

Thesis Title A Comparative Study of Serum Cholesterol, High Density Lipoprotein-Cholesterol, Low Density Lipoprotein-Cholesterol and Triglycerides in Regular and Non-regular Fish Consumption Groups.

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Abstract

This study was conducted to compare serum cholesterol, high density lipoprotein cholesterol (HDL-C), low density lipoprotein-cholesterol (LDL-C), and triglycerides level in two groups of Thai male : the regular fish consumption group (fishermen) and the non-regular fish consumption group (labourers). The regular fish consumption group composed of 54 fishermen aged between 35-55 years who lived at Moo Ban Kalainoi, Ampur Thakuatung, Pangnga province and the non-regular fish consumption group were 52 labourers aged between 35-55 years from the North and Northeast of Thailand. All of the volunteers in both groups were in good health and free from any diseases. According to this study in the regular fish consumption group each individual had fish consumption 30 grams or more per day and everyday for the past 3 months. The non-regular fish consumption group referred to those who did not have any fish at all during the last 3 months. Blood samples were collected from anticubital vein from both groups after 12 hours of fasting. Blood samples were analysed

for total cholesterol, HDL-C, LDL-C, and triglycerides. The results were compared using student t-test. It was found that the mean serum level of triglycerides in the regular fish consumption group was significantly lower than in the non-regular fish consumption group with the p-value of less than 0.05 ($p < 0.05$). There was no significant difference of serum cholesterol, HDL-C, and LDL-C between the two groups. We concluded that at least 30 grams of fish consumption per day was responsible for the low level of serum triglycerides in the regular fish consumption group. The mechanism of low level of triglycerides among the regular fish consumption group was discussed in this study.