Potential Chocolates Drinks Changes in LDL Levels in Dyslipidemia Wistar Strain White Rats (Potential Chocolates Drinks Changes in LDL Levels in Dyslipidemia Wistar Strain White Rats)

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ABSTRACT

Dyslipidemia is an abnormal metabolism of lipids, characterized by increased levels of Low Density Lipoprotein (LDL), triglyceride levels and total cholesterol levels and decreased levels of High Density Lipoprotein (HDL) in the blood. Nonpharmacological therapies that can be given are chocolate drinks that contain antioxidants. Antioxidant compounds contained in chocolate are polyphenols which function to reduce the oxidation rate of LDL. The purpose of this study was to analyze of chocolate drinks to changes in LDL levels in wistar strain dyslipidemia white rats. This research was conducted in September 2018 until January 2019 at the Biomedical Laboratory of the Faculty of Dentistry University of Jember. This type of research is a type of experimental research (True Experimental). The research design used was the Pretest-Posttest with Control Group Design. The samples used were 25 wistar strain white rats with male sex, aged 2-3 months, weighing 180-200 grams, with 25 rats and 2 reserves. Chocolate drink intervention in the treatment group (P1) with a dose of 5.1 ml/day, treatment group (P2) with a dose of 5.2 ml/day, treatment group (P3) with a dose of 5.3 ml/day was given by means of a sonde. The results of the pretest posttest analysis showed significant differences in the positive control group (P +)with values $(p = 0.03; p < \alpha)$ while there were no significant differences in the treatment group ($p > \alpha$). The highest change in LDL levels after the adduction of chocolate drinks is in the group (P3) with a dose of chocolate drinks 0.54 grams has a percentage change of 62%. Giving chocolate drinks has the potential to reduce LDL levels, but the results of analysis of data based on SPSS are not significant.

Keywords: Chocolate drinks, Dyslipidemia, LDL levels.