

Trade Guidelines for Reducing Sugars and Fats in Foods

- Draft for Discussions at the Trade Consultation Forum-

Purpose

This set of guidelines is intended for all food traders manufacturing and selling foods. It aims to help them to produce and promote wholesome and safe products which have lower sugars and fats content.

Sugars

Occurrence of sugars in locally available foods

Sugars, which refer to mono- and di-saccharides present in food, are simple carbohydrates. Some sugars are found naturally in foods (e.g. fructose in fruits, glucose in honey, lactose in milk), whereas others are added to foods. Foods rich in added sugars include confectionery, cakes, pastries, biscuits, fruit drinks, cordials, carbonated soft drinks, and so on. More than a dozen of terms are referring to sugars, such as brown sugar, high fructose corn syrup, malt syrup, maltose, molasses, etc..

Sugars and health

Sugars provide energy for the body but have no other nutritional value (1g sugars provides 4kcal). In the form of glucose, sugars serve as immediate energy source for the brain. Getting too much sugars (including free sugars¹) may lead to excessive energy intake, increasing the risk of overweight and obesity, which in turn increases the risk of heart diseases and other chronic non-communicable diseases (NCD) including certain cancers. Frequent excessive intake of free sugars can also increase the risk of dental caries.

The World Health Organization (WHO) and Food and Agriculture Organization of the United Nations (FAO) suggest that the intake of free sugars should be less than 10% of the daily energy intake. Energy requirement depends on age, gender, body weight and activity level. For example, an individual with a daily energy intake of 2000kcal should limit the intake of free sugars to less than 50g/day (about 10 sugar cubes).

Roles of sugars in food processing

Sugars are usually added to foods during processing, preparation, or at the table. The added sugars sweeten foods and beverages and improve their palatability. They are also added to foods for preservation purposes and to provide functional attributes, such as

¹ Free sugars mean all mono- and di-saccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrup and fruit juices in diets.

viscosity, texture and browning capacity.

Fats

Occurrence of fats in locally available foods

Dietary fats are found in both plant and animal foods. All fats (solid) and oils (most of them are liquid), whether of vegetable or animal origin, are combinations of saturated and unsaturated fatty acids. Trans fat (TFA) is unsaturated fatty acids with at least a double bond in *trans* configuration, which makes it different from other unsaturated fat and has properties more like saturated fat (SFA).

Common sources of fats in our diet are cooking fats and oils, butter, margarine, salad dressings, fried foods, animal skin, seeds and nuts, and high fat animal products. Among these, a high level of SFA is found in animal fats (e.g. lard, beef tallow), full fat dairy products (e.g. butter, milk, cheese, cream), some processed meats, commercially baked products (e.g. biscuits, pastries), deep-fried fast foods, coconut oil and palm oil. On the other hand, TFA is mostly found in processed foods, such as fried foods and bakery products (e.g. crackers, cookies, cakes, pastries, chips, *etc.*) with partially hydrogenated vegetable oil used as ingredients, shortenings and hard margarines. A low level of TFA is also found in highly refined oil and present naturally in the meat, milk and milk products of sheep and cattle.

Fats and health

Fats supply essential fatty acids for the structural components of tissues, especially neural tissues. They help in the absorption of the fat-soluble vitamins A, D, E and K. Fats are concentrated sources of energy (1g fats provides 9kcal). However, eating too much fats is linked to increased risk of overweight and obesity.

Both SFA and TFA raise the level of low-density lipoprotein (“bad”) cholesterol in the blood. In addition, TFA also lowers the level of high-density lipoprotein (“good”) cholesterol in the blood. According to WHO, there is convincing evidence that eating too much SFA and TFA increases the risk of heart diseases, presently the second killer in Hong Kong. Although dietary cholesterol raises plasma cholesterol levels, observational evidence for an association of dietary cholesterol intake with heart diseases is contradictory. However, it is advisable to keep cholesterol intake below WHO’s recommendation, i.e. 300mg/day.

WHO and FAO suggest that diets should provide a very low intake of TFA. In practice, this implies an intake of less than 1% of daily energy intake. As for SFA and total fat, an intake of less than 10% and between 15-30% of daily energy intake respectively is recommended. An individual with a daily energy intake of, for example, 2000kcal should limit the intake of total fat to less than 60g/day (about 4 tablespoons of oils), of which no

more than 20g and 2.2g respectively should come from SFA and TFA.

