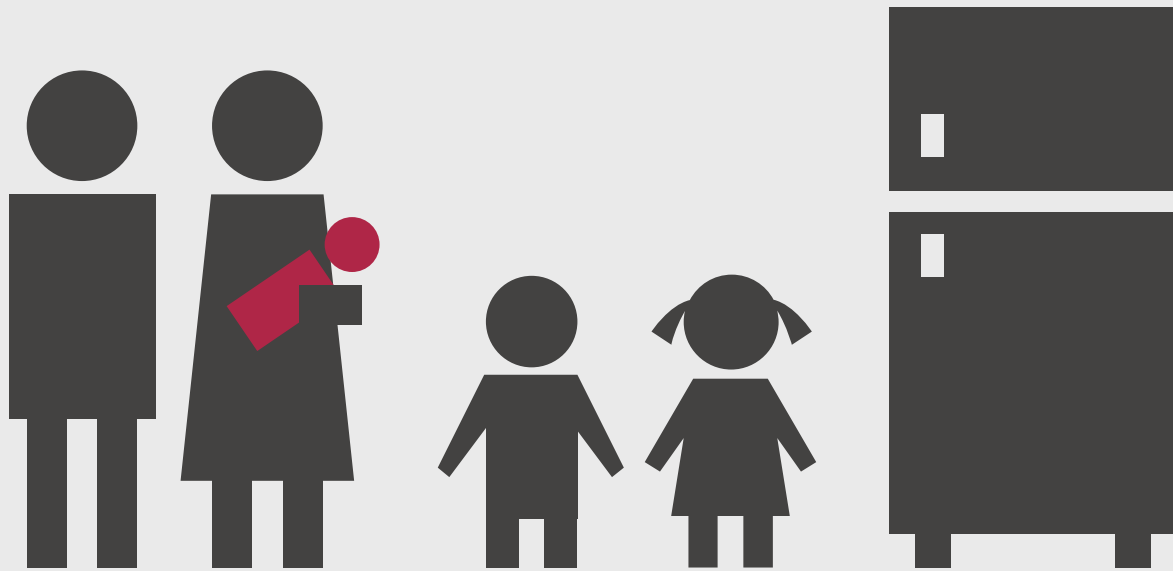


OFF THE SCALES

Tackling England's childhood obesity crisis



Off the Scales

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About the Centre for Social Justice

Established in 2004, the Centre for Social Justice (CSJ) is an independent think tank that studies the root causes of Britain's social problems and addresses them by recommending practical, workable policy interventions. The CSJ's vision is to give people in the UK who are experiencing the worst disadvantage and injustice every possible opportunity to reach their full potential.

Since its inception, the CSJ has changed the landscape of our political discourse by putting social justice at the heart of British politics. This has led to a transformation in Government thinking and policy. The majority of the CSJ's work is organised around five 'pathways to poverty', first identified in our ground-breaking 2007 report, Breakthrough Britain. These are: family breakdown; educational failure; economic dependency and worklessness; addiction to drugs and alcohol; and severe personal debt.

In March 2013, the CSJ report *It Happens Here* shone a light on the horrific reality of human trafficking and modern slavery in the UK. As a direct result of this report, the Government passed the Modern Slavery Act 2015, one of the first pieces of legislation in the world to address slavery and trafficking in the 21st century.

The CSJ delivers empirical, practical, fully funded policy solutions to address the scale of the social justice problems facing the UK. Our research is informed by expert working groups comprising prominent academics, practitioners and policy-makers. Furthermore, the CSJ Alliance is a unique group of charities, social enterprises and other grass-roots organisations that have a proven track record of reversing social breakdown across the UK.

The 13 years since the CSJ was founded has brought with it much success. But the social justice challenges facing Britain remain serious. Our response, therefore, must be equally serious. In 2017 and beyond, we will continue to advance the cause of social justice in this nation.

Working group

The CSJ is enormously grateful to everyone who has contributed to this report. The Working Group members in particular have given a great deal of time and effort. It should be noted, however, that their involvement and help does not necessarily indicate agreement with every aspect of the final report.

Baroness Jenkin of Kennington (Chair)

Baroness Jenkin of Kennington was introduced to the House of Lords as a peer in 2011. She co-founded Women2Win with the Prime Minister, the Rt Hon. Theresa May MP, in 2005 – an organisation dedicated to increasing the number of female Conservative MPs in Parliament, and she remains Co-Chair. She has a particular interest in obesity, international development issues and food waste. She is a member of the All Party Parliamentary Group on Obesity and joined WRAP as a trustee in January 2016. In June 2016, she introduced a debate on obesity and has also raised the specific issue of childhood obesity in the House of Lords chamber.

Professor Dame Carol Black

Professor Black is Principal of Newnham College Cambridge and Expert Adviser on Health and Work to NHS England and Public Health England. She chairs the Board of Think Ahead, the Government's new fast-stream training programme for Mental Health Social Workers. She is a member of the Welsh Government's Parliamentary Review of Health and Social Care in Wales and Bevan Commission on health in Wales, the board of UK Active, Rand Europe's Council of Advisers, PwC's Health Industries Oversight Board, and the Advisory Board of Step up to Serve. As Principal of Newnham, she is on several committees in Cambridge University, and is one of the Deputy Vice-Chancellors. She is a past-President of the Royal College of Physicians, of the Academy of Medical Royal Colleges, and of the British Lung Foundation, and past-Chair of the Nuffield Trust for health policy.

James Cracknell

After winning 2 Olympic Gold Medals and 6 World Championship titles James Cracknell OBE decided he hadn't had enough rowing so entered the 2005 Atlantic Rowing Race, the ordeal made him realise he'd had enough of rowing. He subsequently took part in endurance/adventure events competing in the 2008/9 South Pole Race, Marathon des

Sables and representing Great Britain at the European Triathlon and World Duathlon Championships. In 2010, James suffered a near fatal accident after being struck from behind by a truck while cycling through Arizona. James works closely with two charities close to his heart Headway (of which he is Vice President) and the RNLI. He is director and Co-founder of a mass-participation running event creation, delivery and IP company.

Helen Crichton

Helen is an Independent Consultant specialising in Strategic, Public and External Affairs. She has worked in senior Public & External Affairs posts within the food industry since 2005 and has a long-standing interest in nutrition in the early years and life course approach. Originally a Registered General Nurse, Helen worked as a cardiothoracic staff nurse at The Royal London Hospital, before retraining as a Family Planning Educator.

Professor Paul Dobson

Paul is Professor of Business Strategy and Public Policy and Head of Norwich Business School at the University of East Anglia (UEA). He is recognised as a leading international authority on pricing strategy, retail competition and supply chain relations in the food industry. He has written extensively on these matters, advised numerous national and international organisations, served as an expert witness in court cases, and provided regular commentary for a wide range of media. He has led major research projects examining the impact of retail pricing on overeating and food waste, the dynamics of price competition in UK food retailing, and alcohol pricing.

Professor Paul Gately

Paul is Director of MoreLife and a Professor of Exercise and Obesity at Leeds Beckett University, he is also a visiting professor in the Department of Surgery and Cancer at Imperial College London. Paul is the Principle Investigator on Public Health England's Whole Systems Approach to Obesity and he is the Co-director of the Centre for Applied Obesity Research. His primary research interest is adult and childhood obesity treatment strategies but he has a focus on the use of systems approaches to tackle the wider determinants of obesity.

Professor Yvonne Kelly

Yvonne Kelly is Professor of Lifecourse Epidemiology at UCL and has published extensively over the past 20 years in the area of child and adolescent health and development. She is Associate Director of the ESRC funded International Centre for Lifecourse Studies in Society and Health (ICLS), and is Director of the ESRC-BBSRC Soc-B Centre for Doctoral Training in biosocial research. She leads a large programme of research on children and young

people's health and development, including understanding the causes and consequences of socioeconomic and ethnic inequalities in health, the uptake and retention of health related and the influences of family and broader social contexts for healthy development.

Dr Mike Knapton

Mike recently retired from the British Heart Foundation which he joined in January 2006, from a clinical background. He trained as a GP at Cambridge University, and has significant experience in Primary Care roles, especially working with heart patients. He has held a number of roles in the NHS including, general practitioner, GP Tutor, Chairman of the Cambridge City Primary Care Trust (PCT) Professional Executive Committee, PCTs' Medical Director in 2004. More recently he was appointed as a non-executive director of Cambridge Hospitals NHS Foundation Trust.

Chris Lowe

Chris is the Senior Director for Corporate Affairs at Asda. Within this role, Chris manages the public policy issues for the company across the UK including the work to ensure that Asda meets the government's challenge to reduce overall sugar across a range of products that contribute to children's sugar intakes by at least 20% by 2020. Prior to Asda, Chris was a public affairs consultant for 14 years, working with clients across a range of sectors and before that was head of public affairs for Scottish & Newcastle, at the time Britain's largest brewery. Chris is a member of the Drinkaware Industry Leadership Group and a member of the NHS-led Programme Board for Reducing Childhood Obesity in Manchester.

Professor Sonia Saxena

Sonia is a professor of primary care at the Faculty of Medicine, School of Public Health, at Imperial College London. Her research aims to reduce the burden of childhood illness, particularly influencing current trends in early cardiovascular risk and other long term conditions diagnosed in childhood. She lead a team of researchers in the Child Health Unit and is also a practising GP in Putney.

Dolly Theis

Author and researcher

Dolly joined the Centre for Social Justice in 2015 and lead research for the childhood obesity report. Prior to joining the Centre for Social Justice, Dolly managed Charlotte Leslie MP's 2015 re-election campaign and worked as Baroness Jenkin's researcher from 2010-13, focusing primarily on food waste and obesity, helping found the Conservative Friends of International Development, and working to increase female representation in Parliament. Prior to this, Dolly helped run the 'Landshare' campaign for Hugh Fearnley-

Whittingstall as part of his River Cottage food campaigns, which supported and connected around 65,000 people in the UK to grow their own food.

Hugo Layard Horsfall

Additional research

Hugo is a final year medical student at St George's, University of London and pursuing an academic neurosurgical career. He is passionate about population health, both through prevention of childhood obesity and improving student wellbeing, as co-founder of the non-profit organisation Happy Space. Hugo is a Scholar at the Healthcare Leadership Academy, which aims to foster and nurture the clinical leaders of tomorrow.

Thanks also goes to Georgina Armfield, Jane Ashworth, Mark Balcar, Olly Buston, Emma Coles, Dr Claire Dempster, Tam Fry, Chris Grant, Lucia Ive, Jutka Halberstadt, Professor Corinna Hawkes, Sally Herd, Karen den Hertog, Ann Hunt, Professor Sir Michael Marmot, Tom Painter, Katie Perrior, QPR in the Community, Courtney Scott, Professor Jaap Seidell and Stephanie Wood.

Sponsors

The CSJ would like to thank all its financial partners, and in particular on this report:



Working Group Chair's foreword

We are facing an obesity time bomb. Not only is our children's health at serious risk, but the health service and our country is too. I was a chubby child and a 'plump' adult until I lost 28lb around seven years ago, and I know just how difficult it is to lose weight and keep it off. I came to this subject and this report not as an expert but as a lay person who simply could not stand by and let things get any worse. Living in an obesogenic society means it is hard for many people to resist temptation and maintain a healthy weight, but it is especially hard for those living in poverty whose choices are limited by circumstance. Political will is needed to effect the change we so desperately need. I urge the Government to take a serious look at the recommendations and our case study. It mustn't let another report on obesity be added to the pile or go into the bin. This is the health and future of our children we are talking about.

The CSJ has always sought to act as a convener to tackle difficult social problems and this is what we attempted to do for this report. We brought together representatives from the main sectors involved. We faced a number of problems in doing so and had some difficult conversations. What we present here is as fair a representation of the different perspectives as we could possibly portray. During the process we came to understand how it is that no country around the world has been able to reverse its obesity trend on a national scale. I do not underestimate the will and political courage needed to make the change. Childhood obesity is an exceptionally complex and contentious issue, but not impossible to address.

Key steps have already been taken. Last year the Government published its Childhood Obesity Plan, and there is much good work being done across England by local authorities, charities, NGOs and universities among others. However, the system is fragmented. Without a joined-up approach, these efforts are at risk of being eclipsed by the growing scale of the epidemic. We recognise the Childhood Obesity Plan in being the welcome "start of the conversation" but emphasise the need for the Government to do much more.

The message in this report is clear: there is no silver bullet to end childhood obesity. It requires robust and persuasive political leadership; cross-party and cross-sector commitment; a long-term vision; a whole-systems and targeted approach; and consistent monitoring and evaluation. The case study of the Amsterdam Healthy Weight Programme demonstrates the power that political leadership can have in bringing people together, seeking change and driving it through. I hope that our political leaders at the national, city and local level will be inspired by the fantastic work being done in Amsterdam, and we encourage them to visit.

I would like to thank all members of the working group for their time and commitment to this report. Their expertise and contributions have been invaluable, and thanks to everyone else who contributed their ideas, thoughts, stories and more. You brought your passion and experience from across the country to help us develop our understanding of this multi-faceted and challenging issue, and made recommendations which will help change our country for the better.

Baroness Jenkin of Kennington

Chair of the Working Group

Executive summary

Childhood obesity is one of the most challenging, complex and contentious problems the Government faces today. One in five children start primary school obese or overweight, and this increases to more than one in three by the time they leave.¹ While obesity affects children from all backgrounds, it is the poorest children who are disproportionately more obese, and this gap continues to increase. By the age of five, children in poverty are twice as likely to be obese as their least deprived peers, and by the age of 11 they are three times as likely.² Children living in poverty are not only more likely to be obese, but they are also more likely to experience a combination of acute social problems over their lifetime.

Other identified barriers for families in deprived areas to live a healthy life and practise healthy behaviours include: being more likely to live in an area with more takeaway and fast food outlets; more likely to live in poor, unsuitable or overcrowded housing;³ and more likely to experience a combination of family breakdown, stress, mental health issues and financial problems. They are more likely to be judged and negatively influenced by social disapproval of both their deprivation and obesity. These factors can impair parents' ability to make rational and controlled decisions.⁴ These conditions make it challenging for families in poverty to practise healthy behaviours, and difficult for policy-makers to know where to begin, especially when education and awareness is not enough.

People think [being] overweight is an abnormal response to a normal environment.
That's not true at all. It's a normal response to an abnormal environment.

Professor Jaap Seidell, Free University, Amsterdam⁵

The obesity crisis is often over-simplified. Two key behaviour patterns will increase a child's chance of being obese: the excessive consumption of unhealthy, calorie-dense, nutrient-poor food and drink; and a sedentary lifestyle. However, advice to 'eat less, exercise more' fails to account for the unfavourable obesogenic conditions and everyday challenges faced, particularly by families in poverty. Interventions that focus on changing an individual behaviour are more difficult without an environment that supports those changes and is conducive to healthy behaviour. To do this, there needs to be consistent messaging and support, starting with families in the first 1000 days, then on to early years and in the early years setting, primary school, secondary school, in the community, in retailers, on TV, at

1 NHS Digital, *Statistics on Obesity, Physical Activity and Diet, England 2017*, Health and Social Care Information Centre, first published 30 March 2017

2 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

3 Gousy H., *Safe and Decent Homes: Solutions for a better private rented sector*, 2014: Shelter, London

4 Gandy K, King K, Hurler S P, Bustin C, Glazebrook K, "Poverty and decision-making: How behavioural science can improve opportunity in the UK", *The Behavioural Insights Team supported by Joseph Rowntree Foundation*, 2016

5 Hella Hueck (2017, September 12), *Betutteling moet uit het verdomhoekje!*, rtlnieuws [last accessed 21/11/17 via: www.rtlnieuws.nl/economie/column/hella-hueck/betutteling-moet-uit-het-verdomhoekje]

events and at home. Everywhere should offer children the opportunity to practise healthy behaviours and make the healthy choice.

This report case-studies the Amsterdam Healthy Weight Programme, which is a politically led, joined-up, whole-systems approach aimed at ending childhood obesity in Amsterdam by 2033. It was launched in 2013 by Amsterdam's Deputy Mayor and Alderman Eric van der Burg, who is considered by people involved as critical to its introduction, delivery and success. Since 2013, childhood obesity rates have already decreased by 12 per cent among all children, and 18 per cent among the poorest children. This report examines the main principles that have contributed to the programme's impact, including political leadership, focus on the wider social impact, whole-systems approach, targeted interventions and consistent monitoring and evaluation. Whilst the approach is focused on childhood obesity, the impacts go well beyond this. These include cultural change and a wider vision that invests in a healthier future to ensure every child experiences optimum mental, physical, emotional and social development. By focusing on areas with the highest childhood obesity rates and thus targeting those more vulnerable to childhood obesity, health inequalities are narrowed, not widened.

This report points to Amsterdam as an example of how political leadership and cross-party, cross-departmental and cross-sector commitment can bring fragmented systems together, by putting in place a common goal and inspiring collective action. The focus should not be on the specific interventions because they are unique to Amsterdam, and may not all be appropriate or transferable to England. The key, therefore, is learning from the 'joining up' in Amsterdam.

This report's recommendations are characterised and designed based on a whole-systems approach and area targeting. The report argues that it is the only way the Government will effectively and sustainably address such a complex issue and that single interventions are insufficient in isolation.

No single sector is fully responsible or will make much difference in isolation from other factors. Only when all key departments and sectors take ownership and recognise their responsibility will we have a society and culture conducive to good long-term health.

Ending childhood obesity will take deep commitment. The Government must start by making a political choice: we can and we will end childhood obesity.

Professor Corinna Hawkes, 2017

Taking inspiration from Amsterdam, the Government should adopt a best-practice approach to childhood obesity, which will include an initial mapping out of all relevant policy areas before agreeing upon specific interventions. Only by knowing what is currently being done can efforts be co-ordinated and gaps be identified. This report seeks to identify some of the areas or 'subsystems' of the whole system in which change should be affected, recommends effective action, and urges the Government to lead a collective commitment to end childhood obesity in England.

There are seven main areas for action. The recommendations in the first area (moving from a fragmented to a collective, whole-systems approach) are essential for the Government

to end childhood obesity. The other areas are essential for Government to effect change. However, the different interventions discussed are not core recommendations and should only be considered during the mapping out of relevant policy areas, after the commitment by Government to end childhood obesity has been made.

1. **Moving from a fragmented to a collective, whole-systems approach:** The Government published its Childhood Obesity Plan in August 2016, but it was framed as the “start of the conversation, rather than the final word”.⁶ The plan sets out the immeasurable aim to “significantly reduce childhood obesity rates over the next 10 years” and contains little robust action other than the Sugary Drinks Industry Levy. The plan was an important step for the Government in recognising its responsibility to tackle the issue, but it is missing numerous essential features. This report calls for:
 - a. Government leadership and a cross-party, cross-departmental, cross-sector commitment to end childhood obesity.
 - b. With one in three children being overweight or obese, it is necessary to introduce a Department of Public Health and Prevention to oversee and deliver a whole-systems strategy to end childhood obesity.
 - c. Pilot long-term, whole-system, Amsterdam Healthy Weight Programme-inspired programmes in areas represented by a mayor or metro mayor.
 - d. Set targets for both ending childhood obesity in England and closing the gap between the least and most deprived children; and consistently monitor and evaluate action.
2. **Families and early years:** The first 1000 days (from conception to a child’s second birthday) are widely considered to be the most formative in a child’s development. Before infants are conscious of what they consume and what they like and dislike, their health behaviours have already been heavily influenced. It is even argued that the first 1000 days have more impact on a child’s future than any other time in their life. For example, the most excess weight gain before a child hits puberty occurs before children reach five years of age.⁷ This report considers the impact of breastfeeding rates in the UK, the role of families and the Troubled Families programme, practical support for parents, the Health Start Scheme, and supporting all early years settings to become ‘Healthy Zones’.
3. **Healthcare:** Since half of parents are unaware of their child’s weight problem, and with the average person visiting their General Practitioner (GP) six times a year,⁸ primary care acts as a key ‘contact point’ for the ‘hardest-to-reach’ children. It has the potential to empower parents to learn about their child’s weight problem, understand the health implications and be directed towards relevant support to help address it. Medical professionals including midwives, health visitors and school nurses also have regular contact with the hardest-to-reach families, often at the most critical time – before a child has developed any weight-related issues. Within the health sector this report considers the importance of medical training curricula, improved data sharing, sufficient service delivery and more targeted interventions.

6 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

7 Gardner DS et al (2009) ‘Contribution of early weight gain to childhood overweight and metabolic health: a longitudinal study (EarlyBird 36)’, *Pediatrics*; 123(1):e67–73. Doi: 10.1542/peds.2008-1292

8 BMA, *General practice in the UK – background briefing*, London: BMA, 2017

4. **Schools:** In recent years, much has been made by the Government of the role schools can play in tackling child obesity and helping to “shape healthy habits”.⁹ The publication of the School Food Plan¹⁰ and the introduction of the PE and Sport premium¹¹ in 2013 were important precursors to the further policy announcements made in the 2016 Childhood Obesity Plan. However, a year on from the Childhood Obesity Plan’s publication in August 2016, no action to date has taken place – and there remain significant challenges for schools. Among other things, this report discusses the idea of all schools becoming Healthy Zones, including obesity rates in Ofsted reporting, creating healthy areas around schools, and targeting the Health rather than the Sport Premium, which has tended to support the ‘sporty kids’.
5. **Sport and physical activity:** Physical activity and sport are fundamentally important to tackling our obesity crisis. Schools should be mandated rather than just encouraged to provide at least two hours of quality physical education per week and 60 minutes of physical activity for all pupils each day. Taking inspiration from Scotland, the Government should set the ambition for England to formally become a ‘Daily Mile Nation’. But sport and activity does not need to stop at the school gate or with formalised games. The Government and Sport England should ensure that investments in physical activity and grass-roots sport include investments in safe and active travel, for example. By adopting a whole-systems approach, the Government can ensure that strategies include all relevant departments’ policies, such as the Department of Transport’s cycling and walking investment strategy and NHS England’s Healthy New Towns. Training on childhood obesity should also be provided for volunteers as part of Sport England’s Strategy for Volunteering.
6. **The food and drinks industry:** The Childhood Obesity Plan recognises that obesity is a complex and multi-faceted problem with many drivers, but that at its root it is caused by eating too much unhealthy food and being physically inactive. This perception has placed a firm spotlight on the food and drinks industry, and this has grown stronger in recent years. The often highly polarised debate between the food NGOs and health lobby on one side, and the food and drinks industry on the other, has dominated a great deal of the media’s obesity coverage around the world.¹² One of the key challenges faced in producing this report was the attempt to convene the two sectors. The CSJ believes that the food and drinks industry must work with the Government and civil society to end childhood obesity, and be willing to change its core business rather than focusing on indirect ways.
7. **Environment:** A child’s ‘external environment’ – including their home, playgrounds, leisure and activity centres, shopping centres, high streets, parks, public spaces and food environment – is affected and influenced by the decisions of many sectors, including planning authorities, transport and environment. Theoretically, interventions are almost limitless. In this report, however, we focus on a few key elements, including health as a licensing objective for local authorities and drinking water access in all public places.

9 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

10 The Independent School Food Plan [last accessed 21/11/17 via: www.schoolfoodplan.com]

11 Department for Education (2017) *PE and sport premium for primary schools*: HM Government, London. [last accessed 21/11/17 via: www.gov.uk/guidance/pe-and-sport-premium-for-primary-schools]

12 Bonfiglioli C et al (2007) “Obesity in the media: Political hot potato or human interest story?”, *Australian Journalism Review*, 29(1): 53–61

Recommendations

This report goes into great detail about different areas that could be changed to tackle childhood obesity, but condenses these topics into 10 key recommendations. Unless each of these is concurrently tackled, the subsequent detail is irrelevant.

On that basis, we make four core recommendations for central Government to own the issue, and six subsequent areas that demand simultaneous attention. We discuss different actions in each of those areas, but have not made recommendations to avoid the cherry-picking of individual actions.

Core recommendation 1

Government leadership and commitment: The first step the Government, and specifically the Prime Minister, must take to end childhood obesity is to commit to doing so, secure the cross-party, cross-departmental and cross-sector commitment to support this and set out a bold, long-term, target-led, non-partisan strategy. The Government should focus on area-based targeting: start in areas with the highest proportion of childhood obesity and then roll out interventions proportionate to an area's childhood obesity rates.

Core recommendation 2

Supporting public health in Government: A successful cross-departmental Childhood Obesity Plan requires all relevant Government departments to take responsibility and be accountable. Public health must play a central role in Government and health must be an objective across all major policies. To achieve this, the Government should introduce a Department of Public Health and Prevention (DPHP) led by a Secretary of State for Public Health and Prevention. The Secretary of State's prime responsibility would be to lead Public Health England, deliver effective cross-departmental public health policies (based on Michie et al.'s behaviour change wheel) and ultimately reduce the NHS England budget and burden by investing in effective prevention. Responsibility for childhood obesity and a team of civil servants would need to be assigned across Government to oversee the delivery of the Childhood Obesity Plan to ensure political cycles and Government reshuffles do not affect its delivery.

Core recommendation 3

Piloting a nationally led, locally driven Mayoral Healthy Weight Programme led by England's mayors: Devolution presents a key opportunity to tailor and target childhood obesity interventions and ensure efforts are overseen by the mayors who hold the required powers to deliver effective programmes. The Government should call upon England's mayors, including London, Cambridgeshire and Peterborough, Greater Manchester, Liverpool City Region, Tees Valley, West of England, West Midlands, Bristol and Torbay, to commit to, design and deliver tailored, targeted and outcomes-led healthy weight programmes in their areas. This includes joining up existing services and strategies, and drawing upon existing resources. Through national leadership and supervision, area-based projects can share best practice, compare success and localise actions to ensure resources are not wasted. Mayors should focus on area-based targeting: start in areas with the highest proportion of childhood obesity and then roll out interventions proportionate to an area's childhood obesity rate.

Core recommendation 4

Setting targets and monitoring action – The Childhood Obesity Plan must include two main targets: 1) End childhood obesity by 2037 with shorter-term targets such as halving childhood obesity rates by 2027, 2) Close the gap between the most and least deprived children, with shorter-term targets such as halving the gap by 2027. Like in Amsterdam, where the target has been set at no obese children in Amsterdam by 2033, the Government must be ambitious by setting targets high and breaking these down into shorter-term goals. Actions must also be monitored closely to build the evidence base, so the importance and effectiveness of ending childhood obesity can be established and articulated. This could be conducted by the new Research Policy Unit for obesity launched in 2017.

Recommendations for areas demanding simultaneous attention

1. **Families and early years:** Any obesity strategy must engage with families at the earliest possible opportunity and consider strategies that engage providers in early years settings. This should be done through the Troubled Families programme, food education and support targeted at new parents, and targeting nursery and childcare providers.
2. **Healthcare:** An obesity strategy must engage with medical professionals across all services to ensure it is a priority in their training, service and daily practice. It should become a particular core concern of primary care practitioners at each patient contact, and should work together with schools on data sharing.
3. **Schools:** Schools have a fundamentally central role to improving our obesity rates. The Department for Education must establish and drive a national strategy, particularly focused in primary schools. Schools have a role not just in educating but in providing healthy food, physical activity, the built environment, and data sharing with local health services.
4. **Sport and physical activity:** Physical activity strategy in both the Department for Education and the Department for Digital, Culture, Media and Sport must be joined up and have the ambition of tackling childhood obesity as core to its values. However, a strategy for physical activity must also relate to transport, infrastructure projects, and the role the third sector plays in community sports.
5. **The food and drinks industry:** At the root of many of our obesity problems is the over-consumption of unhealthy food. Any strategy to counter obesity must tackle the food industry at a core level. This must include properly informing the public about what they are eating, responsible advertising, clear labelling, reformulation where appropriate, and making healthy choices easier.
6. **The obesogenic environment:** The environment in which we live each day fundamentally dictates the parameters of some of our choices. Our system of planning and building must recognise this and make health a core objective of its function.

Introduction

Described as an epidemic, childhood obesity is one of the most challenging, complex and contentious problems the Government faces today. There are more obese children in England than the European average¹³ and it is the poorest children who are worst affected.¹⁴

The evidence base on what causes childhood obesity, especially for children in poverty, is still being built. Despite this, it is clear from the evidence that environmental rather than genetic factors are the underlying causes of the childhood obesity crisis. Two key behaviour patterns will increase a child's chance of being obese: the excessive consumption of unhealthy, calorie-dense food and drink; and a sedentary lifestyle. However, viewing obesity purely from the 'energy in, energy out' perspective disregards the multiple social, physiological, genetic, economic and emotional drivers of those behaviours.

Obesity and overweight are more likely to develop in an environment that lacks the incentive or support for people to live otherwise, and thus the ability to be personally responsible and accountable. Interventions that focus on changing an individual behaviour are insufficient without an environment that support those changes and is conducive to healthy behaviour. One report goes as far to state that **"individual treatment is powerless against an environment that offers so many high-calorie foods and labour-saving devices"**.¹⁵

Individual responsibility is important. However, young children in the UK are reliant on parents/carers and school for their consumption, health behaviours and choices. This report is based on three main themes:

- a. For parents to make the healthiest choices for themselves and their children, they need to be empowered and educated to do so, and there must be an environment that makes this easy, convenient and affordable.
- b. Poverty has a profound impact on people's lives and the choices they can make. The link between poverty and childhood obesity shows that it is disproportionately more challenging to live a healthy life in poverty, so interventions must be intensified proportionate to need.
- c. Most people know that gaining weight is relatively easy, but losing it is much more difficult.

¹³ OECD/EU (2016), *Health at a Glance: Europe 2016: State of Health in the EU Cycle*, OECD Publishing, Paris

¹⁴ Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

¹⁵ Katan MB (2009) "Weight-Loss Diets for the Prevention and Treatment of Obesity", *New England Journal of Medicine*; 360(9):923–5

There should therefore be a two-pronged approach:

1. Government must provide the sustainable, joined-up and long-term support for children who are already obese or overweight;
2. Government must invest in preventative approaches for future generations. No child should be forgotten.

Childhood obesity is complex enough without political point-scoring and ideological barriers to tackling it. It would be hard to find a politician who does not want every child to be healthy. Yet ideology often gets in the way. A fear of infringements upon individual freedom and choice from a 'nanny state' may prevent governments from taking bold, ambitious and long-term action. However, tackling childhood obesity has the potential to transform lives and communities beyond obvious improvements to health. The Government has a duty to protect children's health. This requires strong action and leadership, but will benefit the entire population. Childhood obesity is inextricably linked to multiple social, environmental and economic issues. By embracing the complexity of childhood obesity and committing to end it, the Government will not only address the issue at hand, but it will tackle many other issues too.

This report is in three sections: Chapter 1 examines the disproportionate link between poverty and childhood obesity; the key drivers of the child and adult obesity crisis; what reports on obesity over the last ten years have revealed and recommended; what the current approach in England includes and proposes; and what success looks like. Chapter 2 profiles the Amsterdam Healthy Weight Programme, which has contributed to a 12 per cent decrease in child obesity rates among all children and an 18 per cent decrease among the most deprived children in Amsterdam since 2013. Finally, Chapter 3 examines the key areas where the Government should intervene and sets out 46 recommendations which, introduced together as part of a long-term strategy, aim to help the Government end childhood obesity in England.

From seat belts to smoking, we protect our children, but we have a blind spot when it comes to obesity. Childhood obesity has outcomes we would not accept from any other issue.

chapter one

Why should we address this?

State of the nation: social justice and England's childhood obesity crisis

Health inequalities that could be avoided by reasonable means are unfair.
Putting them right is a matter of social justice.

