



Health Inequalities, E-Cigarettes and Sugar

A joint seminar hosted by the All-Party Parliamentary Health Group and Public Health England

Date: Tuesday 3rd November 8.30 – 10.15am

Venue: Attlee Suite, Portcullis House

Chair: Sir Cyril Chantler, APHG Advisory Board

This event, drawing on expertise from Public Health England, seeks to look at the scale of the health inequalities that England is facing - as outlined in the latest Global Burden of Disease report; the latest medical evidence on the health impacts of e-cigarettes; and at sugar consumption and obesity.

Introduction:

Jane Ellison MP, Parliamentary Under Secretary of State for Public Health

Speakers:

- **Duncan Selbie, Chief Executive, Public Health England**
- **Professor John Newton, Chief Knowledge Officer, Public Health England**
- **Professor Kevin Fenton, National Director for Health and Wellbeing, Public Health England**
- **Dr Alison Tedstone, National Lead, Diet & Obesity, Public Health England**

Introduction by the Chair: Seventy per cent of the expenditure of the NHS goes on managing people with chronic illnesses; many of these illnesses are acquired and not genetic and they are part of modern society. The death rate in the US, particularly of white males, is rising, now exceeding the death rates associated with AIDS, because of acquired illnesses and stress. The UK is also the second most overweight nation in world. The Chair then introduced the Public Health Minister, Jane Ellison.

Jane Ellison MP, Parliamentary Under Secretary of State for Public Health

Public Health England (PHE) has an important role to play in assessing the scientific evidence for public health action. We are facing huge health challenges in the UK and we need to test and debate the health evidence.

On health inequalities, England has had the biggest increase in life expectancy in Europe, but there are still significant inequalities across the country. We need to dig beneath the averages to look at the inequalities that continue to exist some communities. The Government, through the Department of Work and Pensions, is working on the Life Chances Strategy, but there are still big differences in health between the most and least healthy communities.

The battle against tobacco is also still not yet over as smoking still affects the life chances of many people. Childhood obesity also remains one of the largest public health challenges. Maybe health visitors, for example, can do more to help with this, as well as local government. We need joined up action.

The recommendations of the Scientific Advisory Committee on Nutrition (SACN) have been accepted by Government **(Ref 1)**. Their final report in July 2015 recommended halving the guideline amount of free sugars in children's diets and minimising consumption of sugar-sweetened beverages; the evidence on sugar is central to the development of a childhood obesity strategy. For charities, their reach is also important in influencing people on lifestyle-related illnesses and we need to recognise that.

E-cigarettes represent a new phenomenon and we are still building the evidence base about their use and this represents a challenge for policy making. The Government has accepted that we need to protect children, so we have banned the sales of e-cigarettes to the under 18s, but they also represent a significant opportunity for smoking cessation strategies.

Duncan Selbie, Chief Executive, Public Health England

PHE is a relatively new body with a duty to protect and improve the public's health and to address inequalities. We inherited a fine history in protecting the public's health from communicable disease and environmental hazards and have genuinely world class knowledge and intelligence services ranging from disease registration and surveillance systems to immunisation and vaccination programmes, and eminent scientists, researchers and public health specialists.

Ref. 1 SACN Carbohydrates and Health Report, Public Health England, July 2015

We earn around £170m a year from our commercial services, products and inventions, and receive a Government grant of around £300m. In addition, I am the accounting officer for the public health grant to local authorities which is around £3.4bn.

Councils in England were given the statutory duty by the 2012 Act to improve the health of the people, the public's health. They last had this duty in the 1970s when it transferred to the NHS. Throughout the forty years of NHS responsibility the proportion of spend allocated to prevention was just short of 3%.

Three key messages.

First, we all - politicians, the media, the public - make the error of conflating good health with further and greater investment in the NHS when in truth healthcare has a marginal impact on length and quality of life. The international evidence says healthcare accounts for around 20%.

Second, we need to do better as a nation in tackling the causes of the causes of poor health and health inequalities.

