

**PENGARUH BUBUK KUNYIT HITAM (*Curcuma caesia*) TERHADAP
PENURUNAN KADAR GLUKOSA DARAH PADA MENCIT (*Mus
musculus L.*) SWISS WEBSTER JANTAN YANG MENGALAMI
HIPERGLIKEMIA**

Abstrak

Kegemukan merupakan keadaan di mana berat badan berada melebihi berat ideal yang disebabkan penumpukan zat gizi terutama karbohidrat, protein dan lemak. Obesitas dapat menyebabkan berlebihnya kadar glukosa dalam darah. Kunyit hitam (*Curcuma caesia*) selain memiliki kandungan fitokimia kurkumin, juga memiliki kandungan flavonoid, alkaloid dan tannin yang diduga kandungan tersebut mampu menurunkan kadar glukosa darah. Tujuan dari penelitian ini adalah mengetahui pengaruh bubuk kunyit hitam (*Curcuma caesia*) terhadap penurunan kadar glukosa darah *Mus musculus L. Swiss Webster* jantan yang telah diberi pakan berkarbohidrat tinggi. Dosis bubuk kunyit hitam (*Curcuma caesia*) yang digunakan adalah 15 mg/30 g BB/hari, 22,5 mg/30 g BB/hari dan 30 mg/30 g BB/hari. Hasil penelitian menunjukkan dosis pemberian bubuk kunyit hitam (*Curcuma caesia*) yang diberikan, menunjukkan penurunan kadar glukosa darah sebanyak 24.6 untuk dosis 15 mg/30 g BB/hari, dosis 22,5 mg/30 g BB/hari menunjukkan penurunan kadar glukosa darah sebanyak 56.8 dan pada dosis 30 mg//30 g BB/hari penurunan kadar glukosa darah sebanyak 21.5. Dapat disimpulkan bahwa secara keseluruhan dosis yang diberikan memperlihatkan adanya pengaruh terhadap kadar glukosa darah mencit, namun dosis yang menunjukkan penurunan kadar glukosa darah tertinggi adalah pada dosis 22.5 mg.

Kata Kunci : Kegemukan, hiperglikemia, kadar glukosa darah, kunyit hitam (*Curcuma caesia*).

ABSTRACT

EFFECT OF BLACK POWDER TURMERIC (*Curcuma caesia*) TO DECREASE IN BLOOD GLUCOSE LEVELS Mice (*Mus musculus*L.) SWISS WEBSTER MALE WHO HAD HYPERGLIKEMIA

Overweight or obesity is a condition in which the body weight exceeds the ideal weight was due to a buildup of nutrients, especially carbohydrates, proteins and fats. Obesity is not only caused by foods that contain fat, but it can also be caused by foods that contain carbohydrates. Continuous consumption of carbohydrates can lead to excess insulin production and lead to the formation of fat that trigger obesity (Munas, 2009). The purpose of this study was to determine the effectiveness of black powder turmeric (*Curcuma caesia*) to decrease blood glucose levels *Mus musculus* L. Swiss Webster male who had been fed high carbohydrate. Dose black powder turmeric (*Curcuma caesia*) used was 15 mg / 30 g BW / day, 22,5mg / 30 g BW / day and 30 mg / 30 g BW / day. The results showed doses of black powder turmeric (*Curcuma caesia*) are given, decrease in blood glucose levels as much as 24.6 to a dose of 15 mg / 30 g BW / day, a dose of 22.5 mg / 30 g BW / day decrease in blood glucose levels as much as 56.8 and at a dose of 30 mg // 30 g BW / day reduction in blood glucose levels as much as 21.5. It can be concluded that the overall dose given showing the effect on blood glucose levels of mice, but dose that showed a decrease in blood glucose levels were highest at a dose of 22.5 mg.

Keywords: Obesity, hyperglycemia, blood glucose levels, black turmeric (*Curcuma caesia*)