What are the most effective solutions to the obesity crisis?

1 Soares 2016

1Putting taxes into the diet equation

Mexico’s soda tax has reduced sales of sugar-sweetened beverages. Time will tell whether the tax helps to reduce obesity prevalence as well

By Andréia Azevedo Soares. Bull World Health Organ 2016; 94:239–240 | doi: http://dx.doi.org/10.2471/BLT.16.020416

“In Mexico, you can easily find people drinking refrescos (sodas) and eating tacos in the middle of the morning. On nearly every street corner you find street vendors selling sodas and fried foodstuff,” says Mónica García, a university teacher who lives in Mexico City, referring to her fellow Mexicans’ beloved snack. “People think that a taco without soda is not a real taco,” says Mónica

Sodas – bottled or canned sweetened soft drinks – have long been part of Mexican culture. The Coca-Cola Company started bottling and selling sodas in the country in 1926. Fourteen years later the first Coca-Cola vending machines were installed in Mexico City and former president, Vicente Fox, was head of Coca-Cola Mexico before taking office in 2000. “The origins of this entrenchment date back to the 1950s, when Coca-Cola began intense marketing campaigns in Mexico. By the 1970s, sodas were well established as components of daily cultural life,” writes the nutritionist and campaigner Marion Nestle in her book Soda Politics, published last year in the United States of America

García finds the statistics on her compatriots’ soda intake alarming and that is why she welcomes the 1 peso per-litre (US$ 0.06) tax on these drinks introduced in January 2014. The intake of sugar-sweetened beverages has been increasing worldwide. Studies in the last few years show that this increase is a significant factor driving rising rates of obesity and diet-related diseases, such as type 2 diabetes – the theme of this year’s World Health Day on 7 April. In Mexico, these drinks are a major source of energy for adults and children especially in the many communities that do not have safe tap water. The age-adjusted prevalence of diabetes in adult Mexicans increased from 10.2% to 10.7% between 2010 and 2014, according to the Global status report on NCDs 2014. This prevalence is the highest among the 34 countries in the Organisation for Economic Co-operation and Development. The figures refer to Mexicans with type 2 diabetes (90–95% of total prevalence) as well as those with type 1 diabetes

More than two years after the Mexican Congress passed legislation levying an excise tax on sugar-sweetened beverages – Mexico’s “soda tax” – a growing body of evidence suggests that pricing policies can influence purchasing patterns and have an impact on dietary behaviour, according to the 2015 World Health Organization (WHO) report, Using price policies to promote healthier diets. A study published in January in the BMJ shows that sales of the taxed beverages in Mexico fell by an average of 6% in 2014, and declined by as much as 12% in the last month of the year. In addition, purchases of water and non-taxed beverages increased by about 4% on average. “Our study shows that taxing sugar-sweetened beverages has a legitimate place as part of a toolkit for the prevention of obesity. Taxation alone will not solve the problem, but can contribute to its prevention and control,” says Dr Juan Rivera Dommarco, co-author of the BMJ study and director of the Mexican Research Centre in Nutrition at the National Institute of Public Health

The soft drinks manufacturers association of Mexico questioned the researchers’ conclusions, arguing that the measure was regressive in that it hit poor households hardest, but failed to make a significant reduction in Mexicans’ average caloric intake. “Unfortunately, the soda industry in Mexico is winning the battle for public opinion, saying that the tax doesn’t work and that it is regressive,” argues Rivera. For Rivera, the impact on the poor has to be measured in terms of improving their health. “Our study found that the reduction in soda purchases was greater among the poor (an average 9% reduction), so we expect greater health gains among poor people,” Rivera says

The money raised by Mexico’s soda tax is being reinvested in obesity prevention, for example, in providing drinking water fountains in low-income schools. “The soda tax is part of a comprehensive strategy to reduce obesity and type 2 diabetes,” Rivera says. “The results in terms of a real reduction in obesity and increase in healthy consumption habits will not show immediately.” Other measures include the regulation of marketing of sodas and unhealthy foodstuffs, Rivera adds

“The decrease in soda sales in Mexico is good news, but we don’t have conclusive evidence yet on whether this is actually reducing obesity and type 2 diabetes,” says Dr Gojka Roglic, WHO medical officer and the lead author of a global report on diabetes to be released on World Health Day. “We don’t know yet what people are drinking instead of these sodas,” she explains. Rivera says that a national survey is planned between 2016 and 2018. “But the effects on weight are probably going to show in five years or more. We estimate that about 400 000 cases of diabetes could be averted by 2050 if Mexico keeps the soda tax.” Price policies are designed to influence consumers to make healthier choices when buying drinks, for example, by making sodas more expensive than bottled water

Mexico’s soda tax is paving the way for the whole Americas region. Last year, Barbados levied a 10% excise tax on sugar-sweetened beverages and plans to reinvest the revenue in health. Dominica levied a 10% excise tax on such drinks and chewing gums and Chile levied an 18% value added tax on drinks containing more than 6.25 grams of sugar per 100 ml. Marion Nestle believes that such taxes are needed because consumer choice is not as free as consumers may think. “We cannot take marketing out of the equation. Individual choice is very much dependent on marketing,” says Nestle, who is also a food studies and public health professor at New York University. “Companies put millions of dollars into food marketing. You are not supposed to think critically about what you are buying. Marketing is aimed to act below the radar of critical thinking.”

Marketing techniques for energy-dense sodas and foodstuffs have become extremely sophisticated in the last two decades. The food industry is now targeting low- and lower-middle-income countries that have the potential to become highly profitable markets. Children are targets of marketing too, for the same reason, Nestle explains. An estimated 41 million children globally under five years were obese or overweight in 2014. The Commission on Ending Childhood Obesity report, released in January, makes recommendations for governments on how to change this. Sugar taxation is one of the commission’s suggested measures, but there are caveats. “The soda tax is not a silver bullet. Taxation is one of many instruments available to promote healthier diets and should be seen as part of a package of policies aimed at altering consumers’ choices,” says Dr Francesco Branca, WHO Director of Nutrition for Health and Development

WHO recommends other price policies such as subsidies for, or lower taxation of, healthy food as well as initiatives to encourage people to eat a healthier diet, avoid tobacco and be more physically active. Finland has taxed sweets and drinks on and off since 1926. In the United States of America, the city of Berkeley succeeded in introducing a soda tax after similar proposals in other states including New York had failed. Hungary introduced a tax on a range of foodstuffs and drinks in 2011, including €0.22 per litre (US$ 0.24) on drinks with more than 0.5% sugar content, the revenues from which are reinvested in health. In the same year, France adopted a tax on sugar- and artificially-sweetened drinks, including fruit beverages and flavoured waters. Its health impact has not been evaluated yet, but a report by Professor Serge Hercberg found that soda sales decreased for the first time in many years in 2012

The French tax is generating revenues of about €300 million a year since 2012 (US$ 326 million), according to Using price policies to promote healthier diets. Co-author, João Breda, programme manager for nutrition, physical activity and obesity in WHO’s Regional Office for Europe, says: “We need to try to find ways to guarantee that the revenue from taxing unhealthy products is reinvested in health-related initiatives.