Notwithstanding 60 years of universal, free healthcare and a doubling of NHS spend in recent times the gap in life expectancy and life in good health between the poor and the affluent has not altered in forty years - typically ten years difference in life expectancy and double that for life in good health. There is today a 25 year difference of life in good health between people living in Salford and Kensington.

Third, the international evidence (Global Burden of Disease) says wealth begets health and economic development and economic prosperity are the primary drivers for improving the public's health. Poor health accounts for the two top constraints on wealth creation (GDP) - obesity and tobacco. The point about economic prosperity and its importance to good health is ensuring that local people benefit from that prosperity.

The three markers of adult good health are to have a job, a home and companionship. Essentially having a job is good for your health, preferably a good job. Worklessness isn't ever good for children if they are to have the best possible start to life.

The leading risk factors affecting early avoidable death remain poor diet, lack of exercise, tobacco and alcohol, and affecting poor health in life mainly mental health problems and joint pain.

These together speak to the importance of putting "place and people" at the heart of our planning and action and to think beyond the NHS as the natural facilitators for making change happen.

More important is local government as "place leaders" working with the third sector, the local NHS and local employers pulling together to create jobs that local people can

get, places where people want to live and strengthening social connectivity to combat loneliness.

The Devolution deals being worked on across England offer huge potential for accelerating this. Not so much about holding onto central grants but seizing back local control in the reasonable belief they will make a better job of it.

None of this we can do by ourselves so PHE need to work with and through national and local government, commerce and industry, the NHS and the third sector. We exist as a source of expertise and as enablers and to be a fearless defender and conscience for the public's health. Public health, as you know, needs to be concerned with a future that does not yet exist. Early days and we are learning but that's the job and it's a great one.

Public health is about being where others aren't and if we are not dealing in controversy and being sometimes irritating, we are probably not doing our job.

Professor John Newton, Chief Knowledge Officer, Public Health England

Public health is a knowledge driven exercise and always has been, but we are doing it in an era of big data. I see my role as ensuring that we put knowledge into the hands of the people who can use it to make a difference, including local authorities and the NHS.

The breadth of what we do is a challenge. In some areas we have to generate new knowledge and we do our own research. PHE is a very productive research organisation and we produce more research outputs than many of our teaching hospitals. The biggest challenge is to get the existing knowledge out in a form which people can use. We produce [Health Profiles](#), the [Public Health Outcome Framework](#) collection and there is also the [Health Matters](#) resource for public health professionals. We cover a wide range of knowledge functions from generating new knowledge and research to the generation and analysis of data. We manage the national cancer registry and are launching a new national congenital anomaly register.

PHE has a broad role and one of our strengths is that we can integrate all these different forms of knowledge. [The Global Burden of Disease](#) (GBD) project typifies that approach. The GBD project been going, internationally, for 20 years. It started out at the World Bank, it was also sponsored by the WHO, and it is currently sponsored by the Gates Foundation. There are around 1000 researchers involved with the GBD project worldwide. It started out as a way of trying to make meaningful comparisons on health data between countries, but also meaningful comparisons between different problems within the same country, which is PHE's focus. The thing that's different and difficult and challenging about the GBD project is that it tries to look at everything at the same time and make sense of all the data. But this is an important thing to do because in real life, even an individual trying to assess his or her own health risks, cannot just think about tobacco and/or diet in isolation; those responsible for health services also have to think about all the risk factors and outcomes together and balance priorities. The reason

why the GBD is so popular is because it uses the very best data, the very best science and some complicated methodologies to produce simple and straightforward answers to the questions people have about health.

In terms of the methodology it's a big data project, with the computing power based in Seattle in the US, which is where Bill Gates comes in; we work in collaboration with the University of Washington. For every risk factor in the GBD, of which there are more than 80, systematic reviews are undertaken of the best available research evidence. The routine health data collected in the UK has a long tradition behind it and is probably the best in the world and we are doing innovative things with GBD that are not being done elsewhere in the world because of the scope and quality of our data.

