

ABSTRACT

The Influence of Giving Sunflower Oil (*Helianthus Annuus L*) in Changing the Total Cholesterol Level (Case Study on Hypercholesterolemia-Wistar Rats), Reni Jumayanti, SIN B4110602, Year 2014, Clinic Nutrition, Politeknik Negeri Jember, Ir. Rindiani, MP (Counselor I) and Puspito Arum, S.Gz. M. Gizi (Counselor II).

Hypercholesterolemia is a risk factor for cardiovascular disease, it is become the main caused of death in the world. One of the alternative for lowering blood cholesterol levels is consumes polyunsaturated fat foods. The polyunsaturated fat foods can reduce bloods cholesterol by increasing the bile's excretion and produce long-chain fatty acids. The sunflower's oil contains 72% polyunsaturated fat per 100 ml. The purpose of this research to determine the changings of total cholesterol on hypercholesterolemia rats by giving sunflower's oil. This research using true experimental using pre-test - post-test with control group design. The sample has induced by high-fat diet, then given a dose of 0,81 ml sunflower's oil for every 200 gr BW each rat/day, then 0,99 ml sunflower's oil for every 200 gr BW each rat/day, then 1,17 ml sunflower's oil for every 200 gr BW each rat/day for 14 days. The total cholesterol levels checked by cholesterol ceck. The data was analyzed by paired t test and ANOVA, then followed by LSD. There are total cholesterol levels differences between the treatment ($p < 0.05$) at a dose of 0,81 ml sunflower's oil for every 200 gr BW each rat/day, then 0,99 ml sunflower's oil for every 200 gr BW each rat/day, then 1,17 ml sunflower's oil for every 200 gr BW each rat/day. It can be seen by the changes of total cholesterol levels, which is decreased into 3,1%, 3,5% dan 4,8%. The result gives a conclusion that giving sunflower's oil is similiar to simvastatin which is lowering total cholesterol levels.

Key Words : *Sunflower Oil, Total Cholesterol Levels, Hypercholesterolemia.*