

# **HEALTH ACTION RESEARCH GROUP - WRITTEN EVIDENCE (FDO0007)**

## **Written evidence for the House of Lords Select Committee on Food, Diet and Obesity from the Health Action Research Group**

### **INTRODUCTION**

Health Action Research Group is an independent health think tank, whose guiding principle is that prevention is better than cure. In this evidence we draw on our research into the underlying causes of obesity, the role of the food and drink industries, initiatives that have successfully begun to reduce childhood obesity in a number of different countries and what we can learn from them.

### **EXECUTIVE SUMMARY**

1. Human physiology and psychology are unlikely to have changed significantly in a few generations. However, the environment children are growing up in clearly has – suggesting an increasingly obesogenic environment is the primary driver for obesity among both the general population and people living in deprived areas.
2. Obesity is a classic example of prevention being better than cure. Only 2-3% of obese adults currently achieve a healthy weight over a ten-year period, confirming the importance of action to prevent children and young people becoming obese in the first place.
3. Successive Conservative governments appear to have taken the lobbying of food and drink companies at face value, resulting in longstanding and continuing delays to the implementation of action to reduce the prevalence of obesity.
4. However, reformulation is a relatively routine process for the food industry, already undertaken to meet the tastes and regulatory requirements of different markets. Contingency plans have presumably also been made to respond as and when a government is elected which takes a more pro-active approach to reducing obesity. This was illustrated by the speed with which reformulated drinks were brought to market in response to the Soft Drinks Industry Levy (SDIL).
5. New technologies continue to emerge, making it ever-easier for food companies to mass- produce food lower in sugar, salt and fat without recourse to artificial ingredients. Examples include: salt microspheres, micro-aeration, adding salt aroma to reduced salt products, natural alternatives to sugar, flavour delivery particles, alternative reformulations, and the potential for dietary protein to encourage satiety.

6. Governments should therefore not be afraid to take action to ensure healthier mass-produced food in the UK. As McKinsey have persuasively argued, legislation to ensure a level playing field is in the interests of food companies themselves, by reducing perceived business risk.

7. International examples suggest two broad approaches are worth pursuing when seeking to reduce the prevalence of childhood obesity in particular: a primary prevention community-based systems approach and a secondary prevention obesity clinic approach.

8. There is now ample evidence that primary prevention community-based approaches have the potential to halt the rise and achieve a modest reduction in the prevalence of childhood obesity. They are not a panacea but do provide a replicable model which can be adopted or adapted in different environments (as illustrated by the spread of the EPODE approach both within France and to other countries – including the recent example of Brighton in the UK). Support for such community-based action is therefore strongly recommended.

9. The success of The Children's Obesity Clinic Treatment (TCOCT) approach in Denmark, achieved with a relatively small amount of healthcare staff time per patient, with reductions in parental obesity also achieved, and without requiring recourse to bariatric surgery, suggests this is a model that the NHS may wish to seriously consider.

### **The primary drivers of obesity both among the general population and among distinct population and demographic groups.**

1. The 2007 Foresight report described obesity as a consequence of abundance, convenience and underlying biology.<sup>1</sup> Some people are indeed biologically predisposed to obesity. However, an analysis of school photographs for most of the 20<sup>th</sup> century would show very few children who are overweight or obese. Biological predisposition appeared to have had a modest effect until the rise of an obesogenic environment triggered activation of this predisposition in more children.

2. Changes in what we eat and drink which have helped create this obesogenic environment have included:

- Supersizing by manufacturers (when Coca Cola introduced 2 litre bottles in 1978 these contained ten times more than the original iconic Coca Cola bottles).
- Ready meals (following the introduction of the microwave in 1984).
- The rise of takeaways and fast-food outlets (with the first McDonalds opening in the UK in 1974 and fast food now deliverable to our door from a variety of sources throughout the day)

- The attractiveness of UPFs and HFSS products to food production companies and retailers (cheap to manufacture, attractive to consumers, and with a long shelf life).