Roles of fats in food processing

Fats play important functional and sensory roles in food. For example, they are responsible for carrying, enhancing, and releasing the flavour of other ingredients, as well as for interacting with other ingredients to develop the texture and mouth-feel characteristics of foods. Fats/oils also serve as a preservative to reduce the water activity of foods, prevent microbial growth and extend product shelf life. Furthermore, fats act as a heat transfer medium in frying.

International approaches on reducing the intakes of sugars and fats in the population

In 2004 WHO Global Strategy on Diet, Physical Activity and Health recommended member states to work together with the private sector, health professional bodies, consumer groups, non-governmental organisations and so forth to reduce the burden of diet-related NCDs including obesity. It is highlighted that initiatives by the food industry to reduce the sugars and fats content of processed foods and portion sizes, to increase introduction of innovative, healthy, and nutritious choices; and review of current marketing practices, could accelerate health gains worldwide. Limiting the levels of free sugars, SFA and TFA in existing products is one of the specific recommendations to the trade.

On marketing practices, WHO advocates restricting the marketing or advertising of foods and beverages high in sugars and fat especially to children. To support this, some countries have introduced statutory regulations that ban advertising, and other countries have implemented non-statutory guidelines and self-regulation that impose some limitations on marketing or advertising (e.g. codes/guidelines published by the European Network on Reducing Marketing Pressure on Children, the Interagency Working Group on Food Marketed to Children, the Consumers International, and the International Obesity Task Force).

Food safety requires proactive tripartite collaboration among the Government, food trade and consumers. Taking into consideration of food safety, quality and consumer acceptance, food reformulation is a widely recommended and adopted approach to reduce sugars and fats in foods and hence in their overall intakes of the population. In the context of healthier food choices, it means reformulating existing foods to remove (e.g. TFA) or reduce (e.g. sugars, SFA) certain food components while maintaining characteristics such as flavour, texture and shelflife. With continual monitoring, some positive results have been reported over the years. For instance, it has been reported that in the EU the amount of SFA has been reduced by 30-70% in chips and 15-18% in biscuits, and that of sugars by 10-40% in sugary

drinks.

Overseas experience shows that the trade plays a crucial role in accelerating health gains in the population by **producing** and **promoting** wholesome and safe products with lower sugars and/or fats content. In terms of food reformulation, three main strategies have been identified to reduce sugars/fats in foods, namely, (i) reduce their amount without replacement, (ii) use replacements or substitutes, and (iii) reduce portion size. For instance targets in reducing fats in various products have been established in the UK, the Netherlands, and Canada for the trade to follow. Furthermore, possible alternatives to replace sugars/fats for various food products have been provided by Canada, the UK, and other places. Lastly, many countries such as Canada, Australia, some EU member states (e.g. the UK) have suggested companies to consider reducing the portion size as an approach to reduce the intake of sugars and fats in the population.

Advice on manufacturing/ producing foods with lower sugars/ fats content

Sourcing and targeting for ingredients/ foods with lower sugars/ fats content

- (i) Choose ingredients with lower sugars/ fats content if available. The information could be obtained from the suppliers, the nutrition labels of the products, or some food composition databases, such as the Nutrient Information Inquiry System from the Centre for Food Safety.
- (ii) Establish a database to monitor the sugars/ fats content in foods.
- (iii) Set individual sugars/ fats reduction targets for various food categories if possible.
- (iv) Follow the advice in the Trade Guidelines on Reducing Trans Fats in Food prepared by the Centre for Food Safety to source for ingredients with lower total fat, SFA and/or TFA.

Practising

- (i) Adhere to the Good Manufacturing Practice (GMP) when using sugars/ fats. Aim to not exceeding sugars/ fats reduction targets, whenever relevant.
- (ii) Provide (re-)trainings to cooks/ chefs/ product developers on healthy eating and the healthier options of food products.
- (iii) Research and develop products with lowered sugars and fats without compromising texture and, ideally, minimise the use of additives, if possible. Taking total fat content of meat pies as an example, it could be reduced by choosing leaner cuts of meat, and may be further cut down by adjusting the ratio of fat and flour in the pastry.
- (iv) While developing low-sugars/ low-fats recipes, consider not only its sensory and textural properties, but also the microbiological safety and stability of the

reformulated product. Consider factors other than preservatives such as reducing pH, reducing storage temperature, increasing heat process, or using packaging techniques (e.g. vacuum packing, nitrogen packing) to reduce the microbiological risk of cutting sugars/fats in the products.

