Strategies to change nutritional behaviours

Janet Cade
How to move from this .... to this....
One size does not fit all…..

Michie et al, 2011
A recent study found that a tax of at least 20% placed on sugar-sweetened drinks could drop obesity rates by 3.5% and prevent 2,700 heart-related deaths each year.

—Association of Psychological Science, 2013
—Behavioral Translational Medicine, 2013
—British Medical Journal, 2012
Voluntary initiatives

Call to action ‘calorie reduction challenge’,

- food and drink industry to play a key role - alongside Government and others - in reducing the population’s calorie intake by 5 billion calories/day. (2011)
Case studies

Subway taking action to **reduce salt, eliminate artificial trans fats, display calorie information and reduce calories**

Harvester providing **calorie information on menus**

Mars **reducing calorie consumption**

Coca-Cola Great Britain **reducing calorie consumption**

Morrisons **reducing calorie consumption** with their new healthy range

**Key motivations:**

corporate social responsibility & reputational enhancement; work already underway – limited ‘added value’; benefit access to Government; potential uneven playing field. (Durand et al, 2015. Health Policy)
Free fruit or vegetable to all 4-6 years olds
• biggest health initiative for child nutrition since free milk in 1946
• Since 2004 over 2 million children in 18 000 schools receive an item of fruit/vegetable everyday
• cost £42 million + further £77 million + from DoH

- Evaluation – non randomised trial, 0.5 portion increase

Ransley et al Journal Of Epidemiology and Community Health 2007
Control of TV advertising

April 2007, Ofcom restrictions to reduce exposure of children to TV advertising of foods high in fat, saturated fat, salt and sugar (HFSS).

At that time, 80% of all food advertising in children's airtime was for HFSS foods.
Has it made any difference?
Ofcom report 2010

In 2009 v. 2005:

• 37% decrease in HFSS ads to children 4-15y

• 52% less in younger and 22% less for older children

• in adult airtime, children saw 28% less HFSS ads on commercial PSB channels; 46% more on commercial non-PSB channels.

Maybe those products in adult airtime would not appeal eg. fat spreads, drink mixers etc
For every £1 spent by governments and the W.H.O promoting healthy foods the food industry spends £500 promoting ‘unhealthy foods’.
Challenge:

Director-General of WHO Margaret Chan:

'Not one single country has managed to turn around its obesity epidemic in all age groups. This is not a failure of individual will-power. This is a failure of political will to take on big business….When industry is involved in policymaking, rest assured that the most effective control measures will be downplayed or left out entirely. This, too, is well documented, and dangerous.'
## Individual opportunities

<table>
<thead>
<tr>
<th>Age</th>
<th>Stage</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–6 months</td>
<td>Pre-conception</td>
<td>Maternal nutrition programmes foetus</td>
</tr>
<tr>
<td></td>
<td>Post-natal</td>
<td>Breast-vs bottle-feeding to programme later health</td>
</tr>
<tr>
<td>6–24 months</td>
<td>Weaning</td>
<td>Growth acceleration hypothesis</td>
</tr>
<tr>
<td>2–5 years</td>
<td>Pre-school</td>
<td>Adiposity rebound hypothesis</td>
</tr>
<tr>
<td>5–11 years</td>
<td>1st school</td>
<td>Development of physical skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of food preferences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of independent behaviours</td>
</tr>
<tr>
<td>16–20 years</td>
<td>Leaving home</td>
<td>Exposure to alternative cultures/behaviour/lifestyle patterns (e.g. work patterns, living with friends etc.)</td>
</tr>
<tr>
<td>16+ years</td>
<td>Smoking cessation</td>
<td>Health awareness prompting development of new behaviours</td>
</tr>
<tr>
<td>16–40 years</td>
<td>Pregnancy</td>
<td>Maternal nutrition</td>
</tr>
<tr>
<td>16–40 years</td>
<td>Parenting</td>
<td>Development of new behaviours associated with child-rearing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biological changes</td>
</tr>
<tr>
<td>45–55 years</td>
<td>Menopause</td>
<td>Growing importance of physical health prompted by diagnosis or disease in self or others</td>
</tr>
<tr>
<td>60+ years</td>
<td>Ageing</td>
<td>Lifestyle change prompted by changes in time availability, budget, work-life balance, Occurrence of ill health.</td>
</tr>
</tbody>
</table>
Changing behaviour:

Can we get children to eat more fruit & veg?

Trial in 50 primary schools - 1000 year 3 children

Complex intervention:

• National curriculum linked lessons
• Tasting sessions: 4 -12 per term
• Gardening, growing & cooking
Reducing fear of eating new foods

- Give repeated *tastes* of new food without punishment for refusal/dislike.

- 2 - 12 tastes of new food before accepted; fear of foods can be changed. Support children in trying new tastes in safe and non-coercive settings.

Key ingredients.....

- Familiarisation
- Repetition
- Activities
- Modelling
- Environment
Did it work?

Follow up after 18 months
BUT .. Did they use the material?

Teacher’s average implementation scores of the Project Tomato school items

(range 0-100)

- Curriculum lessons: 44%
- Tasting Sessions: 25%
- Cooking Club: 7%
- Gardening Club: 8%
- All school intervention items: 21%
Useful family support:

Eating together = Extra 1.5 portions

Cutting up f & v = Extra 0.5 portion

Parent eat f&v daily = Extra 1.0 portion
Cooking skills

• 50% of all ready meals in Europe consumed in UK
• we are forgetting how to cook!

MoF cooking course evaluation (2010 to 2014)
• F&V intake increased by 1·5 (P<0·001) portions/day
• Snacks decreased by −0·9 (P<0·001) portions/day
• Cooking confidence increased

Hutchinson et al, PHN 2016.
Self monitoring app: My Meal Mate

- My Meal Mate allows dieters to monitor their food intake and exercise, and to set a weight loss target
- App users lost an average of 10lbs in six months compared to the 6.5lbs of people using a food diary

- Improved start-up screen
- Clearer layout
- Bar code scanning
- Social media
How do we know if we have changed nutritional behaviour?

https://www.myfood24.org/login
Thanks

UNIVERSITY OF LEEDS

MRC Medical Research Council

NPRI