Potencial of Chocolate Drinks for Changes in HDL Level Of Male Wistar Strain White Rats Dyslipidemia (Potential of Chocolate Drinks for Changes in HDL Level of Male Wistar Strain White Rats Dyslipidemia)

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ABSTRACT

Dyslipidemia is defined as having a high plasma triglyceride concentration, increased Total Cholesterol, decreased Low High-Density Lipoprotein cholesterol (HDL-C) concentration, and decreased concentration of Low-Density Lipoprotein cholesterol (LDL-C). Therapy that can increase HDL is a drink high in antioxidants from natural ingredients namely chocolate drink. Chocolate (food or drink) has great potential producing antioxidants. The antioxidants contained in chocolate are a group of flavonoids composed of several phenol molecules (polyphenols). The purpose of this research was to determine the potential of chocolate drink to change HDL levels in wistar dyslipidemia rats. This research was conducted in September 2018 until January 2019 at the Biomedical Laboratory of the Dentistry Faculty Jember University. This type of research is an experimental research (true experimental) by a pretest-posttest with control group design. The sample used 25 male wistar rats, with each group of 5, aged 2-3 months, weight 180-200 grams. The intervention of granting preferential treatment on chocolate drink I (P1) with doses of 5,1ml/day, treatment II (P2) with 5 doses, 2 ml/day, treatment III (P3) with doses of 5,3ml/day by way of a sonde in each treatment group of rats. There was no significant difference in increasing the levels of HDL (p=0,088). There was a difference in HDL levels before and after treatment in the treatment group III (P3) (p=0,018) with the dose 5,3ml/day contained 0.54 gram chocolate powder with 8.92% content of antioxidant activity, 0.64% of the total polyphenols and 34.88% total flavonoids.

Key words: Chocolate Drinks, Dyslipidemia, and HDL-C level.