De La Salle University – Dasmariñas
GRADUATE PROGRAM

A COMPARATIVE STUDY ON THE HYPOCHOLESTEROLEMIC EFFECTS OF *Allium sativum* (GARLIC), *Allium cepa* (ONION) AND CONCOCTED CRUDE EXTRACT ON MALE *Cavia porcellus* (GUINEA PIGS)

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ABSTRACT

The research study focused on hypocholesterolemic effects of garlic, onion and concocted crude extract in male Guinea pigs. Thirty-five male Guinea pigs were bought and divided into five treatment groups: T_0 were given normal dietary feeds, T_1 for garlic treatment, T_2 for onion treatment, T_3 for concoction treatment and T_4 were given high fattening diet. The entire research procedure lasted for seven weeks. Acclimatization, high fattening diet and treatment were initiated subsequent to blood extraction. The blood samples was then coagulated and centrifuged to separate the serum from formed elements. The collected serum using the cholesterol kit was measured by UV-VIS spectrophotometer. The cholesterol level was computed using cholesterol analysis equation and was analyzed by one-way ANOVA and Scheffe method. The results obtained were the following: the concocted crude extract (T_3) showed 53.2mg/dL in mean blood cholesterol level, while onion treatment (T_2) showed a mean blood cholesterol level of 84.96mg/dL and garlic treatment (T_1) showed a mean blood cholesterol level at 61.6mg/dL. The results prove that the concoction significantly reduced the mean blood cholesterol level of the Guinea pigs and there was a significant difference on the mean blood cholesterol level of each treatment groups in lowering blood cholesterol on male *Cavia porcellus* (Guinea pig).