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KEY WORDS : SCHOOL LUNCH/SUPPLEMENTARY FOOD

PRANEE INTHIVORN : THE STUDY OF SCHOOL LUNCH PROGRAM ON  
NUTRITIONAL ASPECT IN PRIMARY SCHOOLS OF BORDER PATROL  
POLICE GENERAL HEADQUARTERS. THESIS ADVISORS : URAIPORN  
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Many of Thai pupils go hungry from morning till lunch time. Especially in remote areas such as those served by Border Patrol Police (BPP) schools. School Lunch Program (SLP) has played an important role in providing quality food for pupils. The aim of this thesis is to evaluate the SLP in BPP schools in the academic year 1995 in which all pupils received lunch allowance 5 days / week (100% supported). Additionally, BPP schools also have the Agriculture for Schools Lunch Program initiated by H.R.H. Princess Maha Chakri Sirindhorn to support SLP.

Information was collected from 170 BPP schools, nation-wide, through 16 school visits (9.4%) and a further 154 school postal surveys (90.6%). Average of nutritive value of food in SLP was measured by calculating the average energy, macro and micro nutrients, which derived from the 5 day lunch menus of 16 schools in the field survey. It was found that lunch meals generated an average energy of 410 kcal per meal, which was 77 % of 1/3 RDA for Thai children aged 4-12 years (530 kcal). The energy distribution of carbohydrate : protein : fat was 66 : 12 : 22. Pupils had adequate protein (12.4 g/head), 52% of which was derived from animal origin. The NAR of Ca, vitamin A, B1, B2, C and Fe were 21%, 58%, 50%, 58%, 97% and 91%, respectively, which yielded MAR of 68%. Current average cost of lunch was 1.1 stang/kcal, therefore average cost of proper lunch was approximately 6 baht per pupil for 530 kcal, and milk supplement was needed to fulfill quality of micro nutrients.

Regarding nutritional impact, it was found from a nutritional monitoring system, that the prevalence of underweight pupils gradually decreased from 35.5% in 1990 to 29.8% in 1993, due to the support of the H.R.H. Agricultural Program for lunch. Furthermore, after they received full support from the SLP fund in addition to previous agricultural project of schools and the supplementary milk (3-day-soybean and 2-day-cow milk) support by H.R.H. Princess Maha Chakri Sirindhorn, the prevalence of underweight pupils has evidently been decreased from 18.4% in 1994 to 16.8% in 1996. In 1995, it was found that the weight velocity in the kindergarten and pupils grade III-IV was 2.3 and 2.8 kg/year respectively, and the height velocity in these groups was 3.9 and 4.2 cm/year respectively.