

Health Facts

Non-alcoholic fatty liver disease (NAFLD)

Fatty liver is the accumulation of excessive amounts of fat in the liver. The liver filters and cleanses the blood stream of fats and toxins.

When someone is overweight, the body responds by storing fat inside the liver. Greater than 5 per cent of fat storage can affect the liver and the way that it works. Fat cells in the liver may cause inflammation, which left untreated can sometimes cause liver dysfunction, cirrhosis and in rare cases liver cancer.



Risk factors

The most common risk factor for NAFLD in paediatrics is obesity. The presence of type 2 diabetes or high insulin levels, elevated lipids (cholesterol), hypertension (high blood pressure), metabolic syndrome (increased body mass index and high waist circumference) or a family history of liver problems are also closely related to NAFLD. Environmental factors such as high caloric intake, junk food consumption and low levels of physical activity can also produce fatty liver disease.

Symptoms

Most children have no symptoms at all and are only diagnosed with NAFLD after a blood test or ultrasound.

Some people may notice the following symptoms:

- Feeling tired and generally unwell
- Occasional abdominal pain
- Thickening and darkening of the skin in skin fold areas
- Yellow discoloration of the skin or whites of the eye indicating severe liver problems which need to be investigated immediately.



Diagnosis

A blood test is done to check liver function for indicators of NAFLD. Elevated enzymes (chemicals released by the liver) and high cholesterol levels or high insulin levels can indicate inflammation or damage to the liver cells. Further tests may be ordered by the doctor such as an abdominal ultrasound or MRI if the diagnosis is not confirmed by a blood test.

Treatment

If signs of having NAFLD are seen, the most important thing to do is achieve a healthy weight status. This can be done by improving the diet, increasing physical activity and reducing screen time to two hours per day. Screen time includes time spent in front of the computer, TV or playing electronic games.

A gradual weight loss is recommended to improve liver function. Very rapid weight loss resulting from starvation has been associated with worsening of liver disease and should be avoided.

Currently there is no specific drug treatment for NAFLD however Vitamin E has been shown to improve liver injury. A doctor may prescribe other medications to help lower your cholesterol or control high blood pressure.

A healthy lifestyle can improve or treat liver dysfunction. The results take time and even though weight loss may plateau, fat is still being reduced inside your liver. After six months of modifying lifestyle, the doctor may repeat the tests to see if there is any improvement in liver function. Please talk to a Healthy Weight Team member with any further queries regarding NAFLD.

This document can be made available in alternative formats on request for a person with a disability.

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