

Abstract

Khotijah, Siti. 2017. **Pengaruh Pemberian Kopi Hitam dan Minyak Jinten Hitam Terhadap Penurunan Kadar LDL (*Low-density Lipoprotein*) Darah pada tikus jantan *Sprague Dawley***. Pembimbing : Ali Rosidi dan Joko Teguh Isworo.

THE EFFECT OF BLACK COFFE AND BLACK CUMIN OIL INTERVENTION TOWARD LDL BLOOD LEVEL ON MICE SPRAGUE DWALEY

Background : black coffee contains chlorogenic acid which is a strong antioxidant that able to hamper cholesterol absorption. Black cumin oil contains hymoquinon. Both of these antioxidants can lowers LDL levels. This research is aiming to know the effect of black coffee and black cumin oil intervention toward LDL blood level.

Methods : This research is laboratory true experimental, with *randomized pre-post test control group design* to 30 sprague dawley mice which divided into 5 groups. Each group is feed by woof high of fat and different treatment. Positive control group is feed by standard woof, negative control group is feed by standard woof, woof high of fat and simvastatin 0.18mg, treatment 1 is feed by black coffee 3.6 ml, treatment 2 is feed by black cumin oil 0.27 ml and treatment 3 is feed by combination of black coffee 3.6 ml and black cumin oil 0.27 ml for 49 days. The LDL level is examined by direct homogenous enzyme method. The data is analyzed by paired t-test and anova with 95% confident level.

Result : The research shows there is decreasing LDL blood level which is about 1.4mg/dl on positive control group, 31.45mg/dl on negative control group, 12.17mg/dl on black coffee intervention, 26.05mg/dl on black cumin oil intervention and 16.6mg/dl on intervention of combined black coffee and black cumin oil. Negative control group has highest decreasing LDL level compared to other groups. The decreasing LDL level of group with black cumin oil intervention is higher than black coffee intervention and the combination. Anova examination shows there is significant difference of LDL level ($p:0.05$) among those 5 groups intervention.

Summary : Black cumin oil with a dose of 0,27 ml can decrease the LDL level.

Keywords : Black Coffee, Black Cumin Oil, LDL Level.