

# ACTION ON PORTION SIZES



## The impact of obesity

Obesity affects virtually all age and socioeconomic groups. It is estimated that if the current trend continues, almost half of the world's adult population could be overweight or obese by 2030. This issue causes not only a burden on individuals, their health, and their families. It affects society and the economy as a whole. *Overcoming Obesity: An Initial Economic Assessment* - a comprehensive review published by the McKinsey Global Institute - reports that the global economic impact from obesity is roughly US \$2.0 trillion a year.<sup>1</sup>



## Smaller portion sizes

Wide ranging interventions, aiming at the environment and societal norms are needed. They are much more effective than conscious choices and individual responsibilities. The work by the McKinsey Global Institute revealed that portion control, as opposed to other interventions such as weight-management programs, media restrictions, and food taxes, has the highest impact to reduce obesity and promote behaviour change.<sup>1</sup> As recently as 2019, a comprehensive analysis by the OECD confirmed this and favoured smaller portion sizes as a public health tool to reduce consumption of energy-dense foods.<sup>2</sup> The German government already adopted this strategy in its approach to tackle diabetes and obesity among children and adolescents.<sup>3</sup>



## Portion distortion and the portion size effect

Food and beverage portions offered to consumers have increased over the same time period as overweight and obesity levels have risen. The reason why is that when presented with larger portions, people tend to consume more. This is, among others, caused by "unit bias", meaning that the portion or quantity provided is automatically perceived to be the appropriate amount to eat.<sup>2</sup> But there is good news. The solution that has been shown to have the greatest impact on obesity in a highly cost-effective way is also common sense: being smart on portion size.<sup>1</sup>



## Portion size and caffeine intake

Taking action on portion sizes extends beyond management of calorie intake. It applies to caffeine containing packaged food and beverage products as well. This is because health authorities recognize that:

1. 75 mg of caffeine in a single serve is all that is required to achieve a functional effect; and
2. up to 200 mg of caffeine as a single dose or intake, does not raise any safety concerns for healthy adults (excluding pregnant women).<sup>4</sup>

Conventional energy drink products contain 80 mg of caffeine per 250 ml can and fit perfectly within these parameters. This is approximately equivalent to a 250 ml cup of home brewed coffee. EDE members do not produce any products that contain more than 200 mg per container.

1. Dobbs R, Sawers C, Thompson F, et al. Overcoming obesity: an initial economic analysis. McKinsey Global Institute, 2014. [https://www.mckinsey.com/-/media/McKinsey/Business%20Functions/Economic%20Studies%20TEMP/Our%20Insights/How%20the%20world%20could%20better%20fight%20obesity/MGI\\_Overcoming\\_obesity\\_Full\\_report.ashx](https://www.mckinsey.com/-/media/McKinsey/Business%20Functions/Economic%20Studies%20TEMP/Our%20Insights/How%20the%20world%20could%20better%20fight%20obesity/MGI_Overcoming_obesity_Full_report.ashx)

2. OECD (2019). The Heavy Burden of Obesity: The Economics of Prevention, OECD Health Policy Studies, OECD Publishing, Paris. <https://doi.org/10.1787/67450d67-en>

3. Deutscher Bundestag. Start einer nationalen Diabetes-Strategie: Gesundheitsförderung und Prävention in Deutschland und Versorgung des Diabetes mellitus zielgerichtet weiterentwickeln. July 2020. <https://dip21.bundestag.de/dip21/btd/19/206/1920619.pdf>

4. EFSA NDA Panel (EFSA Panel on Dietetic Products, Nutrition and Allergies), 2015. Scientific Opinion on the safety of caffeine. EFSA Journal 2015; 13(5):4102, 120 pp. doi:10.2903/j.efsa.2015.4102. <https://efsa.onlinelibrary.wiley.com/doi/abs/10.2903/j.efsa.2015.4102>



## The opportunity

The most effective policy option that all sectors of society can exercise is reducing portion sizes. The areas of opportunity extend right across the food system. There is evidence that exposure to smaller portion sizes recalibrates what is perceived as "normal" and subsequently, how much food is selected and consumed.<sup>5</sup> By making the default option smaller, it proactively changes societal norms over time. It is also an intervention that relies less on conscious choices.

Other portion control opportunities are:

- provide food and beverages in single serve portions,
- reduce large portion sizes,
- market smaller portion sizes as the default size, or design products to clearly delineate a smaller portion, as well as
- educate the public on appropriate portion sizes for their favourite foods and beverages.

A recently published modelling study measured the impact of reducing the serving size of all single serve sugar sweetened beverages (SSB) to a maximum size of 250 ml. It was shown that such a 250 ml cap on single serve SSB could be an effective contribution to obesity prevention.<sup>5</sup>

The beverage industry plays an important role in this context. However, to reach meaningful effects, and to improve the health of individuals, the whole food industry needs to act.<sup>7</sup>

## What can be changed<sup>6</sup>

Smaller default sizing



Food and drink

Tableware

Add new smaller sizes and remove largest serving sizes



Place larger portions less prominently  
e.g. not at tills / aisle ends

5. Raghoebar S, Haynes A, Robinson E, Kleef EV, Vet E. Served Portion Sizes Affect Later Food Intake Through Social Consumption Norms. *Nutrients*. 2019 Nov 20;11(12). pii: E2845. doi: 10.3390/nu11122845. <https://www.mdpi.com/2072-6643/11/12/2845>

6. Cleghorn C, Blakely T, Murchu CN, Wilson N, Neal B, Eyles H. Estimating the health benefits and cost-savings of a cap on the size of single serve sugar-sweetened beverages. *Prev Med*. 2019 Mar;120:150-156. <https://www.sciencedirect.com/science/article/pii/S0091743519300131>

7. Marteau Theresa M, Hollands Gareth J, Shemilt Ian, Jebb Susan A. Downsizing: policy options to reduce portion sizes to help tackle obesity *BMJ* 2015; 351:h5863. <https://www.bmj.com/content/351/bmj.h5863/infographic>