

LIVER

Presented by:

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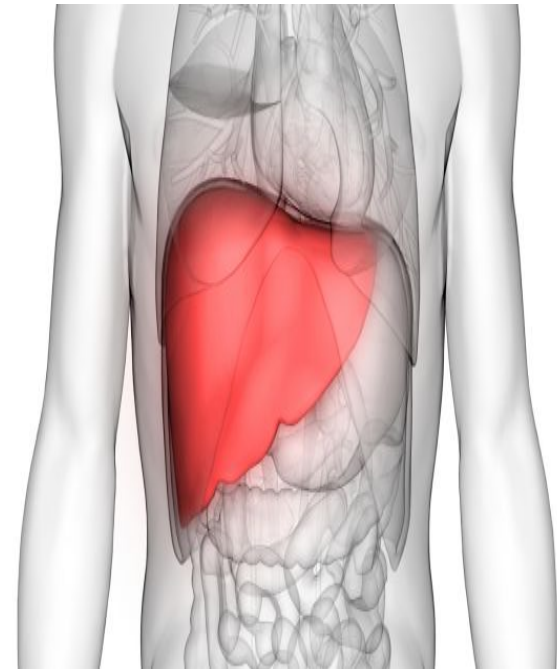
Safa Anwar Elnass

ILOS

- Identify the liver
- Identify the anatomical structure of the liver
- Describe the functions of liver
- Discuss different liver diseases
- List ways to prevent liver diseases

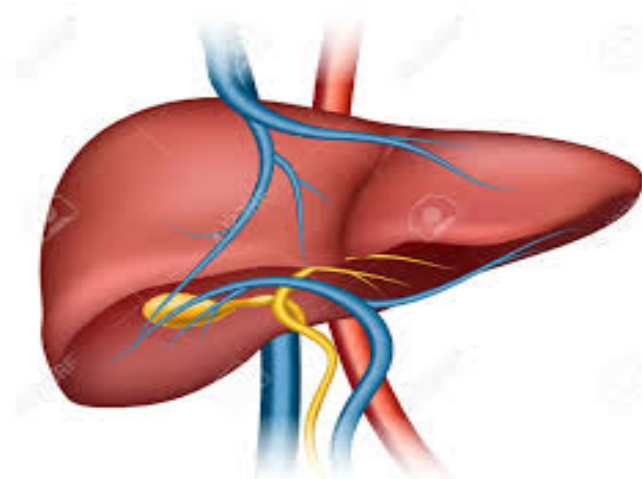
Introduction

- The liver is the largest organ in the body.
- It consists of two main lobes that together weigh from 1400 to 1600 g in the normal adult.
- It is reddish brown in color and has a rich blood supply 1500 ml/min from two major vessels, the hepatic artery and the portal vein.

