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## EDITORIAL

# SUGAR-SWEETENED BEVERAGES: ONE PIECE OF THE OBESITY PUZZLE?

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The current obesity epidemic is the topic of numerous reports and articles not only from the scientific and medical community but also from the lay press. Every week, our national newspapers cover this topic. Despite this media attention, the plethora of basic science discoveries and clinical trials on obesity and numerous comprehensive reviews and reports from consensus groups [1-2], there is no evidence that the prevalence of overweight/obesity across the globe will soon plateau.

Ultimately obesity is simply the consequence of a positive energy balance: more energy consumed and less energy expended. However, behind this simple equation are numerous determinants (biological, psychological, socioeconomic, etc.) of energy intake and likewise, the drivers of physical activity are complex. As an example, it would be difficult to promote a physically active lifestyle in a low income suburb where it is dangerous to ride a bike because urban planners have designed the area to accommodate vehicles and not human beings. Such environments may also not be suited for safe child play or for a brisk walk in the evening. How can we promote an active lifestyle if these important environmental barriers remain and are not dealt with?

These simple examples just highlight the difficulties of identifying easy targets to combat the current obesity epidemic. Nevertheless, as recently emphasized by the U.S. Surgeon General, the underlying behaviours, not obesity, may represent better targets than excess adiposity per se [3]. For instance,

available evidence indicates that improved eating habits and a physically active lifestyle have a very significant impact on cardiometabolic health, irrespective of their effects on body weight. If so, some initial actions should be considered. First, we should consider "side-lining" the words "dieting" and "obesity" and instead, emphasize healthy eating habits using a food-based approach rather than a technical discussion on the macronutrient content of the diet which is difficult to communicate in meaningful terms to the lay public [4]. Fewer processed, energy-dense foods with a high-fat/refined sugar content and more whole fruits and vegetables are simple recommendations to convey to the public. This implies that we need to make sure there is equitable access to healthy, unprocessed foods and encourage a preference for such foods. One opportunity is to improve the quality of the food and drink provided in schools. This may look simple but has logistical and cost challenges.

Another simple target is to globally increase the energy expenditure of our children through increased physical activity. Our children should be physically active at least an hour per day. Again, although simple at first sight, this recommendation also has very significant practical implications. Our children live in a "toxic" sedentary world with a plethora of options which encourage screen-time and squeeze out active play. Changing family lifestyles is critical and local communities can act as the "epicentre" to raise awareness and begin to shift social and cultural norms around food and activity. This community participatory approach has been successfully implemented in France (EPODE project, www.epode.org) and is now exported in several countries.

If we need comprehensive solution, why focus on sugar-sweetened beverages (SSBs)? Data discussed at this joint meeting provides robust evidence that an overconsumption of SSBs is associated with obesity, hypertension, type 2 diabetes and cardiovascular disease. This issue of the **CMReJournal** summarizes three lectures addressing this topic given by three experts, Professors Nick Finer, Frank Hu and Luc Tappy who presented at a meeting jointly organized by the Association for the Study of Obesity and the International Chair on Cardiometabolic Risk in London (UK) on November 2, 2010. Obviously, there are numerous other factors contributing to the current obesity epidemic. However, as there appears to be only limited compensatory reduction in the energy intake from solid food when SSBs are consumed [5-6], and there are credible alternatives, limiting their intake represents a simple dietary recommendation to constrain energy intake. This may particularly be relevant to the segment of the population who are very high consumers of SSBs.

Accordingly, as we have a food pyramid compatible with cardiometabolic health, it may be useful to consider an inverted hydration pyramid with SSBs at the bottom, to be consumed in very small amounts, and water at the top to be the main source of hydration. Certainly we now have enough evidence to suggest that unlimited consumption of SSBs is not part of a healthy diet and that it is only prudent to recommend that they are consumed with great moderation.

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