

## Should you be eating that much s\*\*t (salt)?

Breakfast seminar, given by Professor Bruce Neal, 19 July 2010

This is the second in a series of International Breakfast Seminars, held by C3 Collaborating for Health ([www.c3health.org](http://www.c3health.org)).

Please note that the slides from this seminar are available on the C3 website.

### Introduction from Christine Hancock, C3 Collaborating for Health

Christine introduced the House of St Barnabas (the historic building in Soho where the seminar is being held) and C3 Collaborating for Health ([www.c3health.org](http://www.c3health.org)).

The series of seminars is to influence thinking in the UK by using overseas speakers who can give a different perspective. Professor Neal is in fact British, but is a Senior Director at The George Institute for International Health in Sydney, and is Chair of the Australian Division of World Action on Salt and Health ([www.awash.org.au](http://www.awash.org.au)).

### Should you be eating that much s\*\*t?

Bruce Neal acknowledged that the UK's Food Standards Agency came up with the title – and although it was thought by the FSA to be too risqué for an English audience, he felt it would go down well in Australia.

His background is in clinical research and large-scale trials, and has relatively recently begun work in this field. It has been a hard switch to make, because clinical/pharmaceutical funding is much easier to come by.

He went through the structure of the talk: why the food supply (and salt in particular) is so important; ways of working with industry; and a new international food-monitoring initiative that he is leading.

### Why the food supply is so important

High blood pressure in Australia is the second-leading cause of total disease burden (7.6%) after tobacco (7.8%), despite a huge prevention effort.

The problem persists partly because it was a huge problem initially, and also, importantly, because current strategies are having only a limited impact.

The risk of stroke clearly goes up steeply with blood pressure, and defining a systolic BP of 140 mmHg as being acceptable is, in fact, not necessarily helpful. The link between risk of stroke and blood pressure is a continuous association – any increase of blood pressure will increase risk. The risk decreases in line with blood pressure, down to about 115 mmHg.

Within the bell curve of population blood pressure, only a few people have a high risk (over 140) but there are very many who have low risk (i.e. above 115). Half of all the burden of vascular disease occurs among the high risk group, and half among the 'lower' risk group – i.e. those who do not have 'hypertension'. In other words, this is not just an issue for those with hypertension.



But the guidelines on blood pressure in Australia, as in most countries, are guidelines on hypertension.

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On a somewhat pessimistic assessment:

- a hypertension-based approach will only address 50% of the total disease burden;
- in 2000, 27% of Australian adults had hypertension, of whom 47% had had a diagnosis and were on treatment – so only 24% of the total disease burden is being addressed;
- then only 40% of those treated get down to the 140mmHg target – i.e. this is only addressing 9% of the disease burden;
- and, finally, almost no one with hypertension will get down to 115mmHg.

The guidelines do, however, encourage treatment of those at 'high risk' even if they do not yet actually have high blood pressure.

The cost of the programme is about Aus\$1 billion a year – half of this is spent on drugs and the remaining half on salary for primary-care practitioners, etc.

Ever-larger amounts of money are being spent on research into expensive treatments that deliver incremental gains – whereas Aus\$10–20 million a year would provide a 'gold-plated national salt reduction programme', along the lines of the programme in the UK. This would probably avert a similar amount of disease as is being averted by the current hypertension programme ... for just 1–2% of the cost.

### Working with industry

This section of the talk was illustrated with Bruce's conflict of interest statement, which lists work that he has done with pharmaceutical companies (including as a consultant, lecture fees and research support in large-scale clinical trials) and with the food industry. Of the two industries, the etiquette of working with food companies is less well worked-out, and it makes many in this field very anxious.

While conscious of the potential for conflict when working with industry, there are also opportunities that arise from working with them – for example, with the **pharmaceutical industry**:

- It gives an insight into the business – you begin to understand what drives them, and how they think.
- Data about new products is available at an early stage, which allows you to consider of dualities of interest, for example testing a new drug in a way that allows the company to make money while also benefiting public health.
  - For example, tests of a blood-pressure-lowering drug for those who had had a stroke but did not have high blood pressure showed that risk of future stroke would come down by a quarter to a third on the drug. This increased the odds for people who have had strokes, and taking the drugs has now been written into the guidelines.
- There is greater access to resources.
- Translation of findings can be key – academics working with the industry can disseminate the results of the research at conferences etc., which is good for publicity – but also good for public health.

