

# World Congress on ADVANCED NUTRACEUTICALS AND FUNCTIONAL FOODS

July 15-16, 2019 | London, UK

## Effect of Thioflavin-T on leptin, adiponectin levels, biochemical parameters and liver histological on male NMRI with high fat diet

**Nafiseh Amani Ekhtesar**

University of Tehran, Iran

**Introduction:** Obesity is considered to be a major risk factor for chronic diseases such as CHD and hypertension, type 2 diabetes, and some types of cancer. Obesity is a chronic disease of multifactorial origin and can be defined as an increase in the accumulation of body fat. Effect of Thioflavin-T was evaluated on body weight and blood glucose, insulin, insulin resistance, leptin, adiponectin, cholesterol, LDL, HDL, triglyceride, aspartate amino transferase, alanine amino transferase, alkaline phosphatase and liver histological in male NMRI mice with high fat diet.

**Materials and methods:** The mice were randomly divided into five groups: The normal group, sham group, Experimental group 1: mice were given Thioflavin-T 5mg/kg, Experimental group 2: Thioflavin-T 10 mg/kg, Experimental group 3: Thioflavin-T 15 mg/kg via intragastric gavage for 4weeks.

**Results:** In the present study the amount of body weight of experimental groups treated compared to Sham group statistically significant decrease. The amount of leptin, insulin and blood glucose, cholesterol, serum LDL, TG of the experimental groups compared to sham group showed a significant decrease. Serum adiponectin levels and serum HDL levels in the experimental groups compared to the sham group was increased. Administration of thioflavin-T in different doses, causes finding polymorphonuclear cells in liver of the experimental groups, which the amount of these cells was more in the experimental group3.

**Conclusion:** It could be suggested that Thioflavin-T may be potentially effective candidates in obesity treatment and diabetes.

### Biography

Nafiseh Amani Ekhtesar is a graduate of the Science and Research university of Tehran. She got her M.A in physiology. She was researching about the relation between food and health in the during of the years. In addition, the effect of them on blood parameters and diseases. She has presented some seminars in the related subjects. Unfortunately graduates in the major of physiology are not supported enough. In addition, the related jobs in the mentioned field are very limited in Iran.

amaniekhtesar@yahoo.com