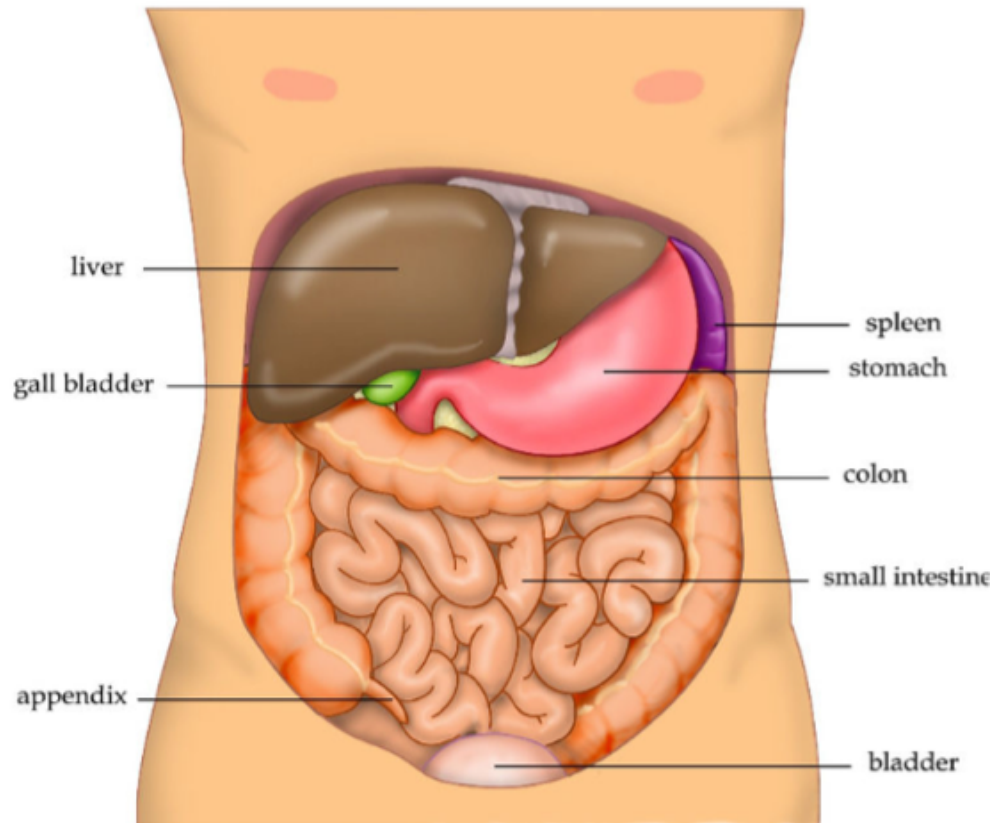


liver

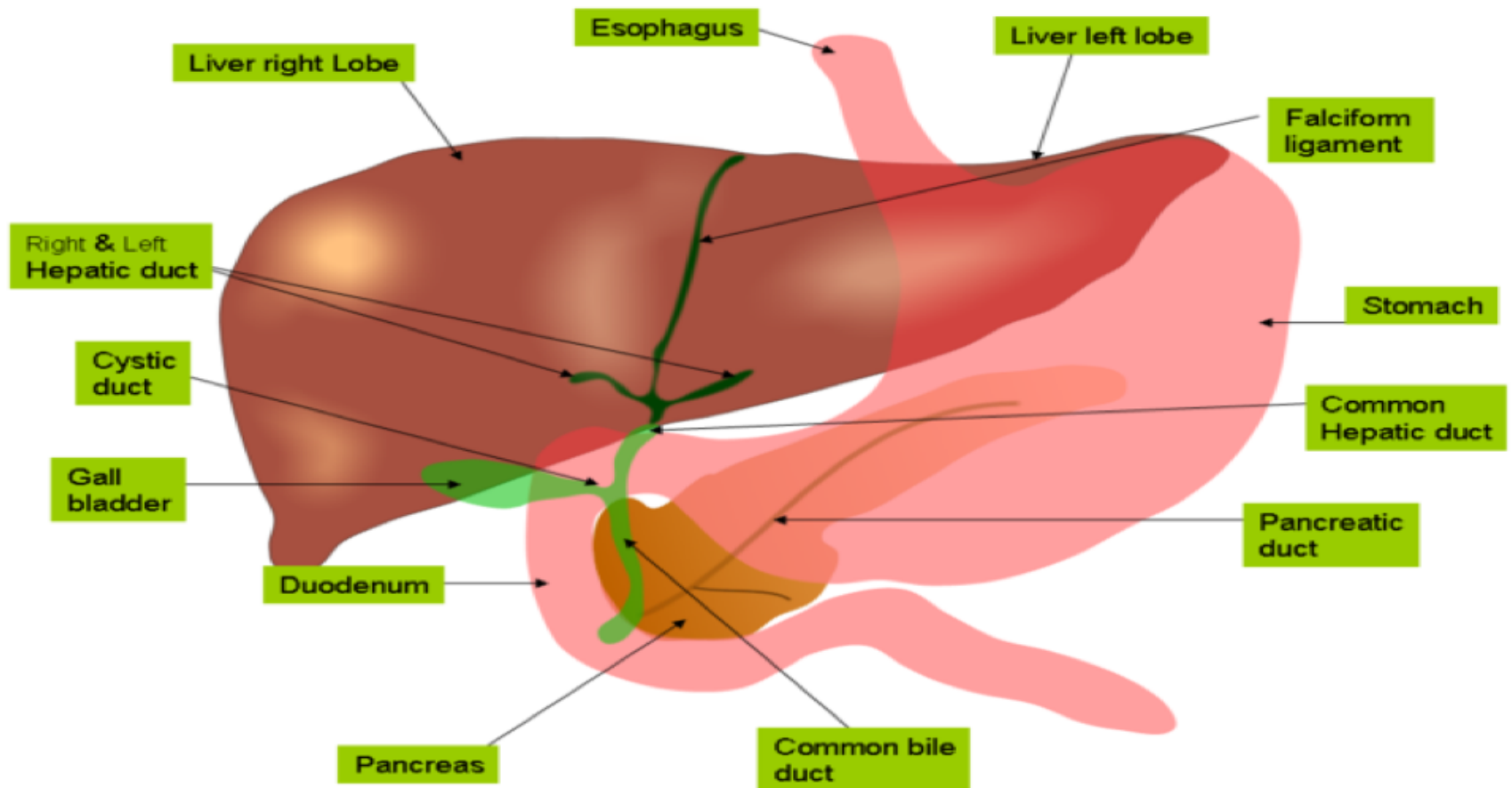
- The liver is an organ only found in vertebrates which detoxifies various metabolites, and synthesizes proteins. Its other roles in metabolism include the regulation of glycogen storage, decomposition of red blood cells and the production of hormones.



