

Thesis Title Effect of cigarette smoking on lipid profiles in Metropolitan Waterworks Employees

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Abstract

Eighty males of Bangkok Metropolitan Waterworks Employees, were studied for the smoking effect and food consumed on lipid profiles. All 80 samples were in the same socioeconomic, status, age, weight and height. No history of taking any drug in all subjects. Forty smokers and forty non-smokers were interviewed for food preferences, including types of cooking oil, fatty foods, food cooked with coconut and egg. Analysis of blood serum for high density lipoprotein cholesterol(HDLc), low density

lipoprotein (LDL), very low density lipoprotein (VLDL), chylomicron, cholesterol and triglyceride, were carried out.

The result showed that the smokers had significant lower levels of high density lipoprotein cholesterol (HDLc) than those of non-smokers (46.25 ± 12.80 vs 53.17 ± 11.57 mgs/100 ml, $p=0.013$). Other lipids i.e., low density lipoprotein (LDL), very low density lipoprotein (VLDL), chylomicron, total cholesterol (Chol), triglycerides (TG) were not effected.

When the analysis was done according to the food preferences, statistic analysis showed that fatty food had further decrease the high density lipoprotein cholesterol (HDLc) level (45.66 ± 11.04 vs 52.87 ± 12.95 mgs/100 ml, $p=0.01$). However fatty food in smokers had decrease the high density lipoprotein cholesterol (HDLc) level (41.43 ± 8.90 mgs/100 ml vs 52.00 ± 11.09 mgs/100 ml, $p=0.04$) when comparing with the group of fatty food in non-smokers. The food cooked with coconut milk in smokers had further decrease the high density lipoprotein cholesterol (HDLc) level significantly (42.84 ± 13.62 vs 55.25 ± 12.43 mgs/100 ml, $p=0.001$) when comparing with food cooked with coconut milk in non-smokers. The egg consumption in smokers had further decrease the high density lipoprotein cholesterol (HDLc) level significantly (45.18 ± 12.83 vs 52.94 ± 11.51 mgs/100 ml, $p=0.012$) when comparing with egg consumption in non-smokers. It was found that there was no change in the high density

lipoprotein cholesterol (HDLc) level in subject who consumed food cooked with coconut milk and egg which reflect the influence of foods.