2 Oliver 2015

2 JAMIE OLIVER’S STRATEGY TO COMBAT CHILDHOOD OBESITY IN THE UK

26/11/15 http://www.jamieoliver.com/theplan/ by Jamie Oliver [ Extracts]

Soft drinks are the largest single source of sugar consumption for school-age children and teenagers. The immediate introduction of a 20p levy per litre on all sugary soft drinks would not only drive down consumption (as shown in France), but could also raise revenue of up to £1 billion per year. This revenue must be ring-fenced and used to support preventative strategies in the NHS and in schools around obesity and diet-related disease, thus making a significant impact on health in the UK

When it comes to the labelling of soft drinks with added sugar, the UK should encourage all manufacturers to clearly state the sugar content in “teaspoons” on their products, and should lead negotiations to make this a mandatory EU initiative. Earlier this year, an online experiment​ demonstrated that adding a simple, visual representation of the number of teaspoons of sugar in a bottle or can of sugary soft drink had an overwhelmingly positive response. It was shared more than 40,000 times with a phenomenal reach of more than 10 million people on Facebook alone. The support for the clarity of information when displayed in this simple, instantly recognisable way was undeniable. Parents spoke en masse to agree that this is a much-needed change – we categorically cannot ignore that extreme level of support. Grams are commonly misunderstood but teaspoons are recognised the world over

The ongoing delivery of the 17 actions in the Government’s School Food Plan, created by John Vincent and Henry Dimbleby, is vital. Schools play a massively significant role in tackling childhood obesity and the UK is leading the way globally – we must keep up that momentum. Within the School Food Plan, legislation is now in place to teach children how to cook, and we must ensure there is development in this area. Many of our current generations have been raised in households where no one cooked from scratch, therefore they, in turn, don’t know how to feed their own children nor can they teach their children to cook. The brilliant plan that put food education and cooking back on the school curriculum needs ongoing support and development. It is every child's human right to learn about real food, where it comes from, how it affects their body, and how to cook it, and the opportunity to teach children these vital life skills at school from a young age must be utilised

School food standards must also apply to all packed lunches consumed in school – meaning that a​ll​ food consumed in our schools is healthy and nutritious. The Plan has reported that only 1% of parent-packed lunches in the UK meet the minimum nutritional standards set for cooked school lunches1. Clear guidance is desperately needed from the Department of Health, the Department of Education and Change 4 Life on what a good packed lunch that reflects School Food Standards looks like​. We also need to provide guidance for parents to ensure that they have the right support to make better choices for their children. Policies should be put in place within schools to ensure consistency of support. To build further on the success of the School Food Plan, Ofsted must, in their school inspections, report on how schools ensure children are eating well and leading active lifestyles. Basic nutritional training must be embedded in all teacher training, from those entering the profession, as well as those aspiring to be our next head teachers. Paying for teachers to eat meals with children at school is also important, this has a transformational effect in supporting healthy eating habits for all our children.​

Local authorities should offer parallel programmes to parents, and parents-to-be, so that they are able to provide healthy meals in the home environment. Indeed, such programmes should also be offered to healthcare workers – particularly doctors, midwives and health visitors – so that they can utilise their training to deliver quality nutritional support to their clients from antenatal care onwards. One of our elite forces on the frontline in the fight against obesity are our GPs. The great doctors of the future will be those that have received detailed nutrition training. The ring-fenced money from the “sugar tax” could have a huge impact here. It is vital that during the crucial first 1000 days of a child’s life, optimum lifestyle practices are understood and adopted by their family: appropriate nutrition in pregnancy, the incredible value of breastfeeding, the dangers of premature weaning and the preparation of first foods. This content should be measured and evaluated to ensure​ consistent, expert information is offered by qualified individuals

The London boroughs of Lambeth and Croydon have been given Food Flagship status and are delivering real system change at a local level across all areas of civic life, from school meals to supermarket layouts. The government’s Obesity Strategy should use Lambeth and Croydon as national ‘Living Labs’, testing and trying out new initiatives and interventions. In addition, the Jamie Oliver Food Foundation, are working in partnership with Brighton and Hove to help them become the UK’s first “Sugar Smart City”, with many initiatives put in place to encourage people and businesses to be more aware of the sugar in their food. There is a real opportunity to promote and amplify the great work these councils are doing not only to tackle childhood obesity, but obesity in general,​ and inspire other councils around the country to do the same. Indeed, there should be more food flagship boroughs, with programmes such as the Ministry of Food (MoF) community cooking classes and growing initiatives set up. Many schools deliver great cooking clubs during term time (often including parents and members of the community). These should be extended to operate during school holidays, too. Fun, educational cooking lessons and growing activities will ensure that millions of children who might otherwise go hungry during holidays receive sufficient nutrition

The affordability and marketing of food needs urgent attention. Current supermarket price promotions and special offers are 20% more likely to have red traffic light levels of high fat, sugar and salt (HFSS) when compared to non-offers. Regulations should be put in place to promote healthier choices, both in store and online, and to limit the quantity, frequency and amount of​ time that HFSS foods and drink can be promoted. Retailers and producers should be made to restrict promotional activity, such as buy-one-get-one-free offers, on unhealthy food and beverages

Marketing strategies should be implemented in social campaigns to encourage the promotion of healthy foods to the consumer and counter the current unhealthy marketing environment. The introduction of a​ buy-one-get-a-reduction-on-another scheme for healthier food products is one offer that retailers could potentially make, as well as allocating greater prominence to healthy products in store and supporting the improvement of the quality, variety and quantity of healthier foods and beverages in existing stores. Supermarkets should also be encouraged to provide on-premises cooking classes for customers, with government grants for in-store kitchens

The marketing of HFSS food around schools is unacceptable and must be banned or significantly curtailed. Imposing restrictions on the types of food businesses allowed to set up within a certain radius of schools will restrict the unhealthy choices available to school children. A prime example of this is the​ profusion of burger vans and fast-food outlets opening and operating near schools. The ridiculous saturation of HFSS food in corner shops and the checkout aisles of supermarkets must also be properly addressed by Government. The decision to prohibit HFSS food from these aisles by retailers such as Aldi, Lidl, TescoMetro and Express, and Marks & Spencer should be applauded and all stores should be encouraged to follow their responsible marketing.​

Jamie Oliver is a celebrity chef and restaurateur. He is well-known for his TV shows and political campaigns which aim to educate and persuade people to eat more healthily and for his work with the government in introducing healthier school meals for children.

3 Marteau et al 2015

3. Downsizing: policy options to reduce portion sizes to help tackle obesity [Extracts] British Medical Journal – BMJ; doi: https://doi.org/10.1136/bmj.h5863 (Published 02 December 2015)

By Theresa M Marteau, Gareth J Hollands, Ian Shemilt, Susan A Jebb,

The worldwide prevalence of obesity and overweight has risen substantially over the past three decades with no country yet achieving a reduction. International and national ambitions to “end childhood obesity” and “reduce non-communicable diseases by 25% by 2025” are unmatched by policies that could realise them. The causes of obesity are complex but overconsumption of food and sugary drinks is a critical proximal determinant, driven in part by large portion sizes. The importance of developing interventions and policies to reduce the size, availability, and appeal of large portions is underscored by the compelling evidence that people eat and drink more from larger portions

The problem

The size of portions, packages, and tableware has increased over the past 50 years. Our recent Cochrane review shows that people consistently consume more food or non-alcoholic drinks when offered larger sized portions or packages, or when using larger items of tableware. The size of this effect suggests that eliminating larger portions from the diet could reduce average daily energy consumed by 12-16% among UK adults and by 22-29% among US adults

Crucially, portion size is a modifiable determinant of dietary energy intake. Although clearer guidance on healthy portion sizes for a range of foods and drinks is awaited, most national and international policies to prevent obesity highlight a need to reduce portion sizes. Indeed, a recent economic analysis ranked reduced portion size as having the highest potential to reduce the population health burden of obesity

The mechanisms underlying the “portion size effect” are not fully understood. However, it seems that the social and personal norms for what constitutes a suitable amount to consume are shaped by food portions we routinely encounter in supermarkets, restaurants, or the home, including images used in marketing. As exposure to larger portions has become more common, these sizes have come to be viewed as appropriate, with consumption correspondingly increasing. This suggests that reductions in portion size might, over time, recalibrate consumption norms, even if there were some initial resistance from consumers and industry

Policy options

Given that larger portions are now an established part of the highly competitive food market, change will require active intervention. The abundance of large portion sizes reflects a synergy of public demand with commercial interests; buyers want filling portions at competitive prices and industry benefits from cost savings when supplying and packaging larger portions combined with promotional strategies to increase producers’ market share. There has been little research on interventions to reduce portion size and existing studies have shown mixed effects. It seems likely, however, that effective interventions will reduce demand and supply, setting up a virtuous circle, to recalibrate portion sizes. Achieving such change will require support from the public, industry, and politicians

What interventions might work?

