Implications for public health

'Sugar', to most of us, means the familiar white or brown granulated table sugar used in cooking or to stir into a hot drink. But there are many different types of sugar – some are natural constituents of food or drink (eg. fructose in fruits and vegetables, lactose in milk), others are added artificially to sweeten it (eg. sucrose in confectionery and carbonated soft drinks). Most alcoholic drinks also contain sugar, although usually in small amounts. This statement is concerned mainly with added sugars* – by far the largest group both as a proportion of our diet and in terms of their impact on public health.

Added sugars mainly take the form of sucrose, usually refined from sugar cane or sugar beet, and glucose (or dextrose, another name for glucose), usually derived from starchy grains such as maize. These forms of sugar are relatively cheap ingredients and are used by the food industry mainly as a sweetener, preservative and texture enhancer. It is difficult to know for certain just how much sugar is ‘hidden’ in our food – particularly as many labels do not give a breakdown of how much carbohydrate is actually made up of sugar. A clue, however, is in how near the top of the list of ingredients sugar (in its many forms†) appears.

Effects on health

All sugars, in common with starches and pectins, are carbohydrates. Their main nutritional value is in providing energy – about 4 calories per gram (about half that of fats). However, unlike starches and pectins which are sometimes referred to as complex carbohydrates, sugars are simple carbohydrates, which means that they are more quickly absorbed into the body. They are also less bulky and filling. The highly attractive sweetness of sugary foods and drinks can lead to over-consumption, with two main adverse effects on health:

- overweight, obesity and increased risk of high blood pressure, diabetes and cardiovascular disease
- dental plaque leading to halitosis, tooth decay and gum disease.

Artificial sweeteners provide flavour without any sugar. They are generally considered to be safe, although more evidence is needed on their long-term health effects. We believe the ultimate aim should be to encourage people to gradually reduce their taste for sweet things by using less added sugar and sweeteners.

Sugar and obesity

The rising tide of obesity in children can, in part, be attributed to the over-consumption of sugary snacks, sugar-sweetened breakfast cereals, cakes, drinks, sweets and the ‘hidden’ sugars in many savoury foods such as soups, tinned vegetables and sauces. Many of these products are specifically marketed at children. It has been estimated that children’s risk of obesity increases by 60% for every sugar-sweetened drink added to their average daily consumption.1

Sugar and oral ill-health

Sugar in food and drinks forms a sticky residue in the crevices and recesses around the teeth. It is then quickly converted by oral bacteria into acidic plaque which dissolves tooth enamel and increases the risk of dental caries (tooth decay). Plaque can also cause periodontal disease (inflamed gums) and halitosis (bad breath). The key factors are how often and for how long sugary substances are present in the mouth.

Note: Sugar is just one of a range of risk factors for health and should be viewed in the context of overall dietary intake and other lifestyle factors including alcohol consumption, smoking, overweight and obesity, and levels of physical activity.
mouth (rather than how much is consumed). Frequent consumption of sweets and sipping sugary drinks throughout the day is more likely to cause the build-up of plaque than having something sweet with each meal.

Sugar and diabetes

Contrary to popular belief, sugar does not directly cause diabetes (although obesity greatly increases the risk of becoming diabetic). People with diabetes do not have to cut out sugary things completely. However, because people with diabetes have difficulty controlling their blood glucose level, they should make every effort to follow the guidelines for a healthy balanced diet and keep to the recommended sugar intakes.

Sugar and health inequalities

Consumption of sugary foods and drinks is higher in low income groups – partly because sugar is a relatively cheap ingredient, thus helping to keep down the prices of these items. Obesity and dental caries are more prevalent in these deprived groups and there is evidence that this is directly linked to consumption.1,2

Recommended intakes

An individual’s intake of added sugars should provide less than 10% of total energy (calories) from food (and drink, including alcohol).1 This roughly equates to a daily intake of no more than 50g for women and 70g for men. But current average intakes are too high: 13.6% of food energy for men and 11.9% for women.3 Worse still, in boys and girls, sugar accounts for 16.7% and 16.4% of total food energy intake respectively.4 Currently, no recommended level of sugar intake has been set for children.

What needs to happen

There is increasing recognition of the need to reduce added sugar levels in the average person’s diet. In particular, concerted action is needed to lobby and advocate for:

- increased public awareness of the need to reduce intake of sugar in food and drink – in terms of both quantity and frequency – particularly for children;
- adoption of a single, simple food labelling scheme (such as the ‘Traffic Light’ scheme proposed by the Food Standards Agency) by all food manufacturers and supermarkets, clearly stating levels of sugar;†
- further pressure on the food industry, with the threat of legislation, to reformulate its products to use less sugar, and to offer a wider range of low sugar and sugar-free alternatives;
- improved standards, training and quality control in the catering industry on choosing ingredients and cooking methods to reduce sugar in meals;
- reduced sugar (or sugar-free) food provided in schools eg. through nutritional standards for schools, as well as other social catering outlets such as hospitals and care homes.
- extended and more effective restrictions on advertising sugary snacks to children.
- continued promotion of the 5-A-DAY message and improved access to good quality, affordable, fresh fruit and vegetables.

How to push for change

- Bring together local (and national) stakeholders to share evidence, expertise, resources and examples of good practice.
- Use local media to advocate for healthier eating/shopping/catering.
- Meet with local food suppliers/procurers/caterers (for schools, hospitals, care homes etc) to discuss ways of reducing sugar consumption.
- Lobby key stakeholders (see list).

What is the FPH doing about sugar?

The Faculty of Public Health works in partnership with organisations such as British Dental Association, the National Heart Forum (NHF) and Heart of Mersey to promote good oral health, healthy lifestyles and to prevent coronary heart disease, stroke and related disorders. The FPH supported the campaign for local decision-making on fluoridation and has produced, jointly with the NHF, practical guidance on tackling overweight and obesity, reducing the impact of food poverty, and promoting physical activity, each of which has an emphasis on achieving a healthy balance of sugar in the diet.