- (v) Provide more reduced sugars/fats content options for customers to choose.
- (vi) Serve sugar/syrup and spread/salad dressings separately for customers to add into the foods according to their tastes.
- (vii) Offer a range of portion sizes of products or smaller dishes for customers to choose. If smaller portion size is not possible, provide tips on or improve package for proper storage of the remaining foods for other eating occasions (e.g. use of zipper bags, resealable boxes).
- (viii) Use the Trade Guidelines on Reducing Trans Fats in Food as a guide to produce foods with lower total fat, SFA and TFA; such as providing more dishes that use low fat cooking methods (e.g. steaming, grilling) rather than deep-frying.
- (ix) Use sugars/ fats replacers only if necessary to reduce the content of sugars/fats in the food supply.

Advice on promoting foods with lower sugars/ fats content

Advertisement/ Promotion materials

- (i) Indicate the sugars/ fats content of various dishes/ products on company's homepage or promotion materials to inform the consumers the lower sugars/ fats food options.
- (ii) Provide leaflets/ reading materials on the harmful effects of excessive sugars/ fats intake from all sources and the sugars/ fats content of the various foods on company's homepage or promotion materials.
- (iii) Follow WHO advice on restricting the marketing or advertising of foods and beverages high in sugars/ fats, especially to children.

On the products

- (i) Make the "free" and "low" sugars/ fats claims only if the sugars/ fats content of the products meet the nutrition claim conditions stipulated in local regulation (**Annex**).
- (ii) For products that are naturally high in sugars/ fats and cannot be meaningfully reformulated (e.g. desserts, butter), state legibly on the product that “*WHO advises limiting the intake of free sugars to less than 10% daily energy intake per day (or 15-30% for total fat, or less than 10% for SFA, or less than 1% for TFA)*” or similar advisory statements, and indicate the sugars/ fats intake when one serving of the product is consumed (refer to the Trade Guidelines on Serving Size of Prepackaged Food for Nutrition Labelling).

- (iii) For fast food chains and restaurant chains, provide voluntarily nutrition label (e.g. in a form of symbols) including the sugars/ fats content of food products, such as in the menu, the label of the non-prepackaged foods and beverages, the price list, and other printing materials for customers to make informed choice.

Other promotion activities

- (i) Provide incentives (e.g. coupons/ discounts/ gifts/ award points) to encourage patrons purchasing/ ordering foods with lower sugars/ fats.
- (ii) Designate a period of time (e.g. lower sugars/ fats month) or a corner (e.g. snacks, desserts, non-alcoholic beverages) in the shop to promote foods with lower sugars/ fats.
- (iii) Encourage cooks/ chefs and frontline staff to provide recommendation and assistance to customers on choosing low sugars/ fats foods.
- (iv) Remove syrups/ sugars and condiments/sauces containing fats/oils from the table and only present them to the customers when requested.
- (v) Submit voluntarily the nutrition information of snacks including sugars/ fats content to the "Database of Prepackaged Snacks" maintained by the Hong Kong Nutrition Association.
- (vi) Supply articles to the food and health sections of local Chinese or English newspapers and magazines to introduce the reformulated products with lower sugars/ fats content.

Risk Assessment Section

Centre for Food Safety

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**Annex: List of sugars/ fats claims and corresponding criteria in the Food and Drugs
(Composition and Labelling) Regulations (Cap. 132W).**

Nutrients	Claim Criteria	
	per 100 g of solid food	per 100 mL of liquid food
<i>Nutrient Content Claims with the word “Low”</i>		
Total fat	Not more than 3 g.	Not more than 1.5 g.
Saturated fat	Not more than 1.5 g of saturated fat and trans fatty acids combined; and	Not more than 0.75 g of saturated fat and trans fatty acids combined; and
	The sum of which contributes not more than 10% of energy.	
Sugars	Not more than 5 g.	
<i>Nutrient Content Claims with the word “Free”</i>		
Total fat	Not more than 0.5 g.	
Saturated fat	Not more than 0.1 g of saturated fat and trans fatty acids combined.	
Trans fat	Not more than 0.3 g of trans fat; Not more than 1.5 g of saturated fat and trans fatty acids combined; and	Not more than 0.3 g of trans fat; Not more than 0.75 g of saturated fat and trans fatty acids combined; and
	The sum of which contributes not more than 10% of energy.	
Sugars	Not more than 0.5 g.	
<i>Nutrient Comparative Claim</i>		
Must meet a minimum relative difference of 25%; and a minimum absolute difference of:		
Total fat	Not less than 3 g.	Not less than 1.5 g.
Saturated fat	Not less than 1.5 g of saturated fat and trans fatty acids combined.	Not less than 0.75 g of saturated fat and trans fatty acids combined.
Trans fat	Not less than 0.3 g.	
Sugars	Not less than 5 g.	