Key Points
- Portion sizes in the UK are increasing, fuelling the UK obesity epidemic
- There is substantial variation in portion sizes offered by manufacturers and no consistency in communicating portion size to the public
- People tend to overestimate the amount that should be eaten to maintain healthy body weight
- Larger portion size results in more calories consumed, smaller portions reduce calories consumed
- Actions in public and private sectors to reduce size, availability, affordability and appeal of larger portions would help to prevent overweight and obesity

Key Actions
- Regulation to control portion sizes
- Regulation to ensure consistency in communicating portion size to the public
- Action across industry, retail and out-of-home sectors

Overview
- **Portion size** is the amount of a food that is recommended to be eaten at one sitting\(^1\).
- Food and drink are available in a very wide range of portion size. Easily available large portions of ultra-processed food may be a problem due to their poor nutritional quality and high energy density. Public Health England claims we are consuming an excess of 200-300 kcal every day.

*When offered larger-sized portions, packages or tableware, people consistently consumed more.*
Why Address Portion Size?

- Substantial variation in portion size exists in the UK and there is no consistency in portion size communicated to the public.
- A report by the British Heart Foundation (BHF) showed that portions of many ready meals are larger now than the 1993 portion guideline. For example, an individual chicken pie was 40% larger and a chicken curry with rice was 53% larger compared to 1993 portions. BHF research showed growth and inconsistency in portion size of bread and sweet bakery products; an average American muffin in 1993 was 85g while currently offered portions varied between 72g and 130g. The more recent Cochrane review also showed that size of ready meals and fast foods in the UK have been increasing.
- BHF research also demonstrated that increasing portion size shapes public views of what is a normal amount to eat.
- Increased portion size results in more calories consumed.
- Packaging of food and drink does not always encourage consumption of portion sizes recommended in the UK. For example, the suggested portion of fruit or vegetable juice is 150ml, however, small cartons usually contain 200ml.
- When eating out of home, it is very difficult to control portion size. According to a CRUK report, over a fifth of UK adults eat ready meals and takeaway meals every day.
- People in Scotland are buying more but spending less out of home compared to the UK overall with more families and the least affluent visiting out of home in 2015.
- Eliminating large portions from the diet could reduce average daily energy intake among UK adults by 16%; this is more than the surplus of calories eaten by an average adult in the UK every day.
- By reducing size, availability and the appeal of larger portion sizes, control over portion size was identified as an action that might help prevent obesity.

Situation in the UK

There is currently no UK or EU legislation relating to requirements in food portion size.

The UK Government’s *Childhood obesity – a plan for action* announced a voluntary reformulation programme challenging industry to reduce sugar by 20% in the products that children eat most by 2020.

Public Health England (PHE) is currently monitoring and regularly reporting on industry progress. The progress is being measured as (1) reduction in the sales weighted average sugar content per 100g of food and drink, (2) reduction in portion size, and (3) sales shift towards lower sugar alternatives. The action plan stated that if there was no sufficient progress by 2020, other levers would be used.

In March 2017 PHE published a technical report outlining the progress of sugar reduction to date. The report also included guidelines for industry with the information on the amount of calories, or product weight in grams, that should be provided for a portion, i.e. amount of a product likely to be consumed by an individual at one time.

One year after the publication of the UK Government’s *Childhood obesity: a plan for action*, the Department of Health and PHE announced plans to consider the evidence, set guidelines and monitor calorie reduction.

A Food Standards Scotland (FSS) Board Paper from January 2016 identified clear financial incentives for industry to encourage larger portion size with small cost to the consumer, which then influences consumer behaviour. FSS stated that regulation in this area would promote a level playing field between manufacturers, enabling standardisation of portion size and defining what constitutes a healthy portion. In the most recent board paper (March 2017) FSS considered exploring the potential for regulation in relation to retail and out of home portion size but also asked the board for agreement to work with industry on serious alternatives to regulation.