For a project to have a real impact:

- there needs to be an important outcome;
- it needs to have indisputable effects (i.e. it is clear that it has benefits with no harmful effects);
- the projects should be large-scale;
- the projects should be adequately funded;
- major reports should be published in journals;
- there needs to be wide dissemination of the results.

Bruce has also worked with the **food-processing industry** and the quick-service restaurant industry, and he addressed conflicts of interest there too.

Industry and public health used to throw insults at each other (especially when public-health academics work with industry), with government trying to mediate. Even after four years of working in this field, Bruce still finds it to be not a comfortable relationship, and conflicts are not always perfectly managed.

- For example, Bruce recently attended the PepsiCo scientific board – this is interesting work, although he is not sure how much influence he would have. He has not claimed payment for his attendance, but could do, and would not have a problem being paid by PepsiCo for the advice he gave – although he noted that not everyone would agree with this position!

Bruce felt that working with the food industry is acceptable if:

- you can manage the real and perceived conflicts;
- you gain from the experience; and
- the work helps to promote public-health goals.

### A new food-monitoring initiative

Bruce then introduced a new food-monitoring initiative that he is heading up at The George Institute in Sydney.

Why monitor food composition?

- Monitoring over time allows for greater precision and better comparison than do one-off studies;
- Robust, repeated estimation of composition on an international basis can drive improvements in the food supply by presenting the data to industry and government.

Hence, he has set up a new food composition-monitoring initiative, which draws on previous vascular initiatives:

- Step one is complete – namely, a draft of the national (Australian) stage of the project, and a comparison of national estimates of FSS (fat, salt, sugar content) etc. to national benchmarks.
- The next step is to do this internationally, and compare between companies.
- Then the idea is to repeat the study over time to track changes on saturated fat, total fat, sugars, salt, energy density, serving size etc. (This is very much focused on over-nutrition, not under-nutrition.)

The hope is that this could bring pressure to bear on industry, governments and regulators.

Limited data will restrict the number of countries that can be involved – and, of course, in some countries, the focus on processed food would not be relevant for much of the country (e.g. in China, the plan is to focus initially on the Beijing area). It is not possible to compare countries exactly, but at least over time the trends will be clear.

The objective is to include all products in each food category, but will probably get up to 80% or more of market coverage, which requires good knowledge of retail patterns.

The data sources will be drawn from companies, company websites, nutrient databases and (if necessary) labels in-store – the researchers will not be independently analysing the products.

Categorising of the foods depends on reviews of existing databases, discussing with industry etc. – this needs to be presented in familiar formats that can be easily fed back to government and industry.

The project will be led out of a secretariat in The George Institute in Sydney, with broader decisions being made by a management committee, which will include a representative from each country that is being surveyed.

Bruce noted that authorship is always contentious for academics – primary publications will be in the name of the collaborative group (e.g. ‘The International Food Composition Collaborative Group’), leaving open the opportunity for publication by smaller groups on sections of the data. All contributing countries will have access to all the data – they can then publish their own country’s data, and others’ data if the other country gives permission.

The key outputs for the project will be the scientific reports and media reports, but the technical reports to industry, government and regulators will also be important and potentially influential.

Limitations of the project:

- The team is not collecting or weighting by sales data – this is currently too complex to attempt with the resources available.
- There is incomplete global coverage – and in many countries, sourcing the information will be difficult because the nutrition information is not readily available. However, looking at the proportion of food without available nutrition information is interesting in itself.

There are already data sets on food composition, but they are often not available. This project will ensure the quality of outputs with a standard methodology, and it will be shared and open-source.

Bruce very much hopes that the project will lead to indisputable outputs about how countries and companies are doing on food composition compared to each other. This sort of objective third-party monitoring gives much greater opportunity to advance the cause of health, especially when industry and government are going down the voluntary rather than regulatory route (as seems to be the case at the moment).

The group has just drafted a paper setting out the project, and expect detailed responses on the ideas soon.

## Discussion

Christine Hancock (C3)

- C3 is aware of the conflicts of interest that can arise when working with industry. C3 has received funds from PepsiCo for specific projects – and someone declined their invitation to today's event because of this link.

