Understanding Recommended LDL-C and Lp(a) Measurement Intervals and Management



What is Cholesterol?

Cholesterol is a type of fat normally found in the bloodstream. It plays an important role in helping your body make cells, hormones, and vitamins, promoting normal growth and development.

There are two types of cholesterol that can cause issues for your heart when their levels rise: LDL-C and Lp(a).

What is LDL Cholesterol (LDL-C)?

Also known as 'bad cholesterol', LDL-C contributes to plaque (build-up) in your arteries. The plaque slows the flow of blood and oxygen and can eventually lead to heart attacks, strokes, and other cardiovascular issues.

LDL-C can be measured in a lipid panel, a blood test of cholesterol and fats levels. A lipid panel can be done when a patient is fasting or non-fasting, although fasting is often preferred.

When Should LDL-C Be Measured?



Children

At least once in all children between the ages of 9-11 with a lipid panel.

Children with a family history of very high LDL-C or early cardiovascular disease (CVD) should have a lipid test as early as age 2.2



Young Adults and Adults

Once in all young adults ages 17–21 and repeated at least every five years in healthy adults aged 21 and older. People at increased risk for heart disease, stroke, or other CVD risk should have their LDL-C measured at least annually.²



For Those Taking Cholesterol Medicine

4–12 weeks after starting cholesterol medicine or changing the dose of cholesterol medicine and again every 3–12 months to make sure the medicine is being taken and is working.²

What Should My LDL-C Level Be?

The target LDL-C level is <100 mg/dL for all individuals, and even lower goals are recommended for those at higher risk of heart disease known as atherosclerotic cardiovascular disease (ASCVD). ASCVD (plaque build-up and/or rupture) is the most common and deadliest form of heart disease.

You and your clinician should discuss your level of risk to determine your LDL-C objective.

Level of ASCVD Risk Determines the Individual LDL-C Objective



How Do I Lower my LDL-C?

A heart-healthy diet with fewer bad fats and more fiber, along with being active, can help reduce your LDL-C, but may not be enough. If you need to lower your LDL-C further, medications can help. Statins are usually the first medicine used to lower LDL-C. If statins are not right for you, there are other non-statin medicines, including ezetimibe, PCSK9 inhibitors, and bempedoic acid.²

What is Lipoprotein(a)?

Lipoprotein (a) or "L-p-little a" (Lp(a)) is an independent risk factor for heart disease and stroke. Elevated Lp(a) is a genetic condition inherited from a parent. The level of Lp(a) in your blood is established in childhood and remains relatively constant throughout your life. It increases your risk for diseases such as heart attacks, strokes, clotting of blood vessels, hardening of heart valves, and heart failure. ^{5,6} The level of Lp(a) in your blood can be determined with a blood test, at the same time as your regular lipid panel. It is not necessary to fast before a blood test for Lp(a).

When Should Lp(a) Be Measured?



About 20% of Americans have high Lp(a), so adults (18 and older) should have their Lp(a) levels measured at least once in their lifetime.⁶ Since it is inherited, children over two years may also have elevated Lp(a) and could be tested. Individuals who have an elevated level of Lp(a) should encourage close relatives to also get screened to identify their own risk, including children 2 and older. By identifying people at a young age who may be at risk, individuals with very high levels of Lp(a) can take steps to help avoid heart disease in the future.

What Does the Lp(a) Level Mean?

Lp(a) is measured is nanomoles per liter (nmol/L) or in milligrams per deciliter (mg/dL).

A level of more 125 nmol/L or 50 mg/dL is considered "high risk".7

Lp(a) Concentration and Associated Risk Levels

Low Risk <75 nmol/L (30 mg/dL) Intermediate Risk
75-125 nmol/L
(30-50 mg/dL)

High Risk ≥125 nmol/L (50 mg/dL)

How Do I Lower my Lp(a)?

People with elevated Lp(a) should address risk factors under their control—like practicing a heart-healthy diet, exercising, and avoiding smoking. High LDL-C and high Lp(a) seem to work together to worsen the risk, so high-risk individuals should also talk to their clinician about ways to lower their LDL-C and their risk of heart disease and clotting. Although not approved by the FDA to treat elevated Lp(a), PSCK9 inhibitors can lower Lp(a) levels a little but it is not clear if that lowers disease risk.

Lipoprotein apheresis is a process that removes lipoprotein(a) from the blood.³ Currently, lipoprotein apheresis is the only FDA-approved treatment option for lowering Lp(a). New medications specifically for lowering elevated Lp(a) are currently in development.

About Take Health to Heart

Take Health to Heart is an education and advocacy initiative of the Foundation of the National Lipid Association and the National Medical Association. Take Health to Heart is made possible through a sponsorship from Novartis Pharmaceuticals Corporation. Learn more at <u>TakeHealthtoHeart.Org</u>.

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