

Kidney drug metabolizing activities in streptozotocin diabetic rats

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1. 1. Streptozotocin-induced diabetes produced significant changes on the drug metabolizing enzyme machinery of rat kidney microsomes. 2. 2. It reduced the cytochrome P-450 content by 30%, this effect being reversed by insulin therapy. 3. 3. Total androstenedione oxidative metabolism was increased 2.5-fold and insulin treatment partially antagonized this activation. 4. 4. Total testosterone hydroxylase activities were not modified by diabetes nor by insulin but the formation of 2 α -OH testosterone and 6 α -OH testosterone were distinct in diabetes or insulin treated diabetic rats. 5. 5. Only UDP-glucuronyltransferase activity for PNP was found in kidney microsomes. Diabetes determined a lower UDPGT substrate efficiency not reversed by insulin therapy. © 1995.