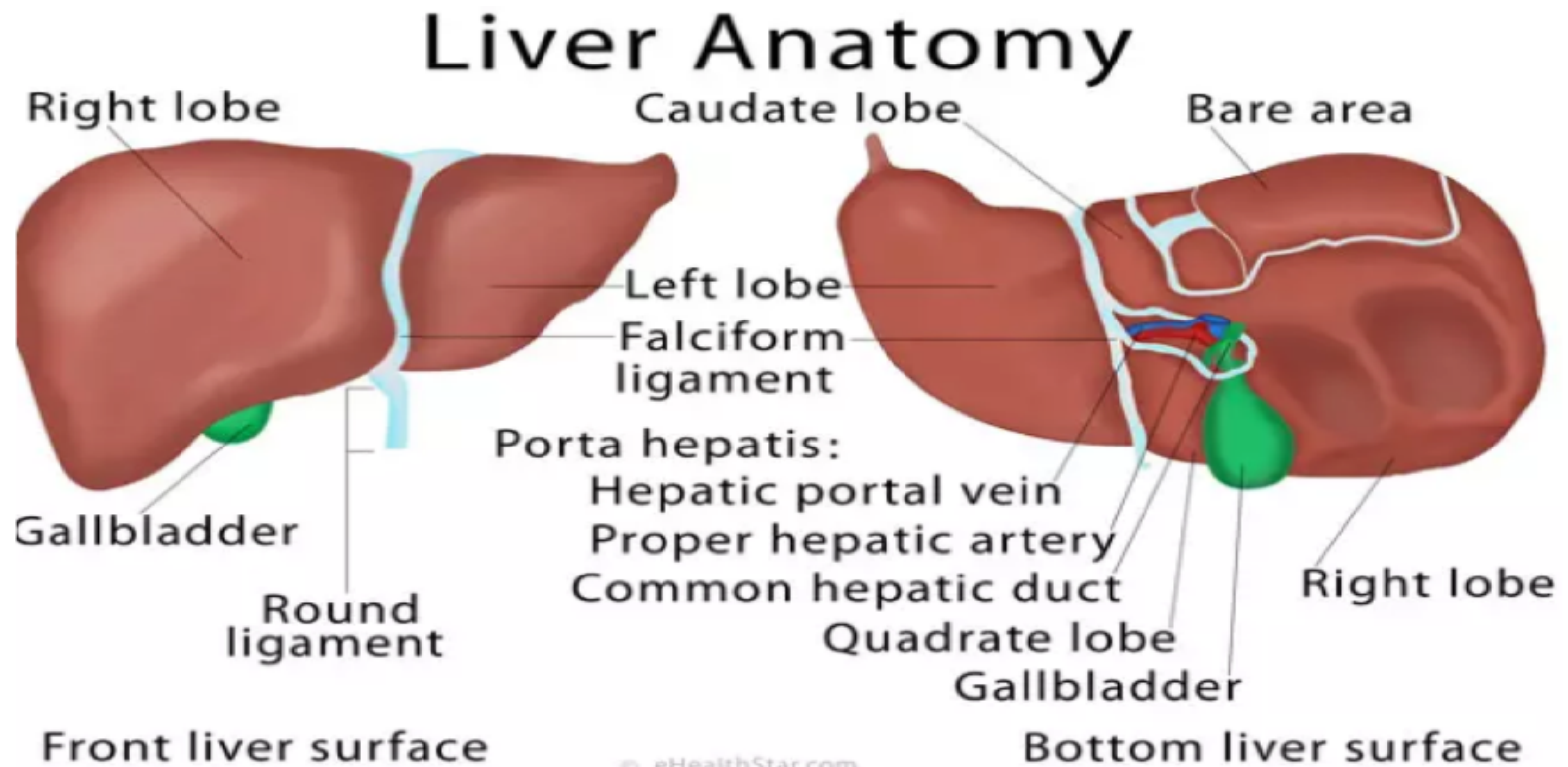
Anatomical structure of liver [location]