Vivienne Nathanson (British Medical Association)

- The tobacco companies use 'personal responsibility' as a hook, and the alcohol industry seems to be moving the same way. There is a real need to work with the food industry – although she felt that the companies are getting very defensive.
  - The tobacco example is very interesting. Bruce already sees standard sets of responses being used by the food industry, in the same way as happened with tobacco – e.g. personal choice. But he is loath to say the food industry is like tobacco – finding a middle ground, rather than alienating the companies, is essential.
  - Chris Holmes (who had a background in marketing before coming to public health) sees a clear danger of creating a self-fulfilling prophecy – if the food industry thinks that any step forward will end with the companies being beaten up, then the industry will retreat to a defensive position, and put up barriers until regulation is put in place. Being in the middle between health and the industry is a very uncomfortable position.
  - Graham MacGregor (Consensus Action on Salt and Health) agreed that it is difficult to work with industry – but voluntary guidelines will only happen if we talk to the industry. He also noted that, in the UK and now in the US, there have been academics who campaign against salt reduction!

Graham MacGregor

- Graham very much liked the idea of the dietary database, but cautioned that measurement can be very inaccurate. Indeed, the nutrition information only has to be within 20% (+ or -) of the actual amounts in the food (i.e. it can vary by up to 40%). Also, there is a huge turnover of food products, and worldwide there are variations between countries in the ingredients even of iconic products such as Kellogg's cornflakes. But he supports the idea of the database, and bemoaned the fact that the FSA did not set

up a database to do this when the salt-reduction efforts began in the UK, as we do not have an accurate measure of the changes that have taken place so far.

- Bruce felt that, so long as there is not a systematic change in how products are measured, there will be so many products that the inconsistencies in measurement will even out.
- In terms of churn, the main products (those with a large market share) tend to stay relatively stable – and in any case it is still possible to track the average for particular groups of products.

#### Ana Baptista (Nestlé)

- Ana noted that the analogy with tobacco is an uncomfortable one, because we need food to live (unlike tobacco). The companies have come a long way – Nestlé, for example, has a good relationship with the FSA and government, and is working towards the nutrition targets. She commented that one cannot argue against salt reduction, but that there is a need to reduce salt over time to allow palates to adjust: step-wise salt reduction is key.
  - Bruce Neal said the new project is not trying to compare the content of food versus tobacco products. But there is some commonality in terms of the companies trying to stifle change – notably, big tobacco was systematic in the way it undermined data and focused on personal responsibility. The food industry needs to know that if it takes that approach then it will be compared to tobacco – so there is an even greater need to encourage the food industry to move forward.
  - Ana said Nestlé would welcome international salt guidelines – for example, there is an issue with importing products from countries where the salt guidelines are set higher than the UK, because why should companies have to do a separate product for the UK market! There is a clear need for consistency.
  - Bruce commented that at national target gives a level playing field – and that he would love to see international standards. He suggested that this could end up being one of the outputs of the food-composition study.
  - Christine commented that C3 has done work in the UK that later got rejected because it was too forward-thinking for the international part of the food company.

#### Cliona Nimhurchu (MRC Human Nutrition Research)

- Cliona has worked with TMS, a company that has data on 40,000 food products. She is currently drafting a paper of comprehensive data on processed food in the UK. This paper will be public – but she is not yet sure how much of the main dataset will be made available.
  - Data is very valuable when it is current, but tails off rapidly as time passes. Perhaps we could get the data from a year ago for a greatly reduced price, because fresh data is very expensive.

#### Jack Winkler (senior academic nutritionist)

- Jack discussed voluntary guidelines versus regulation. If you could introduce legislation, this would be effective in making change – but in the first instance there has to be voluntary guidance, because it is so complex, and because industry resistance to regulation is so great. He believes it will probably take 10 years to get regulation in place. The key is having hard-core, objective, third-party monitoring of the voluntary process, and holding the companies indisputably to account: this could be almost as powerful as actual regulation. The UK shows that you can get change through voluntary approaches.

#### Barbara Gallani (Food and Drink Federation)

- What interaction has there been with the European Food Safety Authority (EFSA) regarding the database?
  - Much of the interaction with other organisations has not yet been worked out, but Bruce and his colleagues have good relationships with FSA-equivalents in many countries, and many companies.
- How would information be inputted into the database?