The Marmot Review, 2010

Obesity rates are increasing among England's poorest children

Children in England's most disadvantaged areas are substantially more likely to be obese, and the gap in childhood obesity rates between our most and least deprived children has continued to widen since 2006.¹⁶ Thanks to the Government's National Child Measurement Programme (NCMP), vital public health intelligence on childhood obesity rates has been documented for over a decade and inequalities have been brought to light. Childhood obesity rates almost double between the beginning and end of primary school. One in five children start primary school obese or overweight, which increases to over one in three by the time they leave primary school.¹⁷ **While obesity affects children from all backgrounds, it is our poorest children who are disproportionately more obese.**

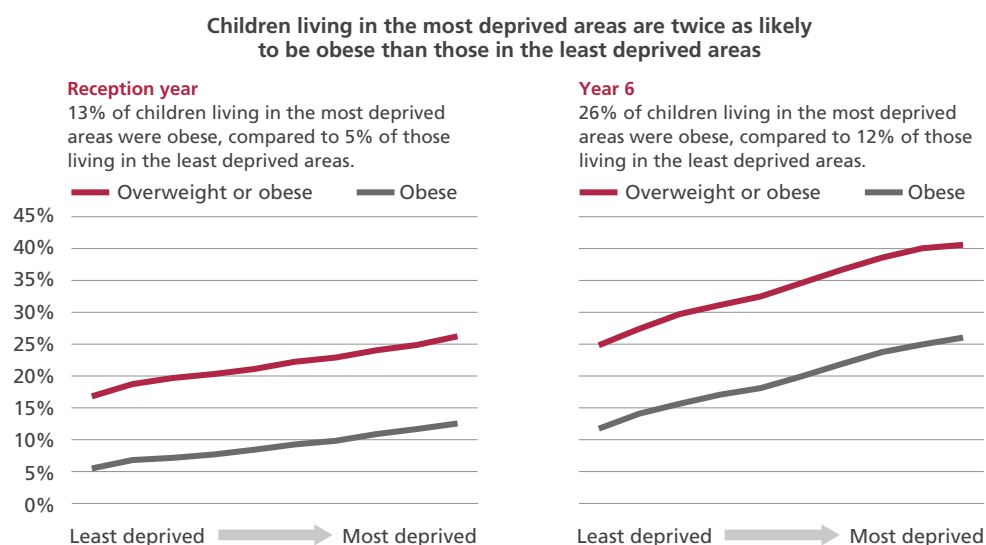
By the age of five, children in poverty are twice as likely to be obese as their least deprived peers, and by age 11 they are three times as likely.¹⁸

¹⁶ The year when the first National Child Measurement Programme dataset was available.

¹⁷ NHS Digital, *Statistics on Obesity, Physical Activity and Diet, England 2017*, Health and Social Care Information Centre, first published 30 March 2017

¹⁸ Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

Figure 1: Childhood obesity – prevalence by level of deprivation



Source: Based on the Department of Communities and Local Government Index of Multiple Deprivation deciles: www.gov.uk/government/uploads/system/uploads/attachment_data/file/6871/1871208.pdf. For more information: Table 6a, National Child Measurement Programme (NCMP) 2015–16

Childhood obesity rates are also higher among black and minority ethnic children. The childhood obesity rates among Black African and Caribbean children are almost 50 per cent higher than among white children.¹⁹ Although there is a growing body of evidence around the link between ethnicity and childhood obesity, substantially more evidence is required to better understand and identify the risk factors.²⁰

Inequality in child obesity rates is getting worse

Between 2006/7 and 2015/16 the obesity gap between the richest and poorest five-year-olds and 11-year-olds grew by almost two and four percentage points respectively.²¹ According to the Royal College of Paediatrics and Child Health, in 2016, 40 per cent of all 11-year-olds in the most deprived areas were obese and overweight, compared to 27 per cent in the least deprived areas.²² While childhood obesity rates among the most affluent children are levelling off or decreasing, they are continuing to increase for the poorest.

There are epidemiological debates over the link between deprivation and childhood obesity, in particular, whether the relationship between deprivation and childhood obesity is linear or not, i.e. whether childhood obesity rates increase in a linear trajectory as children get poorer.²³ Based on NCMP data and the largest population representative samples, childhood obesity rates have been consistently shown to have the highest prevalence in the most deprived areas, with an approximately linear trajectory in between

19 Organisation for Economic Co-operation and Development (2014) *Obesity and the Economics of Prevention: Fit not Fat*. [last accessed 21/11/17 via: www.oecd.org/unitedkingdom/Obesity-Update-2014-ENGLAND.pdf]

20 Zilanawala A. et al (2015) 'Race/ethnic disparities in early childhood BMI, obesity and overweight in the United Kingdom and United States', *Int J Obesity*, 39:520–529

21 NHS Digital, *Statistics on Obesity, Physical Activity and Diet, England 2017*, Health and Social Care Information Centre, first published 30 March 2017

22 Royal College of Paediatrics and Child Health, *State of Child Health: Report 2017*, London: 2017, RCPCH, p.54

23 Griffiths C, Gately P, Marchant PR, Cooke CB (2013) 'Area-level deprivation and adiposity in children: is the relationship linear?' *Int J Obesity*, 37:486–492

(i.e. a strong social gradient in childhood obesity).²⁴ Although further research is required to continue examining the relationship between deprivation and childhood obesity (there are also multiple possible metrics for both deprivation and childhood obesity), NCMP data clearly shows that there is a social gradient in childhood obesity rates.

The double burden: deprivation and obesity

Children living in poverty are not only more likely to be obese, but they are also more likely to experience a combination of acute social problems over their lifetime, defined by the CSJ as “the five pathways to poverty”:²⁵ family breakdown; educational failure; addiction to drugs and alcohol; worklessness and welfare dependency; and serious personal debt. The five pathways capture the complex nature of deprivation and its associated problems, showing that **a one-stop solution does not exist**.

Like poverty, the obesity crisis is often over-simplified. Advice to ‘eat less, exercise more’ fails to account for the unfavourable ‘obesogenic’ conditions and the everyday challenges faced by families, particularly those in poverty. These include mental health issues, poor or inadequate housing, financial problems, time pressures, stress, a lack of choice in the local food and home environment, the powerful influence of food marketing, or confusion about what food and drink is healthy. Making the healthy choice is not always possible, easy or clear.

This report examines the childhood obesity crisis through the perspective of poverty to better understand what we do know about childhood obesity, what the main barriers are to ending it and how the Government can start to address these. The recommendations seek to account for the complex social context in which a person’s socio-economic circumstance dictates their choices, to ensure that resources can be matched with need.

Childhood obesity: a risk to health

Obesity puts children at serious risk of immediate and long-term physical, emotional, psychological and social problems, and it is the poorest children who are most affected. Associated problems include bullying, depression, anxiety, educational failure and social isolation. Health risks include high blood pressure, asthma, poor sleep, joint problems, fatty liver disease, cancer, type 2 diabetes and multiple tooth extraction.²⁶ One 2017 study examining the trend of premature type 2 diabetes development during childhood found that over 600 children in England and Wales have been diagnosed (the first children to be diagnosed with type 2 diabetes was in the 2000s).²⁷ Type 2 diabetes is a preventable condition normally diagnosed later in adult life, and linked to several major complications such as blindness and limb amputation. The 14 per cent increase since 2016 was highest among children living in deprived areas and children from Asian and black minority

24 Rutter H., Hancock C., Ells L (2014) ‘Reply to ‘Area-level deprivation and adiposity in children: is the relationship linear?’
Int J Obesity; 38:160

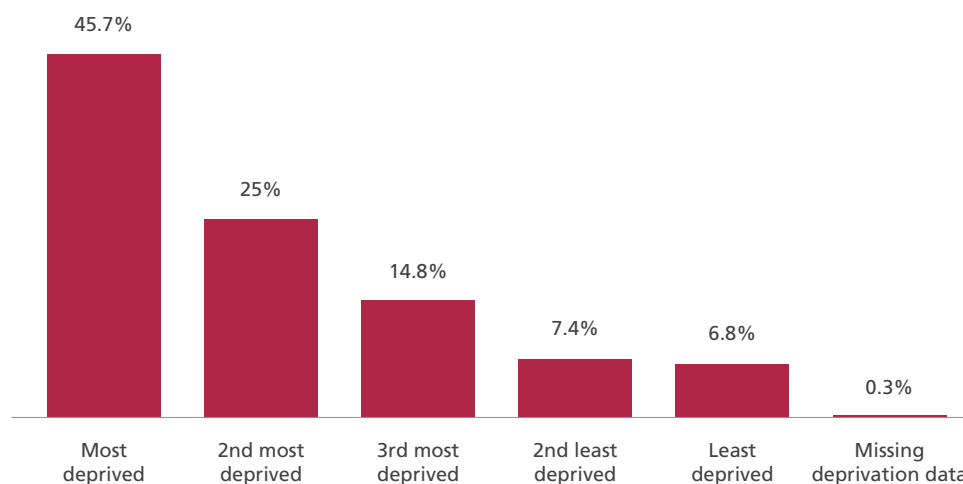
25 Centre for Social Justice (2014) *Breakthrough Britain 2015 – An overview*. CSJ, London

26 Centers for disease Control and Prevention (2016), *Childhood Obesity Causes & Consequences* [last accessed via: www.cdc.gov/obesity/childhood/causes.html]

27 Sarah Knapton (2015, September 17), *Obese three-year-old becomes youngest child diagnosed with Type 2 diabetes*, The Telegraph. [last accessed 21/11/17 via: www.telegraph.co.uk/news/health/news/11869249/Obese-three-year-old-becomes-youngest-child-diagnosed-with-Type-2-diabetes.html]

ethnic backgrounds.²⁸ **There is a clear social gradient in childhood type 2 diabetes. Almost 50 per cent of type 2 diabetes cases are among the most deprived children compared to just 6.8 per cent of cases among the least deprived.**

Figure 2: Numbers of children and young people with type 2 diabetes by deprivation quintile, 2015/16



Source: National Paediatrics Diabetes Audit Report 2015–2016

Obesity in childhood is also associated with poor emotional and psychological health, such as depression, low self-esteem and a distorted emotional relationship with food.²⁹ It increases a child's chance of educational failure as poor health and bullying can result in school absenteeism.³⁰ Obesity is also associated with a higher risk of drinking alcohol and smoking cigarettes in childhood.³¹

Childhood obesity leads to problems in adulthood

Obese children are more likely to be obese adults. As an obese adult, they are at a high risk of early death, more years spent with disability and of developing serious excess weight-related diseases such as type 2 diabetes, cancer, heart disease and stroke.³² They may also experience difficulty finding and obtaining employment due to poor health, which can be costly for employers and the economy due to losses in productivity.³³ In May 2014, there were 7,440 working-age Disability Living Allowance claimants whose main disabling

28 NPDA, *National Paediatrics Diabetes Audit Report 2015–2016 Part 1: Care Processes and Outcomes*, 2017: NPDA and RCPCH, London

29 Kelly Y., Patalay P., Montgomery S., Sacker A., 'BMI Development and Early Adolescent Psychosocial Well-Being: UK Millennium Cohort Study', *Paediatrics*, Vol. 138, No. 6, December 2016: e20160967

30 *Health risks of childhood obesity*, Public Health England [accessed via: www.noo.org.uk/NOO_about_obesity/obesity_and_health/health_risk_child (21/11/2016)]

31 Kelly Y., Patalay P., Montgomery S., Sacker A., 'BMI Development and Early Adolescent Psychosocial Well-Being: UK Millennium Cohort Study', *Paediatrics*, Volume 138, number 6, December 2016: e20160967

32 Public Health England, *Guidance: Childhood obesity: applying All Our Health*, published online 1 April 2015 [last accessed 07.08.17 via: www.gov.uk/government/publications/childhood-obesity-applying-all-our-health/childhood-obesity-applying-all-our-health]

33 *Tackling obesity across the local authority: Workplaces*, Public Health England [accessed via: www.noo.org.uk/LA/tackling/workplaces (21/11/2016)]

condition was obesity.³⁴ Obesity in adulthood is also associated with poor emotional and psychological health, including depression, anxiety, low self-esteem, low quality of life and body dissatisfaction.³⁵

Economic burden of obesity

The obesity crisis is a burden not only on individuals and society, but on the economy and public services too. We are snowballing towards a National Health Service (NHS) crippled by the mounting cost of obesity. NHS England is estimated to spend between £5.1 billion and £6.1 billion a year on the cost of illness related to overweight and obesity,^{36,37} and a further £8.8 billion on type 2 diabetes alone (almost a 10th of the entire NHS budget).³⁸ Children and young people in England consume more sugary soft drinks than children and young people in Europe, resulting in tooth extractions now being the main reason why children are admitted to hospital.³⁹ In 2015/16 there were almost 50,000 multiple tooth extractions in children under the age of 18 in England (a 10.7 per cent rise since 2012/13), which cost the NHS more than £35.6 million.⁴⁰

Figure 3: Oral health survey of five-year-old children



Source: National Dental Epidemiology Programme for England: oral health survey of five-year-old children 2012, Public Health England

Despite these crippling costs and the direct link to potentially fatal diseases, the Government spends substantially less – around £638 million per annum – on obesity prevention programmes.⁴¹ In 2014, the results of 109 local authorities across England

34 Department for Work and Pensions (DWP), *An independent review into the impact on employment outcomes of drug or alcohol addiction, and obesity: Call for evidence*, London: DWP, July 2015

35 *Consequences of Obesity*, More Life [last accessed 21/11/17 via: www.more-life.co.uk/Default.aspx?PageName=Consequences+of+Obesity]

36 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

37 HOOP, *Tackling obesity: all talk, no action* (2014) HOOP, London

38 NHS England, *Annual Report and Accounts 2014–15*, London: 2015, NHS England, p.10

39 *Facts and Figures*, Oral health Foundation [last accessed 21/11/17 via: www.nationalsmilemonth.org/facts-figures/]

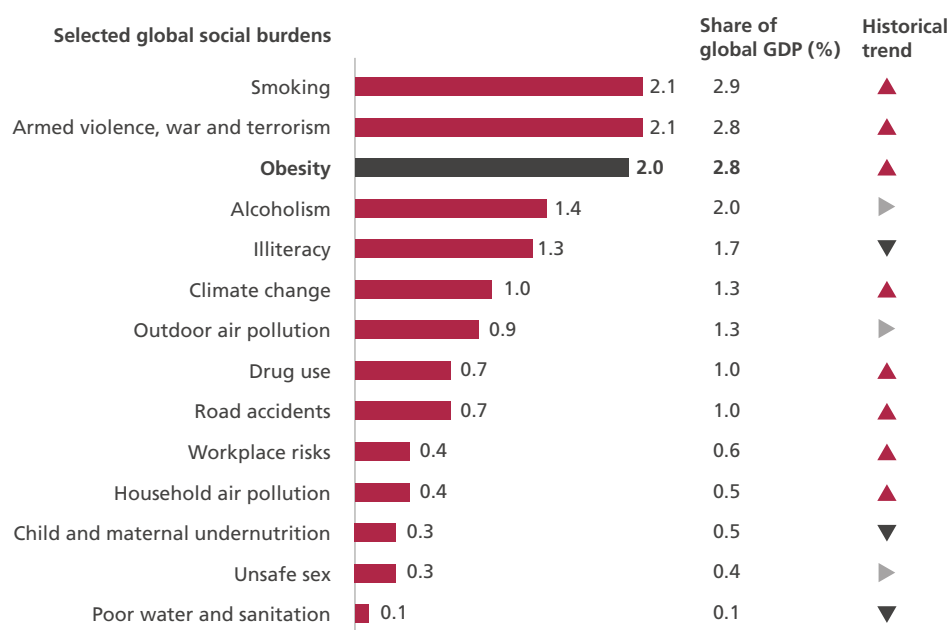
40 *More than 160 operations a day to remove rotting teeth in children*, Local Government Association (2017, Jan 12) *press release* [last accessed 21/11/17 via: www.local.gov.uk/about/news/more-160-operations-day-remove-rotting-teeth-children]

41 Royal College of Paediatrics and Child Health (RCPH), *Tackling England's childhood obesity crisis*: (RCPH), first published online: October 2015

reporting on their public health spending were published. The results showed a clear disparity between the cost of an issue and what they spent tackling it. Obesity is reported to directly cost between £5.1 billion and £6.1 billion compared to sexual health, which is reported to cost an estimated £1.5 billion, and drug and alcohol misuse, which is reported to cost almost £4 billion. Yet, local authorities spent an average of 0.9 per cent of their budget on children and young people's weight management services, compared to 29 per cent on substance misuse and 21 per cent on sexual health.⁴² Thus, despite obesity costing NHS England substantially more, local authorities dedicate a fraction of their budget to it compared to other less costly (but no less important) problems.

Obesity is considered to be one of the top three most costly social burdens generated by human beings globally (see figure 4). In the absence of concerted action, it is estimated that by 2050, obesity and overweight will cost the NHS almost £10 billion a year,⁴³ and the full economic cost will rise from around £27 billion⁴⁴ today to £50 billion⁴⁵ by 2050. The 'no-expense-spared' approach to obesity treatment, while failing to invest properly in prevention, is turning the NHS into a crisis management service, rather than the 'national health service for prevention' that Sir William Beveridge intended it to be.⁴⁶

Figure 4: Estimated annual global direct economic impact and investment to mitigate selected global burdens, 2012



Source: McKinsey Global Institute, 2014⁴⁷

42 HOOP, *Tackling obesity: all talk, no action* (2014) HOOP, London

43 The Food foundation, UK Health Forum, World Obesity, Food Research Collaboration, Informas., *Priorities for tackling the obesity crisis in England: Expert agreement on what needs to be done*, London: The Food Foundation et al, 2016

44 National Obesity Observatory (NOO), *The economic burden of obesity*, London: NOO, October 2010, p.2

45 Butland B, Jebb S, Kopelman P, et al., *Tackling obesities: future choices – project report* (2nd Ed), London: Foresight Programme of the Government Office for Science, 2007, p.5

46 Sir William Beveridge, *Social insurance and allied services, Report by Sir William Beveridge*, London: HMSO, 1942

47 McKinsey Global Institute, *Overcoming obesity: An initial economic analysis, Discussion paper*, 2014: London

The causes of childhood obesity in England's most deprived areas

Obesity is a complex problem with many drivers, including our behaviour, environment, genetics and culture.

The Government's Childhood Obesity Plan, 2016

Anyone examining the vast body of obesity-related research from multiple disciplinary sources understands that there are numerous potential causes of obesity. Studies on childhood obesity often highlight the socio-economic inequalities in childhood obesity, but there remains a substantial gap in knowledge and evidence about what causes children in poverty to become obese. The first UK cohort study, published in 2016, to specifically examine and compare potential risk factors to explain why poorer children are more likely to be obese, based its study on data from 21,349 five – and 11-year-olds, and identified several risk factors divided into three main groups: mother's health behaviours, child's physical activity and sedentary behaviours, and child's diet.

The report found that obese and overweight children living in the poorest families were more likely to have mothers who were obese or overweight themselves, who did not breastfeed or breastfed for a shorter duration, who introduced their infant(s) to solid foods early, and who smoked during pregnancy. The poorest children were more likely to spend more time watching TV and using a PC (and so have a greater exposure to food and drinks advertising), experience later and more irregular bedtimes, do less sport, be more physically inactive, engage less in active play with their parent, live in an area without a playground, not have breakfast every day and eat less fruit. The metrics for a child's diet are limited as they only cover portions of fruit, breakfast and sweet drinks. However, the results did show a positive correlation between children in deprivation and the high consumption of sugary drinks (as a main drink in between meals and once a day) and a negative correlation between children in deprivation and fruit consumption.⁴⁸

It is important to note that these risk factors increase a child's chance of being obese, rather than certainly causing obesity – i.e. it is not that mothers who smoke during pregnancy, do not breastfeed, introduce their baby to solid foods early or allow their children to watch too much television are going to have obese children. It is that, statistically, obese children in deprived areas are more likely to have experienced the risk factors identified.

There are several other identified barriers for families in deprived areas to live a healthy life and practise healthy behaviours. They are more likely to live in an area with more takeaway and fast food outlets, which is known to increase fast food consumption.⁴⁹ They are more likely to have a poor diet⁵⁰ including an increased consumption of processed food and drink, which is linked to low education levels.⁵¹ The most deprived children are more

48 Goisis A., Sacker A., Kelly Y., 'Why are poorer children at higher risk of obesity and overweight? A UK Cohort Study', *European Journal of Public Health*, First published online: 10 December 2015

49 Public Health England, *Healthy people, healthy places briefing – Obesity and the environment: regulating the growth of fast food outlets*, 2014: Department of Health, London

50 Modi Mwatsama, Lindsey Stewart (2005), *Food Poverty and Health*, Faculty of Public Health [last accessed 21/11/17 via: www.fph.org.uk/uploads/bs_food_poverty.pdf]

51 Centre for Diet and Activity Research, *Food income and education: who eats more of what?* [last accessed 21/11/17 via: www.cedar.iph.cam.ac.uk/resources/evidence/food-income-education-graphic/]

likely to consume 10 per cent less fruit and vegetables than the least deprived children.⁵² This links to evidence that healthy foods are three times more expensive per calorie than less healthy foods, and because less healthy foods tend to have greater price reductions in retail promotions than healthy foods.⁵³ ASDA explained that this was largely because less healthy foods like crisps have a longer shelf life so supermarkets know customers will bulk buy these products.

I can't even afford fruit, so I ended up with anaemia, with low folic levels and iron... when you only have £19 for food each week, you end up with the crap stuff.

Panel member, Fabian Commission on Food and Poverty 2015

Despite spending less on food in real terms than affluent families, the amount poor parents spend is double the percentage of their income compared to the richest parents. The 2013 Living Costs and Food Survey showed that the poorest 10 per cent of households only spent an average of £46 on food and non-alcoholic drinks each week but that accounted for 15 per cent of their household expenditure. In contrast, the richest 10 per cent spent more than £80 but this amounted to less than 7 per cent of their expenditure.⁵⁴

Disadvantaged families are also more likely to live in poor, unsuitable or overcrowded housing,⁵⁵ making cooking and eating at a table together difficult or impossible, and they are also more likely to experience a combination of family breakdown, stress, mental health issues and financial problems. This can impair parents' ability to make rational and controlled decisions. This state, referred to as a 'cognitive overload', means making appropriate and healthy decisions for their children is much more difficult.⁵⁶

These challenging conditions make it difficult for families in poverty to practise healthy behaviours and difficult for policy-makers to know where to begin, especially when education and awareness is not enough. In the 2011 Low Income Diet and Nutrition survey, 60 per cent of parents stated they wanted to change their children's diet.⁵⁷ Yet, unlike smoking – which is unequivocally linked to cancer, inessential for survival and therefore easier to advise and regulate against (although even then it took around 50 years after the evidence was confirmed to do so) – childhood obesity is substantially more complicated.

52 NHS Digital, *Statistics on Obesity, Physical Activity and Diet, England 2017*, Health and Social Care Information Centre, first published 30 March 2017

53 Fabian Commission of Food and Poverty (2015, March 16), *A Recipe for Inequality, Fabian Society* [last accessed 21/11/17 via: http://foodandpoverty.org.uk/wp-content/uploads/2015/03/ARecipeforInequality_WEB.pdf]

54 Bulman J et al (2013) "Living Costs and Food Survey. Technical Report for survey year: January – December 2013, Great Britain and Northern Ireland", *Office for National Statistics, ONE Social Surveys*, December 2014

55 Gousy H., *Safe and Decent Homes: Solutions for a better private rented sector*, 2014: Shelter, London

56 Gandy K, King K, Hurlé S P, Bustin C, Glazebrook K, "Poverty and decision-making: How behavioural science can improve opportunity in the UK", *The Behavioural Insights Team supported by Joseph Rowntree Foundation*, 2016

57 Food Standards Agency, *Low income diet and nutrition survey (2011)* [last accessed 21/11/17 via: <http://webarchive.nationalarchives.gov.uk/20110110172405/www.food.gov.uk/science/dietarysurveys/lidnsbranch/>]

Case studies

To help illustrate the complexity of childhood obesity for the most deprived children, the Lambeth Healthy Weight Project has provided four children's stories, written by the project's Family and Systemic Psychotherapist, Dr Claire Dempster. These case studies are representative of the complexity of the childhood obesity crisis for England's most deprived families. They demonstrate that tackling childhood obesity in families that face complex needs is not simple, and doing so often brings to light numerous other issues that also need addressing.

Sally's story

Sally is a 12-year-old white British girl. The referral [to the Lambeth Healthy Weight Project] came following concerns by her School Nurse as well as Social Services. Both were worried about Sally being very overweight (obese) in the context of parental neglect, including her mother Nancy's poor engagement with services, Sally's school absenteeism, a history of domestic violence and maternal mental issues. It quickly emerged that Sally's mother Nancy also wanted support and help. In addition to her mental health struggles, Nancy reported diabetes and other physical health issues. The family home was in a poor state of neglect and had been broken into by Sally's brother, including on one occasion when he hosted a party in which a person he had invited urinated in Sally's treasured gifts.

Sally was initially presented to the project as what is medically termed 'morbidly obese'. She was also being severely bullied at school and so was not attending. Nancy could not get Sally to school and would sit and cry because she felt she had let Sally down. This in turn led Sally to care for her mother. Despite these profound difficulties there was a sense from the start that both mother and daughter wanted things to be different; both engaged quickly and were keen to learn. They were, however, highly mistrustful and fearful of other services. Sally already had a CIN (Child in Need) social worker.

The project team took time to listen to both family members. The treatment was based on working with the family, first addressing the stigma and shame associated with obesity. Project members spoke about safety and good health rather than taking a critical and judgmental approach. The project quickly linked up with other services involved and prioritised working with the family's strengths and resources.

A key point came about when Nancy trusted project staff enough to ask for help, and she told the Family Therapist how she could no longer care for Sally. This led to the project making an emergency referral to adult mental health services whereupon Nancy was admitted to psychiatric care. The benefit was that Nancy remained in charge of this process and was active in her own treatment, despite the very real pain and distress involved. Running alongside this, a referral was made regarding Sally who went into emergency care with her uncle and then into foster care.

Project work continued with Sally and her foster carer whilst also remaining respectful and connected to Nancy, who remains an important person in Sally's life. The project knows how this is a matter frequently overlooked by services and how its neglect often has a negative and damaging effect on children and their carers. The project's ability to draw on its family therapy background and practice enabled it to consider the impact on the whole family, ensuring that relationships were nurtured and maintained, and that critical moments of change were well-managed.

This family-centred approach brings its own challenges. The project engaged with the foster carer who responded positively and continued working with us. Helpfully the foster carer had her own commitment to health and well-being, however it was difficult initially to help the carer to understand and appreciate Sally's habits and culture in relation to health and diet, which were very different from her own. There was a risk at one point of Sally's habits being regarded by the foster carer as defiance.

Careful thought was given to supporting the foster carer in developing a keener understanding of the place food had in Sally's life i.e. both emotionally and culturally. This enabled the gap to be bridged between the foster carer's beliefs and Sally's own experience so they could both reach a better understanding, a more compassionate approach and, indeed, vastly improved health outcomes. This included managing contact sessions which were often difficult and sometimes risked becoming increasingly so as food had been a 'gift' for Sally during these times. The foster carer was supportive in helping Sally's mother make contributions of other kinds. In turn, Nancy's role in enabling Sally to make changes has been maintained throughout and likely to be key in sustaining these.

Sally's weight has gone from being above the 99th centile to now being a healthy weight for her height. She also has full attendance at school and is making friends. Previously she was unable to read and is now catching up on her education. Her message to the project and to other young people is 'you can do it' and the project taught her that you can believe in yourself.

Reine's story

Reine is a five-year-old girl of Congolese heritage and part of a Christian family. She was referred to the Lambeth Health Weight Project by a local paediatrician. Reine's mother Syntyche came to the UK as a 16-year-old asylum seeker after her whole family had been murdered in the war. Syntyche gained a degree in Electrical Engineering and then married. Both she and her husband suffered trauma because of their experiences in the Congo and so sought therapy.

On the birth of their first child, they suddenly had a family again, which in its own way brought some healing. However, one consequence of their experiences was that Syntyche found it hard to deny her daughter anything and, fearing that Reine was lonely, led her to overcompensate. Syntyche sought advice but, to the detriment of Reine's health, the health visitor at the time suggested that mother and daughter went to McDonald's to meet other mums and children.

Reine subsequently developed behavioural problems in relation to food which Syntyche found hard to manage. Syntyche, in not wanting to make a fuss in a country that she felt pleased to be in, was embarrassed in these social situations and gave in to her daughter. Compounding this was her unfamiliarity with Western foods.

As part of the project, Syntyche developed strategies to say 'no'. There was careful and sensitive teaching regarding food types, portion sizes and the importance of exercise. The key to change was the family gaining a better understanding that the underlying cause and context to Reine's weight issues was cultural isolation and loneliness.

Reine is now quickly moving towards a healthy weight.

Tiana's story

Tiana is an 11-year-old British girl of African-Caribbean heritage. When Tiana was referred to the Lambeth Healthy Weight Project it was made known that she has complex medical conditions in addition to her obesity, which means that she can't communicate verbally and has severe breathing problems. Additionally, her whole family have severe back problems (caused by moving Tiana, who is immobile and obese) and depression.

The project spent time looking in detail at Tiana's feeding plan, working out with the family how food was often an expression of their relationship with her, e.g. one parent needing to feed Tiana quickly to get to work, another to keep her happy and as an expression of being playful/sociable by her sibling. Respite care were also feeding Tiana lots of puddings. Consequently, Tiana had been given more than she needed to eat. As the family responded to questions about Tiana's feeding, they could make these connections themselves.

Tiana now has less to eat and the family have been supported in thinking about their interaction with her, what keeps her happy and their own role in relation to this. Tiana also no longer needs a sleep ventilator, takes less medication and only needs one carer to lift her. This has changed the family's life. To achieve this, the project had to work closely not just with the family but with the school and the respite home too. This illustrates the need to deconstruct and understand better how a young person has become overweight, as well as the project's vital role of working across the network to plan and address long-term goals, and ensure sustainable change.

David's story

David is an 11-year-old British boy of Ethiopian heritage and part of a Christian family. David was referred to the Lambeth Healthy Weight Project regarding concerns about his weight. Additionally, David has a diagnosis of autism and, with this, some very set patterns of behaviour.

David is the third child of his mother Abeba, who is parenting him and his siblings alone. Abeba reported feeling embarrassed and at a loss to know how best to parent David. She had already found it hard to accept David's diagnosis of autism and struggled to say no to him because of his persistence, which led to increasingly severe problems with his behaviour. Unfortunately, this pattern of behavioural difficulties resulted in stress and difficulties at school.

The project's work has involved helping Abeba to break the day down, making what are small but significant steps of change while at the same time reinforcing parental authority. The project has also supported getting David active.

Positively, his weight is now stabilising. Given that Abeba's other children do not have healthy weight issues, key to change for this family was how to parent a child with specific needs and adapt where the rules may differ. The project also taught the family to recognise that whilst David has specific difficulties and limitations, he also has strengths and capabilities. This is no mean feat given that families often wait a long time for diagnoses of this kind, which can often compound matters and fuel a sense of bewilderment and anxiety.

The Macro Perspective: When did obesity become a crisis?

Obesity is often talked about as a problem that started in the 1980s. However, the recognition of it as a problem has a longer and more complex history. Only over the past 20 years have governments and global organisations around the world appreciated the magnitude and gravity of the issue and framed it as a 'crisis'.

