

COMPARISON OF ESTIMATED NUTRIENT INTAKE BY FOOD FREQUENCY AND WEIGHED FOOD RECORDS

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Food frequency questionnaires (FFQ's) are currently used in many food intake studies of large numbers of subjects. They are a cheap and practical method for assessing food intake. The validity of such questionnaires is often measured by comparison with a food intake method considered to be more accurate, since there is no 'gold standard'. Results of such comparison studies have been variable, depending on the type of questionnaire and the nutrient(s) of interest. This points out the necessity to validate every questionnaire.

In this study, we compared dietary intake estimated by a FFQ and a seven day weighed food record (7DWR). The subjects were 24 female post-graduate students between 20 and 43 years of age (mean = 24 years). The FFQ, a modified version of the FFQ used in the Victorian Nutrition Survey (Baghurst and Record 1984), is currently being used in a food study in Western Sydney, aimed at identifying high fat consumers.

Nutrient (per day)	FFQ	7DWR	Rank correlation
Energy (kJ)	9149.0 ± 2362*	6958.0 ± 1218	0.50 P<0.02
Fat (g)	82.9 ± 27.7	56.5 ± 17.0	0.83 P<0.001
Carbohydrate (g)	258.8 ± 66.0	212.9 ± 46.7	0.30 n.s.
Protein (g)	103.1 ± 27.3	75.5 ± 17.0	0.34 n.s.
Alcohol (g)**	3.2 ± 3.4	3.2 ± 4.3	0.68 P<0.001

* mean ± SD

** one non-drinker removed

n.s. = not significant

The results presented in the table show differences in mean daily nutrient intake between the two methods, the FFQ generally giving higher mean values than the 7DWR. Rank correlation coefficients ranged between 0.30 - 0.83, showing the highest correlation for total fat intake (0.83). These results suggest that this FFQ is suitable for classifying subjects into categories for total fat intake but it is not suitable for estimating daily nutrient intake in small groups.

BAGHURST, K.I. and RECORD, S.J. (1984). *Comm. Health Stud.* 8: 11.

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