

Every day a person needs to consume 80–100 grams of lipids. Emulsification is also facilitated by intestinal peristalsis and carbon dioxide released during the interaction of chyme and bicarbonates, which also contributes to the mixing of food gruel. The second stage is hydrolysis by digestive enzymes. It must be said that polyunsaturated fatty acids (such as linoleic, linolenic, arachidonic acids) are not synthesized in the human body, these are essential acids, so they should come with food: oils, arachidonic acid is present in pork fat and dairy products. Acidic chyme stimulates the secretion of the hormone secretin from the cells of the mucous membrane of the small intestine into the blood, stimulating the secretion of bicarbonates into the juice of the pancreas. Fatty acids with a short and medium chain (up to 8–10 carbon atoms) are absorbed without the participation of micelles mainly in the small intestine. Regulation of lipid digestion is carried out with the help of cholecystokinin (or pancreosimin), which causes the release of bile from the gallbladder and pancreatic juice from the pancreas into the lumen of the duodenum. Bile acids are formed in the liver from cholesterol, deposited in the gallbladder and are released through the duct into the lumen of the small intestine as part of bile. Bile acids activate lipolysis enzymes (in particular, lipase and phospholipase) and are involved in the absorption of lipolysis products. Resynthesis of triacylglycerols, phospholipids and cholesterol esters in enterocytes. Fat emulsification. Absorption. 2.4.5.