Atherosclerosis is a serious condition where cholesterol and other lipids can build up, as deposits, against the walls of your arteries, reduce your blood flow, and lead to serious complications such as these:

- Chest pain and other symptoms of coronary heart disease
- Heart attack when a clot, formed by ruptured deposits, blocks the blood flow to a part of your heart
- Stroke when a clot blocks the blood flow to a part of your brain

The Saudi Burden of Disease 2010 study showed that hypercholesterolemia was the 11th ranked risk factor for disability-adjusted life years in the Kingdom of Saudi Arabia in 2010. High cholesterol accounted for 2.2% and 1.6% of DALYs for males and females, respectively. It is strongly associated with high risks of chronic diseases including atherosclerosis.

Recent data from the Saudi Health Interview Survey (SHIS) show high rates of elevated total cholesterol in the Kingdom. This large household survey showed that the prevalence of hypercholesterolemia, defined as a cholesterol level greater than 6.2 mmol/L, was 9.5% for males and 7.3% for females in 2013. The prevalence increased by age and was highest among those aged 65 or older (28.7%). Also, the prevalence of hypercholesterolemia varied by region. The highest prevalence was observed in Al Tabouk while the lowest was observed in Al Kasseem.

**Key facts about cholesterol:**

- Cholesterol is a fatty substance necessary for much functionality in the body. However, excess cholesterol in the blood causes deposits in our arteries.

- There are no symptoms of high cholesterol. Many people have never had their cholesterol checked, so they don't know they're at risk. A simple blood called a lipoprotein profile test can tell you your cholesterol level. The MOH recommends that healthy adults get their cholesterol levels checked every five years.

- Lipoproteins, such as Low-Density Lipoproteins (LDL) and High-Density Lipoproteins (HDL), transport cholesterol in the blood.
  1. LDL: Most of our cholesterol is made of LDL cholesterol. When LDL cholesterol builds up in the arteries it causes heart problems. Thus, it is known as "bad" cholesterol.
  2. HDL: HDL cholesterol transports cholesterol through our blood to the liver where it's flushed away. The more HDL we have, the lower our risk for heart problems such as heart attack or stroke. Thus, HDL is known as "good" cholesterol.

- If you are diagnosed with high cholesterol, your doctor can help you take control of your condition either through medication or through a lifestyle change. We recommend you ask your doctor about ways to reduce your risk for heart disease.

- The good news is that there are steps you can take to prevent high cholesterol—or to reduce your levels if they are high.

Take control of your cholesterol and keep your heart healthy

- Get a blood test
- Eat a healthy diet
- Maintain a healthy weight
- Exercise regularly
- Don't smoke
- Treat high cholesterol


Desirable cholesterol levels:

<table>
<thead>
<tr>
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<th>Desirable cholesterol levels</th>
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<tbody>
<tr>
<td><strong>Total cholesterol</strong></td>
<td>Less than 5.18 mmol/dL</td>
</tr>
<tr>
<td><strong>LDL (&quot;bad&quot; cholesterol)</strong></td>
<td>Less than 3.35 mmol/dL</td>
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<tr>
<td><strong>HDL (&quot;good&quot; cholesterol)</strong></td>
<td>For Men 1.0 mmol/dL or higher</td>
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<tr>
<td></td>
<td>For Women 1.3 mmol/dL or higher</td>
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<tr>
<td><strong>Triglycerides</strong></td>
<td>Less than 1.7 mmol/dL</td>
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