

EVALUATION OF ELEMENTARY SCHOOL LUNCH BASED ON NUTRIENT CONTENT AND FOOD DIVERSITY OF SERVED MENUS. Jung H.J.¹, Paik H.Y.¹, Moon H.K.², Yu C.H.³, Yang I.S.⁴, Moon S.J.⁴, Lee L.⁵ ¹Dept. of Food and Nutrition, Seoul National University, Seoul 151-742. ²Dankook University, Seoul 140-714. ³Sangmyung University, Seoul 110-743. ⁴Yonsei University, Seoul 120-749. ⁵Chung Ang University, Seoul 156-756, Korea.

This study was conducted to evaluate the quality of meals served in elementary schools in Korea based on nutrient content and food diversity of representative menus. A questionnaire was mailed to dietitians of elementary schools nationwide requesting for representative menus of one week each in April and October. Menus served in 388 schools from each province and major cities of Korea were used for evaluation of quality of the meals. Mean nutrient content of menus from each school were calculated and found to be lower than the standard, $\frac{1}{3}$ of RDA for children. Energy, Vit. A, Vit. B₂, Ca, and Fe were the ones most frequently lower than the standards. Mean contents of Ca, Fe, and Vit. A per 1,000kcal of energy were also lower than the values calculated from RDA. Mean nutrient contents of the menu were significantly higher in schools in small cities and rural area, those adapting commissary or joint management systems, schools serving smaller numbers of persons, and those with higher food expenses. Percentages of energy from fat was 20.2%, and was significantly different among the foodservice systems. Mean number of food items and dishes per meal were 15.3 and 5.1, respectively, and 66.3% of meals provided three food groups, grain, meat, and vegetable. There was significant positive correlation between mean number of different food items of the meals and nutrient content or density per meals. In summary, many schools provided meals with nutrients lower than the standard. Major reasons for this shortage are low energy content and lack of milk in meals served. Therefore energy contents of meals should be increased and milk must be added in each meal. This study was based on served menus only. More comprehensive evaluation of the meals based on actual consumption and acceptance by children are needed.