

Plasma Lipid Profiles and Atherogenic Indices of Rats Fed Raw and Processed Jack Fruit (*Artocarpus heterophyllus*) Seeds Diets at Different Concentrations

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Abstract : The effect of processing on plasma lipid profile and atherogenic indices of rats fed *Artocarpus heterophyllus* seed diets at different concentrations were investigated. Fifty five rats were used for this study, they were divided into eleven groups of five rats each (one control group and ten test groups), the test groups were fed raw, boiled, roasted, fermented, and soaked diets at 10 % and 40% concentrations. The study lasted for thirty five days. The diets led to significant decrease ($p < 0.05$) in plasma cholesterol and triacylglycerol of rats fed 10% and 40% concentrations of the diets, and a significant increase ($p < 0.05$) in high density lipoprotein (HDL) levels at 40% concentrations of the test diets. The diets also produced decrease in low density lipoprotein (LDL), very low density lipoprotein (VLDL), cardiac risk ratio (CRR), atherogenic index of plasma (AIP) and atherogenic coefficient (AC) at 40% concentrations except the soaked group that showed slight elevation of LDL, CRR, AC and AIP at 40% concentration. *Artocarpus heterophyllus* seeds could be beneficial to health because of its ability to increase plasma HDL and reduce plasma LDL, VLDL, cholesterol, triglycerides and atherogenic indices at higher diet concentration.

Keywords : artocarpus heterophyllus, atherogenic indices, concentrations, lipid profile

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