The global GBD results on risk factors were published in [an article in the Lancet on 10th September 2015](#) (**Ref. 2**). The GBD results for England for the period 1990 to 2013 were published on 15th September 2015 (**Ref. 3**). In this latter report PHE looked specifically at the results for England, compared to other countries and within England at its regions, and also divided the population into quintiles by deprivation in each region. We are therefore able to compare populations by levels of deprivation. PHE worked with many of the leading universities in the UK to interpret the data.

In terms of the results, the good news is that England's health has improved dramatically, almost more than in any other country. Overall life expectancy has increased by 5.4 years since 1990. We have moved up the league table and only Australia, Canada, Scandinavia, Italy and Spain are slightly ahead of us, but we have improved more than almost any country. In addition, some English regions have a better life expectancy than *any* of those countries, specifically the South East, the South West and the East of England. These regions have large populations which achieve amongst the best health outcomes in the world within the existing infrastructure of the English NHS.

Ref. 2 [Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013](#), The Lancet, 10 September 2015.

Ref. 3 [Changes in health in England, with analysis by English regions and areas of deprivation, 1990 to 2013: a systematic analysis for the Global Burden of Disease Study 2013](#), Public Health England, September 2015

These improvements have largely come about due to improvements in cardiovascular disease and some improvements in cancer outcomes. But there is also a negative effect due to liver disease and the combination of poor diet and obesity also emerges as a growing problem.

There are some warning signs though, despite the good overall picture. For example, while there has been a 41% reduction in premature mortality, there has only been a 1.4% reduction in the level of ill health over the same period (since 1990). We are not living better, even if we are living longer. We have a population which is as much troubled by ill health as a foreshortened life. The obvious answer is that this is because of an ageing population, but it is not just because of that. Survivorship is another issue. A lot of people are surviving cancer and living with other conditions they would have died from before, for example diabetes and stroke.

Survivorship and an ageing population are both key factors that need to be considered. There has also been no discernible improvement in health inequalities and no relative improvement over the period between the most deprived quintiles and the more wealthy quintiles. People in deprived quintiles are only now experiencing the levels of mortality that better off people had in 1990. Poorer people have only just caught up to where others were then.

Forty per cent of the overall burden of ill-health is also due to potentially preventable risk factors, and up to 84% in the case of cardiovascular disease. In terms of risk factors, diet is just ahead of smoking, taking into account the population as a whole.

This all means that there is an enormous opportunity for prevention. What has been achieved in some parts of England needs to be replicated in other areas. Also even in better off areas, deprived populations are still doing badly. We need to tackle deprivation wherever we find it and the burden of disability needs specific attention. Also, how do we help people with multiple conditions to live better? It is not just about preventing mortality any more.

Professor Kevin Fenton, National Director for Health and Wellbeing, Public Health England

There is a role for preventing chronic disease, but we also need to look at the risk factors fuelling these diseases, including tobacco, drugs, physical activity and diet.

Turning to smoking and e-cigarettes, the results of recent research have shown that there has been tremendous success in reducing rates of smoking in England. For example, between 1998 and 2014 we saw a significant reduction in smoking rates, which declined from 28% to 18% - the lowest ever recorded level (**Source:** Integrated Household Survey). However, the decreasing prevalence of smoking hides significant variations across the country. There is a higher prevalence of smoking, in particular, in

lower socio-economic groups, disadvantaged groups including LGBT communities, and in men than in women. There are significant variations in smoking rates amongst different populations.

There has been legislation, anti-smoking campaigns and smoking cessation campaigns which have resulted in reduced levels of smoking. However, over the past seven years, there has been the introduction of new technologies in the form of e-cigarettes and we have seen a significant and dramatic increase in the number of smokers making the decision to switch to e-cigarettes (today there are 2.6 million people who are using e-cigarettes (source: ASH/YouGov Smokefree GB survey)). The reasons vary. Some are using e-cigarettes to reduce harm, for others it is as a way to quit; in England e-cigarettes are now the number one method to help smokers to quit. Within this context PHE decided to look at the evidence on e-cigarettes, at the request of the DH, and how they can be incorporated into tobacco control policies. PHE made the following key findings in our expert independent evidence review, published in August 2015 (**Ref. 4**):