Medical literature on obesity first flourished during the 18th century, with distinguished writers and physicians fervidly debating both its causes and consequences. Among these was the Scottish physician and professor William Cullen (1710–1790), who was one of the first physicians to formally classify obesity as a disease. He argued in his *Practice of Physic* that it should be considered so, since “it renders persons... uneasy in themselves, and, from the inability of exercise, unfit for discharging the duties of life to others”.⁵⁸ However, it was not for another 165 years, in 1948 when the World Health Organisation (WHO) was established, that obesity was formally included in the International Classification of Diseases.⁵⁹ Governments did little to act. Almost no action to combat obesity took place until 1997, when the WHO conducted the first special obesity consultation. Only then did developing countries begin to recognise the need to actively manage escalating obesity rates and reduce the burden of obesity and diet-related medical costs.⁶⁰

While obesity was largely ignored by governments as a problem during the mid-20th century, diet-related disease became a major concern. The relationship between coronary heart disease (CHD) and fat intake caught the most attention.⁶¹ Shortly after wartime rationing came to an end, there was a stark increase in the number of CHD cases, particularly among the more affluent. For example, in the US, eight Senators died of heart disease during the 1960s and 70s alone.⁶² Professor Stewart Truswell, an emeritus professor of human nutrition, observed that during the 1950s there was “...a slow realization that the major degenerative diseases of older life might at least partly be determined by something as humble, as domestic, as enjoyable as the foods we eat habitually”.⁶³

The sudden rise in diet-related disease put food and drink firmly under the spotlight, and scientists and researchers were determined to identify which ones caused diseases such as CHD. This occurred at a time of major consumption transition in developing countries. After years of rationing and the controlled provision of food, which had been the primary barrier to increased consumption, many Western economies improved dramatically and food availability flourished. This resulted in what the WHO described as a “global shift in diet towards increased intake of energy-dense foods that are high in fat and sugars but low in vitamins, minerals and other healthy micronutrients”, as well as an increase in sedentary lifestyles.⁶⁴ People could now eat calorie-dense food in abundance, with few anticipating the consequential health problems. A 2010 review of the key drivers of food consumption in the post-war era identified seven major trends:

58 Thomson J., *The works of William Cullen... containing his physiology, nosology, and First lines of the practice of physic: with numerous extracts from his manuscript papers, and from his treatise of the materia medica*, Vol. 2: *Physiology*, Edinburgh: William Cullen, London: Blackwood, 1827, p.571

59 Garde A., 'EU Law and Obesity Prevention', Vol. 74, *European monographs*: Kluwer Law International, 2010

60 James WPT., 'WHO recognition of the global obesity epidemic', *Int J of Obesity* (2008) 32, S120–S126; doi:10.1038/ijo.2008.247

61 Heasman M., Mellentin J., *The Functional Foods Revolution: Healthy People, Healthy Profits?*, London: Earthscan, 2014

62 Allison Aubrey (2014, March 28), Why we got fatter during the fat-free food boom, National Public Radio [last accessed 21/11/17 via: www.npr.org/sections/thesalt/2014/03/28/295332576/why-we-got-fatter-during-the-fat-free-food-boom]

63 Truswell, A S (1994), "The evolution of diets for western diseases", in D Harriss-White and R Hoffenberg (editors), *Food: Multidisciplinary Perspectives* (Blackwell, Oxford)

64 WHO, *Global Strategy on Diet, Physical Activity and Health*, 'What are the causes?' [last accessed 21/11/17 via: www.who.int/dietphysicalactivity/childhood_why/en/]

Key drivers of food consumption

1. An increase in income and lower food prices led to an increased consumption of processed and animal-based foods;
2. Urbanisation increased the number of people leading more sedentary lives while consuming more energy-dense, convenient and fast foods;
3. Trade liberalisation reduced the price and increased the availability of unhealthy, energy-dense, nutrient-poor foods;
4. The rise and increased expansion of transnational food corporations such as McDonald's, KFC and Nestlé, contributed to the development and availability of fast food and energy-dense alternatives to traditional meals;
5. Retailing and the rising dominance of supermarkets increased the supply of readily-available, cheap and unhealthy foods;
6. The rise in food industry marketing has had "a profound effect" on the food and drinks people consume. TV advertising is potentially the single most responsible factor for the childhood obesity epidemic in the USA;
7. The shift in consumer attitudes and behaviours away from necessity towards more socially constructed aspirations, such as social status, has increased consumption, which is made possible by the availability of cheap and convenient food and drink.⁶⁵

To address the sudden rise in diet-related disease and respond to changing consumption trends, the UK's dormant expert committee on food and health, formally named the Standing Committee on Nutritional and Problems, was revived and rebranded in 1957 as the Committee on Medical Aspects of Food and Nutrition Policy (COMA). The Department of Health commissioned COMA to investigate what impact fat in milk had in relation to CHD. COMA published a set of nutritional guidelines in 1969, and a 1974 report, Diet and Coronary Heart Disease. However, experts were divided on what conclusions could be drawn about foods directly linked to disease, and thus it effected little immediate change.⁶⁶

Around the same time, the General Director of Health in Norway set up an expert committee which produced a report recommending that the nation reduce its daily fat consumption to 30 per cent of people's daily nutritional intake. Despite ongoing disagreement among experts, the Norwegian government published the world's first set of nutritional guidelines in 1976, followed shortly by the US government in 1977, and the UK in 1983.⁶⁷ Like Norway, the UK's guidelines were based on a report published by the National Advisory Committee on Nutrition Education (NACNE), that had the same recommendation: to reduce people's fat consumption to combat the prevalence of CHD.⁶⁸

65 Kearney, J. 2010, *Food consumption trends and drivers*, Philosophical Transactions of the Royal Society B 365: 2793–2807

66 Winkler T J., 'The COMA report: what it left out', *British Medical Journal (Clinical Research Edition)*, Vol. 290, No. 6469 (2 March 1985), p.685

67 Norum KR et al. Nutrition and food policy in Norway: effects on reduction of coronary heart disease. *Nutrition Reviews*, 1997, 55(11): pp.455–6

68 Harcombe Z, Baker JS, Cooper SM, et al., 'Evidence from randomised controlled trials did not support the introduction of dietary fat guidelines in 1977 and 1983: a systematic review and meta-analysis', *Openheart*, 2015, [last accessed 21/11/17 via: <http://dx.doi.org/10.1136/openhrt-2014-000196>]

This “vilification of fat” was later responsible for what Professor Emma Jayne Abbotts referred to as a rise in “heavily promoted” public health campaigns in the late 1990s “as part of a focus on heart health and cholesterol levels”.⁶⁹ The food industry responded by producing extensive varieties of reduced-fat alternatives to high-fat products such as dairy, many of which contained increased levels of sugar.⁷⁰ There was a major switch to low-fat alternatives such as semi-skimmed milk, which is now four times as popular as whole milk.⁷¹

Despite a loose agreement globally about the need to reduce fat in people’s diet, scepticism about this “diet-heart hypothesis” remained widespread in the US and UK. For experts, the evidence base was not strong enough, and The Lancet famously warned against the unknown consequences of basing national guidelines on contentious nutritional research: “The cure should not be worse than the disease.”⁷²

Where are we now?

It is now over 30 years since the introduction of national nutritional guidelines, and the state of the nation’s health is mixed. Indeed, CHD cases have halved since 1961, suggesting Government action to reduce fat consumption worked.⁷³ However, the obesity epidemic has grown to crisis point and diet-related diseases, such as type 2 diabetes, have increased drastically since the 1990s.⁷⁴

In England today, 68 per cent of men, 58 per cent of women, and over a third of children leaving primary school are obese or overweight,⁷⁵ making Britain the fattest country in Western Europe.⁷⁶ Despite widespread awareness of the crisis and various public health campaigns designed to combat the causes, obesity rates have quadrupled over the past 40 years.⁷⁷

Reducing fat in the nation’s diet has been successful in reducing CHD cases, particularly among the more affluent, but the creation of an obesogenic environment, where the unhealthy choice is the default, has worsened, and this has disproportionately affected the poorest. Public Health England identify the obesogenic environment as a major contributing factor to the obesity crisis. In 2014, it estimated that there were over 50,000 fast food outlets, fast food delivery services and fish-and-chip shops across England alone, many of which are near schools.⁷⁸ For the majority, eating out is no longer a treat or for special occasions. It has become the norm, which means out-of-home food and drinks are as important as the food and drinks prepared at home. Over a quarter of adults and one in five children eat food from out-of-home outlets at least once a week and these foods

69 10 ways the UK’s eating habits have changed, BBC News, 18 February 2016 [last accessed 24.01.17 via: www.bbc.co.uk/news/magazine-35595530]

70 More sugar in low fat products

71 Department for Environment Food & Rural Affairs, *Family Food 2014*, London: DEFRA, 2015, p.9

72 Teicholz N. (2015) *The Big Fat Surprise: Why Butter, Meat and Cheese Belong in a Healthy Diet*. Simon and Schuster, London

73 Scarborough P., Wickramasinghe K., Bhatnagar P., Rayner M (2011) *Trends in coronary heart disease, 1961–2011*. British Heart Foundation, London

74 Diabetes UK, *Diabetes: Facts and Stats*, version 4. Revised: May 2015. Diabetes UK, London

75 NHS Digital, *Statistics on Obesity, Physical Activity and Diet, England 2017*, Health and Social Care Information Centre, first published online 30 March 2017

76 Central Intelligence Agency, *The World Factbook*, ‘Obesity – Adult Prevalence Rate’, last updated 2014 [last accessed 21/11/17 via: www.cia.gov/library/publications/the-world-factbook/fields/2228.html]

77 National Audit Office (2001) *Tackling obesity in England. Report by the Comptroller and Auditor General*, The Stationery Office: London

78 Public Health England, *Guidance – Health matters: obesity and the food environment*, published online 31 March 2017 [last accessed online 08.08.17 via: www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2]

and drinks are associated with being more calorie-dense and unhealthy.⁷⁹ Furthermore, by not preparing the food and drink, people tend to be unaware of the exact ingredients and nutritional content.

Like the increased consumption of out-of-home, fast and takeaway food, snacking has also become a regular habit rather than an occasional treat. A 2017 YouGov survey showed that two thirds of children in Britain aged eight to 15 regularly snack on crisps and a third do so every day. While the survey found that snacking on fruit was high, **89 per cent of children snacked on unhealthy products including crisps, biscuits, confectionery and cakes.** These unhealthy snack products are estimated to have generated £13 billion in retail sales in 2012 alone.⁸⁰

How important is physical activity and sport?

Although there is agreement that people cannot out-run a poor diet, physical inactivity is widely considered as a contributing factor to the obesity crisis and a cause of many deaths. People are 20 per cent less active than they were in the 1960s and Public Health England state that in the absence of concerted effort, people will be 35 per cent less active by 2030.⁸¹ Physical inactivity is the fourth biggest risk factor of mortality globally (after high blood pressure, smoking and high blood glucose)⁸² and accounts for six per cent of deaths. In England alone, physical inactivity is estimated to cost £7.4 billion a year.⁸³

The UK Chief Medical Officer recommends that children and young people should do at least 60 minutes of moderate – to vigorous-intensity physical activity every day.⁸⁴ Despite this advice and the Government's ambition to make England an "active nation", only nine per cent of children aged two to four years old and 22 per cent of children aged five to 15 years old meet the recommended physical activity levels.⁸⁵ Being physically active and participating in sport is not the norm in England, and for children in the lowest income decile, rates are worse. Only 25.9 per cent of disadvantaged children take part in sport once a week compared to 42.7 per cent of children in the highest socio-economic group.⁸⁶

It is critical for the Government to treat physical activity and sport as integral parts of a healthy lifestyle which lowers a child's risk of serious poor health, rather than solutions to the childhood obesity crisis. The Government's Behavioural Insights Team stated that "reductions in physical activity do not provide a realistic explanation for the change in [people's] weight" and while "attempts to increase physical activity should be part of the policy mix, they should not act as a distraction from the central importance of reducing [people's] calorie consumption".⁸⁷

79 Public Health England, *Guidance – Health matters: obesity and the food environment*, published online 31 March 2017

80 Harry MacLeod, *1/3 of children eat crisps daily*, YouGov, published online 27 March 2017 [last accessed 29.08.17 via: <https://yougov.co.uk/news/2013/03/27/13-children-eat-crisps-daily/>]

81 Public Health England, *Guidance – Health matters: obesity and the food environment*, published online 31 March 2017

82 World Health Organisation (WHO), 2010. Global recommendations on physical activity for health

83 Sport England, *Why tackling inactivity matters*, updated April 2013 [last accessed 21/11/17 via: www.sportengland.org/our-work/health-and-inactivity/why-tackling-inactivity-matters/]

84 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

85 NHS Digital, *Health Survey for England 2015: Physical activity in children*, December 2016: London, Health and Social Care Information Centre

86 Centre for Social Justice (CSJ), *Sport for Social Good: Revisiting More Than a Game*, 2015: London

87 Harper H. and Hallsworth M., 'Counting Calories How under-reporting can explain the apparent fall in calorie intake' (2016) *The Behavioural Insights Team*, UK Government

Some retailers have accepted the childhood obesity crisis and introduced clothing ranges to suit. In September 2017, it was revealed that high street retailer Next has been selling a range of “plus fit” clothing for children aged 3 to 16 years old since 2007.⁸⁸ M&S also trialled a plus-size range for children in 2010 but decided not to continue with it. This formal acceptance of childhood obesity demonstrates the normalisation that can be considered to contribute to the obesogenic environment.

The media plays a key role in bringing public attention to the scale of obesity and its associated problems. However, coverage often over-simplifies the causes, embeds appearance-based social stigmas and presents the public with often conflicting and disjointed dietary, nutritional and lifestyle advice. One Australian study, examining Australian television’s news coverage of obesity, concluded that it portrays the issue as a “personal health and human interest story, not as hot political news; thus, missing an opportunity to generate adequate support for the policy solutions obesity experts advocate”.⁸⁹ One of the best-known and contentious examples that reflects this is the on-going obesity-related media debate on whether fat or sugar is to be blamed more for the obesity crisis. This focus on a single nutritional content encourages the search to find the ‘one thing’ that causes obesity which can be blamed, and so the ‘one thing’ that can be fixed. The Government’s introduction of a levy on sugary soft drinks is demonstrative of this. It is a greatly celebrated step in terms of action but, introduced alone, it won’t end childhood obesity.

Dr Harry Rutter, founder of the National Obesity Observatory, was asked to name “the single most important intervention to reduce childhood obesity”. He replied: “There is no single most important intervention.”⁹⁰ If the Government is going to effectively reduce childhood obesity rates, it must be prepared to introduce a long-term, unpartisan strategy that includes multiple interventions.

What success looks like

Solving childhood obesity is not easy or simple. It requires the Government to be prepared to take a long-term, target-based, whole-systems, trial-and-error approach that is monitored by a non-partisan, independent body to oversee the strategy and ensure it continues unaffected by political cycles.

By being long-term, the independent monitoring body has the capacity to build upon evidence of what works and what does not, without being distracted by achieving results immediately. Childhood obesity is complex and the drivers exist deep in the very fabric of society, so change is going to take time. Success will take cultural, institutional, societal and economic change alongside consistent political commitment and leadership.

By setting targets, success can be determinable, monitored and data-based. Targets must be long-term and ambitious, such as halving childhood obesity rates by 2027 and ending childhood obesity by 2037. They must equally aim at achieving an overall reduction in childhood obesity rates as well as closing the gap in childhood obesity rates between rich and poor, to remove the social gradient in health – i.e. the poorer a child is, the more

88 Katie Morley (2017, September 14) *Next is selling ‘plus size’ clothes for children as young as three*, The Telegraph [last accessed 21/11/17 via: www.telegraph.co.uk/news/2017/09/14/next-selling-plus-size-clothes-kids-young-three/]

89 Bonfiglioli C et al (2007) “Obesity in the media: Political hot potato or human interest story?”, *Australian Journalism Review*, 29(1):53–61

90 Rutter H., ‘The single most important intervention to tackle obesity...’, *Int J Public Health* (2012) 57:657–658

likely they are to be obese. It would not be successful if childhood obesity rates reduced significantly but not for the poorest.

By being whole-systems, existing efforts can be joined up and gaps where more needs to be done can be identified. As will be discussed further on, there is an enormous amount of positive action already taking place to reduce childhood obesity across England in countless schools, local authorities, GP surgeries, supermarkets, organisations, charities and communities. For these efforts to reach their maximum potential and effectiveness, they need to be joined up. Our ecosystem is complex and connections must be built between the various elements. As argued by Professor Corinna Hawkes, Professor of Food Policy and Director of the Centre for Food Policy, by making connections between the problems children and families face in tackling obesity, co-beneficial solutions can be identified and problems (e.g. social, economic, health, environmental etc) can be solved more efficiently by pooling resources and sharing efforts.⁹¹

91 Corinna Hawkes, "Seven connections we need to make to fix the food system", *Centre for Food Policy*, published online 4 May 2017 [last accessed 31.08.17 via: <https://blogs.city.ac.uk/foodpolicydispatch/2017/05/04/seven-connections-we-need-to-make-to-fix-the-food-system/>]

chapter two

How should we address this?

Learning from the Amsterdam Healthy Weight Programme

Reducing childhood obesity rates is possible

In April 2017 the trend in obesity rates in Amsterdam was published. Since 2013, childhood obesity and overweight rates had gone down by 12 per cent for all children and by 18 per cent among the most deprived children. Since 2013 Amsterdam intensified its efforts aimed at the prevention and cure for overweight and obesity among children and youngsters. This account of the Amsterdamse Aanpak Gezond Gewicht (AAGG), translated as the 'Amsterdam Healthy Weight Programme', sets out why and how the programme was introduced, what features have made it successful and sustainable so far, and provides examples of some of the interventions. The case study was compiled based on interviews, a visit, assistance from individuals involved in the programme and insights from other reports and case studies. While one cannot assume a direct causal trend, the Amsterdam project demands further attention.

Learning from the *how*, not the *what*

The AAGG was chosen as the report's main international case study, not only because the data published in April 2017 indicated promising signs that childhood obesity rates are decreasing, but also because two of the main factors that have made the programme successful so far are transferable and replicable to other countries. These two factors are political leadership, and the adoption of a whole-systems, collective approach. There are numerous whole-systems programmes and effective childhood obesity projects being delivered across England, but unlike in Amsterdam where efforts are joined up and politically led, the current system in England remains fragmented. The lessons to be learned are therefore not in what specific interventions were introduced, since they were based on what was appropriate and feasible in Amsterdam and its target neighbourhoods. Rather, the key lessons are in how the programme was introduced, how it was politically led and how a whole-systems approach was successfully implemented.

Background to the Amsterdam programme

In 2012, childhood obesity and overweight statistics showed that 21 per cent of under-18-year-olds in Amsterdam were obese or overweight. Amsterdam City Council's Alderman and Deputy Mayor, Eric van der Burg, who believed in the city's responsibility for tackling

this enormous and complex problem and quickly understood that blaming the individual was too simple, brought the municipality's political leaders together to commit to doing something bold and mission-led. In 2013, the AAGG was launched with the ambitious aim of having no overweight or obese children in Amsterdam by 2033.⁹²

AAGG aims to actively support children and parents to be healthier by engaging with them alongside professionals and organisations that work with children or significantly influence their lifestyles. In contrast to a treatment-based approach, AAGG focuses on integrated, cross-sector and cross-departmental actions involving politicians, local authorities, schools, medical professionals, planning bodies, sports organisations, communities and neighbourhoods, charities, and the business sector.

The key principles of the programme are political leadership, focus on social impact, whole-systems, targeted learning development based on consistent monitoring, and value in professionals and professional training. In some ways, the programme is about much more than reducing childhood obesity rates. It is about cultural change and investing in a healthier future to ensure every child experiences optimum growth mentally, physically, emotionally etc.

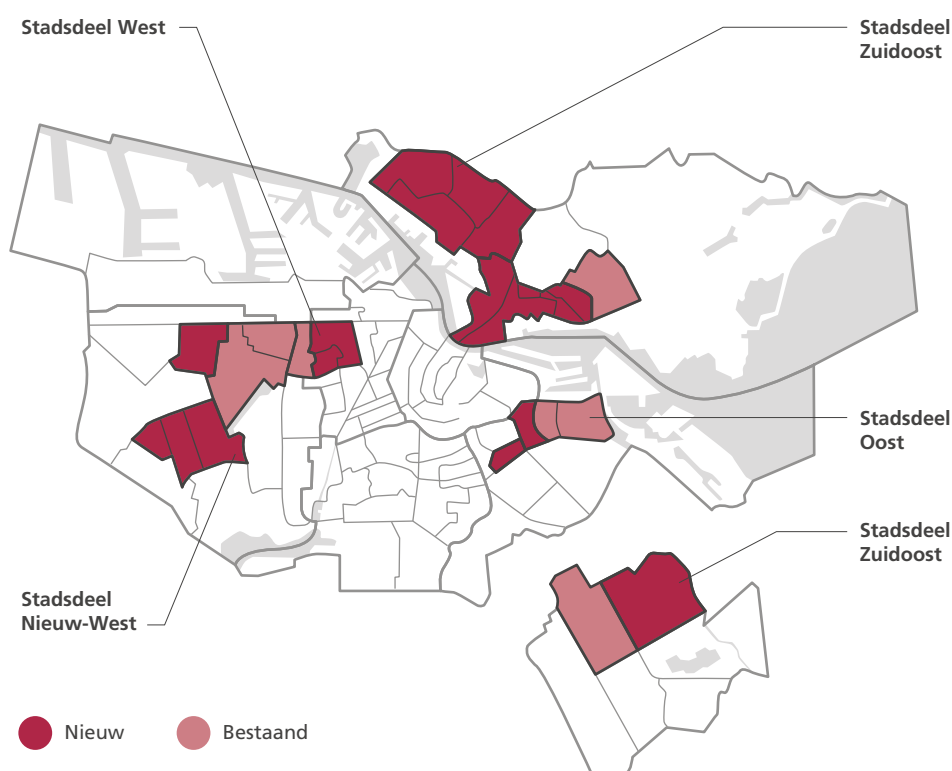
In a 2017 report by IPES-Food exploring various case studies of effective food-related policies, a review of AAGG details how the programme was brought to fruition, delivered, and the outcomes so far. The report points to the holistic, multi-component nature of AAGG in not just being a public health plan, but in adopting a fully integrated, systems-based approach that “seeks to address the structural causes of obesity”.⁹³ In this way, AAGG aims to make it easy and normal for people to be healthy in both noticeable and unnoticeable ways by facilitating healthy behaviours, choices and lifestyles, and by systematically supporting people at every key opportunity.

One of the key aspects of the AAGG is to target efforts based on neighbourhoods, which ensure the programmes reach those most in need: children from nine months to 2.5 years and their parents, children from 2.5 to 12 years old, children over 12 from high risk groups, and children who are morbidly obese. The programme adopts a whole-systems approach by working with key professionals in the child's environment, such as teachers and health professionals, and includes a focus on both prevention and care as a ‘package deal’.

92 Amsterdam Healthy Weight Programme, *Summary of programme plan*, Amsterdam: City of Amsterdam, 2015

93 *Unravelling the Food-Health Nexus*, IPES Food (2017, October), [last accessed 21/11/17 via: www.ipes-food.org/images/Reports/Health_FullReport.pdf]

Figure 5: Implementation areas for the Amsterdam Health Weight Programme in 2016



Nieuw = new
Bestaand = existing

Source: Gemeente Amsterdam: Uitvoeringsprogramma 2016 – Amsterdamse Aanpak Gezond Gewicht

Interventions take place during the first 1000 days (from conception to two years old), in schools (from pre-school to secondary), in neighbourhoods (including targeting efforts and monitoring success), in the creation of a healthy environment (including urban design and regulation of the food and drinks industry, such as restricting unhealthy marketing to children). There was an understanding that the majority of families with obese or overweight children were often multi-problem families with multi-complex needs, and so addressing the issue of childhood obesity was about more than just getting children to eat better and exercise more. It was about tackling the complex social issues behind unhealthy behaviours, such as mental health issues, poverty, lack of education etc.

The key to success: political, non-partisan, long-term leadership

Amsterdam is not unique (although, to date, the city's success in reducing obesity is).⁹⁴ There are numerous projects across England that take a similar, systems-wide approach on a smaller scale and deliver effective outcomes, such as the London Food Flagship Programme, the Lambeth Healthy Weight Project and a whole-systems approach led by Leeds Beckett University that is being piloted across four local authorities. However, the resounding emphasis from experts connected to or involved in AAGG is that the political leadership – most notably the leadership, vision and commitment to overseeing the

94 As far as the CSJ is aware.

project by Alderman van der Burg – has been integral to its success in being city-wide and effectively holding every sector to account.

The IPES-Food report notes how Alderman van der Burg, who is a right-wing politician, was essential to the introduction and delivery of the programme. It states that he “understood the gravity of the problem and propelled childhood obesity to the top of the city’s agenda”. In doing so, other key politicians formally committed to introducing the programme in 2013 and, in publicly signing up to the long-term vision and ambitions, are now fully accountable to ensuring its success. Alderman van der Burg was persuasive in his political arguments that the AAGG would expand people’s choice. For example, in schools there were vending machines selling primarily unhealthy drinks, but no free tap water readily available, which presented children with an unbalanced and disproportionately unhealthy choice. Rather than starting with banning vending machines, Alderman van der Burg focused on introducing more and easily accessible healthy choices to children.

Another key point made in the review is that the initial commitment to reduce childhood obesity did not include any funding commitments. This was a deliberate move by Alderman van der Burg, who believed the key to success was first to identify, draw upon and pool existing resources from across the various departments and sectors. Focus began on joining up existing services by identifying community-, school-, local government – and neighbourhood-led projects that already existed. The one initial cost was for the departments to each employ a programme or project manager who was paid for by the participating departments. By not putting a price on the project at the beginning, time for the joining up and mapping of existing services and opportunities was allowed. Funding down the line was then provided based on evidence, including identifiable gaps in support.

Lessons from New York

The importance of political leadership in successfully driving change is further emphasised in a 2016 review of former New York Mayor Michael Bloomberg’s bold obesity prevention strategy. The review recognised that, while some of the interventions were unique to New York City at that time, there are key lessons that are transferable to other urban settings wanting to tackle obesity, including “strong and consistent leadership; a commitment to innovative approaches and cross-sectoral collaboration; and a context to support and encourage this approach”.⁹⁵

Locally driven, politically led, nationally supported

Like the UK Health and Social Care Act 2012, which devolved responsibility for public health, including tackling childhood obesity, to local authorities, the Dutch Public Health Act of 2000 and the Youth Policy Bill of 2015 also devolved responsibility for public health policies to local government. As a result, AAGG has been focused primarily on actions which local government can control and influence, rather than policies, such as restricting advertising directed at children, which remain under the control and influence of national government (though sponsorship of city sports events is no longer permitted by unhealthy food and drinks manufacturers). The success of this demonstrates how local government can effect change without direction from national government, although support from national government has been important.

95 Kelly P., et al (2016) ‘Obesity prevention in a City State: Lessons from New York City during the Bloomberg Administration’, *Front Public Health*; 4:60

Joined-up approach

A key feature of the AAGG is the joining up of existing programmes and interventions, and the introduction of interventions to fill the gaps. For example, the Amsterdam Youth Health Care programme (school nurses and doctors) was introduced around 90 years ago, and the connection with local communities and networks is strengthened by being part of the AAGG as it has become part of a whole-systems approach. The AAGG was originally inspired by several others models or frameworks such as the Dahlgren & Whitehead Rainbow Model and the national, but slightly different, JOGG programme (Jongeren Op Gezond Gewicht, translates as Young People at a Healthy Weight), which was first introduced in the Netherlands in 2010 and has contributed to declines in childhood obesity rates across the country.⁹⁶ Other interventions, such as banning of unhealthy advertising in subway stations, has been introduced since the launch of the AAGG, and has been made possible since it is part of a wider vision for the city. Although Holland has a long history (around 150 years) of tackling health inequality, until the AAGG was introduced, interventions tended to be introduced on an ad hoc, individual basis and thus have been less effective than the AAGG has been so far.

The long-term, non-partisan vision

To build an effective long-term plan independent of political cycles, a cross-departmental team, put together by the programme manager, developed a 20-year plan and model, so that children born at the time of the programme launch would all be of a healthy weight by the end of the programme. To make this achievable and to help keep track of the success, the programme was broken down into three key phases: by 2018, a healthy weight for those five and under; by 2023, a healthy weight for those 10 and under; and by 2033, the mission is a healthy weight for all children and young people in Amsterdam.

The 'Golden Triangle' concept is a belief in the Netherlands that government, civil society and knowledge institutions (e.g. academics) should work together to tackle problems, to ensure solutions are non-partisan and exist beyond political cycles.

One of the key components of the Amsterdam programme is that it is a learning programme where science and learning institutes play a key role. The programme's guiding principle is 'learning by doing, doing by learning'. The learning element of the programme structurally connects practice, programmes, policy and science. An outcome monitor has been developed that reports yearly progress. The team monitors output every quarter. In addition, the Free University is developing external monitoring tools to ensure independent monitoring of results. To facilitate this an independent team of expert academics including Professors Jaap Seidell and Karien Stronks, together with a team of expert specialists in public health and other specialities, was established to provide evidence and insights, review actions, advise and develop the research base all conducted and detailed.

The programme and approach has constantly changed since it was introduced, which is considered to be a good thing, because it is an iterative process where interventions are constantly improved or changed for the better, and new interventions are introduced along the way where necessary. At the same time, the constant monitoring and evaluation allows those involved to know why something does not work. If monitoring occurred only

⁹⁶ Young People at Healthy Weight Programme – Zwolle, Healthy City, Netherlands, [last accessed 21/11/17 via: www.epestory.eu/project-netherlands.php]

at the beginning and end of each milestone, those involved would have no idea what happened in between.

Success is also attributed to individuals being fully involved in the programme, rather than relying solely upon political leadership. In a newspaper interview, Wilbert Sawat, a co-ordinator and PE teacher at De Achtsprong primary school in the more deprived and immigrant-populated Bijlmer district, emphasised the importance of engaging with and educating parents about the interventions. “All children have to bring water or milk to school. No juice. A lot of parents were really upset. We had really hard discussions with them.” This was because parents thought juice was healthy, because it contained fruit. Once the teachers informed parents about the sugar content, parents understood and accepted the decision.⁹⁷ To help with this, professionals have been placed in primary and secondary schools, and there are “learning expeditions” for professionals to discuss new developments in the field and their own role within the whole-systems approach, including the development of digital platforms for professionals.

AAGG intervention examples

The first 1000 days

The programme recognises the importance of the first 1000 days (from conception to two years old), including maternal health during pregnancy for the health of a child. Support is provided in three main ways:

1. **Information:** All parents of unborn children and children between 0–4 years in Amsterdam receive information about healthy nutrition at all ages of their child’s life.
2. **Connected care:** All pregnant women and young parents have regular appointments with medical professionals (midwives, youth health care nurses etc). These professionals agree on the way to work together, share necessary information and use the same information for parents. Special focus lies in the detection of (a higher risk of) overweight and obesity before the age of two.
3. **Healthy communities:** During pregnancy and early childhood, the informal network and community surrounding parents is incredibly important and powerful. Key persons within these networks are trained about healthy lifestyle and invited to organise activities.

First 1000 days intervention examples:

- Growth app – in this popular information app, information about healthy lifestyles for pregnant women is included
- Referral by medical professionals to customise coaching programmes for future parents
- Screening infants for risk of obesity, with extra support provided to at-risk families

⁹⁷ Boseley S., *Amsterdam’s solution to the obesity crisis: no fruit juice and enough sleep*, The Guardian, published online 14 April 2017 [last accessed 08.08.17 via: www.theguardian.com/society/2017/apr/14/amsterdam-solution-obesity-crisis-no-fruit-juice-enough-sleep]

- Nurses provide two years of support to teenagers and more deprived mothers
- Development of a new pregnancy course for more deprived women
- Greater access to fitness programmes and information for young children
- Pre-natal home visits
- “Healthy Weight Pact” strategy, which involves midwives
- Research involving teenagers, which examines how expectant mothers can be best supported inside and outside of the doctor’s office

A healthy school environment

A critical element of the programme is the work in schools. The programme is based on the belief that children have the right to a healthy school environment in which they don’t eat unhealthy products and have sufficient, effective exercise. The programme states that all schools in Amsterdam promote health. All pre-schools and schools that have more children with overweight and obesity than the national percentage can get help achieving this through the Amsterdam school programme ‘Jump-in’. Specific targets have been put in place: Jump-in supports all the primary schools in Amsterdam, but especially those where the percentage of children with an unhealthy BMI is higher than the average percentage for the Netherlands. Secondary schools can get support from another Public Health Department team in order to become a healthy school with regard to food, exercise and sleep.

Jump-in

All 225 schools have access to the school programme Jump-in. Jump-in has eight goals around healthy eating and drinking, physical activity and sports, healthy environment and healthy education. 150 schools with a prevalence of overweight and obesity above the national average get help from a Jump-in coach that reviews the current status and creates an implementation plan together with the school to meet the eight goals within three years. The school is responsible for the implementation and execution of the overall plan. The Jump-in coach provides information for and advice on involvement of parents, healthy eating and drinking and outside play.

Jump-in approach: First, the school carries out a “prevention scan” to check how close the school is to achieving the eight Healthy School targets. The “movement manager” then works with school leadership to create a plan for achieving the eight targets. The coach is responsible for implementing the plan, particularly the parts that involve communication with parents. The Jump-in coach and a Jump-in “movement manager” work together to improve attitudes towards a healthy lifestyle including healthy eating and drinking, good and enough sleep and plenty of exercise and sports. They provide tools for implementing the targets and in-school and after-school fitness programmes. As of 2016, 32 schools have completed the programme.

Jump-in programme components include healthy food and drink, agreements about the size and content of celebration treats brought into school, workshops with children and parents, extra measurement and weighing of children by child health services, playground materials, gym lessons (extra sessions are offered to physically inactive children) and extra-curricular activities.