Anatomical structure of liver

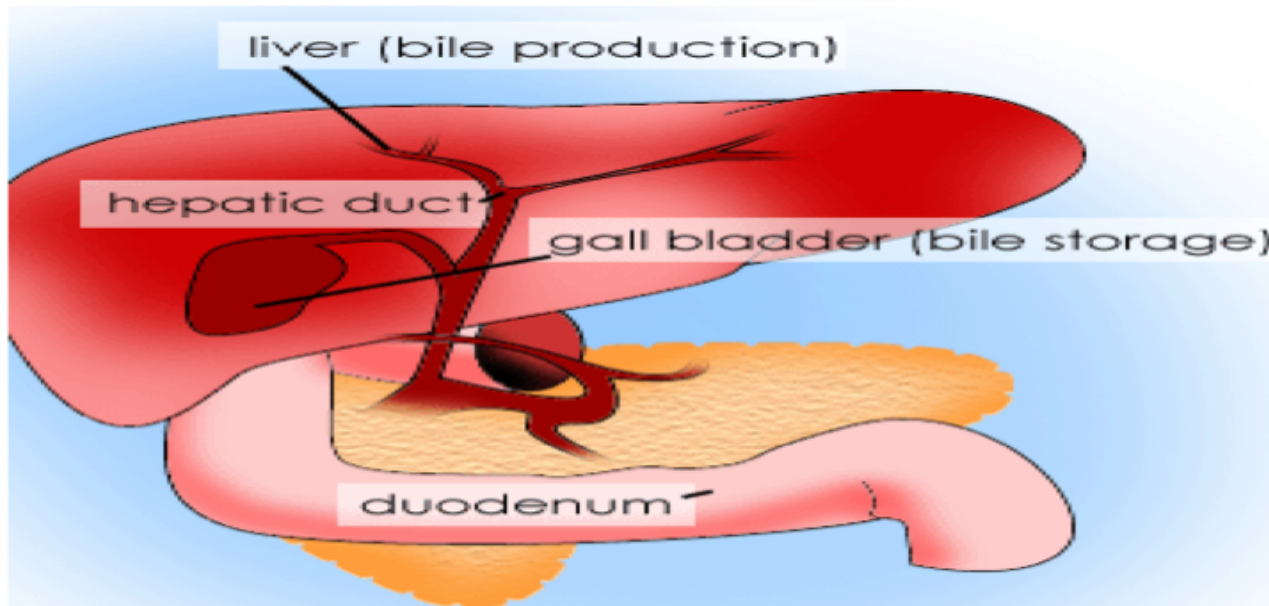


Anatomical structure of liver



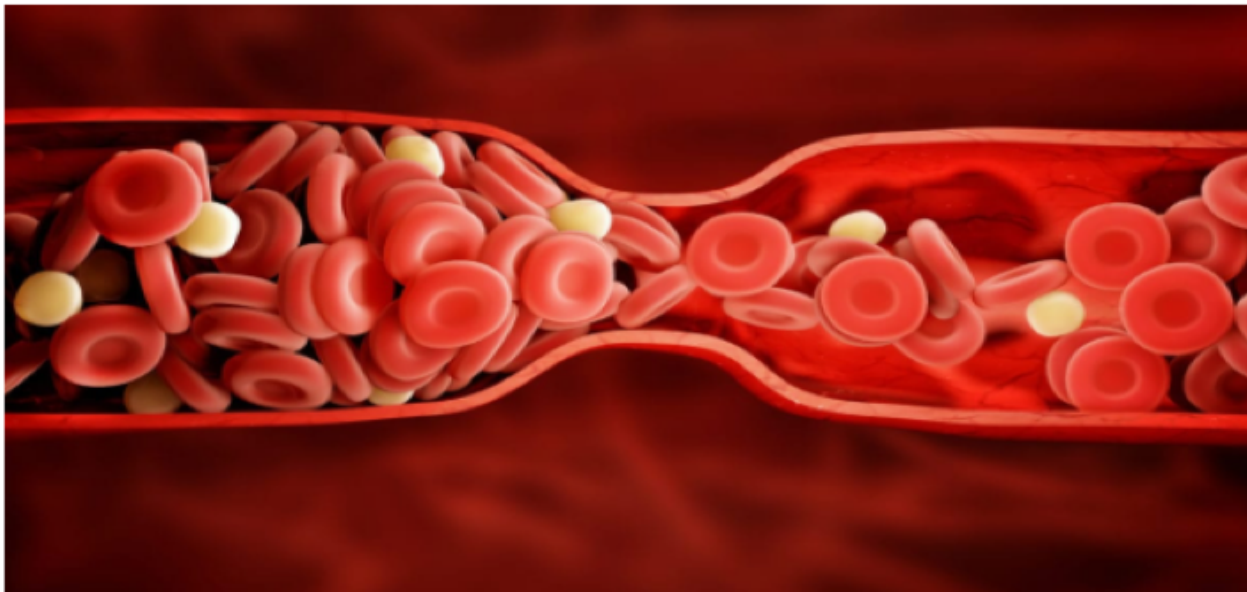
Functions of liver

- **Bile production:** Bile helps the small intestine break down and absorb fats, cholesterol, and some vitamins.