Sizing—Make default serving sizes smaller for energy dense foods and drinks—eg, reduce size of single serve confectionery and serving size of chips and cakes in canteens

• Availability—Reduce availability of larger portion and package sizes†—eg, remove largest serving size of drinks; increase availability of smaller portion and package sizes—eg, offer option of smaller portions to diners in restaurants

• Placement—Place larger portion sizes in stores and cafes less accessibly†—eg, portion size limits at checkouts, aisle ends, and special displays

• Design—Demarcate single portion sizes in packaging through wrapping or visual cues†—eg, individual wrapping of biscuits

• Marketing—Restrict portion and package sizes used in advertisements and other marketing

• Sizing—Make smaller tableware the default for self-service and served foods and drinks†

• Availability—Increase availability of smaller tableware and reduce availability of larger tableware for home use

• Design—Develop tableware that maximises the mechanisms underlying the portion size effect—eg, shallow plates, straight sided glasses, cutlery that holds smaller mouthfuls

• Restrict pricing practices whereby larger portion and package sizes cost less in relative (and sometimes absolute) monetary terms than smaller sizes†

• Restrict price promotions on larger portion and package sizes†

• Price tableware in relation to size

Key uncertainties

Most of the existing evidence on the effects of reducing portion size comes from studies of very large portions. We therefore cannot be certain that reducing smaller portions would be as effective in reducing food consumption. In addition, we do not know by how much large portion sizes can be reduced before becoming unacceptably small. Reducing exposure to larger portion sizes could also have unintended compensatory effects, encouraging consumption of multiple smaller portions or additional foods. At present, there is no strong evidence for this. The few primary studies that have assessed this directly found no such effects—for example, consumption of a reduced size of breakfast did not affect the amount of food consumed over the rest of the day

There has been an effort to reduce portion size in England through voluntary agreements as part of the Public Health Responsibility Deal. For example, Mars, Nestlé, and Mondelez, the three largest chocolate manufacturers have committed to limiting the energy content of single serve confectionery to 250 kcal. However, broader change across companies and products is fragmented, and there has been no evaluation of the net reduction in energy intake as a consequence of portion size reductions. Some cinema chains in England have voluntarily removed their largest cup size of soft drinks so that the maximum is now 32 ounces, but this is still a large amount and the fact that not all cinemas have signed up illustrates the limits of a voluntary approach.

Who needs to act?

Although policy makers and the food industry have primary responsibility for action, public acceptability is likely to be an important facilitator. Public acceptance of government intervention to prevent obesity is mixed but stronger when it is focused on children. More specifically, little is known about the acceptability of reducing portion or package sizes. A newspaper survey of New York residents in 2012 reported 60% opposed the proposed 16 ounce cap on sugary drinks. This was during a media campaign, funded by soda manufacturers, highlighting the rights of citizens to purchase soda in sizes “without interference from bureaucrats.” By contrast, a more recent survey of UK and US participants found greater support for this intervention, with 59.9% and 53.5%, respectively, finding it acceptable.

Conclusion

The compelling evidence that larger portion sizes of food and non-alcoholic drinks increase consumption is currently unmatched by similarly strong evidence on how to reduce this effect. This requires independent and rigorous evaluation of interventions that aim to reduce the size, availability, and appeal of larger portions. Successful interventions, if implemented at sufficient scale, have the potential to help prevent obesity as part of a wider obesity strategy

4 Harvard School of Public Health 2016

4 Television Watching and “Sit Time”

https://www.hsph.harvard.edu/obesity-prevention-source/obesity-causes/television-and-sedentary-behavior-and-obesity/#Other-Sedentary-Behaviors/ Harvard School of Public Health (2016)

Research conducted at Harvard first linked TV watching to obesity more than 25 years ago. Since then, extensive research has confirmed the link between TV viewing and obesity in children and adults, in countries around the world. There is good evidence that cutting back on TV time can help with weight control-part of the reason why many organizations recommend that children and teens limit TV/media time to no more than two hours per day. This article briefly outlines the research on how TV viewing and other sedentary activities contribute to obesity risk, and why reducing screen time and sedentary time are important targets for obesity prevention.

Studies that follow children over long periods of time have consistently found that the more TV children watch, the more likely they are to gain excess weight. Children who have TV sets in their bedrooms are also more likely to gain excess weight than children who don’t. And there is evidence that early TV habits may have long-lasting effects: Two studies that followed children from birth found that TV viewing in childhood predicts obesity risk well into adulthood and mid-life. Several trials designed to reduce children’s TV use have found improvements in body mass index (BMI), body fat, and other obesity-related measures. Based on this evidence, the U.S. Task Force on Community Preventive Services recommends that communities roll out behavior-change programs aimed at curbing screen time, since there’s “sufficient evidence” that such programs do help reduce screen time and improve weight

TV reduction trials have focused largely on children, not adults. But a small pilot study in 36 men and women suggests that an electronic TV “lock-out” device could help adults with weight control. Half of the volunteers were assigned to use a lock-out device that would cut their TV viewing time by half; the other half were assigned to a control group with no limits on TV. The volunteers who used the lock-out device watched less television and burned more calories each day, and they had a greater reduction in BMI than the control group. The difference in BMI did not reach statistical significance, however. Given the study’s small size, more research is needed to confirm these results.

Researchers have hypothesized that TV watching could promote obesity in several ways: displacing time for physical activity; promoting poor diets; giving more opportunities for unhealthy snacking (during TV viewing); and even by interfering with sleep. Many studies show that TV viewing is associated with greater calorie intake or poorer diet quality, and there’s increasing evidence that food and beverage marketing on television may be responsible for the TV-obesity link. The effects of TV viewing on physical activity are much smaller than on diet, so they don’t seem to play as strong a role. Some research findings that support the food marketing-TV-obesity link:

• The thousands of food-related TV ads that children and youth see each year are primarily for high-calorie, low-nutrient foods and drinks, according to a comprehensive review of the evidence by the Institute of Medicine (IOM). Food marketing influences children’s food preferences and purchase requests, and marketers rely on this “pester power” to influence what parents buy.

• Branded foods, drinks, and restaurants are often featured in TV shows and movies (the ad industry term for this is “product placement”), and these product placements are overwhelmingly for unhealthy foods. An analysis of food brands that appeared in prime-time television programming in 2008 found that children and teens saw roughly one food brand per day, and three out of four of these brand appearances were for sugary soft drinks

• Laboratory studies find that TV food ads influence food consumption. In one experiment, for example, children who watched cartoons with food commercials ate 45 percent more snack food while viewing than children who watched cartoons with non-food advertising

• More evidence that exposure to food ads, rather than watching television itself, contributes to obesity comes from a study that tracked the TV viewing habits and change in BMI of 1,100 young children over a five-year period. The more hours per day of commercial TV children watched at the start of the study, the more likely they were to have a relative increase in BMI at the study’s end. There was no link between non-commercial TV watching and change in BMI

• In the wake of the IOM report, Coca Cola, McDonald’s, and 15 other major food and drink companies pledged to self-regulate food advertising during U.S. television shows aimed at children under the age of 12, through the voluntary Children’s Food and Beverage Advertising Initiative (CFBAI) that launched in 2006. But loopholes exist. The guidelines do not cover, for example, general audience prime-time shows, such as American Idol, which are often viewed by young children, and don’t cover teens; while TV food and drink advertising to children ages 2-11 decreased from 2004 to 2008, advertising to adolescents (12-17) and adults (18-49) rose substantially

• Other sedentary behaviors-computer/Internet use, video game playing, sitting at work, driving, and the like-have have not been studied as extensively as TV watching. But there is evidence that these other forms of “sit time” can contribute to obesity.

