Consultation response
WHO Guideline: Sugars intake for adults and children

About the UK Health Forum and WCRF International

The UK Health Forum is a charitable alliance of 70 national professional and public interest organisations working to reduce the risk of avoidable non-communicable diseases (NCDs) by developing evidence-based public health policy and supporting its implementation through advocacy and information provision. The opinions in this submission do not necessarily reflect the views of all individual members of the UK Health Forum.

World Cancer Research Fund International is an umbrella organisation that leads a network of Cancer charities and has a global reach. The network funds scientific research and updates and interprets the evidence on the relationship of food, nutrition, body weight, physical activity and alcohol to cancer risk. WCRF International advocates the wider implementation of effective policies to prevent cancer and other non-communicable diseases.

Summary and Background

- We applaud WHO on the systematic and transparent approach it has taken to developing the guidelines, particularly in its adoption of the highly robust and transparent GRADE system.
- We strongly support the developmental target towards a further reduction in intake level of free sugars to less than 5%. We urge WHO to change it from a conditional to a strong recommendation.
- We call for revision of the recommendation "In both adults and children, WHO recommends that intake of free sugars ~~not exceed~~ **be less than** 10% of total energy," in line with previous policy.
- The scale the NCD burden is unprecedented, as is the rate at which they are rising globally. We need a radical departure and step change from the approaches taken so far if we are to successfully tackle them. And that should start with reviewing what we are currently doing.
- There is no biochemical requirement for added or free sugars. Consumption of free sugars is associated with significant negative outcomes including overweight, dental caries, type 2 diabetes, NCDs, displacement of nutritious foods, and energy-dense, nutrient poor diets.
- Individuals and populations palates can adapt towards a reduced preference for sweetness.
- We support the focus of the review on obesity and dental caries. Excess weight gain is the third most important cause of the burden of disease and early deaths in affluent societies and fifth cause for all world health issues. Dental caries caused by free sugars affect 3.9 billion people worldwide, and untreated caries is the most prevalent of all conditions assessed in the recent Global Burden of Disease Study.

- We draw attention to the statement on page 8 that "there were no strong disagreements among the Nutrition Guidance Expert Advisory Group members on any aspect of the guideline."
- The Recommendations on how the guidelines can be used should include: policies on Economic and fiscal measures such as food taxes; Reformulation; Agriculture policies; Marketing restrictions of foods high in sugar as well as saturated fat and salt; Nutrition and health claims.
- Further research is needed to assess the impact of a variety of policies on free sugar consumption including fiscal policies such as taxes, trade policies, trade and investment policies, agriculture policies, policies related to the marketing of foods high in free or added sugars
- We recommend that the guidelines provide supplementary targets on per-capita intake of free sugars for countries that do not yet have diet and nutrition surveys.
- Historically, WHO's efforts to reduce intakes of refined sugars were stridently opposed by commercial vested interests. We urge WHO to continue to maintain it's vigilance in order to minimise the negative effects of Conflicts of Interests.

Comments on specific sections of the WHO form

General

We welcome the current review of global guidance on sugar intakes being undertaken by WHO. There is no evidence that free sugars are beneficial to health. Since the last guideline was published in 2002, obesity, diet-related conditions and non-communicable diseases have risen at dramatic rates globally. NCDs are now the biggest killers accounting for over 60% of deaths worldwide. Excess weight gain is the third most important cause of the burden of disease and early deaths in affluent societies and is the 5th most important for all world health issues (WHO Global Health Risks 2009).

The recommendations, page 11

We strongly support the following proposed recommendation:

- WHO recommends reduced intake of free sugars throughout the life-course (*strong recommendation*).

We strongly urge that following is changed to from a provisional to a strong recommendation, as a developmental target, on the basis of the best quantitative data that the unique cause of dental caries is sugars:

- WHO suggests further reduction to ~~below~~ **less than** 5% of total energy (~~*conditional*~~ ***strong*** *recommendation*).

