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Use the **editorial address** when writing about the newsletter—see the panel on page 4.

## Dietary sodium intake amongst Australian infants - recent results

**A research group under the leadership of Professor Karen Campbell of Deakin University has been investigating the sodium intake in Melbourne infants during the first two years of life.**

The Melbourne Infant Feeding Activity and Nutrition Trial (InFANT Program) was originally set up to test a lifestyle intervention for first-time mothers. It was focused on reducing the obesity risk behavior of children. As part of the trial, dietary intake and other information was collected when the child was about 9 months old, and again when the child was about 18 months old. At each point in time, dietary intake was assessed by recalled diet on three non-consecutive days.

The study managed to collect good quality dietary assessments at two points in time for 295 infants – providing a large sample for investigation of dietary intake at a young age.

The major sources of food energy were also large contributors to sodium intake at both ages. Infants are unusual in deriving a lot of their food energy from single foods such as breast milk, infant formula and cow's milk. For example, at 9 months of age, 31% of total dietary sodium was derived from breast milk and/or infant formula (which provided almost half the total energy intake).

At the older age, more regular family foods appear in the dietary intake and this can mean high sodium foods – Vegemite was consumed by 56% of the children at 18 months for example although only providing 3% of the total sodium intake.

At 18 months of age, 54% of children exceeded the recommended daily upper level for sodium intake. Besides milk, important food sources included bread (providing 15% of the total sodium intake), cheese (11%), breakfast cereal (5%), mixed dishes (5%) and soup (4%). Children who had diets with a higher sodium density tended to be those who had commenced solid foods at an earlier age.

***Ideally, children would be fed foods that are low in sodium from an early age so that they never become accustomed to salt.***

As always, preparation of food from known ingredients (preferably fresh) or careful attention to the sodium content on the food label being less than 120mg per 100g is the best policy.

### Reference:

Campbell KJ, Hendrie G, Nowson C, et al. Sources and correlates of sodium consumption in the first 2 years of life. *Journal of the Academy of Nutrition and Dietetics* 2014;114:1525-32.



## Has the salt content of Australian foods changed recently?

The George Institute for Global Health, based in Sydney, is very active in advocating that Australians (and people from other countries) have a lower salt intake. The investigators realise that it is very difficult for individuals to follow a low salt diet and they promote efforts by the government and the food industry to lower the sodium intake across all food categories. This would provide health benefit to all of the population – those who are actively seeking to consume lower salt diets, and those who are able to benefit by accident and without their conscious efforts.

Earlier this year, investigators at the George Institute assessed the change in the sodium content of leading fast food products in Australia between 2009 and 2012. Across this 4 year period, they found that the overall average sodium content of fast food has decreased by 43 mg/100g. This is equivalent to a reduction of about 2% - 3% in sodium levels each year which is a small rate of change but encouraging.

The annual survey of foods focussed on products from the six leading fast-food companies in Australia – Domino's, hungry Jack's, Kentucky Fried Chicken, McDonald's, Subway and Pizza Hut. The study noted a high variability in sodium content for similar fast food products – this can be interpreted to mean there is a lot of room for the higher salt products to have their sodium concentrations reduced, and that there is value in seeking out the foods on the menu with a lower sodium content (although the sodium levels in general will be too high for people looking to skip salt).

Aside from sodium concentration, portion size is an important determinant of total sodium load – a move towards modest portion sizes is to be encouraged.

**At Salt Skip News, we are always interested to hear from readers. Please send us your Salt Skip news, tips and salt-free or low sodium recipes...**

The George Institute team also assessed the progress made by the Australian Food and Health Dialogue (FHD) to lower the sodium content of bread, breakfast cereals and processed meat. The FHD was launched by the Federal Government in 2009 and convened a series of roundtable discussions aimed to engage key stakeholders to lower the salt content of processed foods.

One strategy of the FHD was to negotiate voluntary salt reduction targets for particular food product categories. Targets were agreed upon for breads, breakfast cereals and processed meats and scheduled to be achieved by December 2013.

Using sodium content information from the labels of relevant packaged foods, the George Institute found that the mean sodium content of bread products fell from 454 to 415 mg/100g sodium between 2010 and 2013, and the proportion of products achieving the target rose from 42% to 67%. The mean sodium content of breakfast cereals also fell from 316 to 237 mg/100g (a 25% fall), and the mean sodium content of bacon/ham/cured meats fell from 1215 to 1114 mg/100g (8% lower) with the proportion meeting the target rising from 28% to 47%.

Declines in the mean sodium content did not appreciably differ between those made by companies that made public commitments to the targets, and those made by companies that did not.

These results are interpreted to show that with the right encouragement, food manufacturing companies are able to voluntarily make changes to their products to achieve sodium targets.

More encouragement needed!

### References:

Garcia J, et al (2014). Changes in the sodium content of leading Australian fast-food products between 2009 and 2012. *Medical Journal of Australia* 200:340-44.

Trevena H et al (2014). An evaluation of the effects of the Australian Food and Health Dialogue Targets on the sodium content of bread, breakfast cereals and processed meats. *Nutrients* 6: 3802-17.

