

# Non-Alcoholic Fatty Liver Disease

## Non-Alcoholic Fatty Liver Disease (Nafld)

### What Is Non-Alcoholic Fatty Liver Disease?

Non-alcoholic fatty liver disease (NAFLD) is a common liver condition where excess fat accumulates in the liver, unrelated to alcohol consumption. **NAFLD is also known as metabolic dysfunction-associated steatotic liver disease (MASLD).**

Affecting an estimated 25-30% of adults in the UK, NAFLD is often associated with obesity, type 2 diabetes, high blood pressure, and high cholesterol. NAFLD typically progresses slowly and may be reversible in its early stages with lifestyle modifications. However, if left untreated, it can lead to serious liver complications, including liver inflammation (known as non-alcoholic steatohepatitis or NASH), fibrosis, cirrhosis, and even liver cancer.

### Symptoms Of Nafld

In its early stages, NAFLD often causes no noticeable symptoms, which is why it's sometimes referred to as a "silent" disease. Many people with NAFLD may not realise they have a liver condition. As the disease progresses, symptoms can include:

- Fatigue
- Discomfort or pain in the upper right abdomen
- Weakness
- Unexplained weight loss

If NAFLD progresses to more severe stages, such as NASH or cirrhosis, symptoms may become more pronounced and include jaundice (yellowing of the skin and eyes), swelling in the abdomen or legs, and confusion.

### Stages Of Nafld

NAFLD is a spectrum that ranges from mild to severe:

- **Simple Fatty Liver (Steatosis):** Fat accumulates in the liver without causing inflammation or

liver damage. This stage is usually benign but can progress if risk factors aren't managed.

- **Non-Alcoholic Steatohepatitis (NASH), also known as metabolic dysfunction-associated steatohepatitis (MASH):** In this stage, fat buildup in the liver leads to inflammation, which can cause liver cell damage.
- **Fibrosis:** Persistent inflammation may lead to fibrosis, where scar tissue begins to replace healthy liver tissue.
- **Cirrhosis:** In the advanced stage, widespread scarring causes permanent liver damage, potentially leading to liver failure or liver cancer.

## Causes And Risk Factors

The exact cause of NAFLD is unknown, but several risk factors increase the likelihood of developing it:

- **Obesity:** Excess body weight, particularly around the abdomen, is strongly linked to NAFLD.
- **Type 2 diabetes:** High blood sugar levels increase fat buildup in the liver.
- **Metabolic syndrome:** A cluster of conditions (high blood pressure, abnormal cholesterol levels, insulin resistance) increases the risk of NAFLD
- **Genetics:** A family history of liver disease can increase the likelihood of developing NAFLD.
- **Age:** NAFLD is more common in people over 50, but it can affect all ages, including children.

### Diagnosis of NAFLD

NAFLD is often discovered through routine blood tests that show elevated liver enzymes. However, these results don't confirm NAFLD alone, so further tests are typically required:

- **Ultrasound:** An initial imaging test to detect fat in the liver.
- **FibroScan:** A specialised ultrasound to assess liver stiffness, indicating fibrosis or scarring.
- **MRI or CT Scan:** Provides more detailed images if needed.

- **Liver biopsy:** In some cases, a small sample of liver tissue is taken to confirm the severity of liver damage.

## Treatment Options For Nafld

Currently, there's no specific medication approved to treat NAFLD. The primary treatment approach focuses on lifestyle modifications to reduce fat in the liver and improve liver function:

- **Weight loss:** Losing 5-10% of body weight can significantly reduce liver fat and inflammation.
- **Healthy diet:** A balanced diet low in sugars, refined carbs, and saturated fats, with an emphasis on vegetables, whole grains, and lean proteins, supports liver health.
- **Exercise:** Regular physical activity (150 minutes per week) helps reduce liver fat and improves overall health.
- **Managing comorbid conditions:** Control blood pressure, cholesterol, and blood sugar levels to reduce disease progression.

In advanced cases, treatment options may include medications to manage associated conditions (like diabetes or high cholesterol), and, in severe cases, liver transplantation may be considered.

## Why Choose Birmingham Liver Clinic?

At the Birmingham Liver Clinic, we specialise in diagnosing and managing NAFLD. We provide a comprehensive and personalised approach, from initial diagnosis to advanced treatment. Our consultant hepatologists are experienced in assessing NAFLD and providing evidence-based lifestyle and medical recommendations to help manage and slow the progression of the disease.

If NAFLD progresses to a stage where more intensive management is required, our HPB (Hepato-Pancreato-Biliary) surgeons work closely with our hepatology team to provide the highest quality care. We are equipped to manage complications of advanced liver disease, including those requiring surgical interventions.

## Contact Us

If you are experiencing symptoms or have concerns related to NAFLD, the team at Birmingham Liver Clinic is here to help. We provide expert guidance and support to manage your liver health and improve your quality of life. For more information or to schedule a consultation, please contact us today.