

## Sodium intake and self-efficacy

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High sodium intakes contribute significantly to the development of cardiovascular disease, and Australian intakes are substantially above recommended levels (1). In developing strategies to encourage reduced intakes, it is useful to compare the characteristics of those who have lower and higher Na intakes, especially characteristics that are potentially modifiable by education/counselling.

One such characteristic is self-efficacy, a person's confidence that they could perform certain behaviours if they so chose. Self-efficacy is not generic, but needs to be evaluated in relation to specific behaviours. A nine-item instrument has been developed (2) to measure self-efficacy for reducing salt intakes. It assesses the subject's confidence that they could persist with certain low-salt dietary habits (eg, buy fewer high-salt snacks, keep the salt shaker off the table, eat low-salt cereals) if they decided to. Possible scores range from 9 (minimal confidence) to 63 (maximal confidence).

As part of a study on Na intakes on 194 Hobart adults (87 males, 107 females, ages 20–69 years), we asked participants to complete the salt self-efficacy instrument and also assessed their Na intakes from 24h urinary Na excretion. Data were noticeably skewed, necessitating use of non-parametric statistical methods.

Among women, the median salt self-efficacy score was 60, and the median Na intake was 112 mmol/day. The two showed a Spearman coefficient of  $-0.27$  ( $P = 0.005$ ). Median Na intakes were 121 mmol/day for subjects in the lowest quartile of self-efficacy scores (i.e.,  $\leq 54$ ), and 94 mmol/day in the highest quartile (i.e., a score of 63).

Among men, the median salt self-efficacy score was 54, and the median Na intake was 172 mmol/day. The two showed a Spearman coefficient of  $-0.19$  ( $P = 0.09$ ). Median Na intakes were 189 mmol/day for subjects in the lowest quartile of self-efficacy scores ( $\leq 54$ ), and 151 mmol/d in the highest quartile ( $\geq 58$ ).

We conclude that greater salt self-efficacy is linked to lower Na intakes. Further study is needed to assess whether intervention programs aimed at increasing salt self-efficacy would help patients lower their Na intakes, but our results suggest that such interventions might potentially lower Na intake by up to 30–40 mmol/day.

1. Beard TC, Woodward DR, Ball PJ et al. The Hobart Salt Study 1995: Few meet national sodium target. *Med J Aust* 1997; 166: 404–407.
2. Sallis JF, Pinski RB, Grossman RM et al. The development of self-efficacy scales for health related diet and exercise behaviors. *Health Educ Res* 1988; 3: 283–292.