

3936641 PHPH/M : MAJOR : NUTRITION;M.Sc.(PUBLIC HEALTH)

KEY WORDS : ANTIOXIDANT VITAMINS/SERUM LIPIDS

CHARUNEE THAIBPHO : THE COMPARATIVE STUDY OF DIETARY ANTIOXIDANT VITAMINS INTAKE BETWEEN GROUPS WITH HYPERLIPIDEMIA AND NORMO-LIPIDEMIA. THESIS ADVISORS : DUSANEE SUTTAPREYASRI, M.D., Dr.P.H. VICHAI CHUIAROJANAMONTRI, M.P.H.(NUTRITION) WONGDYAN PANDII, Ph.D. NILNETR VIRASOMBAT, M.D., M.P.H.(EPIDEMIOLOGY) 90 p. ISBN 974-662-443-1

The objectives of this study were to investigate the dietary antioxidant vitamin intake of female workers in the weaving factory in Soongnern district, Nakornratchasima province, and to study the correlation between intake of dietary antioxidant vitamins and serum lipids. The sample size was 86 workers. The inclusion criteria were normal females, aged 35-49 years, with regular menstruation, within normal limits of BMI ( $20.0-29.9 \text{ kg/m}^2$ ) and blood pressure ( $\leq 140/90 \text{ mmHg}$ ), no history of heart, diabetes, liver or thyroid diseases, not smoking or heavy alcohol drinking, no exercise, no oral contraceptives or hormone supplementation in the period of study. The cut points of hyperlipidemia were cholesterol  $> 200 \text{ mg/dl}$  and/or triglyceride  $> 150 \text{ mg/dl}$ . Three-day-food records and quantification of dietary nutrient intake per person per day were assessed.

The results showed that the dietary intake of  $\beta$ -carotene of the female workers in the hyperlipidemic group were significantly lower than that in the normolipidemic group ( $p = 0.005$ ), while vitamin C and Vitamin E intakes were not significantly different ( $p > 0.05$ ). The concentration levels between  $\beta$ -carotene / vitamin C / vitamin E, and serum lipids were not significantly related ( $p > 0.05$ ). It is recommended that vegetables and fruits high in  $\beta$ -carotene should be consumed daily by hyperlipidemic female workers, aged 35-49 years.