Amsterdam School Garden Programme

The School Garden programme existed before the AAGG was introduced. It has been running for over 90 years and it gives children the opportunity to learn how to grow food for a whole year in urban settings. Many of the school garden locations in Amsterdam are in the target AAGG neighbourhoods. This food education programme, called Amsterdams NME centrum (NME stands for 'nature and environmental education') involves five theoretical lessons indoors and 20 practical lessons in the garden. The first lessons are conducted in springtime and contain themes such as soil, seeds and fruits, germination and growth. The practical lessons place responsibility in the hands of the pupils, who are responsible for their own plot of land and are taught how to cultivate vegetables, flowers and herbs. Then they learn how to process their products. For example, they make potato pancakes, herb oil, scent bags, soup etc.⁹⁸

- School intervention examples:
- Jump-in toolkit and helpdesk is available to all schools (225 schools)
- Jump-in interventions in primary and pre-schools: Healthy eating and drinking, physical activity and sports, healthy school environment and healthy education
- Active guidance available to schools where the average BMI of students is above the Dutch national average (152 schools)
- Other schools are encouraged to become Healthy Schools and achieve associated goals
- Healthy eating in schools: Only milk, water or tea without sugar are permitted in school, as are wholewheat sandwiches, fruits and vegetables. Healthy lifestyle interactive theatre and workshops for parents
- Extra and more targeted PE lessons for the most in-need children
- After-school advice and support
- Playground interventions to increase physical activity during school playtime, which involves support by organisations, provision of play materials, (if necessary) changes to the school playground, and a folder of games and activities for children to try
- Activity diplomas and rewards for parents and pre-school children
- Schools that have not been chosen for an intervention are still eligible to apply for Healthy School certification if they have met all eight Jump-in goals
- Healthy School canteen campaign
- School Garden Programme

Communities and neighbourhoods

The programme is targeted at neighbourhoods where overweight and obesity are highest. Community managers have been brought in to support the programme in the priority neighbourhoods. The focus neighbourhoods are: North Amsterdam: Waterlandplein, Oud Noord and Noord-West; West Amsterdam: Erasmuspark, Landlust, Kolenkitbuurt; New West Amsterdam: Slotermeer, Geuzenveld, Osdorp De Punt, Reimerswaalbuurt en Wildemanbuurt; East Amsterdam: Indische Buurt, Transvaalbuurt, Dapperbuurt; and South East Amsterdam: Bijlmer-Centrum, Bijlmer-Oost. Each neighbourhood has co-created and adopted a unique and locally appropriate set of interventions, which is a key feature of the AAGG in that there are few 'blanket' interventions. Rather, neighbourhoods bring together local residents, community and self-help organisations and professionals

98 Booijs-Vonk (2011) 'School garden education in Amsterdam: The teacher's perception about its quality', *Het Amsterdams Natuur en Milieu Educatie Centrum*: Van Hall Larenstein University, Amsterdam

to ensure that interventions will work and last for those that live there. In this section examples of the different local activities are included.

Neighbourhood programme North

- Focuses on the neighbourhoods with the most children
- In 2016, efforts were made to make the Waterlandplein (Waterland Square) a healthier shopping area by engaging local businesses to offer a healthier choice

Neighbourhood programme New West

- Includes healthy lifestyles as part of coaching for teenage girls to increase their self-confidence and social skills
- City health challenge launched in Sloterveer to encourage healthy purchases in a fun and accessible way using discounts

Neighbourhood programme East

- Outreach programme targeting parents and guardians, including fathers and male guardians
- After-school activities for children
- Sport and opportunities for increasing physical activity and exercise
- Efforts to make the local environment healthier

Neighbourhood programme South East

- Training of spiritual leaders about the importance of a healthy lifestyle and what that entails
- Participatory project to improve already existing interventions so that they fit the needs of the target population better and, whenever possible, include advice regarding a healthy lifestyle

Neighbourhood intervention examples

- Priority neighbourhoods chosen based on children's weight averages and given a neighbourhood manager. Every neighbourhood has a localised and customised approach
- Partnerships with shops, cafes, civil society, welfare organisations and neighbourhood health ambassadors. There are now more than 200 ambassadors throughout the city playing an important role in engaging their network, organising activities and inspiring their neighbours towards realising and maintaining a healthier lifestyle
- Working with ethnic organisations and other key figures to promote a healthy weight in communities with higher levels of obesity and overweight
- Promoting community health ambassadors and providing additional information and support to food bank clients

Creating a healthy physical and food environment

The programme states that the physical layout of the city does not yet support a healthy and active lifestyle for children, and the food environment does not often support a healthier food choice for children. An important focus is on a healthier environment to support an active life for children and a healthier food environment. Amsterdam has been the first city to sign up for the **Alliance To Stop Unhealthy Marketing to Children**.

From 2016, the guidelines – which are **significantly stricter than the EU** pledge – have been included in Amsterdam regulations including city buying practices, licences, subsidies and sponsoring.

In September 2017, it was announced that no advertisements on billboards for unhealthy products targeted at children would be allowed in any of the 58 metro stations, including the advertisement of products such as ice cream and fries.⁹⁹

Ban on unhealthy sponsorship: Sponsoring of city sports events that attract an audience of more than 25 per cent children/youngsters is no longer permitted by unhealthy food and drinks manufacturers. By the end of 2018 Amsterdam aims to become child-marketing proof and to support this the city of Amsterdam will work together with the Alliance To Stop Unhealthy Marketing to Children, the Dutch heart foundation and the Dutch consumer organisation – De Consumentenbond.

Lobbying industry: Amsterdam believes that the food industry also plays an important role and will lobby them to take steps to improve the food environment, including focus on labelling, portion size and product formulation, as well as playing an active role in the food debate, locally and nationally.

Financial benefits: A pilot directed at local shop owners at the Waterlandplein in Amsterdam has shown that it is possible to get financial benefits within a month from a healthier offering by changing buying practices, managing stock better and modifying menus and portion sizes. The city will challenge entrepreneurs to use this pilot as an example.

Partnership healthy food environment: Albert Heijn supermarket

A partnership has been developed with Albert Heijn (the largest supermarket chain in the Netherlands), the Amsterdam Health and Technology Institute and the Free University and this is being expanded into a network for healthier food. The goal of the network is that food businesses will take steps to support healthier eating patterns for children and young people in Amsterdam. The network is aimed at businesses involved in the production, supply and sale of food. A requirement for involvement for businesses is that the steps they take have impact on their core business. Albert Heijn's efforts have included introducing healthier checkouts in store, removing children's characters from their own-brand products, displaying large traffic-light labelling posters in the soft and alcoholic drinks aisles, and educating young employees and people diagnosed with type 2 diabetes on healthy eating and how to shop, eat and cook healthily.

Healthy environment examples

Sports: Increasing the quantity of sport areas, playgrounds and bike and walking paths in the priority neighbourhoods

Inactivity: An action plan has been developed to increase the focus on physically inactive children

⁹⁹ Janene Pieters (2017, September 4), *Amsterdam Bans Unhealthy Food Ads Aimed at Kids in Subway Stations*, NL Times, [last accessed 21/11/17 via: <https://nltimes.nl/2017/09/04/amsterdam-bans-unhealthy-food-ads-aimed-kids-subway-stations>]

Information: A roadshow has been developed to share information in priority communities on the importance of active living for children

In-school activity: Increased focus on in-school activity to ensure children meet the Dutch physical activity recommendation of one hour per day

Walking/cycling to school: Increased focus on walking or cycling to school including 'walking buses' in target areas

Monitoring: Together with the Free University Amsterdam, the programme has developed a monitoring system to better track the activity level of children in Amsterdam

In addition:

- Improving the physical design of Amsterdam to encourage physical activity and nutrition
- Investing in priority areas to build or improve sports pitches, playgrounds, and biking and hiking trails
- Inactive Youth Action Plan aims behavioural interventions at youth (they attend roadshows to engage with professionals and parents)
- Alliance Stop Kindermarketing: regulations on advertising unhealthy food. Organise healthy food debates and frameworks. Active lobbying for healthier food. Encouraging creation of healthy food and drinks for children
- RCT on the effectiveness of aerobic activity on improving academic achievement.
- Supervised outdoor playtime so children can play safely outside together. Twenty children (aged eight to 14) at each location
- Encourage walking or cycling to and from school
- Monitor physical activity of children (create physical activity map, understand children's perspective)
- Healthy shopping

Children in poverty

The programme includes a focus on children living in poverty due to the disproportionate link between poverty and childhood obesity rates.

- Partnerships with food banks to provide information on nutrition. Connect service users with city farms and vegetable gardens
- Youth nurses, client managers, financial advice and language support provided to improve families' knowledge of nutrition and healthy eating
- Evaluation of interventions and collecting stories of low-income children who have reached a healthier weight
- Offer families a CityPass and provide discounts with that pass for healthy activities
- Financial support for youth sports

Before 2015, the care for children was completely funded by health insurers. However, the relevant standards of care regarding childhood obesity were not implemented in Amsterdam (as well as in the rest of the country). The City Council felt responsible to make sure that those thousands of overweight children would be getting the appropriate care.

This process started with the joint effort of health insurer Zilveren Kruis (then Achmea) and the AAGG to initiate the Healthy Weight Programme that was signed by more than 20 (umbrella) organisations from the civil society, sport, welfare, care and healthcare domain. In the 11 focus neighbourhoods of the AAGG local professionals participating in the local welfare and care network have implemented those agreements. This means that all the children who are overweight or (morbidly) obese and their families now receive connected support and cure programs according to so-called care pathways. The network of professionals does not only look at lifestyle factors, but also takes into account other problems within the family system and provides families with the necessary support or referral towards that. This means the networks not only include dietitians, physiotherapists and paediatricians, but also parenting support, debt counsellors and youth psychologists.

The way the health networks are working in Amsterdam and 's-Hertogenbosch (a city in the south of the Netherlands) are the basis of the recently published national template for the the integral support and treatment of children who are overweight or obese. Amsterdam is one of the national test areas where this model is further developed to fit the needs of all municipalities in the Netherlands.

Health insurance partnership

An agreement has been made between the main health insurance company in Amsterdam, Zilveren Kruis, part of Achmea and the Amsterdam Health Weight programme to provide care co-ordination to children that are morbidly obese and their parents and carers. For all these children in Amsterdam (around 2000), support is provided by one care provider (Central Care Co-ordinator). All these morbidly obese children will be brought into cure programmes and supported through an action plan for three years.

Sleep Intervention Development

In collaboration with hospital sleep specialists, a six-step intervention plan has been introduced to help improve children's sleep, as evidence links poor sleep with an increased chance of obesity.

1. Inventory of sleep behaviour in Amsterdam
2. Finding determinants of healthy sleep behaviours
3. Develop assessment tool
4. Develop intervention
5. Develop implementation strategy for intervention
6. Prepare a study on the effects of the intervention

Digital development

There is also profound emphasis on digital innovation for both professionals involved in the programme as well as children and parents/guardians. Interventions include:

- Digital Health Coins: Families can earn coins by doing "challenges" which can be exchanged for discounts on healthy products and services
- The Living and Action Plan online tool for parents, children and "buddies" (community supporters) to set goals and achieve them
- Investigation into whether digital marketing can reach priority groups

- Better marketing of and inclusion of more healthy lifestyle information in existing services e.g. www.jouwggd.nl and the JGZ parent chat
- Digital tools for information-sharing among employees
- Research into recommended quality healthy lifestyle apps
- Improve programme website
- Experiment with behavioural “priming” and other unconscious interventions (e.g. cartoons)

Success so far

Politically, the most significant success has been the introduction of a fully functioning, localised, targeted, integrated, cross-sector and cross-departmental approach. It is proof that local government power is effective if used and exercised properly, regardless of any conflicts with national government. Childhood obesity and overweight rates among the lowest socio-economic groups have decreased by 18 per cent and by 12 per cent among all children,¹⁰⁰ breastfeeding and physical activity rates have gone up and primary school children are drinking sugary drinks less often. Local communities are actively sharing insights and experience with healthy food and lifestyle.

The AAGG is currently working with key academics and researchers to publish research that identifies what the ‘leading principles’ are, such as political leadership and cross-sector collaboration, and lessons learned from the programme to date, so other countries and cities can look at how the model may be transferred globally. The research is also being used by the AAGG team to assess how they can improve the programme based on what has worked, what has not worked and how that was adapted or changed to make it work.

Figure 6: Healthy Amsterdam flyer



100 Amsterdam Healthy Weight Programme, Amsterdam children are getting healthier, Amsterdam: City of Amsterdam, 2017 [last accessed 21/11/17 via: www.amsterdam.nl/publish/pages/847273/factsheet_amsterdam_children_are_getting_healthier.pdf]

chapter three

What should we address?

What must happen to end childhood obesity in England

The approach of the AAGG is compatible with our understanding of the complexity of health inequalities. By bringing together every key sector and ensuring each one plays a measurable and definable role in tackling the issue, and by leading centrally to ensure every sector is accountable, the AAGG has demonstrated that a whole-systems, city-wide approach is not only possible, but could work quickly.

The key sectors involved in the AAGG and regarded as particularly influential in shaping a child's health, dietary and physical activity behaviours are political leaders, local authorities, early-years settings, schools, medical professionals, planning authorities, and the food and drinks industry. This section examines each of these sectors and several others in the context of England, and sets out key areas to investigate, which, if taken up together (and it is crucial that this is done together) and driven politically, would put England on the map as the global leader in addressing childhood obesity.

However, we have not presented all ideas as recommendations. This is because they cannot be cherry-picked and expected to bring about change.

Instead we are making a small number of recommendations that will lead to a whole-systems approach. We are recommending six areas which must be included, and then measures within each area are considerations which should only be discussed and refined after a whole-systems approach is adopted.

The danger and temptation is to pick a few policy levers and expect change when none will happen.

The sections are presented in no particular order as each is interlocking and important.

Moving from a fragmented to a collective, whole-systems approach

Obesity drives disease. It increases the risk of cancer, diabetes and heart disease – and it costs our economy £27 billion a year.

George Osborne, former Chancellor of the Exchequer, 2016

Political, non-partisan, long-term leadership

Some of the most effective Government interventions, policies and campaigns have been those led by the Prime Minister and Number 10, such as the commitment by Prime Minister Theresa May to tackle mental health.¹⁰¹ Likewise, the Government's Childhood Obesity Plan, published in August 2016, marked a significant and celebrated step towards reducing childhood obesity rates in England over the next 10 years. The plan states that it is the 'start of a conversation, rather than the final word'. However, at present, there is little direct accountability in the plan for Government departments other than Department of Health (DH) and Department for Education (DfE) to help deliver its ambitions, and little clarity about the roles of other departments such as the Department of Communities and Local Government (DCLG); Digital, Culture, Media and Sport (DCMS); Environment, Food, and Rural Affairs (DEFRA); Transport (DfT); and the Treasury. Many of these departments are already delivering strategies that contribute towards the goal to reduce childhood obesity rates, but many were not included in the plan and are not joined up.

The current system is fragmented. Is it not that Government departments are not attempting to tackle childhood obesity, it is that the cross-overs have not been identified. For example, DEFRA's 'Clean Air Strategy' and DfT's 'Cycling and walking investment strategy' both seek to reduce the number of cars on the road by increasing the number of people walking and cycling, which in turn helps people get active and can contribute to reducing childhood obesity rates. Cross-departmental success will come about when the ambitions of the Childhood Obesity Plan led by the DH match the ambitions of other departments, and the question is asked: "How can the government's Childhood Obesity Plan help deliver other departments' policy objectives?"

This was a key success of the Amsterdam Healthy Weight Programme. The political leadership and cross-party, cross-departmental and cross-sector commitment to ending childhood obesity allowed Amsterdam to move away from a fragmented approach towards a collective approach or whole-systems approach. The team mapped out how every department and sector could play its part, then identified how resources could be pooled. It also committed to a long-term approach which meant setting up a system that did not depend on Eric van der Burg always being in office, and was not focused on results within a political term.

¹⁰¹ Prime Minister's Officer (2017, January 9), Press Release: *Prime Minister unveils plans to transform mental health support*, [last accessed 21/11/17 via: www.gov.uk/government/news/prime-minister-unveils-plans-to-transform-mental-health-support]

Ending childhood obesity will take deep commitment. The Government must start by making a political choice: we can and we will end childhood obesity. That means the highest level of Government publicly committing to an ambitious target, instituting mechanisms to listen from the people who experience the problem, designing actions that work for long-term change, and then monitoring the effectiveness of what they do. It means an unflinching desire to make a difference and a willingness to cast ideology aside. It also requires patience. It will take time, so let's all help by measuring signs of progress along the way.

Professor Corinna Hawkes, 2017

For England to move from a fragmented to a collective approach requires Government to firstly understand the importance of public health by creating a departmental structure conducive to putting prevention, reducing inequality and cross-departmental collaboration at its heart, and secondly, leading the commitment to end childhood obesity.

Figure 7: Role of leadership



The definition of public health is “the art and science of preventing disease, prolonging life and promoting health through the organised efforts of society” (Acheson, 1988; WHO). The Government’s role is to “strengthen public health capacities and service... to provide conditions under which people can maintain to be healthy, improve their health and wellbeing, or prevent the deterioration of their health”.¹⁰² It starts at every point of Government policy: whether it’s how houses are built, children are educated, what employment rights people are protected by, or how the economy is built, the health of the public can be designed into every aspect of Government policy. Public health is fundamentally cross-departmental. To prevent people needing primary care services, they need to live in, and be influenced by, an environment that is conducive to good health as the default.

The Health and Social Care Act 2012 marked the Government’s first major step towards a new focus on public health, prevention and tackling health inequalities, introducing Public Health England (PHE) in April 2013. The Act also included a hand-over of NHS management from the Health Secretary to the newly established NHS England (formally known as the NHS Commissioning Board), although the Health Secretary remains ultimately accountable for the NHS. This move was introduced to “limit political micro-management” and allow NHS England to manage its budget, planning and service delivery, unaffected by political changes to Government.¹⁰³

¹⁰² WHO, *Public health services*, published online [last accessed 21/11/17 via: www.euro.who.int/en/health-topics/Health-systems/public-health-services]

¹⁰³ Department of Health, *Overview of health and care structures – The Health and Social Care Act 2012*, HM Government: London, 2012

Both these changes were brought in to reduce the cost of healthcare by removing unnecessary political management and placing decision-making in the hands of Clinical Commissioning Groups, made up of GPs who (in theory) would know how best to spend money locally. This, alongside the introduction of PHE, which seeks to “protect and improve the public’s health and well-being and reduce health inequalities”,¹⁰⁴ indicated that the Government sought to move departmental focus away from the management of the NHS, towards preventing people from needing primary care services in the first place and thus easing the enormous and growing pressures on them. However, this structural reform has never been adequately reflected in the Department of Health’s spending allocation and in the media, which still places focus on the current Secretary of State for Health, Jeremy Hunt, for problems in the NHS rather than the NHS’s Chief Executive Simon Stevens, who is technically responsible for the running of it.

The Government’s total Department of Health spending is £149 billion annually.¹⁰⁵ Almost three-quarters of this is taken up by NHS England (£110 billion per year),¹⁰⁶ compared to PHE’s net operating budget, which accounts for just 0.2 per cent (£302.3 million per year). This imbalance between treatment and prevention expenditure highlights a critical need for the Government to develop its approach and delivery of public health services further, and ensure prevention receives the investment it so desperately requires. Furthermore, PHE is primarily overseeing and responsible for decreasing the proportion of children leaving primary school overweight or obese and reducing levels of excess weight in adults too.¹⁰⁷ With such serious responsibility, PHE should be better funded.

The CSJ recommends that Government and key policy makers use Michie et al’s ‘behaviour change wheel’ (see below) to characterise and design behaviour change interventions.¹⁰⁸ The “behaviour system” involves what it defines as three “essential” behaviour conditions: capability, opportunity and motivation. These can be changed using the nine surrounding intervention functions, such as education and environmental restructuring, which occur in the seven policy categories, such as guidelines, regulation and legislation. The wheel demonstrates the complexity of behaviour change and how single interventions are insufficient in isolation. To change complex behaviours such as consumption and physical activity requires multiple interventions across multiple sectors.

104 Public Health England, *Annual Report and Accounts 2015/16*, PHE: London, 2016, p.13

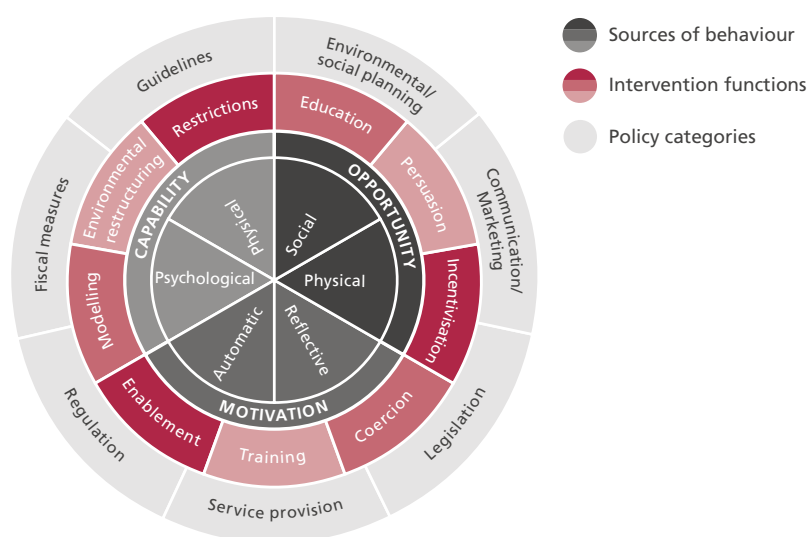
105 HM Treasury, *Spring Budget 2017*, London: HM Treasury, 2017

106 Worked out based on PHE’s declared budget of £302.3 million as a percentage of DH £149 billion budget

107 Public Health England, Policy paper: *Childhood obesity plan: PHE’s role in implementation*, HM Government, published online 29 September 2016 [last accessed 18.08.17 via: www.gov.uk/government/publications/childhood-obesity-plan-phes-role-in-implementation/childhood-obesity-plan-phes-role-in-implementation]

108 Michie et al. (2011) ‘The behaviour change wheel: A new method for characterising and designing behaviour change interventions’, *Implementation Science*; 6:42

Figure 8: Behaviour change wheel



Source: Michie et al, Implementation Science 2011

Maximising mayoral powers

The Amsterdam Healthy Weight Programme demonstrated the powerful role cities can play in localising and targeting efforts to reduce childhood obesity by drawing upon existing resources and easing the pressure from central government. This was primarily because of the political leadership, ambition and convening power of Amsterdam Alderman Eric van der Burg but would not have been possible without the support of other political leaders, sectors and departments.

The 2017 mayoral elections in England saw an increase in the number of directly elected mayors representing major cities and areas across England. The mayors present an opportunity for the Government to call upon them to take responsibility for childhood obesity rates in their areas and to appropriately target, tailor and localise their approaches.

London Mayor Sadiq Khan, Greater Manchester Mayor Andy Burnham and others are already leading effective projects to make their areas healthier and more equal places. In August 2017, the Mayor of London published a consultation on the planned Health Inequalities Strategy for London, marking an important step in closing the health gap between the richest and poorest. A few effective obesity-tackling projects in England are case-studied in this chapter and demonstrate how much is already being put into action across the country. The CSJ is calling on the Government to join up existing action, and support an AAGG-style vision across England so outcomes can be measured, best practice can be shared and mayors can become accountable for delivering the national Childhood Obesity Plan in their areas.

By being nationally led and locally driven, mayors, who do not hold certain national powers, can work with the Government to make any necessary changes at a national level to support efforts locally. Only by adopting a nationally led, locally driven, long-term approach overseen by an independent body and championed by committed political leaders will an effective childhood obesity plan be delivered.

Key recommendations

Recommendation 1: Government leadership and commitment

The first step the Government, and specifically the Prime Minister, must take to ending childhood obesity is to commit to doing so, secure the cross-party, cross-departmental and cross-sector commitment to support this and set out a bold, long-term, target-led, non-partisan strategy. The Government should focus on area-based targeting: start in areas with the highest proportion of childhood obesity and then roll out interventions proportionate to an area's childhood obesity rates.

Recommendation 2: Supporting public health in Government

A successful cross-departmental Childhood Obesity Plan requires all relevant Government departments to take responsibility and be accountable. Public health must play a central role in Government and health must be an objective across all major policies. To achieve this, the Government should introduce a Department of Public Health and Prevention (DPHP) led by a Secretary of State for Public Health and Prevention. The Secretary of State's prime responsibility would be to lead Public Health England, deliver effective cross-departmental public health policies (based on Michie et al's behaviour change wheel) and ultimately reduce the NHS England budget and burden by investing in effective prevention. A Minister for Childhood Obesity and a team of civil servants would need to be assigned across Government to oversee the delivery of the Childhood Obesity Plan to ensure political cycles and Government reshuffles do not affect its delivery.

Recommendation 3: Piloting a nationally led, locally driven Mayoral Healthy Weight Programme led by England's mayors

Devolution presents a key opportunity to tailor and target childhood obesity interventions and ensure efforts are overseen by the mayors, who hold the required powers to deliver effective programmes. The Government should call upon England's mayors, including London, Cambridgeshire and Peterborough, Greater Manchester, Liverpool City Region, Tees Valley, West of England, West Midlands, and Bristol and Torbay, to commit to, design and deliver tailored, targeted and outcomes-led healthy weight programmes in their areas. This includes joining up existing services and strategies, and drawing upon existing resources. Through national leadership and supervision, area-based projects can share best practice, compare success and localise actions to ensure resources are not wasted. Mayors should focus on area-based targeting, starting in areas with the highest proportion of childhood obesity and then rolling out interventions proportionate to an area's childhood obesity rates.

Recommendation 4: Setting targets and monitoring action

The Childhood Obesity Plan must include two main targets: 1) End childhood obesity by 2037 with shorter-term targets such as halving childhood obesity rates by 2027, and 2) Close the gap between the most and least deprived children, with shorter-term targets such as halving the gap by 2027. As in Amsterdam, where the target has been set at no obese children in Amsterdam by 2033, the Government must be ambitious by setting targets high and breaking these down into shorter-term goals. Actions must also be monitored closely to build the evidence base, so the importance and effectiveness of ending childhood obesity can be established and articulated. This could be conducted by the new Research Policy Unit for obesity launched in 2017.

Families and early years

The first 1000 days – from conception to a child's second birthday – are widely considered to be the most formative in a child's development. Before infants are conscious of what they consume and what they like and dislike, their health behaviours have already been heavily influenced.

Health before the age of five is critical, which makes the role of families and early years settings of fundamental importance. The most excess weight gain before a child hits puberty occurs before children reach five years of age.¹⁰⁹ There is an association with junk food consumption at age three with lower school attainment at Key Stage 2, regardless of subsequent changes to diet.¹¹⁰

The focus on early life and the early years settings is shared by many leading public health specialists and championed by Professor Sir Michael Marmot and Dame Sally Davis, UK Chief Medical Officer.¹¹¹ The Childhood Obesity Plan includes a section on enabling healthcare professionals, including health visitors and school nurses, to support families and improve early years settings, focused on revising early years menus, developing voluntary guidelines and updating the Early Years Foundation Stage Framework to include the UK Chief Medical Officers' physical activity guidelines in early years settings.¹¹²

Recommendation 5

It is with this in mind that any obesity strategy must engage with families at the earliest possible opportunity and consider strategies that engage providers in early years settings. This could be done through the Troubled Families programme, public education targeted at new parents, and targeting nursery and childcare providers.

109 Gardner DS et al (2009) 'Contribution of early weight gain to childhood overweight and metabolic health: a longitudinal study (EarlyBird 36)', *Pediatrics*; 123(1):e67–73. Doi: 10.1542/peds.2008–1292

110 Feinstein L (2008) 'Dietary patterns related to attainment in school: the importance of early eating patterns', *Journal of Epidemiology and Community Health*; 62(8):734–9. Doi: 10.1136/jech.2007.068213

111 Public Health England, *Best start in life and beyond: Improving public health and outcomes for children, young people and families – Guidance to support the commissioning of the Healthy Child Programme 0–19: Health Visiting and School Nursing services*, 2016: PHE, London

112 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

Areas for consideration

1. Troubled Families Programme – addressing childhood obesity

The Troubled Families Programme (TFP), launched in 2012, is a Government-led (Department for Communities and Local Government), family-based and targeted intervention programme designed to help disadvantaged families with multiple, complex needs, to join up public services and ensure they take a ‘whole family approach’, and lower costs for the taxpayer by reducing demand for reactive services. It is delivered through local authorities who identify families in their area and assign a key worker to them. This is done based on a framework in which families must fulfil at least two of the following criteria:

- Households who are involved in crime or anti-social behaviour
- Households with children not in school or who do not attend school regularly
- Households with an adult on out-of-work benefits, at risk of financial exclusion or young people at risk of worklessness
- Households affected by domestic violence or abuse
- Households with children that need help, are identified as needing help or are subject to a child protection plan
- Households with a range of physical and mental health problems

The indicator addressing health problems places emphasis on drug and alcohol abuse, rather than childhood obesity. Projects such as the Lambeth Healthy Weight Project demonstrate how tackling childhood obesity can help address a range of other issues too. The TFP should include childhood obesity as a specific indicator and tool for engaging the poorest families, so that childhood obesity can be addressed alongside other key objectives. This would support the programme’s aim to reduce the demand for reactive services, join up statutory care and save costs by doing so.

2. Empowering and supporting mothers from day one

The UK has the lowest breastfeeding rate in the world.

The World Health Organisation (WHO) recommends that mothers breastfeed exclusively for six months and then continue mix-feeding (breastfeeding while introducing appropriate complementary foods) for up to two years of age or beyond.¹¹³ In England, only 1 per cent of mothers breastfeed exclusively up to six months,¹¹⁴ with 0.5 per cent of mothers still breastfeeding at 12 months.¹¹⁵ According to Public Health England figures published in 2017, the drop-off for most mothers occurs between six to eight weeks, which is just a third of the recommended time for mothers to breastfeed exclusively.¹¹⁶

113 World Health Organisation, Health topics, *Breastfeeding*, last updated 2017 [accessed via: www.who.int/topics/breastfeeding/en/]

114 Unicef, United Kingdom, *Breastfeeding in the UK*, “Breastfeeding rates in the UK” [last accessed 21/11/17 via: www.unicef.org.uk/babyfriendly/what-is-baby-friendly/breastfeeding-in-the-uk/breastfeeding-rates-in-the-uk/]

115 Victoria G C et al, “Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect”, *The Lancet*, Vol. 387, Issue 10017, 475–490, DOI: [http://dx.doi.org/10.1016/S0140-6736\(15\)01024-7](http://dx.doi.org/10.1016/S0140-6736(15)01024-7)

116 Public Health England, Press release, “New survey of mums reveals perceived barriers to breastfeeding”, published online 27 March 2017 [last accessed 21/11/17 via: www.gov.uk/government/news/new-survey-of-mums-reveals-perceived-barriers-to-breastfeeding]

Breast milk is the best form of nutrition for infants, and breastfeeding has many important health benefits to both the mother and infant, including dramatic and positive effects on an infant's life expectancy. Benefits include being zero-cost and convenient; it protects mothers against breast and ovarian cancer; it uses up around 500 calories a day for the mother; it gives emotional, behavioural and bonding benefits between mother and child; and it offers protection for babies from serious infections and diseases such as childhood obesity, diarrhoea and vomiting, sudden infant death syndrome (SIDS), childhood leukaemia, type 2 diabetes and cardiovascular disease in adulthood.¹¹⁷ Only 1 to 2 per cent of mothers are physically incapable of breastfeeding.¹¹⁸ For all other mothers, breastfeeding may be difficult, painful or cause mastitis, but these problems are solvable, often quickly, with the right support and advice.