Some studies in children and teens suggest that computer, video game, and Internet use are associated with excess weight, although not all studies have found an effect. More and more television content is moving from TV screens to computer and smartphone screens, however, so it’s possible that clearer effects will emerge as “Generation M,” spends more and more time immersed in these new media forms. Furthermore, food and beverage companies are becoming more sophisticated and targeted in their use of digital marketing and social media across these platforms, and public health advocates have called for stronger government regulation and industry self-regulation

A newer breed of video games, so-called “active video games,” requires players to move around to control the screen. A recent small trial suggests that trading sedentary video games for active video games may help curb BMI and body fat in overweight kids, but this finding awaits confirmation by other studies

Overall, there is little doubt that time spent watching TV is an important risk factor for obesity-and a modifiable risk factor. There’s evidence that excessive marketing of unhealthy foods and beverages on television contributes to the TV-obesity link. It remains to be seen whether there’s enough political will to implement stronger regulations or a ban on junk food TV advertising to children, though such regulations, if implemented, would likely be effective-and cost effective

5 Evans 2016 f

5.Why parents and pupils are finding healthy packed lunches hard to stomach [Extracts]

September 14, 2016 The Conversation https://theconversation.com/why-parents-and-pupils-are-finding-healthy-packed-lunches-hard-to-stomach-65419

Author Charlotte E.L. Evans, Lecturer in Public Health Nutrition, University of Leeds

Despite campaigns by household-name chefs, a survey of primary school children’s packed lunches in 2016 has revealed that they are still of poor quality and rarely meet all the food-based standards set for school meals. Vegetables and salad in particular are largely absent from packed lunches while snack foods such as crisps and confectionery are common. Lunchboxes contain higher amounts of saturated fat, added sugars and salt and lower amounts of vitamins and minerals than recommended

School meals, on the other hand, have been transformed in the past decade. In 2006, standards were introduced which stipulated that school meals should provide a portion of each of the following five foods – protein-rich food such as unprocessed meat or fish, low-fat carbohydrate food such as bread or potato (not fried), dairy food such as yogurt or cheese, fruit and vegetables. The standards also restricted three food types including sweetened drinks, savoury snacks and confectionery. The School Food Plan, which came in subsequently in 2014, upheld these food-based standards.

It is therefore likely that the gap between the quality of school meals and packed lunches has widened. In 2006, we found that only 1.1% of the packed lunches met all the standards, including the five healthy foods and the three restricted food types. In 2016, our survey showed this had increased slightly to 1.6%. Despite numerous awareness campaigns on childhood obesity and excessive sugar consumption, children are still being provided with packed lunches with high levels of snack foods and too little fruit and particularly vegetables. Less than a fifth (17%) of lunchboxes contain any vegetables or salad and the majority contain too many sweet and savoury snacks (52% and 60% respectively) and sweetened drinks (46%).

While overall these results are depressingly similar to ten years ago, there have been, reassuringly, some moderate but important improvements, indicating that better quality lunches are possible. The percentage of children provided with a sweetened drink has decreased from 61% in 2006 to 46% in 2016. This indicates that good consistent advice and help from schools and the food industry, enable parents to make better choices for their child’s packed lunch; but we are still a long way from where we want to be.

Providing healthy foods requires commitment and perseverance and is more time consuming as it involves buying a range of fresh foods, chopping up fruits and vegetables and getting children to try new foods that they may not prefer initially. There will be resistance to changes by the child if their friends are eating more snack foods and less salad. Although there are various sources of ideas for parents keen to prepare the perfect lunch for their child, clearly it is not enough to bring about real change.

Action is also needed from schools and the food industry. Some schools currently have no policies, while others have ones that are too draconian for parents to stomach. I suggest that the first step should be for primary schools to ban all sweetened drinks and just serve water at lunchtime. This will considerably reduce sugar intake at lunch – and many schools have already taken this step. A second step would be to reduce – but not ban – foods high in saturated fats and limit each child to one snack food a day. The best packed lunches recorded in this study included all the foods recommended in the School Food Plan and none of the restricted foods. For example, a chicken and salad sandwich, grapes, a yoghurt and water. Although the ultimate goal is to exclude all savoury and sweet snacks, we are so far from this goal that to completely ban snack foods is too much for many parents and children to support.

In order to improve the quality of food brought into schools it is clear we need to involve parents, schools and the food industry. We also hope that the All Party Parliamentary Group for School Food will provide clear guidance for schools and parents. Maintaining a commitment from all these key stakeholders will result in the culture change needed for successful improvements in dietary behaviour. I believe this is possible and hope we see real progress in the next 10 years – and truly benefit children’s future health.

\*packed lunch = a lunch prepared by parents for their children to take to school.

6 Snowdon 2016

6. Sugar taxes: A Briefing [extracts]

By Christopher Snowdon, Director of Lifestyle Economics at the Institute of Economic Affairs, 11 January 2016

https://iea.org.uk/wp-content/uploads/2016/07/IEA%20Sugar%20Taxes%20Briefing%20Jan%202016.pdf

How a sugar tax is supposed to work

There is growing interest in the idea of taxing sugar as a way to reduce rates of obesity. Figure 1 shows how such a tax is supposed to work. The tax raises the price of the targeted product which leads to a decline in sales. This decline in sales leads to people consuming fewer calories, thereby reducing the prevalence of obesity. Since obesity is related to several adverse health conditions, this leads to fewer people becoming ill. The economic (as opposed to political or social) justification for this is that illnesses from obesity impose externalities or “spillover” costs on the rest of society

Each link in the chain of events seems to follow logically to the next, leading campaigners to portray taxation as a simple way of reducing obesity-related diseases and hence costs on society. Upon closer inspection, however, it becomes clear that the chain will break down if any of the underlying assumptions are incorrect. The model only works if consumers behave as the campaigners want them to, but this is far from certain. People respond to incentives, but not always as the government would like

How taxes on food and soft drinks work in practice

Several countries have implemented taxes on sugary drinks, saturated fat, confectionery, chocolate and/or ice cream. As many as 33 US states have ‘soda’ taxes in place and France introduced a modest tax on all fizzy drinks (including low calorie versions) in 2012. Hungary and Finland both tax a range of high calorie food products as well as sugary soft drinks. Mexico introduced a sugary drinks tax of around 10 per cent in January 2014. Denmark introduced a wide-ranging tax on saturated fat in October 2011 before repealing it in January 2013. The Danes also had a tax on soft drinks in place for 80 years before repealing it in 2014. The evidence from these real-world experiments shows that unintended consequences are common whereas the intended chain of events is rare

Impact on price

Although industry is sometimes able to absorb some or all of the tax without raising prices, experience has shown that businesses are more likely to increase profits by raising prices beyond what is needed to accommodate the tax. When Berkeley, California introduced a soda tax in 2015, Cawley and Frisvold (2015) found ‘retail prices rose by less than half of the amount of the tax’. However, this was ‘in contrast to much of the previous literature on the pass-through of taxes, which tended to find full or even overshifting of taxes.’ The Berkeley effect may be due to price competition from neighbouring areas which do not have a soda tax. In Denmark, Finland and France, taxes on sweet foods, fat and sugary drinks have typically been associated with price rises that were higher than expected given the rate of tax (ECSIP 2014: 25). Likewise, preliminary evidence from Mexico suggests that ‘[p]rices of regular sodas jumped by more than the amount of the tax’ (Grogger 2015). This may seem counter-intuitive. Why would suppliers not increase prices in any case, even without the tax if they wished to do so? The answer to this might be that, in the short run at least, prices can be ‘sticky’. If it is required that firms increase prices, they may take the opportunity to factor in price increases that they would have liked to implement in any case. However, it would be reasonable to suppose that, overall, in the long term, the tax will be passed on in total to the consumer more or less in its entirety

Impact on consumption

Basic economic theory predicts that higher prices will generally lead to less demand. However, there are a number of factors at work. If a product makes up a high proportion of people’s budgets, in effect their real incomes have been reduced too and they will take other decisions to change their shopping habits as a result. Those changes may offset the direct effect of higher prices

The extent to which consumption falls in response to higher prices depends on, amongst other things, how important the product is to the consumer. Food and drink are the cornerstones of the household budget and most people are reluctant to change their consumption habits unless prices change dramatically. Economic evidence shows that the demand for soft drinks is inelastic, which is to say that a one per cent increase in price leads to a less than one per cent decline in consumption

It is unusual for a ‘sin tax’ on food and soft drinks to have no effect on consumption, but the effect is usually quite trivial. For example, a 13.1 per cent increase in the price of butter resulting from the Danish fat tax was associated with a modest 5.5 per cent decline in sales. Similarly, a 14.8 per cent increase in the price of confectionary in Finland coincided with a mere 2.6 per cent drop in consumption. When the price of soft drinks rose by 7.3 per cent for two years running in Finland, consumption fell by less than one per cent in the first year and by 3.1 per cent in the second year (ECSIP 2014: 34). A ten per cent tax on sugary drinks in Mexico - the poorest country to have experimented with such a policy - was associated with a six per cent decline in sales (Colchero et al. 2016)

