## Ask Leyla: When it comes to supplements, how much is too much?



**Q:** I know supplements can go a long way toward helping me maintain optimal health, but I'm a little lost as to the correct dosages. Is it OK to just follow the instructions on the bottle? With regard to my supplement intake, how much is too much and what are the possible consequences?

A: This is a common question that can be difficult to answer because any supplement regimen, as you will find out in this article, needs some degree of supervision from a credentialed nutrition professional, not the guy or gal who works at your local health food store.

Here is a small sampling of why this is true:

 $Vitamin\ A$  — Taking high doses of vitamin A (not beta-carotene) can be hard on the liver and eventually cause damage. For someone with fatty liver, which is reaching epidemic status of late, vitamin A is definitely contraindicated. I see too many over-the-counter vitamin formulations with as much as 10,000 IU vitamin A per dose. In my opinion, this is too much.

Niacin — Many people are self-prescribing niacin to support healthy cholesterol levels. You're probably thinking "what's the harm? It's just vitamin B3, and it's water soluble, which means it isn't stored in the body." Well, taking high doses of niacin for a long period of time can increase liver enzymes and eventually damage the liver. It's important to monitor liver function tests when taking high doses of niacin (read: supervision).

Iron — Is there iron in your multivitamin? I'll bet there is. But if you don't have iron-deficiency anemia, or if you have high ferritin levels (the storage form of iron), this excess iron may feed an infection. And very high levels of iron are toxic to the heart.

Zinc — This is a very important mineral in immune system support. But did you know that taking high doses for a long period of time (say, all winter long) will eventually deplete copper? Both zinc and copper need to be balanced for optimal health.

Folic acid — This is definitely in your multivitamin. But guess what? If you have the MTHFR gene mutation (Methylenetetrahydrofolate reductase), you shouldn't be taking ANY folic acid. Naturally occurring folate in your food is just fine. However, any supplement you take should include methylfolate or L-methylfolate, not folic acid.

Calcium — Taking high amounts of calcium for bone health is no longer advised (a topic for a future newsletter). Gone are the days of taking 1,200-1,500 mg per day. Too much calcium without the required magnesium to balance it can cause kidney stones. There is also some question as to whether excess calcium contributes to coronary artery disease and suspicious calcifications in breast tissue. In addition, taking a calcium supplement will cause constipation in many individuals.

 $Black\ cohosh\ -$  This is an herb typically used in menopausal women to tame hot flashes and night sweats. However, long term use necessitates liver function monitoring.

Kava — Long term use of kava, a common herb used for anxiety and insomnia, is also not advised because of possible liver damage. Monitoring liver function is warranted.

This is just the tip of the iceberg when it comes to knowing which micronutrients to take and how much. As you can see, your individual nutrition/health assessment is critical in making the distinction of whether your supplements, doses and length of time taking them are appropriate.