

EFEK PEMBERIAN BAWANG HITAM TERHADAP KADAR

*C-REACTIVE PROTEIN (CRP) TIKUS PUTIH (*Rattus norvegicus*)*

MODEL HIPERURISEMIA

ABSTRAK

Latar Belakang: Hiperurisemia dapat menyebabkan inflamasi dan stres oksidatif yang ditandai dengan peningkatan kadar *c-reactive protein* (CRP). Bawang hitam memiliki kandungan bioaktif yang berperan sebagai antiinflamasi, antioksidan, dan xantin oksidase inhibitor sehingga dapat menurunkan kadar CRP. Penelitian ini bertujuan untuk mengetahui efek pemberian bawang hitam terhadap penurunan kadar CRP tikus putih model hiperurisemia. **Metode:** Penelitian ini merupakan penelitian *true eksperimental* dengan *post test only with control group design*. Dua puluh lima hewan coba dibagi dalam lima kelompok yaitu I : kontrol sakit, kelompok II : obat standar, kelompok III, IV, dan V : kelompok perlakuan yang diberikan larutan bawang hitam dengan dosis berturut-turut 240, 480, 960 mg/hari selama 14 hari. Hari ke 14 penelitian dilakukan pengukuran kadar CRP serum menggunakan metode ELISA. Analisis data menggunakan uji non parametrik *Kruskal-Wallis*. **Hasil:** Rerata kadar CRP kelompok I, II, III, IV, dan V berturut-turut adalah 278,762; 113,078; 247,878; 209,290; dan 185,482 mg/dL. Rerata kadar CRP kelompok I lebih tinggi dibanding kelompok II, III, IV dan V ($p < 0,05$). Rerata kadar CRP kelompok V lebih rendah dibanding kelompok III dan IV ($p < 0,05$). **Kesimpulan:** Pemberian larutan bawang hitam dosis 960 mg/hari selama 14 hari paling efektif dalam menurunkan kadar CRP tikus putih (*Rattus norvegicus*) model hiperurisemia.

Kata kunci: Bawang hitam, CRP, hiperurisemia

**THE EFFECT OF GIVING BLACK GARLIC ON C-REACTIVE
PROTEIN (CRP) LEVELS IN HYPERURISEMIC RATS (*Rattus***

***norvegicus*)**

ABSTRACT

Background: Hyperuricemia can cause inflammation and oxidative stress which is characterized by increased levels of c-reactive protein (CRP). Black garlic has a bioactive content that acts as an anti-inflammatory, antioxidant, and xanthine oxidase inhibitor so that it can reduce CRP levels. This study aims to determine the effect of giving black garlic on reducing CRP levels in hyperuricemia rats. **Methods:** This research is a true experimental study with a post test only with control group design. Twenty five experimental animals were divided into five groups, namely I: disease control, group II: standard drug, groups III, IV, and V: the treatment group which was given black onion solution with successive doses of 240, 480, 960 mg/day for 14 days. On the 14th day of the study, serum CRP levels were measured using the ELISA method. Data analysis used the Kruskal-Wallis non-parametric test. **Results:** The mean CRP levels in groups I, II, III, IV, and V are 278,762; 113,078; 247,878; 209,290; and 185,482 mg/dL. The mean CRP level in group I higher than in groups II, III, IV and V ($p < 0.05$). The mean CRP level of group V lower than groups III and IV ($p < 0.05$). **Conclusion:** Giving black garlic solution at a dose of 960 mg/day for 14 days is most effective in reducing CRP levels in white rats (*Rattus norvegicus*) with hyperuricemia.

Keywords: Black garlic, CRP, hyperuricemia