Yet, as incomes fall, generally so do breastfeeding rates. In one study examining the socio-demographic factors affecting breastfeeding rates, it found that breastfeeding was associated with lower area-based deprivation. In areas outside of London, the chance of mothers in the most deprived quintile initiating breastfeeding was 32 per cent less than mothers in the least deprived quintile.¹¹⁹ Comprehensive data on breastfeeding rates among different socio-demographic groups in England is lacking because the Government discontinued its Infant Feeding Survey in 2010 following nine recurrent UK surveys since 1975. Instead it introduced an annual report focused solely on breastfeeding-initiation rates. The Government has also reduced the number of specialist infant feeding co-ordinators, which will inevitably mean lower breastfeeding rates and the associated higher costs to Government in the long term.¹²⁰

Almost 80 per cent of mothers want to start breastfeeding because they feel it is healthier for their child and "the most natural thing to do".¹²¹ However, there are major barriers to breastfeeding which indicate that mothers in England are simply not supported effectively. A report by the Royal College of Midwives on infant feeding found that only 7 per cent of mothers felt they received plenty of support from their midwife compared to a quarter of mothers who stated they received very little support and felt like they were on their own.¹²²

3. The Healthy Start Scheme

The Healthy Start Scheme (HSS) is a voucher scheme for low-income pregnant women and mothers with children under four years old to help them buy basic foods and products. The vouchers can be spent on milk, fruit and vegetables, and infant formula. Women and children on the scheme also get vitamin vouchers to claim Healthy Start vitamins. Women are usually directed to the scheme by a midwife or health visitor and it is advertised in healthcare locations such as family planning clinics.¹²³

117 NHS choices: Your health, your choices, Health A-Z, Pregnancy and baby, "Benefits of breastfeeding", last reviewed 2017 [last accessed 21/11/17 via: www.nhs.uk/Conditions/pregnancy-and-baby/Pages/benefits-breastfeeding.aspx]

118 The Telegraph, "Breastfeeding: Where, When and How? 11 myths busted", published online 5 December 2014 [accessed via: www.telegraph.co.uk/women/mother-tongue/11275278/Breastfeeding-mothers-11-myths-busted.html]

119 Oakley LL, Renfrew MJ, Kurinczuk JJ, et al, "Factors associated with breastfeeding in England: an analysis by primary care trust", *BMJ Open* 2013; 3: e002765. doi: 10.1136/bmjopen-2013-002765

120 Brown A, "What Do women Really Want? Lessons for Breastfeeding Promotion and Education", *Breastfeeding Medicine* Vol.11, Issue 3, April 2016, 11(3): 102–110. <https://doi.org/10.1089/bfm.2015.0175>

121 Woolridge M., Presentation: *Barriers to breastfeeding – what influences UK mothers' drop-off rates?*, University of Leeds [accessed via: www.rcm.org.uk/sites/default/files/Barriers_to_breastfeeding_Final_no_animation.pdf]

122 The Royal College of Midwives, *Infant feeding: Supporting parent choice* [accessed via: www.rcm.org.uk/sites/default/files/Pressure%20Points%20-%20Infant%20Feeding%20-%20Final_0_0.pdf]

123 NHS Healthy Start website [last accessed 21/11/17 via: www.healthystart.nhs.uk/healthy-start-vouchers/]

The HSS represents a key opportunity for influencing diets in the early years of life by providing key nutrients and support for fruit and vegetable consumption in pregnancy and up until the age of four. However, the scheme's uptake is currently less than 70 per cent, and is particularly low in pregnancy and for children between two and four years.¹²⁴ This is significant, as participation in pregnancy and up to the age of four is a missed opportunity to increase fruit and vegetable consumption in these populations.

To help meet the crucial nutritional needs of its target population, the scheme would benefit from several changes. The modernisation efforts that the Department of Health is currently working on will be an important step forward in how easy it is for participants to use the vouchers, but there is also a need to simplify the programme's enrolment – for example, participants must re-register for the programme after birth. Furthermore, the value of the voucher has not changed in more than 10 years despite considerable food price inflation,¹²⁵ and more deliberate effort is needed to encourage participants to use the vouchers for fruit and vegetables, particularly in pregnancy and after the child is past the age of two.

The Department of Health should set an uptake target for Healthy Start (e.g. 85–90 per cent) and work with local authorities to achieve this. They should simplify and modernise the scheme with a view to supporting healthy eating, increased fruit and vegetable consumption in pregnancy and early childhood, and empowering mothers to breastfeed.

Case study: WIC, USA

The WIC Program (The Special Supplemental Nutrition Program for Women, Infants and Children) was established in the US in 1974 to protect the health of low-income women, infants and children up to the age of five who are at nutritional risk. The programme is available in all 50 US States and is funded through grants from the Federal Government. Service users gain access to WIC authorised foods including cereal, fruit and vegetables, juice, eggs, milk, cheese, yoghurt, soy-based drinks, tofu, peanut butter, canned fish and wholewheat bread. It also provides milk formula to mothers not fully breastfeeding.¹²⁶ In many ways, the UK's Healthy Start Scheme is similar. However, the WIC Program provides access to several additional beneficial resources, including health screenings, nutrition and breastfeeding counselling, immunisation screening and referrals, and substance abuse referrals. WIC mothers are actively encouraged and supported to breastfeed, unless medically advised not to, and are provided with the necessary educational materials and support through counselling and guidance.

¹²⁴ Healthy Start Alliance website [last accessed 21/11/17 via: www.healthystartalliance.org/about-healthy-start/4587182409]

¹²⁵ Pregnant women and children over one and under four years old are eligible for one £3.10 voucher per week. Children under one year old are eligible for two £3.10 vouchers per week.

¹²⁶ United States Department of Agriculture, *Factsheet*, "The Special Supplemental Nutrition Program for Women, Infants and Children (WIC Program)" [last accessed 21/11/17 via: www.fns.usda.gov/sites/default/files/wic/WIC-Fact-Sheet.pdf]

4. Incentivising and supporting early years settings to become Healthy Zones

One in five children start primary school already obese or overweight and only one in 10 children aged two to four meet the UK Chief Medical Officers' recommended amount of physical activity for this age group.¹²⁷ The early years settings provide a vital opportunity to prevent young children from becoming obese or overweight so early in their life and provide them, regardless of background, with the healthiest possible start to life.

All three – to four-year-olds in England are eligible for free early education or childcare and some two-year olds are also eligible if parents receive certain benefits. All children are eligible for 15 hours a week (based on 38 weeks a year) and parents who are in work and each earning at least the National Minimum Wage or Living Wage for 16 hours a week can claim 30 hours of free childcare a week. The extended provision aims to support and improve the educational attainment level of disadvantaged children. However, there is currently a low uptake of these entitlements among disadvantaged families. For the programme to reach its full potential and achieve its ambitions, the Government must focus on increasing uptake among target families.

Childcare and early learning resembles a makeshift public service, delivered through a mixed economy of voluntary, private sector and maintained sector providers. Of all registered childcare in 2016, this mix was made up of (an estimated):

- 25,500 group-based early years providers
- 8200 school-based providers offering reception provision but no nursery
- 9300 school-based providers offering nursery and reception provisions
- 400 maintained nursery schools
- 46,600 practising childminders¹²⁸

The National Audit Office noted that the national composition of the early years and childcare market has not changed significantly since 2011. The total number of providers in the market has decreased by 2200 since 2011 and the overall proportion of providers of all types has remained broadly the same.¹²⁹ Although the national picture has stayed largely the same, significant regional disparities persist in terms of the type, availability and quality of provision at parents' disposal.

A Nuffield study looking at over 1200 providers from 2007–2013 found that while maintained schools serving disadvantaged nursery children were of equal or better quality to those serving more advantaged populations, private and voluntary provisions located in deprived areas – with more disadvantaged user bases – were lagging in quality. This gap was most pronounced where private and voluntary settings were not graduate-led.¹³⁰

127 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

128 Department of Education, *Survey of Childcare and Early Years Providers*, England, 2016, [last accessed 21/11/17 via: www.gov.uk/government/uploads/system/uploads/attachment_data/file/593646/SFR09_2017_Main_Text.pdf]

129 National Audit Office (2016), *Entitlement to free early education and childcare*, [last accessed 21/11/17 via: www.nao.org.uk/wp-content/uploads/2016/03/Entitlement-to-free-early-education-and-childcare.pdf]

130 Nuffield Foundation (2014), *Quality and Inequality*, [last accessed 21/11/17 via: www.nuffieldfoundation.org/sites/default/files/files/Quality_inequality_childcare_mathers_29_05_14.pdf]

The Early Years Foundation Stage Framework (EYFSF) sets the standards for childcare and early years providers from birth to five years old. All schools and Ofsted-registered early years providers are obligated to apply the EYFSF, which only applies in England, and Ofsted inspectors use it when carrying out inspections and reporting on provision. The areas of learning include physical, personal, social and emotional development, which take into account food, physical activity, active play and emotional well-being.¹³¹

To support the EYFSF statement that “children learn best when they are healthy”, all early years settings should become Healthy Zones. Although it is not compulsory for early years settings to provide food, those that do are encouraged to follow the Voluntary Food and Drink Guidelines for Early Years Settings in England. The framework states that “where children are provided with meals, snacks and drinks, they must be healthy, balanced and nutritious” and that fresh drinking water must be available and accessible at all times. The Childhood Obesity Plan included the commissioning of the Children’s Food Trust to develop revised and updated menus for early years settings, which are incorporated into voluntary guidelines. However, by not mandating the need for early years settings to be Healthy Zones and providing the evaluation incentive to do so, the ambitions to provide children in early years settings with the healthiest experience and education possible are not met universally.

¹³¹ Department for Education (2017, March 3), *Statutory framework for the early years foundation stage*, [last accessed 21/11/17 via: www.gov.uk/government/uploads/system/uploads/attachment_data/file/596629/EYFS_STATUTORY_FRAMEWORK_2017.pdf]

Healthcare

For the hardest to reach and most vulnerable families, contact with healthcare professionals may be the only time parents discuss their child's health. For many parents, recognising that their child is overweight is not easy. Half of parents of obese children think their child is about the right weight¹³² and parental understanding of childhood obesity is worse among lower socioeconomic groups.¹³³

Since half of parents are unaware of their child's weight problem and with the average person visiting their General Practitioner (GP) six times a year,¹³⁴ primary care acts as a key 'contact point' for the 'hardest-to-reach' children. It has the potential to empower parents to learn about their child's weight problem, understand the health implications and be directed towards relevant support to help address it. Other medical professionals including midwives, health visitors and school nurses also have regular contact with the hardest-to-reach families often at the most critical time – before a child has developed any weight-related issues.

To ensure no contact opportunity is wasted and everyone involved is supported to tackle childhood obesity, services must be joined up by introducing a systematic rather than opportunistic approach. This means introducing a formal and set process, instead of encouraging medical professionals to use 'opportunities' to address childhood obesity. A formal process would start with a medical professional detecting a potential or existing weight problem, communicating with the parent and/or child, informing them about the risks, supporting them to make the necessary changes and empowering them to sustain them. This section sets out the necessary framework in which a systematic approach can be delivered effectively.

Recommendation 6

Any obesity strategy must engage with medical professionals across all services to ensure it is a priority in their training, service and daily practice. It should become a particular core concern of primary care practitioners at each patient contact and should work together with schools on strategy and data sharing.

Areas for consideration

1. Making every contact count

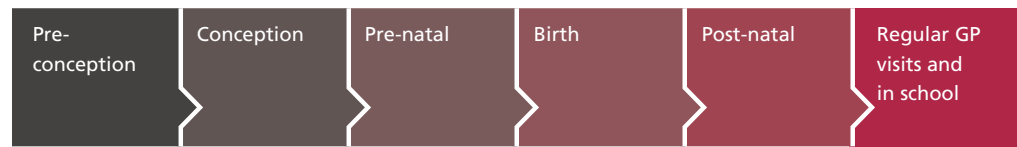
There are numerous moments when the 'hardest to reach' encounter medical professionals, who can play a pivotal role in guiding people towards a better state of health for both them and their children. It is critical that consistent advice is given at every opportunity, and medical and nursing professionals are supported, equipped and trained to prevent childhood obesity. Smoking and alcohol consumption are addressed by medical and nursing professionals to reduce the rates of any related diseases, so obesity, which is linked to so many serious diseases, should be too.

¹³² NHS Digital, *Statistics on Obesity, Physical Activity and Diet*, England 2017, Health and Social Care Information Centre, first published 30 March 2017

¹³³ Black, J., et al., (2015) 'Child obesity cut-offs as derived from parental perceptions: cross-sectional questionnaire', *British Journal of General Practice*, 65(633), pp.e234-e239

¹³⁴ BMA, *General practice in the UK – background briefing*, London: BMA, 2017

Figure 9: The key contact points



Before a woman has conceived, there are key intervention opportunities when they are planning to conceive for medical and nursing professionals to inform them about why it is important to be a healthy weight upon conception, and how being obese as a parent increases the chances of having an obese child. The National Institute for Health and Care Excellence (NICE) guidelines state that “GPs, dietitians and other appropriately trained health professionals should advise, encourage and help women with a BMI of 30 or more [i.e. obese] to reduce weight before becoming pregnant”.¹³⁵ It states that ideally, mothers would have a BMI between 24.9 and 18.5 (healthy range) upon conception. However, evidence shows that the majority of medical professionals do not raise weight issues with obese patients during visits, proving more needs to be done to ensure medical and other appropriately trained professionals make every contact with the ‘hardest to reach’ count.¹³⁶

Children with two obese parents are 15 times more likely to be obese themselves.¹³⁷ They are also more likely to experience continued weight gain throughout childhood, especially between the ages of three and five. Other risk factors of having two obese parents include exhibiting low levels of physical activity or being physically inactive, having a greater preference for unhealthy foods, and displaying less preference for healthy foods.¹³⁸ Whether these risk factors are caused by the normalisation of familial behaviours, through genetic mechanisms, through the environment a child is exposed to, or a combination of these is yet to be established.

It is vital that GPs and nurses in sexual health and family planning clinics use the pre-conception window to raise concerns with patients about their weight before they conceive to reduce chances of them being obese upon conception.

2. Monitoring growth regularly

Once a child is born there are several points in their life before they reach primary school age where they are expected to be weighed and measured. In 2000, 2004 and 2005, the Child Growth Foundation organised three specialist seminars, chaired by Professor Sir David Hall, President of the Royal College of Paediatrics and Child Health, to establish when and how frequently infants and children should be weighed and measured. It was agreed that BMI should be calculated several times during primary and secondary school.¹³⁹ The Department of Health’s Healthy Child Programme states that “growth is an important indicator of a child’s health and well-being” and “the child’s growth should be measured

¹³⁵ NICE, *Weight management before, during and after pregnancy*, first published online July 2010 [last accessed 21/11/17 via www.nice.org.uk/guidance/ph27/chapter/1-Recommendations]

¹³⁶ Aveyard, P. et al., ‘Screening and brief intervention for obesity in primary care: a parallel, two-arm, randomised trial’, *The Lancet*, Vol. 388, Issue 10059, 2492–2500, DOI [http://dx.doi.org/10.1016/S0140-6736\(16\)31893-1](http://dx.doi.org/10.1016/S0140-6736(16)31893-1)

¹³⁷ Scott, F. I., et al. “Etiology and comorbidities of childhood obesity.” *Turk J Gastroenterol* 28 (2017): 149–51.

¹³⁸ Fuemmeler BF, Lovelady CA, Zucker NL, Østbye T. Parental obesity moderates the relationship between childhood appetitive traits and weight. *Obesity (Silver Spring, Md)*. 2013; 21(4):815–823. doi:10.1002/oby.20144

¹³⁹ Information provided by the UK National Obesity Forum 2017

and plotted on appropriate charts".¹⁴⁰ Regular measuring and plotting on appropriate charts allows a child's growth curve to be monitored closely, and any irregularities can be picked up the more frequently a child is measured.

Once a child reaches primary school they are measured as part of the National Childhood Measurement Programme (NCMP). The NCMP weighs over one million children in schools twice (at four to five years and at 10 to 11 years) and current surveillance is ineffective as a policy measure in isolation, since data is not shared. This prevents schools, parents and health professionals from effectively preventing obesity by joining up efforts and providing wrap-around support.¹⁴¹ By the time an obese or overweight child reaches the age of 10 to 11 years old and is measured for the second time, obesity rates have doubled nationally but quadrupled in the most deprived areas. Thus opportunities for interventions are lost during this key stage. By regularly monitoring children's weight and so showing any abnormality in a child's growth curve at an early stage, effective prevention measures can be introduced.

Case study: Reducing Childhood Obesity in Manchester (RCOM)

RCOM is an NHS-sponsored, multi-organisation collaboration aimed at reducing childhood obesity and improving children's health in Manchester. It works in partnership with Central Manchester University Hospitals, CHAMP (Children's Health and Monitoring Programme), Manchester City Council, the University of Manchester, ASDA and City in the Community (Manchester City FC's community organisation).

The collaboration takes a system-wide approach based on empowering individuals, supporting communities, developing digital technologies and solutions, adopting NHS principles and values, and taking a multi-agency strategy. It seeks to join up and examine the effectiveness of existing services such as health professional programmes, in-school work, community-based organisations and the role of the food and drinks industry.

A key element has been recognising the vital importance of monitoring children's growth and expanding the NCMP by measuring 45,000 children annually across Manchester primary schools. Results of the programme are appropriately communicated to parents using an online platform in which growth feedback is provided and data is shared with schools, following insight that revealed the extent to which school leaders were regularly underestimating the obesity rates in their schools. Other measures include a physical activity programme led by City in the Community that focuses on personal, social, emotional, physical, communication and language development; and the introduction of a six-week cooking programme.¹⁴²

¹⁴⁰ Department of Health, *Healthy Child Programme: Pregnancy and the first five years of life*, 2009: Department of Health, London

¹⁴¹ (National Child Measurement Programme – England, 2013–14, Health and Social Care Information Centre 2014).

¹⁴² In Manchester (RCOM): Programme Report, [last accessed 21/11/17 via: www.kirstymarks.com/rcom/]

3. Educating and communicating with parents

Parents are told the results of the NCMP screening via a letter. One study reveals that over 50 per cent of parents take no action upon receiving the 'obesity' letter, only five per cent consult a health professional for advice and less than one per cent attend effective weight-management schemes.¹⁴³ This dramatic absence of action demonstrates that the NCMP, although useful for statistics and data, is not working. Overweight or obese children should be automatically referred to their GP since they are best placed to increase awareness and give guidance, which parents would and do listen to.

One reason why parents are unable to recognise their child as overweight, and indeed fail to take action on 'obesity' letters, is because most parents believe that 'health and happiness' is more important than the child's weight.¹⁴⁴ This survey investigated parents' health beliefs, and found that their child's lifestyle, diet and activity levels are central to the child's health and wellbeing – totally disregarding weight. A mother of a five-year-old obese child states: "I never thought of the weight side particularly, I just looked at what the lifestyle was. He does exercise and he does eat well." If the parent believes their child is eating a healthy diet, despite being overweight, then they think the child is fine.¹⁴⁵ This demonstrates a lack of health literacy and a disconnection between parents' health beliefs and long-term health outcome. The most common belief of parents questioned in the study is that being overweight is a 'temporary' issue, which echoes findings in previous literature.¹⁴⁶

The theory of planned behaviour would suggest that motivation to change a health-related behaviour is influenced by two sets of beliefs.¹⁴⁷ First, beliefs about current behaviour (e.g. whether the parent feels their child's diet is putting them at risk of health problems) and, second, beliefs about the ability to change behaviour (e.g. how easy the parent would find it to change their child's diet). Information on weight status alone is not enough to bring about change¹⁴⁸ but the NCMP feedback may be an important step to behaviour change if parents understand that their child may be at risk of long-term health problems associated with being overweight.

This suggests that the first step to parents changing their behaviour involves them understanding that their child is overweight and at risk of health problems because of current behaviour (e.g. poor diet, sedentary lifestyle). They would then need to believe that they were able to change those behaviours. In other words, behaviour change will not occur if parents do not perceive their child to be overweight or at risk of health problems. This is where health practitioners and GPs can intervene. If a child is overweight or obese and has a letter sent home, an appointment with health staff should be arranged.

143 Falconer, C., Park, M., Croker, H., Skow, A., Black, J., Saxena, S., Kessel, A., Karlsen, S., Morris, S., Viner, R. and Kinra, S. (2014). The benefits and harms of providing parents with weight feedback as part of the national child measurement programme: a prospective cohort study. *BMC Public Health*, 14(1).

144 Syrad, H., Falconer, C., Cooke, L., Saxena, S., Kessel, A., Viner, R., Kinra, S., Wardle, J. and Croker, H. (2014). 'Health and happiness is more important than weight': a qualitative investigation of the views of parents receiving written feedback on their child's weight as part of the National Child Measurement Programme. *J Human Nutrition & Dietetics*, 28(1), pp.47–55

145 Syrad, H., Falconer, C., Cooke, L., Saxena, S., Kessel, A., Viner, R., Kinra, S., Wardle, J. and Croker, H. (2014). 'Health and happiness is more important than weight': a qualitative investigation of the views of parents receiving written feedback on their child's weight as part of the National Child Measurement Programme. *J Human Nutrition & Dietetics*, 28(1), pp.47–55

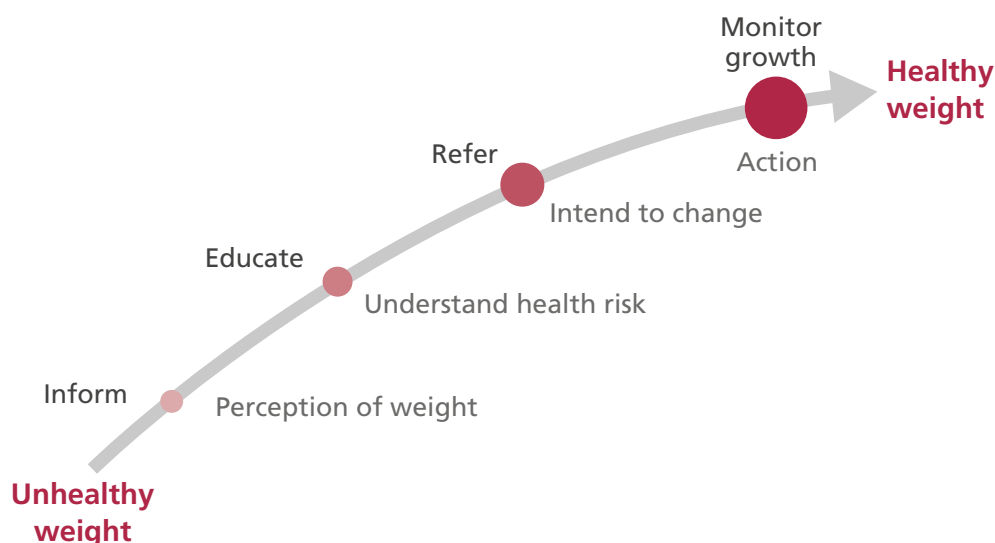
146 Carnell, S., Edwards, C., Croker, H., Boniface, D. and Wardle, J. (2005). Parental perceptions of overweight in 3–5 y olds. *Intl J Obesity*, 29(4), pp.353–355

147 Ajzen I. (1991). The theory of planned behavior. *Org Behavior & Human Decision Process*. 50, pp.179–211

148 Chomitz, V., Collins, J., Kim, J., Kramer, E. and McGowan, R. (2003). Promoting Healthy Weight Among Elementary School Children via: a Health Report Card Approach. *Arch Pediatrics & Adolescent Medicine*, 157(8), p.765

By doing so, it will further increase the utility of the NCMP alongside health behaviour change, resulting in beneficial long-term consequences.

Figure 10: Changing parental behaviour



Source: Schematic from Professor Sonia Saxena, Imperial College London

The current role of primary care

Recent guidelines from NICE outlines three key roles for the GP:

1. To work with families to address behavioural risk factors
2. Follow up weight status in children
3. Inform them about local weight management services or refer for specialist care

More specific expectations of GPs in a 10-minute consultation:

- Explore a parent's ideas, concerns and expectations about food and exercise and build a picture of the home environment
- Exclude medical causes of overweight and plot height and weight on a growth chart
- Offer practical strategies and achievable goals, agree follow-up and involve the multidisciplinary team for support

It is believed that this should be suitable to help tackle the current obesity epidemic, especially helping parents who may not realise that their child is overweight.¹⁴⁹

149 Saxena S, Lavery AA. GPs can offer obese children and their families practical help. *Clinical Guidelines* 2014

Healthy lifestyle ideas

- Find creative ways to ensure everyone in the family eats five portions of fruit/vegetables a day.
- Clear the house of calorie dense foods (e.g. crisps, sweets).
- Decrease sedentary behaviour by restricting computer and television time and increase lifestyle physical activity (e.g. walking to shops and school).
- Set quantifiable goals together and invite parents to monitor the family's positive changes (e.g. using a star chart for low, medium (e.g. walking to school) and high energy activities (e.g. football, running in park). Aim for 60 minutes of physical activity per day.
- Reward children for good behaviour by spending time with praising them e.g. rewarding them with story time rather than with food.

Reality of primary care

The key role of the GP is primary prevention of obesity. Currently, GPs are under enormous pressure to respond to escalating health problems with treatments and referrals. For example, bariatric surgery in teenagers has increased 30-fold in the past 10 years, with hospital admissions in obese children increasing four-fold.¹⁵⁰ Furthermore, the number of anti-obesity medications prescribed has increased 15-fold.¹⁵¹ GPs are increasingly stretched, with limited resources, and their action often becomes reactive as opposed to proactive.

At a time of austerity and with an increasing population, demand on services has never been higher. Consultations with children in primary care are often time-limited and occur in the context of an acute illness. In other words, the appointment is not about the child's weight status and many opportunities are missed to talk openly with parents about their child's general health, as opposed to their specific health need at that time. Furthermore, many GPs believe that tackling weight issues takes too much time, is a sensitive subject which can be inappropriate during a consultation (especially with patients suffering from mental health issues), and many of the necessary interventions are ineffective or do not exist locally. It is critical that GPs are adequately empowered and incentivised to drive the change needed and supported to do so by other key sectors.

Many practitioners also say they are unsure about how to assess and tackle obesity in a child. As a result, they lack the confidence to be agents of behaviour change. The CSJ agrees with the Childhood Obesity Plan that "health professionals should feel confident discussing nutrition and weight issues with children, their families and adults", but evidence shows that GPs still do not feel sufficiently equipped with the communication skills and knowledge required to broach such a sensitive and complex topic, especially when consultations are so short.¹⁵²

A 2017 study published in the British Journal of General Practice found that only 20 per cent of GPs were familiar with the Chief Medical Officer's national physical activity guidelines for adults,

150 Jones Nielsen, J., Lavery, A., Millett, C., Mainous III, A., Majeed, A. and Saxena, S. (2013). Rising Obesity-Related Hospital Admissions among Children and Young People in England: National Time Trends Study. *PLoS ONE*, 8(6), p.e65764

151 Viner, R., Hsia, Y., Neubert, A. and Wong, I. (2009). Rise in antiobesity drug prescribing for children and adolescents in the UK: a population-based study. *British J Clinical Pharmacology*, 68(6), pp.844–851

152 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

and 30 per cent admitted having never heard of them.¹⁵³ Many GPs have limited training in either paediatrics or how to properly assess and monitor growth in children. In addition to being empowered and incentivised, GPs must also be equipped to understand the causes of childhood obesity to ensure that broaching this sensitive subject with parents and children is de-stigmatised and discussed in the context of safeguarding against disease and illness.

Despite these issues, and the fact that many GPs do not raise weight issues with obese patients during visits,¹⁵⁴ parents have explained that they would be much more likely to act if their GP recommended it.¹⁵⁵

Case study: the 30-second intervention

In 2016, The Lancet published a study that had been conducted and led by Professor Paul Aveyard to identify the most effective way GPs and physicians can address and reduce adult obesity, in response to the growing evidence showing how rarely they intervene. The study included a randomised trial including 137 GPs in England and 1,882 patients attending a consultation unrelated to their weight issue. The trial divided patients into two halves. At the end of the consultations, half of the patients were offered a 12-week weight management programme available free on the NHS, and the other half were advised by their GP about the health benefits of losing weight but not offered a weight management service.

The results showed that 81 per cent of people across both groups found the intervention appropriate and helpful, and a similar percentage across both groups had taken some action to address their weight issue. However, those in the group offered a weight management service were around five times more likely to have taken effective action.

Professor Aveyard stated that “evidence from this trial shows that they [doctors] should be much less worried [about offending their patients]” and that a “30-second conversation, followed by help booking the first appointment on to a community weight loss programme, leads to weight loss and is welcomed by patients”.¹⁵⁶

Since the trial was conducted on adults, a trial needs to be conducted in England to determine whether the 30-second intervention can effectively address childhood obesity.

4. Service delivery: supporting and empowering families to address childhood obesity

The devolution of public health responsibility to local government in 2013 sparked the development of numerous innovative weight management programmes across the country. Weight management services offered by the NHS are divided into four tiers that cover different activities:

153 Nicola Davis, *GPs in England ‘unconfident’ discussing physical activity with patients – report*, The Guardian, 15 August 2017 [last accessed 17.08.17 via: www.theguardian.com/society/2017/aug/15/gps-in-england-unconfident-discussing-physical-activity-with-patients-report]

154 Aveyard, P. et al., ‘Screening and brief intervention for obesity in primary care: a parallel, two-arm, randomised trial’, *The Lancet*, Vol. 388, Issue 10059, 2492–2500, DOI [http://dx.doi.org/10.1016/S0140-6736\(16\)31893-1](http://dx.doi.org/10.1016/S0140-6736(16)31893-1)

155 Falconer, C., Park, M., Croker, H., Skow, A., Black, J., Saxena, S., Kessel, A., Karlsen, S., Morris, S., Viner, R. and Kinra, S. (2014). The benefits and harms of providing parents with weight feedback as part of the national child measurement programme: a prospective cohort study. *BMC Public Health*, 14(1)

156 University of Oxford, *GP referral to weight loss programme is effective, welcomed and takes 30 seconds*, University of Oxford, published online 25 October 2016 [last accessed 18.08.17 via: www.ox.ac.uk/news/2016-10-25-gp-referral-weight-loss-programme-effective-welcomed-and-takes-30-seconds]

- Tier 1 – Universal services (such as health promotion or primary care)
- Tier 2 – Lifestyle interventions (usually delivered in community, leisure or school settings)
- Tier 3 – Specialist weight management services
- Tier 4 – Bariatric surgery

Many of the available weight management services fall into the NHS's Tier 2 and 3 categories. Typically, local authorities commission Tier 2 services and Clinical Commissioning Groups (CCGs) and/or local authorities commission Tier 3 services.

In a 2017 report by the Local Government Association to demonstrate the work local government has been delivering to tackle the issue of child and adult obesity, several of the most effective and innovative council-led healthy weight initiatives are profiled, including a Stoptober-style campaign in Blackpool to help children give up sugary soft drinks, and an early intervention scheme in Telford and Wrekin helping pregnant women and mothers to help control their weight and give their infant the healthiest start possible.¹⁵⁷ Pioneering and innovative projects can be found across England, many of which adopt a whole-systems, collective – impact approach such as that being taken at a city-wide level in Amsterdam.

However, while some local authorities and CCGs are paving the way by supporting and delivering outstanding weight management programmes, others do not have a single service available locally. A 2016 report examining the effectiveness of CCGs in tackling obesity found that significant numbers of CCGs reported that they did not consider themselves responsible for tackling obesity, and 0.18 per cent of children eligible for weight management services had no access to them.¹⁵⁸ According to Public Health England, 75 per cent of local authorities reported having a weight management service available for children and adults locally, **meaning a quarter of all local authorities do not have a known local Tier 2 or 3 weight management service for children or adults.**¹⁵⁹

The barriers local authorities identified in commissioning weight management services included:

- The absence of strong national leadership to “drive and mobilise action on obesity”
- Tackling child and adult obesity is not mandated so it becomes a low priority, especially when resources are finite
- Disjointed services and referrals dependent on the area and local authority
- Threats to budget and reduced ring-fencing prevents long-term strategies being protected and introduced
- Insufficient numbers of people registered with services make them cost-ineffective

The report highlights several key barriers local authorities and CCGs face in effectively tackling obesity and being sufficiently equipped to ease the pressure on primary care services. Currently, services are opportunistic rather than systematic, and there is little evidence of clear procedures about how a child should be identified as overweight or obese and who by, how they are referred to a service and who by, and then how they are

¹⁵⁷ Local Government Association, *Healthy weight, healthy futures: Local government action to tackle childhood obesity*, 2017: LGA, London

¹⁵⁸ HOOP, *CCGs fall well short on tackling obesity!* (2016) HOOP, London

¹⁵⁹ Public Health England, *National mapping of weight management services: Provision of Tier 2 and Tier 3 services in England* (2015) Public Health England, London

supported by a Tier 2 or 3 service in which they are monitored and progress is recorded continuously. A systematic plan including primary care and then onto Tier 2, 3 or 4 (in the worst cases) is required to join up service delivery and ensure children do not fall through the gaps.

Existing services often demonstrate how imperative the joining up of services is. This means liaising with and joining up various services involved. Existing projects have reported that families they come into contact with are already known to individual services, but a failure to connect the different aspects of a family's issues means that root causes are not recognised.