- E-cigarettes are significantly less harmful than cigarettes and do not contain the toxins and chemicals found in smoked tobacco. The reduction in harm is estimated to be around 95%.
- E-cigarettes are the number one method for permanently giving up smoking, providing an enormous public health opportunity. How can e-cigarettes be incorporated into smoking cessation programmes?
- Concerns have been raised about these new technologies and the use of e-cigarettes in young people and about how young people are using them. PHE report suggests that the data is reassuring; young people are experimenting with e-cigarettes and tobacco too, but the regular use of e-cigarettes after using them for experimentation is very uncommon in young people and only a very small % of young people continue to use e-cigarettes. Those who do so are likely to be smokers or ex-smokers.
- Finally, we did not find evidence to support the 'gateway' hypothesis; there was some concern that if young people use e-cigarettes this would lead them to start smoking or to use other forms of drugs, but data for England found no evidence so far of a gateway effect.

Ref.4. [E-cigarettes: an evidence update](#), Public Health England, 19th August 2015, updating **[E-cigarettes: a new foundation for evidence-based policy and practice](#)**, Public Health England, August 2015

What does this mean for policy and practice? These are the key issues for PHE:

- We need consistently clear messages on e-cigarettes now that we have better data and more information; it is important that we give clear and consistent messages and tackle the myth that e-cigarettes are at least as harmful as smoking tobacco. Many smokers in fact have not switched to e-cigarettes because they are afraid that e-cigarettes are too dangerous.
- We need to support our colleagues in smoking cessation services to help them to incorporate e-cigarettes into their day-to-day practice.
- We have to do more research in terms of monitoring, evaluation and surveillance, so we can understand the medium and long-term effects of e-cigarette use.

Dr Alison Tedstone, National Lead Diet & Obesity, Public Health England

As a nation we are overweight: 64% of adults are overweight or obese. 1 in 5 children arriving at school are already overweight or obese and by the time that children leave primary school that figure rises to 1 in 3. Obesity in adults is a severe cost to NHS. If children are obese they are more likely to be bullied and more likely to be absent from school and to miss educational opportunities.

PHE produced two related reports over the summer. The first one by the Scientific Advisory Committee on Nutrition (SACN) (**Ref. 1**) looked at evidence around sugar and health and it concluded that sugar in our diet is leading us to consume too many calories and that this is increasing weight gain and obesity. Their meta-analysis of data from randomised controlled trials (which are right at the top of the evidence hierarchy) shows that the sugary drinks (which on average we consume every day) are leading to us having about 200 calories per day more than we need. If we could cut that, it would go a long way towards solving the nation's obesity problem.

This advice is accepted by Government and the official public health advice now is that we should have no more than 5% of our calories from sugar, but as a nation we are not doing well. Children have three times more than that number of calories as sugar, so that's a lot of calories. SACN also said that we need to minimise sugary drink consumption. PHE produced advice, which the Minister endorsed, to say that sugary drinks have no place in children's diet and yet we know that the average child in the UK is consuming the equivalent of almost a can of fizzy drink a day.

The next thing we did was to take a critical look at how to achieve SACN recommendations and again we looked at the evidence in a critical, quality-controlled way and we saw that if we could achieve SACN's recommendations we could save the NHS about £500 million a year. This is a significant contribution to the financial savings we need.

PHE's second peer-reviewed report, **Sugar Reduction from Evidence to Action (Ref. 5)**, was published on 22nd October 2015, rather unexpectedly; we were expecting it to come out later in the year. It concluded in this country we are being heavily promoted to in the retail environment. Forty per cent of the food we buy in England is on promotion, much more than in any other country in Europe. The level in the next highest country is around 20%. Promotions do not just swapping brands, but to buying 20% more food than we would have done if that food had not been on promotion. We cannot say what people are doing with that additional food, but it is probably fuelling the obesity crisis.

