



Prevention

To help prevent high cholesterol, you can:

- ✓ **Eat a diet low in salt, saturated fat, trans fat, and sodium.** This includes lean meats, seafood, fat-free or low-fat milk, cheese, yogurt, whole grains, fruits and vegetables.
- ✓ **Limit foods high in saturated fat.** Saturated fats come from animal products (cheese, fatty meats, and dairy desserts) and tropical oils (palm oil).
- ✓ **Maintain a healthy weight.** Excess body fat affects how your body uses cholesterol and slows down your body's ability to remove LDL cholesterol from your blood.
- ✓ **Quit smoking.** Smoking damages your blood vessels and quickens the hardening of the arteries.
- ✓ **Make physical activity a routine.** For adults, the Surgeon General recommends 2 hours and 30 minutes of moderate-intensity exercise, such as brisk walking or bicycling, every week. Children and adolescents should get 1 hour of physical activity every day.
- ✓ **Drink alcohol in moderation.** Men should have no more than two drinks per day, and women should have no more than one.

Treatment

High cholesterol is often treated by a combination of modifying certain lifestyle factors and taking medications prescribed by a physician.

- ✓ **Take your medicines as directed.** Follow your physicians' instructions carefully and ask questions if you do not understand something.
- ✓ **Make healthy lifestyle changes.** Make healthy changes to your lifestyle, such as selecting foods lower in saturated and trans fats and maintain a healthy weight.
- ✓ **Work with your physician.** Discuss your treatment plan regularly with your health care team, and bring a list of questions to your appointments.
- ✓ **Check your cholesterol regularly.** You may need to have your cholesterol levels tested at least once every 4 to 6 years if you do not have heart disease. Some may need to be checked more often or less often.

References:

Centers for Disease Control and Prevention. (2022, October 24). *About cholesterol*. Centers for Disease Control and Prevention. Retrieved February 2, 2023, from <https://www.cdc.gov/cholesterol/about.htm>

Mayo Foundation for Medical Education and Research. (2023, January 11). *High cholesterol*. Mayo Clinic. Retrieved February 2, 2023, from <https://www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/symptoms-causes/syc-20350800>

This brochure is intended to promote healthy habits. It is not intended as a substitute for medical advice or professional care. Before making changes to your diet or exercise, consult your health care provider.



Risks High Cholesterol



Risks, Prevention & Treatment



High Cholesterol

Blood cholesterol is a waxy, fat-like substance made by your liver. Your body needs it to perform essential jobs, like making hormones and digesting fatty foods. With high cholesterol, you develop fatty deposits in your blood vessels. Over time, these deposits grow, which makes it problematic for enough blood to flow through your arteries.

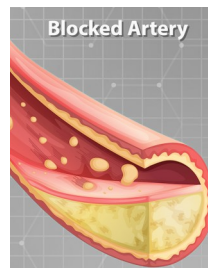
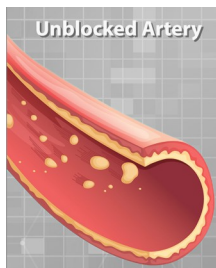
High cholesterol can be inherited, but it is both preventable and treatable as it is frequently the outcome of unhealthy lifestyle choices. A healthy diet, regular exercise and occasionally medication can help reduce high cholesterol.

High cholesterol has no symptoms, which is why getting your cholesterol levels checked is so vital. Getting a blood test done is the only way to identify if you have it.

Blood Cholesterol Numbers

Cholesterol is measured in milligrams per deciliter (mg/dL) and is carried through your blood, attached to proteins. Cholesterol and proteins combined is called a lipoprotein. There are different types of cholesterol, based on what the lipoprotein carries.

- **Low-density lipoprotein (LDL):** The "bad" cholesterol, transports cholesterol particles throughout your body. Having high levels of LDL cholesterol can lead to plaque buildup in your arteries and result in heart disease or stroke.
- **High-density lipoprotein (HDL):** The "good" cholesterol, picks up excess cholesterol and takes it back to your liver. High levels of this can lower the risk of heart disease and stroke.
- **Triglycerides:** A type of fat in your blood that gives your body energy. The combination of high levels of triglycerides with low HDL cholesterol or high LDL cholesterol levels can raise your risk of heart attack, strokes and pancreatitis.
- **Total cholesterol:** The total amount of cholesterol in your blood based on your HDL, LDL, and triglycerides numbers.



Risk Factors

- **Poor diet.** Too much saturated fat or trans fats in your diet can result in unhealthy cholesterol levels.
- **Obesity.** A body mass index (BMI) of 30 or higher poses a greater risk of high cholesterol.
- **Physical Activity.** Exercise helps increase your body's HDL, the "good," cholesterol.
- **Smoking.** Cigarette smoking can lower your body's HDL cholesterol.
- **Alcohol.** Too much alcohol consumption can increase your total cholesterol level.
- **Age.** Unhealthy cholesterol is more common in people over 40. As you age, your liver becomes less able to remove LDL cholesterol.

Complications

High cholesterol levels can cause a dangerous amount of cholesterol and other deposits on the walls of your arteries. These deposits, known as plaque can restrict blood flow through your arteries. This can cause complications, such as:

Chest pain. When the arteries that supply your heart with blood (coronary arteries) are affected, chest pain and other symptoms of coronary artery disease may occur.

Heart attack. If plaques rupture, a blood clot can form. The clot may then block the flow of blood, plugging an artery downstream. If blood flow to part of your heart stops, you will have a heart attack.

Stroke. A stroke can occur when a blood clot blocks blood flow to part of your brain.

Optimal Cholesterol Levels

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|--------------------------|--|
| Total cholesterol | About 150 mg/dL |
| LDL ("bad") cholesterol | About 100 mg/dL |
| HDL ("good") cholesterol | At least 40 mg/dL in men and 50 mg/dL in women |
| Triglycerides | Less than 150 mg/dL |