Function of liver

- **Supporting blood clots:** Vitamin K is necessary for the help clot the blood



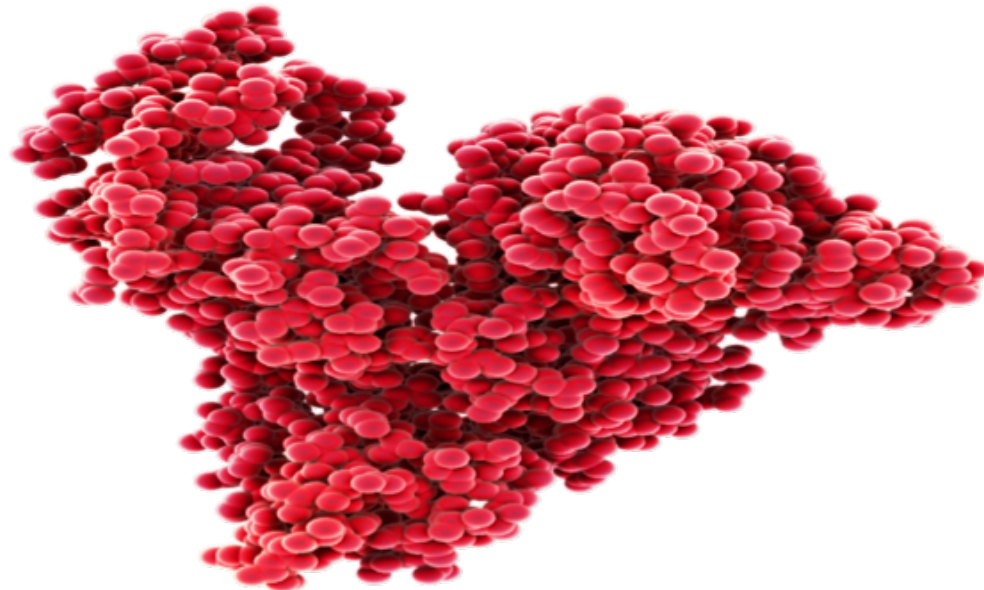
Function of liver

- **Filters the blood:** The liver filters and removes compounds from the body, including hormones, such as estrogen and aldosterone, and compounds from outside the body, including alcohol and other drugs.



Function of liver

- **Production of albumin:** Albumin is the protein in blood serum. It transports fatty acids and steroid hormones to help maintain the correct pressure.



Function of liver

Metabolism: Metabolism of carbohydrates, fats, proteins, everything occurs in the liver.

Storage: Storage of glycogen, ferritin, fats, vitamin A, vitamin D etc. occur in the liver.



Liver Diseases

- **Fascioliasis:** This is caused by the parasitic invasion of a parasitic worm known as a liver fluke, which can lie dormant in the liver for months or even years. Fascioliasis is considered a tropical disease.
- **Cirrhosis:** This sees scar tissue replace liver cells in a process known as fibrosis. This condition can be caused by a number of factors, including toxins, alcohol, and hepatitis. Eventually, fibrosis can lead to liver failure as the functionality of the liver cells is destroyed.

Liver Diseases

- **Hepatitis:** Hepatitis is the name given to a general infection of the liver, and viruses, toxins, or an autoimmune response can cause it. It is characterized by an inflamed liver. In many cases, the liver can heal itself, but liver failure can occur in severe cases.
- **Alcoholic liver disease:** Drinking too much alcohol over long periods of time can cause liver damage. It is the most common Trusted Source cause of cirrhosis in the world.

Liver Diseases

- **Primary sclerosing cholangitis (PSC):** PSC is a serious inflammatory disease of the bile ducts that results in their destruction. There is currently no cure, and the cause is currently unknown, although the condition is thought to be autoimmune.
- **Fatty liver disease:** This usually occurs alongside obesity or alcohol abuse. In fatty liver disease, vacuoles of fat build up in the liver cells. If it is not caused by alcohol abuse, the condition is called non-alcoholic fatty liver disease (NAFLD).

Liver Diseases

- **Gilbert's syndrome:** This is a genetic disorder affecting 3 to 12 percent of the population. Bilirubin is not fully broken down. Mild jaundice can occur, but the disorder is harmless.
- **Liver cancer:** The most common types of liver cancer are hepatocellular carcinoma ,The leading causes are alcohol and hepatitis. It is the sixth most common form of cancer and the second most frequent cause of cancer death.

Ways to prevent liver disease

- Don't Drink alcohol
- Avoid risky behavior.
- Take care with aerosol sprays. .
- Protect your skin.
- Get vaccinated.
- Avoid contact with other people's blood and body fluids.

Conclusion

- The liver is an essential and large organ that sits on the right side of the belly, that has many functions in the body, including making proteins and blood clotting factors, manufacturing triglycerides and cholesterol, glycogen synthesis, and bile production.
- Many different disease processes can occur in the liver, including infections such as hepatitis, cirrhosis (scarring), cancers, and damage by medications or toxins.

Reference

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Thank
You

