A-38 Hypolipidaemic activity of *Aegle marmelos* roots

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Hyperlipidaemia is a predisposing factor for coronary heart disease. Elevation of blood cholesterol leads to its deposition in the arterial walls. High density lipoproteins (HDL), in contrast, could scavenge the deposited cholesterol and prevent predisposition to CHD. Hence, it is advantageous to lower the serum Total: HDL cholesterol ratio by therapeutic or dietary intervention.

In this study, *Aegle marmelos* roots *Aegle marmelos* leaves, *Allium sativum* bulbs, *Murraya koenigii* leaves and *Sida acuta* roots were investigated for hypocholesterolaemic activity. Hyperlipaedaemic male Sprague Dawley rats were treated with boiling water extracts of above plants (1 g/kg orally) for 3 weeks, and bled following a 14 h fast, and the sera were analysed for the lipid profiles. The data was analysed by t test.

The total and HDL cholesterol levels of the control group were 102.93 ± 42.02 and 32.86 ± 8.23 mg/dl, respectively. (Total : HDL = 3.13). The test groups dosed with the extracts of *A. marmelos* roots *A. marmelos* leaves, *A.sativum* bulbs, *M.koenigii* leaves and *S. acuta* roots displayed Total : HDL ratios of 1.31, 3.54. 6.70, 1.73 and 1.92, respectively.

This study shows that the *A. marmelos* roots are the most effective in decreasing the Total : HDL ratio, among the medicinal plants tested, which is a result of the simultaneous lowering of the total cholesterol and elevation of HDL cholesterol levels.