The liver, your body's chemical factory



The liver is located in the upper right side of the abdomen under the rib cage. The liver is a triangular flattened football shape, reddish-brown in color, and weighs about three pounds. The weight and size vary for different size people and between men and women. The liver is the only organ that can regenerate itself. In fact 1.5 quarts of blood pass through the liver every minute and holds 13% of the body's blood at any given time.

The liver performs many varied and complex functions. It cleans and purifies the blood supply, breaks down certain chemical substances in the blood, clears certain toxins (poisons substances), and manufactures other necessary substances for maintain optimal health.

The liver's four most important tasks are:

- 1. Purification: changing harmful chemicals and toxins to harmless substances and eliminates them
- 2. Synthesis: takes the simple building blocks of food to syntheize complex substances.
- 3. Storage: sugars, fats and vitamins are stored until needed by the body.
- 4. Transformation: the essential building blocks are changed to be use in other ways by the body.

The liver contributes to more than 500 vital functions in the body including:

- produces bile to carry away fats in the small intestines
- produces proteins for blood plasma
- produces cholesterol and proteins to help carry fats through the body
- converts excess glucose into glycogen for storage for future energy
- regulates the blood levels of amino acids to form building blocks of proteins to maintain lean muscle tissue,
- processes the hemoglobin to use its iron content to distribute oxygen to the rest of the body
- neutralizes and converts harmful substance such as ammonia, alcohol. into urea which will excreted in urine
- clears blood of drugs, alcohol, and other poisonous substances
- regulates blood clotting
- resists infections by producing immune factors and removing bacteria from blood

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