**Chinese Herb Nephropathy.... (Article Continued from Page 3 BP Monitor)**

**Treatment – general**

- Prevention of exposure (no products containing AA approved by FDA) Banned in Europe, USA, Hong Kong, Taiwan and mainland china (some species permitted in china still under supervision)
- No proven effective treatment
- No Randomised Controlled Trials (case series, opinion, animal data)
- No evidence for Renin Angiotensin System blockade

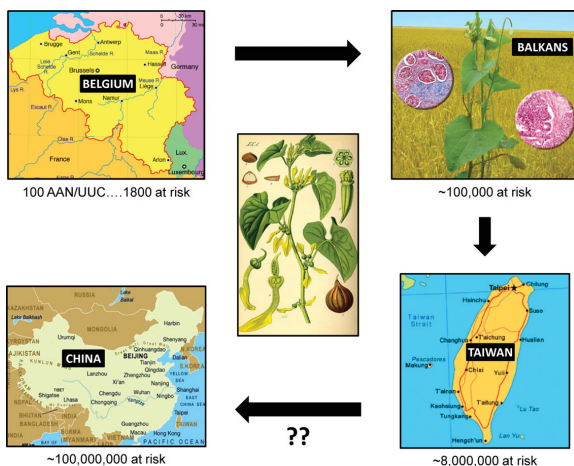
**Surveillance**

- Urine cytology routinely – 6 monthly
- Invasive surveillance necessary as cytology poor test for upper urinary tract malignancy.
- Pre-dialysis - Annual CT and ureteroscopy
- Post nephroureterectomy – rigid cystoscopy and bladder biopsy 6 months
- Optional cystectomy if AA-DNA adducts in bladder specimens

**Patient Demographics: AA-UUC vs non AA-UUC**

- AA-UUC pts younger (median age 64vs68 yrs respectively P=0.189)
- Predominantly female (65%vs35% P=0.011)
- More ESRD (28%vs12% P=0.055)
- Infrequent smokers (5%vs23% P=0.07)
- All 14 pts with contralateral UUC had AA DNA adducts, 10 also had mutation

**How does it all tie together?**



- Schema demonstrating how a cluster of

cases in Belgium led to the recognition of the central role of Aristolochia herbs in a devastating disease occurring around the world, manifested by chronic nephropathy and urothelial carcinoma of the upper urinary tract.

**Functions of the Chinese Medicine Board of Australia**

- Developing standards, codes and guidelines for the Chinese Medicine profession
- Approving accreditation standards and accredited courses of study
- Registering Chinese Medicine practitioners and students
- Handling notifications, complaints, investigations and disciplinary hearings
- Assessing overseas trained practitioners who wish to practise in Australia

Chinese Medicine Practitioners: Registration Type by State

State	General	Limited Teaching or research	Non-practising	Total	% By State
ACT	61		1	62	1.52%
NSW	1,644		5	1,649	40.52%
NT	10		2	12	0.29%
QLD	777	1	7	785	19.29%
SA	156		1	157	3.86%
TAS	33			33	0.81%
VIC	1,091		60	1,151	28.28%
WA	191		1	192	4.72%
Not Stated	11		18	29	0.71%
<b>Total</b>	<b>3,974</b>	<b>1</b>	<b>95</b>	<b>4,070</b>	

**Chinese herbs listed in “Standard for the Uniform Scheduling of Medicines and Poisons” - September 2012**

- |                      |                   |
|----------------------|-------------------|
| Guan Mu Tong         | Guang Mu Tong     |
| Hui Mu Tong          | Guang Fang Ji     |
| Mu Fang Ji           | Han Zhong Fang Ji |
| Ma Dou Ling          | Bei Ma Dou Ling   |
| Tian Xian Teng       | Xun Gu Feng       |
| Qing Gu Feng         | Qing Mu Xiang     |
| Zhu Sha Lian         | Qing Xiang Deng   |
| Nan Mu Xiang         | Zhu Sha Lian      |
| Dong Bei Ma Dou Ling |                   |
| Mian Mao Ma Dou Ling |                   |

**Appendix C: ARISTOLOCHIA app. for therapeutic use**

Thanks and appreciation to Dr Sarah Stevenson for her presentation on “Chinese Herb Nephropathy” – a fascinating insight into herbal remedies in mainstream medicine.

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Salt Skip News will  
continue to be distributed  
in hard copy in The BP  
Monitor (QHA newsletter)

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## **News from Ararat – the community strikes back!**

Readers may remember that Ararat Victoria was named one of Australia's most obese towns. The town (or some of its overweight members) was featured in the reality TV program *The Biggest Loser*.

This program followed the progress of contestants as they competed against each other to lose weight and in physical challenges against a background of dieting and vigorous physical activity programs.

The reality show cameras eventually left town, and one would be forgiven for thinking the town of Ararat would return to how it was before. However, the community has taken charge of its health problem and taking personal responsibility for their health.

The Mayor and the Council have initiated 'Active 8' using income from the TV show. 'Active 8' is a program where the whole community works together to support each other in losing weight and being healthier. It is showing a high level of community participation and some stunning results. More than 1200 out of 8000 residents are wearing pedometers to measure their physical activity. Residents have been made aware of the extent of their community weight problem, rather than accepting it as a normal situation. Champions in the community have made changes resulting in weight loss of up to 20kg in 12 weeks – and everyone shares in their success.

Community agreement and commitment is a very powerful force for change – it certainly seems to have galvanized Ararat!

**The people of Ararat show that concerted focus, mentoring and motivation can change a whole community's behaviour, at least in the short-term.**

**According to Angela Hunt from Ararat Council, there are lessons here for all Australians.**

**"We have put a lot of effort into activity, physical activity ... now we are getting some gains there we have to keep going. We also have to put some focus on nutrition," Ms Hunt said.**

**For 40 years Australia has faced a weight and obesity epidemic, countered by public health campaigns like the Life Be In It ads of the 1970s. But in that time the obesity rates in Australia have doubled, and look likely to keep rising.**

**BP Monitor with Salt Skip News** is published every 2 months, from February to December (6 issues a year).

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