
Liver disease - fatty liver disease

Fatty liver disease is a common liver complaint in Western countries. It affects about one in every 10 people. It is caused by a build-up of fats in the liver, which replace healthy tissue and trigger enlargement of the rest of the liver cells.

In some cases, fatty liver disease can damage the organ and lead to serious complications such as cirrhosis. Fatty liver disease is also known as steatosis. A fatty liver that is associated with inflammation is called steatohepatitis.

The liver

The liver, located on the upper-right side of the abdomen, is the largest internal organ of the human body. The main functions of the liver are to remove toxins and process food nutrients. Blood from the digestive system filters through the liver before travelling anywhere else in the body.

Symptoms

In most cases, fatty liver disease does not cause any symptoms. Symptoms only tend to develop once fats account for about 10 per cent of the liver's weight. The most common symptom is mild abdominal discomfort. An inflamed liver may cause symptoms including fatigue, jaundice (yellowing of the eyes and skin) and persistent fever.

Common risk factors

Some people are at higher risk of fatty liver disease. Known risk factors include:

- Obesity (about two in every 10 obese people have the condition)
- High fat diet, especially diets that are high in saturated fats
- Lack of exercise
- High alcohol intake
- Diabetes
- Insulin resistance.

These risk factors are not conclusive. For example, a severely obese person may not have fatty liver disease, while a slim person may. The exact causes of fatty liver are unknown.

Uncommon risk factors

Rarely, other factors can cause fatty liver disease. These may include:

- Pregnancy
- Some prescription drugs such as corticosteroids or tetracyclines
- Underactive thyroid gland (hypothyroidism)
- High blood cholesterol
- Polycystic ovarian syndrome.

Two types of fatty liver disease

The two main types of fatty liver disease include:

- **Non-alcoholic fatty liver disease (NAFLD)** – this is the most common type. NAFLD does not lead to complications and is commonly treated with lifestyle changes.
- **Non-alcoholic steatorrheic hepatitis (NASH)** – without medical treatment, some patients with this type of fatty liver disease are at risk of serious complications including liver cirrhosis. The cells of the liver are gradually replaced by scar tissue, which hampers liver function. Cirrhosis is one of the most common causes of liver failure and may be life threatening. The risk of NASH is increased if the person has another health condition that compromises liver function, such as alcoholism, hepatitis C or hepatitis B.

Diagnosis

Tests used to diagnose fatty liver disease include:

- Medical history, including the patient's drug and alcohol use
- Physical examination
- Blood tests to check liver enzymes – called liver function tests
- Blood test to check blood triglyceride levels (however, this test isn't considered conclusive because some patients with fatty liver disease do not have raised blood triglycerides)
- Tests to rule out other liver diseases, such as haemochromatosis or viral hepatitis, which may cause similar symptoms
- Ultrasound, CT scan or MRI of the liver, which helps to rule out other conditions that mimic the symptoms of fatty liver disease, such as a liver tumour or obstruction of the bile duct
- Biopsy (the surgical removal of a small tag of liver tissue for laboratory analysis) – this is usually only advised if other tests are inconclusive, or if non-alcoholic steatorrheic hepatitis is suspected, or if tests reveal a significant degree of liver dysfunction.

Treatment

Treatment partly depends on the underlying causes, but may include:

- **Weight loss and a healthy lifestyle** – this can successfully treat or control fatty liver disease in many cases.
- **Regular exercise and dietary modifications** – your doctor may recommend cutting down on fatty foods and limiting alcohol intake.
- **Careful management of diabetes** – existing conditions that are known to make this condition worse, such as diabetes, need good management. Consult with your doctor for further advice and treatment.
- **Medications for other health conditions** – the doctor may prescribe drugs to treat high blood cholesterol or high blood sugar levels.
- **Monitoring of existing medications** – if medicines play a part in the condition, the doctor may change the dose of particular prescription drugs that you take or may recommend different drugs.
- **Limiting alcohol and other drugs** – the doctor may advise against taking any drug or medicine that strains the liver. For example, alcohol is known to make demands on liver function.
- **Regular medical check-ups** – are recommended to monitor your liver function. See your doctor for further information.

Where to get help

- Your doctor
- Gastroenterologist
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)

Things to remember

- Fatty liver disease is a build-up of fats in the liver that replace healthy tissue and trigger enlargement of remaining liver cells.
- Risk factors include obesity, a high fat diet, high alcohol intake and diabetes mellitus.
- In most cases, fatty liver disease is treated with dietary modifications, regular exercise and weight loss.

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Gut Foundation Research Institute

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