- Inputting data would be up to the individual person organising each country's effort.
- Barbara reiterated that there is only one way forward – namely, working together with industry. She felt that you should not see a focus on physical activity purely as a smokescreen – after all, the food companies can reach more people than traditional health promotion. There is a need to address health very widely – and she said that work being done on workplace health (particularly when it involves employees' families) is interesting.
  - Bruce cautioned that it can look like industry is coming back with a pre-prepared plan (for example, on physical activity) – but agreed that not all that the companies are doing in this area is bad.

#### Vivienne Nathanson

- It is interesting that weighting has been ignored in the study. She cited the example of how, a couple of years ago, a UK supermarket introduced a healthier version of chicken tikka masala, priced the same as the usual one – and within three weeks 80% of sales were of the healthier option.
  - It was noted that the opposite can also happen – Bruce suspects that McDonald's sells very few of their (heavily promoted) healthy options. But people do not go to McDonald's for health food!
- Viv is also working with the Coalition on Better Health on alcohol issues. They are working with local shops to check sales in real time, to compare how sales tally with local drinking campaigns. This is not commercially sensitive because it is aggregated data.
  - Christine commented on the South African insurance company Discovery, which is working with a major supermarket chain, Pick 'n' Pay. 9,000 products have been chosen as 'healthy', and customers receive a cash discount at the till if purchasing those products. There has been a clear shift into the supermarket (i.e. towards Pick 'n' Pay), and a shift in product choices made by consumers.

#### Chris Holmes (London Social Marketing Unit)

- Very little of the data in the commercial world is accessed and used – this is partly because there are issues regarding access to the data, but there is also resistance to looking for it. Tesco has a great deal of information on customers through their ClubCards – there must be interesting data on how families shift to healthier shopping choices. He cautioned against doing work to collect data that has already, in fact, been collected.
  - Bruce agreed that it would be good to use what is out there – but in any case the project is not hugely onerous. He estimates that, of the roughly 40,000–50,000 products, the nutrition information from half of them can be easily accessed from industry. Information about the remaining products can be gleaned from websites and from supermarkets. He expects it to take a few research assistants a few weeks.
- Chris also voiced concern about multiple data sources, changes in products etc., because data may be seen to be varying.
  - Bruce reassured the group that it be very clear how the information has been collected etc., and the methodology will be in the public sphere. He hopes to be able to put enough safeguards in place to overcome most of these objections, and for the project to be seen as valid and robust.



#### Ian McDowell

- The current UK government's 'Big Society' vision is about localism, a world that is more values-driven than management-driven. So where do people interact on a local level? In East London, this interaction is very much with shops – the local corner shop, Tesco, etc. Whatever we do to solve problems has to

be correlated with what people actually do in their lives – and without engagement with industry, we cannot do this, because industry is where people are.

- Bruce felt that the only way to make a change is by making every food product a little bit better. Encouraging individuals to change their lifestyles is not plausible on a population level. Instead, businesses need to change what they make. Public-health campaigns are not necessary to create change – and it is not worth spending lots of money on community education. Delivering ‘choice’ is not a public-health solution. Other participants felt that this is a narrow way of looking at the issue, however.
- Viv pointed out that for, for example, the South Asian community largely cooks from scratch – so when looking at such groups, the researchers need to know about preparing food. Simply looking only at processed food will a particularly skewed view of people’s nutrition intake in these groups. Bruce agreed this is true for relatively small sections of the population in western countries, but that is more generally the case in countries such as China.
- Christine mentioned the importance of price – for example, Diet Coke can be much more expensive in developing countries.

Graham MacGregor

- Cereal and bread in the UK have been subject to big salt reductions. But those who are less well off die earlier and can only buy the cheapest products – it is these cheap products that must be targeted, because those who consume them have no choice. From a public-health perspective, you have to go for the big problem.

Kat Jenner (CASH)

- Where does the funding for the project come from? Is it for research, or for salt reduction?
  - Bruce explained that the project has a non-tied programme grant for three years, and that the Australian government is beginning to fund translational research (working with health authorities and industry). There are targets set for the project on baseline data-gathering, implementation and follow-up.

## Final words

Christine thanked Bruce and told the group about the next Seminar, which is to be held on 10 September, given by Dr Tom Glynn of the American Cancer Society.