



## **IDF Framework for Action on Sugar**

Given the evidence that increased sugar intake is associated with increased obesity and risk of type 2 diabetes, IDF supports the WHO conditional recommendation to reduce recommended sugar intake to 5% of daily energy intake. IDF calls on national governments to implement policies to reduce sugar consumption and advocates specific measures to increase access to healthy alternatives such as fresh fruit and vegetables and clean drinking water, in order to help prevent new cases of type 2 diabetes. The IDF framework for action on sugar proposes twelve clear measures which demonstrate IDF's commitment to continuous engagement with national governments and the WHO in order to stem the inexorable rise in cases of type 2 diabetes.

### **Background**

Sugar is produced in 113 countries around the globe and is supported by subsidies in a number of countries. The global per capita sugar consumption has increased by over 50% over the past fifty years. Sugar is found in the vast majority of processed foods, especially in sugar-sweetened beverages.

The global prevalence of diabetes has increased progressively over the past 50 years, with an estimated 387 million adults having diabetes in 2014, the vast majority of whom have type 2 diabetes. A number of studies have suggested associations between specific dietary factors and increased risk of type 2 diabetes. Recent studies have demonstrated strong associations between consumption of sugar-sweetened beverages (including fruit juice) and increased risk of type 2 diabetes (1–3) and that per capita sugar consumption is independently associated with the prevalence of diabetes. (4). There is evidence for a direct, independent link between sugar exposure and diabetes (5) and increased access to sugar may explain part of the association between urbanisation and increased risk of type 2 diabetes (6,7). This is especially a problem in low-income areas where local retailers stock predominantly processed foods and very little fresh food.

The WHO have published a guideline which recommends that adults and children reduce their daily intake of free sugars to less than 10% of their total energy intake, in view of the known health risks in predisposing to overweight and obesity, increased risk of NCDs and dental caries. WHO also states that a further reduction to below 5% (about 6 teaspoons) per day would provide additional benefits (8). The limits would apply to all sugars added to food, as well as sugar naturally present in honey, syrups, fruit juices and fruit concentrates.

A number of countries, including Finland, France and Mexico, have introduced taxes in an effort to reduce consumption of sugar-sweetened beverages, and many public health commentators and national diabetes associations are calling for action to reduce sugar intake as an important step in stemming the increase in prevalence of type 2 diabetes.

While recognising that access to sugar and other refined carbohydrates is important as a treatment for hypoglycaemia in people with diabetes, IDF believes there is sufficient evidence of the need for concerted action to reduce sugar intake by the general population. IDF therefore advocates the following specific measures:



1. **The introduction of clear, unambiguous, colour-coded front of pack labelling which gives total sugar content, including all types of sugar, including those with alternative names (such as high fructose corn syrup).**

Research shows that use of colour-coded labels – also known as traffic light labelling – kept in a single format across all food products, is one of the most effective ways to communicate nutritional information to people (9).

2. **A ban on advertising of sugar-sweetened beverages and high sugar foods to children and adolescents.**

Increasing concerns are raised that advertising targeted at children may not only influence children's current consumption, but may also set patterns of consumption behaviour for the future. Moreover it is believed that advertising has increased the consumption of sugar-sweetened beverages and high sugar foods and is related to the increase in obesity among children. Evidence suggests that a ban on advertising targeted at children can be effective in lowering consumption, and approximate estimates of the total difference in expenditures suggest the social welfare impact of such ban can be significant (10).

3. **Revision of healthy eating guidelines to reduce consumption of foods with naturally high sugar content (eg certain fruits and fruit juices).**

National guidelines generally make no distinction between vegetables and fruit, or between types of fruit, in their healthy eating guidelines. Some include fruit juice or dried fruits as healthy options (11), despite high sugar content. It is recommended that guidelines favour the consumption of leafy vegetables and fresh (or unsweetened frozen) fruit, rather than higher-sugar alternatives such as fruit juice, dried or sweetened canned fruit.

4. **A ban on sponsorship of sporting events by manufacturers of sugar-sweetened beverages or high sugar foods.**

It is recommended to introduce criteria to select sponsors for major sporting events that exclude food and beverage companies that produce high-calorie brands that increase risk of obesity and type 2 diabetes.