Taxing cigarettes is often cited as a precedent for taxing food and drink. However, this comparison is flawed. The most obvious reason is because the scale of tobacco taxation is vastly higher (around 700 per cent for cigarettes compared with 10-20 per cent proposed for sugary drinks). There is no serious proposal to increase the cost of sugary drinks to the extent that the cost of cigarettes has been increased. In addition, unlike smoking, food is a biological necessity. If one source of calories becomes more expensive, consumers will switch to another food or drink product or to a cheaper variety of the same product. There is no guarantee that the substitute products will have fewer calories or be better for health. Since humans are hard-wired to seek out energy-dense food, the most likely effect of taxing calorific products is, as Ryan Edwards notes in Preventive Medicine, that ‘consumers will probably increase their demand for cheaper calories, leaving obesity unchanged’ (Edwards 2012: 284)

High calorie substitutes for sugar-sweetened beverages include fruit juice, full fat milk, wine and beer. Evidence shows that people do indeed switch to these drinks to some extent when sugar-sweetened beverages are taxed (Dharmasena and Capps 2011). Studying the effect of soda taxes on children and adolescents in the USA, Fletcher et al. (2010) found a ‘modest reduction in soft drink consumption’ but no effect on obesity because ‘any reduction in soft drink consumption has been offset by the consumption of other calories’. Danish consumers responded to the tax on saturated fat by switching to cheaper brands of the same fatty products and shopping in discount stores (Jensen and Smed 2013). Some even began to shop in Germany and Sweden to take advantage of lower prices. In Hungary, where a tax covers a wide range of energy-dense foods and drinks, there is clear evidence of shoppers downshifting to cheaper brands. Likewise, cheaper confectionery, ice cream and soft drinks have won out over premium brands in Finland (ECSIP 2014: 45)

Impact on health

Sugary drinks provide only a small fraction of the population’s energy intake (three per cent in Britain) and they are disproportionately consumed by people aged 11-18 years who are least likely to be obese. Since soft drink taxes have only a modest effect on the consumption of this relatively minor source of calories, it should not be surprising that there is virtually no evidence that sugary drink taxes have reduced obesity or improved health anywhere in the world. Studying soda taxes in the USA, Fitts and Vader (2013) concluded that their research ‘does not support the theory that soda taxes have a negative effect on body-mass index’ (Fitts and Vader 2013). In line with Fletcher et al. (2010) and others, Powell et al. (2009) found ‘no statistically significant associations between state-level soda taxes and adolescent [body mass index]’

Early evidence from Mexico suggests that a ten per cent tax on sugary drinks led to an average daily decline in consumption of 36ml per person (Colchero et al. 2016). As Tom Sanders, a professor of nutrition and dietetics, notes, this is the equivalent of 16 calories and is ‘a drop in the caloric ocean. Long-term reductions in total energy in the range of 300-500 kcal/d are probably needed to prevent obesity’ (Science Media Centre 2016). Since disposable incomes are considerably higher in Western nations than they are in Mexico it is unlikely that a soft drink tax in the UK would make sales fall to the same extent

Other considerations

Any sugar tax is likely to be highly regressive as the poor spend a much higher proportion of their income on the relevant products than the rich. To justify the tax, there would have to be strong evidence that the poor were more price sensitive. This is unlikely to be so given that they are choosing to spend a large proportion of their income on the product and that the poor will seek out cheaper substitutes to existing sources of sugar. Obese people are also more likely to have price inelastic behaviour or to seek out subsidies. The heaviest consumers (in both senses of the word) tend to be least responsive to prices changes, as are the heaviest consumers of alcohol and tobacco

7 Harvard School of Public Health, 2014

7. Exercise Can Help Control Weight Harvard School of Public Health, 2014

https://www.hsph.harvard.edu/obesity-prevention-source/obesity-causes/physical-activity-and-obesity/

Obesity results from energy imbalance: too many calories in, too few calories burned. A number of factors influence how many calories people burn each day, among them, age, body size, and genes. But the most variable factor-and the most easily modified-is the amount of activity people get each day. Keeping active can help people stay at a healthy weight or lose weight. It can also lower the risk of heart disease, diabetes, stroke, high blood pressure, osteoporosis, and certain cancers, as well as reduce stress and boost mood. Inactive (sedentary) lifestyles do just the opposite.

Despite all the health benefits of physical activity, people worldwide are doing less of it-at work, at home, and as they travel from place to place. Globally, about one in three people gets little, if any, physical activity. Physical activity levels are declining not only in wealthy countries, such as the U.S., but also in low- and middle-income countries, such as China. It’s clear that this decline in physical activity is a key contributor to the global obesity epidemic, and in turn, to rising rates of chronic disease everywhere.

The World Health Organization, the U.S. Dept. of Health and Human Services, and other authorities recommend that for good health, adults should get the equivalent of two and a half hours of moderate-to-vigorous physical activity each week. Children should get even more, at least one hour a day. There’s been some debate among researchers, however, about just how much activity people need each day to maintain a healthy weight or to help with weight loss, and the most recent studies suggest that a total of two and a half hours a week is simply not enough

Worldwide, people are less active today than they were decades ago. While studies find that sports and leisure activity levels have remained stable or increased slightly, these leisure activities represent only a small part of daily physical activity. Physical activity associated with work, home, and transportation has declined due to economic growth, technological advancements, and social changes. Some examples from different countries:

• United States. In 1950, 30 percent of Americans worked in high-activity occupations; by 2000, that proportion had dropped to only 22 percent. Conversely, the percentage of people working in low-activity occupations rose from about 23 percent to 41 percent. Driving cars increased from 67 percent of all trips to work in 1960 to 88 percent in 2000, while walking and taking public transit to work decreased. About 40 percent of U.S. schoolchildren walked or rode their bikes to school in 1969; by 2001, only 13 percent did

• United Kingdom. Over the past few decades, it’s become more common for U.K. households to own second cars and labor-saving appliances. Work outside the home has also become less active. In 2004, about 39 percent of men worked in active jobs, down from 43 percent in 1991-1992

• China. Between 1991 and 2006, work-related physical activity in China dropped by about 35 percent in men and 46 percent in women; women also cut back on physical activity around the house-washing clothes, cooking, cleaning-by 66 percent. Transportation-related physical activity has also dropped-no surprise, perhaps, given that car ownership is on the rise: Sales of new cars in China have gone up by about 30 percent per year in recent years

The flip side of this decrease in physical activity is an increase in sedentary activities-watching television, playing video games, and using the computer. Add it up, and it’s clear that globally, the “energy out” side of the energy balance equation is tilting toward weight gain.

How Much Activity Do People Need to Prevent Weight Gain?

Weight gain during adulthood can increase the risk of heart disease, diabetes, and other chronic conditions. Since it’s so hard for people to lose weight and keep it off, it’s better to prevent weight gain in the first place. Encouragingly, there’s strong evidence that staying active can help people slow down or stave off “middle-age spread”: The more active people are, the more likely they are to keep their weight steady; the more sedentary, the more likely they are to gain weight over time. But it’s still a matter of debate exactly how much activity people need to avoid gaining weight. The latest evidence suggests that the recommended two and a half hours a week may not be enough.

Vigorous activities seem to be more effective for weight control than slow walking. The Nurses’ Health Study II, for example, followed more than 18,000 women for 16 years to study the relationship between changes in physical activity and weight. Although women gained, on average, about 20 pounds over the course of the study, those who increased their physical activity by 30 minutes per day gained less weight than women whose activity levels stayed steady. And the type of activity made a difference: Bicycling and brisk walking helped women avoid weight gain, but slow walking did not.

How Much Activity Do People Need to Lose Weight?

