Microsomal and peroxisomal fatty acid oxidation in streptozotocin diabetic rat

liver

Orellana, Myriam

Valdés, Elena

Del Villar, Eugenia

Microsomal lauric acid hydroxylation and fatty acid peroxisomal ?-oxidation were studied in hepatic subcellulant preparations from streptozotocin-induced diabetic and diabetic insulin-treated rats. The liver microsomes of the streptozotocin diabetic rats displayed a similar activity to hydroxylate lauric acid as the control microsomes. Diabetic insulin-treated rats showed lower (?1) and ?-lauric acid hydroxylase activities than diabetic and control rats. Streptozotocin-induced diabetes and diabetic insulin-treated rats exhibited no significant changes on peroxisomal palmitoyl CoA ?-oxidation compared to the control rats. Both microsomal and peroxisomal fatty acid oxidation responded in a similar way in this model of experimental diabetes.