We particularly support the proposal for a developmental target towards a further reduction in intake level of free sugars to below 5% for the following reasons:

1. The scale the NCD burden is unprecedented, as is the rate at which they are rising globally. We need a radical departure and step change from the approaches taken so far if we are to successfully tackle them. And that should start with reviewing what we are currently doing.
2. There is no there is no medical, biochemical, or social harm associated with reducing the intake of free sugars to less than 5% total energy

3. Consumption of added sugars is associated with significant negative outcomes including overweight, dental caries, the displacement of nutritious foods from the diet as well as energy-dense, nutrient poor diets
4. As noted by the proposal, there is no harm associated with reducing the intake of free sugars to less than 5% total energy
5. People's palates can adapt to a preference for less sweet tastes as a result of gradual reductions. This has been demonstrated from successful salt reduction initiatives around the world, as well changes in preference from sugared to sugar free tea and coffee.
6. Many alternatives are available to added sugars in most countries. These include minimally processed natural and whole foods, particularly fruit, vegetables, nuts, pulses and whole grains. However, by contrast, there is a predominance of added sugars in snack and discretionary foods.
7. The impacts on sugar producing countries should be explored by FAO with support provided to low and middle income countries, farmers and producers who rely on sugar production as a major source of income. This should include diversifying from sugar production to producing other plant-based foods of public health benefit owing to their relative nutrient density, such as fruit, vegetables, nuts, pulses and whole grains.

We are concerned that there appears to be a weakening of the recommendation relating to the recommendation on less than 10% of energy intake from free sugars. In the current guideline, this recommendation has been changed from previous WHO policy from less than 10% of energy to "not exceed 10%" of energy which could be interpreted that up to 10% is acceptable. Given the new emerging evidence of a benefit for a much lower sugar intake of less than 5% energy intake, we recommend that the following recommendation is amended so that it is in line with the recommendations contained within the pervious WHO 797 (WHO 1990)and WHO 916 (WHO 2003) reports:

- In both adults and children, WHO recommends that intake of free sugars ~~not exceed~~ **be less than** 10% of total energy (*strong recommendation*).

Additional per capita guidelines

We recommend that the guidelines provide supplementary and parallel recommendations on per-capita availability and/or consumption of sugar at the macro-level. Many countries do not yet have regular diet and nutrition surveys which can reliably monitor food and nutrient intakes in the population. Establishing per capita consumption targets will allow countries to begin to develop and monitor the impact of policies straight away. These per capita targets would be in line with the levels associated with the evidence on dental caries and sugar consumption:

- A developmental recommendation: Per capita intake of less than 10kg/person/year (approximately 5% of total energy intake)
- A recommendation that: Per capita intake of less than 18kg/person/year (approximately 10% of total energy intake)

Summary of the evidence, page 9

We welcome the comprehensive systematic reviews and meta-analysis which have been commissioned to inform the guidelines, and commend the use of the highly robust GRADE methodology to assess the strength of the evidence and make recommendations.

Summary of evidence: body weight

Excess weight gain is the third most important cause of the burden of disease and early deaths in affluent societies and is the fifth most important for all world health issues (WHO Global Health Risks 2009). There is no evidence that any free sugars are beneficial. A recommendation to reduce free sugar intakes to less than 5% of dietary energy would provide a major driver to help reduce caloric intakes at the population level. This would help to prevent and reduce levels of overweight, obesity and associated type 2 diabetes and NCDs.

We therefore strongly support the focus of the review on body weight. The evidence shows a clear and reversible link between consumption of free sugars and weight gain. Obesity is an important and growing medium through which the risk of NCDs is raised, both independently and through its contribution to other factors such as type 2 diabetes and hypertension.

