

EMPLOYEE HEALTH SOLUTIONS

CHOLESTEROL

EDUCATE. MOTIVATE. REWARD

MARCH 2022

Understanding Cholesterol

What is Cholesterol?

Cholesterol is a microscopic and waxy substance found in animal food products such as milk, meats, and eggs. We ingest cholesterol through the foods we eat and produce it ourselves in the liver. Cholesterol is essential to producing sex hormones and human tissue. It also assists with bile (helps us digest and emulsify dietary fat) production in the liver. Cholesterol travels through the bloodstream attached to larger particles known as lipoproteins. There are two types of lipoproteins:



High-Density Lipoprotein (HDL) is also known as **GOOD** cholesterol. It earns this title because it helps to deliver cholesterol from the bloodstream and artery walls to the liver for processing, breakdown, and disposal. Essentially, HDL prevents the build-up of cholesterol on our arterial walls.

Measuring Cholesterol Levels*

LDL Cholesterol (in milligrams/deciliter, or mg/dl)

< 100	optimal
100-129	near or above optimal
130-159	borderline high
160-189	high

HDL Cholesterol (mg/dl)

< 35	low
35-59	desirable
≥ 60	optimal

Total Cholesterol (mg/dl)

< 200	desirable
200-239	borderline high
≥ 240	high

Low-Density Lipoprotein (LDL) is also known as **BAD** cholesterol. It transports cholesterol to various body cells and deposits excess cholesterol on our artery walls. This in turn can lead to build-up of cholesterol on our arterial walls, leading to risk of coronary heart disease.

You can lower your risk of high cholesterol by changing lifestyle habits such as exercising regularly and dietary adjustments.

Causes and Symptoms

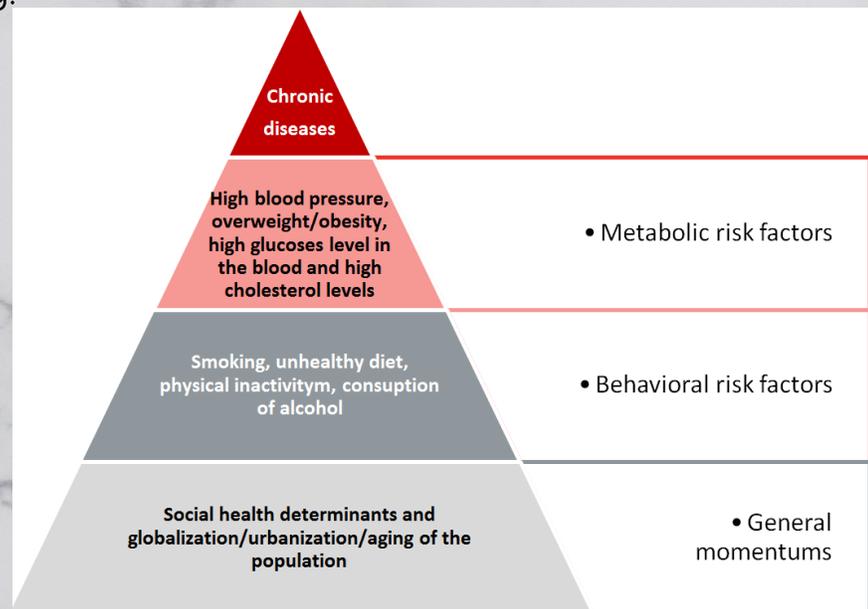


There are various **risk factors** that can contribute to a increased LDL including:

- Age
- Gender (males are at greater risk)
- Ethnicity
- Poor diet(↑ saturated & trans fats)
- Alcohol consumption
- Smoking
- Overweight/obesity
- Lack of physical activity
- Family history/genetics
- Diabetes, kidney disease, hypothyroidism, and other health complications

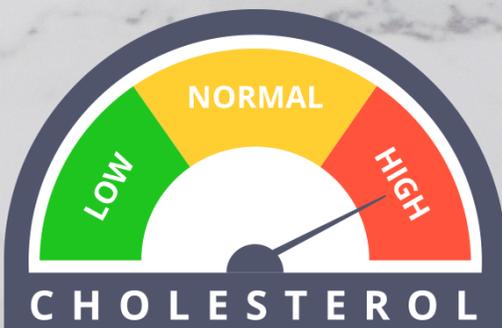
What Causes Elevated Levels of LDL?

Problematically high levels of cholesterol is a condition that usually develops over a prolonged period. This "bad" cholesterol can be increased through poor lifestyle habits, unhealthy nutritional choices, and lack of physical activity. This only means that it is both **preventable** and **treatable**!



Symptoms

High cholesterol usually does not cause any symptoms which makes it dangerous. Blood work measuring your LDL and HDL levels is the most effective method in detecting underlying issues. It is recommended to get blood tests between 17-20 years old and every 4-6 years after this point.



If a symptom is to occur, most cases require **emergency attention**. A **stroke, heart attack, chest pain, high blood pressure, peripheral vascular disease, and chronic kidney disease** are all examples of serious complications that may arise as a result of the prolonged effects of high cholesterol.

Resources

- <https://www.healthline.com/health/high-cholesterol-symptoms>
- <https://www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/symptoms-causes/syc-20350800>
- <https://www.health.harvard.edu/heart-health/11-foods-that-lower-cholesterol>
- <https://www.heartandstroke.ca/articles/eat-to-lower-your-cholesterol>
- <https://medlineplus.gov/howtolowercholesterolwithdiet.html>
- <https://www.tupperwarebrands.com.my/naturcare-app/>
- <http://www.healthactionlobby.ca/build-a-healthy-lifestyle-complete-guide-and-tips/>
- <ttp://apsroot.blogspot.com/2014/02/riskfactors-everybodyhas-some-risk-of.html>
- Mann, S., Beedie, C., & Jimenez, A. (2014). Differential effects of aerobic exercise, resistance training and combined exercise modalities on cholesterol and the lipid profile: review, synthesis and recommendations. *Sports medicine* (Auckland, N.Z.), 44(2), 211-221. <https://doi.org/10.1007/s40279-013-0110-5>