


14 supplements you should NEVER take – updated! (part one)

As you already know, I'm a big proponent of nutritional supplements. The majority of supplement manufacturers are responsible and ethical, and their claims are, by and large, science-based.

That does not mean that I suspend my critical faculties when it comes to supplements. As an active practitioner, I've had the opportunity to field-test many highly-touted health products over the years. Sometimes they don't measure up to their extravagant claims.

In an *Intelligent Medicine* podcast with Steve Mister, Executive Director of the Council for Responsible Nutrition, he coined a memorable phrase: "The supplement industry is a 'tale of two industries'." Regrettably, there are some players who put profits before service to consumers. 

I wrote on this topic originally last year, but in the time since have come across a few additions to the list that I thought my readers should be aware of. Here are, in my opinion, some of the worst offenders:

1) Coral Calcium: The very personification of hype, extensive advertising campaigns have pitched "Coral Calcium" as a panacea for conditions ranging from cancer to chronic fatigue syndrome. But no evidence exists for these exaggerated assertions.

There's a romantic aura about sea coral as a natural source of calcium. The truth is that it's just calcium carbonate, the cheapest and least absorbable form of calcium (I prefer calcium citrate). Also, unless chemically purified or made synthetically, harvested calcium is likely to contain high levels of contaminants like lead.

Besides, as an inveterate scuba diver, I like my coral just fine where it belongs: in the ocean.

2) Vitamin D2: Otherwise known as ergocalciferol, it's the active ingredient in most prescription vitamin D (e.g., Drisdol, Calcidiol). Some discount supplements contain Vitamin D2, even advertising it as "vegetarian D" since it's made from mushrooms, as opposed to D3, which comes from sheep lanolin (technically "cruelty-free" because the sheep are shorn for wool anyway).

Studies now confirm that D2 is only about 60% as bio-available as D3; moreover, it's been theorized that excess D2 may cancel out D3's benefits. Vitamin D2 should not be regarded as a nutrient suitable for supplementation or fortification, yet it continues to be sold.

3) "Flush-Free" Niacin: Vitamin B3 in the form of niacin commonly causes uncomfortable flushing. The effect is transient and harmless, but it can be disconcerting.

Unscrupulous manufacturers offer consumers "flush-free" niacin, which is inositol hexanicotinate. I've tried it on patients, and it never seems to work to lower cholesterol.

Even more disconcerting are recent studies that suggest that, while high-dose regular niacin can lower cholesterol and raise HDL, this doesn't translate into meaningful protection against heart disease and stroke. The suggestion is that it

may not just be about cholesterol.

4) Policosanol: A derivative of sugar cane, policosanol was claimed by Cuban researchers to be very effective for reducing cholesterol. But when Scandinavian researchers tried to replicate the Cubans' results, policosanol came up short. My take? Policosanol is a lame attempt by Cubans to boost their foreign exchange.

5) Raspberry ketones: Promoted as a "fat-burners in a bottle," raspberry ketones actually possess meager scientific bona fides.

NO scientific studies have been performed on humans. The few studies that exist were done on rodents and were small in size and published in obscure Asian journals. One test-tube study showed favorable metabolic changes when cells were exposed to raspberry ketones, but in vitro results often don't translate to real live people. Dr. Oz recently was burned for his too-enthusiastic embrace of this dubious product.

6) 3-6-9: These healthy fatty acid supplements are said to provide a balanced blend of Omega-3, 6, and 9 oils. But most people have too many Omega-6 fatty acids already, and Omega 9 oils can best be obtained by consuming extra-virgin olive oil, which offers the additional benefit of healthy polyphenols.

The business end of these supplements are the Omega-3 oils which are usually more costly than Omega-6 and 9, hence it's to the manufacturer's advantage to convince you that you need all 3 in a combo pill. With all that cheap Omega-6 and 9 crammed into your capsules, there's little room for meaningful amounts of the high-quality EPA and DHA that you need.

Bottom line: Just take a high-quality fish oil supplement, and let your diet provide you with healthier, more economical natural sources of Omega-6 and 9.

7) Potassium: Studies show that one of the problems with the modern diet is that we have an increased ratio of dietary sodium to potassium. Over-the-counter potassium pills are limited by regulation to contain no more than 99 milligrams, because excess potassium can be a problem for people with poor kidney function (prescription potassium delivers more).

By comparison, a banana yields 425 mg, a baked potato with skin 925 mg. Fresh fruits and vegetables are generally rich sources of potassium, packed with healthy additional nutritional factors.

What about potassium gluconate supplements that advertise 550 mg of potassium? Actually, that's slight-of-hand: potassium gluconate is a heavy molecule, of which only about 20% is elemental potassium—1 pill delivers only 90 mg of potassium, just under the legal threshold. A mere cup of ordinary lettuce delivers more.

As you can see, things are not always all they're touted to be in the supplement world, and it's important to be sure the supplements you *do* take have ample research to back up their efficacy and safety. Next week, I'll share with you seven more supplements that don't make the cut.