THE NEED FOR NUTRITION EDUCATION / INNOVATION PROGRAMME

SALT REDUCTION TARGETS, POPULATION HEALTH & PREVENTION

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WITH SPECIAL THANKS TO SHIVANI BHAT AND THE NNEdPro GROUP
FROM WHITE GOLD... To White Poison?
SALT, SODIUM BALANCE & DISEASE RISK

Associated with:
- High Blood Pressure
- Cardiovascular Disease
- Kidney Disease
- Obesity
- Osteoporosis
- Stomach Cancer
- Water retention/bloating

Exacerbation of:
- Diabetes
- Meniere's Disease
- Asthma
- Alzheimer's

Salt intake → Plasma sodium concentration → Water intake
Salt and water excretion → Kidneys → Extracellular fluid volume → Cardiac output
Peripheral vascular resistance → Blood pressure
CVDs number one cause of mortality worldwide (~30% deaths)

UK healthcare spending on CVD is greater than any other EU country

53% CVD treatment in UK for preventable conditions
The Public Health Intervention Ladder

- Eliminate choice
- **Restrict choice** - regulate to restrict the options available to people with the aim of protecting them
- **Guide choice through disincentives** – disincentives to influence people not to pursue certain activities
- **Guide choices through incentives** – regulations to guide choices by fiscal and other mechanisms
- **Guide choices through changing the default policy**
- Enable choice – supporting individuals to change their behaviours
- Provide information – inform and educate the public
- Do nothing or simply monitor the current situation

POLICY TIMELINE FOR SALT REDUCTION GUIDELINES
Timeline

- **1991**: COMA published a report that set RNI for salt at 4g of salt
- **1994**: COMA published “Nutritional Aspects of Cardiovascular Disease”
  - Recommended salt intake reduction from 9g/day to 6g/day for BP control
- **2002**: FSA committed to nationwide salt reduction initiative to reduce UK salt intake to 6g/day
  - WHO published ‘preventing risks and promoting a healthy lifestyle’ – global burden of high BP linked with salt
Timeline

- **2003**: SACN published ‘Salt and health’ with evidence for direct association between salt intake and BP, recommending reduction to <6g/day

- **2004**: FSA started series of meetings
  - Salt campaign
  - DH White paper, ‘Choosing Health, Making healthy choices easier’

- **2005**: Salt model finalised and published
  - FSA Strategic Plan 2005-2010 set target to reduce average population salt intake to 6g per day by 2010
  - First FSA stakeholder meeting held to discuss the development of targets for salt reduction in food categories
  - First FSA/DH joint statement published, on progress made by the food industry in reducing salt levels
  - Public consultation on proposed salt targets published
  - Summary of salt-reduction commitments received from food organisations updated and published
Timeline

- **2006:** Final salt reduction targets published
  - Publication of first sampling round of the Processed Food Database
  - Series of short TV advertisements shown to maintain awareness of key messages
  - FSA to discuss development of a self-reporting framework, used to monitor progress made by industry towards targets

- **2007:** Third phase of the FSA’s salt campaign
  - Urinary sodium analysis results published estimating mean population average salt intakes at 9g per day
  - British Meat Processors Association published Small Business Guidance
  - Self Reporting Framework (SRF) published
  - Stakeholders brief on 2008 review of salt targets
Timeline

- **2008**: Publication of second sampling round of the Processed Food Database
  - Stakeholder meetings to assess progress to date, challenges being faced and salt target adjustments
  - First meeting of the European Salt Action Network
  - Urinary sodium analysis results published estimating mean population average salt intakes at 8.6g per day
  - Public consultation on proposed revised salt targets for 2010 and 2012 published
  - Population average salt intake fell from 9.5g/day to 8.6g/day

- **2009**: Second meeting of the European Salt Action Network
  - Revised salt reduction targets for 2010 and 2012
  - Launch of the fourth phase of the salt campaign

- **2010**: Responsibility for salt reduction programme transferred from FSA to DH in England and Welsh Government
  - NICE published ‘Prevention of Cardiovsacular Disease’ recommending salt reduction acceleration to achieve average of 6g/day in 2015, and 3g/day in 2025
**Timeline**

- **2011:** WHO Regional Office for Europe adopted 'Action Plan for Prevention and Control of Non-communicable Diseases’ 2012-2016