If promotions stopped it is estimated that this would lead to a 6% reduction in the amount of sugar taken home from retail outlets. This is a bigger impact than countries have seen who have introduced a sugar-sweetened beverage tax. For example, Mexico has seen a 6% reduction in sugar-sweetened drinks sales, but this only represents a small proportion of total sugar consumption, so it has a much smaller effect on sugar consumption. We estimate that if a Mexican-style sugar tax was introduced in UK, it would lead to around a 1 gram reduction in sugar consumption.

We also looked at the effect of advertising of children. Children are being advertised to more than ever before - on traditional platforms like TV, on the internet and through advo-gaming. The evidence shows that this is likely to be affecting children's food choice, preferences and the overall balance of their diets so it is not a neutral thing. We believe that restricting advertising would have a major effect on children's food choices and preferences.

The PHE then looked to see if, in England, we could do the same for sugar as we have done for salt. Could we reduce the sugar content of food and would that lead to an overall reduction in sugar consumption? PHE's view is that it would, particularly if combined with portion size reduction. Under the Responsibility Deal, under the last Government, we saw no net reduction on sugar consumption, but we did see examples of good practice that could be built into more holistic managed action in the industry going forward.

PHE looked at the evidence on possible fiscal measures for reducing sugar consumption and all countries which have introduced some kind of sugary drinks tax saw a reduction in the sales of fizzy drinks at the time of the introduction of the tax, but no long term data has yet been produced. We cannot be certain if this effect will be sustained.

So, on this basis of our review, we have drawn up a set of conclusions, including three main areas for action, which could potentially have a large effect on the nation's diet, child obesity and dental caries. Almost 40% of children in reception already have tooth decay so the problem of tooth decay has not gone away either.

Ref 5: [Sugar reduction: from evidence into action](#), Public Health England, October 2015

Our key conclusions are that:

- Restrictions on the marketing and advertising of high sugar foods and on food promotions would help to reduce the nation's sugar intake and therefore obesity rates considerably.
- A structured well-monitored programme of reformulation and portion size reduction would also be an effective way of reducing sugar intake.
- Fiscal measures could also be an effective part of any strategy on obesity.

We believe it is important that this is underpinned by good health promotion, good information and the training of health professionals, and also in terms of the people who provide our food, a great deal of improvement could be made.

The single most important message is that we need a broad structured attack on this problem if we want to see obesity statistics get better. There is a real opportunity for the UK to lead way in this area.

The Q & A session

The questions (Q) and comments (C) in bold below were raised by attendees. The answers from each speaker are given below.

Q. Sir Kevin Barron MP: We have known for 50 years now that it's not the nicotine in cigarettes that harms people, but the tar, so should we treat e-cigarettes as cigarettes?

Professor Fenton: The evidence is clear that e-cigarettes do not contain the main chemicals and toxins that cause cancer and that we find in cigarettes, so there is an argument to think about them and treat them differently. If we treat them the same we will miss an opportunity for harm reduction and for us to use disruptive technology to benefit millions of individuals. I'm particularly concerned about people, for example, in mental health units, prisons, and more deprived parts of the country where people are less likely to give up smoking. Switching completely to e-cigarettes is an opportunity to reduce harm and an opportunity we would miss if we treat them the same.

Some of my colleagues are concerned about the Tobacco Products Directive coming out next year as they feel that the new standards being applied to e-cigarettes could have the unintended consequences of reducing the use and uptake of e-cigarettes.

Q. Sir Kevin Barron MP: I have been against tobacco for two decades and this is in my view a major breakthrough. I cannot get over the attitude of clinicians and others who look at this product and assess that it's anywhere near as harmful as tobacco which is still killing 80,000 people prematurely in this country. We have a

gifted situation where over 2.6 million people who have gone on to these products, as opposed to using cigarettes, full time or part time, and yet we are still having the debate about how we should treat these products. We have two products that could possibly be medicinalised within the next few months, but when the Tobacco Directive comes in the licences for these products could be removed. This could be a major setback for public health. So are they cigarettes or not? We need to have this debate.

