



THE GEORGE INSTITUTE
for International Health



Monitoring sodium reduction in Australian processed foods

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8th International Food Data Conference
Bangkok, Thailand
October 2009



Affiliated with the University of Sydney



Objectives of presentation



- Provide an overview of impact of salt on health and AWASH strategy
- Describe the set-up of the AWASH sodium database
- Present results of changes in sodium in processed foods between 2007 and 2008
- Discuss implications



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Salt and ill-health



- Required daily salt consumption about 1g/day
- Recommended maximum 6g/day (2,300mg Na) and Suggested Dietary Target 4g (1,600mg Na)
- Salt causes blood pressure to rise and greatly increases the risk of cardiovascular disease
- Cardiovascular disease is the leading cause of disease burden in Australia
- Blood pressure is the leading cause of chronic disease worldwide



Australian Salt Intakes

- Recent Australian National Children's Diet and Physical Activity Survey
- Boys – up to >9g salt/day
- Girls – up to >6g salt/day
- No recent measurements for adults
- Estimates between 5-13g/day
- Likely greater intake than children



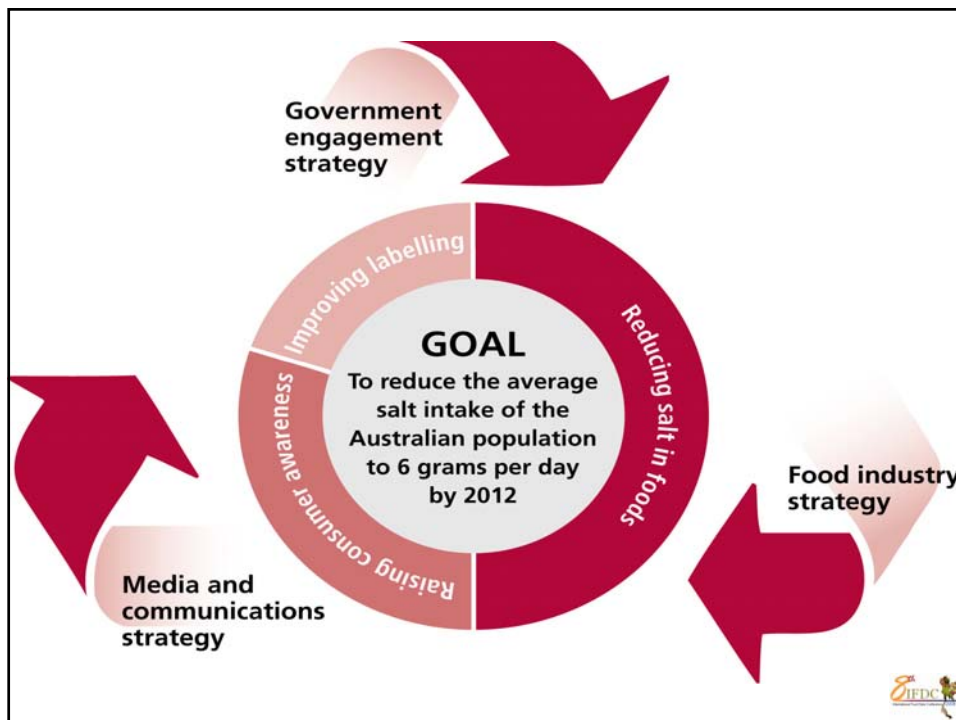
Australian Division of World Action on Salt and Health (AWASH)

DROP THE SALT!

