SUMMARY

Pharmacodinamic Study of Ethanol Extract of Celery Root (*Appium graveolens*) to Lipid Profil And APO A1 Of White Rat Strain Wistar (*Rattus novergicus Strain Wistar*) Dyslipedemia

Dyslipidemia is a disorder of lipid metabolism is marked increase in total cholesterol, LDL cholesterol, triglycerides and decreased HDL cholesterol, Apo A1 in the blood. Data from *national healthy and nutrition examination survey* (NHANES) in 2005 – 2006 known that american populatian have high cholesterol are upper 240 mg/dl [*American Heart Association* (AHA) recommended 200 mg/dL]. Prevalence of dyslipidemia in Indonesia in 2004 is 10,9% of all population.

This research is an experimental laboratory by using the approach of the post-test only control group design that aim to know effect of ethanol extract of celery root to lipid profil and apolipoprotein A1 of rat's blood serum. Population of rats is devided to four groups. They made dyslipidemia by eating high colesterol food and than three of four groups, called treatment group, given different doses of extract ethanol of celery root are 0.2mg/g, 0.4mg/g, 0.8mg/g, and another group is a controller group.

In controller group showed increase LDL, TG and decrease HDL and Apo A1. In treatment group showed decrease LDL, TG and increase HDL, Apo A1 following increase doses of extract ethanol of celery root. The mentioned happened cause of extract ethanol of celery root have d-limonene. D-limonene can decrese LDL, TG and increase HDL, Apo A1 by activated peroxisome proliferator-activated receptor (PPAR)-α signaling, and inhibited liverX receptor (LXR)-β signaling mechanism.

The study concluded that effect of ethanol extract of celery root can decrease LDL cholesterol, triglycerida and increase HDL cholesterol, Apo-A1. In the future the ethanol extract of celery root can be solution of dyslipidemia cases.