Exercise can help promote weight loss, but it seems to work best when combined with a lower calorie eating plan. If people don’t curb their calories, however, they likely need to exercise for long periods of time-or at a high intensity-to lose weight. In one study, for example, researchers randomly assigned 175 overweight, inactive adults to either a control group that did not receive any exercise instruction or to one of three exercise regimens-low intensity (equivalent to walking 12 miles/week), medium intensity (equivalent to jogging 12 miles/week), or high intensity (equivalent to jogging 20 miles per week). All study volunteers were asked to stick to their usual diets. After six months, those assigned to the high-intensity regimen lost abdominal fat, whereas those assigned to the low- and medium-intensity exercise regimens had no change in abdominal fat. More recently, researchers conducted a similar trial with 320 post-menopausal women, randomly assigning them to either 45 minutes of moderate-to-vigorous aerobic activity, five days a week, or to a control group. Most of the women were overweight or obese at the start of the study. After one year, the exercisers had significant decreases in body weight, body fat, and abdominal fat, compared to the non-exercisers

The Bottom Line: For Weight Control, Aim for an Hour of Activity a Day

Being moderately active for at least 30 minutes a day on most days of the week can help lower the risk of chronic disease. But to stay at a healthy weight, or to lose weight, most people will need more physical activity-at least an hour a day-to counteract the effects of increasingly sedentary lifestyles, as well as the strong societal influences that encourage overeating.

Keep in mind that staying active is not purely an individual choice: The so-called “built environment”-buildings, neighborhoods, transportation systems, and other human-made elements of the landscape-influences how active people are. People are more prone to be active, for example, if they live near parks or playgrounds, in neighborhoods with sidewalks or bike paths, or close enough to work, school, or shopping to safely travel by bike or on foot. People are less likely to be active if they live in sprawling suburbs designed for driving or in neighborhoods without recreation opportunities.

Local and state governments wield several policy tools for shaping people’s physical surroundings, such as planning, zoning, and other regulations, as well as setting budget priorities for transportation and infrastructure. Strategies to create safe, active environments include curbing traffic to make walking and cycling safer, building schools and shops within walking distance of neighborhoods, and improving public transportation, to name a few. Such changes are essential to make physical activity an integral and natural part of people’s everyday lives-and ultimately, to turn around the obesity epidemic.

8 Boseley 2017 f

8.Amsterdam's solution to the obesity crisis: no fruit juice and enough sleep [Extracts]

SarahBoseley in Amsterdam14thApril2017 https://www.theguardian.com/society/2017/apr/14/amsterdam-solution-obesity-crisis-no-fruit-juice-enough-sleep

The city of Amsterdam is leading the world in ending the obesity epidemic, thanks to a radical and wide-reaching programme which is getting results even among the poorest communities that are hardest to reach. Better known for tulips and bicycles, Amsterdam has the highest rate of obesity in the Netherlands, with a fifth of its children overweight and at risk of future health problems.

The programme appears to be succeeding by hitting multiple targets at the same time – from promoting tap water to after-school activities to the city refusing sponsorship to events that take money from Coca Cola or McDonalds. It is led by a dynamic deputy mayor with the unanimous backing of the city’s politicians. From 2012 to 2015, the number of overweight and obese children has dropped by 12%. Even more impressive, Amsterdam has done what nobody else has managed, because the biggest fall has been amongst the lowest socio-economic groups.

It is in neighbourhoods like the Bijlmer in the south-east that the programme is changing lives. The Bijlmer is notorious, says Wilbert Sawat, coordinator and PE teacher at De Achtsprong primary school, and that’s why he wanted to work there. The school, which in 2007 was in the top three in Amsterdam for overweight children, is now one of 100 that are a key focus of the obesity programme. Children are weighed and measured every year. Some parents objected but now it is normal, says Sawat. And so is tap water.

“All children have to bring water or milk to school,” he said. “No juice. A lot of parents were really upset. We had really hard discussions with them.” The parents thought juice or even squash was healthier, assuming they contained fruit. The teachers told them about the sugar. “I told them we were doing them a favour. They could have water at school and then juice at home. Now it’s normal – not a problem.” The ban on birthday feasts for the class also caused ructions. “It had become competition. Somebody brought cupcakes, so another brought cupcakes and juice and then cupcakes and juice and a toy.” The school produced a folder of healthy treats, such as oranges or carrots decorated to look like faces.

Another important part of the programme is sleep. “It is very important to get enough sleep. Nobody knows that,” says van der Burg. Programme manager Karen den Hertog says that if you don’t sleep, your hormones are messed up. “You will be extra hungry. It is your hormones talking to you,” she said. They work to organise discussions with parents on children’s sleep patterns through community leaders.

Professor Corinna Hawkes, director of the centre for food policy at City University, who has studied the Amsterdam model, is impressed. “They weren’t just saying let’s have a soda tax – they were thinking about how people connect with their environment,” she said. “They went to parents and understood their attitudes and engaged in educational programmes to change them,” Hawkes said. “We have to understand why people are making their decisions and adapt accordingly,” she said.

9 Luo 2015 f

9.China's obesity epidemic: Teaching children to 'eat a rainbow'

Lucy Luo, Programmes director, joint US-China Collaboration on Clean Energy (JUCCCE) 24th November 2015 https://www.theguardian.com/global-development-professionals-network/2015/nov/24/defusing-chinas-childhood-obesity-timebomb

There’s a direct link between urbanisation and increased food consumption and obesity issues in China, and it has become a growing epidemic. Dr Xu Zhangrong, deputy secretary of the China Diabetes Society has said that “the sudden rise of diabetes in China isn’t only a health threat but an economic one. It could bankrupt the country’s healthcare system. China needs to shift its focus from treating diabetes to preventing it”. Within one generation, the percentage of Chinese children who are overweight or obese has skyrocketed from 5% to 20%. But why? The main cause is our increasingly sedentary lifestyle, combined with the introduction of highly processed fast food and adoption of western aspirations

The one-child policy meant a whole generation of children growing up as the only child doted on by their two parents and four grandparents, which means they can have a large say in dictating what the household purchases. The problem is compounded by the fact that this generation of parents grew up not having a lot. I remember my mother telling me stories of her youth - that they were so poor that they only ate a portion of pork once every few months. Now, it is not uncommon for Chinese households to have two or three investment properties. Within a generation you have people who have accumulated a lot of wealth which of course they want to give to their kids. They want to give them everything they never had, so if their kids want McDonalds, if they can afford it, why shouldn’t they? It’s a sign of affection. And Chinese people love showing their affection with food. But it’s the introduction of western aspirations and fast food which has allowed the habits to take such a sharp turn. KFC is the number one food chain here and there are also a lot of Chinese chains that are unhealthy as well

A New Way to Eat is a behavioural change programme. The concept behind it is to take complex subjects like sustainability, biodiversity and micronutrients and translate them into a language that kids can understand and relate to. For instance, one of the catchy themes we have developed is “eat a rainbow everyday” because if you eat a variety of colours every day, you are getting all the micronutrients you need. In order to make it memorable for kids we’ve created theme songs (Chinese and English), activity sheets, discussion questions and visually stimulating flash cards. We even dress up in “food heroes” costumes. We paint, we draw, we make them run around and get active, and get them engaged with healthy eating. We specifically target young urban kids, because they are the emerging middle class. It is much easier to instill healthy habits when you’re young rather than trying to change entrenched unhealthy habits when you’re a young adult.

The programme is based on “playducation” which is a different and innovative approach to the current education system here where, basically, you have the teacher at the front, talking for the entire length of the class. Therefore, our classes have been exceptionally well received – kids love them. We’ve had parents tell us they catch the kids singing the jingles even a week after class, which shows us our approach works. We’re currently piloting our programme with a few schools and hope to roll out the programme nationwide and make our content open source to all schools within China in the next three to four years. Also, we are working with school cafeterias and local chefs to reframe their recipes, so that whatever the kids learn in class they see on a plate at lunch. We promote a lot of leafy greens for calcium, beans and legumes and tofu for protein – China has hundreds of varieties of tofu.

We have faced some challenges with parents’ entrenched misconceptions about how much milk or meat their kids should be consuming. We can’t tell them they are wrong, so we have to try and work around this and hopefully they will come to their own realisation in time. A lot of parents also say, we’re not vegetarians, we can’t not eat meat. The conversations become fairly polarised – you either eat meat or you don’t. So we talk more about being smarter consumers, finding a medium ground. We’re not saying don’t eat meat, just be smarter about how you’re consuming meat. Instead of eating a steak, you can eat three meals of stir-fry dishes that use the same amount of meat. Funnily enough these are more traditional Chinese dishes, and they just so happen to be better for you and the planet too.