5. **A ban on selling sugar-sweetened beverages and high sugar foods in canteens and vending machines in schools and policies to restrict access in workplaces.**

Prohibiting or restricting the access to sugar-sweetened beverages and high sugar foods is associated with less consumption of these items and increased availability of healthier options. The more comprehensive these policies are, the more effective they are found to be (12).

6. **An obligation to make clean drinking water freely available in all schools, places of employment and in public open spaces.**

Evidence shows, that the types of the liquids we drink have a long-term impact on health, influencing the development of overweight, obesity and metabolic diseases (1,2). Thus it is recommended that largest proportion of daily fluid intake is from plain water.



- 7. Government incentives (including taxes) to reduce consumption of sugar-sweetened beverages and high sugar foods.**

Taxation is well-recognised to influence consumption (e.g. tobacco, alcohol). The health risks of excess sugar consumption demand similar action to reduce consumption. Similar measures have been introduced in France and Mexico with a tax on sugar sweetened beverages.
- 8. Government incentives to promote production of leafy vegetables and fruit in preference to sugar.**

Sugar has calories, but no other nutritional value. Dietary recommendations all around the globe emphasize that sugar-containing foods should be consumed in very limited amounts. Agricultural subsidies should support those recommendations by promoting production of healthy foods.
- 9. Government incentives to increase availability and affordability of fresh vegetables, fresh fruit and clean drinking water.**

Fresh vegetables and fruits should form the basis of any diet. Government incentives should promote availability and consumption of vegetables and fruits rather than sugar.
- 10. A regulatory framework for reformulation of processed foods to reduce sugar content.**

The UN General Assembly High Level Meeting declaration identified the reformulation of products to provide healthier options that are affordable and accessible as an approach to support the promotion and production of food products that are more consistent with a healthy diet (13).
- 11. Public health campaigns to educate people about the health risks associated with excess sugar intake.**

There is a significant link between health information and food choices (14). A decrease in consumption of fat was observed following government campaigns to educate individuals on the links between dietary fat and health. This consumption decreased even further when food producers made additional health claims as part of their advertising campaigns (15). The same approach now needs to be used to reduce sugar consumption.
- 12. Further research to be undertaken to establish links between sugar intake and diabetes.**

There are extensive data which show associations between sugar intake and increased risk of developing type 2 diabetes (1-5), but less evidence for direct causality. This is exploited by food industry to weaken the position of those advocating for reduction in sugar intake. Availability of quality data which strengthens the link will help inform future public health policy for prevention of type 2 diabetes.



## **Annex: Definitions**

**Definition of Sugar-Sweetened Beverages** (adapted from: The CDC Guide to Strategies for Reducing the Consumption of Sugar-Sweetened Beverages (16), with the addition of fruit juice)

Sugar-sweetened beverages are those that contain caloric sweeteners and include:

*Soft drinks:* Non-alcoholic, flavoured, carbonated or non-carbonated beverages usually commercially prepared and sold in bottles or cans

*Soda, pop, soda pop:* Same as soft drink

*Fruit drinks, fruit juice, punches, or ades:* Fruit juice and sweetened beverages of diluted fruit juice

*Sports drinks:* Beverages designed to help athletes rehydrate, as well as replenish electrolytes, sugar, and other nutrients

*Tea and coffee drinks:* Teas and coffees to which caloric sweeteners have been added

*Energy drinks:* Most energy drinks are carbonated drinks that contain large amounts of caffeine, sugar and other ingredients, such as vitamins, amino acids, and herbal stimulants

*Sweetened milks or milk alternatives:* Beverages prepared by blending sweetened powder or syrup and milk

## **Definition of high sugar food**

High sugar foods are foods containing more than 22.5g of sugar per 100g (17). This is determined based on total sugars within the product. It reflects the total amount of sugars in the product and also takes into account naturally-occurring sugars.



