



Abnormal liver blood tests

What the results mean and what happens next

PE-GIC-19

Liver blood tests are often slightly abnormal, and the cause is usually common and manageable, most often fatty liver, alcohol or a medicine. The pattern of the results, together with your history, guides the next tests. A few situations need urgent attention.

What do the tests measure?

Most 'liver function tests' measure substances released when the liver is irritated, rather than how well the liver is working:

- ALT: an enzyme found mainly inside liver cells. It rises when liver cells are inflamed or injured
- AST: found in the liver but also in muscle and heart. It can rise after strenuous exercise
- ALP: comes from the bile ducts and from bone. It is naturally higher in teenagers, during pregnancy and with some bone conditions
- GGT: comes from the bile ducts. It is raised by alcohol, fatty liver and some medicines, and helps show whether a high ALP is coming from the liver
- Bilirubin: a yellow pigment from the normal breakdown of red blood cells, cleared by the liver. High levels cause jaundice (yellow eyes and skin)
- Albumin and INR (a clotting test): these reflect how well the liver is actually working

The size of the rise does not always match how serious the problem is. Someone with cirrhosis can have near-normal enzymes.

Common causes

- Fatty liver linked to weight, diabetes and cholesterol
- Alcohol, even moderate amounts taken regularly

- Medicines, such as some antibiotics (for example amoxicillin-clavulanate), tuberculosis medicines, some epilepsy medicines and methotrexate. Statins often cause small, harmless rises
- Herbal remedies and supplements, including bodybuilding and weight-loss products, green tea extract and concentrated turmeric
- Viral hepatitis B or C, and short-lived infections such as hepatitis A or E
- Autoimmune liver diseases
- Less common causes: iron overload, Wilson disease in younger people, coeliac disease, thyroid disease and muscle disorders

Gilbert syndrome

Gilbert syndrome is a common, harmless inherited condition in which the liver processes bilirubin a little more slowly. Bilirubin is mildly raised while the other liver tests are normal. It rises further when you go without food for long periods, and with illness, dehydration or lack of sleep, and may cause slight yellowing of the eyes. It does not damage the liver, needs no treatment and does not affect life expectancy.

What happens next?

Depending on the results and your history, your doctor may repeat the tests after a few weeks or arrange further tests straight away. If the tests stay abnormal, a 'liver screen' is usually arranged:

- Blood tests for hepatitis B and C
- A liver ultrasound
- Tests for diabetes, cholesterol and iron levels, and, when relevant, other inherited conditions such as Wilson disease or alpha-1 antitrypsin deficiency
- Autoimmune antibodies and immunoglobulins
- Coeliac and thyroid blood tests
- A FIB-4 score or FibroScan if fatty liver is suspected; occasionally an MRI scan or liver biopsy

What you can do

- Tell your doctor about every medicine, herbal remedy and supplement you take, including 'natural' products
- Stop supplements that a doctor did not prescribe, unless advised otherwise

- Do not stop prescribed medicines without medical advice
- Stop alcohol completely
- Avoid very strenuous exercise for a few days before a repeat test
- If you are overweight, gradual weight loss often improves the results

Get urgent medical care if you have

- Yellow eyes or skin, especially with dark urine or pale stools
- Jaundice with fever, shivering or pain under the right ribs
- Confusion, unusual sleepiness, or bleeding or bruising easily
- Vomiting blood or passing black stools
- Having taken more paracetamol than recommended, or if you are unsure how much you have taken, even if you feel well: go to the emergency department immediately

Common questions

My ALT is only slightly raised. Should I worry?

Usually not, and fatty liver is the commonest reason. A rise that persists should still be investigated, because some causes are treatable and easier to manage early.

Do I need to stop my statin?

Usually not. Small rises are common and harmless, and statins are safe in fatty liver. Discuss any concern with your doctor rather than stopping it yourself.

Should I take a liver tonic or detox product?

No. They have no proven benefit, and some herbal products are themselves a cause of abnormal liver tests.

This leaflet is general information and does not replace advice from your own doctor. Version 1.0, October 2026. Next review October 2028.
