

# Effect of Ethanol Extract of Devil's Claw on Serum Levels of Cholecystokinin Hormone and BodyWeight in Male Rats

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## Abstract

**Introduction:** Cholecystokinin (CCK) is a 33 amino acid peptide that is produced by endocrine cells in the small intestine, a variety of neurons in the gastric intestinal region and the central nervous system. CCK hormone plays an effective role in lose weight. This study was conducted to evaluate the effect of devil's claw extract on serum levels of the hormone CCK and body weight in male rats. **Materials and Methods:** In this experimental study, 40 male Wistar rats weighing 180-200 g were divided randomly into 5 groups of 8 animals (control, experimental groups receiving devil's claw extract in concentrations of 150, 300, and 600 mg/kg of body weight). Devil's claw extract was administered orally to animals for 28 consecutive days. One day after the last injection, the mice were weighed, and after blood collection and serum separation, hormone CCK concentration was measured by special ELISA kits for male rats. Data analysis was performed with SPSS software (version 21) by one-way ANOVA and Duncan test. **Results:** Doses of 300 and 600 mg/kg devil's claw extract caused a significant increase in the hormone CCK as well as decreased body weight than the control group ( $P < 0.05$ ). **Conclusion:** Devil's claw extracts reduce bodyweight by increasing the CCK hormone.

**Keywords:** Body weight; cholecystokinin; devil's claw; rat