

ABSTRACT

Epidemiological studies showed that intake of high fat diet causes obesity and also bring many physiological imbalances in mice. The accumulation of triglycerides in hepatocytes is called hepatic steatosis. Steatosis is prototypical form of metabolic syndrome which is described by accumulation of lipids in the liver. Steatosis is a multiple process that consists of many different cell categories comprising hepatocytes, Kupffer cells and hepatic stellate cells. Steatosis eventually leads to cirrhosis and hepatocellular carcinoma. The main aim of study to evaluate detrimental effects of consuming local banaspati ghee (a source of high fat diet) on liver steatosis in mice model. To evaluate this, mice were divided into three groups each consisting of 5 Mice. The first group was control group which was given normal feed .While the second group was given 10% Adil ghee and third group was given 10% Dil Dil ghee mixed with the feed. For histology of mice Hematoxylin and eosin staining was performed. Histopathological alterations were observed as a result of high fat diet in liver tissue mainly in hepatocytes, sinusoidal lining cells, endothelial cell, Kupffer cells and fat storing cells. It was concluded that locally available ghee in market can cause damage to vital organs like kidney as well as liver. It has been shown that female biological system looks to be more susceptible to damage caused by high fat diets as compared to male biological system.