

When should I have screening tests for cholesterol?

The National Heart, Lung and Blood Institute (NHLBI) recommends every five years starting at age 20 for those at average risk. Patients with certain high-risk conditions (e.g. diabetes, previous heart attack) should be tested every year.

How high is too high?

Total cholesterol should be less than 200. Normally, the total cholesterol is broken down into its components to further determine risk.

The NHLBI distributes guidelines for normal levels of these components. In general, it is best if **triglycerides** are less than 150, **HDL cholesterol** is more than 40 for males and 50 for females and **LDL cholesterol** is less than 100.

What are triglycerides?

Triglycerides are the “fat” in the blood and are very dependent on diet. High triglycerides are a risk factor for heart disease even if cholesterol is normal.

What is the difference between HDL cholesterol and LDL cholesterol?

- **HDL** – “High Density Lipoprotein”. This cholesterol particle is good for you. It helps remove cholesterol from plaques inside of arteries. It is not highly affected by diet but does not go up with exercise.
- **LDL** – “Low Density Lipoprotein”. This cholesterol particle is a more significant risk factor for heart disease than triglycerides or HDL cholesterol. Desired levels vary based on risk.

If your risk of heart disease is...	...your LDL should be less than...
Average	130
High	100

To find out what your risk of heart disease is and what your LDL ought to be, ask your primary care provider.

How can I lower my cholesterol?

- **Low Fat Diet** – Obtain a diet plan from your provider that contains less than 7% of total calories from saturated fat and less than 200 mg of cholesterol per day. Consider reviewing your diet with a nutritionist.
- **Soluble fiber** – Eat more apples, beans, oatmeal and high-fiber grains. Consider taking a methylcellulose fiber supplement (e.g. Citrucel). Fiber slows down the absorption of cholesterol so your liver can handle it more effectively. Try taking a dose of fiber supplement before each meal.
- **Plan stanols and sterols** – These natural substances reduce cholesterol. They are currently available in the US as pills or margarine substitutes, e.g. Benecol. It has to be taken regularly to work.
- **Exercise** – Walking 30 minutes every day helps lower LDL and triglycerides and raise HDL. It also makes your heart more fit, lowers blood pressure and helps with weight loss!
- **Supplements** – **Fish oil supplements** contain eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA). At high doses (5 to 12 grams per day) they can lower triglycerides significantly. **Soy protein** at 25 to 75 g per day can lower LDL cholesterol modestly (3-20%). **Policosanol** may not be effective and little is known about its safety. **Red Yeast Rice** is very similar to the prescription medicines called statins (e.g. Lipitor). It seems similar to lower cholesterol but little is known about its ability to reduce heart attack or stroke.
- **Medication** – There are several effective and safe medications available for patients who do not successfully lower their cholesterol with the above measures. Ask your provider which one is right for you.