

Effect of Yogurt on Blood and Liver Lipids Level in Rats

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Abstract : This present investigation was performed to study the effect of low fat yogurt on serum and liver lipids profile of male albino rats (weighing 100 g+or- 5 gram) when fed balanced or high fat high cholesterol diets and given yogurt ad libitum compared with control groups. Rats were divided into 4 groups, each group contains 6 rats. The groups of rats were fed as follows: Group(1) was fed balanced diet + water(control). Group(2) was fed balanced diet + low fat yogurt. Group(3) was fed high fat high cholesterol diet + water(Control). Group(4) was fed high fat high cholesterol diet + low fat yogurt. The obtained results could be summarized as follows: When rats were given low fat yogurt and fed balanced or high fat high cholesterol diets a significantly greater weight gains resulted in comparison with the control groups given water instead of yogurt. The data on the weights of liver and heart expressed' as percentage increased the body weight in case of rats which were fed balanced diet with low fat yogurt while in case of rats which were fed high fat high cholesterol diet with low fat yogurt the increment scenes to be less. Results of serum cholesterol levels in serum of rats were given balanced or high fat high cholesterol diets and consuming low fat yogurt was showed a significant reduction values. However the low fat yogurt produced the highest significant decrease values. The values of serum cholesterol go hand in hand with serum lipoprotein fractions in rats given low fat yogurt with both balanced or high fat high cholesterol diets. An increase of high density lipoprotein HDL-C and a decrease of low density lipoprotein LDL-C values were obtained. When rats ingested low fat yogurt a significant decrease in serum and liver triglycerides content was obtained wether with balanced or high fat high cholesterol diets. Rats consuming high fat high cholesterol diets with water showed a significant increase in liver total lipids, total cholesterol and phospholipides levels in comparison with the same liver parameters in rats given balanced diet with water. Supplement with low fat yogurt significantly suppressed these effects.

Keywords : yogurt, lipids profile, albino, rats

Conference Title : ICNFS 2015 : International Conference on Nutrition and Food Sciences

Conference Location : Zurich, Switzerland

Conference Dates : July 29-30, 2015