

What you need to know about Dyslipidaemia

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♠ WHAT ARE LIPIDS?

Lipids are fatty substances in the blood, they are the building blocks of cells and provide energy to them.

Lipids include:

- LDL cholesterol, which is bad because it can cause plaques to form in the blood vessels.
- HDL cholesterol, which is good because it can help to remove LDL from the blood.
- Triglycerides, which result when calories are not burned right away and are stored in fat cells.

Lipids can build up in and clog blood vessels, which contributes to heart attack, stroke, or other forms of Cardiovascular disease.

WHAT IS DYSLIPIDAEMIA? (or 'Hyperlipidaemia')

Dyslipidaemia is sometimes called high cholesterol however it describes an abnormal amount of lipids (e.g. triglycerides, cholesterol and/or fat phospholipids) in the blood.

Hyperlipidaemia is when your blood has too many lipids (or fats), such as cholesterol and triglycerides and is most common.

WHAT CAUSES DYSLIPIDAEMIA?

Dyslipidaemia may be caused by primary (inherited) or secondary (acquired) factors. Secondary causes are most common and include:

- Sedentary lifestyle with diet high in saturated fats, cholesterol and trans fats
- Obesity
- Diabetes mellitus
- Excessive alcohol intake
- Liver disease
- Chronic kidney disease
- Drugs
- Smoking

SYMPTOMS TO LOOK OUT FOR?

Unless it is severe, most people with dyslipidaemia are unaware that they have it. A doctor will usually diagnose dyslipidaemia during a routine blood test or a test for another condition.

Severe or untreated dyslipidaemia can lead to other conditions, including blockage of one or more arteries that supply blood to the heart known as coronary artery disease (CAD), the brain and limbs.

Common symptoms include:

- Leg pain, especially when walking or standing.
- Chest pain, especially with exertion.
- Tightness or pressure in the chest and shortness of breath.
- Pain, tightness, and pressure in the neck, jaw, shoulders, and back.
- Indigestion and heartburn.
- Sleep problems and daytime exhaustion.
- Dizziness.
- Heart palpitations.
- Cold sweats.
- Vomiting and nausea.
- Swelling in the legs, ankles, feet, stomach, and veins of the neck.

WHEN TO SEE A DOCTOR?

See a doctor if you have the symptoms listed and especially if accompanied by chest pain.

Have a doctor check your cholesterol if you have a family history of high cholesterol, heart disease or other risk factors, such as smoking, diabetes or high blood pressure.



WHAT YOUR DOCTOR WILL DO?

Your doctor will check your blood pressure and body mass index (BMI) and request a fasting lipid profile test.

If fasting is difficult or you are a diabetic on insulin, a non-fasting test may be conducted.

Your doctor will make specific recommendations for you based on the results of your lipid profile. These will include lifestyle changes, special healthy diets, and medication.

If primary dyslipidaemia is suspected, you may be referred to a specialist who will perform certain investigations for you.



ADVICE FOR A HEALTHY LIFESTYLE

- Reduce excess body weight.
- Increase physical activity.
- Reduce consumption of foods high in saturated fat and trans-fat and refined sugars.
- Eat more fruits, vegetables, lean proteins, and whole grains.
- Reduce alcohol intake.
- Stop smoking (ask your doctor about 'stop smoking' services).



TREATMENT OPTIONS

The most commonly used medication to treat dyslipidaemia are Statins.

Statins help reduce LDL levels by interfering with cholesterol production in the liver. Do not use any of the statins if you:

- Are pregnant or breastfeeding.
- Have active liver disease.
- Have problems with your muscles.

Ezetimibe is a non-statin drug that may be prescribed in addition to a statin or in place of a statin if you are intolerant to statin treatment.

Fibrates are another non-statin drug that may be prescribed if you are intolerant to statins.

Side effects for Statins and Ezetimibe to be aware of include:

- Abdominal pain.
- Diarrhoea and/or flatulence.
- Fatigue.
- Headache.
- Muscle pains.



Pre-menopausal women who are not using contraception and who have diabetes mellitus, should not be prescribed any medications for lipids.

ALL MEDICATIONS FOR LIPIDS SHOULD BE DISCONTINUED 3 MONTHS BEFORE WOMEN TRY TO CONCEIVE AND CAN BE RESTARTED ONCE BREASTFEEDING IS STOPPED.



You will be referred to a Specialist if you:

- Have suspected Primary Dyslipidaemia.
- Are at a high risk of stroke or heart disease.
- Have very high triglyceride levels due to the risk of pancreatitis.
- Did not respond to initial statin treatment due to the type and severity of your dyslipidaemia or intolerance to first-line treatments.
- Require collaborative management with a specialist.
- Require more advanced tests such as apolipoproteins, enzyme testing, DNA genotyping, or more detailed vascular assessment.



- Try to maintain a healthy weight by following a healthy diet.
- Eat at least 5 portions of fruit and vegetables per day. Legumes other than soy have been shown to decrease total and LDL cholesterol.
- Eat at least 2 portions of fish per week, including a portion of oily fish.
 Pregnant women should limit their intake of oily fish to two portions a week.
- If you have a family history of high cholesterol, be proactive about leading a healthy lifestyle.
- Exercise at least 30 min, 5 days a week but seek medical advice before starting an exercise plan.
- Men and women should avoid alcohol consumption as much as



♣ FOLLOW UP

Your doctor or specialist may schedule follow-up appointments or assessments as follows:

- Review of your liver function and lipid profile within 3 months of starting statin treatments.
- Regular clinic visits every 4-12 weeks to monitor adherence to medication, diet and lifestyle measures until target LDL reductions are achieved.
- Thereafter 6-12 monthly reviews of lipid levels may be done.



Additional information on diagnosis and management of Dyslipidaemia can be found in the National Clinical Guideline published by The Ministry of Public Health (MOPH) Qatar.

The Guideline is available for public on MOPH website: www.moph.gov.ga