

## **Abstract**

Diabetes mellitus is known to be associated with enhanced intestinal absorption of lipids. A validated in vitro technique was used to examine the uptake of (3H) retinol (a lipid soluble vitamin) into the jejunum and ileum of streptozotocin (STZ)-induced diabetic rats. In addition, availability of vitamin A in the plasma and liver of diabetics which were pair-fed to non-diabetic control rats was investigated. The relationship between the duration of incubation and retinol uptake was curvilinear in both the jejunum and the ileum, but no difference in intestinal uptake was observed between the two groups of animals. A linear relationship was noted between the concentration of retinol and uptake into both the jejunum and ileum. There was no difference in the uptake of retinol between the diabetic and control animals. The hepatic concentration of vitamin A also remained unaffected by diabetes as indicated by similar values found between pair-fed diabetic and non-diabetic control rats. Unlike the liver, plasma retinol level was decreased in the diabetic animals; this effect does not appear to be caused by any change in the intestinal absorption of the vitamin.