

## Lipoprotein(a) – What it is and how it might affect your heart health

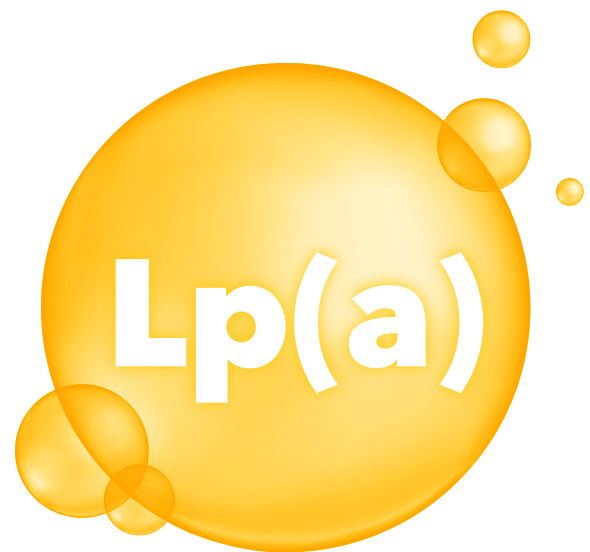
You've probably heard of low-density lipoprotein (LDL) cholesterol - the "bad" cholesterol. But what about lipoprotein(a) - also called Lp(a) or "L-P-little-A"?

Though not as well known or talked about, Lp(a) is a type of lipid particle called a lipoprotein. Lipoproteins carry cholesterol through the blood.

Much like high LDL cholesterol raises your heart disease risk, high Lp(a) is also linked to:

- A buildup of fat and cholesterol, called plaque, which can clog the arteries that supply blood to your heart (**coronary artery disease**), eventually slowing or blocking normal blood flow
- **Heart attack**
- **Stroke**
- **Peripheral artery disease (PAD)** - when plaque builds up in the walls of the arteries in your limbs, most often the legs, narrowing blood flow
- **Aortic valve disease** - the aortic valve is one of four valves, or doorways, in the heart that keep blood flowing through the heart in one direction to the body and brain

Lp(a) can also promote inflammation and blood clots, which can be harmful.



### By the Numbers



**1 in 5 adults**  
have an Lp(a) level that is too high



**1 in 3 people with  
Familial  
Hypercholesterolemia**  
have high Lp(a)

**2-4x**  
How much high Lp(a) may raise  
one's chance of a heart attack  
or stroke

## Key things to know about Lp(a)



**It's inherited or passed down in families.** In most cases, your genes determine how much Lp(a) you make. The amount you have in your body usually stays the same starting in childhood.



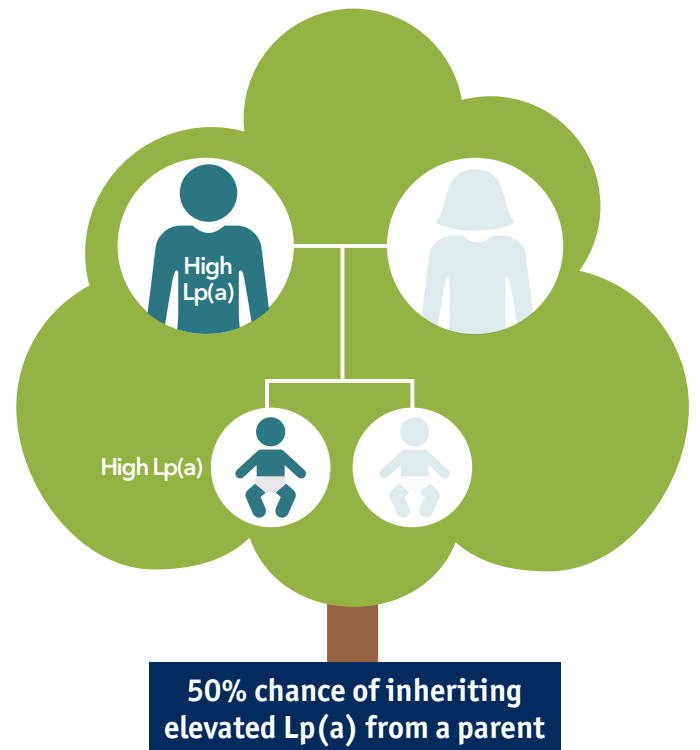
**It's unrelated to what you eat or other lifestyle choices.** Lp(a) levels generally don't change much over time.



**It appears to be a stronger risk factor than LDL cholesterol** for heart disease and stroke. It can still be harmful, even if other lipid measures are normal or healthy.

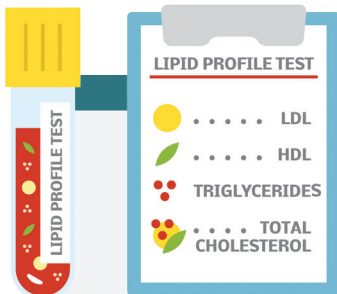


**It's not routinely tested for yet.** So it's important to ask whether knowing your Lp(a) would help give you and your care team more information about your future heart health and ways to protect it. Researchers are quickly learning more.



## Knowing your Lp(a) number

Lp(a) isn't included as part of your routine cholesterol or lipid panel - the one that checks your total cholesterol, HDL cholesterol, LDL cholesterol, and triglycerides. It's a separate, add-on blood test. Because Lp(a) often stays the same, most people only need to have it checked once.



A **lipid panel** is routinely done as part of an annual physical and, over time, to help monitor your risk of heart disease. An **Lp(a) test** is separate. It measures the amount of Lp(a) in your blood.

Knowing your Lp(a) can give you and your health care team more information about the possible impact of cholesterol on your body and how to lower your chance of heart attack or stroke.

