**Relative validity of two brief sets of questions to assess vegetable intake behaviours**

JL Barkess[1], JL Sherriff[1]

[1]*School of Public Health, Curtin University of Technology, WA, 6845*

**Background-** A short food frequency questionnaire (SFFQ) has been developed to assess intake of fruit, vegetables, and cereal foods, as well as saturated fat, in Australian adults.

**Objective**-to assess the relative validity of SFFQ vegetable questions ( a two and four item set of questions) in comparison to intake measured by seven day estimated food records (7DDR).

**Design**- Sixty four adult volunteers (30 male and 34 female), at risk of coronary heart disease, completed the SFFQ and a 7DDR. Vegetable intake was calculated using the SFFQ in two ways: by adding daily average potato intake assessed by one question to 1) a summary question on vegetable intake (excluding potato) (VEG2) or 2) the sum of three separate questions (1)on the intake of vegetable soups, salads and cooked vegetables (excluding potato) (VEG4).

**Outcomes**- Wide 95% limits of agreement for both VEG2 and VEG4 in comparison to 7DDR indicates poor agreement at the individual level. Further results are shown in the table below.

| | Vegetable serves/day[1] | Prevalence of 5 serves/day, % | Positive predictive value for <5 serves/day | Prevalence of 4 serves/day, % | Positive predictive value for <4 serves/day |
|---|---|---|---|---|---|
| 7DDR | 3.6 ± 1.6 (3.2,4.0) | 12.5 | … | 34.4 | … |
| VEG2 | 2.9 ± 1.3* (2.6,3.3) | 7.8 | 0.90 | 18.8 | 0.69 |
| VEG4 | 3.3 ± 1.5 (3.0,3.7) | 12.5 | 0.91 | 39.1 | 0.74 |

[1]mean ± SD (95% CI); *P<0.001 in comparison to 7DDR mean

**Conclusions**- VEG2 or VEG4 from the SFFQ cannot replace 7DDR in estimating vegetable intakes of individuals, however VEG4 can assess mean group intake for vegetables and has good ability to identify those not meeting the dietary recommendation of 5 serves/day of vegetables.

1. Ling, AM, Horwath, C, Parnell W. Validation of a short food frequency questionnaire to assess consumption of cereal foods, fruit and vegetables in Chinese Singaporeans. Eur J Clin Nutr 1998; 52: 557-64.