The damage this can cause is hugely underestimated, especially when viewing services through the lens of the most vulnerable families, where ineffective services can be more harmful than no service at all because it can lead families to mistrust and be isolated by the services. In cases where families have been referred to numerous disjointed services, have lost trust and whose issues have not been dealt with, effective services have the double burden of patching up damage caused by inadequate provision as well as tackling the multiple complex needs of the family. To demonstrate the importance of a multi-component, joined-up approach, an example of an effective Tier 3 service is profiled below.

Tier 3 Case study: Lambeth Healthy Weight Project

Lambeth Healthy Weight Project is a Tier 3 project working with families with complex presentations of obesity as part of Lambeth's Healthy Weight Care Pathway. The project employs a systemic family and multi-disciplinary approach that addresses healthy eating, physical activity and psychosocial issues in a way it deems is acceptable to families (their feedback states that it is). Work to date has revealed a wide range of psychosocial factors acting as barriers to healthier lives, including child protection, parental mental and physical health issues, asylum seeking status, domestic violence, parental substance misuse, bereavement, and children with additional diagnoses e.g. autism.

The project is not based on one specific model but a range of thinking in the area and direct feedback from families – e.g. families and young people have told the project about the stigma and shame they experience as well as the practical struggles of navigating services. What evidence there is points to multi-modal and family approaches as being important e.g. Epstein. BMJ guidance (BMJ. 2001 October 20; 323(7318): 916–919), who summarised the following:

- Young obese children should maintain weight or gain weight slowly rather than lose weight
- Inculcating healthy eating habits is better than restricting diet
- Sustainable lifestyle activities should be encouraged
- Psychosocial problems are important consequences of overweight or obesity
- Behavioural treatments should be individually designed
- All treatments must be acceptable to the family

Despite this, evidence for weight and fat loss remains limited. Typically, the focus is on the individual child or family, which has led to people reporting that they feel blamed. Interventions need to address the areas outlined above and the different aspects of family life, many of who have complex histories. The project identified that to date, environmental, psychological, and socio-demographic factors tend to be ignored. This is despite evidence

from experimental and longitudinal cohort studies showing that in addition to physical health problems, overweight children are likely to suffer from psychological problems and have an increased risk of psychosocial and psychological problems that can persist into adulthood. These are issues already linked with environmental and other social factors e.g. the disproportionate number of children and young people from black and minority ethnic groups who are obese.

To address this, the project convened a team and protocol to work at these different levels of intervention. For example, bringing different skills and personnel together in one team, as well as working closely with the families to unpick the different and often interrelated factors maintaining their struggles with weight.

Outline of the project

The aim of the project is to provide a service to families where there are complex presentations of obesity. This may include related physical health issues, other social stressors or adversity. The values of the project are essential to the work and underpin its practice.

A whole-systems approach

Too often families experience services in a fragmentary fashion, with the focus on families doing things differently rather than services thinking about how they can devise and adapt their policies and practice to the families. For the families who have had mixed or difficult experiences of services, this can compound issues of discrimination and poor health outcomes. For some, it becomes hard to trust services and be hopeful about help. The project seeks to address this by making good communication, co-ordination, and integrated, family-oriented care the key features of the work. This begins from the point at which the project receives its referrals through to ongoing treatment and review.

Systemic/family therapy principles and practice

Whilst the project team is multi-disciplinary as well as multi-agency, combining family therapy, dietetic, physical activity and paediatric care within one team, one challenge has been to find ways in which the different disciplines can work together as well as maintaining what is unique about their contribution. To do this, team members work under the umbrella of specific systemic and family therapy principles and practice. This is because:

- Family therapy offers a dynamic way of thinking about family difficulties whilst at the same time focusing on family strengths and resources.
- There is good evidence for family therapy approaches with a range of difficulties (see NICE guidance e.g. depression, anxiety, eating disorders).
- Central to its understanding is the importance and impact of context such as race, culture, family and community life e.g. in the experience of food and eating.
- Key to family therapy is its relational focus e.g. understanding intergenerational patterns and wider systems in how families approach or are encouraged to approach food or think about their bodies.

The project works as a Tier 3 service. This means it aims to see those young people for whom Tier 2 services are not appropriate or have been found not to be helpful. It uses an assertive outreach approach such as meeting families at home or in a place of their choice. Following initial meetings, the multi-agency, multi-disciplinary assessment takes place in a clinic setting when a tailor-made programme and planning is begun with the family. Subsequent sessions are at the clinic or place of the family's choice as deemed appropriate e.g. local gym, home, school.

The programme can last a year, with a greater frequency over the first six months. The age group is 12 years and under and referral is based on a young person being within the 98th centile or above for BMI. Height, weight and other measures e.g. dietetic, physical activity, are carried out at the start and at minimum frequencies of three, six and 12 months in line with professional guidance.

From the very start, the project is keen that families receive the message that no longer attending is not a failure but rather a choice. 'Drop out' usually happens at the very start, but for those that remain committed, engagement with the service once established tends to be very good.

The families the project supports are from a variety of racial, cultural, religious and other backgrounds and are keen to be part of the project. The project works hard to communicate its care and respect towards families. The project has taken time to think about its own background as a project e.g. racially and in relation to health, food and eating. Where possible it is assertive in outreach and flexible e.g. offering appointments and interventions that fit in with people's lives.

The project relies upon support by Lambeth Council and the local CCG. There was training by the local authority and CCG to recognise, understand and communicate about childhood obesity. Sometimes referrals to the project come from the Tier 2 weight management service, which offers group-based input about diet and physical activity and is usually delivered in schools. Where appropriate, the project refers back to the Tier 2 service for families to use.

The project also identifies a number of integral people it liaises with to co-ordinate efforts. In particular, it liaises with specialist school nurses, which allows efforts to be shared between the project and children's school, ensuring they are working towards the same goal and supporting the children in every possible environment. The same goes for joining up with community-based projects. The delivery of service is focused primarily around the family and often professionals involved in the project spend time with families in their home.

The project's staff members all work part-time (a maximum of two days a week) and the dedicated steering group mostly volunteer their time. The project relies upon funding and renewed investment commitments by the local authority and CCG.

Case study provided by Dr Claire Dempster, the project's Family and Systemic Psychotherapist

Schools

Long before the introduction of national nutritional guidelines in 1983, the Government introduced a major nutrition policy: the formal provision of food in schools. This first began in Manchester in 1879 when free school meals were offered to “destitute and badly nourished children”.¹⁶⁰ Later, in the 1944 Education Act, the universal provision of school meals and milk became a statutory duty¹⁶¹ and in 1945 Lord Woolton advocated the states’ responsibility to protect children’s health not only to “give them opportunity” but to properly nourish them too: “Feeding is not enough, it must be good feeding.”¹⁶² In 1980, nutritional standards were abolished and the universal entitlement was removed, leaving only children from families on welfare support with the right to receive free school meals.¹⁶³ The poorest pupils have continued to receive free school meals, with extensions introduced in the late 1990s and 2003, which provided an additional 75,000 children with Free School Meals (FSM).¹⁶⁴

In 2008, the Government launched its FSM pilot in three local authorities (LAs) in England. The £20 million initiative led by the Department of Education and the Department of Health was extended nationally in 2014 for children in “relative and absolute poverty” and for all pupils in Reception and Years One and Two.¹⁶⁵ The reasons why it was valued were stated to be: “raising the profile of healthy eating and ensuring pupils get at least one healthy, good-quality meal a day; increasing the range of food pupils eat and building their social skills at meal times; easing the financial stress for parents and providing additional family time”.¹⁶⁶

In July 2013, the School Food Plan was published by the Government, which set out a wide variety of recommendations for schools to increase the take-up of school meals, improve the quality of the meals, and introduce teaching about cooking and ingredients.¹⁶⁷ This led to the Government announcement in June 2014 of a new set of standards for food served in maintained schools, new academies and free schools, “designed to make it easier for school cooks to create imaginative, flexible and nutritious menus”.¹⁶⁸ The regulations under The Requirements for School Food Regulations 2014 came into force on 1 January 2015.

Much has been made by the Government in recent years of the role schools can play in tackling child obesity, and to “shape healthy habits”.¹⁶⁹ The publication of the School

160 Gillard D (2003) *Food for Thought: child nutrition, the school dinner and the food industry* [last accessed 30.01.17 via www.educationengland.org.uk/articles/22food.html]

161 Rahim N., Kotecha M et al., *Implementing the Free School Meals Pilot*, National Centre for Social Research, London: Department of Education, 2010, p.8

162 Lyons R., *Panic on a Plate: How Society Developed an Eating Disorder*, London: Andrews UK Limited, 2011

163 Long R., School meals and nutritional standards (England), *House of Commons Library: Briefing Paper*, No.04195, 15 December 2016, p.4

164 Rahim N., Kotecha M et al., *Implementing the Free School Meals Pilot*, National Centre for Social Research, London: Department of Education, 2010, p.8

165 Department of Work and Pensions, Free school meal entitlement and child poverty in England, December 2013, p.3 [last accessed 30.01.17 www.gov.uk/government/uploads/system/uploads/attachment_data/file/266587/free-school-meals-and-poverty.pdf]

166 Rahim N., Kotecha M et al., *Implementing the Free School Meals Pilot*, National Centre for Social Research, London: Department of Education, 2010, p.7

167 Long R., School meals and nutritional standards (England), *House of Commons Library: Briefing Paper*, No.04195, 15 December 2016, p.5

168 Long R., School meals and nutritional standards (England), *House of Commons Library: Briefing Paper*, No.04195, 15 December 2016, p.5

169 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

Food Plan¹⁷⁰ and the introduction of the PE and Sport premium¹⁷¹ in 2013 were important precursors to the further policy announcements made in the 2016 Child Obesity Plan.

Several school-focused initiatives have been implemented in recent years. Practical cooking and nutrition lessons are now a mandatory part of the National Curriculum.¹⁷² The PE Curriculum has been supported with PE and Sport premium funding for all pupils. New food standards¹⁷³ are in place, designed to make it easier for school cooks and caterers to serve tasty and healthy meals. And following a Government announcement in September 2013, Universal Infant Free School Meals are served daily to over 2.9m children.

Although schools are not required to provide breakfast clubs, the Government does contract schemes such as Magic Breakfast to deliver breakfast clubs in schools where over 35 per cent of the pupils are entitled to FSMs.¹⁷⁴ The benefits of Magic Breakfast's scheme are set out in the 2016 Institute for Fiscal Studies and National Children's Bureau report.¹⁷⁵ For example, Year 2 children in breakfast club schools made two months' additional progress compared to those in schools without breakfast clubs, as well as showing improved behaviour. To expand the number of healthy breakfast clubs, the Government announced in its Childhood Obesity Plan that an additional £10 million a year from the soft drinks levy will be invested in breakfast clubs.

To support schools, Change4Life has created a Schools Zone¹⁷⁶ resource centre, which forms part of the vast suite of available teaching resources on healthy living.

The current Childhood Obesity Plan looks to build on these important initiatives. The proposed Healthy Schools Rating Scheme¹⁷⁷ aims to encourage schools to recognise and prioritise their role in supporting children to develop a healthy lifestyle. Initial plans promote a 'whole school' approach to achieving positive health and education outcomes covering a) healthy eating, b) physical activity, and c) emotional health and wellbeing.

School food standards are due to be refreshed to take account of new, stricter dietary guidelines aimed at reducing sugar and increasing fibre consumption. Ofsted is tasked with taking the Healthy Rating scheme into account as an important source of evidence about the steps taken by the school to promote healthy eating and physical activity. And Ofsted has also been tasked with undertaking a thematic review on obesity, healthy eating and physical activity in schools, making future recommendations on what more schools can do in this area.

170 The Independent School Food Plan [last accessed 21/11/17 via: www.schoolfoodplan.com]

171 Department for Education (2014), *PE and sport premium for primary schools*, (Updated 2017, October 24), [last accessed 21/11/17 via: www.gov.uk/guidance/pe-and-sport-premium-for-primary-schools]

172 Department of Education (2013), *National curriculum in England: design and technology programmes of study*, [last accessed 21/11/17 via: www.gov.uk/government/publications/national-curriculum-in-england-design-and-technology-programmes-of-study/national-curriculum-in-england-design-and-technology-programmes-of-study#cooking-and-nutrition]

173 The Independent School Food Plan, *School Food Standards*, [last accessed 21/11/17 via: www.schoolfoodplan.com/standards]

174 Long R., *School meals and nutritional standards (England)*, *House of Commons Library: Briefing Paper*, No.04195, 15 December 2016, p. 14

175 Institute for Fiscal Studies, *Breakfast clubs work their magic in disadvantaged English schools*, 4 November 2016

176 Public Health England, *School Zone* [last accessed 21/11/17 via: <https://campaignresources.phe.gov.uk/schools>]

177 School Healthy Rating Scheme [last accessed 21/11/17 via: www.tenderlake.com/home/tender/310f15b1-9b00-43fc-a0df-9df403d0cac2/healthy-schools-rating-scheme]

Physical activity forms a key part of the Childhood Obesity Plan, with schools having to deliver at least 30 minutes of physical activity in school every day. Support will be partly provided through an online tool that recommends initiatives such as the Daily Mile to help achieve the 30 minutes. The governments of Scotland and Wales have gone even further to ensure every school delivers free physical activity, such as the Daily Mile, in school. The Scottish Government has written to schools and nurseries urging them to help Scotland become the first “Daily Mile Nation”, which is in the Scottish National Party’s manifesto.^{178, 179} Similarly in Wales, the Daily Mile was officially launched in March 2017 by the Public Health Minister, celebrities and public health experts to encourage all schools in Wales to adopt the initiative.¹⁸⁰

Case study: Daily Mile

The Daily Mile is a free and simple initiative aimed at improving the physical, emotional and social health and well-being of children across the world, regardless of background or age, by getting them to run or walk for 15 minutes every day. Research conducted around the initiative has also shown links to improving children’s educational attainment levels, mood and behaviour.

The initiative was started in 2012 by Elaine Wyllie, former headteacher at St Ninians Primary School in Stirling, following her concerns about substandard fitness levels among children at her school. It has been adopted by over 3000 schools globally.¹⁸¹

In February 2017, details of how the £415m Soft Drinks Industry Levy would be spent was announced,¹⁸² though education spending decisions made in July 2017 seem to have now removed most of this healthy pupils capital fund.

A year on from the Childhood Obesity Plan’s publication in August 2016, no action to date has taken place – and there remain significant challenges for schools.

178 Scottish Government, *Scotland a Daily Mile Nation*, (2017) [last accessed 21/11/17 via: <https://news.gov.scot/news/scotland-a-daily-mile-nation>]

179 Scottish National Party, *Sport Policy*, [last accessed 21/11/17 via: www.snp.org/pb_how_is_the_snp_encouraging_people_to_be_more_active]

180 Welsh Government, *‘The Daily Mile’ officially launched in Wales*, (2017, March) [last accessed 21/11/17 via: <http://gov.wales/newsroom/health-and-social-services/2017/170330launch/?lang=en>]

181 The Daily Mile website, [last accessed 21/11/17 via: <http://thedailymile.co.uk>]

182 Department for Education (2017, February 28), Press Release: *New Funding to Boost schools Facilities and Healthy Lifestyles*, [last accessed 21/11/17 via: www.gov.uk/government/news/new-funding-to-boost-schools-facilities-and-healthy-lifestyles]

Recommendation 7

Schools have a fundamentally central role in improving our obesity rates. The Department for Education must establish and drive a national strategy, particularly focused in primary schools. Schools have a role not just in educating but in providing healthy food, physical activity, the built environment, and data sharing with local health services.

Areas for consideration

1. Being healthy means entwining physical, nutritional and emotional well-being

Whilst the Childhood Obesity Plan and the proposed Healthy Schools Rating Scheme recognises the need for a co-ordinated physical, nutritional and emotional well-being approach, this is rarely achieved in practice. Whilst there is now a Healthy Schools unit formed at the Department for Education, policy announcements are normally focused on either nutrition, physical exercise or emotional well-being, rather than presenting a holistic approach for a child's health and wellbeing.

2. Measurement and evaluation

Chapter 12 of the School Food Plan was titled "What gets measured gets done", and presented simple data sets that the Government committed to collect, recognising that publishing progress made by schools was an important incentive. Four years on from the Plan's publication, very little has actually been measured to track and progress the implementation of the policies already put in place.

There is no national data or analysis of how effectively the food standards are being applied in schools, nor any knowledge of how much food education or sport provision is provided, or the effect it is having.

Government has not commissioned any evaluation into the benefits of Universal Infant Free School Meals on health or attainment, leaving the undoubtedly popular policy vulnerable to political whim.

And whilst PHE has published advice to schools, setting out how schools can work with the school nurses, health centres, healthy weight teams in local authorities and other resources,¹⁸³ there is no national data on the number of school nurses or the extent to which they are actively engaged in delivery.

Importantly, there is scant evidence that Ofsted is applying its inspection criteria of "pupil's knowledge of how to keep themselves healthy, including through exercising and healthy eating".

183 Public Health England, *School nurse toolkit: evaluation of behaviour change interventions* [last accessed 21/11/17 via: www.gov.uk/government/uploads/system/uploads/attachment_data/file/595361/evaluation_of_behaviour_change_intentions.pdf]

3. Knowledge and skills alone aren't enough

The current cooking and PE curriculum is framed around the knowledge and skills that children are expected to acquire, rather than requiring a demonstration of learned behaviours – the outcomes or behaviours that are commensurate with a healthy lifestyle. This does not resonate with the expected conditions for behaviour change: motivation, capability and opportunity.

4. Consistency

There are still too many inconsistencies in existing and planned policies. Many have noted (including the Health Select Committee) that school food standards do not apply to 4000 academy schools, nor to independent or free schools.¹⁸⁴

Additionally, school environments themselves are inconsistent. Whilst food standards apply across the school day, they do not apply to any food brought in by the child. A report by the Food Foundation found that only one per cent of packed lunches are 'healthy' and only five per cent of breakfast cereals are considered to fit in with nutritional guidelines;¹⁸⁵ this was further backed up by another report on school lunches that showed only a fraction of improvement in 2016 to 1.6 per cent.¹⁸⁶

5. The will and skill of our educational workforce

With Government's expectation that schools have a significant role to play, little is done to support the school workforce. There is no mandatory focus on health and well-being in initial teacher training, continual professional development or senior leadership training.

Case study: Food Flagships in London

In 2014, the Mayor of London launched the Food Flagship programme starting in two pilot boroughs: Croydon and Lambeth. Based upon The School Food Plan, the programme aims to make healthy eating the norm, and to reduce childhood obesity and food poverty rates by focusing on in-school interventions such as education, school meals, breakfast and lunch clubs. The programme is supported by the Mayor of London and the London Food Board, as well as major supermarkets.

The Flagships are based on a whole-systems approach which seeks to transform the food systems in the two boroughs and share the knowledge gained across the whole city and beyond. The Flagship boroughs bring together the Food Flagship activities with other city-wide programmes available to all London boroughs such as Food Growing Schools: London, Healthy Schools London, and the London Healthy Workplace Charter.

As is the case in Amsterdam, the Food Flagship boroughs are working with fast food outlets, local restaurants, supermarkets and food manufacturers to try to change how and what they sell to ensure that healthy options are the easiest and most convenient ones.¹⁸⁷

184 Health Committee, *Childhood obesity demands bold Government actions says committee*, Commons Select Committee (2015, November 30) [last accessed 21/11/17 via: www.parliament.uk/business/committees/committees-a-z/commons-select/health-committee/news-parliament-2015/childhood-obesity-report-published-15-16/]

185 Food Foundation, *Force-Fed*, 2016 [last accessed 21/11/17 via: <http://foodfoundation.org.uk/wp-content/uploads/2016/07/The-Food-Foundation-64pp-A4-Landscape-Brochure-AW-V32.pdf>]

186 Karen Mc Veigh (2016, September 6), *Kid's school packed lunches still full of junk food, research finds*, The Guardian [last accessed 21/11/17 via: www.theguardian.com/society/2016/sep/06/kids-school-lunchboxes-junk-food-research-england]

187 Mayor of London, *About Food Flagships*, published online 2014 [last accessed 18.08.17 via: www.london.gov.uk/what-we-do/business-and-economy/food/food-flagships/about-food-flagships]

6. Preventing hunger among the most vulnerable children during the holidays

While progress is being made in the role schools play to help shape children's health behaviours, school holidays can be hugely challenging, particularly for children receiving Free School Meals. One 2017 report estimated that three million children may be at risk of hunger, a poor diet and physical inactivity during school holidays, highlighting the potential triple burden faced by disadvantaged children of hunger, obesity and deprivation.¹⁸⁸ The report suggests that this can affect children's educational attainment level as they are thought to start several weeks – if not months – behind their more affluent peers.

To address this problem, we should consider allocating a 10th of the Healthy Pupils Capital Programme (£41.5 million), which will be funded by the revenues from the Soft Drinks Industry Levy, towards the provision of free meals and activities during the school holidays.

In 2017, Labour MP Frank Field introduced a Private Members Bill on School Holidays (Meals and Activities) that, if passed, would require local authorities to facilitate the delivery of programmes that provide free meals and activities for children during school holidays. The second reading is due to take place in January 2018.¹⁸⁹

Case study: London Kitchen Social Programme

To address the gap that school holidays leave in the diets of an estimated 500,000 disadvantaged children (including 200,000 children in London who receive Free School Meals), the Mayor of London launched a £2 million fund in 2017 for the London Kitchen Social programme. This aims to fund 330 Kitchen Social community hubs that will provide lunch and activities for children across London during the holidays.¹⁹⁰

188 All-Party Parliamentary Group on Hunger and Food, *Hungry Holidays: A report on hunger amongst children during school holiday*, [last accessed 21/11/17 via: <https://feedingbritain.files.wordpress.com/2015/02/hungry-holidays.pdf>]

189 School Holidays (Meals and Activities) Bill 2017–19, Private Members' Bill, [last accessed 21/11/17 via: <http://services.parliament.uk/bills/2017-19/schoolholidaysmealsandactivities.html>]

190 Mayors' Fund for London, *500,000 London Children Struggle for Food During School Holidays*, [last accessed 21/11/17 via: www.mayorsfundforlondon.org.uk/kitchen-social-great-things-to-eat-and-do/]

Sport and physical activity

Physical inactivity is the fourth leading risk factor for global mortality and is estimated to cost England £7.4 billion a year.¹⁹¹ According to Sport England, 80 per cent of the seven million children aged five to 15 in England do not meet the recommended daily amount of exercise.¹⁹² While schools play a critical role in helping children to stay active and take part in sport, children need to be supported to stay active outside of school.

The CSJ has published two reports (*More Than a Game* and *Sport for Social Good*) on the power of sport and physical activity in not only improving people's health but, by engaging the hardest to reach, helping to transform lives in the most deprived communities. Benefits include improving children's educational attainment levels, tackling antisocial behaviour and crime and boosting young people's employability. The third sector is a key deliverer of sport and physical activity programmes, achieving individual and social transformation, and the support of Government and Sport England is vital.

Charities such as Sported, Streetgames and QPR in the Community are delivering impactful, effective and life-changing programmes across the country, using sport and physical activity to transform lives and tackle obesity. Their ability to help and communicate with the hardest to reach children, who often have multiple, complex needs, puts them in a unique position to address numerous issues through one realm. In this way, they are much more than community activities; they are community hubs.

The Childhood Obesity Plan places a firm spotlight on the role of physical activity and sport in tackling childhood obesity both inside and outside of school. There have been a number of positive developments since it was published, including the publishing of the Government's £1.2 billion "Cycling and walking investment strategy", which sets out its long-term plan to increase walking and cycling in England by 2040.¹⁹³

However, policy remains fragmented, and plans to address obstacles faced by children and young people in the most deprived areas, such as getting to and from activities, are missed out. To help illustrate some of the challenges, the Dallaglio RugbyWorks has provided a case study.

Case study: RugbyWorks, Dallaglio RugbyWorks

The Dallaglio RugbyWorks programme operates 12 Pupil Referral Units (PRUs) across 10 London Boroughs: Barnet, Bexley, Camden, Hillingdon, Greenwich, Kensington and Chelsea, Southwark, Sutton, Tower Hamlets and Wandsworth. These PRUs work with a diverse range of ethnicities and there is a 78/22 per cent ratio of boys to girls respectively.

A RugbyWorks coach stated that the participants "have an ingrained lack of both the will and means to pursue a healthy lifestyle", which means the problem of childhood obesity is common across the PRUs. The main stated reasons for high childhood obesity rates among the PRU students are skipping breakfast, consuming sweet drinks, a poor diet and time spent watching TV/gaming. The coach reported that it was common for students to arrive at school having had

¹⁹¹ Sport England, *Why tackling inactivity matters*, updated April 2013 [last accessed 21/11/17 via: www.sportengland.org/our-work/health-and-inactivity/why-tackling-inactivity-matters/]

¹⁹² Sport England, *Families Fund prospectus: Supporting families to be active together*, 2017: Sport England, London

¹⁹³ Department for Transport, *Government publishes £1.2 billion plan to increase cycling and walking*, (2017, April 21), [last accessed 21/11/17 via: www.gov.uk/government/news/government-publishes-12-billion-plan-to-increase-cycling-and-walking]

no breakfast and many compensate with cheap energy drinks (between 40p and £1 each) to maintain energy levels. Many also arrive with some fast food bought on the way to school.

When asked about their breakfast habits, one student said he rarely had breakfast on school days, and when he did it was a bacon sandwich with white bread. He consumes energy drinks and coffee before school as he “feels tired”. On weekends, he tends to have a fry-up. Other students also stated they did not eat breakfast before school and one stated he drinks “a lot” of energy drinks before school. The Wandsworth PRU offers a free breakfast as part of the Healthy London Schools Programme. However, the PE teacher reported a very low take-up.

The coach reported students being prone to unhealthy and inconsistent dietary behaviour at lunch and dinner. Even when the students eat a healthy lunch provided by the school, this is not supported by a healthy meal at home, which many have when they return home late. One student said every weekend she visits her father and they go to Burger King. She said she does not eat fruit or vegetables even though she knows they are good for her. Two students reported not eating for days at a time when there is nothing in the fridge, and another student said dinner was “usual stuff, oven chips, burgers”. As a group, the food options at weekends were summarised by a coach: “Everyone I asked said it was a very different diet at the weekends mainly consisting of just bits and pieces, kebabs and so on”.

A major factor reported by the coach as affecting the students’ diets was the fact that many regularly stayed up late to play video games or watch TV, making them tired the next day. Without a proper breakfast, they end up relying on energy drinks throughout the day. One student reported playing video games until 3am on a school night. Another said he did not get home until 10:30pm and will then play on his Xbox for five hours, while another student said she spends “most of the night” messaging friends on WhatsApp.

The coach stated that inconsistent mealtimes after school were largely because many students leave school then go to a park or hang out with friends on the street until late. Many eat in takeaways as a result, particularly chicken shops, which many of the students also go to at lunchtime (the coach said it can cost £1.50 for chicken, chips and a soft drink). One of the reasons stated was the lack of after-school programmes or community amenities available. There is a reported profound lack of access to affordable sports clubs, leisure facilities and gyms, and cheaper alternatives tend to be poorly maintained and unsafe.

Summary of key problems

1. Debt and cost

Cost can be a major barrier, especially for young people. A junior membership to the London Aquatic Centre and its facilities will cost £14.95/month with a £15 joining fee if they are under 15 years of age. For those who are over 16, a full student membership will cost £29.95/month, which is prohibitively expensive even for those who have managed to find work. The membership is the equivalent of almost eight hours of work at the national minimum wage for U18s.

Available safe space

There is a reported lack of availability of public land for safe, free play. Unsupervised public spaces, especially in deprived areas, are feared to be unsafe by both parents and children. Many RugbyWorks students have been involved in knife crime and gang violence. They continue to perceive many of the parks around them as dangerous and certainly not safe for a game of football, for example. Another reported problem is school land being sold by councils who are

being forced to make extensive budget cuts, with a reported four per cent of local authorities either considering selling parks or transferring their management to others.¹⁹⁴

2. Perception of sport

The perception of sports teams more generally is reported to be 'class associated' due to the increased participation in formal sports clubs by children and young people from higher socioeconomic backgrounds. For example, a very promising athlete was sent down to a rugby club in Dulwich by RugbyWorks but he returned a few weeks later saying that he had not felt welcome and had not gone back for two weeks. While this may be an internal problem linked to that student's own insecurities, it reportedly supports a commonly held view. There is also an issue with a perception of 'formality' around sports clubs and organisations. Many students who are not high performers are not likely to get involved since they feel they are not good enough. Previous strategies and funding priorities have favoured the development of elite youth athletes. This has put the focus on performance, rather than participation. This preoccupation has left many young people feeling it is 'not their place' or they 'aren't good enough' to play sport. In a climate of low mental health, this is a difficult attitude to overcome.

3. Parental support/lack of role models/coaching support

One of the major reported problems facing RugbyWorks' young people is the lack of any positive role models in the home. This means that many who would like to take part in sport do not get the support they need. Many parents have a key role to play in the sporting development of their children, ranging from practical support like transport, through to a positive outlook on the value of sport. Without support from this quarter, the responsibility falls to school staff and community leaders and coaches. Here, the lack of coaches to run community sports programmes has a major effect. Salaries for sports coaches working for local authorities range from £15,000–£25,000. More usually at the bottom end of this range, there is a difficulty recruiting, especially in London where the living wage equates to around £19,000 over a year. This is coupled with a dearth of vacancies in the first place, owing to a lack of local sports projects.

4. Lifestyle

Many of RugbyWorks' young people make lifestyle choices that mean exercise and sport are low priorities. Most of the young people are reported to spend their spare time socialising, gaming and focusing on the immediate future. Many of them from deprived areas are increasingly turning to gangs. In gang culture, they see an alternative form of adult validation that they do not receive at home, which feeds back into the discussion of coaches as role models above. Due to gang culture, travel between different areas of London is highly unlikely because of territorial contests. The students are reported to be afraid to walk about in their own borough. Tied in with this are mental health issues, social anxiety and low self-perception which can create a desire for escapism through drug and alcohol abuse in their spare time and involve frequent contact with gangs. Overall the lifestyle choices of the young people, brought about by a wide array of factors, means living a healthy life and practising healthy behaviours is difficult.

Case study provided by RugbyWorks, Dallaglio RugbyWorks 2017

194 Fields in Trust, [www.fieldsintrust.org/The_Threat_to_our_Playing_Fields.aspx]

Recommendation 8

Physical activity strategy in both the Department for Education and the Department for Digital, Culture, Media and Sport must be joined up and have the ambition to tackle childhood obesity as core to its values. However, a strategy for physical activity must also relate to transport, infrastructure projects, and the role the third sector plays in community sports.

Areas for consideration

1. Active and safe travel

One of the key problems highlighted in the case study is travel. In 2016, Sport England – the executive non-departmental public body sponsored by the Department for Digital, Culture, Media and Sport – published its *Towards an Active Nation* strategy, which, in alignment with the Government’s *Sporting Future* strategy, sets out the aim of helping everyone, regardless of age, background or ability, to be physically active and engaged with sport. This includes the launch of Families Fund in 2017 – a major new targeted investment stream helping families with children to get active. The first wave of funding is targeted at families in lower socioeconomic groups, identified using three criteria: education, employment and income. Successful applicants will be notified by January 2018.¹⁹⁵

Although the Families Fund prospectus identifies the problem with travel, emphasising that a lack of safety or perception of safety in deprived areas prevents families from getting around, and the Cycling and walking investment strategy sets out plans to improve travel safety for cycle and walking routes, the system remains fragmented. Sport England should ensure that plans and investments to get children in deprived areas active are joined up with plans at a national, city-wide and local level to increase safe and active travel, so children in deprived areas, who face disproportionately more safety risks, are able to travel to and from activities it is investing in, as well as other places such as schools. A joined-up approach will ensure resources are pooled and investments in activities for children in the most deprived areas are not wasted by low uptake due to children not being able, or feeling able, to travel.

2. Whole-systems opportunity to tackle inactivity and join up efforts

Sport England will be launching and investing £130 million into 10 Local Delivery Pilots across England, to learn, develop and deliver sustainable approaches to increasing activity levels across the country. The pilots will focus on a behaviour-change approach and will be measured consistently.¹⁹⁶ As of July 2017, 113 expressions of interest were narrowed down to a shortlist of 19 places, including Birmingham City Council and Greater Manchester Health and Social Care Partnership.¹⁹⁷ These pilots present an opportunity to join up with efforts to tackle childhood obesity, include the reduction of childhood obesity rates as a key metric for success, and ensure a whole-systems approach based on Michie et al’s ‘behaviour change wheel’. The pilots are not linked to NHS England’s Healthy New Towns, which is a missed opportunity to share best practice, pool resources and join up efforts.

