The present research work “Role of Calcium in Modulating Obesity” was conducted with the following objectives:

- To make comparison between different sources of calcium (dairy, non-dairy sources and Ca supplement) in modulating obesity.
- To examine the effect of calcium on weight, lipid profile and triglyceride level.
- To assess the effect of high calcium diet on fecal fat excretion.

To investigate the effect of calcium rat model of diet-induced obesity was used. Weight and blood samples were taken from rats to confirm that the high fat diet had its intended effect of increasing body weight. Rats fed on high fat diet were significantly heavier and fatter than those fed on standard diet.

Obese rats were divided into different groups and each group was given high calcium diet from three different sources (dairy, non-dairy and supplements). Weight, lipid profile and fecal fat were estimated again to investigate the effect of calcium.

The results of the study are summarized as below:

- After the administration of high fat diet (phase II) rats were heavier and fatter than they were in phase I i.e. when they are maintained on standard diet.
- Significant difference was also observed in total cholesterol, triglyceride and LDL levels which confirm that high fat diet has its intended effect of increasing body weight.
- High fat diet produced significant decrease in the amount of fat excreted in feces.