

# Understanding your liver function results

## Te mārama ki ō hua whakamātaunga oranga ate

Your liver is a very important organ that has many jobs. Some of its jobs are to make proteins, make bile to help you digest fats, store energy and break down some toxins and medicines.

Liver function tests are done if you have symptoms of a liver condition or risk factors for liver disease such as fatty liver, viral hepatitis or high alcohol use. They're also checked if you're taking medicines that can affect how your liver works.

## Terms used

**Protein:** this is the total of all the different types of protein in your blood.

**Albumin:** this is the main protein your liver makes. It goes into your blood and helps to carry many things around your body.

**Bilirubin:** this is something your body makes when it breaks down old red blood cells and replaces them with new ones. Bilirubin gives bile its yellow colour.

**Alkaline phosphatase (ALP):** this is an enzyme in your liver and bones. (An enzyme is a chemical that helps speed up other chemical processes.)

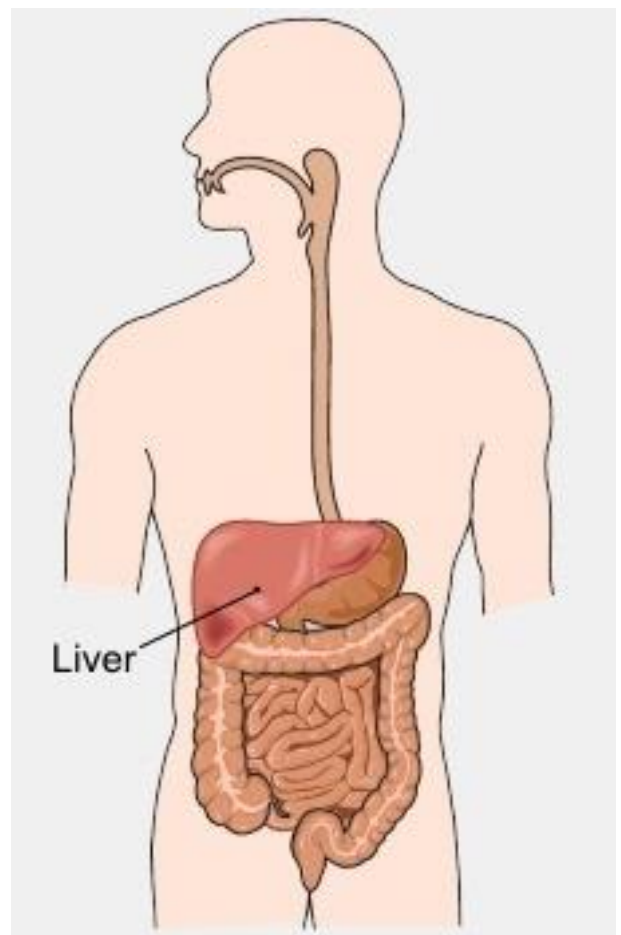
**GGT:** this stands for gamma glutamyltransferase, which is an enzyme in your liver.

**ALT:** this stands for alanine aminotransferase, which is another enzyme in your liver.

**AST:** this stands for aspartate aminotransferase, which is also an enzyme in your liver.

## Normal results

If you have a copy of your test results, it will show your results and a normal range for each test. The normal ranges may vary depending on your gender and age group and whether you're pregnant or have any underlying health conditions. So, the normal ranges shown on your test results may not be exactly right for you. Discuss your results with your general practice team if you're unsure.





### High results

Most blood tests that look at your liver don't give an exact answer to what's wrong with your liver, they just give a clue that something might be wrong. It can be difficult to interpret the results of your liver function tests.

There can be many reasons why your bilirubin might be high. One is a harmless condition called Gilbert's syndrome, another is a blockage of bile flow in your liver, such as from gallstones, or it could be because you're breaking down more red blood cells than usual.

If your ALP is high, this can be a sign of liver damage or a problem with your bones.

If your GGT is raised, it can be a sign you're drinking too much alcohol, using certain medications or have liver or bile duct damage.

If your AST or ALT are high, this can be a sign of inflammation or damage in your liver.

### Low results

If your albumin levels are low, this can be a sign that your liver isn't working properly and not making proteins. It can also happen if you're malnourished (not eating enough or not eating the right foods).

### Next steps

This will depend on what your blood tests show and how abnormal they are.

Some minor abnormalities will come back to normal on their own, and your general practice team will simply repeat the blood test and monitor the results.

If your blood tests show problems in your liver, you may need more blood tests or scans, such as an ultrasound scan to find out what's wrong.

Talk to your general practice team if you have any questions about your liver function tests.

*Written by HealthInfo clinical advisers. Last reviewed October 2022.*