¹⁹⁵ Sport England, *Families Fund Prospectus*, July 2017, [last accessed 21/11/17 via: www.sportengland.org/media/11794/families-fund-prospectus-supporting-families-to-be-active-together.pdf]

¹⁹⁶ Sport England, *Investing in Local Areas*, [last accessed 21/11/17 via: www.sportengland.org/our-work/local-delivery/investing-in-local-areas/]

¹⁹⁷ Sport England, *Update July 2017*, [last accessed 21/11/17 via: www.sportengland.org/our-work/local-delivery/update-july-2017/]

3. Empowering volunteers to tackle childhood obesity

As discussed earlier, charities are unique in their ability to communicate with the hardest-to-reach children, who often have multiple, complex needs. They are an untapped resource in tackling childhood obesity, as they are not integrated into a joined-up, systematic approach. Training on childhood obesity should be provided for volunteers as part of Sport England's Strategy for Volunteering, which sets out its vision and investment of £26 million in volunteering from 2017 to 2021.¹⁹⁸ Training must include modules on the importance of nutrition in preventing and managing health conditions, the immediate and long-term physical and mental health consequences of childhood obesity, communication training to address obesity and childhood obesity with families and children, and finally, training in the types of interventions they can refer children on to.

¹⁹⁸ Sport England, *Volunteering in an Active Nation: Strategy 2017–2021*, [last accessed via: 21/11/17 via: www.sportengland.org/media/11323/volunteering-in-an-active-nation-final.pdf]

The food and drinks industry

The Childhood Obesity Plan recognises that obesity is a complex and multi-faceted problem with many drivers, but at its root it is caused by eating too much unhealthy food and being physically inactive. This perception has placed a firm spotlight on the food and drinks industry, one which has grown stronger in recent years. The often highly-polarised debate between the food NGOs and health lobby on one side and the food and drinks industry on the other has dominated a great deal of the media's obesity coverage around the world.¹⁹⁹ One of the key challenges faced in producing this report was the attempt to convene the two sectors. The CSJ believes that the food and drinks industry must work with the Government and civil society to end childhood obesity and be willing to change its core business, rather than focusing on indirect ways, such as supporting research development.

When the Childhood Obesity Plan was published, policies were compared to those in the alleged leaked draft strategy exposed in an episode of Channel 4's *Dispatches*. Many argued that the most ambitious and far-reaching actions that were not included in the final plan were ones that affected the food and drinks industry, such as introducing TV advertising restrictions and marketing of all HFSS (high in fat, salt or sugar) products.²⁰⁰ This raised concerns over the power of food and drinks industry lobbying, with Dr Sarah Wollaston MP stating the plan showed "the hand of big-industry lobbyists".²⁰¹

Recommendations from academics, scientists, the food lobby and Government itself are slowly being put into action, with the introduction of the Soft Drinks Industry Levy in 2016 being the most significant policy introduced to date. The reformulation of many products, particularly carbonated soft drinks, in response to the levy and targets in the Childhood Obesity Plan confirms the important role of taxation, regulation and targets in creating a less obesogenic environment, and demonstrates that the food and drinks industry does take responsibility when measures are brought in (although we are yet to learn if the measures are effective in reducing childhood obesity rates). This has been further proven in PHE's 2017 announcement that they are introducing a voluntary calorie reduction programme to remove excess calories from the foods that children consume the most.²⁰²

After the Childhood Obesity Plan was published, the British Retail Consortium (BRC) said it was disappointed that the Government had focused on voluntary actions by the food and drinks industry, stating that it believes "the only way to achieve targets that the Government set out is to ensure a level playing field across the food industry".²⁰³ Mandated measures are supported by some organisations, dependent on a level playing field to ensure the market remains fair and competitive.

199 Bonfiglioli C et al (2007) "Obesity in the media: Political hot potato or human interest story?", *Australian Journalism Review*, 29(1): 53–61

200 May's child obesity plan is all flab and no meat, Jamie Oliver, Jamie's Food Revolution [last accessed 12.01.17 via: www.jamiesfoodrevolution.org/news/mays-child-obesity-plan-is-all-flab-and-no-meat/]

201 BBC News – Health (2016, August 18) [last accessed 21/11/17 via: www.bbc.co.uk/news/health-37108767]

202 Department of Health, Press Release (2017, August 2017) [last accessed 21/11/17 via: *Next stage of world-leading childhood obesity plan announced*, www.gov.uk/government/news/next-stage-of-world-leading-childhood-obesity-plan-announced]

203 Sarah Boseley, *Childhood obesity: retailers urge mandatory cuts to food sugar levels*, The Guardian, published online 18 August 2016 [last accessed 17.08.17 via: www.theguardian.com/society/2016/aug/18/childhood-obesity-retailers-urge-mandatory-cuts-to-food-sugar-levels]

We need a holistic approach to tackle childhood obesity, including compulsory measured targets across all nutrients – not just sugar – and mandatory traffic-light labelling across all food and drinks products, regardless of whether they are consumed inside or outside the home.

Mike Coupe, CEO of Sainsbury's, 2016²⁰⁴

Comparisons between the food and drinks industry and the tobacco industry have been drawn, with some predictions of a future of plain packaging, potent health warnings, duties comparable to alcohol and blanket advertising bans severely restricting how HFSS food and drinks are sold.²⁰⁵

If well-known brands that sell HFSS food and drinks are to avoid such restrictions, they must be empowered and supported to make products healthier and ensure the healthiest choices are the easiest, affordable and most convenient. Through reformulation, responsible marketing and packaging, the introduction of alternative healthy products and greater support for healthy lifestyle initiatives, the food and drinks industry has started to make the positive changes to support a healthier society and help reduce childhood obesity rates. For the industry to take a leading role in the goal of halving childhood obesity by 2026 and to reduce the inequality in childhood obesity rates across our communities, there are a number of further changes it needs to make.

From a libertarian perspective, Government intervention into food and drinks industry practices may evoke fears of a 'nanny state'. However, as the childhood obesity crisis continues and parents report feeling unfairly exposed to an "obesogenic environment",²⁰⁶ it is time for the Government and the industry to return real choice in children's diets to parents by protecting children from any undue or imbalanced influence promoting unhealthy choices, and by ensuring it is easy for parents to make informed and healthy choices for their children. Changes must be introduced in a way that protects and values the industry, and creates a level playing field.

Recommendation 9

At the root of many of our obesity problems is the over-consumption of unhealthy food. Any strategy to counter obesity must tackle the food industry at a core level. This must include properly informing the public about what they are eating, responsible advertising, clear labelling, and making healthy choices easier.

204 BBC News – Health (2016, August 18) [last accessed 21/11/17 via: www.bbc.co.uk/news/health-37108767]

205 Example child-led report: Royal Society for Public Health, *The Child's Obesity Strategy: How our young people would solve the childhood obesity crisis*, 2017: RSPH, London

206 Children's Food Campaign, *Briefing Paper: Unfinished Business from the Government's Childhood Obesity Plan*, 2017: Children's Food Campaign, London

Areas for consideration

1. Eating out and unhealthily is the norm

Going out for a meal is part of Britain's culture but instead of being a weekly 'treat' for families, it's becoming the norm and contributing to the obesity epidemic.

Dr Alison Tedstone, PHE Chief nutritionist

Children today spend twice as much time eating out than children in the 1970s.²⁰⁷ This increase in consumption of 'out-of-home' meals is regarded as a crucial contributing factor to the childhood obesity crisis, especially as out-of-home meals tend to be associated with high levels of energy, saturated fat, salt and sugar.

During the 1990s, while the dangers of high fat consumption were being warned of and low-fat, often higher-sugar alternatives were being promoted, there was an increase in the consumption of carbohydrate-heavy food. Since 1975, the consumption of ready meals and processed meat products has increased five-fold. People eat 26 times more pizza, and the purchasing of chips is three times higher. Dried and fresh pasta was not even recorded in the UK's National Food Survey until 1998 and since then consumption has more than doubled.²⁰⁸ Food historian Annie Gray argues that this shift in consumption was because foods such as chips were "aggressively marketed", and because convenience foods are marketed on the "perceived lack of time and perceived ease of cooking".²⁰⁹

This "aggressive marketing" is most visible in the rise of price promotions, which are considered by Professor Paul Dobson of the University of East Anglia as a "key driver" of shopping behaviours and spending.²¹⁰ In a 2014 evidence briefing, Professor Dobson revealed that price promotions account for half of all soft drinks purchases; they are extensively applied to ready meals, sugary foods, snacks, meat and yoghurts; they are 20 per cent more likely to be on foods with red nutritional traffic-light levels of sugar compared to non price-promoted foods; and there is comprehensive evidence demonstrating a consistent bias in shops towards the promotion of unhealthy foods that are high in sugar, salt and saturated fat.²¹¹ Furthermore, 65 per cent of calories consumed are from "ultra-processed foods"; and less healthy foods are three times cheaper than healthy foods.²¹²

2. The growth of portion sizes

Portion size has increased over the past 50 years, making larger portions the norm, and it is considered by many to influence the quantity people consume.²¹³ The larger the portion, the more likely people are to over-consume, especially if the product is HFSS.²¹⁴ There has also been a rise in manufacturers producing and marketing 'sharing bags' of snacks such

207 Laura Donnelly (2017, January 7), *Britain's booming restaurant culture fuels record childhood obesity levels*, The Telegraph, [last accessed 21/11/17 via: www.telegraph.co.uk/news/2017/01/07/britains-booming-restaurant-culture-fuels-record-childhood-obesity/]

208 Department for Environment Food & Rural Affairs, *Family Food 2014*, London: DEFRA, 2015, p.9

209 10 ways the UK's eating habits have changed, BBC News, 18 February 2016 [last accessed 24.01.17 via: www.bbc.co.uk/news/magazine-35595530]

210 Dobson P., *evidence BRIEFING: Food price promotions and public health* (2014), Economic & Social Research Council

211 Dobson P., *evidence BRIEFING: Food price promotions and public health* (2014), Economic & Social Research Council

212 Food Foundation, *Force-Fed*, 2016

213 Marteau TM., et al (2015) 'Downsizing: policy options to reduce portion sizes to help tackle obesity', *BMI*; 351:h5863

214 Faulkner GP et al (2012) 'Serving size guidance for consumers: Is it effective?' *Proceedings of the Nutrition Society*; 71(4): 610-21

as crisps and chocolate. A 2015 poll found that 40 per cent of young people under the age of 25 regularly consume a whole 150g sharing bag of crisps (around 750 calories), which can account for around a third of an adult's recommended daily calorie intake.²¹⁵ There is some evidence to show that the rise in mass-marketed chocolate sharing bags is an unintended consequence of the agreement made by manufacturers in 2005 to phase out king-size chocolate bars.²¹⁶

Price incentives to 'go large' or for multi-buys can encourage consumers to buy more than they need or intended to buy.²¹⁷ This is referred to as 'upselling', which is defined as "persuading a customer to buy something additional or more expensive".²¹⁸ A major study on price incentives found that there were several reasons why retailers focused offers and price incentives on HFSS foods, including encouraging customers to 'bulk buy' HFSS products that are easier to store and have a longer shelf life; to distinguish and target price-conscious 'tempted' customers; or to encourage customers to consume and get used to consuming more, so they visit the store more frequently.²¹⁹

There have already been some welcome small steps taken by the food and drinks industry over the past few years to address portion-size increases. The three largest chocolate manufacturers, Mars, Nestlé and Mondelez, have all committed to limiting their single-serving chocolate bars to a maximum of 250 calories, and some cinemas in England have removed the largest cup size option for soft drinks. However, these changes will not reduce childhood obesity rates because they do not go far enough and there are potential loopholes in the efforts. These include no evaluation to determine whether the main chocolate manufacturers have also reduced net energy intake, i.e. to ensure companies are prevented from selling more 250-calorie products to compensate portion-size reductions.²²⁰

Despite ample evidence showing a significant increase in portion size over the past 50 years, current guidelines have not been updated or revised since 1993.²²¹ There are also no policies in the Childhood Obesity Plan to better inform parents about portion sizes or to reduce them. Although there is insufficient evidence to evaluate the effectiveness of portion-size reduction in directly reducing obesity rates, the 2014 McKinsey report ranked portion-size reduction as being the most effective intervention to reduce obesity and the associated health burden.²²² It is also an arguably simpler intervention than reformulation.

The Government needs to not only reduce portion sizes in retailers and out-of-home food outlets, but also ensure labelling on products informs consumers properly. If, as evidence shows, young people are consuming whole 'sharing bags' themselves, labelling should show nutritional information for the whole product so people are aware of the percentage the product accounts for of their daily intake.

215 Brown N. Revealed: 40% of young binge on crisps and 75% skip meals. *Grocer* 2015 Jan 30. [last accessed 21/11/17 via: www.thegrocer.co.uk/reports/digital-features/snack-report-2015/revealed-40-of-young-binge-on-crisps-and-75-skip-meals/512721.article]

216 Marteau TM., et al (2015) 'Downsizing: policy options to reduce portion sizes to help tackle obesity', *BMJ*; 351:h5863

217 Economic and Social Research Council, *Food price promotions and public health*, [last accessed 21/11/17 via: www.esrc.ac.uk/news-events-and-publications/evidence-briefings/food-price-promotions-and-public-health/]

218 Royal Society for Public Health (2017) *Size matters: The impact of upselling on weight gain*: RSPH, London

219 Dobson P., *evidence BRIEFING: Food price promotions and public health* (2014), Economic & Social Research Council

220 Marteau TM., et al (2015) 'Downsizing: policy options to reduce portion sizes to help tackle obesity', *BMJ*; 351:h5863

221 *Food Portion Sizes*, Her Majesty's Stationery Office: London, 1993

222 McKinsey Global Institute, *Overcoming obesity: An initial economic analysis, Discussion paper*, 2014: London

Requiring food vendors to use proportional pricing on HFSS products, so that unit prices are the same across the product size range, would eliminate the pecuniary incentive for consumers to 'go large' in choosing 'bargain' large portion sizes over 'expensive' smaller alternatives.²²³ The evidence is that proportional pricing works very effectively to encourage consumers to purchase smaller portion sizes.²²⁴

Case study: Obesity awareness campaign, New York

In 2012, as part a bold, innovative and multi-sector strategy to address New York's obesogenic environment,²²⁵ New York Mayor Michael Bloomberg supported the US Department of Health's evocative anti-obesity campaign posters, which were put up across New York's subway. The posters showed portion-size increases against a backdrop of black-and-white photos of obese people, some with limb amputations as a result of type 2 diabetes, with taglines such as "Portions have grown. So has type 2 diabetes, which can lead to amputations".

Mayor Bloomberg defended the controversial posters, saying: "What do you want to do? Do you want to have people lose their legs or do you want to show them what happens so that they won't lose their legs? Take your poison. Which do you want? You can't have it both ways. Do you want to help people or do you want to have a story and say, 'Oh, we don't want to annoy you, we don't want to worry you'".²²⁶

Bloomberg's campaign was introduced around the time when former First Lady Michelle Obama launched Let's Move! This was a comprehensive programme aimed at ending obesity within a generation, and was introduced alongside the former President's Presidential Memorandum that created the first ever task force on Childhood Obesity.²²⁷ There was therefore a context that was conducive to political interventions tackling childhood obesity due to strong national-level leadership.

3. Labelling – no level playing field

I don't know where to begin, it is so very complicated. Coping with my son's demands for food is very hard.

Mum, Lambeth Healthy Weight Project

There has been significant progress in the development of nutrition labelling since 1991.²²⁸ However, there are still too many inconsistencies in existing and planned nutritional label policies, with much of the regulation coming from the EU. Now that Britain has voted to leave the EU, there are numerous opportunities for the Government to determine its own policies and regulations concerning nutrition labelling.

223 Dobson P.W., Gerstner, E. 'For a Few Cents More: Why Supersize Unhealthy Food?' *Marketing Science* (2010), 29, 770–778; Dobson, P.W., Chakraborty R., Seaton S. 'Containing Big Soda: Countering Inducements to Buy Large-Size Sugary Drinks', *Journal of Business Research* (2017), 75, 185–191.

224 Vermeer W.M., Steenhuis I.H.M. & Poelman M.P. 'Small, medium, large or supersize? The development and evaluation of interventions targeted at portion size.' *International Journal of Obesity* (2014), 38, S13–8.

225 Kelly P., et al (2016) 'Obesity prevention in a City State: Lessons from New York City during the Bloomberg Administration', *Front Public Health*; 4:60

226 Laura Stampler (2012, January 10), *Mayor Bloomberg Defends Anti-Obesity Ads And Then Orders Chicken Soup And Popcorn*, [last accessed 21/11/17 via: www.businessinsider.com/mayor-bloomberg-ironically-defends-controversial-anti-obesity-ad-while-in-seamlesscom-headquarters-2012-1?IR=T]

227 Let's Move website [last accessed 21/11/17 via: <https://letsmove.obamawhitehouse.archives.gov/about>]

228 FDF, *Nutrition labelling – a history*, [last accessed 21/11/17 via: www.foodlabel.org.uk/label/history.aspx]

Current guidelines for front-of-pack traffic-light nutrition labelling is voluntary, and, based on evidence, are designed to make it as clear and easy as possible for customers to understand.²²⁹ Although businesses are not currently obliged to abide by Government guidelines, they do have to abide by EU regulations, which requires businesses to display nutritional information.

4. Energy | fat | saturates | sugars | salt

EU regulations also require nutritional labelling to include a portion-size declaration, nutritional information per portion and per 100g or just per 100g, and they may also include the percentage of daily intake references. There is no requirement for manufacturers to provide nutritional information of the whole product, including what percentage of a person's daily intake the whole product accounts for.²³⁰ The businesses that have adopted the voluntary guidelines are said by the Department of Health to account for around two thirds of the pre-packed food and drinks market in the UK, including major supermarkets and manufacturers.²³¹ However, the voluntary guidelines do not create a level playing field and since evidence shows that people often consume whole products, despite them being designed to share, nutritional information should inform customers about how much a whole product contributes to their recommended daily intake so they are properly informed.

Case study: Australia's Health Star Rating

In 2014, to address Australia's obesity crisis, the Australian state and territory governments in collaboration with the food and drinks industry, public health and consumer groups introduced the Health Star Rating front-of-pack labelling system to simplify labelling and make the healthy choice easier for consumers to identify. The rating scheme, which is currently not mandated, rates the overall nutritional profile of packaged food from ½ to a maximum of five stars. The more stars, the healthier the product.²³²

The rating scheme is supported by public health professionals and was a catalyst for major companies such as Nestlé and Kellogg's reformulating products to achieve a better rating.²³³ However, a key criticism has been that the algorithm used to determine the health rating includes total sugar which does not differentiate between naturally occurring sugar and added sugar.²³⁴

The UK Government and its Policy Research Unit for obesity should examine the evidence base for the Health Star Rating.

229 Walsh M., 'UK voluntary Front of Pack nutrition labelling scheme: High Level Group 28th October 2015', *Department of Health*: London, 2015

230 Walsh M., 'UK voluntary Front of Pack nutrition labelling scheme: High Level Group 28th October 2015', *Department of Health*: London, 2015

231 Walsh M., 'UK voluntary Front of Pack nutrition labelling scheme: High Level Group 28th October 2015', *Department of Health*: London, 2015

232 Health Star Rating System website (updated 2016) [last accessed via: 21/11/17 via: <http://healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/About-health-stars>]

233 Gabrielle Jackson (2015, October 14), *It's clear the nanny state works when food health values are written in the stars*, [last accessed 21/11/17 via: www.theguardian.com/commentisfree/2015/oct/14/food-health-values-star-ratings-australia-nanny-state]

234 Peters S.A.E. (2017) 'Incorporating Added Sugar Improves the Performance of the Health Star Rating Front-of-Pack Labelling System in Australia', *Nutrients*, 9(7), 701

5. The power of advertising: How the food and drinks industry communicates with children

The food and drinks industry tends to mass-market their products to consumers through a plethora of platforms including TV advertising, product placement, non-broadcast media, social media, the internet, sports and events sponsorship, through collaboration with well-known people and characters, and sponsorship of school events and school-related products.

One of the major criticisms of the Government's Childhood Obesity Plan was that it failed to sufficiently address the advertising, marketing and sales of HFSS products. In December 2016, following a full public consultation, the Committees of Advertising Practice (CAP) announced that it will voluntarily ban HFSS advertising where children make up over a quarter of the audience. The rules, which were introduced in July 2017, apply to all non-broadcast media including print, cinema, online and social media. Crucially, it does not apply to television.²³⁵

In England, the average child aged between five and 15 spends an estimated 16 hours a week online and 13.5 hours watching television, which is more than double the recommended amount of screen time for children and exposes them to more adverts for HFSS food and drinks.²³⁶ **Children in poorer areas are also twice as likely to have a television in their bedroom compared to children from affluent areas.**²³⁷ The Department of Health's Change4Life scheme recommends that children should have no more than two hours of screen-based entertainment per day.²³⁸ Research has shown that factors such as siblings, personal cognitions, physical home environment and household electronic media use all determine the extent to which a child uses electronic devices.²³⁹

Not only do multiple social factors influence children's media usage, but there are disparities across regions within England in the amount of time spent watching television. The average family in the North East watches six more hours of television per week than families in the South and South East, which is equivalent to a whole school day. (Families in the North East watch 34.7 hours of television a week, compared to families in the South and South-East who spend 28.5 hours in front of the television).²⁴⁰

People watch television for many different reasons. However, children now make up more than 25 per cent of the overall television audience, and it is often hard to encourage children away from their devices or the television.^{241,242} Some reports also argue that children from lower-income backgrounds typically spend more time in sedentary activities due to financial constraints associated with sports activities.²⁴³

235 ASA, "Food and soft drink advertising to children consultation and regulatory statement (CAP)", published online December 2016 [last accessed 21/11/17 via: www.asa.org.uk/resource/food-and-soft-drink-advertising-to-children-consultation.html]

236 Ofcom, *Online overtakes TV as kid's top pastime*, 2016 [last accessed 21/11/17 via: www.ofcom.org.uk/about-ofcom/latest/features-and-news/childrens-media-use/]

237 BBC News (2007), *Poorer children 'watch more tv'*, [last accessed 21/11/17 via: <http://news.bbc.co.uk/1/hi/education/6900909.stm>]

238 Change4Life, *top tips for top kids*, London: Department of Health, 2009 [accessed via: www.dh.gov.uk/publications]

239 Granich, Roenburg, Knuiman & Timperio, (2008) [last accessed 21/11/17 via: <https://academic.oup.com/her/article/25/2/199/664487/Understanding-children-s-sedentary-behaviour-a>]

240 TV Licensing, *Telescope: A focus on the nation's viewing habits from TV Licensing*, (2011) [last accessed 21/11/17 via: www.tvlicensing.co.uk/ss/Satellite?blobcol=urldata&blobheadname1=content-type&blobheadvalue1=application%2Fpdf&blobkey=id&blobtable=MungoBlobs&blobwhere=1370006220747&ssbinary=true]

241 Josie Clarke (2016, December 8), *Ban on Junk Food Advertising Aimed at Children Extended to Online and Social Media*, The Independent, (2016) [last accessed 21/11/17 via: www.independent.co.uk/life-style/health-and-families/health-news/junk-food-ads-children-advertising-banned-ban-online-social-media-ofcom-a7462521.html]

242 Coombs et al. (2013) – [last accessed 21/11/17 via: <http://jech.bmj.com/content/67/10/868#ref-21>]

243 Coombs et al. (2013) – [last accessed 21/11/17 via: <http://jech.bmj.com/content/67/10/868#ref-21>]

6. Pester power

Evidence shows that marketing encourages children to prefer advertised products, and also pester their parents to purchase them.²⁴⁴ According to Dr Marion Nestle of New York University, marketing is particularly effective with “low income and minority children” and television is the “quickest and most effective route” to reach them.²⁴⁵

I wish the Government would support more healthy weight programmes, and for there to be more free programmes, more often. I know what to do, but it is so hard to handle all the pressures and demands.

Mum, Lambeth Healthy Weight Project

Increased screen time for children increases their exposure to marketing and advertisement of unhealthy food and drinks. Research examining the link between children’s unhealthy dietary habits and watching television show that children are considered to be major targets of the marketing industry due to the influence they have on family spending and spending power in general.²⁴⁶ **Children from poorer areas are six times more likely to believe the claims in adverts.**²⁴⁷ Television adverts have been shown to enhance children’s preferences for high-carbohydrate and high-fat foods, particularly children who watch a lot of television and are obese.²⁴⁸ Overweight characters shown in common television shows, such as Peppa Pig and The Simpsons, have also been shown to increase the unhealthy food choices of children between the ages of six and 14.²⁴⁹

I asked my mum if I could have it and she said ‘no’, and I was annoyed and I kept trying and she finally said ‘yes’, and I got to go to the shops to get it.

Girl, Year 5²⁵⁰

The combination of children spending an increased amount of time watching television, being exposed to unhealthy foods via adverts, and living in households with a higher percentage of unhealthy foods, is dangerous, and they are placed at a higher risk of obesity. Evidence shows that children are likely to consume more food whilst they are watching television or using a computer, and if these foods are unhealthy, a vicious cycle spirals. Television can act as a distraction and may result in people being unaware of how much they are eating. This effect has also been linked with computer usage.²⁵¹

We watch telly and then we turn it off to go to bed so they’re normally on around seven up to nine.

Girl, Year 6²⁵²

244 Nestle M. (2015) *Soda Politics: Taking on big soda (and winning)*, Oxford University Press, New York

245 Nestle M. (2015) *Soda Politics: Taking on big soda (and winning)*, Oxford University Press, New York

246 Boyland and Halford (2013)

247 BBC News (2007), Poorer children ‘watch more tv’, [last accessed 21/11/17 via: <http://news.bbc.co.uk/1/hi/education/6900909.stm>]

248 Boyland and Halford (2013)

249 NHS (2015), *Homer Simpson and Peppa Pig ‘linked to childhood obesity’* [last accessed 21/11/17 via: www.nhs.uk/news/2015/07/July/Pages/Homer-and-Peppa-Pig-linked-to-childhood-obesity.aspx]

250 Aznar C., MacGregor A., Rosenberg G., Porter L. and Lepps H. (2016) *Ad Brake: Primary school children’s perceptions of unhealthy food advertising on TV*. National Centre for Social Research and Cancer Research UK

251 Step to Health, *The Danger of Eating in Front of the TV*, [last accessed 21/11/17 via: <https://steptohealth.com/danger-eating-front-tv/>]

252 Aznar C., MacGregor A., Rosenberg G., Porter L. and Lepps H. (2016) *Ad Brake: Primary school children’s perceptions of unhealthy food advertising on TV*. National Centre for Social Research and Cancer Research UK

Some evidence also shows that poor sleep, which is increasingly linked to childhood obesity,²⁵³ can be caused by screen usage, as the blue light that is emitted from screens reduces the essential hormone for sleep (melatonin). One study found that 62 per cent of 2,445 children across England aged five to 16 now have their own computer,²⁵⁴ and children who use it before bedtime are more likely to experience poor sleep or fall asleep later.^{255,256} A poor night's sleep has been linked to poor performance at school, worse behaviour and greater calorie consumption the next day.²⁵⁷

I watch TV with my dad at about seven o'clock because my dad's not there in the day and I'm at school and that's the only time we really watch it together.

Girl, Year 4²⁵⁸

Children under eight years of age who have a television in their bedroom are less likely to get the recommended amount of sleep, which, in turn, has been shown to lead to affect their mental wellbeing.²⁵⁹ A 2017 study found that girls who had televisions in their bedroom at age seven were around 30 per cent more likely to be overweight by 11 years old.²⁶⁰ The study emphasised the many health risks associated with a child having a television in their bedroom including snacking unobserved and unthinkingly, being exposed to junk food advertising while watching adult programmes, not sleeping well and being sedentary for long periods of time. Children who have computers, televisions and mobile phones in their bedroom are also likely to experience anxiety which can hinder their sleep²⁶¹ and has been linked to symptoms of depression.²⁶² Additionally, prolonged use of screens throughout the day over long periods of time has been shown to affect brain plasticity and increase grey matter in the hypothalamus, which is associated with aggression.^{263, 264} These factors have been shown to exacerbate children's physical and mental ill-health, including an increased risk of obesity, poor sleep and symptoms of anxiety and depression.

253 Miller AL, Lumeng JC, LeBourgeois MK. Sleep patterns and obesity in childhood. *Current opinion in endocrinology, diabetes, and obesity*. 2015; 22(1):41–47. doi:10.1097/MED.0000000000000125

254 Katherine Sellgren (2011, February 1), BBC News [last accessed 21/11/17 via: www.bbc.co.uk/news/education-12334962]

255 Jenny Kleeman (2017, March 4), *Sleep problems mounting in children*, BBC News [last accessed 21/11/17 via: www.bbc.co.uk/news/health-39140836]

256 Foley, Maddison, Jiang, Marsh, Olds & Ridley (2013), *Presleep Activities and Time of Sleep Onset in Children*, [last accessed 21/11/17 via: <http://pediatrics.aappublications.org/content/early/2013/01/08/peds.2012-1651>]

257 Jim Horne/ NHS (2015), updated 2017, [last accessed 21/11/17 via: www.nhs.uk/Livewell/Childrensleep/Pages/junksleep.aspx]

258 Aznar C., MacGregor A., Rosenberg G., Porter L. and Lepps H. (2016) *Ad Brake: Primary school children's perceptions of unhealthy food advertising on TV*. National Centre for Social Research and Cancer Research UK

259 Sarah Knapton (2014, April 18), *Children lose seven minutes of sleep for every hour of TV*, TheTelegraph [last accessed 21/11/17 via: www.telegraph.co.uk/news/science/science-news/10775428/Children-lose-seven-minutes-of-sleep-for-every-hour-of-TV.html]

260 Boseley S., *TVs in the bedroom linked to childhood obesity, study finds*, The Guardian, published online 2 June 2017 [accessed via: www.theguardian.com/society/2017/jun/02/tvs-in-the-bedroom-linked-to-childhood-obesity-study-finds]

261 Alice Philipson (2013, November 13), *Computers and phones in childre's bedrooms 'can cause anxiety and sleep loss'*, The Telegraph, [last accesses 21/11/17 via: www.telegraph.co.uk/education/educationnews/10448123/Computers-and-phones-in-childrens-bedrooms-can-cause-anxiety-and-sleep-loss.html]

262 Sarah Knapton (2014, April 18), *Children lose seven minutes of sleep for every hour of TV*, TheTelegraph [last accessed 21/11/17 via: www.telegraph.co.uk/news/science/science-news/10775428/Children-lose-seven-minutes-of-sleep-for-every-hour-of-TV.html]

263 Jim Horne/ NHS (2015) updated 2017, [last accessed 21/11/17 via: www.nhs.uk/Livewell/Childrensleep/Pages/junksleep.aspx]

264 Blog Brainfacts (2015) – [last accessed 21/11/17 via: <http://blog.brainfacts.org/2015/05/watching-tv-alters-childrens-brain-structure-and-lowers-iq/#.WO9Vdljyu00>]

Evidence clearly shows the power of advertising and the detrimental effect too much screen time can have on children's health and well-being. Children are also targeted by companies that buy and use famous characters to promote their branded food and drinks products to maximise sales and market share.²⁶⁵ In the US, popular media characters owned by entertainment organisations and licensed to food, drinks and restaurant companies include Shrek, SpongeBob SquarePants, Dora the Explorer, Scooby-Doo and the Walt Disney princesses.²⁶⁶ Many of the products promoted via recognisable characters are HFSS products including cereals.

