

Liver Function Test

Q.What is the importance of getting a liver function test?

- i)Liver function tests, also known as liver chemistries, help determine the health of your liver by measuring the levels of proteins, liver enzymes, and bilirubin in blood.
- ii)Noninvasive methods for screening of liver dysfunction.
- iii)Help in identifying general types of disorder.
- iv)Assess severity and allow prediction of outcome.
- v)Disease and treatment follow up.

Q.What are the major functions of the liver?

- i)The liver is both a secretory and excretory organ of the body and has numerous metabolic functions. The liver is closely associated with **carbohydrate metabolism** (synthesis of glycogen from glucose as well as break down of glycogen into glucose), **protein metabolism** (most plasma proteins are made in liver), and **lipid metabolism** (source of cholesterol).
- ii)The liver stores a number of essential substances and makes them available when needed **glycogen, vitamins, iron**, and others.
- iii)It also destroys old cells by phagocytosis and detoxifies many substances.

Q. Which tests are routinely followed for assessing liver function?

- a)Serum bilirubin (total and direct): Diagnoses conjugation disorders and bile duct obstruction.
- b)Serum enzymes: Transaminases or amino transferase (SGOT or AST, SGPT or ALT) and ALP alkaline phosphatase), confirms damage in the liver that causes the release of liver enzymes.
- c)Serum total protein and albumin: Examines the liver's synthetic function in producing proteins.
- d)Urine bilirubin: Confirms bile duct obstruction, which results in the rise of conjugated bilirubin in serum and its excretion through the kidney.
- e)Urine urobilinogen: Suggests increased haemolysis, bilirubin production, and discharge of urobilinogen through the kidney.
- f)Serum cholesterol (total): Assesses the liver's function in lipid metabolism.
- g)Prothrombin time: Assesses the liver's synthetic function in producing coagulation factors.

Q.What are the normal values in liver function tests?

Normal blood test results for typical liver function tests include:

- ALT. 7 to 55 units per liter (U/L)
- AST. 8 to 48 U/L
- ALP. 40 to 129 U/L
- Albumin. 3.5 to 5.0 grams per deciliter (g/dL)
- Total protein. 6.3 to 7.9 g/dL
- Bilirubin. 0.1 to 1.2 milligrams per deciliter (mg/dL)
- GGT. 8 to 61 U/L
- LD. 122 to 222 U/L
- PT. 9.4 to 12.5 seconds

Q.When are liver function tests recommended?

LFT is recommended in the following situations:

- i)To check for damage from liver infections, such as hepatitis B and hepatitis C.
- ii)To monitor the side effects of certain medications known to affect the liver.