## Bibliography

1. Barrio-Lopez MT, Martinez-Gonzalez MA, Fernandez-Montero A, Beunza JJ, Zazpe I, Bes-Rastrollo M. Prospective study of changes in sugar-sweetened beverage consumption and the incidence of the metabolic syndrome and its components: the SUN cohort. *Br J Nutr*. 2013 Nov 14;110(9):1722–31.
2. Koning L de, Malik VS, Rimm EB, Willett WC, Hu FB. Sugar-sweetened and artificially sweetened beverage consumption and risk of type 2 diabetes in men. *Am J Clin Nutr*. 2011 Jun 1;93(6):1321–7.
3. Malik VS, Popkin BM, Bray GA, Després J-P, Hu FB. Sugar-Sweetened Beverages, Obesity, Type 2 Diabetes Mellitus, and Cardiovascular Disease Risk. *Circulation*. 2010 Mar 23;121(11):1356–64.
4. Weeratunga P, Jayasinghe S, Perera Y, Jayasena G, Jayasinghe S. Per capita sugar consumption and prevalence of diabetes mellitus – global and regional associations. *BMC Public Health*. 2014;14(1):186.
5. Basu S, Yoffe P, Hills N, Lustig RH. The relationship of sugar to population-level diabetes prevalence: an economic analysis of repeated cross-sectional data. *PLoS ONE*. 2013, 8(2): e57873. doi:10.1371/journal.pone.0057873
6. Basu S, Stuckler D, McKee M, Galea G. Nutritional determinants of worldwide diabetes: an econometric study of food markets and diabetes prevalence in 173 countries. *Public Health Nutr*. 2013 Jan;16(1):179–86.
7. Cheema A, Adeloje D, Sidhu S, Sridhar D, Chan KY. Urbanization and prevalence of type 2 diabetes in Southern Asia: A systematic analysis. *J Glob Heal [Internet]*. 2014 Jun [cited 2015 Feb 6];4(1). Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4073245/>
8. World Health Organisation. Guideline: Sugars intake for adults and children [Internet]. 2015 Mar. Available from: [http://who.int/nutrition/publications/guidelines/sugars\\_intake/en/](http://who.int/nutrition/publications/guidelines/sugars_intake/en/)
9. Draper AK, Adamson AJ, Clegg S, Malam S, Rigg M, Duncan S. Front-of-pack nutrition labelling: are multiple formats a problem for consumers? *Eur J Public Health*. 2013 Jun 1;23(3):517–21.
10. Dhar T, Baylis K. Fast-Food Consumption and the Ban on advertising Targeting Children: The Quebec Experience. *Journal of Marketing Research*. 2011 Oct;48(5):799–813.
11. Food Standards Agency. Eat Well Your guide to healthy eating [Internet]. London: Food Standards Agency; 2010. Available from: <http://www.food.gov.uk/sites/default/files/multimedia/pdfs/publication/eatwell0708.pdf>
12. Chriqui JF, Pickel M, Story M. Influence of School Competitive Food and Beverage Policies on Obesity, Consumption, and Availability: A Systematic Review. *JAMA Pediatr*. 2014 Mar 1;168(3):279.
13. World Health Organisation. Policy Brief: Producing and promoting more food products consistent with a healthy diet [Internet]. 2014 Dec. Available from: <http://www.who.int/nmh/ncd-coordination-mechanism/Policybrief32.pdf>
14. Brown DJ, Schrader LF. Cholesterol Information and Shell Egg Consumption. *Am J Agric Econ*. 1990 Aug;72(3):548.



**International  
Diabetes  
Federation**

Chaussée de la Hulpe 186  
BE-1170 Brussels | Belgium  
tel +32-2-5385511 | fax +32-2-5385114  
www.idf.org | VAT BE433 674 528

15. Ippolito PM, Mathios AD. Information and advertising: the case of fat consumption in the United States. *Am Econ Rev.* 1995 May;85(2):91–5.
16. The CDC Guide to Strategies for Reducing the Consumption of Sugar-Sweetened Beverages. CDC 2010. Available from:  
[http://www.cdph.ca.gov/SiteCollectionDocuments/StratstoReduce\\_Sugar\\_Sweetened\\_Bevs.pdf](http://www.cdph.ca.gov/SiteCollectionDocuments/StratstoReduce_Sugar_Sweetened_Bevs.pdf)
17. Guide to creating a front of pack (FoP) nutrition label for pre-packed products sold through retail outlets. Dept of Health, London 2012. Available from:  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/300886/2902158\\_FoP\\_Nutrition\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/300886/2902158_FoP_Nutrition_2014.pdf)