



Tackling childhood obesity - whose responsibility is it?

Currently, 23-33% of children aged 4-11 years are overweight or obese. This is worrying because obesity usually tracks into adulthood and is associated with many adverse health outcomes (e.g., increased risk of cardiovascular disease and type 2 diabetes). When discussing *Let's Move!*, the US Government's childhood obesity initiative, Michelle Obama described this problem as "everyone's responsibility." Here, our physical activity for health expert panel make 'sound bite' suggestions on what parents and specific organisations and professional groups could do to help tackle childhood obesity. The aim of this article is to stimulate thought and promote discussion about this important topic.



Dr Keith Tolfrey, Chair of the BASES Division of Physical Activity for Health and Senior Lecturer in Paediatric Exercise Physiology, Loughborough University

Government

The UK Government has initiated several strategies aimed at reducing obesity rates, with some specific to children and adolescents. These strategies have focused on increasing habitual physical activity and sports participation, a minimum entitlement to high-quality school physical education, active transport and environmental safety, and encouraging a healthier, balanced, lower energy diet. Encouragingly, a recent plateau in childhood obesity rates suggests that something is working, so perhaps the Government really has done something for us. So, what more can it do? It must continue to encourage all young people to achieve the 60 min daily target of habitual physical activity, but also raise public awareness about avoiding sedentary activities and other unhealthy behaviours that might often accompany them. There is mounting evidence that childhood obesity prevention needs to be implemented at pre-school age, which requires a focused effort

“People can choose to eat and drink healthily if they wish, even in an environment that is making such behaviours more difficult. Of course, it would be better if the environment also helped!”

on childcare at home and nurseries. More people need to understand that it is possible to experience considerable mental and physical health gains independent of changes in body weight and fat. Therefore, we might need to temper our obsession with body fat and focus on the many other benefits of a physically active lifestyle coupled with a nutritious diet. The Government will need to draw upon expertise from exercise and health scientists to achieve this long-term goal.



Prof Marie Murphy FBASES, Professor of Exercise and Health, University of Ulster

Parents

Parents heavily influence their children's diet and physical activity habits and, therefore, have an important role in determining whether or not their children experience unhealthy weight gain. During early childhood, parents are the main source of children's food and drink. Providing balanced meals, encouraging consumption of a wide-range of foodstuffs, and limiting access to sugary and high-fat foods will help prevent unhealthy weight gain. Establishing healthy eating habits might also help

children make wise food choices as they get older. Many popular leisure time pursuits for children, such as watching TV and playing computer games, are inherently inactive. Limiting the amount of 'screen time' and encouraging children to take part in more active pursuits or using these popular pastimes to 'reward' physical activity can increase daily energy expenditure. There are many opportunities for children to be active in organised sports and physical activity sessions and many environments that encourage physical activity such as parks and playgrounds. Parents can facilitate their child's physical activity by providing or arranging transport to these activities/venues, and encouraging and praising participation in such active pursuits. Parents act as role models for their children, so it is important for them to lead by example by eating a healthy diet and being physically active! James Baldwin, the American civil rights activist, observed, "Children have never been very good at listening to their elders, but they have never failed to imitate them."



Prof Nanette Mutrie FBASES, Professor of Exercise and Sport Psychology, University of Strathclyde

Schools

The topic of childhood obesity is both a boon and a bane for advocates of school-based physical activity/education. It is a boon because obesity prevention remains a priority for all UK home countries, with each country having strategies to provide physical education and ensure children are sufficiently active. Without such an emphasis on obesity prevention at this time, many schools could find that their physical education, sport and physical activities budgets are cut. So schools must make the most of physical activity/education provision being a strategic priority; this means providing quality physical education from well-trained teachers. It also means that schools must make a contribution, through extra curricular activities such as sport and promoting active commuting, to children achieving the recommended minimum of 60 minutes of activity each day. This also provides an opportunity for teachers to consider less sedentary ways of conducting most classroom-based learning. Childhood obesity might also be considered a bane for schools because it becomes the most important reason for promoting activity and clearly there are many other reasons for children to receive good physical education experiences and regular physical activity. The whole principle of learning physical skills gets lost when obesity is the *raison d'être* and it becomes more important to expend calories than to practise and master basic skills such as catching and throwing and having a variety of enjoyable activities to learn about. This means that schools must not substitute good physical education experiences with activities that only have the aim of managing weight.



