Effect of Different Sugar on Fasting and Peritoneal post-prandial Glucose Tolerance Test; in Male and Female Mice.

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Abstract

Background: Different sugars are consumed daily by human, among of the most consumed sugar is glucose, fructose and the disaccharides sucrose. Sugar was known as a safe source of energy for human in comparison to lipids. Nowadays several lines of evidence suggest that sugar have a harmful effect on human in regard to cardiovascular diseases and dyslipidemia.

Aim of the study: to investigate the effect of different sugar; glucose, fructose and sucrose regime on post prandial peritoneal glucose tolerance test.

Material and methods: 20 male and female mice each were divided into 4 groups, one drinks water, the second 20% fructose, the third 20% glucose the last one on 20% sucrose. At 7, 11- and 12-weeks fasting blood glucose, 30min and 60 min postprandial peritoneal glucose tolerance test were done.

Results: There is a trend in weight reduction in sucrose fed mice. Regardless to the PGTT there is a significant change in SM 30min after 7 weeks and 12 weeks, and FM after 12 weeks. According to FBG there's a reduction in GF, GM.

Conclusion: in our regime which include different sugars showed decrease in glucose level in mice