Summary of evidence: dental caries

3.9 billion People worldwide are affected by dental caries caused specifically by free sugars. Untreated caries is the most prevalent of all 291 conditions assessed in the recent Global Burden of Disease study (Marcenes et al 2013): *"Worldwide, oral disease is the fourth most expensive disease to treat; dental caries affects most adults and 60-90% of schoolchildren, leading to millions of lost school days each year, and remains one of the most common chronic diseases; ..."*

The citing of adult caries in the draft WHO guidelines is valuable but underplayed. It is crucially important that this is highlighted as adult caries accounts for about 80% of the dental care costs relating to caries compared with only 20% for children up to the age of 18 years.

The evidence shows that there is a clear dose-response relationship between sugar consumption and tooth decay in children and adults. Tooth decay is a major cause of pain and suffering in children, and its consequences track into adulthood as a major source of poor nutrition (eg difficulties in eating foods such as raw fruits and vegetables and meat), embarrassment and self esteem.

The evidence is sufficient and there is strong consensus among independent experts

Given the scale of the problem, action must take place now and the world cannot afford to wait until further evidence becomes available before governments and policy makers start to act.

Significantly, we draw attention to the statement on page 8 that "there were no strong disagreements among the NUAG (WHO Nutrition Guidance Expert Advisory Group) members on any aspect of the guideline." We wish to add our strong support for the recommendation to limit free sugar intakes to less than 5% of energy intake as a developmental target.

Research gaps and future initiatives: implications for future research, page 14

The evidence that sugar plays a major role in overweight, obesity, tooth decay, type 2 diabetes and associated non-communicable diseases is sufficient to strongly support the proposed

recommendations. Urgent action is needed now, in order to stem the rapidly rising levels of these conditions, and any further delays will be deleterious to global health.

In the UK, the National Institute of Health and Clinical Excellence has recognised that public policy making should not rely on double-blind trials. Such trials are suited to studies on medical devices and pharmaceutical drugs but not dietary measures on public health policy making. Any further research should be conducted concurrently with policymaking.

Action research is needed to assess the impact of a variety of policies on free sugar consumption in order to support translation of the recommendations into effective practice. This should include research on:

- fiscal policies such as taxes, where they have been introduced
- trade policies, such as trade liberalisation and foreign direct investment policies
- agriculture policies
- policies related to the marketing of foods high in free or added sugars (as well as saturated fat and salt)
- collation of data on substitution by non-caloric sweeteners and any negative health effects
- an index on the prevalence of dental caries in children.

Remarks, page 3

Free sugars include monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit concentrates.

We strongly agree with this. It is important that the issue of misleading labels is also addressed. We need to look at much more clear labelling systems and education for consumers worldwide. Products may often be labelled as “sugar-free” when they are in fact flavoured with sugars disguised as concentrated fruit juices e.g. apple concentrate. Or in other cases, cane or beet sugar, or corn syrup, could be labelled as a “vegetable extract” or “juice”. Indeed, many sugars have chemical names that do not allow their identification as sugars by the public.

For countries with low free sugars intake, levels should not be increased. Higher intakes of free sugars threaten the nutrient quality of diets by providing significant energy without specific nutrients

We strongly agree with this. In addition, free sugar intakes need to be reduced in countries where they are much higher.

These recommendations were based on the totality of evidence regarding the relationship between free sugars intake, and body weight and dental caries.

We strongly agree that the recommendations are based on the totality of the evidence. Any public health issue must consider the wider determinants and not be solely focused on a narrow type of the evidence. In the case of sugar, this should include epidemiology, animal experiments, treatment trials, expert consensus, the importance of the outcomes, and the evidence of an absence of harm.

Increasing or decreasing dietary sugars is associated with parallel changes in bodyweight, and the relationship is present regardless of the level of intake of free sugars. The excess body weight associated with free sugars intake results from excess energy intake.

We agree with this statement based on the evidence provided in the report. This adds weight to the recommendation that free sugars must be reduced to less than 5%

The recommendation to limit free sugars intake to less than 10% of total energy is based on observational studies that use dental caries as an outcome.

