

participants could distinguish between: standard versus 350 mg or standard versus 300mg sodium breads (analysed using binomial probability). Participants also tasted all three breads in a random, and balanced, order and rated their liking of sensory characteristics (appearance, colour, flavour, sweetness, saltiness, texture, softness, overall liking); differences between breads were analysed using ANOVA with $p < 0.05$ set for significance.

Results: Participants were unable to detect a difference between standard and reduced-salt breads (300 mg or 350 mg/100 g) in both WtBT and WmBT ($p > 0.05$). There were no significant differences in sensory characteristics between standard, 300mg or 350mg sodium breads in WtBT or WmBT ($p > 0.05$).

Conclusions: In a sample of Indigenous Australians living in a remote community, 25% salt reduction in bread was not detected, and no effects on liking were observed. Salt reduction in bread could be an important strategy to reduce the excess salt intake observed in remote Indigenous communities

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TRENDS IN DIETARY SODIUM INTAKE IN AUSTRALIAN CHILDREN AND ADOLESCENTS FROM 2007 TO 2011–13

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Background/Aims: The 2009 Food and Health Dialogue set maximum sodium levels for a range of food product groups. It is unclear if these initiatives have reduced population sodium intake. The aim of this study was to assess changes in sodium intake from food sources in Australian children aged 2–16 years from 2007 to 2011–13.

Methods: We compared data from the 2007 Children's Nutrition and Physical Activity Survey ($n = 4487$) and the 2011–13 National Nutrition and Physical Activity Survey ($n = 2548$). Intakes of energy and sodium were assessed via one 24-hr dietary recall and under-reporters were excluded ($n = 330$). Statistical analysis accounted for population weightings and the complex survey design.

Results: Mean sodium intake of children aged 2–8 years was 2042 (95%CI: 2002, 2083) mg/d in 2007 and 1943 (1870, 2016) mg/d in 2011–13; 9–16 years was 2928 (2850, 3007) mg/d in 2007 and 2717 (2607, 2827) mg/d in 2011–13. The sodium density of the diet in children aged 2–8 years was 289 (283, 294) mg/MJ in 2007 and 284 (275, 293) mg/MJ in 2011–13; 9–16 years was 302 (296, 308) mg/MJ in 2007 and 290 (281, 300) mg/MJ.

Conclusions: There was a 7.2% reduction in dietary sodium intake between 2007 to 2011–13 in 9–16 year olds, and no fall in those aged 2–8 years. However there was no indication of a change in sodium density. This apparent reduction of sodium intake in older children requires further exploration of the potential changes in sodium content of main food sources of sodium.

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THE ASSOCIATION BETWEEN 24-HOUR URINARY SODIUM AND IODINE EXCRETION IN A SAMPLE OF VICTORIAN SCHOOL-AGED CHILDREN

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Background/Aims: A reduction in the salt content of foods such as bread continues to be the main focus for sodium reduction strategies. As mandatory fortification of bread with iodised salt is the main vehicle for iodine fortification in Australia, there is concern that reducing the salt content of bread may adversely affect iodine status.

We aimed to assess i) the relationship between 24-hour urinary sodium (UrNa) and urinary iodine excretion (UIE) and ii) the relationship between bread consumption and UIE in Victorian schoolchildren.

Methods: A cross-sectional study of 5–12 year old Victorian primary school

children. Sodium and UIE were assessed using 24-hour urine samples. Bread intake (g/d) was determined via 24-hour dietary recall, completed in a sub-sample of children aged ≥ 8 years.

Results: Valid 24-hour urine samples were provided by 650 children [$n = 359$ boys, mean (SD) age 9.3(1.8) years] and 448 provided dietary recalls. Mean UrNa and UIE were 104 (48) mmol/24 hr and 104 (54) $\mu\text{g}/24$ hr, respectively. UrNa was positively associated with UIE ($r = 0.36$, $p < 0.001$). In the sub-sample of children with dietary recalls, 86% ($n = 386$) reported consuming bread and mean consumption was 83.6 (62.1) g/day. There was no association between bread intake and UIE ($r = 0.01$, $p = 0.82$).

Conclusions: UrNa and UIE were significantly correlated, indicating some common dietary sources of iodine and sodium. No association between bread (containing iodised salt) consumption and UIE was evident in this population, which may indicate a higher contribution of other foods to iodine intake.

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THE INFLUENCE OF SOCIOECONOMIC STATUS ON SODIUM INTAKE IN A SAMPLE OF AUSTRALIAN SCHOOL CHILDREN

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Background/Aims: Excessive dietary salt in childhood has impacts on blood pressure and the establishment of taste preferences. This study explores the association between socioeconomic status (SES) and salt intake assessed by 24-hr urinary sodium excretion in Australian children.

Methods: Cross-sectional study conducted with a convenience sample of children aged 4–12 years, in 42 Victorian primary schools. Total sodium intake was determined using a single 24-hr urine sample. SES was defined by parent education level, and split into three levels. Between group differences were determined using linear regression with cluster robust standard errors to account for school clusters.

Results: Valid urine results and SES data were available for 569 children with mean (SD) age of 9.2 (1.9) years with a mean \pm SEM sodium excretion of 102 ± 2.2 mmol/d. For low ($n = 137$), medium ($n = 85$) and high ($n = 347$) SES groups, sodium excretion was 110 ± 4.0 , 100 ± 3.6 and 99 ± 2.7 mmol/d respectively. Sodium excretion differed across SES groups ($p < 0.05$). Further adjustment for age, gender and day type of the urine collection did not change this result.

Conclusions: Children in lower SES families have an 11% higher mean intake of salt compared to those in higher SES groups. Given the lifelong health impacts of higher salt intake, this should be considered in the development of future public health interventions.

Funding source(s): NHF.

SALT REDUCTION IN AUSTRALIA AND NEW ZEALAND: HOW DO WE COMPARE WITH THE REST OF THE WORLD?

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Background/Aims: Excess salt intake is a major determinant of raised blood pressure and cardiovascular risk, responsible for an estimated 1 in 10 cardiovascular deaths worldwide. In 2013, all World Health Organization countries committed to achieving a 30% relative reduction in mean population salt intake by 2025. The study reviews progress in Australia and New Zealand compared to other countries.

Methods: Salt reduction initiatives were identified from a systematic search of published and grey literature, accompanied by questionnaires sent to country program leaders. The programs in Australia and New Zealand were compared against other countries based on strategic characteristics extracted from a pre-defined framework.

Results: Neither Australia or New Zealand currently has a nationally coordinated government-led salt reduction strategy. However, both