Prof John Saxton FBASES, Professor of Clinical Exercise Physiology, University of East Anglia

Exercise scientists

Childhood obesity is *simply* an energy balance problem – but the factors influencing energy balance in humans are manifold and highly complex! This presents many challenging research opportunities for exercise scientists. At the individual level, exercise expends energy but evidence suggests that an energy balance approach, which includes managing dietary intake (including the quality of the diet) and providing opportunities to engage in enjoyable exercise, is likely to be more successful for desirable body weight maintenance or sustained weight loss. Hence, well-controlled studies of such complex interventions, including built-in strategies for promoting long-term adherence to healthy lifestyle behaviours in this population, should be a research priority. In addition, further studies of physiological and behavioural compensatory responses to weight loss interventions are needed to improve our understanding of why some individuals will always be more 'successful losers'. For example, genetic/epigenetic and hormonal determinants of appetite regulation, and how these physiological regulators respond to perturbations in energy balance and are influenced by physical activity, are important areas for future research. Compensatory behavioural responses, such as altered sleeping patterns and non-exercise activity thermogenesis, represent

other key areas for future study – especially as the latter can vary by as much as 2,000 kcal per day between individuals! In summary, childhood obesity is a multifaceted problem that crosses scientific boundaries and provides exercise scientists with many avenues for future research.



Prof Ken Fox FBASES, Professor of Exercise and Health Sciences, FPPH, University of Bristol

Primary health care professionals

General practice consultations generally last <10 minutes, so the capacity of doctors to address the problem of childhood obesity is limited. Indeed, it has been reported that doctors feel helpless when it comes to dealing with both adult and childhood obesity. However, they can play an important part in the overall scheme of its identification and treatment.

1. Empathise with the problem. Many parents who are aware of their children's obesity feel guilty and really don't know what to do to solve it. People take notice of their GP and a supportive reaction can mean a lot.
2. Raise awareness where needed. Although the schools measurement programme now identifies children who have a potential weight problem, many parents fail to appreciate that their child is at risk. Doctors can empathically confirm that action needs to be taken, and provide confirmation through measurement of BMI where necessary.
3. Refer to existing programmes. Primary care trusts are now charged with reducing childhood obesity and should have commissioned services for treatment. Doctors and nurses have a responsibility for signposting and advocating these programmes. As doctors are about to become the commissioners themselves, this is even more critical.
4. Equally important is the role that GPs have in supporting initiatives for preventing childhood obesity. This responsibility, which is under the umbrella of public health, is planned to move from primary care trusts to local authorities. However, the support of the primary care teams will still be critical.



Prof Stuart Biddle FBASES, Professor of Exercise and Sport Psychology, Loughborough University

Food and drink companies

Childhood obesity is biologically simple and behaviourally complex! Alongside the laws of physics – the energy balance equation – studies on contemporary trends on childhood obesity point towards low levels of habitual physical activity and unhealthy eating patterns (e.g., increased consumption of calorie dense foods and drinks and high levels of snacking) as major causes of childhood obesity.

So what role does the food and drink industry play? Are they the sinners to be singled out? Yes and no! Obesity trends are complex. They are due to personal, social and environmental influences. Some of these can be negative, such as highly available energy-dense foods often in areas of low socio-economic status, or large supermarket chains having the capacity to offer very cheap alcohol. Companies 'supersizing' products are not helping, and their marketing budgets are massively larger than budgets for promoting physical activity. But at the same time, personal responsibility for healthy consumption patterns is also required. People can choose to eat and drink healthily if they wish, even in an environment that is making such behaviours more difficult. Of course, it would be better if the environment also helped! Some food and drink companies support research and other activities related to health. This is controversial but as someone who has conducted research and consultancy work for food and drink companies, I think it's better to work with them than against them – they can do some good! ■

Compiled by: Dr Garry Tew, Research Fellow, Sheffield Hallam University

Resources National Obesity Observatory - www.noo.org.uk/NOO_pub

PDF Download Download a PDF of this article - www.bases.org.uk/The-Sport-and-Exercise-Scientist

Have Your Say Share your comments and opinions on this topic - www.bases.org.uk/ForumBases