ABSTRACT

Cardiovascular disease is world widely recognized as the main casualty of death. Hyperlipidemia is the trigger, initials with atherosclerosis by the fat component of cholesterol and triglycerides. Diet therapy (increase fiber intake in daily diet), adequate exercise and medication decrease plasma cholesterol. Dragon fruit fiber binds the bile salt and leave out the enterohepatic cycle.

This study intended to prove the effect of dragon fruit (Hylocereus polyrhizus) on the lipid profile (total cholesterol, HDL, LDL and triglycerides) of blood white rat exposed with high-fat diet (HFD). The study uses a separate pretest-posttest control group design. The samples including 48 experimental white rats were distributed into 6 groups (G1-6). While the control group pretest: G1 is immediately terminated, the treatment group last for 6 weeks. G2 were only given a standard diet, G3 were given a standard diet + HFD 2% of Body weight (BW) of rats, G4 given a standard diet + HFD 2% rats BW + 0, 72 g dragon fruit for each 200 g rats, G5 given a standard diet + HFD 2% rats BW + 1.08 g dragon fruit for each 200 g rat, G6 were fed with standard diet + HFD 2% BW + 1.44 g dragon fruit for each 200g rat.

The results showed the expose of high-fat diet to white rat with dragon fruit (Hylocereus polyrhizus) decreases the total cholesterol, LDL and raises HDL, but it is unable to lower blood triglyceride levels.

Keyword: dragon fruit, lipid profile, HFD (High Fat Diet)