**Knowing your Lp(a) level will give you and your health care team one more piece of information to help you better understand your cardiovascular risk** - how likely you are to develop heart disease or have a heart attack or stroke.

This is especially important if:

- Your LDL cholesterol is still high, even though you take medicine to lower it.
- You've had a procedure to open blocked arteries, a heart attack, or stroke at a young age.
- You have an inherited condition called familial hypercholesterolemia, or FH, which causes dangerously high levels of LDL cholesterol beginning early in life.
- You have a close family member (parent, child, brother or sister) who at an early age had heart disease, a heart attack, or stroke (before age 55 for males, and 65 for females).

Black people are more likely to have higher levels of Lp(a) than other racial or ethnic groups.

## Understanding the test results

Lp(a) is measured and reported in one of two ways - either in mass units (mg/dL) or in molar units (nmol/L), depending on the lab you use. High Lp(a) is defined as greater than 50 mg/dL **OR** 125 nmol/L.

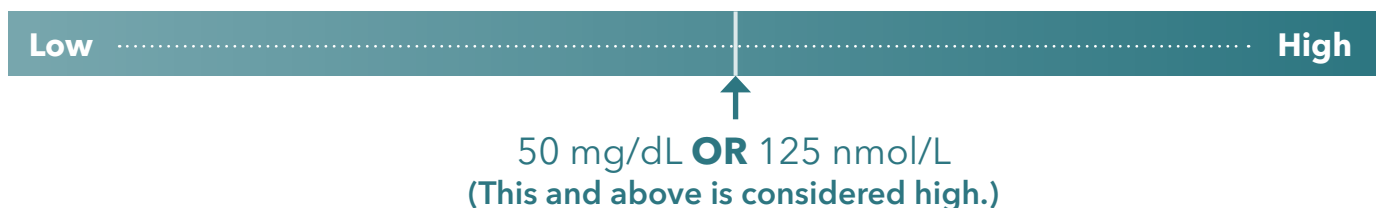
Although Lp(a) levels tend to be roughly similar over time, we are learning that certain things can influence Lp(a) and affect the results. Examples include:

- Menopause
- Kidney disease
- Certain medications, such as estrogen supplements, hormone replacement or fertility treatments
- Thyroid disease
- PCSK9 inhibitors



In these cases, repeat Lp(a) testing may be useful. Ask your health care team.

**If Lp(a) is elevated**, you may need more testing to further understand your risk for heart disease, heart attack or stroke. For example, a coronary artery calcium (CAC) test may be ordered to measure the amount of calcium in the heart's arteries.

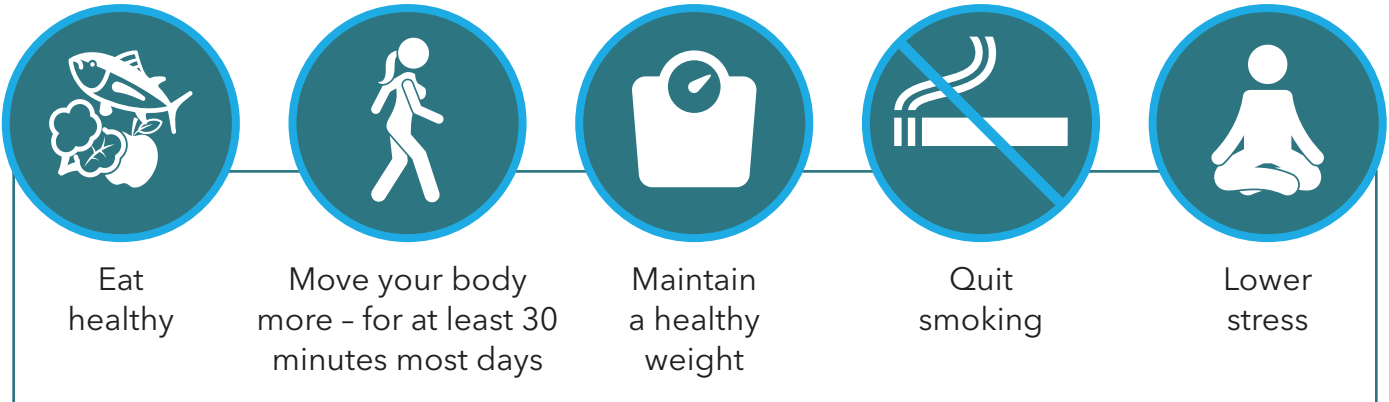


## Treating high Lp(a)

Large studies are now underway to test if therapies that lower Lp(a) can reduce cardiovascular events.

While there aren't any treatments available yet, knowing if your Lp(a) is high is important. It can help you team up with your primary care provider and cardiologist to:

### 1. Step up efforts to follow and stick with a healthy lifestyle.



### 2. Take stronger actions to control other conditions that make heart disease more likely.

For example, managing high blood pressure, high LDL cholesterol, and diabetes.

### 3. Talk with family members who might also benefit from getting their Lp(a) checked.

## Questions to ask

- If my Lp(a) is normal, do I need to get tested again?
- What does my Lp(a) level mean for my chance or risk of heart attack, stroke or other problems?
- How might knowing my Lp(a) affect my other treatments (for example, LDL cholesterol, diabetes)?
- How can I do more to prevent having a cardiovascular event? Where can I get more guidance on physical activity and healthier meal planning?
- When are treatments to lower Lp(a) expected?
- Is having high Lp(a) more harmful than high LDL cholesterol?
- What should I tell my family about Lp(a)?
- Who would benefit from an Lp(a) test?
- What other tests do I need to get if my Lp(a) is elevated?

