

# Cholesterol-Lowering Drugs: An Overview

When your doctor says you have high cholesterol, the first steps in treatment are usually a cholesterol-lowering diet (less saturated fat and cholesterol), getting more exercise, and controlling weight. When diet and exercise fail to lower high cholesterol enough, then a cholesterol-lowering medication may be prescribed.

The goal of a cholesterol-lowering treatment is to lower your level of “bad”, low-density lipoprotein (LDL) cholesterol enough to reduce your chance of having heart disease or a heart attack. Another type of cholesterol is the “good”, high-density lipoprotein (HDL) cholesterol. Triglycerides are another form of fat in the blood.



## Medications for Lowering Cholesterol: A Quick Look

| Type of Drug                             | Primary Effect  | How It Works  | Side Effects   | How to Take                            |
|--|---|---|--|--|
| <b>Statins</b>                           | Lowers LDL cholesterol more than other drug types                 | Blocks an enzyme used by liver to make cholesterol                              | Minor/temporary: upset stomach, gas<br>Serious (rare): liver abnormalities, muscle problems            | Once daily                             |
| <b>Bile Acid Resins</b>                  | Lowers LDL cholesterol  | Attaches to cholesterol-containing bile acids in intestines, then is eliminated | Possible constipation, bloating, nausea, gas   | Taken with fluids, once or twice daily |
| <b>Nicotinic Acid</b>                    | Lowers total cholesterol, LDL cholesterol; raises HDL cholesterol | Affects cholesterol process and production in liver                             | Common: flushing<br>Minor: nausea, indigestion, gas<br>Serious: liver problems, gout, high blood sugar | Once daily                             |
| <b>Fibrates</b>                          | Lowers triglycerides  | Complex; varies with drug   | Minor: gastrointestinal symptoms<br>Serious: can increase effect of blood-thinning medications         | Once or twice daily                    |
| <b>Cholesterol Absorption Inhibitors</b> | Lowers LDL cholesterol in combination with statins                | Inhibits intestinal absorption of cholesterol                                   | Similar to statins   | Once daily                             |

## *A Closer Look at Medications*

**Statins**—Statins lower LDL cholesterol more than any other type of drug. In two major studies, statins were shown to produce big decreases in heart attacks and deaths from coronary heart disease (CHD). This was due to the drugs' effect in lowering LDL and total cholesterol. While most people can take statins without any major problems, statins may affect the liver. Your doctor will check this by monitoring your progress with blood tests.

**Bile Acid Resins**—These medications work mainly to lower LDL cholesterol by as much as 20%. Sometimes they're prescribed along with a statin. To avoid side effects like constipation or bloating, bile acid resin tablets must be taken with lots of fluids. The powder form is mixed with water or fruit juice.

**Nicotinic Acid**—Available without a prescription, this vitamin can lower total cholesterol, LDL cholesterol and triglycerides, and raise HDL cholesterol. Caution: anyone using it must be closely monitored by a doctor because of possible side effects. Higher doses increase the risk of liver problems, gout, and high blood sugar. It is not recommended for people with diabetes.

**Fibrates**—The most widely used type, called gemfibrozil, can work well for people with high levels of triglycerides. Reductions generally range from 20% to 50%. However, these drugs are less effective at lowering LDL cholesterol.

**Cholesterol absorption inhibitors**—They lower blood cholesterol by blocking the absorption of cholesterol, including dietary cholesterol, from the intestines. Ezetimibe—the best known of these medications—is typically prescribed in combination with statins.

# Remember

Even if you take a medication for high cholesterol, you still need to follow a healthy lifestyle to reduce your risk of health problems. There are several types of cholesterol medicines. Your doctor will choose the one best for you based on a number of factors.