

ABSTRACT

THE EFFECT OF AGAR-AGAR SUPPLEMENTATION TO THE TOTAL OF CHOLESTEROL LEVELS, *LDL* CHOLESTEROL, *HDL* CHOLESTEROL AND TRIACYLGLYCEROL LEVELS IN RATS (*Rattus Norvegicus*) SERA ON HIGH LIPID DIET

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The effect of agar-agar on total cholesterol, LDL cholesterol, HDL cholesterol and triacylglycerol levels in hypercholesterolemic rats (*Rattus norvegicus*) sera with high lipid diet are unwell known.

The study of the influence of agar-agar supplementation with different dose in hypercholesterolemic rats was performed to know the effect in serum total cholesterol, LDL cholesterol, HDL cholesterol and triacylglycerol levels, respectively. Thirty-six hypercholesterolemic rats were divided into 3 groups, i.e. control group (K), treatment group 1 (P1) and treatment group 2 (P2).

Multivariate Analysis of Variance (Manova) and Least Significance Difference (LSD) were used to test the data on the effect of agar-agar solution on serum total cholesterol, LDL cholesterol, HDL cholesterol and triacylglycerol levels.

In conclusion, this study reveals that supplementation with agar-agar 80 mg/day (0,6 ml) and 350 mg/day (3 ml) were associated with significant decreases of total cholesterol, LDL cholesterol serum levels and HDL cholesterol levels but not on weight gain and triacylglycerol serum levels. Triacylglycerol serum levels were not significantly influenced by agar-agar.

Key word : Agar-agar, Total cholesterol serum levels, LDL cholesterol serum levels, HDL Cholesterol serum levels, Triacylglycerol serum levels.