3. These changes have typically resulted in an increase in food which is relatively cheap and widely available, calorie rich but nutritionally poor, potentially leading to people becoming overweight but undernourished. This is a particular issue in deprived areas, where obesity levels are typically higher. A further potential factor in deprived areas may be that people are turning to 'comfort food' (as well as to smoking and alcohol) to help cope with the stresses of their daily lives. These are, after all, areas where anti-depressant prescriptions are twice as high as in more affluent areas.<sup>2</sup>

4. These changes in food availability and consumption coincided with a reduction in physical activity due to factors such as de-industrialisation (with manufacturing jobs replaced by more sedentary occupations), an increase in car ownership, and reduced opportunities for children to play outside. For example, the 2020 British Children's Play Survey found the average age at which children are allowed outside alone had risen from nine to eleven in just a generation.<sup>3</sup>

5. Human physiology and psychology are unlikely to have changed significantly in a few generations. However, the environment they are growing up in clearly has – suggesting this as the primary driver for obesity among both the general population and people living in deprived areas.

### **The role of the food and drink industry in driving food and diet trends and on the policymaking process.**

6. Successive Conservative governments appear to have taken the lobbying of food and drink companies at face value, resulting in longstanding delays to the approval and implementation of action to reduce the prevalence of obesity. For example, bans on junk food advertising to children and restrictions on volume price promotions were first proposed in a draft government Obesity Strategy in 2016 but have still not been implemented eight years later.<sup>4,5,6</sup>

7. To put this lobbying in context, companies seeking to survive and prosper in a changing world often use business planning tools to seek to anticipate and prepare for future changes that could impact them. Examples include:

- Scenario planning (to seek to flesh out possible futures they may need to operate in).<sup>7</sup>
- SWOT Analysis (to identify internal strengths and weaknesses and external opportunities and threats).<sup>8</sup>
- STEP and PESTLE Analysis (to identify social, technological, economic and political trends likely to affect their future – plus environmental and legal trends for PESTLE).<sup>9</sup>

- PRESTCOM Analysis (to identify political, regulatory, economic, social, technological, competitor and organisational factors which may affect the company's future).<sup>10</sup>

8. Each business planning tool usually includes consideration of **potential political change** (in particular, if there is a change of government) and **changes in consumer tastes**. Major food and drink companies conducting business analysis will presumably therefore have considered the possibility, ahead of each General Election, of an alternative government that is more committed to action to reduce obesity - and also the possibility of changing consumer tastes, including (prior to the current cost of living crisis) an increasing consumer interest in healthier food. In both scenarios it is therefore reasonable to assume the food and drink companies will have put contingency plans in place to ensure a reasonably smooth transition in the event of such eventualities.

9. The speed with which the soft drinks industry implemented changes following the Soft Drinks Industry Levy (SDIL) is a good example here of already being prepared for change, however much lobbying there may have been against such change at the time.<sup>11</sup>

10. It is true that reformulation can be a challenge, particularly where sugar, salt and fat are important for preservation and shelf life or are an integral part of the production process, for instance for baking. There is also the challenge of keeping consumers if the taste changes.

11. However, reformulation is a relatively routine process for the food industry, which often already produces different formulations of the same product to cater for different food tastes in different markets or to meet different regulatory requirements. For instance, Dunkin Donuts amends its menu to cater for each of the 36 countries it operates in.<sup>12</sup> Another example is the Big Mac. This contains the same seven ingredients in both the US and the UK - but the US version has more calories (including more saturated fat and more carbohydrates) than its UK counterpart.<sup>13</sup>

12. Importantly too, new technologies continue to emerge. Examples include:

- Salt microspheres (which provide the same salt taste but with less salt) - developed by Tate & Lyle in partnership with Nottingham University and launched in 2012.<sup>14</sup>
- Micro-aeration (providing the same taste and consistency but with less fat).<sup>15</sup>
- Adding salt aroma to a reduced salt product (which uses the smell of salt to give consumers the impression that food contains more salt than is actually the case).<sup>16</sup>
- Natural alternatives to sugar, which can sometimes be used in conjunction with a reduced level of sugar to ease the transition for consumers.<sup>17</sup>
- Flavour delivery particles, which can cut sugar content by up to a half while retaining the same taste. Israeli company DouxMatok (now rebranded Increded) created a carrier particle coated with sugar molecules using non-covalent

bonding. This increases the surface area, meaning the same sweetness can be achieved with less sugar, costing less, and without needing to use artificial sweeteners.<sup>18</sup>

- Alternative reformulations e.g. to reduce saturated fat and sugar content in chocolate.<sup>19</sup>
- The potential for dietary protein to control hunger as a means to help achieve weight loss - for example when Marks & Spencer, working with researchers at the University of Aberdeen, developed the 'Fuller Longer' range (later renamed to comply with EU laws). This soon became the company's bestselling diet range.<sup>20</sup>

