

DEVELOPMENT AND VALIDATION OF A FOOD FREQUENCY QUESTIONNAIRE TO EVALUATE NUTRITIONAL STATUS OF KOREAN ELDERLY.

H.S.Won, Y.A.Jang, W.Y.Kim, Ewha Womans University, Seoul, Korea

Evaluation of nutritional status of the elderly imposes different problem from the other age groups. It is essential to use right instrument to assess food consumption. In Korea, the food frequency questionnaire(FFQ) has not been applied widely to elderly people. The purpose of this study is to assess the possibility of employing FFQ for the Korean elderly. In this study the FFQ for the elderly was developed and validated. The subjects were 144 free-living old women aged from 65 to 90.

The FFQ was designed with 90 food items and with frequency of 12 intervals. Three portion sizes were given to select: 1/2 of standard amount, standard amount, and 1 1/2 of standard amount. Each subject was interviewed with newly developed FFQ form and same subjects were also involved to complete 3-day diet record. Nutrient intake was calculated using software program developed by our group. The nutrient intake by

the FFQ was validated by comparing the results with 3-day diet record.

The FFQ estimated significantly higher mean intakes of energy, carbohydrate, protein, fats and vitamin C than did the diet records ($p < 0.05$). For energy, 11 nutrients and alcohol, pearson's correlation coefficients between the dietary records and the FFQ ranged from 0.21 for vitamin A to 0.69 for alcohol(mean $r = 0.53$). Correlation coefficients for macronutrients were 0.63 for energy and carbohydrates, 0.59 for proteins and 0.51 for fats. From 32% to 42% of the subjects were classified in the same quintile of nutrient intake by two methods, and 63% to 84% were classified in the same or adjacent quintile. On average, only 4% of the subjects were misclassified into extreme quintiles. The validity of responses for 6 food groups and others on the FFQ were evaluated. For 6 groups and others, the mean of correlation coefficients between two methods was 0.47 (range=0.35 for sugars, fats and oils to 0.63 for milk and milk product). The results indicate that the FFQ developed for the elderly in this study is useful for classifying individuals by rank and identifying groups at extremes of nutrient intakes.