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Serum cholesterol and triglyceride levels of rats fed with consumer selected coconut oil blends

[1*]Seneviratne, K.N., [1]Kotuwegedara, R.T. and [2]Ekanayake, S

[1]*Department of Chemistry, University of Kelaniya, Kelaniya, Sri Lanka*
[2]*Department of Biochemistry, Faculty of Medical Sciences University of Sri Jayawardenapura, Nugegoda, Sri Lanka*

Abstract: Double blends were prepared by mixing copra oil (CO) with seed oils of *Brassica juncea* (BO), *Madhuca nerifolia* (MO) and *Sessamum indicum* (SO) in different volume proportions. The consumer-acceptable oil blends were selected based on the opinion of a panel of consumers about the palatability and other physical properties of French fries prepared using the oil blends. The effect of the selected oil blends on serum lipid parameters of Wistar rats was examined. The serum levels of total cholesterol, LDL and triglycerides decreased and the serum levels of HDL increased significantly in rats fed with selected oil blends, when compared to those fed with coconut oil. The beneficial effects on lipid parameters of the rats fed with the oil blend containing the seed oil of BO (40%) and CO (60%) were closely comparable with those of the rats fed with soybean oil. The results recommended that it could be helpful to prepare essential fatty acid-rich nutritional oil blends based on CO in industrial scale.

Keywords: Coconut oil, soybean oil, oil blends, total cholesterol, HDL/LDL, triglycerides