

Pemberian Minuman *Soybeans Dragon Fruit Peel Powder* Terhadap Kadar Kolesterol Total Tikus *Sprague dawley* Jantan Dislipidemia
(*The Giving Soybeans Dragon Fruit Peel Powder Drink to Total Cholesterol Levels of Male Sprague dawley Rats Dyslipidemia*).

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ABSTRAK

Dislipidemia merupakan gangguan metabolisme lipid, salah satunya adalah kenaikan kadar kolesterol total darah. Salah satu alternatif yang dapat menurunkan kolesterol total penderita dislipidemia adalah bahan makanan yang memiliki kandungan senyawa fenolik (flavonoid) yaitu buah naga merah dan kedelai. Buah naga merah mengandung flavonoid yang dapat menghambat sintesis kolesterol dengan cara menghambat kerja enzim HMG CoA reduktase. Kedelai juga diyakini memiliki efek hipokolesterolemia karena adanya kandungan isoflavon. Tujuan penelitian ini untuk mengetahui pengaruh minuman *soybeans dragon fruit peel powder* terhadap kadar kolesterol tikus *Sprague dawley* jantan dislipidemia. Jenis penelitian ini adalah *true-experimental* dengan *pretest - posttest with control group design*. Penelitian ini menggunakan 27 ekor tikus jantan galur *Sprague dawley* dengan berat badan antara 150-250 gram yang berumur 2 -3 bulan. Tikus dibagi menjadi 2 kelompok kontrol dan 1 kelompok perlakuan yang diberikan minuman *soybeans dragon fruit peel powder* dengan dosis 12,8 ml/kgBB/hari selama 14 hari. Kadar kolesterol total diukur dengan metode CHOD-PAP (*Cholesterol oxydase-phenyl aminopyrazolon*). Data dianalisis dengan uji *One Way Anova* dilanjutkan uji *Post Hoc* atau *Man Whitney*, serta dilakukan uji *Paired T-test* dengan hasil terdapat perbedaan signifikan kadar kolesterol total tikus sebelum dan setelah intervensi ($p= 0,003$). Pemberian minuman *soybeans dragon fruit peels powder* dapat menurunkan kadar kolesterol total pada kelompok perlakuan (P) sebesar 18,45% secara signifikan ($p= 0,044$).

Kata Kunci: Dislipidemia, Kolesterol total, *Soybeans Dragon Fruit Peel Powder*.

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ABSTRACT

Dyslipidemia is a disorder of lipid metabolism, one of which is an increase in total blood cholesterol levels which is more than 200 mg / dL. One alternative that can reduce total cholesterol of dyslipidemia sufferers is food that contains phenolic compounds (flavonoids), namely red dragon fruit and soybeans. Red dragon fruit contains flavonoids which can inhibit cholesterol synthesis by inhibiting the action of the HMG CoA reductase enzyme. Soybean is also believed to have hypocholesterolemia effect due to the presence of isoflavones. The purpose of this study was to determine the effect of the beverage soybeans dragon fruit peel powder on cholesterol levels of male *Sprague dawley* rats dyslipidemia. This type of research is *true-experimental* with pretest - posttest with control group design. This study used 27 male *Sprague dawley* strain rats with a body weight between 150-250 grams, aged 2-3 months. Rats were divided into 2 control groups and 1 treatment group that was given *soybeans dragon fruit peel powder* drink with a dose of 12.8 ml / kgBB / day for 14 days. Total cholesterol levels were measured by the CHOD-PAP (Cholesterol oxydase-phenyl aminopyrazolon) method. Data were analyzed with *One Way Anova test* followed by *Post Hoc test* or *Man Whitney test* and *Paired T-test* with the result there was a significant difference in total cholesterol levels of rats before and after the intervention. Giving *soybeans dragon fruit peels powder* drinks can reduce total cholesterol levels in the treatment group (P) by 18.45% significantly ($p = 0,044$).

Key words :*Dyslipidemia, Soybeans Dragon Fruit Peel Powder, Total Cholesterol*