

The influence of black tea on cholesterol

This study was carried to evaluate whether the Sri Lankan black tea of high grown new (HGN) and old tea (HGO) improves total lipid profiles with male and female Wistar rats.

Preliminary investigation was conducted to obtain a hyperlipidemic model. From this study the best experimental animal model was selected, where the rats were fed with 20% butter fat (w/w) diet.

When female and male rats were given this hyperlipidemic diet the total cholesterol (TC) went up by 10% and 5% respectively: triglycerides levels were elevated by 26% and 12% respectively than the control group. High density lipoprotein (HDL) cholesterol levels decreased by 24% and 29% respectively too.

When HGN tea was given simultaneously with the hyperlipidemic diet, the TC levels decreased by 9% and 11% respectively and the triglycerides by 26% in female rats and

increased by 9% in male rats than the control group. The HDL cholesterol levels were increased by 5% and 8% respectively than the control group. Results shows that the adverse effects due to hyperlipidemic condition were blunted by HGN tea, in both sexes.

In this contrast when old tea (over 14 months) was given the Tc level decreased by 14% than the control group and HDL cholesterol level did not improve, making HGN tea more lipid profiles.