

## **Biochemical perturbations in the ovarian total proteins and triglycerides of a cyclic female of Swiss Albino mice subjected to sodium fluoride challenge**

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**ABSTRACT :** Total protein (TP) and triglycerides (TG) were estimated in ovary of a female mice exposed to 5 mg/kg BW and 10 mg/kg BW chronic dose of NaF in drinking water for five days. Study demonstrates significant fall in level of TP, as well after ingestion of 5 mg/kg BW dosage. A further fall in these levels was observed in them after ingestion of NaF increase to 10 mg/kg BW. A significant increase in the level of total Triglycerides was noted after 5 mg/kg BW dose ingestion. Further increase was observed when treated with 10 mg/kg BW. The study included effect of sodium fluoride on total protein (TP) and triglycerides. Study suggested significant fall in total protein level. A further fall in these levels was noted after increasing the dose to 10 mg/kg BW. These data were interpreted in the light of earlier reports. Decrease in protein content is attributed to the impairment of the biosynthesis. Increase in the amount of TG may be due to the reduced utilization of these substrates. Lack of lipid or its hydrolysates may mean loss of alternate source of energy as well as non availability of precursors needed for steroidogenesis. Any alternation in steroidogenesis may adversely affect the folliculogenesis which need a constant supplication of these steroids. The reduced utilization of lipid due to NaF may affect folliculogenesis and the intricate process of maturation. Histological data also lend support to this.

**Key Words :** Fluoride toxicity, biochemical perturbations, ovary proteins, triglycerides, Albino mice.