed.

Fact #2. Soy can help reduce cholesterol levels.

Many people have heard that soy may help cholesterol levels but most have no idea how much might help. For soy to have an impact on cholesterol, studies show between 25 to 50 grams of soy per day is going to be needed. So, those who are supplementing with soy-containing foods and/or supplements and not seeing a reduction in cholesterol may simply not be eating enough. Most soy products in the US list the amount they contain on their labels, which makes it easy to track how much soy you are getting.

Keep in mind that most research for soy reducing cholesterol is on people who eat soy-containing foods. This leaves open the possibility that isolated soy ingredients, often found in supplements, may not

have the same effect as eating soy itself. Regardless, if soy is going to help, it is important to combine it with a diet that is also low in saturated fat to obtain the best results.

Fact #3. Vitamins do not give us energy.

Some people may take massive amounts of vitamins (especially B vitamins) in the hopes that they will provide more pep to get through hectic days. This is why you often see a lot of B vitamins in energy drinks. However, a problem arises when it becomes known that vitamins do not contain any usable energy (calories). Vitamins do help us extract energy from food and process it. In a malnourished person, such vitamins may indeed help, but for those who eat an even halfway decent diet, vitamins alone are unlikely to improve energy levels. Remember, vitamins and food work in concert with each other to keep us healthy and provide us with the energy we need.

Fact #4. Glucosamine may help arthritis.

Many studies over the last several years found that glucosamine may help reduce arthritis-related pain. For glucosamine to work, you must have osteoarthritis. Of the over 100 types of arthritis known to exist, osteoarthritis is the most common and results when the cartilage between bones wears away. This is the type of arthritis that responds to glucosamine. While the degree of osteoarthritis and length of time you have it may impact success with this nutrient, studies tend to show that four to eight weeks of glucosamine supplementation may be needed before results are observed. For best results, look for glucosamine sulfate as this form has the most evidence that it might help.

Fact #5. Natural does not always mean safe.

A common mantra repeated on many web sites today is that because supplements are natural, they are automatically safe for everyone. On the contrary, some supplements, if used by the wrong people may have significant side effects. For example, St. John's wort, which is typically used for depression, may interact with not only antidepressant drugs but also those used to treat cancer and AIDS. Vitamin E might reduce the blood's ability to clot. This is the reason why doctors typically tell their patients to stop using vitamin E before surgery. While many supplements are indeed safe, it is also true that people should know what they put in their bodies.

Fact #6. To build the most muscle, eat your protein after working out.

Frequently, I am asked the question, "When is the best time to eat protein, before or after exercise?" While your body will absorb protein no matter when you eat it, new research suggests that after exercise may be better than before exercise. In a study of older individuals who lifted weights, researchers found that people who ate protein immediately after exercise built more muscle than seniors who ate protein two hours later. While this study investigated the effects of protein and strength training in seniors, there is little reason to doubt that the same effect would not be seen in younger persons. If you like to eat protein before exercise, that's fine. Just remember to also eat some protein (and carbs) preferably within 30 to 60 minutes after exercise to get the best results.

Fact #7. The government does regulate supplements.

It's often stated that the US government doesn't regulate supplements. In reality, it does, but the regulations are different than those used for medications. The government has a very lengthy definition to describe what can and cannot be called a "supplement." While this does allow for a wide range of products to be sold, the definition does have limits. For example, some hormones are not permitted to be sold as supplements. Another stipulation is that supplement companies cannot make specific claims that a product can treat or cure any diseases or conditions. Doing so might confuse people and make the product appear to be like a drug.

In contrast, supplement labels can list what are called structure/function claims. These claims make reference to how a supplement is involved in helping the body. For example, the claim that a supplement helps keep bones strong is a structure/function claim. Structure/function claims are pretty easy to identify because they usually contain words like supports, aids or maintains.

Fact #8. You CAN absorb more than 40 grams of protein at a time.

There is an urban legend circulating through some fitness circles that maintains that people can only absorb a certain amount of protein per meal. Usually, people say this amount is about 40 grams. This may be why some protein bars and shakes usually do not contain much more than this amount. Regardless, while we can indeed utilize more than

40 grams of protein per meal, the real question is whether or not all of that protein is going to build and maintain muscle. This is a much harder question to answer and depends on your exercise routine, how often you work out and how much rest you get, to name a few.

Fact #9. Extra vitamins will not make you a better athlete.

While a good quality multivitamin is probably something to consider, many studies have found that extra vitamins do not make people stronger, faster or improve any exercise-related activity. As a rule, people who exercise regularly tend to eat more food and make healthier food choices overall. Food is also a very good source of vitamins. So the more food people are eating, the more vitamins they tend to eat as well.

Fact #10. Even if you eat a healthy diet, you might still benefit from supplements.

Sometimes people email me and ask, "Do I need supplements if I eat well"? It turns out that the answer appears to depend on who you are. Research shows that some supplements may benefit certain groups of people when used above what is normally consumed in a typical diet. For example, it is well known that as people grow older, they tend to eat less. This can have disastrous consequences by leading to muscle and strength loss and a reduced quality of life. Some new research is finding that the branch chain amino acids (leucine, isoleucine and valine) can stimulate appetite in older adults. Potentially, if you can stimulate appetite, this might lead to stronger muscles and a better chance of remaining independent to a ripe old age. Another example is the amino acid glutamine. Studies tend to show that when consumed at higher amounts than is normally eaten, glutamine may lead to shorter hospital stays and increased body weight in some cancer patients.

There is no doubt that for most people, a balanced diet that's rich in fruits, vegetables and grains is still a great first step to staying healthy. For those who have special needs or concerns or who want to see what else they can do to stay fit, a quality-made supplement may be something to discuss with your physician.

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