



PATHOLOGY TESTS EXPLAINED

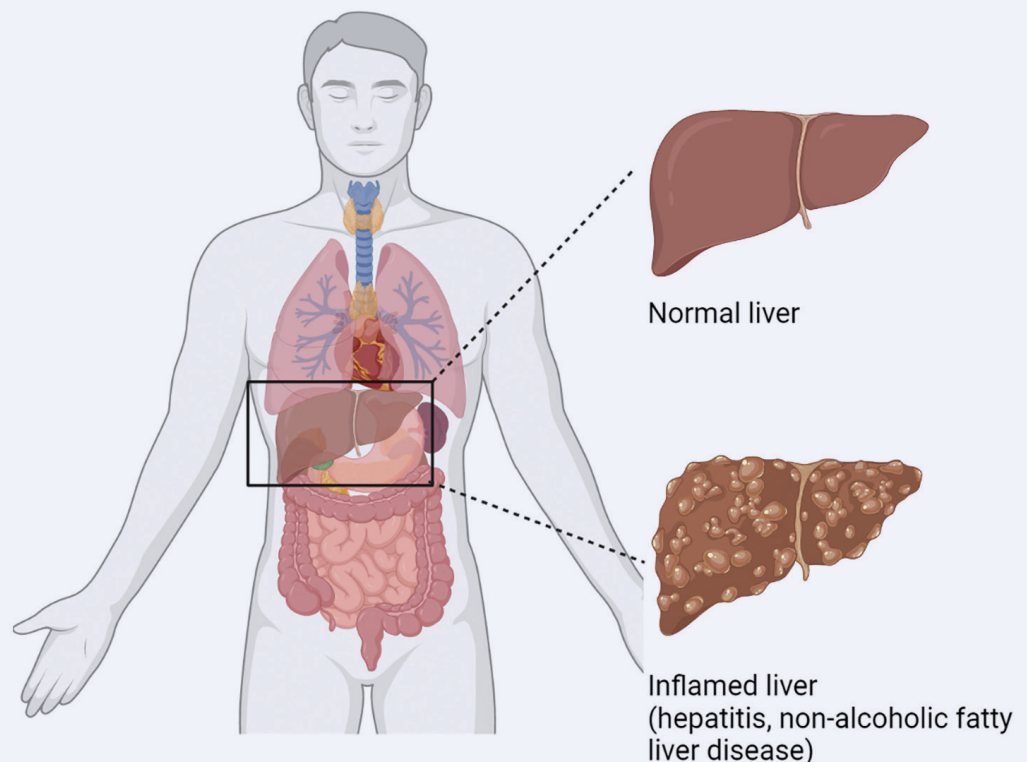
Information about pathology tests to help everyone take control of their health and make the right decisions about their care.

WHAT YOU SHOULD KNOW ABOUT YOUR **LIVER FUNCTION TESTS (LFTs)**


This is a group of tests performed on the same blood sample. They give information about how your liver is working. Your doctor may order Liver Function Tests as part of a routine health check, to help make a diagnosis if you have symptoms that could mean you have liver damage, or to monitor your health if you are taking medication or have an ongoing condition.

The liver is one of the most important organs in the body. It controls most chemical levels in the blood, makes bile to help digest fats and carry away waste, filters harmful chemicals from the blood, helps blood to clot, makes cholesterol, stores glucose, and much more.

Many diseases and infections, drugs or toxins can cause liver problems. The liver can become inflamed, scarred, or the flow of bile can become blocked. It can be quite damaged before symptoms appear.



An inflamed liver

 **PTE**
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What do Liver Function Tests measure?

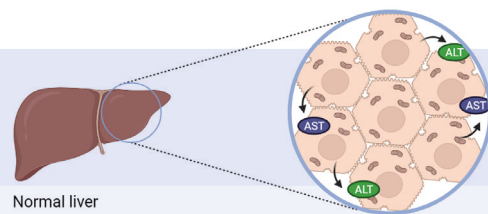
Liver Function Tests look for damage or disease by measuring the levels of several different substances in the blood. These are either produced by liver cells as part of their normal function or released into the blood when liver cells are damaged. Each substance gives different information. Looked at together, along with your symptoms and medical history, they help build a picture of your liver's health.



