

Athero Basics

A Deeper Look at Atherosclerosis, Your Risk Factors, and Questions for Your Doctor

Did you know that high levels of LDL-C (also known as “bad” cholesterol) can contribute to plaque buildup in your arteries?

It’s a progressive disease called atherosclerosis, or athero for short. It can start in early adulthood and get worse over time. LDL (bad) cholesterol along with other health factors, such as a family history of early heart disease, diabetes, high blood pressure, smoking, and being overweight, can all play a role in the formation of plaque. Take a few minutes to read through this guide. You’ll find out about how athero progresses and whether it’s something you should be concerned about and find a list of questions you can ask your doctor.

A Deeper Look at Atherosclerosis

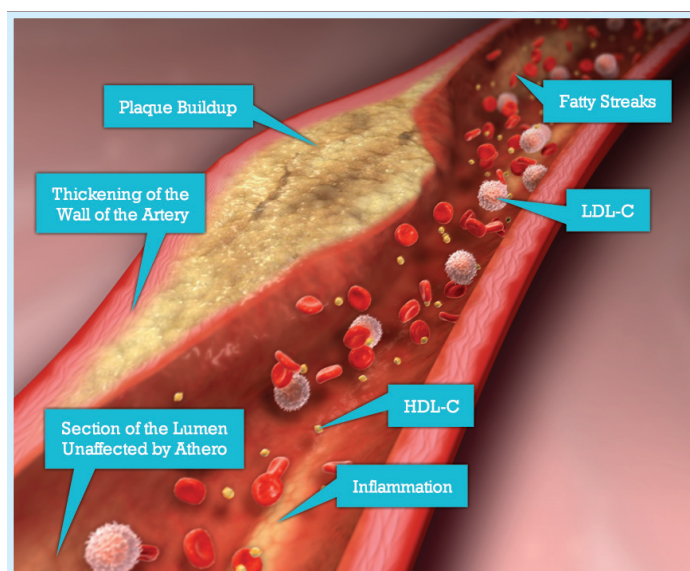
Atherosclerosis is the progressive buildup of plaque in the arteries. Take a look at the illustration to the right to get a better understanding of athero. Then, if you have concerns about athero or have questions about treatment options, talk to your doctor.

Section of the Lumen Unaffected by Atherosclerosis:

Atherosclerosis: The lumen is the hollow space inside the artery. Blood flows through the lumen as it travels through the body.

HDL-C: “HDL-C” stands for high-density lipoprotein cholesterol. It’s also called “good” cholesterol, in part because it helps return cholesterol to the liver, where it can be removed from the body. This helps keep some cholesterol from building up in the arteries.

Fatty Streaks: Often considered the first sign of atherosclerosis, fatty streaks are mostly made up of



cholesterol inside the wall of the artery. By early adulthood, many people have fatty streaks in their arteries.

Inflammation: After LDL-C enters the wall of the artery, it undergoes changes. These changes spark the secretion of substances and the recruitment of cells in the wall of the artery. Inflammation occurs when the substances, cells, and LDL-C interact in the wall of the artery. Foam cells are formed when cells called macrophages consume the LDL-C. This process contributes to the formation of fatty streaks and plaque buildup.

Thickening of the Wall of the Artery: The wall of the artery actually becomes thicker during the progression of atherosclerosis. This thickening is due to plaque buildup within the artery wall over time.

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Plaque Buildup: Also called atherosclerosis, fatty streaks may build into plaque over time, and plaque may continue to build within the wall of the arteries.

LDL-C: “LDL-C” stands for low-density lipoprotein cholesterol. It’s also called “bad” cholesterol, in part because it is one of the major building blocks of atherosclerosis. When high levels of LDL-C exist in the bloodstream, cholesterol may infiltrate and build up in the wall of the artery.

Should You Be Concerned?

While LDL cholesterol is a major factor, here are a few other health factors that may also contribute to the progression of atherosclerosis.

- A family history of early heart disease
- Diabetes
- High blood pressure
- Cigarette smoking
- Overweight/obesity

If you have high cholesterol and any of the factors listed above, be sure to talk to your doctor about steps you can take to manage your cholesterol.

Key Questions for Your Doctor

Having an ongoing dialogue with your doctor is a good way to understand how high cholesterol and other health factors can contribute to the progression of atherosclerosis. If you have questions, don’t be afraid to ask. Here are a few questions you might want to ask your doctor.

- What are some of the potential dangers of atherosclerosis?
- How can my high cholesterol contribute to the progression of atherosclerosis?
- Do my health factors increase my risk for atherosclerosis?

- Can you tell me more about bruits (pronounced brew-ees), the ankle/brachial index, and how they are used to indicate atherosclerosis?

Living a Healthy Lifestyle Can Help

Making the right diet choices now can help you steer your cholesterol in the right direction tomorrow. And exercise is also an important part of any plan to lower cholesterol. If your cholesterol is too high, your doctor or nutritionist may recommend the Therapeutic Lifestyle Changes (TLC) diet, developed by the National Institutes of Health. The TLC diet is a low-saturated fat, low-cholesterol eating plan that recommends

- Less than 7% of calories come from saturated fat
- Dietary cholesterol be limited to less than 200 mg per day
- You consume only enough calories to maintain a desirable weight and to avoid weight gain

As for getting in shape, it doesn’t mean training for a marathon. Try to get at least 30 minutes of moderate-intensity activity, most days, if not all days of the week. First, talk to your doctor before beginning any exercise program. Then try walking around the block, playing with the kids or grandkids, or dancing to your favorite music. It may do more than just help you manage your cholesterol levels — it may also boost your self-esteem.

While exercise and diet should be a part of every cholesterol management plan, sometimes they’re just not enough. That’s when it may be time to make an appointment with your doctor to find out if a cholesterol-lowering medication might be right for you.