AL-MUSTAQBAL UNIVERSITY

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Biochemistry

(lipid profile)

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Lipids:

Lipids is the term used to describe the fats in the body. Lipids may come from the diet but the body is also capable of making its own lipids. Lipids are transported in the blood in lipoproteins.

lipid profile:

A complete cholesterol test (called a lipid panel or lipid profile) is a blood test can measure the amount of cholesterol and triglycerides in your blood. A cholesterol test can help determine your risk of the buildup of fatty deposits (plaques) in your arteries that can lead to narrowed or blocked arteries throughout your body (atherosclerosis). And significant risk factor for coronary artery disease.

The tests of lipid profile:

A complete cholesterol test is done to determine whether your cholesterol is high and to estimate your risk of heart attacks and other forms of heart disease and diseases of the blood vessels. A complete cholesterol test includes the calculation of four types of fats in your blood:

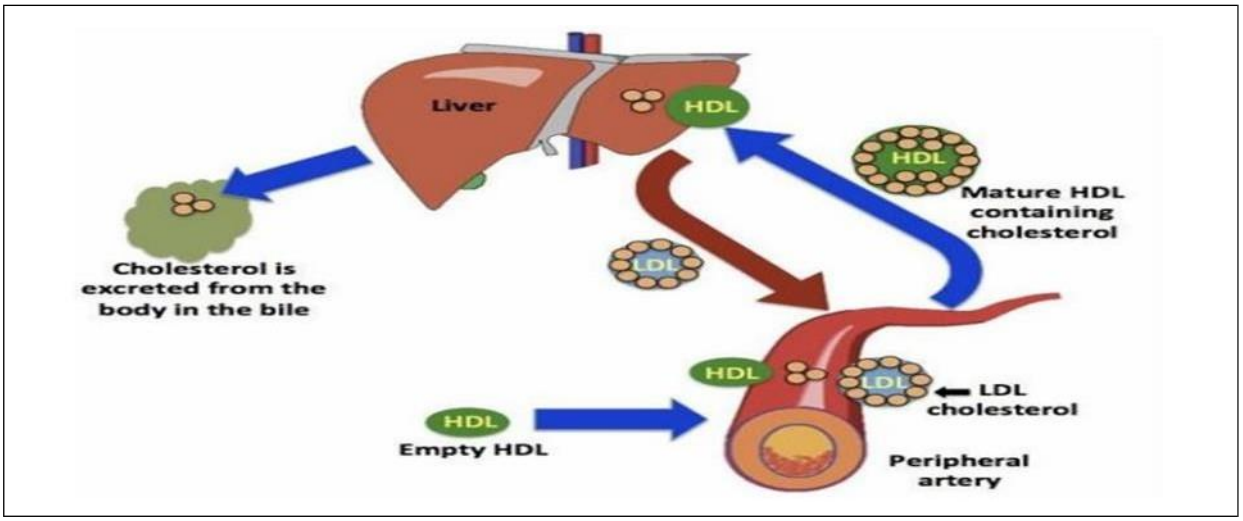
1-Total cholesterol. This is a sum of your blood's cholesterol content.

2- Low-density lipoprotein (LDL) cholesterol. This is called the "bad" cholesterol. Too much of it in your blood causes the buildup of fatty deposits (plaques) in your arteries (atherosclerosis), which reduces blood flow. These plaques sometimes rupture and can lead to a heart attack or stroke.

3- High-density lipoprotein (HDL) cholesterol. This is called the "good" cholesterol because it helps carry away LDL cholesterol, thus keeping arteries open and your blood flowing more freely.

4-Triglycerides. Triglycerides are a type of fat in the blood. When you eat, your body converts calories it doesn't need into triglycerides, which are stored in fat cells. High triglyceride levels are associated with several factors, including being overweight, eating too many

sweets or drinking too much alcohol, smoking, being sedentary, or having diabetes with elevated blood sugar levels.



Why do I need a lipid profile blood test?

There are several reasons why you may need a lipid profile blood test. use lipid profile often for screen and monitoring purposes If you have one or more risk factors for cardiovascular disease to try to catch elevated cholesterol levels before you have symptoms. Risk factors for cardiovascular disease include:

- Being over age 45 and over 50 if you're a women

- Having a high cholesterol result on a previous test.

- Smoking cigarettes.

- Having obesity.

- Not getting enough physical activity.

- Having high blood pressure (hypertension).

- Having diabetes or prediabetes.

- Having a first-degree relative, such as a parent or sibling, who developed heart disease at an early age (under 55 in males and under 65 in females).

- Children who have obesity or diabetes may need to be screened for high cholesterol more often.

How to prepare for a cholesterol and lipid blood test

You will usually need to fast for 8 to 12 hours before having this blood test.

This means not eating any food and drinking only water. Most people have the test in the morning, so it doesn't interfere with their meals.

LIPID PROFILE

	DESIRABLE	BORDERLINE	HIGH RISK
Cholesterol	<200 mg/dl	200-239 mg/dl	240 mg/dl
Triglycerides	<150 mg/dl	150-199 mg/dl	200-499 mg/dl
HDL cholesterol	60 mg/dl	35-45 mg/dl	<35 mg/dl
LDL cholesterol	60-130 mg/dl	130-159 mg/dl	160-189 mg/dl
Cholesterol/ HDL ratio	4.0	5.0	6.0