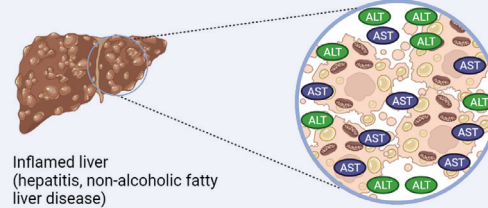
What can your results tell you?

Your test results report will include some or all of these.

ALT (Alanine aminotransferase)	ALT is the best test for detecting hepatitis. People with acute (sudden, severe) hepatitis often have very high levels of ALT, while those with chronic (long-lasting, low level) hepatitis have moderately raised levels.
ALP (Alkaline phosphatase)	ALP is found in liver and bone. When the liver or bone is damaged, ALP is released into the blood stream, meaning that high levels of ALP indicate the liver, or a bone has been damaged. If some of the other LFT substances are high, it can be assumed that the high levels of ALP are coming from the liver, meaning it is damaged.
GGT (Gamma-glutamyl transferase)	GGT is found mainly in the liver and can be used to confirm results if you have high ALP levels. ALP and GGT are used to work out whether a problem is related to the liver and bile ducts or if it is due to bone disease. Both ALP and GGT are higher when there is liver or bile duct disease but only ALP is increased in bone disease. GGT is often higher in heavy drinkers.
AST (Aspartate aminotransferase)	AST is found in the liver and a few other places, particularly the heart and other muscles in the body. When liver, heart or muscles are damaged they release AST into the blood.
Bilirubin	This is an orange pigment formed when red blood cells break down as a natural part of the body's ongoing renewal. It is processed by the liver to be got rid of. Raised levels show the liver isn't functioning well.
Albumin	This is the main protein made by the liver and low levels may mean the liver is damaged or that albumin is being lost through damaged kidneys.
Total protein	This measures albumin, globulins and other proteins. Albumin is made by the liver and a low albumin level can indicate problems. Globulins are part of your immune system and contain antibodies that help fight off infections.



Normal liver



Inflamed liver
(hepatitis, non-alcoholic fatty liver disease)



What are reference intervals (reference ranges)?

Some of your results are shown in your report as a comparison against a set of numbers called reference intervals or reference ranges. This is the range of test results considered 'normal' for the general population. If a result in your report is outside this range it can be flagged as high (H) or low (L). This does not necessarily mean that anything is wrong. It depends on your personal situation. Your results need to be interpreted by your doctor.



What if you have abnormal results?

A great many conditions can affect the liver and interpreting the many variations in test results is complex. Also, some of the substances being tested can be raised due to problems in other parts of the body. Sometimes levels can be higher than normal when there is no problem. Levels can be higher temporarily because of short-term liver damage from things like burns, infections, and muscle damage or if you are taking medications, drugs, dietary supplements or herbs. It's important to talk with your doctor about what the results mean for your personal situation.



Having more tests

Sometimes, some tests need to be repeated to see if the results change over time. This can indicate whether your condition is getting better or worse and whether any treatment you are having is working. You may need further, different tests to see what's causing your symptoms. This could be a blood test for an infection, an autoimmune test, or a biopsy or scans to look for liver damage.

For more detailed information on these and many other tests go to pathologytestsexplained.org.au



PATHOLOGY TESTS
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www.pathologytestsexplained.org.au

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Pathology Tests Explained is managed by a consortium of medical and scientific organisations representing pathology practice in Australia. More details at:

www.pathologytestsexplained.org.au/about



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My Health Record

You'll find a direct link to the Pathology Tests Explained website embedded in the pathology results pages of your My Health Record and the my health app.

Click on the link to find information about what your tests are investigating or measuring and what your results can tell your doctor.