The evidence for obesity, based on the studies provided, and the urgent need for global action to tackle obesity, strongly suggests that a developmental recommendation of less than 5% of energy from free sugars would be beneficial.

The recommendation to further limit free sugars intake to less than 5% of total energy is based on ecological studies in which a linear relationship between sugars intake and dental caries was observed.

A similar causal relationship between sugar intake and weight gain has been demonstrated by the evidence. Therefore, studies would be likely to show that a reduction to less than 5% would be beneficial for reducing obesity as well as for dental caries. However, this should not delay the WHO from making the "less than 5%" recommendation as a developmental target.

The recommendation to further limit free sugars intake to less than 5% of total energy is further based on the recognition that dental caries tracks from childhood to adulthood; in order to minimize lifelong risk of dental caries, the consumption of free sugars should be as low as possible.

We agree with this statement, and would add that it also applies to obesity. Overweight and obese children are likely to be overweight and obese adults and at an increased risk of developing NCDs. Furthermore, studies argue that taste preferences are set early in infancy and childhood; therefore reducing sugar as a percent of the diet in this age group will be a powerful preventive measure.

Any additional comments

Guideline Development Process, page 4

We applaud WHO on the systematic and transparent approach it has taken to developing the guidelines, particularly:

- Adopting the highly robust and transparent GRADE system attests to the importance of this (Guyatt et al 2008). We note the system has been endorsed by used by more than 50 highly influential organisations worldwide including the National Institute for Health and Clinical Excellence (NICE), the Centre for Disease Control (CDC) and the BMJ. (http://www.gradeworkinggroup.org/).

- Including the requirement for those who take part in the process to complete a declaration of interests. This is particularly important, as the evidence shows that those with commercial

interests are more likely to align their positions with their funders, for example, studies into the association between sugar-sweetened beverages and weight gain (Bes-Rastrollo et al 2013).

Translation and implementation, p13

We support the proposed Recommendations on how the guidelines can be used, and suggest these are extended as follows:

The guidelines can be used by programme managers and policy planners to develop measures to reduce intake of free sugars through public health interventions (labelling, consumer education and the establishment of food based dietary guidelines). We recommend that this list is extended **to include:**

- Economic and fiscal measures such as food taxes
- Reformulation
- Agriculture policies (subsidies and incentives) – informed by per capita intakes where appropriate
- Marketing restrictions of foods high in sugar as well as saturated fat and salt
- Nutrition and health claims (as part of labelling)

In the absence of national diet and nutrition surveys countries should use per capita sugar intakes as an indicator of the degree of risk exposure to obesity, dental caries and related NCDs in a given population. This will be especially important for populations were comprehensive diet and nutrition surveys are lacking.

Last para on page 13 – "it is feasible to achieve this recommendation while respecting national dietary customs, because a wide variety of fresh foods are naturally low in sugars". This should be amended to acknowledge that not just fresh but many other whole foods (plant based foods) are low in sugars, for example, nuts, cereals, pulses and whole grains.

Concerns around reducing free sugars may, in part, be due to a lack of understanding as to how this could be replicated in a real world setting. With that in mind, we support the proposed a plan of action for reducing sugar, that replicates the already successful and WHO endorsed programme for salt reduction (MacGregor and Hashem 2014).

Monitoring and implementation, p14

We welcome the expansion of the WHO Global Database on the Implementation of Nutrition Action (GINA) to monitor and capture country progress on translating the guidelines into action.

Addressing commercial Conflicts of Interest

Previous efforts by WHO to promote the reduction in intakes of refined sugars were vehemently challenged by vested interests (Vio and Uauy 2007). In a similar vein, WHO's current efforts to reduce the intake of refined sugars are likely to once again be stridently opposed by commercial vested interests. WHO is to be congratulated on its requirements that contributors to the sugar guidelines process provide declarations of interests. We urge WHO to undertake continued vigilance to minimise the negative effects of Conflicts of Interests.

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