LIVER

Located in the upper right quadrant of the abdominal cavity, the liver is an organ responsible for numerous metabolic functions. It is the largest solid organ in the body and plays a crucial role in the breakdown of carbohydrates, proteins, and fats. The liver is also involved in the production of bile, which aids in the digestion of fats.

The liver has a dual blood supply, receiving oxygenated blood from the hepatic artery and nutrient-rich blood from the portal vein. This dual supply is essential for the liver's ability to perform its metabolic functions.

The liver is divided into two lobes: the left lobe and the right lobe. The right lobe is further divided into segments, which are important for surgical and diagnostic planning.

In the horizontal position, the liver is located in the right upper quadrant of the abdomen, just below the diaphragm. The liver's main function is to produce bile, which is essential for the digestion of fats. Bile is produced in the liver and stored in the gallbladder before being released into the small intestine.

The liver also plays a crucial role in detoxification, storing vitamins, hormones, and blood products, and breaking down drugs and other substances.

In the case of liver disease, such as cirrhosis or hepatitis, the liver's ability to perform its functions is impaired, leading to a variety of health issues. Treatment for liver disease often involves managing symptoms and improving liver function, which may include lifestyle changes, medications, and in some cases, liver transplantation.