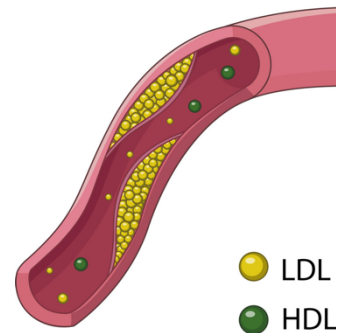


# Cholesterol and Triglycerides

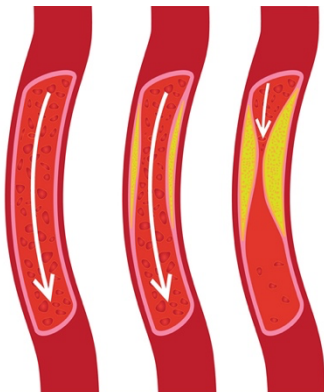
[gethearthealthy.ca/cholesterol-triglycerides](http://gethearthealthy.ca/cholesterol-triglycerides)

In this section you will learn:

- What cholesterol and triglycerides are
  - The effects of elevated cholesterol and triglycerides levels
  - How to manage your cholesterol and triglyceride levels
- Cholesterol and triglycerides are types of fat within the blood.
  - The body converts excess calories into triglycerides, which are stored as fat.
  - 80 per cent of cholesterol is produced in the liver, and 20 per cent comes from diet.
  - There are two types of cholesterol:
    - Low density lipoprotein (LDL): LDL is known as “bad” cholesterol, as it can build up in your arteries, making the arteries hard and narrow, impacting blood flow.
    - High density lipoprotein (HDL): HDL is known as “good” cholesterol, as it carries LDL back to the liver, to be recycled or removed from the body.



## Effects of Elevated Cholesterol and Triglyceride Levels



- High LDL cholesterol and triglyceride levels can cause plaque build-up in the arteries. This is known as atherosclerosis, where the arteries narrow and harden, impacting blood flow.
- Plaque can build up in any artery in the body (heart, legs, eyes, kidney, etc.), contributing to conditions such as angina, coronary artery disease, peripheral artery disease, chronic kidney disease, and gallstones.
- Plaque build-up can develop into a total blockage, which can lead to heart attack or stroke.

High blood pressure and high cholesterol levels are linked. When the arteries narrow and harden due to plaque build-up, the heart has to work harder and exert more pressure against the artery walls in order to pump blood through them.

## Managing Cholesterol and Triglyceride Levels

**Regular physical activity and exercise:** Engaging in regular physical activity and exercise increases HDL levels, and decreases LDL and triglyceride levels. Each week, aim to complete 150 to 300 minutes of cardio-based exercise, and at least two days of resistance training.

**Healthy eating:** Limit your intake of saturated and trans fats, as these can increase LDL levels. Examples include red meat, poultry with skin, butter, and packaged foods containing partially hydrogenated vegetable oil. Whole grains that are rich in fibre, such as whole wheat bread, oats, brown rice, and quinoa, can reduce LDL levels.

Saturated fats are usually solid at room temperature.

**Reduce smoke exposure:** Exposure to smoke decreases HDL levels, and increases LDL and triglyceride levels. Smoking also damages artery walls, promoting plaque build-up. Develop a plan to quit, seeking advice as necessary.

**Limit alcohol intake:** Alcohol can increase your triglyceride levels, as alcohol is high in calories that contain no nutritional value. These excess calories are converted to triglycerides and stored as fat. Ensure you stay within the recommended guidelines if consuming alcohol.

**Medications:** Statins are a commonly prescribed class of medication, used to manage cholesterol and triglyceride levels. Take your medications as prescribed.

## Know Your Target Values

When you have bloodwork done, always ask for a copy. It is important to know your cholesterol and triglyceride level values, and to monitor them over time.

	General Guidelines	Write in your most recent values here:
Total Cholesterol	<4.5 mmol/L	
LDL	<2.0 mmol/L	
HDL	Males: >1 mmol/L Females: >1.3 mmol/L	
Triglycerides	<1.8 mmol/L	

Prior to menopause, females have increased estrogen levels, which increases HDL levels. Post menopause, estrogen levels decrease, negatively impacting HDL levels. Therefore, having a higher HDL target for females helps to combat the increased risk that occurs post menopause.

Notes: