

Download Malonyl Coa Pathway

Acetyl-CoA (acetyl coenzyme A) is a molecule that participates in many biochemical reactions in protein, carbohydrate and lipid metabolism. Its main function is to deliver the acetyl group to the citric acid cycle (Krebs cycle) to be oxidized for energy production. In molecular biology, Hydroxymethylglutaryl-CoA synthase or HMG-CoA synthase EC 2.3.3.10 is an enzyme which catalyzes the reaction in which Acetyl-CoA condenses with acetoacetyl-CoA to form 3-hydroxy-3-methylglutaryl-CoA (HMG-CoA). As pointed out in the Glycolysis page, glucose is the primary fuel used for energy production in the brain. When glucose is metabolized within the hypothalamus, a signaling pathway is initiated that ultimately results in the suppression of food intake. Fatty Acid Biosynthesis. We make fatty acids as well as break them down. Fatty acids are synthesized in the cytosol. The pathway of fatty acid biosynthesis is not just the reverse of fatty acid degradation, although there are some interesting parallels between the two pathways.