

INTISARI

Rizky Putri Hapsari. Nim 3181027. Pengaruh Pemberian Bubuk Kedelai Hitam (*Glycine soja* (L.) Merr.) Terhadap Kadar LDL Tikus Putih (*Rattus norvegicus*).

Hiperkolesterolemia adalah kondisi meningkatnya kolesterol darah dan disertai peningkatan kadar *Low-Density Lipoprotein* (LDL). Peningkatan kadar menyebabkan penumpukan lemak pada dinding arteri yang dapat memicu terjadinya sumbatan pada pembuluh darah. Antosianin dalam kedelai berperan menghambat pembentukan kolesterol yang nantinya akan berpengaruh dalam penurunan kadar LDL. Tujuan penelitian ini untuk mengetahui efek pemberian bubuk kedelai hitam (*Glycine soja* (L.) Merr.) terhadap kadar LDL tikus putih (*Rattus norvegicus*). Penelitian ini bersifat eksperimental dengan *pretest and posttest controlled group design* yang terbagi dalam kelompok kontrol dan perlakuan. Tahap sebelum, semua kelompok diberi kuning telur puyuh 2 ml pada pagi dan sore hari selama 15 hari. Tahap sesudah, pemberian kuning telur tetap dilanjutkan dan dilakukan penambahan bubuk kedelai hitam dosis 0,80 g selama 14 hari pada kelompok perlakuan. Pengukuran kadar dilakukan menggunakan alat fotometer Clima MC 15. Hasil analisa dengan SPSS pada uji *Shapiro Wilk* menunjukkan data berdistribusi normal $p > 0,05$ dan uji *Paired T-Test* diperoleh nilai signifikansi $p < 0,05$ dengan persentase penurunan sebesar 12,87% pada kelompok perlakuan sebelum dan sesudah. Dari hasil penelitian tersebut dapat disimpulkan bahwa terdapat pengaruh pemberian bubuk kedelai hitam terhadap kadar LDL tikus putih.

Kata Kunci: LDL, Kedelai Hitam, Antosianin, Tikus Putih

ABSTRACT

Rizky Putri Hapsari. Nim 3181027. *The Effect of Powder Black Soybean (*Glycine soja* (L.) Merr.) In LDL level of White Rats (*Rattus norvegicus*).*

Hypercholesterolemia is a condition of increased blood cholesterol accompanied by increased levels of *Low-Density Lipoprotein* (LDL). Increased levels cause an accumulation of fat on the artery walls which can lead to blockages in blood vessels. Anthocyanins in soybeans play a role in inhibiting the formation of cholesterol which will affect reducing LDL levels. The purpose of this study was to determine the effect of black soybean powder (*Glycine soja* (L.) Merr.) on LDL levels in white rats (*Rattus norvegicus*). This research is experimental with pretest and posttest controlled group design which is divided into control and treatment groups. In the pretest stage, all groups were given 2 ml of quail egg yolk in the morning and evening for 15 days. In the posttest stage, egg yolk was continued and black soybean powder was added at a dose of 0.80 g for 14 days in the treatment group. Measurements were using a photometer Clima MC 15. The results of the SPSS analysis on the Shapiro Wilk test showed the data were normally distributed at $p > 0.05$ and the Paired T-Test test obtained a significance value of $p < 0.05$ with a percentage decrease of 12.87% in the treatment group before and after. From the results of this study, it can be concluded that there is an effect of giving black soybean powder on LDL levels in white rats.

Keywords: LDL, Anthocyanins, Black Soybean, White Rats