WHAT YOU SHOULD KNOW ABOUT LIVER TESTS

What Are Liver Tests?
Your liver is a large organ that sits inside your belly. Its job is to help your body digest food and get rid of toxic substances. Liver tests show how well your liver is working and can help your doctor know whether you have any liver damage or disease.

How Do They Work?
Liver tests are done by drawing your blood and measuring certain enzymes and proteins in it. If your liver is damaged or diseased, some of the enzyme and protein levels might be higher or lower than normal. Common liver tests include:

- Serum alanine aminotransferase (ALT)
- Aspartate aminotransferase (AST)
- Alkaline phosphatase (ALP)
- Gamma-glutamyltransferase (GGT)
- Albumin
- Bilirubin
- Prothrombin time (PT)

What Causes Abnormal Results?
Liver tests might show higher- or lower-than-normal results if:

- Your liver is inflamed (for example, from an infection like hepatitis)
- Your liver cells have been damaged (by substances like alcohol)
- Your liver is working harder to process toxic substances, certain herbal supplements, or medicines (for example, antibiotics, antifungal treatments, nonsteroidal anti-inflammatory drugs, some HIV treatments, and chemotherapy)
- Your liver is physically injured
- You have a health condition that affects the liver’s production and storage abilities

Do Abnormal Results Mean That I Have Liver Disease?
Because tests are not perfect, people with healthy livers may occasionally have abnormal test results. Tests with results outside the normal range should be repeated and followed up because they may mean you have an underlying health condition. Depending on the specific test and result, your doctor may need to do additional testing for one of the following conditions:

- Alcoholic liver disease
- Nonalcoholic fatty liver disease
- Viral hepatitis
- Autoimmune hepatitis
- Drug-induced liver injury
- Metabolic or genetic disorders
- Biliary tract disease

What Will Happen Next if Any of My Results Are Outside the Normal Range?
- Your doctor will repeat the tests or perform additional ones to clarify the original result.
- If the result is still abnormal, your doctor will do a physical examination and ask about your medical history. This will include a review of any risk factors you have for liver disease, like alcohol or drug use, sexual history, recent travel, history of blood transfusions, and family history of liver disease. Your doctor will also ask what medicines or herbal supplements you take.
- If your doctor thinks a medicine you take is causing the abnormal result, they will have you stop taking it, find an alternative, or establish a plan to monitor for progression of liver failure.
- Your doctor may recommend additional work-up, including more blood tests or imaging tests (like a CT scan, MRI, or ultrasound), or they may refer you to a doctor who specializes in liver disease.
- Sometimes a liver biopsy is necessary to diagnose liver damage or disease. This is when a small piece of your liver is removed and examined under a microscope for signs of disease.

What Else Should I Know?

- Drinking too much alcohol is a common cause of liver damage and a factor in developing chronic liver disease. If you are concerned about your alcohol use, your doctor may be able to help you cut down or stop drinking.
- Lifestyle changes like avoiding alcohol, stopping certain medicines, avoiding risk factors for hepatitis, getting vaccinated against hepatitis, losing weight, and managing substance use disorders may help improve and even reverse liver injury.

Questions for My Doctor

- What caused my abnormal liver test results?
- Do I need to have other tests?
- Do I need to stop or start taking any medicine?
- What lifestyle changes can help improve my liver function?
- Do I need to be referred to a liver specialist?

For More Information
American Liver Foundation
https://liverfoundation.org