Editorial: British Journal of Sports Medicine http://bjsm.bmj.com/content/49/15/967.full

10 Malhotra et al 2015

10.It is time to bust the myth of physical inactivity and obesity: you cannot outrun a bad diet [extracts]

By A Malhotra1, 2. T Noakes2, 3. S Phinney3 22nd April 2015

A recent report from the UK's Academy of Medical Royal Colleges described ‘the miracle cure’ of performing 30 min of moderate exercise, five times a week, as more powerful than many drugs administered for chronic disease prevention and management. Regular physical activity reduces the risk of developing cardiovascular disease, type 2 diabetes, dementia and some cancers by at least 30%. However, physical activity does not promote weight loss.

In the past 30 years, as obesity has rocketed, there has been little change in physical activity levels in the Western population. This places the blame for our expanding waist lines directly on the type and amount of calories consumed. However, members of the public are drowned by an unhelpful message about maintaining a ‘healthy weight’ through calorie burning, and many still wrongly believe that obesity is entirely due to lack of exercise. This false perception is rooted in the Food Industry's Public Relations machinery, which uses tactics chillingly similar to those of big tobacco. The tobacco industry successfully stalled government intervention for 50 years starting from when the first links between smoking and lung cancer were published. This sabotage was achieved using a ‘corporate playbook’ of denial, doubt and confusing the public. Coca Cola, who spent $3.3 billion on advertising in 2013, pushes a message that ‘all calories count’; they associate their products with sport, suggesting it is ok to consume their drinks as long as you exercise. However, science tells us this is misleading and wrong. It is where the calories come from that is crucial. Sugar calories promote fat storage and hunger. Fat calories induce fullness or ‘satiation’.

A large econometric analysis of worldwide sugar availability, revealed that for every excess 150 calories of sugar, there was an 11-fold increase in the prevalence of type 2 diabetes, in comparison to an identical 150 calories obtained from fat or protein. And this was independent of the person's weight and physical activity level; this study fulfils the Bradford Hill Criteria for causation. A recently published critical review in nutrition concluded that dietary carbohydrate restriction is the single most effective intervention for reducing all the features of the metabolic syndrome and should be the first approach in diabetes management, with benefits occurring even without weight loss. The public health messaging around diet and exercise, and their relationship to the epidemics of type 2 diabetes and obesity, has been corrupted by vested interests. Celebrity endorsements of sugary drinks, and the association of junk food and sport, must end

The ‘health halo’ legitimisation of nutritionally deficient products is misleading and unscientific. This manipulative marketing sabotages effective government interventions such as the introduction of sugary drink taxes or the banning of junk food advertising. Such marketing increases commercial profit at the cost of population health. The Centres of Disease Control health impact pyramid is clear. Changing the food environment—so that individuals’ choices about what to eat default to healthy options—will have a far greater impact on population health than counselling or education. Healthy choice must become the easy choice. Health clubs and gyms therefore also need to set an example by removing the sale of sugary drinks and junk food from their premises.

11 Gagnon & Freudenberg 2012

11.Slowing down fast food: A policy guide for healthier families

BY MONICA GAGNON AND NICHOLAS FREUDENBERG, DrPHD CITY UNIVERSITY OF NEW YORK SCHOOL OF PUBLIC HEALTH AND CORPORATE ACCOUNTABILITY 2012 [extracts]

With 2010 revenues of more than $180 billion, the fast food industry is a powerful force in our economy. Corporations such as McDonald’s, Yum!, Burger King and Wendy’s engage in business practices that undermine the health and well-being of communities. By now, most of us have heard the gloomy health statistics. Millions of people across the United States suffer needlessly from diet-related conditions, putting an increasing burden on our already broken health care system. Children are especially targeted by the likes of McDonald’s, through toys, playgrounds and other tactics that exploit their unique vulnerabilities. But this report isn’t just about the gloom and doom. The good news is we have numerous policy tools at our disposal that can help reduce the negative impact of fast food in our communities. While things may seem hopeless in Congress these days, local action provides many feasible and effective solutions

This report focuses on four local policy approaches and includes case studies and challenges for each. While this is not an exhaustive list, these ideas have some track record of success and show the most promise at the local level. The four approaches are: school policy, “healthy” zoning, curbing child-focused marketing, and redirecting subsidies to healthier businesses. For years now, schools have become a focal point for change. Schools should be a place where children are free from corporate marketing. And yet across America, schools are succumbing to economic pressures and opening their cafeteria doors to corporations such as Pizza Hut and Taco Bell. But many parents, teachers and even school administrators are taking a stand by setting strong policies to keep fast food corporations out of the learning environment.

Of course, once kids leave school, they are also bombarded with fast food marketing in their communities. Research suggests that low-income neighborhoods have disproportionately higher concentrations of fast food outlets. But it doesn’t have to be that way. Local cities and counties are standing up for the health of their residents through various policy approaches. For example, zoning laws can restrict the number of fast food outlets, as well as encourage economic development that is beneficial—not detrimental—to public health. Because children lack the judgment of adults and are potential new life-long customers, fast food marketers have targeted them. Toys are by far the most popular form of marketing to children by fast food corporations. According to the U.S. Federal Trade Commission, in 2006 the food industry spent $360 million purchasing toys, which came with 36 percent of all fast food meals served to kids that same year. Some cities and counties are responding by placing specific limits on this exploitative practice. The strategy presents an opportunity to organize community members to oppose fast food outlets more generally.

In order to take effective action, advocates for health need to understand how the fast food industry operates. While the vast majority of people benefit from policies that reduce obesity and diet-related diseases like diabetes, the fast food industry profits from promoting products that contribute to these problems. In 2011, McDonald’s reported revenues of $27 billion and an operating profit of more than $8.5 billion.8 Meanwhile, PepsiCo, maker of soft drinks and salty snacks, saw revenues of $66 billion and profits of more than $9 billion.9 Although both corporations proudly introduced new products they claimed were healthier, the vast proportion of sales, advertising and profits came from their core business: selling high-fat, high-salt and high-sugar products around the world.

Many factors contribute to rising rates of diet-related health problems, but the growth of the fast food industry has played a seminal role in the dietary changes that have led to these problems. McDonald’s, the world’s largest fast food corporation, now operates more than 33,000 outlets serving more than 64 million people every day in more than 117 countries. Reducing consumption of the unhealthy food served by fast food outlets is one important piece of a comprehensive plan to improve the health of people in the United States and help reverse the trends of obesity and diet-related diseases. However, reducing the ubiquity of fast food and its promotion is not so simple. With revenues in 2010 of more than $180 billion (expected to grow to $208 billion by 2015), the fast food industry is a powerful force in our economy and politics. Here are some of the ways fast food corporations advance their business.

Designing irresistible products: Fast food corporations aim to create “irresistible” products that our biology drives us to consume. The industry hooks us on blends of fat, sugar and salt from an early age, disrupting tastes and eating habits for our lifetime.

Advertising and Promotion: In 2009, fast food corporations spent $4.2 billion on advertising their products.18 One study found that in 2008, children in the United States aged 2-11 saw on average 1,106 commercials for fast food outlets on television and adolescents saw on average 1,684 such ads. Adults saw on average 1,905 ads

Retail siting: Another way fast food corporations make sure people visit, buy and eat their food is to locate stores within easy reach of many people. The United States now has more fast food outlets than public libraries or hospitals. As a result, about one in four Americans and nearly one in every three children eat fast food every day. And the closer fast food is to where children study, the more likely they are to gain the weight associated with chronic diseases. One study found that for ninth grade children, a fast food outlet within a tenth of a mile of a school increases the risk of obesity by more than 5 percent. In some cities, fast food outlets are everywhere. For example, a comprehensive block-by-block study found that in majority-African-American neighborhoods in Chicago, the nearest grocery store was roughly twice as far as the nearest fast food outlet.

