The Effect of Giving Olive Soy Turmeric Cookies on High-Density Lipoprotein Levels in Dyslipidemic Wistar Male Rats.

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ABSTRACT

Dyslipidemia is a medical condition characterised by abnormal levels of total cholesterol, LDL cholesterol, triglycerides or HDL cholesterol. Turmeric and soya contain flavonoids that can increase HDL levels in the blood by increasing LCAT (Lecithin Cholesterol Acyltransferase) activity. This study aims to determine the effect of soy-turmeric-olive cookies on HDL levels in dyslipidemic Wistar rats. This true experimental study with pretest-posttest control group design. Twenty-four male Wistar rats weighing 150-250 grams and 2-3 months old were divided into three groups. The negative control group (K-) received standard Rat Bio feed (20 grams/mouse/day) and drank ad libitum. The positive control group (K+) was fed a modified high-fat diet, including intravenous injection of adrenaline 0.006 mg/200 gBB on the first day, followed by duck egg yolk (5 g/gBB) orally for 14 days, and then beef fat (2 g), quail egg yolk (1 g), and butter (2 g) orally. The treatment group (P) received a high-fat diet, ad libitum drinking, and cookies soyaturmeric-olive 21.7 g/mouse/day. The pretest and posttest data showed significant differences between groups (pretest p = 0.01; posttest p = 0.005). However, there was no significant difference within groups in the pretest and posttest results (K-p = 0.715, K + p = 0.785, P p = 0.233). The difference in HDL cholesterol levels between pretest and posttest was also not significant (p = 0.661). Therefore, the administration of cookies soy-turmeric-olive did not significantly affect HDL cholesterol levels in dyslipidemic Wistar rats.

Keywords: HDL Cholesterol, Cookies, Dyslipidemia White Rats