ABSTRACT

Yuliani, Kartika. 2015. Analysis of White Adipose Tissue (WAT) Mass on Male Rat (*Rattus novergicus* strain *Wistar*) after Giving of Atherogenic Diet Modified from AIN-93M Standard and Normal Standard AIN-93M Diet. Final Assignment, Nutrition Program, Faculty of Medicine, Brawijaya University. Supervisors: (1) Inggita Kusumastuty, S.Gz., M.Biomed. (2) Kanthi Permaningtyas Tritisari, S.Gz., MPH.

Atheroschlerosis or hardening of arteries is happening from dyslipdaemia and obessity. The obessity is a result of accumulation of triasilgriserol as effect of excessive energy intake. The forming of athresclerosis needs an atherogenic diet that can modified from standard diet. This research is aimed to know the difference of WAT mass on Male Rat (*Rattus novergicus* strain *Wistar*) after giving of atherogenic diet modified from AIN-93M standard and normal standard AIN-93M diet. This experimental study using randomized post test control group design as research design and using random sampling to select the samples then divide it into two groups. The groups are P1 “atherogenic diet” and P2 “normal diet”. Variable measured is WAT that taken from omental, perirenal, inguinal and epididymal sections. Result of this research show that averages of dietary food intake and dietary fat intake on P1 are higher than P2 (p=0,006 and p=0,001). However, the final body weight isn’t significantly difference. WAT total mass on P1=3,87 gram and P2= 2,59 gram (p=0,001). The conclusion is there is a difference of white adipose tissue (WAT) mass on Male Rat (*Rattus novergicus* strain *Wistar*) after giving of atherogenic diet modified from AIN-93M standard and normal standard AIN-93M diet.

Keywords: atheroschlerosis, normal diet, atherogenic diet, AIN-93M, *white adipose tissue*