

Effect of Free Sugars on Diabetes, Obesity, and Dental Caries.

A.R. Tappuni¹, R. Al-Kaabi², and E. Joury³

1 Institute of Dentistry, Queen Mary University of London, London, UK

2 Directorate of Preventive Health Affairs, Directorate General of Health, Duhok, Iraq

3 Population and Patient Health, King's College London Dental Institute, London, UK

Corresponding Author:

A.R. Tappuni, Institute of Dentistry, Queen Mary University of London, Turner Street, London, England, E1 2AD, UK. Email: a.r.tappuni@qmul.ac.uk

Accepted for publication: 31 October 2016

Online First JDR. first published on November 21, 2016 as doi:10.1177/0022034516680326

We read with interest the recent JDR paper by Schwendicke et al. (2016) and agree with the authors' assumptions that taxing sugar-sweetened beverages may reduce caries and in turn play a role in reducing inequalities in dental health. In the editorial by Lee and Giannobile (2016), the concept is widened, and a case is eloquently made for the growing evidence of the negative effect of added dietary sugar on the general health: a topic that we address in our recently published paper (Joury et al. 2016). In it, we present a systematic search of published data on the prevalence and incidence of type 2 diabetes, obesity, and dental caries in relation to free sugars consumption in Iraq, a country in which the availability of sugar has varied over the years due to imposed economic sanctions. Our results showed that dental caries in Iraq declined markedly during a period of United Nations sanctions (1991 to 2002) but increased after the sanctions were lifted (2003 to 2015), when annual sugar consumption per person increased from 16.3 to 24.1 kg. Similarly, type 2 diabetes and obesity patterns mirrored those of free sugars consumption and started increasing with higher free sugars consumption after the United Nations sanctions were lifted. While we acknowledge that the etiology of these conditions is multifactorial, we support the concluding remarks of Lee and Giannobile (2016) and advocate that oral health clinicians and researchers share a responsibility in informing public opinion and policy makers of the positive effect of limiting added sugars on oral and general health.

Acknowledgments

The authors received no financial support and declare no potential conflicts of interest with respect to the authorship and/or publication of this article.

References

- Joury E, Al-Kaabi R, Tappuni AR. 2016. Constructing public health policies in post crisis countries: lessons to learn from the associations between freesugars consumption and diabetes, obesity and dental caries before, during and after sanctions in Iraq. *J Public Health*. 24:563–569.
- Lee JY, Giannobile WV. 2016. Taxes on sugar-sweetened beverages a strategy to reduce epidemics of diabetes, obesity, and dental caries? *J Dent Res*. 95(12):1325–1326.
- Schwendicke F, Thomson WM, Broadbent JM, Stolpe M. 2016. Effects of taxing sugar-sweetened beverages on caries and treatment costs. *J Dent Res*. 95(12):1327–1332.