

Chalermrat Kamchuchat 2012: Effects of Fish Consumption on Serum Lipid Level among People in Yao Noi Island, Phangnga Province. Doctor of Philosophy (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Associate Professor Win Chaeychomsri, Ph.D. 115 pages.

Hyperlipidemia is the major risk factor for cardiovascular diseases which caused by physical exercise lacking, smoking, drinking and improper diet consumption. Recent studies showed that regular fish consumption can reduce the risk factor of this disease. The objective of this study is to examine the fish consumption for reducing serum lipid level. The effects of fish consumption on serum lipid level were performed among 227 adults, aged 15 years and older between April 2010 and March 2011 in Yao Noi, Phangnga Province. Data were collected by interviewer questionnaire, health examination and clinical examinations. The eighty volunteer were qualified. The samples were divided into two groups, 40 persons per group. The control group lived in normal lifestyle. The experimental group was added more 200 grams of fish per meal, 2 meals a week for 4 weeks. After the 4 weeks experiment, both groups could lived in a normal lifestyle for 8 weeks. The bloods exams from both groups were collected at week 0, week 4 and week 12 of experimental period for determining of cholesterol, triglyceride, LDL-cholesterol and HDL-cholesterol levels. The results of the study revealed that the cholesterol and LDL-cholesterol levels of the sample populations in the week 4 of experiment were reduced significant difference from the levels at week 0 ($p < 0.05$). In experimental group, these levels had a trend to reduce more than in the control group. From week 4 to week 12 of the study, the experiment was stopped. The cholesterol and LDL-cholesterol levels were increased in all groups significantly difference from the 4th weeks ($p < 0.05$). These indicated that fish consumption had effected on decreasing the cholesterol and LDL-cholesterol levels. In conclusion, fish consumption might be the way to lower the serum lipids level in people who had the risk factor of cardiovascular diseases.

Student's signature

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