



*Your Liver. Your Life.*

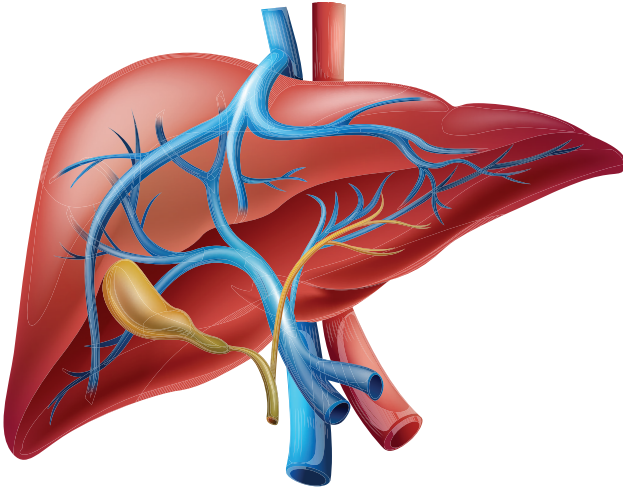
# Liver Function Tests



## American Liver Foundation Handout

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# Liver Function Tests



## Why is the liver important?

The liver is the second largest organ in your body and is located under your rib cage on the right side. It weighs about three pounds and is shaped like a football that is flat on one side.

The liver performs many jobs in your body. It processes what you eat and drink into energy and nutrients your body can use. The liver also removes harmful substances from your blood.

## What are “liver function tests”?

Liver function tests help your doctor check your liver’s health and detect liver damage. These blood tests measure

the levels of certain proteins and enzymes in your blood. Proteins are large molecules that are needed for your overall health. Enzymes are cellular proteins that help important chemical reactions to occur in your body.

## Why are liver function tests done?

Liver function tests may be done for many reasons. Some doctors perform these tests as part of a regular checkup. Other doctors may use liver function tests to screen patients who are at risk for liver disease. Doctors also use them to monitor a person’s liver disease and to check if treatment is working.

## What are the commonly used liver function tests?

### Liver Enzyme Tests

*Alanine Transaminase (ALT)* is an enzyme mainly found in your liver. The ALT test measures the level of ALT in your blood. Consistently high levels of ALT in your blood can be a sign of liver damage.

*Aspartate Transaminase (AST)* is an enzyme found in large amounts in your liver and other parts of your body. The AST test measures the level of AST in your blood. High levels of AST can be a sign of liver damage.

*Alkaline Phosphatase (ALP)* is an enzyme found in large amounts in your liver, bile ducts, and other parts of your body. The ALP test measures the level of ALP in your blood. High levels of ALP can be a sign of liver or bile duct damage.

*Gamma-glutamyl transpeptidase (GGT)* is an enzyme found in large amounts in your liver, bile ducts, and pancreas. The GGT test measures the level of GGT in your blood. High levels of GGT can be a sign of liver or bile duct damage.

## Liver Protein Tests

*Total Protein* measures the amount of protein in your blood. The two main proteins found in the blood are globulins and albumin.

*Globulin* is a protein made in your liver and helps the immune system fight infections. Low globulin levels can be a sign of liver damage or other conditions.

*Albumin* is another protein made in your liver. An albumin test measures how well your liver is making the proteins that your body needs. Low albumin levels can be a sign of liver damage.

*Prothrombin* is a protein made in your liver and helps with clotting blood. A prothrombin time test measures how much time it takes for your blood to clot. A high prothrombin time can be a sign of liver damage.

## Bilirubin Tests

*Bilirubin* is a yellow fluid made in your body when red blood cells break down. A bilirubin test measures the level of bilirubin in your blood. If your liver is damaged, bilirubin can leak out of your liver into your blood and can cause jaundice (yellowing of skin and eyes). It also can come out in the urine making it look very dark.

## How do you prepare for liver function tests?

Your doctor may ask you to not eat or drink and avoid medications before your blood tests. Certain foods and medications may affect your liver function test results. Tell your doctor about all the prescription, over the counter and herbal supplements you are taking.

## What are normal ranges for liver function tests?

Normal ranges for liver function tests can vary by age, gender and other factors. Laboratory test results usually provide normal ranges for each liver function test with your results. Talk to your doctor about your results.

