

Peroxisomal and microsomal fatty acid oxidation in liver of rats after chronic ethanol consumption

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1. Microsomal P450 and peroxisomal fatty acid oxidation activities were studied in liver of rats after long-term ethanol consumption. 2. Ethanol increased the microsomal lauric acid α -hydroxylation and the aminopyrine N-demethylation catalyzed by cytochrome P450. 3. Ethanol increased peroxisomal α -oxidation of palmitoyl CoA and catalase activity in liver. 4. Both microsomal and peroxisomal activities behaved in a coordinate way in the liver of rats with long-term ethanol consumption. 5. These results would support a role of microsomal α -hydroxylation and peroxisomal α -oxidation of fatty acids in an extramitochondrial pathway of lipid oxidation in the liver. Copyright (C) 1998 Elsevier Science Inc.