Network of representatives from medical, scientific, industry and consumer organisations who endorse the health benefits of a population wide reduction in dietary salt consumption

Governance

- Secretariat based at George Institute: Bruce Neal, Jacqui Webster, Jane Austin and Caryl Nowson (Deakin University)
- Advisory Group representing industry, consumers, academia and the public sector



Food industry support



Project Objective

- To establish a baseline for sodium levels in processed foods available in Australian supermarkets and to examine whether there had been any changes in sodium levels over a one year period (from 2007 to 2008)



AWASH Sodium Database - Approach

- Identify food categories that contribute most to salt in the Australian diet.
- Collect sodium data on packaged foods sold in Australian supermarkets from selected sources.
- Set up AWASH sodium database.
- Assign foods to relevant major, minor and sub-categories.
- Collect relevant additional data (other nutrients where possible) for each item and input data.
- Monitor changes over time.



Salt in the Australian diet

Food Category	Percent contribution to salt intake from processed foods
Cereal and cereal products	32
Cereal-based products and dishes	17
Meat, poultry and game products and dishes	21
Milk products and dishes	5
Savoury sauces and condiments	8
All other foods	17



Example – bread & bakery products

Minor food category	Sub-category	Description
Bread	White bread	Pre-packed white sliced bread
	Wholemeal bread	Pre-packed wholemeal sliced bread
	Mixed grain bread	Pre-packed mixed grain or seed sliced bread
	Fruit bread	Pre-packed fruit bread and fruit-based muffins/rolls
	Others	Pre-packed Turkish pide, wraps, flatbread, tortillas, bagels, English-style muffins, crumpets, rotis, pizza bases and other plain bread-based products



Data collection

Direct from manufacturer

- Companies to provide nutrition information of all products sold in Australian supermarkets

Company websites

- Accuracy to be confirmed with manufacturer

In-store visits

- Two major Australian supermarket chains
- Information taken directly from product NIPs



Example of market share data

AWASH Category	Retail World Category	Brand	% volume
Bread	Bread loaf	Private label	27.8
		Helga's	7.9
		Wonder White	8
		Tip Top Up	6.9
		Mighty Soft	7
		Tip Top Sunblest	7.1
		Noble Rise	3.3
		Burgen	2.6
		Country Split	1.6
		Vogel's	0.6
		TOTAL	72.2



Data analysis

- For each food category (and relevant sub-categories) in both 2007 and 2008, the range and mean sodium value per 100g were determined.
- Changes in the sodium content of each food category and sub-category were analysed using a student's independent t-test in SPSS, with significance defined as a p value of <0.05.



Results

- Huge variations in salt content of similar products
- Minimal change between 2007 and 2008
- Significant decreases in sodium content of **pizza, soft cheeses** and **canned salmon**
- Significant increases in sodium content of **processed cheeses**



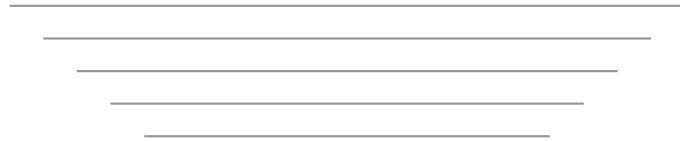
Results

Food category	2007		2008		% change	P value
	N	Sodium mg/100g	N	Sodium mg/100g		
White bread	45	482 ± 62	36	464 ± 53	-4	0.164
Potato crisps	70	649 ± 217	47	642 ± 184	-1	0.859
Pizza	15	457 ± 98	8	369 ± 47	-19	0.028*
Bacon	31	1258 ± 276	30	1194 ± 262	-5	0.363
Processed cheese	47	959 ± 450	18	1266 ± 408	+24	0.016*
Soft cheese	43	439 ± 298	41	334 ± 113	-24	0.036*
Canned tuna	131	406 ± 151	125	398 ± 131	-2	0.647
Canned salmon	63	445 ± 136	53	391 ± 132	-12	0.032*



Conclusions

- Some Australian food manufacturers have taken steps to reduce sodium in their products
- Still wide variation in sodium levels within major food categories.
- Monitoring of sodium levels over time is crucial to identify whether changes companies allege to are actually occurring
- With population salt intakes still far too high, there is an urgent need for government action to set sodium targets for processed food products



Acknowledgements

National Heart Foundation
of Australia



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