A recent report by the University of Stirling for the FSS on factors that can enable healthier purchasing in the

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Retail environment, concluded that regulation of both product reformulation and sizing is necessary. It recommended that lessons from the Soft Drink Industry Levy should be considered: the levy comes into force in April 2018 but has already led to reformulation.

How Should the Food Industry Tackle This?
The food industry could consider the following:
- Introduction of calorie caps, varying container size and a greater price differential between large and small portions.
- Adopting front of pack (FoP) food labelling, ensuring that portion sizes are standardised, clearly labelled and easy to understand.
- Promoting consumption of appropriate portions of food and drink by matching size of single portions with the recommended ones, marking on the side of packaging or other clear labelling.
- Reduction of portion size of ready meals and takeaway meals.
- Discouraging pricing that incentivises the purchasing of larger pack or portion size, the practice known as upselling.
- Introducing calorie labels in out of home sector.

Moreover, about 30% of people who claimed they had made some change to their diet over the past year tried reducing portion size.

Consumers found portion size labelling that offered a wider range of portion size and proportional pricing (a comparable price per unit regardless of size), more acceptable as a strategy to control food intake than reducing package size.

Policy Position
The World Health Organization has stated “Initiatives by the food manufacturing industry to reduce the content of fat, sugar and salt and portion sizes of processed foods, and to increase the production of innovative, healthy and nutritious choices, could accelerate health gains worldwide if implemented widely.”

The UK Government in their Childhood obesity: a plan for action challenged the food and drinks industry to reduce overall sugar content across a range of products that contribute to children’s sugar intakes. They indicated that it could be achieved through reduction of sugar levels in products, reducing portion size or shifting purchasing towards lower sugar alternatives. The Department of Health, jointly with Public Health England announced plans to consider the evidence, set guidelines and closely monitor progress on calorie reduction.

Public Health England in their Sugar reduction: the evidence for action report in 2015, suggested that a cap on portion size for relevant foods, in both retail and out of home sector, could reduce both calorie and sugar intakes. In March 2017 they published portion size guide for industry with the aim of sugar reduction and in August 2017 announced they would work on similar guidelines for calorie reduction; the evidence document and goal for the calorie reduction programme will be published in the first quarter of 2018.

Consumer Attitudes
66% of interviewed consumers believed that the Government and food industry should be doing more to make it easier for people to understand portion sizes. In order to make their diets healthier, adult respondents in the FSS survey on Attitudes to Diet and Health indicated that the main changes they wanted to make were:
- to eat fewer sweets, chocolates and cakes (19%)
- to eat smaller portions (14%)
- to eat more fruit and vegetables (11%)

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The House of Commons Health Select Committee encouraged Public Health England to go further with the introduction of means to measure progress in reducing portion sizing. They recommended that the Government draw up measures to implement their earlier recommendation of a cap on portion size, linked to the calorie content of certain food and drinks, to be introduced if swift progress on portion sizing is not achieved by voluntary means\(^{17}\).

Food Standards Scotland declared they would work with industry on alternatives to regulation on portion size, although in the absence of industry action, the potential of regulation to address large portion size will be explored\(^{8,12}\).

REFERENCES

13. Sparks L, Burt S. Identifying and understanding the factors that can transform the retail environment to enable healthier purchasing by consumers. Project report prepared for Food Standards Scotland. 2017; FSS 2016 013.

Obesity Action Scotland was established mid-2015 to provide clinical leadership and independent advocacy on preventing and reducing overweight and obesity in Scotland. Our main aims:

- To raise awareness and understanding of what drives obesity and the health problems associated with obesity and overweight with health practitioners, policy makers and the public
- To evaluate current research and identify strategies to prevent obesity and overweight based on the best available evidence
- To work with key organisations in Scotland, the rest of the UK and worldwide, to promote healthy weight and wellbeing

Overseeing our work is the Steering Group whose membership spans various disciplines involved in preventing and tackling obesity and its consequences: clinicians, public health experts, epidemiologists, nutritionists and dieticians, GPs and weight management experts. There are four members of staff.