• Portion sizes, appetite control and health

• Government strategies

• Communicating guidelines to consumers

• Consumer understanding
Obesity

• Over one billion adults globally overweight, of which a third classified as obese.

• Obesity rates have more than doubled in all ages of the population since the 1960’s and is currently regarded as the primary cause of premature death in UK.

• Associated with many chronic lifestyle-related diseases including type 2 diabetes and cardiovascular disease.

• Treatment for obesity and obese-related conditions costs the NHS over £3.2 billion and these figures are predicted to increase in the future.
Our ambition is to be the first major nation to reverse the rising tide of obesity and overweight in the population by ensuring that everyone is able to achieve and maintain a healthy weight. Our initial focus will be on children: by 2020, we aim to reduce the proportion of overweight and obese children to 2000 levels.
The private sector can be a ‘significant player’ in promoting healthy diets and physical activity*

Best-practice guidelines for food companies on addressing consumer health issues

The Proof of the Pudding: comparative analysis of ten of the world’s leading food companies and to benchmark their performance

Growing Issue

Two Slices of Pizza
- Twenty years ago: 500 calories
- Today: 850 calories

Movie Popcorn
- Twenty Years Ago: 5 cups, 270 calories
- Today: Tub, 630 calories
Why Portion size

• Portion size has an important role to play

• If the amount eaten was determined only by internal satiation (amount eaten in one meal) and satiety mechanisms (the effect on subsequent meal), the portion sizes of foods served should not affect energy intake

• Larger portion sizes increase energy intake of that food

• Energy dense foods increase food consumption

Portion Size and Food Intake

Rolls et al. (2006) AJCN
• Portion sizes as a strategy to reduce obesity
• Action to set up actual portion sizes
• Communication to consumer
• NDNS used to measure dietary impact of actions
## Summary of Portion Size Reduction Recommendation

<table>
<thead>
<tr>
<th>Product</th>
<th>Portion Size</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonated, dilutable, still &amp; juice drinks containing 8g total sugar/100ml or more</td>
<td>Single-portion packaging sizes equal to 250ml or less for purchase singly and as part of a multi-pack</td>
<td>End 2015</td>
</tr>
<tr>
<td>Existing and new single-portion chocolate block products that exceed 40 g packaging weight</td>
<td>Make available single-portion packaging sizes equal to or less than 40 g for purchase singly or as part of a multi-pack and market these in such a way to encourage consumer preference for these smaller single-portion sizes.</td>
<td>End 2012</td>
</tr>
<tr>
<td>Existing and new single-portion chocolate-confectionery countlines that exceed 50 g packaging weight</td>
<td>Make available single-portion packaging sizes equal to or less than 50 g for purchase singly or as part of a multi-pack, and market these in such a way in such a way to encourage consumer preference for these smaller single-portion sizes.</td>
<td>End 2012</td>
</tr>
</tbody>
</table>

FSA (2008) Saturated Fats and Energy intake Program
Industry Approach

• Approaches to portion size across 18 food industry organisations

• Nutrition-related and non nutrition-related criteria
  • Better value for money perceived by consumers as a larger size
  • Requirement to meet a specific calorie benchmark (100kcal)
  • Manufacturing efficiency of production lines to reduce waste
  • Historical : MAFF food portion sizes using average serving data

Ministry for Agriculture Fisheries and Food (1993) Food portion sizes
Nutrition information on products is provided on a voluntary basis only legally required where a nutrition or health claim is made.

Nutrition information are indicated as the contents in:

- 100g or 100ml
- Additional weight or volume indication not described as a portion (*each 500ml bottle contains*)
- A ‘serving’ or a ‘portion’, the food item itself, the pack, or a measuring implement (*per slice*)
- Words like serving, portion, item, pack are used and are preceded by either ‘each’ or a number or ‘per’ and followed by ‘contains’ or provides’
- Additional detail used include ‘daily’, ‘approximately’, ‘cooked’, ‘uncooked’, ‘made up with milk’, or ‘made up with water"
Communication of Guidelines
The eatwell plate

Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.