- **2012:** UK population salt intakes fell from 8.6g/day to 8.1g/day

- **2013:** WHO issue new guidance on dietary salt and potassium: 5g/day of salt
  - WHO report published on a mapping of salt reduction initiatives in the WHO European Region
  - Technical working group meetings between industry, NGOs, stakeholders and government officials to review 2012 targets and consider continued salt reduction

- **2014:** Revised salt targets developed for 76 categories of foods and agreed by four UK administrations working closely with industry, NGOs and stakeholders

***New revised UK wide 2017 salt targets***

https://www.food.gov.uk/northern-ireland/nutritionni/salt-ni/salt_targets/salt-timeline#sthash.jLIUpJDS.dpuf
Current Guidance

- New revised UK-wide salt reduction targets for 2017 have been published
- More challenging and wide-ranging than the previous targets for 2012
- 2017 targets aims to encourage further reduction
  - Salt levels covered by previous targets reduced significantly ~40-50%
  - >11 million kilograms of salt being removed from foods
- BUT, average UK salt consumption remains high ~8.1g - 8.8g/day
  - Considerable action required to meet the maximum daily intake of 6g for adults
## UK Salt Guidelines: British Heart Foundation

<table>
<thead>
<tr>
<th>Age</th>
<th>Max. salt per day</th>
<th>Max. sodium per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3 yrs</td>
<td>2g</td>
<td>0.8g</td>
</tr>
<tr>
<td>4-6 yrs</td>
<td>3g</td>
<td>1.2g</td>
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<tr>
<td>7-10 yrs</td>
<td>5g</td>
<td>2g</td>
</tr>
<tr>
<td>11 and older</td>
<td>6g</td>
<td>2.5g</td>
</tr>
<tr>
<td>Adults</td>
<td>6g</td>
<td>2.5g</td>
</tr>
</tbody>
</table>

UK SALT GUIDELINES: NHS

- Adults should eat no more than 6g of salt a day (one teaspoon)
- Children under 11 should have less salt than adults
- Infants under 1 year should have less than 1g of salt a day
  - 1 to 3 years – 2g salt a day (0.8g sodium)
  - 4 to 6 years – 3g salt a day (1.2g sodium)
  - 7 to 10 years – 5g salt a day (2g sodium)
  - 11 years and over – 6g salt a day (2.4g sodium)

http://www.nhs.uk/Livewell/Goodfood/Pages/salt.aspx
WHO GUIDELINES

- WHO recommends reduction in sodium intake to reduce blood pressure and risk of cardiovascular disease, stroke and coronary heart disease in adults <2g/day sodium (5g/day salt) in adults

- WHO recommends a reduction in sodium intake to control blood pressure in children – recommended maximum intake of 2 g/day sodium in adults adjusted downward based on relative energy requirements of children

http://apps.who.int/iris/bitstream/10665/77985/1/9789241504836_eng.pdf?ua=1&ua=1
Further high-quality RCTs testing the effects of:

Reducing sodium to <1.2g/day on blood pressure
Sodium reduction on blood pressure
Multiple intervention arms with multiple levels of sodium on health outcomes
All-cause mortality, cardiovascular disease, stroke and coronary heart disease as outcomes

http://apps.who.int/iris/bitstream/10665/77985/1/9789241504836_eng.pdf?ua=1&ua=1
**BLOOD PRESSURE CASE STUDY**

- Hypertension accounts for **12% of all GP visits**
- Diseases caused by high blood pressure are estimated to cost the NHS **£2 billion every year**
- Over 10 years, **around £850 million could be saved** if BP, of the nation as a whole, was reduced

*C Wright, ICPCPH 2015*
Laying the foundations of nutrition knowledge relevant to clinical and public health practice

A virtual strategic partnership between doctors, dietitians, nutritionists, researchers, educators and other healthcare professionals across eight countries

Delivery of Medical Nutrition Education in Practice
Action Research into Medical Nutrition Education
Building Capacity and Policy Impact in Medical Nutrition for Practice
Nutrition Research for Translation to Medical Education
THANKS...

KEEP CALM AND EAT LESS SALT

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- The categories remain the same as the previous 2012 targets
- additional category added on meat extracts;
- sub-category on salted butter was removed
- several minor changes made to better reflect current market position
- This reduces the number of categories from 80 (2012 targets), to 76 in the 2017 targets
everyone age 2 and up should consume less than 2,300 milligrams (mg) of sodium each day. Some groups of people should further limit sodium intake to 1,500 mg per day, including:

- Adults age 51 or older.
- All African Americans.
- Anyone who has high blood pressure, diabetes, or chronic kidney disease.

http://www.cdc.gov/salt/