

**Sodium intake indicator questions appear more useful for females than for males**

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Given the logistic problems of mounting national nutrition surveys, increasing consideration is being given to use of simple indicator questions as a cost-effective way to monitor dietary trends. We report the performance of three such questions relating to sodium intakes.

During 1995, 87 males and 107 females in Hobart participated in a survey of Na intakes (1). They filled in a questionnaire, which included three proposed indicator questions: (i) 'how often is salt added to your food during cooking?', (ii) 'how often do you add salt to your food after it is cooked?', and (iii) 'do you avoid eating salty foods?'. The options offered for each were 'never or rarely', 'sometimes' and 'usually'. Participants also provided a 24-hour urine sample, subsequently assayed for sodium, 24-hour Na excretion being a recognised bio-marker for Na intake.

There was a significant ( $P < 0.05$ ) gender difference in Na excretion: the mean value for males was 170 mmol/d (SD 52), compared to 118 mmol/d (SD 42) for females. Males were significantly less likely 'never' to add salt at the table (51% v 73%), and 'usually' to avoid salty foods (39% v 60%). Men and women had similar likelihood of 'never' having salt added to food during cooking (54% v 61%). Given these gender disparities, the performance of the indicator questions was explored separately for males and females. Logistic regression was used to assess how correctly the three indicator questions would allocate subjects to the 'higher-Na' (excretion above median for gender) or 'lower-Na' (below median) group.

Among women, question (iii) about avoidance of salty foods correctly allocated 61% of subjects to their Na-intake group, a result better ( $P = 0.01$ ) than random allocation. Allocations predicted by the other questions did not differ significantly ( $P < 0.05$ ) from chance, only 54% being correctly allocated by question (ii) and only 52% by question (i). Including all three questions as simultaneous predictors correctly allocated 61% of subjects - no better than using the salty foods question alone.

Among men, none of the questions individually gave significantly better predictions than random allocation: 52% for (i), 55% for (ii), and 54% for (iii). Including all three questions simultaneously gave no improvement over using single questions.

These results suggest that simple questions about addition of salt during cooking or at the table are not useful indicators of overall sodium intake. A question about avoidance of salty foods has some limited usefulness for women, but not for men.

1. Beard TC, Woodward DR, Ball PJ, Hornsby H, von Witt RJ, Dwyer T. The Hobart Salt Study 1995: few meet national sodium intake target. *Med J Aust* 1997;166:404-7.