

# Liver Function Tests (Lfts)

## What Are Liver Function Tests (Lfts)?

Liver function tests (LFTs) are a group of blood tests measure various enzymes, proteins, and substances in the blood, providing information about liver health and function. These tests are commonly used to detect, diagnose, and monitor liver conditions, ranging from mild inflammation to serious liver diseases. Liver function tests are essential for identifying liver disorders early, allowing for timely intervention and treatment.

The main components assessed in LFTs include:

- **Alanine transaminase (ALT):** ALT is an enzyme found in liver cells. High levels can indicate liver damage or inflammation, often due to conditions like hepatitis or fatty liver disease.
- **Aspartate transaminase (AST):** AST is another enzyme in the liver. Elevated AST levels, along with ALT, suggest liver injury, although AST is also found in other organs, so it may indicate non-liver-related issues.
- **Alkaline phosphatase (ALP):** ALP is present in the liver, bile ducts, and bones. Raised levels may indicate a problem with bile flow, possibly due to conditions affecting the bile ducts.
- **Gamma-glutamyl transferase (GGT):** GGT levels can indicate bile duct or liver issues. High GGT levels are often associated with liver disease, alcohol consumption, or medication use.
- **Bilirubin:** Bilirubin is a waste product produced by the breakdown of red blood cells. Elevated bilirubin can lead to jaundice (yellowing of the skin and eyes), which may indicate liver or bile duct problems.
- **Albumin:** Albumin is a protein made by the liver. Low albumin levels can suggest liver disease or other health issues.
- **Prothrombin time (PT):** This test measures how long it takes for blood to clot. The liver produces clotting factors, so a prolonged PT can indicate liver dysfunction.

## Why Are Liver Function Tests Important?

LFTs provide insights into the health and function of the liver. They help in:

- **Diagnosing liver diseases:** LFTs are often the first step in identifying liver diseases such as hepatitis, fatty liver disease, cirrhosis, and liver cancer.
- **Monitoring liver conditions:** For those with a known liver condition, LFTs help monitor disease progression and the effectiveness of treatment.
- **Evaluating medication effects:** Some medications can affect the liver. Regular LFTs can help ensure that treatments are not causing liver damage.
- **Assessing overall health:** The liver is a vital organ involved in many bodily functions, including metabolism, detoxification, and digestion. LFTs provide valuable information about your general health and metabolic function.

## What Conditions Can Lfts Help Diagnose?

LFTs can help detect a range of liver conditions, including:

- **Hepatitis:** Inflammation of the liver caused by viruses (hepatitis A, B, C) or other factors like alcohol and autoimmune diseases.
- **Non-alcoholic fatty liver disease (NAFLD):** A common liver condition associated with obesity, diabetes, and high cholesterol.
- **Alcoholic liver disease:** Liver damage caused by excessive alcohol consumption.
- **Liver cirrhosis:** A late-stage scarring of the liver due to prolonged damage.
- **Liver cancer:** Abnormal liver cell growth, often detected in later stages if not monitored.
- **Biliary conditions:** Issues affecting the bile ducts, such as bile duct obstruction or primary biliary cholangitis.

## Understanding Lft Results

Interpreting LFT results can be complex. Elevated levels of certain enzymes and proteins may indicate different types of liver conditions:

- **Raised ALT and AST:** Often associated with liver inflammation or injury, such as hepatitis.
- **High ALP and GGT:** May suggest bile duct issues or liver damage.
- **Elevated bilirubin:** Can indicate jaundice, often linked to liver or bile duct problems.
- **Low albumin:** May indicate chronic liver disease or other health conditions affecting protein production.

It's essential to remember that abnormal LFT results do not always mean liver disease. Many factors, such as medications or minor infections, can temporarily impact liver enzymes. Your doctor will interpret these results in the context of your overall health and may recommend further tests if necessary.

## How Birmingham Liver Clinic Can Help

At Birmingham Liver Clinic, our team of expert hepatologists and HPB (Hepato-Pancreato-Biliary) surgeons provides comprehensive care for patients with liver conditions. Our specialists use advanced diagnostics, including LFTs, to diagnose and manage liver diseases effectively. We aim to offer personalised care, tailoring treatments based on each patient's unique health needs and condition severity.

With access to cutting-edge facilities and a highly skilled medical team, Birmingham Liver Clinic is dedicated to delivering the highest standards of liver care. Whether you're experiencing symptoms of a liver condition or need ongoing monitoring, our team is here to support you.

## Contact Us

If you have concerns about your liver health or need to undergo liver function tests, don't hesitate to reach out to Birmingham Liver Clinic. Our expert team is available to guide you through the process and ensure you receive the best care possible. For more information or to book a consultation, please contact us today.