13. The potential of reformulation more generally has been recognised by the Food & Drink Federation, for instance through the Food & Drink Federation Guide to Reformulation published by fdf Scotland.<sup>21</sup>

14. When McKinsey reviewed ways of tackling obesity in 2014 the three interventions they considered likely to have the greatest effect were: Portion control, Reformulation and Calorie rich availability, with the food industry key to achieving these three changes – from food manufacturers through to restaurants, takeaways and fast-food outlets. McKinsey went on to make the case for regulation and standardisation to achieve healthier food, arguing that it was in the food industry's own interests for this to happen - to ensure a level playing field and avoid companies being deterred from taking action as a result of perceived business risk.<sup>22</sup> Our own assessment is that such regulation or standardisation is likely to have benefits not just for public health but also for the food industry itself, by creating potential competitive advantage in the evolving and often increasingly health-conscious global market place.

15. Taken together this evidence suggests that while the food and drink industry will sometimes have legitimate concerns, government needs to take a more evidence-based approach when considering representations made by the industry – and should not underestimate how much planning these companies will already have done to prepare for potential legislation.

### **Lessons learned from international policy and practice, and from the devolved administrations, on diet-related obesity prevention**

16. The factors driving the increase in obesity in the UK are well-known and were set out for instance in the 2007 Foresight report. This recognised, for example, the impact of an obesogenic environment. The Foresight report also correctly identified the scale of the challenge (comparable to that required in the mid-19th century to prevent mass epidemics and the worsening health conditions in Britain's cities) and the need for a long-term, comprehensive strategy and systemic change.<sup>1</sup>

17. Unfortunately, successive UK governments have lacked the political will to act on this clear and accurate analysis – so we need to look to other countries, and to local initiatives in the UK, for practical examples we can learn from. International examples suggest two broad approaches: a primary prevention community-based systems approach and a secondary prevention obesity clinic approach – each of which has demonstrated some success in halting and modestly reversing the upward trend in childhood obesity.

### **Primary prevention approaches – through community-based stakeholder engagement**

18. These are often described as community-systems approaches by researchers. Whilst this is technically accurate too heavy a focus on ‘systems’ language may be counterproductive when seeking to achieve change, by suggesting a high degree of technical complexity and specialist knowledge outside the scope of ordinary people, including politicians. The obesity systems map on page 129 of the Foresight report is a classic example here.

19. The reality is that obesity is the result of powerful economic, social and technological change, with significant vested interests in maintaining these changes, including companies benefitting from the current obesogenic food environment. As the Foresight report observed, ‘What is certain is that this epidemic of ‘passive obesity’ is unlikely to come to a natural end, i.e. without intervention.’ What is needed therefore is a major pushback locally, nationally and internationally – bringing together as wide a collection of stakeholders as possible. Presenting this in human rather than ‘systems’ terms may increase the chances of success.

20. The initial and most influential example of a community-based primary prevention approach was EPODE (Ensemble Prévenons l'Obésité Des Enfants) in France.<sup>23</sup> This was a model which spread among towns across large parts of France and was then rebadged and adapted in Dutch cities as JOGG (Jongeren op Gezond Gewicht) – the best-known example here being the Amsterdam Healthy Weight Programme.<sup>24,25</sup>

21. EPODE also influenced initiatives in other countries including Scotland (e.g. the Healthy Weight Communities pathfinder programmes). EPODE itself saw further evolution, leading to VIF (Vivons en Forme) which moved from describing itself as Together Let’s Prevent Children’s Obesity to a more positive message, roughly translating as Let’s Live in Good Shape.<sup>26</sup>

22. This community-based approach typically has four critical components: political commitment, public and private partnerships, community-based actions, and evaluation. Other elements usually include multi-setting interventions (e.g. in homes, schools and communities), measures to improve the local food environment (e.g. in school canteens, shops and/or supermarkets), community engagement and capacity building, central

coordination (at a national or municipal level) and local managers/coordinators. These provide a blueprint for community-based action to reduce childhood obesity.

23. Each approach typically also has additional elements. For example, EPODE made use of social marketing, VIF assumed experience has more impact on behaviour than information, JOGG linked prevention and healthcare, while the Amsterdam Healthy Weight Programme adopted a Health in all Policies approach and also focused on sleep alongside diet and physical activity.

