

The Safety of Microbiologically Prepared Fructooligosaccharide on White Albino Rats

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Abstract : FOS was produced from FTase of *Aspergillus niger*. HPLC analysis showed 32.24%. Consisting of 28.57% ketose and 4.67% nystose. Effects of FOS were studied on 12 weeks old albino rats. All animals survived until scheduled euthanasia. A low incidence of clinical sign and no toxicological effect were observed. Male rats fed with 2500mg/kg fructooligosaccharides had the highest weight. Male and female rat showed a significant increase in weight from first week to the fifth week. All haematological parameters examined were normal in male and female rats. Mean haematological and haemoglobin values for 2500mg/kg bw FOS fed male rats were the highest. Clinical chemistry test, glucose, albumin, and cholesterol were within normal laboratory values for a rat. The mean glucose value was lower for FOS fed male and female rats compared to those fed with honey and 60% sucrose. Gross necropsy observation showed no remarkable internal gross abnormalities for any of the animals.

Keywords : fructooligosaccharide, white albino rat, haematology values, clinical chemistry values

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