Pricing: Like many businesses, fast food corporations cut costs to attract customers. The amount food outlets charge has a big influence on who buys what. Don Thompson, CFO of McDonald’s, recently explained that McDonald’s doesn’t base its prices on what the competition is charging, rather, the corporation considers “eating at home” to be the competition and thus prices its own food just below that cost

Campaign contributions and lobbying: Like other corporations, fast food corporations contribute to the campaigns of elected officials in order to advance their own interests. McDonald’s contributes to both Republicans and Democrats, ensuring political influence no matter what party is in power. While campaign donations reflect money spent to help politicians get elected, industry also spends a lot of money lobbying for or against specific policies. Between 1997 and 2012, McDonald’s spent more than $6.5 million, Burger King reported more than $2.5 million and Yum! Brands almost $11 million

Challenges: Of course, the fast food industry will vigorously oppose any effort to restrict its ability to open outlets. The food industry’s trump card is that restricting the number of fast food outlets could lead to job loss or other economic impacts. Common sense dictates that healthier businesses can easily take the place of fast food outlets and communities implementing these policies typically support new local businesses

Fast food corporations are always ready to strike back. Corporations are already seeking to preempt legislation restricting giveaways. Preemption allows states or the national government to bypass or preempt lower levels of government from taking action on an issue. Each year, fast food corporations spend more than a half billion dollars advertising fast food meals to children. Marketing, especially to children, has proven to be a hugely successful tactic for the industry, which will continue to lobby for the right to bypass parents to reach children directly.

12 Jolly 2011 f

12. Marketing obesity? Junk food, advertising and children [extracts]

http://www.aph.gov.au/About\_Parliament/Parliamentary\_Departments/Parliamentary\_Library/pubs/rp/rp1011/11rp09

Dr Rhonda Jolly Government of Australia Social Policy Section 12 January 2011

Introduction This paper considers some of the available evidence relating to the influence of the various forms of advertising in general, their influence on children and on consumption habits. It considers also arguments which maintain that junk food can be part of a balanced diet and that the food, non-alcoholic drink and advertising industries can be entrusted to market these types of products responsibly without the intervention of government, or with minimal government intervention.

Marketing to children: It was unusual for children to be targeted by advertisers until television became commonplace in homes during the twentieth century. In recent times, as more people have added subscription television to their entertainment fare, more opportunities have been created to market products to children on channels, such as Nickelodeon and the Cartoon Network, which deliver children-specific programming. The Internet has provided even more opportunity through websites which feature content aimed at children. Marketing on the Internet employs a variety of techniques to appeal including advertorials, competitions, video links, product discounts and ‘advergames’. Advergames are advertiser-sponsored video games which embed brand messages in colourful, fun, fast-paced adventures which are created by companies for the explicit purpose of promoting their brand.

Indeed, advertising has effectively broadened to include a comprehensive range of activities—television advertising, marketing on the Internet, product placement in television programs, films , and DVDs, computer and videogames, peer-to-peer or viral marketing, supermarket sales promotions, cross promotions between films and television programs, use of licensed characters and spokes-characters, celebrity endorsements, marketing in children’s magazines, outdoor advertising, print marketing, sponsorship of school and sporting activities, marketing on mobile phones and branding on toys and clothing.

Junk food advertising: findings: A British Heart Foundation and Children’s Food Campaign concluded that food marketing to children is almost always for unhealthy products and this plays an important role in encouraging unhealthy eating habits which are likely to continue into adulthood. Further, evidence suggests that advertisements affect food choices at both brand and category level. That is, a McDonald's hamburger advertisement is likely not only to make it more probable that a person will buy a McDonald’s hamburger in preference to another brand, but also that the person will buy a hamburger per se

The British Heart Foundation has pointed out that it is not simply advertising on television that affects children’s choices of unhealthy foods; many things contribute—packaging of products, celebrity endorsements and the colour and shape of foods. A study by the Rudd Center [sic] for Food Policy and Obesity at Yale University released in 2010 illustrated this point by presenting children between the ages of four and six years old with identical food items in packages either with or without a popular cartoon character. Results indicated that children were significantly more likely to prefer the taste of low-nutrient, high-energy foods when a cartoon character appeared on the package

No need to ban: arguments in favour of retaining junk food advertising: There are a number of arguments advanced against banning the advertising of certain products, such as alcohol and junk food. Broadly, some commentators see any attempts to prohibit advertising of these products ‘as the new coolest thing for paternalistic policymakers and their nanny state’. In other words, according to this view, people of all ages are able to form opinions about the merits of products advertised and make decisions, which they calculate are in their best interests, in relation to what they consume. Advertising in fact informs us that new products are available in the marketplace. With reference to children, this type of argument can be manipulated to portray children as responsible consumers

One aspect of the responsible marketing and consumption argument is that, unlike tobacco, junk foods can be enjoyed in moderation without causing undue harm to children or adults. The Cadbury Company maintains, for example, that its products can be enjoyed as treats and as part of a balanced diet. Another argument against the banning of junk food advertising to children claims that assertions about causal influences of food advertising on children’s diets and weight are flawed because they do not take into consideration other risk factors. A 2005 United States Federal Trade Commission (FTC) report which concluded that children see fewer television advertisements promoting food products than they did 28 years ago, noted that the incidence of childhood obesity more than doubled in the same period

A number of defenders of junk food advertising maintain current regulations are sufficient to ensure that the food advertised in children’s television time and the way it is advertised does not contribute to obesity. The communications and media regulator, ACMA, appears sympathetic to these claims. In 2005, it concluded as part of the review of the CTS that it was difficult to define what benefit would be gained from banning junk food advertising in children’s television viewing times. In making this claim, ACMA cited the United Kingdom regulator Ofcom’s estimate that the association between advertising and junk food consumption is modest—accounting for about two per cent in the variation in eating habits caused by junk food advertising.

Conclusion: A diverse group, comprising parents, health economists, politicians and other policy analysts argue that there is incontrovertible evidence that much of the blame for obesity epidemic lies with the junk food industry. According to this group, further blame lies with the advertising industry, which uses what are seen as unscrupulous marketing tactics to manipulate children’s food preferences and consumption and to encourage children to pester their parents to purchase these unhealthy products. This group considers that radical steps need to be taken to deal with the marketing of junk foods. Australian advocates argue that in the case of children at least the current self-regulatory regime does not work; children are continually, and in a variety of ways, exposed to junk food advertising. One commentator maintains with reference to television, that the narrow restriction of what constitutes children’s television makes it relatively easy for industry to claim that self-regulation is effective. However, what is not taken into consideration is that ‘prime-time shows such as The Simpsons and Home and Away… are popular with children’

In opposition to this group, there are other analysts and representatives of the food and advertising industries, as well as organisations that benefit from junk food sponsorship, who argue that a healthy diet can contain some foods high in fat, sugar or salt. The rationale behind this perspective is that when it comes to food, it is not what, but how much is eaten. Junk food producers argue that they responsibly market their products, promote healthy menu alternatives and support nutrition labelling to assist people in making decisions about their personal energy in/energy out equations. Advertisers argue that they do not make fraudulent claims about products. They provide information on products of all types. People, including children, can then make informed decisions about whether to purchase those products

There is a fundamental tension underlying the junk food advertising/ marketing debate that is unlikely to be resolved. This is reflected in the question of whether the negative results of individual choices—for example in smoking, consuming alcohol or eating junk foods— should consequently be regarded as an individual or collective problem. While it is not the intention of this paper to engage overly in ideological debate, it is worth noting comments on this subject by academic, Dr Linda Botterill:

A classical liberal interpretation of obesity would surely be that over-eating and low levels of physical activity are private behaviours which, at worst, result in harm to the obese person themselves. [The philosopher John Stuart] Mill argued that ‘Over himself, over his own body and mind the individual is sovereign.’ Others can attempt to educate, persuade or otherwise cajole individuals to change their behaviour but, in the absence of that threshold test of harm to others, there is no role for compulsion

In contrast, the argument for intervention is based on a potent ‘image of the powerless consumer in the face of the irresistible multinational, food industry’, and its co-conspirators, advertisers. In Botterill’s words:

This is the interpretation which calls for limits on advertising, particularly to children, and taps into concerns about the protection of the helpless and the innocent.

This argument rejects the implication that intervention to discourage the consumption of junk food represents the actions of a ‘nanny state’. Professor Boyd Swinburn, who has written extensively on this subject, points out that governments have often required certain behaviours of their citizens to decrease public health threats. These include the wearing of seatbelts and imposing smoke free public environments