24. Here in the UK, Brighton has also adopted a community-based primary prevention approach and experienced a downward trend in child obesity rates compared to national figures. Researchers suggest the following factors have contributed to its success: 'a commitment to early years intervention such as breastfeeding promotion; a supportive local political context; the ability to tailor interventions to community needs; governance structures and capacity that enable cross-sectoral collaboration; and a citywide framing of obesity solutions in the context of a 'whole system' approach.'<sup>27</sup>

25. Each of these initiatives aims to prevent or reduce the prevalence of obesity in childhood. The importance of early intervention should not be underestimated. Several studies have found that the chances of someone who is obese returning to a healthy body weight are 2- 3% over a ten-year period.<sup>28</sup>,<sup>29</sup> Obesity is a classic example of prevention being better than cure.

26. There is now ample evidence that community-based primary prevention approaches have the potential to halt the rise and achieve a modest reduction in the prevalence of childhood obesity. They are not a panacea but they provide a replicable model which can be adopted or adapted in different environments (as illustrated by the spread of the EPODE approach and its evolution both within France and to other countries). Support for such community-based action is therefore strongly recommended.

27. It may also be worth mentioning here two complementary approaches with potential. The first is from the US. A study in Alaska identified statistically significant declines in obesity among students in grades K, 1, and 3 between the 2003–2004 and 2010– 2011 school years. A policy review identified nine State policies related to nutrition, physical activity, and the built environment in Alaska between 2001 and 2012 – including five related to nutrition, two to physical activity, and one to physical activity and the built environment. Most of these policies affected the early care and education and school settings.<sup>30</sup>

28. The second example is from four London local authorities (Newham, Islington, Southwark and Tower Hamlets), which introduced Universal Free School Meals (UFSM) between 2010 and 2014. This led to one in three children newly eating a school lunch, mostly those not already eligible for FSM. This, in turn, was followed by a reduction in the proportion of children living with

obesity in both Reception and Year 6 classes – although unfortunately the beneficial impacts didn't extend to the schools with the highest pre-existing obesity rates.<sup>31</sup> This suggests UFSM may have a part to play within an overall Obesity Strategy but that more is needed to help children most at risk, including community-based primary prevention systems approaches along the lines described earlier, as these address the risk factors in a more multi-dimensional way.

### **Secondary prevention – a medical treatment approach**

29. The children's obesity clinic's treatment (TCOCT) protocol, an approach pioneered at the Holbaek Hospital in Denmark, was reported to be, 'safe and effective in reducing BMI SDS independent of baseline adiposity, age (boys), or social class in these young people.'<sup>32</sup> It is an approach which has been successfully adopted in other clinical settings, including another hospital, with reductions in children's obesity achieved with median time spent by health care professionals being 4.5 hours per year per patient.<sup>33</sup> It has also been successfully adopted in a community health care setting, with both BMI and waist circumference reduced after 1.5 years.<sup>34</sup>

30. This family-based approach has resulted in reductions not only in childhood obesity but also in parental obesity. In one study, of the overweight/obese parents, 60% of the mothers and 58% of the fathers lost weight during their child's treatment.<sup>35</sup>

31. TCOCT is provided by a multidisciplinary health care team including paediatricians, dieticians, nurses, psychologists and social workers. It is a family-centred lifestyle approach. Each child and their family receive a customized plan comprising 10-25 treatment plan points concerning sources and amounts of nutrition, sugar and fat intake, level and type of physical activity and inactivity, psychosocial functions, eating behaviours, hygiene, allowances, and sleep patterns – the particular combination being tailored to meet the needs and circumstances of the particular child and their family.<sup>36</sup>

32. TCOCT also recognises that the human body has evolved energy-saving physiological responses (the endocrine regulation of fat mass) to cope with historic disruptions to food supplies caused by events such as famine and winter, and that this makes it more difficult to lose weight on a sustainable basis once people have put on weight in the first place. It therefore recognises the need for sustained health professional intervention, rather than relying on individual motivation.<sup>37</sup>

33. The success of the TCOCT, achieved with a relatively small amount of healthcare staff time per patient, with reductions in parental obesity also achieved, and without requiring recourse to bariatric surgery, suggests this is a model that the NHS may wish to seriously consider.



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