Case study: Child-friendly marketing examples (September 2017)

1. Coca-Cola is running a promotion to win family holidays to Disneyland. This is designed to appeal to the people who want to go to Disneyland, i.e. children. It only runs on large bottle and multi-buy packs of full-sugar red Coke (so people have more to consume) and there is a prize each week for six weeks, which encourages customers to form a habit of buying and consuming the multi-buy boxes of Coca-Cola every week.²⁶⁷
2. McDonald's is giving away Happy Meal toys for The Emoji Movie, a film aimed at young children. They give away different toys each week for five weeks, to encourage children to return regularly. The most popular Happy Meal is a cheeseburger, fries and a shake, which contains more than twice the sugar that young emoji fans should consume in a whole day.²⁶⁸
3. Kellogg's has released cereal products for Cars, Disney Princesses and The Emoji Movie. They carry large images of characters on the boxes to attract the attention of children, who are more likely to pester their parents to buy the products in the supermarket. None of the options are from its low-sugar range – they are 21g sugar per 100g.²⁶⁹

However, marketing products using familiar characters is not confined to successfully increasing consumption of HFSS food and drinks. The rules of increased sales and market share apply to healthy foods too. **In a study conducted by researchers at the University of Bangkok, children who regularly watched Popeye, a cartoon character who consumes large quantities of spinach after which his muscles grow, doubled their intake of spinach and other green vegetables.**²⁷⁰ The power of familiarity and child-friendly branding is evident. The problem therefore is not advertising itself – it is advertising of unhealthy foods. Increased sales of healthy food and drinks such as fruit and vegetables should be encouraged and sufficiently supported by DEFRA. This will be important in a soon-to-be Brexit Britain where the health and value of the food and drinks industry needs to be protected. Brexit presents a key opportunity for the Government to invest in and support the food and drinks industry to prioritise the development and sales of healthy products.

265 Kraak VI, Story M. e *Use of Brand Mascots and Media Characters: Opportunities for Responsible Food Marketing to Children*. Durham, NC: Healthy Eating Research; 2016. [accessed via: www.healthyeatingresearch.org]

266 Kraak VI, Story M. e *Use of Brand Mascots and Media Characters: Opportunities for Responsible Food Marketing to Children*. Durham, NC: Healthy Eating Research; 2016. [accessed via: www.healthyeatingresearch.org]

267 Coca-Cola Website: Disneyland Promotion, [last accessed: 21/11/17 www.cocacola.co.uk/disney/]

268 MacDonald's Happy Meal Toys, You Tube (2017), [last accessed: 21/11/17 via: www.youtube.com/watch?v=olzWRo2Tr_4]

269 Kellogg's Website, Emoji Movie Promotion, [last accessed: 21/11/17 via: https://emoji.kelloggs.com/en_GB/home]

270 Sirikulchayanonta C., Iedsee K., Poonsook S., Srisorrachatr S. (2010) 'Using food experience, multimedia and role models for promoting fruit and vegetable consumption in Bangkok kindergarten children', *Nutrition & Dietetics*, Vol.67, Issue 2, pp.97–101, DOI 10.1111/j.1747-0080.2010.01426.x

The obesogenic environment

A child's 'external environment', including playgrounds, leisure and activity centres, shopping centres, high streets, parks, public spaces and food environment, is affected and influenced by the decisions of many sectors, including the food and drinks industry, planning authorities, transport and environment.

There are numerous sectors, departments and policy areas that affect the environment and thus could be examined in this section. The ones discussed in this report are those considered most prominent: planning, the food and drinks industry, and the environment. Other areas that should be explored by Government in relation to tackling child obesity include social housing and hospital environments (i.e. the food and physical environment). This section details how key sectors and departments can help England move from an obesogenic to a healthy nation that encourages children to practise healthy behaviours by making the healthy choice normal, easy and convenient.

Recommendation 10

The environment in which we live each day fundamentally dictates the parameters of some of our choices. Our system of planning and building must recognise this and make health a core objective of its function.

Areas for consideration

1. Planning

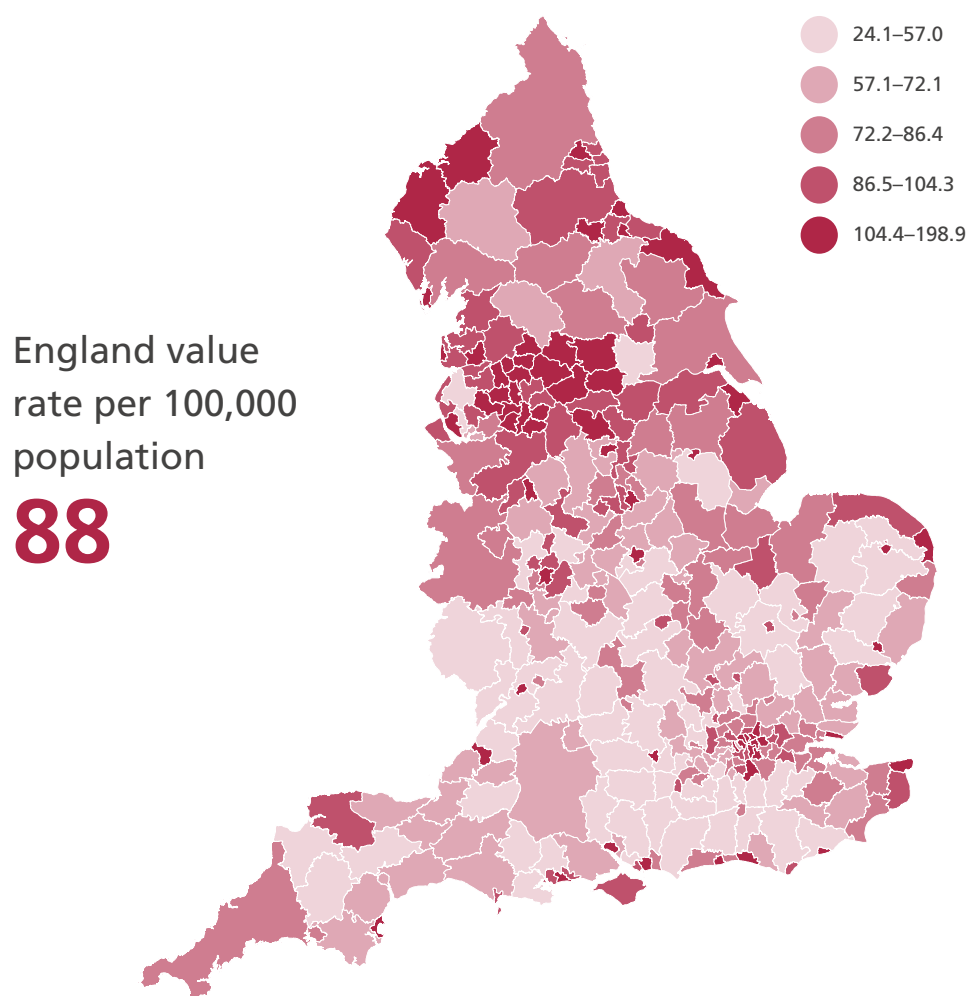
From houses to high streets, playgrounds to parks, planning bodies are hugely influential in the way neighbourhoods are built, and it is the planning frameworks and objectives set by Government that shape their decisions. The childhood obesity crisis presents local authorities with various opportunities to improve the environment by designing health into neighbourhoods and communities across the country.

This includes tackling problems such as the growth of fast food outlets, which has become a major concern of many organisations, including Public Health England.²⁷¹ It found that a fifth of children consume food from out-of-home outlets at least once a week, and several studies show that the greater concentration of fast food outlets and takeaways in deprived areas encourages increased consumption among children living there.²⁷²

²⁷¹ Public Health England, *Strategies for Encouraging Healthier 'Out of Home' Food Provision: A toolkit for local councils working with small food businesses*, 2017: PHE and LGA, London

²⁷² The British Medical Journal (2014), *Associations between exposure to takeaway food outlets, takeaway food consumption, and body weight in Cambridgeshire, UK: population based, cross sectional study*, Published online 2014, [last accessed 21/11/17 via: www.bmj.com/content/348/bmj.g1464]

Figure 11: Fast food outlets by local authority – rate per 100,000 population



Source: Public Health England

In the 2003 Licensing Act, there are four licensing objectives to help local authorities look at licence applications. These are the prevention of crime and disorder, public safety, the prevention of public nuisance and the protection of children from harm.²⁷³ Applicants must consider the impact of their premises in relation to the licensing objectives as part of the application process. If they do not meet the requirements, the local authority has the power to reject the application. To help empower local authorities to make the environment as healthy as possible, the Government should introduce 'health' as the fifth licensing objective. This would not only be applicable to new applications, but it would authorise local authorities to take any necessary steps to improve the health of the existing environment, such as reducing the number and density of fast food outlets in the local area, particularly around schools and playgrounds.

273 UK Government, *Licensing Act 2003: 2003 Chapter 17*, published online [last accessed 17.08.17 via: www.legislation.gov.uk/ukpga/2003/17]

One intervention to 'design-in' health to neighbourhoods and communities across England by making it easy, accessible and free for children to drink water would be for the Government to introduce a requirement for local authorities to ensure every public space, building, commercial establishment, school and transport station used by the public has a water fountain, or means whereby tap water can be freely accessed by the public, to ensure people have access to the healthiest drink available. The benefits not only include helping children adopt healthy behaviours such as drinking water, but would support local authorities to tackle other issues too. For example, in April 2017, the London Assembly Environment Committee urged the Mayor of London, Sadiq Khan, to help reduce plastic waste in London (plastic bottles make up 10 per cent of all litter found in the River Thames) by providing sufficient access to tap water, including across the TFL network.²⁷⁴

NHS England is already paving the way in putting health at the heart of communities across England with the launch of 10 pilot 'Healthy New Towns'. These are separate to Sport England's Local Delivery Pilots, aimed at tackling physical inactivity, which is discussed further down.

Case study: Healthy New Towns

In 2014, NHS England published its Five Year Forward View, which set out a vision for health service in England and included a proposal of new health and care 'new towns' across the country. In March 2016, Simon Stevens, Chief Executive of NHS England, announced formal plans to create ten pilot 'healthy new towns'. The aim of these towns are to contribute to and support the Government's house-building ambitions while 'designing-in' health from the start. The schemes will bring together clinicians, designers, technology experts and planning bodies to put "health at the heart of new neighbourhoods and towns across the country".²⁷⁵

In 2017, some winning design firms were picked from submissions to start designing the new towns, including Citiesmode, the design firm selected for the NHS's Healthy New Town in Runcorn.

Professor Sir Al Aynsley-Green, the former Children's Commissioner, urged that the new towns should "build developments with children's health at their hearts".²⁷⁶ Despite this, and the opportunity Healthy New Towns present to tackle childhood obesity, the Government's Childhood Obesity Plan made no mention of it and the towns are disconnected from other similar projects, such as Sport England's Local Delivery Pilots.²⁷⁷

274 London Assembly (2017, April 13), *Bottle Water*, [last accessed via: www.london.gov.uk/about-us/london-assembly/london-assembly-publications/bottled-water]

275 NHS England (2015), *Healthy New Towns – a mouth-watering opportunity*, [last accessed 21/11/17 via: www.england.nhs.uk/2015/09/healthy-towns/]

276 NHS England (2015), *Healthy New Towns – a mouth-watering opportunity*, [last accessed 21/11/17 via: www.england.nhs.uk/2015/09/healthy-towns/]

277 Sport England, *Investing in Local Areas*, [last accessed 21/11/17 via: www.sportengland.org/our-work/local-delivery/investing-in-local-areas/]

Health as a licensing objective would also enable local authorities to reject planning applications threatening playgrounds, parks and recreational areas, as well as sports facilities, which are linked to improvements in children's health.²⁷⁸ A 2017 report by the Association of Play Industries revealed that between 2014 and 2016 local authorities across England closed 214 playgrounds and planned to close a further 234. Conservative MP Sir Julian Knight stated that the report highlights "a deeply concerning trend away from children's playgrounds. At a time when we are all trying to combat childhood obesity and promote exercise we need to encourage children's play. I think it would be most helpful if the likes of the Big Lottery fund could be persuaded to look again at projects which promote children's play."²⁷⁹

278 Association of Play Industries (2017), *Hundreds of playgrounds set to close*, [last accessed 21/11/17 via: www.api-play.org/hundreds-of-playgrounds-set-to-close-says-API-report]

279 Association of Play Industries (2017), *Hundreds of playgrounds set to close*, [last accessed 21/11/17 via: www.api-play.org/hundreds-of-playgrounds-set-to-close-says-API-report]

appendix one

Recommendations made by other reports in the last decade

Over the past 10 years, numerous reports on obesity, childhood obesity and health inequality have been published. Some of these were commissioned by the Government itself.

In 2007, a UK Government-commissioned report on obesity, often referred to as the **Foresight Report**, was published. It moved public rhetoric away from the simple and stigmatising portrayal that obesity is caused by poor personal willpower, towards understanding that there are various physical and psychological drivers of obesity which dictate people's choices.²⁸⁰ It examined the impact and health outcomes of living in an "obesogenic environment", which it described as the "sum of the influences that the surroundings, opportunities or conditions of life have on promoting obesity in individuals and populations".²⁸¹ The report highlighted other drivers such as a human's inherent predisposal to weight gain, maternal health, early feeding patterns, changing lifestyles (more sedentary, less manual labour, less time spent cooking and more access to cheap, calorie-dense food and drink), the increase in food marketing, and the rise of technology, which Foresight deemed to have engineered "physical activity out of the environment".

The report drew together an analysis of the "systems engine" that drives the growing trend in obesity, and called on the Government to design and adopt a long-term, whole-systems approach in which "social and individual priorities favour healthy behaviours and where underlying biological mechanisms to control body weight are continually reinforced".²⁸² It recommended that Government focus should be on five main areas deemed as having the greatest average impact on obesity levels:

1. Increase walkability/cyclability of the built environment
2. Target health interventions for those at increased risk (i.e. most deprived communities)
3. Control the availability of/exposure to obesogenic foods and drinks
4. Increase the responsibility of organisations for the health of their employees
5. Early life interventions at birth or in infancy

280 Butland, B., Jebb, J., et al. (2007) *Foresight Tackling Obesity: Future Choices – Project Report*, 2nd Edition: Government Office for Science, London

281 Butland, B., Jebb, J., et al. (2007) *Foresight Tackling Obesity: Future Choices – Project Report*, 2nd Edition: Government Office for Science, London

282 Butland, B., Jebb, J., et al. (2007) *Foresight Tackling Obesity: Future Choices – Project Report*, 2nd Edition: Government Office for Science, London

Three years later, a review of England's health inequality, commissioned by the former Labour government as part of a global examination of health inequalities, was published. The final report, *Fair Society, Health Lives: The Marmot Review* (2010), chaired by public health specialist and epidemiologist Professor Sir Michael Marmot, transformed public rhetoric on health inequality and highlighted the complexities around the poverty-disease connection. It proposed effective, evidence-based solutions to close the growing health gap. The review found that while many people in England are living longer and spending more of their older years in better health than ever before, a healthy and long life was not enjoyed by all as those in poverty are being left behind.²⁸³

It explained that poor health is often caused by the social conditions that define a person's lifestyle and behaviours. Inequalities in health exist across several social and demographic indicators, including level of education, housing condition, parental occupation, neighbourhood quality, geographic region and ethnicity. The worse the social and demographic condition, the worse the health. Therefore, Marmot did not blame individuals for being in a poor state of health, but blamed individuals' socioeconomic grade.

During the 1990s the health gap widened for the first time since 1870.²⁸⁴ Unlike in the 19th century, when poor health in the most deprived communities was due to a lack of access to clean drinking water, vaccinations and healthcare, poor health in recent decades has been driven by unhealthy lifestyles and poor choice dictated by circumstance.²⁸⁵

The Marmot Review called for Government interventions to be focused on early years (pre-birth up to five years old) and to prioritise maternal health interventions; children and young people in full-time education (five to 16 years old), ensuring that reducing social inequalities is a sustained priority in schools; a healthy standard of living for all, including a minimum income for healthy living; the creation of healthy places and communities by removing barriers to active travel and improving safety; strengthening the role of ill-health prevention, and prioritising investment in ill-health prevention and health promotion across Government departments to reduce the social gradient. The report argued that to reduce the health gap and tackle inequalities, solutions must be universal rather than targeted only at the most deprived, to avoid those above the "target group" but behind the healthiest being left out. The approach, known as "proportionate universalism", seeks to improve the lives of all in the fairest and most resourceful way possible, by proportionately matching the intensity and scale of resources to a person's level of disadvantage.²⁸⁶ This approach is supported by this report.

In 2014, the McKinsey Global Institute published an obesity report from an economic perspective and compared the estimated impact of measurable obesity interventions against factors such as cost. It made the critical point again that "success requires as many interventions as possible by a full range of private and public sectors of society".²⁸⁷ This was followed shortly after by the National Obesity Forum's 2015 **State of the Nation's Waistline** report, which developed as a response to the lack of sufficient action following the **Foresight Report** and **The Marmot Review**. It stated that "the situation is now

283 The Marmot Review, p.37

284 Mayhew L., Smith D., *An investigation into inequalities in adult lifespan*, London: City University London, 2016. p.1

285 The Marmot Review, p.37

286 The Marmot Review, p.41

287 McKinsey Global Institute, *Overcoming obesity: An initial economic analysis, Discussion paper*, 2014: London

worse than it was in 2007” and made several recommendations.²⁸⁸ These included more evocative public health campaigns, like the anti-smoking campaigns; that GPs play a much greater role in tackling obesity; improved obesity training for primary healthcare professionals; more emphasis in official nutritional guidelines on hydration; focus on both prevention and support for obese people; and the introduction of compulsory physical activity in schools.²⁸⁹

In 2016, Professor Dame Carol Black’s Government-commissioned **independent review into the impact on employment outcomes of drug or alcohol addiction, and obesity** was published. It confirmed the disproportionate link between poverty and obesity, with evidence showing that obese and severely obese people not in work are more likely to live in the most deprived areas, while identifying various indirect effects of obesity on the labour market, such as increased absenteeism and lower wages.²⁹⁰ It called upon the Government to further investigate the impact of obesity on working-age people to better understand the costs to the labour market. It made the case that if obesity is proven to impact the labour market, then urgent action should be taken to reduce the potentially damaging impact of obesity, particularly before obese and overweight children reach working age.²⁹¹

In 2016, the WHO published a report on ending childhood obesity, which set out a comprehensive and integrated approach to tackling the problem, including firm and bold action on the food and drinks industry, schools and medical professionals. This report echoes the approach and suggested recommendations of the WHO report in many ways – in particular, the actions and responsibilities set out for member states. It calls for countries to “take ownership, provide leadership and engage political commitment to tackle childhood obesity over the long term”. It also focused on securing cross-party, cross-departmental and cross-sector commitment and action, ensuring sufficient data collection, and setting targets.²⁹²

In January 2017, the Royal College of Paediatrics and Child Health (RCPCH) published its report **The State of Child Health**, which called for a ban on the advertising of unhealthy foods in all broadcast media before the 9pm watershed; cross-departmental support for breastfeeding; expansion of the national child measurement programme; and the adoption of a “child health in all policies” approach.²⁹³

288 National Obesity Forum, *State of the Nation’s Waistline*, London: National Obesity Forum, 2015, p.3

289 National Obesity Forum, *State of the Nation’s Waistline*, London: National Obesity Forum, 2015, p.7

290 Black, C. (2016) *An Independent Review into the impact on employment outcomes of drug or alcohol addiction, and obesity*: OGL, London

291 Black, C. (2016) *An Independent Review into the impact on employment outcomes of drug or alcohol addiction, and obesity*: OGL, London

292 http://apps.who.int/iris/bitstream/10665/204176/1/9789241510066_eng.pdf

293 *RCPCH launches landmark State of Child Health report*, Royal College of Paediatrics and Child Health, News & Campaigns, last published 26 January 2017 [last accessed 31.01.17 via: www.rcpch.ac.uk/news/rcpch-launches-landmark-state-child-health-report]

In June 2017, a comprehensive and systematic study, compiled by the Institute for Health Metrics and Evaluation at the University of Washington and funded by the Gates Foundation, on the health effects of obesity and overweight to date was published. The study analysed 1,800 data sets across 195 countries. It found that excess weight accounted for around four million deaths and 120 million “disability-adjusted life years” globally in 2015, and was directly related to conditions such as heart disease, type 2 diabetes, cancer and kidney disease. Forty per cent of the excess-weight-related deaths caused by cardiovascular disease occurred in people who were overweight (BMI 25–29) rather than obese (BMI of 30 or above), showing that both overweight and obese people are at risk of illness, disease and death.

The report pointed to the changes in the food environment and food systems as likely to be major drivers of the obesity crisis, including the increased accessibility, availability and affordability of calorie-dense and aggressively marketed foods. It says, “We have more processed food, more energy-dense food, more intense marketing of food products, and these products are more available and more accessible... The food environment seems to be the main driver of obesity.”²⁹⁴ The report also examined physical inactivity but concluded that it is less likely to have been a major contributor to the obesity crisis. As a global study examining a wide range of countries, there is little focus on recommended solutions. It suggested the expansion of clinical interventions, which could be effective in reducing the burden of diet-related diseases, surgical interventions for morbidly obese patients and, most importantly, comprehensive monitoring systems for all interventions to assess their effectiveness, feasibility and sustainability.

This brief overview of recommendations made by reports on obesity over the past 10 years conveys the repeated effort by experts and clinicians to call on Government to take significant steps to tackle obesity and health inequalities. A clear theme running throughout is the need for the Government to introduce a whole-systems approach with multiple interventions, in multiple settings, in partnership with multiple stakeholders, and directed appropriately at multiple groups across a community. While reports are published and recommendations are made regularly, statistics are getting worse, and inaction breeds resentment. It is not the case, however, that consecutive Governments have ignored the issue. There has been a failure to do enough to follow a whole-systems approach. England is not alone. **No country in the world has reversed its obesity epidemic at a national level.**²⁹⁵

294 The GBD 2015 Obesity Collaborators (2017) “Health Effects of Overweight and Obesity in 195 Countries over 25 years”, *New England Journal of Medicine*; 377:13–27, doi: 10.1056/NEJMoa1614362

295 Roberto CA., et al (2015) ‘Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking’, *The Lancet*, published online [last accessed 18.09.17 via [http://dx.doi.org/10.1016/S0140-6736\(14\)61744-X](http://dx.doi.org/10.1016/S0140-6736(14)61744-X)]

appendix two

The current approach to childhood obesity

Politicians have been under pressure to “do something” about obesity for decades. A recent review of the challenges in developing effective health policies for obesity discusses that the pressure for politicians to “do something”, although well-intended, often leads to a “scattershot” and disjointed approach lacking in evidence and well-thought-through, long-term policies.²⁹⁶ The risks of implementing ineffective policies includes wasting resources – if policies meet with little success, they are often scrapped completely rather than supported with additional interventions. This creates a dangerous cycle: policies are scrapped, the problem gets worse, so new or recycled policies are introduced. If policies lead to negative unintended consequences and are scrapped as a result, the opportunity to better understand the problem and adapt the policy to address any negative unintended consequences is missed, and thus the knowledge base on what is an effective intervention does not develop.

Every single policy must be introduced with clear and measurable desired outcomes, and a system of monitoring its effectiveness or ineffectiveness. Monitoring not only allows for a better understanding of how effective the policies are, it also picks up any negative, unintended consequences quickly, allowing policy deliverers to respond by examining how the policies can be improved and identify what may be missing.

Government responsibility to tackle obesity largely falls within the Department of Health, which has made several attempts to reduce obesity rates over the past decade. In 2009, the Government introduced **Change4Life**, a national animation-based social marketing campaign designed to help families and individuals make healthier choices about what they eat, how much physical activity they do and how much alcohol adults consume, defined by its strapline “Eat well, Move more, Live longer”.²⁹⁷ Prior to the introduction of the Government’s **Childhood Obesity Plan**, **Change4Life** has largely been considered the Government’s main action to tackle childhood obesity, and since its introduction more than 3.1 million people have signed up to the online platform.²⁹⁸

In 2011, the Government published the anti-obesity white paper **Healthy Lives, Healthy People**, in response to **The Marmot Review**. It set out a number of ambitious targets

²⁹⁶ Binks M., Chin S-H., ‘What are the challenges in developing effective health policies for obesity?’, *International Journal of Obesity* (2017) 41, 849–852

²⁹⁷ Change4Life, About [last accessed 10.01.17 via: www.nhs.uk/change4life/pages/why-change-for-life.aspx]

²⁹⁸ Public Health England, Press release, Purchase of sugary drinks falls during healthy swaps campaign, [last accessed 10.01.17 via: www.gov.uk/government/news/purchase-of-sugary-drinks-falls-during-healthy-swaps-campaign]

including a £135 million investment in launching a physical activity initiative called “Mass Participation and Community Sport”. It also launched the well-publicised “Public Health Responsibility Deal”, which focused mainly on voluntary reformulation of food to reduce salt content.²⁹⁹ The report set out a vision of how both national and local government could tackle obesity, including reducing child poverty, empowering employers to be ‘champions of public health’, creating active and sustainable communities and ring-fencing public health funding. However, the report failed to achieve much success, and little has been mentioned of it since 2011.

While the Prime Minister was on holiday during Parliamentary recess in August 2016, the Government’s 13-page **Childhood Obesity Plan** was published, which outlined several proposed actions, as well as voluntary and compulsory demands on the food and drinks industry, to combat childhood obesity. The Government’s commitments include a Soft Drinks Industry Levy, which will come into effect in April 2018, and its revenue will be invested in healthy breakfast clubs and physical activity in school; voluntary reformulation for the entire food and drinks industry to take 20 per cent of sugar out of high-sugar products; and the introduction of a voluntary healthy rating scheme for primary schools, which will be considered during Ofsted inspections.³⁰⁰ After the Plan was published, an episode of Channel 4’s *Dispatches* featuring the celebrity chef Jamie Oliver revealed that a leaked draft of former Prime Minister David Cameron’s planned 37-page childhood obesity strategy, named **Making the Healthy Choice the Easy Choice: A Healthier Future for all our children**, had included a number of ambitions and far-reaching actions that were not included in the **Childhood Obesity Plan**. It had also ambitiously committed to halving England’s childhood obesity rate within 10 years.³⁰¹

The Childhood Obesity Plan not only lacks measurable and accountable ambition by setting the loose aim of “significantly reducing England’s rate of childhood obesity over the next 10 years”, but it fails to include the reduction of inequality as a goal in the Plan, despite acknowledging that the childhood obesity burden falls hardest on the poorest children. This omission undermines the potential of the Plan in addressing inequalities, and means that if childhood obesity rates do decrease, but not for the most deprived, that could still be regarded as a success. While a decrease would undeniably be an achievement, leaving the poorest children behind by allowing the childhood obesity gap to grow would be unjust and wrong. The Government should correct this oversight immediately.

The outcome of the Childhood Obesity Plan will not be clear for a while, but since the Soft Drinks Industry Levy was announced, there have been several positive developments.³⁰² Manufacturers such as Nestlé, ASDA, Lucozade Ribena Suntory, AG Barr (Irn Bru and Tizer), Tesco, Waitrose, Kellogg’s and Sainsbury’s have all committed to reducing sugar in their products. The widespread response to the levy from the soft drinks industry underlines the effective role of Government leadership to incentivise reformulation through legislation and direct taxation. Although the success of this in “significantly reducing England’s childhood obesity rates” is yet to be seen and will remain unknown for some time, it

299 Department of Health (2011) *Healthy Lives, Healthy People: A call to action on obesity in England*: HM Government, London

300 Department of Health (2016) *Childhood Obesity: A Plan of Action*: HM Government, London

301 May’s child obesity plan is all flab and no meat, Jamie Oliver, Jamie’s Food Revolution [last accessed 12.01.17 via: www.jamiesfoodrevolution.org/news/mays-child-obesity-plan-is-all-flab-and-no-meat/]

302 Tesco cuts sugar in own-brand drinks to avoid sugar tax, The Guardian, 7 November 2016 [last accessed 31.01.17 via: www.theguardian.com/society/2016/nov/07/tesco-cuts-sugar-in-own-brand-drinks-to-avoid-sugar-tax]

is extremely unlikely to do so in and of itself. The RCPCH even warned that sugar-free alternatives were “no more helpful for maintaining a healthy weight than their full-sugar versions” since they may trigger the excess consumption of food by overstimulating people’s sweet taste receptors.³⁰³ Furthermore, the Soft Drinks Industry Levy is too narrow in that it only applies to carbonated soft drinks. To be truly effective it needs to ensure that sugary dairy drinks, powdered drinks and syrups are included.

In August 2017, one year after the Childhood Obesity Plan was published, PHE England announced that, as part of the next stage of the childhood obesity programme, it will consider plans to reduce overall calories in the foods children consume most, including ready meals, pizzas, burgers, savoury snacks and sandwiches. Duncan Selbie, Chief Executive of PHE, stated that PHE “will work with the food companies and retailers to tackle this as the next critical step in combating our childhood obesity problem”.³⁰⁴ This is a welcome ambition and one the CSJ believes should be mandated to create a level playing field for manufacturers and retailers. The CSJ also welcomes the introduction of a £5 million childhood obesity research unit by the Department of Health in 2017, which aims to provide long-term research into childhood obesity, independently advise on effective interventions and evaluate actions taken.³⁰⁵

The Government has continued to respond to criticisms since the report was published by saying the plan is “what public health experts call the world’s most ambitious plans on childhood obesity and diabetes prevention”.³⁰⁶ By not detailing its ambitions other than to “significantly reduce childhood obesity rates over the next ten years” means its ambitions are almost impossible to determine or hold to account. This report sets out an ambitious plan that puts measurable outcomes at the forefront and is led by example. If the world’s most ambitious plan is going to succeed, success must be determinable in the short, medium and long-term.

Childhood Obesity Plan Commitment	Progress to date (September 2017)
Soft Drinks Industry Levy (SDIL)	The SDIL has become law and will take effect in April 2018.
Reformulation programme	PHE have been leading a comprehensive sugar reformulation programme with the aim of achieving a 20 per cent reduction in sugar in key foods by 2020. Assessment of sugar reduction due March 2018 after its announcement in 2017.
Investing in sports and physical activity	The revenue from the SDIL will fund a doubling of the Primary PE and Sport Premium to £320 million a year (£16,000 per school) from October 2017.

303 Royal College of Paediatrics and Child Health, *RCPCH responds to paper on sugar free and diet drinks*, Last published 9 Jan 2017, [last accessed 21/11/17 via: www.rcpch.ac.uk/news/rcpch-responds-paper-sugar-free-and-diet-drinks]

304 HM Government, press release: “Next stage of world-leading childhood obesity plan announced”, *Department of Health and Public Health England*, published online 18 August 2017 [last accessed online 04.09.17 via: www.gov.uk/government/news/next-stage-of-world-leading-childhood-obesity-plan-announced]

305 HM Government, News story: “£5 million investment for new obesity policy research unit”, *Department of Health and Public Health England*, published online 18 August 2017 [last accessed 04.09.17 via: www.gov.uk/government/news/5-million-investment-for-new-obesity-policy-research-unit]

306 ITV, *Fears over childhood obesity ‘time bomb’*, published online 12 August 2017 [last accessed 14.08.17 via: www.itv.com/news/wales/2017-08-12/fears-over-childhood-obesity-time-bomb/]

Childhood Obesity Plan Commitment	Progress to date (September 2017)
Investing in breakfast clubs	Investing a further £26 million in breakfast clubs for the next three years in 1600 schools, with a focus on increasing provision for disadvantaged pupils in 'Opportunity Areas'.
Calorie reduction programme	PHE is considering the evidence on children's calorie consumption and has set the ambition for the calorie reduction programme to remove excess calories from the foods children consume the most. PHE plan to publish evidence in early 2018 and consult with the food industry, trade bodies and health NGOs to develop guidance and timelines for the calorie reduction programme.
Country Sports Partnership Network (CSPN)	CSPN is working with London Sport to develop an online portal for schools to make it easier for them to access sport and physical activity offers. The portal will allow national and local providers to electronically upload and communicate their offer to schools on a national, regional and local basis. This is being trialled in the London region. CSPN is also exploring the wider issue of how NGBs and local providers can better co-ordinate their offers to schools and work together where appropriate to align their programmes. The aim is to not only ensure that schools have access to a range of different offers to meet their needs, but that the offer is high quality, trusted and successful.
Cycling and walking investment strategy (CWS)	CWS was published in April 2017 and set out a £1.2 billion investment in cycling and walking from 2016 to 2021. This includes £300 million of dedicated funding, with £50 million set aside to provide 'bikeability' training for a further 1.3 million children.
Healthy rating scheme for primary schools	Currently exploring voluntary digital models for a healthy rating scheme that would be designed to support schools to become healthy zones.
School Food Standards take-up	About to launch a programme to encourage take-up.
FSM	Keeping UIFSM but not introducing universal breakfasts, as was in the Conservative Party manifesto
Policy Research Unit	Not originally included in the Childhood Obesity Plan. In 2017, the launch of a new £5 million Policy Research Unit on obesity was announced to provide evidence, evaluation and research capability. Initial work will include looking at advertising, promotions, labelling; tackling inequalities in prevention of childhood obesity; policy levers for prevention of childhood obesity in early life; evaluation of the Childhood Obesity Plan.



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