

## Efficacy of Chia Seed Oil Supplemented Ice-Cream against Hypercholesterolemia

**Authors :** Naureen Naeem, M. S. Aslam

**Abstract :** Chia seeds found to be a rich source of dietary fiber contain oil which is high in omega 6 and omega 3 fatty acids and helpful in the control of cardiovascular diseases. Owing to its spectacular significance, present research had been designed to explore its effect on cholesterol level of the individuals after consumption of chia seed oil supplemented ice cream. The project was designed in such a manner that fat of ice cream was replaced with chia seed oil in different proportions i.e., 25%, 50%, 75%, 100%. After physico-chemical and sensory evaluation of ice cream, best treatment was selected and used for efficacy trials. After baseline line study and thorough inclusion criteria 10 individuals were selected and divided into two groups. One group treated as control and the other was given chia seed oil supplemented l(50%) ice cream. Significant decrease in cholesterol level was observed in the treated group. 18% decrease in cholesterol level was observed at 40th day followed by 8% at 20th day. Similarly 20% decrease in LDL cholesterol with 14% increase in HDL cholesterol. It was recommended that further trials be conducted with sophisticated techniques to completely replace saturated fat in ice cream with unsaturated fats and to study its effect in hyperglycemia and oxidative stress.

**Keywords :** hypercholesterolemia, chia seed oil, HDL, triglycerides

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