



## Anti hyperlipidemic and Antioxidant Activity of Extract *Cinnamomum zeylanicum* in male Rats Fed a High Fat Diet

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**Abstract :** The study was divided into four groups (7 rats in each group) for 8 weeks in 3 days in each week. Include gives high cholesterol diet (Libitum). Group 1: control animals give 0.5 ml/kg of normal saline only. Group 2: administrated with 100g/kg of volume dose from libitum only. Group 3: was administrated with 0.5 ml/kg of volume dose from ECE at concentration 250 mg/kg plus 100g/kg of libitum. Group 4: administrated with 0.5 ml/kg of volume dose from ECE at concentration 500 mg/kg plus 100 g/kg of libitum. At the end of treatment period (8 weeks), rats were scarified, serum sample obtained for assessment of antioxidant parameters and lipid profile, the result indicated that ECE 250 and 500 mg/kg show a significant decline ( $p<0.05$ ) in activities of MDA and a significant raise ( $p<0.05$ ) in GSH levels. This results showed the concentration 500 mg/kg of ECE have high effect of antioxidant. In line of high cholesterol diet, the result shown, that libitum have significantly increased ( $p<0.05$ ) in total cholesterol, TG, LDL, HDL and VLDL and body weight but when gives libitum with extract, the results shown that the parameters near to normal.

**Key words:** Hyperlipidemia, ECE, Lipid profile.

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