Only One Form of Niacin Can Boost HDLs

Q. My doctor gave me a prescription for niacin to lower my cholesterol. Can’t I just take the niacin that’s sold over the counter in my health food store?

A. No. The niacin your doctor prescribed is likely in a different form than the niacin in most supplements. Though both are forms of niacin (vitamin B3), nicotinic acid is available mostly by prescription, while the form of niacin in most over-the-counter supplements is niacinamide or nicotinamide.

What We Know About Niacin. Several decades ago, researchers discovered that large doses of nicotinic acid could lower blood cholesterol. Not only that, but it’s only the medication that has a dramatic impact on HDL (high-density lipoprotein or “good”) cholesterol, boosting it by 25% to 35% when taken in high doses.

While statins like atorvastatin (Lipitor), lovastatin (Mevacor) and simvastatin (Zocor) are the best for lowering elevated LDL (low-density lipoprotein or “bad”) cholesterol, they are less effective for raising HDLs. In fact, nicotinic acid is one of the few drugs that can improve the entire range of blood lipids—total cholesterol, LDLs and HDLs—all at the same time. It may even have anti-inflammatory effects, which would further reduce the risk of heart attack or stroke. One prescription medication (Adicor) offers both options together by combining a statin (Lipitor) with nicotinic acid. However, it should only be prescribed after treatment with either drug alone has failed.

Slow vs. Fast Niacin. In the beginning, nicotinic acid was available only in its immediate-release form, which causes a harmless, but annoying flushing of the skin. To reduce the flushing, an extended-release form was developed, but it caused dangerous liver abnormalities.

Now, a safer extended-release nicotinic acid is available by prescription as Niaspan or over the counter as Slo-Niacin. However, experts caution that users should be monitored by a physician and should limit dosage to two grams a day, avoiding additional niacin from supplements.

EN’s Bottom Line. Niacin as nicotinic acid is an effective way to improve your cholesterol levels. Although immediate-release nicotinic acid is still available by prescription, the improved extended-release forms reduce flushing by about 80%. Just be sure your doctor monitors your liver function and blood sugar levels while you are on the medication.

Got Milk Allergy?

Q. I have lactose intolerance and can’t drink milk. Should I also avoid products that say “may contain milk”?

A. No. That warning is intended for people who suffer from milk allergy, a much more serious condition.

People with lactose intolerance are missing an enzyme needed to digest lactose, the natural sugar in milk. But they can generally tolerate small amounts of lactose, as much as a half-cup of milk at a time. So there’s no need to worry about the small amounts that might inadvertently be found in foods or in ingredients that contain milk protein, like casein, whey and flavorings.

A milk allergy, on the other hand, is a reaction to a protein in milk. Even a tiny amount can trigger a severe immune response, which can include a rash, a dangerous drop in blood pressure, rapid heartbeat or swelling of the lips, throat and tongue, making breathing difficult.

EN’s Bottom Line. Milk allergy sufferers must become diligent readers of ingredient labels, though not all products with small amounts of milk protein carry the voluntary “may contain milk” warning. People with lactose intolerance need only limit dairy products to small amounts to avoid gastrointestinal upset.

When Is an Antioxidant Not an Antioxidant? Flavonoids Reveal New M.O.

Q. I heard recently that fruits and vegetables don’t really contain antioxidants after all. Do I still need fruits and veggies?

A. Yes, eating the recommended five to 9 servings of fruits and vegetables each day is still a smart health move. The findings you mention are from an Oregon State University review of studies on flavonoids in fruits and vegetables. The researchers found that while flavonoids have strong antioxidant properties in test tubes, their antioxidant activity in the body is weak.

Flavonoid Facts. Flavonoids are in the family of compounds called polyphenols, all with a similar chemical structure. Common flavonoids include quercetin (in apples and onions), catechins (in tea and wine) and anthocyanidins (in blueberries and cranberries). Eating lots of flavonoid-rich foods has been linked with a reduced risk of heart disease, stroke and cancer.

When measured outside the body, flavonoids appear to have three to five times the antioxidant activity of vitamins C or E, but apparently that’s not what happens in the body. The body seems to treat flavonoids as unwelcome visitors, quickly showing them the door. But compounds the body produces as a result of metabolizing flavonoids may be even more beneficial.

Redeeming Flavonoids. The Oregon State University researchers point out that flavonoids appear to have a strong influence on the cell signaling that plays a role in cancer and heart disease prevention. Moreover, as the body gears up to rid itself of flavonoids, enzyme systems kick in that eliminate mutagens and carcinogens. This may help explain the value of fruits and vegetables in cancer prevention.

Another enzyme system spurred into action by the brief presence of flavonoids in the bloodstream helps lower blood pressure and prevent inflammation in blood vessels.

EN’s Bottom Line. Eat those fruits and veggies! They are rich sources of much-needed vitamins, minerals and fiber. They may work their magic differently than scientists first thought, but they’re still worth their weight in gold for the effects they induce in the body. And the result is the same—reduced risk for several chronic diseases. You can’t beat that perk.

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