312.3 Does Lipoproteinuria Rate in lactating exercised rats return to rest values after 2 or 4 hours?

312.4 EFFECTS OF EXERCISE IN RATS DURING TWO REPRODUCTIVE CYCLES.

312.5 Incorporation of 14C-labeled Oxacetic Acid in Skeletal Muscle M.E. Wathne and R.G. Miller

312.6 REDUCTION OF PLASMA CHOLESTEROL BY PHIRACETAMOPHORE IN HYPERCHOLESTEROLEMIC HAMSTERS.


Pharacaceinemone and 2,4,4-trifluorocamphenyl [THA] in the agenius part of parahocerebroseal glucosinolates in an indigenous plant, Chrozophora thermophylla Robb. This compound has been previously shown to stimulate bile secretion in rats by enhancing bile acid excretion which is then, decreased plasma cholesterol. However, the mechanism by which THA decreases plasma cholesterol is not known. This study is aimed to evaluate the hypercholesterolemic effect of THA by using hypercholesterolemic male hamsters. In hamsters fed a basic diet with daily supplemental cholesterol (0.5% body weight), THA (300-800 μg/kg twice a day for 7 days, intragastrically) decreased both plasma cholesterol and triglyceride levels in plasma by 68.1% and 74.7%, respectively, with decreases in both plasma VLDL and LDL-cholesterol but not HDL-cholesterol. THA did not significantly alter hepatic cholesterol content in either free or bound pools but significantly increased fecal excretion of both bile acid and cholesterol.

Corresponding to the increase of fecal bile acids in THA treated animals, the activity of cholesterol 7α-hydroxylase in liver (7-fold). These results suggest that THA reduced plasma cholesterol by stimulating hepatic conversion of deoxicolate into bile acids. This compound may have the potential for development as a therapeutic agent in lowering lipids in hypercholesterolemic patients.