

Introduction The liver is a brown-colored organ with a smooth surface, weighing between 1200–1500 grams, which constitutes approximately 2% of body weight. Continued research into non-invasive diagnostic techniques and lifestyle interventions will enhance understanding and support optimal liver function. It receives blood from two main sources: arterial blood from the hepatic artery and venous blood from the digestive tract, pancreas, and spleen through the portal vein, with the latter providing about two-thirds of the liver's blood flow.

Liver Functions in Digestion The liver functions as a central metabolic hub, managing the processing and storage of essential nutrients:

- Carbohydrates:** The liver stores glucose as glycogen and synthesizes glucose from non-carbohydrate sources during fasting.
- Over the centuries, views on liver functions evolved significantly:**
- Middle Ages:** Scholars like Ibn Sina linked the liver to humor production and urine analysis.
- Proteins and Amino Acids:** It synthesizes vital proteins and regulates nitrogen balance by converting excess nitrogen into urea.
- Dysfunction can lead to several conditions:**
- Fatty Liver Disease (FLD):** This includes nonalcoholic fatty liver disease (NAFLD) and its more severe form, nonalcoholic steatohepatitis (NASH), both of which can lead to serious complications.

By exploring its functions, this paper emphasizes the importance of the liver in maintaining overall health and its implications for various diseases.

Historical or Scientific Context Historically, the liver was viewed as one of the most vital organs, considered crucial for life.

- Fats:** The liver metabolizes fatty acids for energy and produces ketone bodies during glucose deficiency.
- Cirrhosis:** Advanced liver scarring from chronic diseases disrupts function and can necessitate transplantation.

Maintaining liver health is vital for preserving metabolic processes and preventing gastrointestinal disorders. Poor hepatic function can hinder digestion by impairing bile production, causing malabsorption and nutritional deficiencies.