ABSTRACT

**Background:** Atherosclerosis was caused by increase number of *low density lipoprotein* (LDL) in the blood plasm. This study aimed to examine the effectivity of *Garcinia mangostana* extract in decreasing number of LDL in rat with hiperlipid treatment. **Materials and Methods:** Giving appropriate amount of Hiperlipid diet which contain lard 28% composed by normal diet in 63 days to induced hiperlipidemia in rat. Rat with hiperlipid treatment treated with *Garcinia mangostana* extract in dose 300mg/kgBB by force feeding in fourteen days. Other groups with hiperlipid treatment treated with *Garcinia mangostana* extract in dose 600mg/kgBB by force feeding in fourteen days. Other group was a positive and negative control in hiperlipid treatment. Treatments are given orally once a day for fourteen days. Therapeutic effect of each treatments compared to control groups. **Results:** The result after 63 days was , negative control group K1 (15.67±3.445), positive control group K2 (16.67±2.160) treatment in dose 300mg/kgBB P1(16.83±2.401) and treatment in dose 600mg/kgBB P2 (17.80±2.049). The LDL level has no difference both between treated group and between treated and control grup. **Conclusion:** *Garcinia mangostana* extract treatment in fourteen days can’t decrease number of LDL level in rat with hyperlipidemic diet.

**Keywords:** *Garcinia mangostana*, LDL, Hyperlipidemia, lard,