



# NAFLD OR NASH: HAVE YOU BEEN DIAGNOSED?

## What is NAFLD/NASH?

### Nonalcoholic fatty liver disease (NAFLD)

NAFLD, nonalcoholic fatty liver disease, is a condition where there is too much fat built up in the liver. If left untreated, it can lead to serious liver problems.

### Nonalcoholic Steatohepatitis (NASH)

NASH is caused when that extra fat turns into inflammation (swelling in the liver) and fibrosis (scarring) of the liver. If severe enough, that can lead to cirrhosis or liver cancer, potentially requiring a liver transplant.

## How is NAFLD/NASH diagnosed?

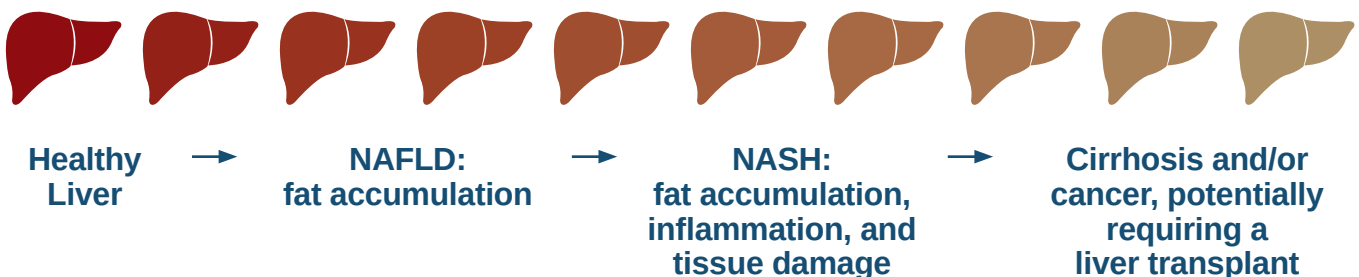
NAFLD and NASH can have very few observable symptoms in the early stages. There are several tests to diagnose NAFLD/NASH. These tests include:

- 1 General clinical history/exam
- 2 Blood tests
- 3 Imaging tests (e.g., ultrasound, MRI)
- 4 Liver biopsy

## What is the difference between a diagnosis for NAFLD and NASH?

If diagnosed, you may be at an early stage or late stage of liver disease. Here is how your health care provider determines the difference:

- If you have fat but no inflammation or tissue damage, the diagnosis is NAFLD
- If you have fat, inflammation, and liver damage, the diagnosis is NASH
- If you have a type of scar tissue in your liver called fibrosis, you may be developing cirrhosis



# What happens if I am diagnosed with NASH?

Currently, there are no approved medications for NAFLD/NASH. However, it is possible to stop it from progressing to severe liver damage through lifestyle change by focusing on physical activity and nutrition.

People with NASH are at a higher risk of developing other conditions such as metabolic disorders and cardiovascular disease. Cardiac-related deaths are one of the leading causes of mortality for people living with NASH or non-alcoholic fatty liver disease.

If left untreated and the liver becomes damaged to the point of failure, a liver transplant may be required. NASH can progress into cirrhosis, liver cancer, or result in death and is expected to become the leading cause of liver transplant.

## What are options for treatment of NAFLD/NASH?

The more serious NASH becomes, the more difficult it is to manage. The amount of fat in the liver can be reduced through nutrition, physical activity, and adequate sleep. This can help NAFLD and NASH at all stages.

While there are no approved therapies, lifestyle modification through nutrition and physical activity are recommended. This can be done through:

- 1 Healthy food choices
- 2 Limiting portion sizes
- 3 Being physically active



Read the nutrition labels to look for hidden fat, sugar, and sodium



Have a goal of 5 portions of fruit and vegetables a day



Eat foods high in fiber including whole grains



Use extra virgin olive oil as main added fat



Consume fish 2-3 times per week



Switch sugary drinks and sodas for water or low-calorie beverages



Avoid processed food and fast food



Avoid saturated fats



Aim for 60 minutes of physical activity a day. It does not have to be all at the same time. Walk more, exercise, take the stairs whenever possible

## What are the next steps with my health care provider?



Your health care provider will schedule you for regular evaluations to determine severity and provide consultation on treatment.

This may include:

- scheduled blood tests and/or imaging of your liver (e.g., ultrasound, MRI)
- working with a nutritionist or recommended trainer for lifestyle changes

For individuals with NASH, health care providers can provide a variety of options to treat the problems caused by inflammation and cirrhosis. These include:

### Lifestyle

Lifestyle modification through nutrition and physical activity

### Medication

No medication is available to reverse the fat buildup in your liver. However, there are several medications in clinical trials being tested for approval. If you have NASH, work with your health care provider on possible medications for diabetes, high blood pressure, or other conditions that may complicate NASH.

### Transplant

If cirrhosis leads to liver failure, you may need a liver transplant.



Research shows that some individuals may need to lose up to 7 to 10 percent of body weight to reduce liver inflammation. If your BMI is over 40, you may be a candidate for weight loss procedures, such as gastric balloons or bariatric surgery.

## Are clinical trials for me?

If you are at risk or diagnosed with NAFLD or NASH, you may consider being a part of a clinical trial. Clinical trials are research studies that look at different, new ways to prevent, detect, treat disease, or improve quality of life. This research helps scientists:

- Identify care that is best
- Find the best dosage for medicines
- Find treatments for conditions
- Treat conditions that behave differently in different people
- Understand how treatment affects the individual or other conditions



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