The Eat Well Plate http://www.eatwell.gov.uk/healthydiet/eatwellplate/
Communication Tools

Canada Food Guide

USDA Pyramid

USDA Food Pyramid http://www.mypyramid.gov/pyramid/
Health Canada http://www.healthcanada.gc.ca/foodguide
Mediterranean Diet Pyramid http://oldwayspt.org/med_pyramid.html
What's a healthy portion?
If you're not sure how much you should eat, everyday objects offer guidance on what makes up a healthy portion size.

**VEGETABLES**
- 1 cup = Baseball

**MEAT**
- 3 ounces = Deck of cards

**PASTA**
- ½ cup = Tennis ball

**ICE CREAM**
- ½ cup = Two golf balls

**FISH**
- 3 ounces = Checkbook

**PANCAKE**
- 4-inch compact disc

**BAKED POTATO**
- 1 ½ ounces = Four stacked dice

**CHEESE**
- A large egg or light bulb

**MUFFIN**
- 1 teaspoon = Thumb tip

**BUTTER**
- 2 tablespoons = Ping-pong ball

**PEANUT BUTTER**
- Hockey puck
Health Care Professionals Tools

Food Models

Life/form® http://www.nhdmag.com/ProductDetails/28/Life/form®-Great-Food-Kit
Replica LTD http://replica.co.uk/main.htm
The Diet PlateTM http://www.thedietplate.com

The diet plate

Food Packaging
Voluntary Labelling

FSA Signposting

TRAFFIC LIGHTS

Core Principles

- Provide separate information on fat, saturated fat, sugar and salt

- Use red, amber or green colour coding to indicate whether high, medium or low based on FSA nutritional criteria

- Give information on levels of nutrients per portion
FSA Recommended Signposting

- **FAT**: 7.7g per serving
- **Saturates**: 2.0g per serving
- **Sugar**: 42.2g per serving
- **Salt**: 2.0g per serving

- **Low Fat**: 7.7g per serve
- **Low Saturates**: 2.0g per serve
- **High Sugar**: 42.2g per serve
- **Med Salt**: 2.0g per serve
• Portion size information on pre-packaged foods is currently not well used

• A simple format is preferred for portion size information

• Portion size tools could help guide appropriate portion sizes

• Messages should highlight energy intake both in and out of the home
• Portion size information provided on pre-packaged foods was not widely used among respondents in determining how much food to eat

• 38% of respondents indicated that they would eat what they wanted rather than following the serving size on pack

• 30% thought that where a pack indicated *it contained three servings*, there would only be enough for two

• Looked for portion size information to ensure there would be sufficient food on the plate for a meal, and they would frequently purchase more than was necessary according to guidance on the pack

IGD (2009) Portion size: Understanding the consumer perspective
• Simple guidance was favoured
• Indication of the number of servings in the pack
• Dislike of portion size indicated as a fraction of a pack
• For multi serve products an indication of the number of servings in the pack is useful

• The majority of respondents did not measure out the foods they prepared. Three in five were willing to use simple portion tools

• Side of pack markings for pourable products, received a positive. Half of respondents would use them for portion guidance. Common household spoons also scored well as a tool
Plate size
• **Resealable packaging:** Packaging that enables customers to eat what they want with the confidence that they can eat the remainder at a later date without it going to waste.

• **Portion packaging:** Individually packed portions within a larger pack that allow the customer to open only as much as required whilst the rest remains sealed. WRAP believe that although there may be an increase in packaging through this route, it should reduce food waste.

More food is thrown away each year than packaging.
• Government has set a big challenge for 2020 and portion size plays a key role
• Current guidance on food product is based on nutritional guidelines using government and expert body advice
• Portion sizes and the way these are communicated to the consumer need to be standardised
• Food waste to be taken into account
• Consumer understanding
Thank You

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