

DOES COCONUT FAT CONSUMED IN A SRI LANKAN DIET
ELEVATE SERUM CHOLESTEROL?

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While a number of studies indicate that diets high in saturated fats have an undesirable effect on serum cholesterol^{1,2} feeding studies which manipulated this parameter have done so with diets containing a high percentage (40%) of fat. The aim of this project was to manipulate this parameter in a typical Sri Lankan diet which is high in carbohydrate (70%) and low in fat (15%), to establish whether saturated fats exert a similar effect in the Sri Lankan diet.

Baseline serum lipid profiles of 12 healthy male medical students were determined after the subjects were put on a standard diet (1960±50 K Cal, 70%, 14%, 16% from carbohydrates, proteins and fats respectively) for a period of 4 weeks. The subjects then consumed a diet containing an additional 10% of coconut calories (ie 1960±50 K Cal, 60%, 14%, 26% from carbohydrates, proteins and fats respectively) but which is isocaloric with the standard diet for a further period of 4 weeks. Lipid profiles were then determined and the subjects reverted to the standard diet for 4 weeks after which the lipid profiles were redetermined.

Analysis of the results revealed that in 8 of the 12 subjects, the coconut increment had the undesirable effect of increasing total and LDL cholesterol ($p < 0.05$). Serum triglycerides and HDL cholesterol were unaffected.

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