

Sodium intake and health in New Zealand

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Dietary sodium intakes in New Zealand exceed recommendations for good health¹. It is well-established that excess dietary sodium consumed throughout life causes blood pressure to increase with age², and greatly increases the risk of cardiovascular disease³. One in seven New Zealanders have high blood pressure⁴, and cardiovascular disease is the leading cause of death, responsible for approximately 41% of all deaths annually. Therefore, reducing sodium intakes in New Zealand is important for improving population health.

Most of the sodium we consume is in the form salt (1g of salt contains approximately 2.5mg of sodium), and most of the salt we consume (approximately 75%) comes from processed or pre-prepared foods. In fact, less than one quarter of dietary sodium comes from the addition of salt to prepared foods.

Although it is generally accepted that New Zealanders consume too much sodium, we do not have up-to-date information on national intakes. The gold standard for measuring sodium consumption is the 24-hour urinary sodium excretion survey. However, the most recent such survey in New Zealand was undertaken between 1993 and 1998 in Dunedin and the Waikato¹. Therefore, findings may not be relevant to current sodium intakes, or to the wider New Zealand population. Spot urine samples were collected as a component of the recent 2008/09 national nutrition survey (results due in 2012), and although they may correlate with 24-hour sodium excretion, spot urines only provide an indication of total dietary sodium intake.

In the absence of accurate sodium intake data in New Zealand, it is difficult to set national targets for daily sodium intake. However, the World Health Organisation target for prevention of chronic disease in adults is $\leq 2,000\text{mg/day}$. Similarly, the Food Standards Agency (FSA) in the United Kingdom recommends adults consume less than $2,300\text{mg/day}$ ⁵.

Internationally, many governments and policy groups have developed nutrient targets for processed foods. For example, in 2003 the United Kingdom FSA set voluntary sodium reduction targets for 85 food categories⁶, and in 2010 Australia's Food and Health Dialogue set voluntary sodium reduction targets for breads and breakfast cereals⁷. Similarly in New Zealand, the food industry is being encouraged to decrease the sodium contents of products through reformulation. In 2007, the Heart Foundation (HF) of New Zealand initiated Project Target 450, a voluntary initiative to encourage bread manufacturers to reformulate low cost, high volume breads to $\leq 450\text{mg}/100\text{g}$ sodium⁸. This continuing project has been expanded to other food categories, and supplements the Tick programme, a manufacturer-sponsored HF initiative promoting healthier choices and reformulation within food categories⁹. Despite these initiatives, country-specific food formulation targets for New Zealand have yet to be set. In order to set such targets, more information is needed

regarding the sodium content of the New Zealand food supply, and the impact of initiatives such as the HF Project Target 450. These analyses are currently being undertaken at the Clinical Trials Research Unit at the University of Auckland with a view to informing industry and policymakers with an interest in improving the national food supply and population sodium intakes.

In summary, New Zealanders currently consume more sodium than is necessary for good health; most of this sodium comes from processed and pre-prepared foods. Too much dietary sodium increases population rates of high blood pressure and cardiovascular disease. Strategies led by the Heart Foundation aim to decrease the sodium content of commonly consumed processed foods. However, much remains to be done: accurate assessment of population dietary sodium intakes and setting of a national sodium intake target are priorities, and must be supported by objective monitoring of the sodium content of our food supply and national food category sodium targets. Only then will we be able to take real steps towards reducing sodium intakes and ultimately improving population health in New Zealand.

References

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