

Niacin to boost your HDL 'good' cholesterol

Niacin is an important B vitamin that may raise your HDL "good" cholesterol. A Mayo Clinic doctor discusses niacin, including its benefits and side effects.



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Niacin has long been used to increase high-density lipoprotein (HDL), the "good" cholesterol. But compared with other cholesterol drugs, niacin hasn't gotten much respect. It's just a simple B vitamin, nothing fancy. Still, it's hard to deny niacin's often-significant impact on your HDL cholesterol levels.

A lot of the attention regarding cholesterol has been focused on lowering your low-density lipoprotein (LDL), or "bad" cholesterol. That's still an important goal. But as researchers learn more about how cholesterol is used by the body, they're realizing that boosting your HDL level is just as important as lowering your LDL cholesterol. Drug manufacturers have been busy trying to come up with new medications to increase HDL, but they haven't had much luck. One drug recently in development called torcetrapib looked promising, but it had too many dangerous side effects and was not approved by the Food and Drug Administration.

It may be time to refocus on the old standby niacin for raising HDL.

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What is niacin, and where is it found?

Niacin is a B vitamin — vitamin B-3 to be precise — that is used by your body to convert carbohydrates into sugar (glucose), which your body then uses for energy. Niacin also helps keep your nervous system, digestive system, skin, hair and eyes healthy. That's why niacin is often a part of a daily multivitamin, though most people get enough niacin from the food they eat.

You may see niacin labeled in many different ways. As part of a multivitamin or supplement, it's often just referred to as niacin. When it's used as a treatment, such as when it's used to increase your HDL cholesterol, it's sold in higher doses. Some common brand names of niacin in these forms include Niaspan, Niacor or Slo-Niacin. Niacin is also sometimes referred to as nicotinic acid.

Niacin is found in many foods, including dairy products, lean meats, poultry, fish, nuts and eggs. In addition, many breads and cereals have niacin added to them. Niacin is also available in a variety of different forms as either prescription medication or over-the-counter supplements. However, don't take niacin — even in the over-the-counter form — without discussing it with your doctor first because niacin can cause side effects when taken in high doses.

What impact does niacin have on cholesterol?

Niacin can raise HDL — the "good" cholesterol — by 15 percent to 35 percent. This makes niacin the most effective drug available for raising HDL cholesterol. While niacin's effect on HDL is of most interest, it's worth noting that niacin also decreases your LDL and triglyceride levels. High levels of LDL and triglycerides are significant risk factors for heart disease.

Why is having a high HDL cholesterol level important?

HDL, or "good," cholesterol picks up excess bad cholesterol in your blood and takes it back to your liver for disposal. The higher your HDL cholesterol, the less bad cholesterol you'll have in your blood.

Cholesterol levels are measured in milligrams (mg) of cholesterol per deciliter (dL) of blood:

- For men, HDL levels under 40 mg/dL increase the risk of heart disease.
- For women, HDL levels under 50 increase the risk of heart disease.
- An HDL level above 60 mg/dL is considered ideal for men or women.

Research has shown that HDL plays an important role in protecting your heart. Having a low HDL level is an independent risk factor for developing heart disease. That means even if your LDL and other risk factors are normal, having a low HDL level still increases your risk of heart disease.

What about niacin side effects, like flushing?

Niacin comes in a variety of different forms, ranging from fast-acting forms to those that are longer acting. Some forms of niacin, especially in high doses — 1,000 milligrams or more — do cause temporary flushing of the skin. While annoying, this flushing is not harmful. Also, talk to your doctor about taking an aspirin shortly before you take your niacin. Aspirin can counteract this flushing effect. Versions of niacin with reduced flushing effects also are available by prescription.

Other possible side effects include upset stomach, headache, dizziness, and, in rare cases, liver damage. Niacin can also raise blood sugar in some people, so people with diabetes may not be able to use niacin. However, your doctor may be able to find the right dose and form of niacin that minimizes side effects. Also, taking niacin with food or aspirin may help prevent side effects. Remember, don't take niacin — even in the over-the-counter form — without discussing it with your doctor first. Niacin can cause side effects when taken in high doses.

Who might consider taking niacin?

It depends. Niacin has been shown to increase HDL in otherwise healthy people who have normal LDL levels, so your doctor might suggest you take niacin, even if your LDL is relatively normal and you're healthy.

However, don't start taking niacin to raise your HDL without talking to your doctor. Niacin must usually be given at higher doses to raise your HDL cholesterol, and the use of high-dose niacin needs to be monitored by your doctor to make sure it doesn't cause any harmful side effects.

Non-drug approaches are also helpful in boosting HDL. These include: Stop smoking if you are a smoker, eat a healthy diet and exercise. Exercise has been found to be especially effective in increasing your HDL levels. If you try steps like this and your HDL is still too low, your doctor may suggest you take niacin.

Niacin is usually given along with statins or other medications to people who have high LDL levels and low HDL. Check with your doctor before taking niacin with another medication to avoid any dangerous drug interactions. However, in general, niacin seems to work even better when used in combination with statins, drugs used to lower your LDL cholesterol. In fact, when used with some statins, niacin can increase your HDL level by 50 percent or more, as well as reduce LDL levels more than when just statins are used.

You may have heard of some prescription medications that combine statins and niacin, such as Simcor. Although these medications were approved by the Food and Drug Administration, no research studies have yet shown that the combination drugs lower cholesterol more than does taking niacin and a statin separately. If you're interested in taking a combination medication, talk to your doctor.

Are over-the-counter niacin supplements just as good as prescription niacin when it comes to increasing HDL cholesterol?

It's hard to say. Supplements sold over-the-counter (OTC) are not regulated like prescription medications. As a result, the ingredients, formulations and effect of over-the-counter niacin can vary widely. Again, it's necessary to work with your doctor if you are considering taking niacin to avoid harmful side effects.