The Effect of Red Dragon fruit Peel Extract Jelly Drink on HDL Levels in Dyslipidemic Galur Wistar Rats

Anik Dwi Oktavia

Clinical Nutrition Study Program
Department of Health

ABSTRACT

Dyslipidemia is a non-communicable disease condition characterised by changes in plasma lipid fractions. Usually the fractions that change and experience abnormalities are an increase in total cholesterol levels, Low Density Lipoprotein (LDL) and triglyceride levels and a decrease in High Density Lipoprotein (HDL) levels. There are several efforts made to overcome dyslipidemia, namely through non-pharmacological therapy by undergoing a diet pattern of consuming foods containing sufficient antioxidants, one of the antioxidant compounds is vitamin C, one of these foods is red dragon fruit peel juice jelly drink, which is made from dragon fruit peel which contains vitamin C of 37.5 mg/100 ml. The purpose of this study was to determine the effect of red dragon fruit peel juice jelly drink on HDL levels of dyslipidemia wistar rats. This study used a True Experimental research approach with the research design used was Pretest-Posttest Control Group Design. This study involved 27 white rats aged 2 - 3 months with body weight between 150 - 200 grams divided into 3 groups, namely the negative control group which was fed standard feed, the positive control group which was given high-fat feed with the composition of corn powder, soybean powder, fructose, palm oil, duck eggs, beef fat, and sodium benzoate, and the treatment group which was given high-fat feed and dragon fruit peel juice jelly drink. In this study, it was found that there was a significant difference before and after the intervention in the positive control group (p = 0.013), treatment (p = 0.003). There was no difference in HDL levels before and after in the negative control group (p = 0.812). Thus, it can be said that there is an effect of giving red dragon fruit peel juice to HDL levels in dyslipidemia Wistar rats.

Keywords: Red Dragon Fruit Peel Extract Jelly Drink, HDL Levels, Dyslipidemic Wistar Rats, Dyslipidemia