Duncan Selbie: In the EU we have a good regulatory framework; it's not the same in other parts of the world.. The precautionary principle says if one is not sure, don't do anything, but this is a bit 'after the event' with e-cigarettes. Two thirds of the adult population believe that e-cigarettes are as harmful as cigarettes, which is not true. We have to get the message across to the public that if you are a smoker, and you don't want to smoke, this is a fantastic opportunity to help you give up; we need to have the courage to say that despite concerns expressed in the public health community and by clinicians, it is important not to conflate tobacco with e-cigarettes – they are not the same thing.

Chair: I'm a paediatrician and I worry about e-cigarettes being the entry point to nicotine addiction. A number of papers published in the US recently, in the Journal of the American Medical Association, point in that direction, which I know people here criticise. Maybe there is a sensible place for a middle ground where we treat e-cigarettes as different to tobacco and a valuable way of tackling nicotine addiction, but where we are careful that they are not advertised in way that encourages young people to take them up.

Professor Fenton: I agree that we have to commit to monitoring what happens with young people who take up this technology, but there are laws protecting under-18s which prevent the sale and proxy purchase of e-cigarettes, which is not the case in the US, which does not have the same regulatory framework as in the UK on this. We share your concerns about young people taking up this technology and we have to commit to monitoring the situation.

Comment from Baroness Hollins: Nicotine is not a great product and surgeons don't like operating on people who have nicotine in their system. There are good medical reasons why nicotine is banned and nuanced messages are more difficult to get across. As a psychiatrist, I would say addiction is not great either. E-cigarettes are being promoted and are a new source of income for the tobacco industry, so it's difficult.

Duncan Selbie: It is tricky and that is why we are having this debate. Kevin has set out the areas where we need to pay attention. We do not want people to smoke, but people do make choices, and if they continue to smoke, for whatever reason, then e-cigarettes are a better option. We are not suggesting that non-smokers should take up e-cigarettes. For smokers though, they can be an aid to quitting. Support from specialist stop

smoking services is the most effective way of giving up smoking and e-cigarettes are the most popular way of giving up. If you combine these two approaches you get the best outcomes. It's a fantastic opportunity, but we do not want to see children take them up.

This Parliament did something great in voting for standard packaging. Just think about the progress we have made and e-cigarettes are the next opportunity. They are not without their issues and we would rather that people don't smoke, but as people do smoke, at least e-cigarettes are an option to help people to give up. PHE will, without fear or favour, follow the evidence and publish it, and if the evidence on use by young people changes, we will change our advice.

Comment by Professor Graham MacGregor, Chair, Action on Sugar: Nicotine is a highly addictive drug and although e-cigarettes are better than smoking cigarettes, nicotine itself has harmful effects; we have to think carefully how we operate this to get people to stop smoking cigarettes, maybe by using e-cigarettes, but not getting the whole of country addicted to nicotine. We have to be careful as it is a very addictive drug; in 30 years all our children could be addicted to nicotine. We haven't got long term studies on nicotine addiction per se.

Professor Fenton: In our report we looked at this area. We have decades of experience with nicotine replacement therapy (NRT): it has been a safe and effective way for millions of smokers who have quit smoking using NRT or are using NRT to manage their nicotine needs. Our review also made it clear that the addictive properties of cigarettes are not only due to nicotine, but due to a combination of the chemicals which enhance their addictive properties. The evidence is clear that the addictive properties of nicotine are nowhere near the level of substances like heroin. So we have to be clear about the evidence.

The key issue is how do we ensure that we maximise the opportunities for e-cigarettes to help smokers to quit while ensuring that non-smokers are not taking them up.

Q. Colleen Fletcher MP for Coventry North East: In my constituency there are some dreadful health inequalities and within the space of just three miles, some people are living twelve years longer than others. It is not getting better. I am worried and confused about the messages coming out about e-cigarettes. If I am confused, then I am really worried about how the conversation is going to continue and how we can communicate messages about e-cigarettes and smoking. I am glad you mentioned young people, because it is now almost seen as trendy to use e-cigarettes; it's seen as ok to get them off parents. I am very worried, but also mindful that some smokers are using e-cigarettes in places where one cannot smoke; they are a really good method of giving up smoking and less dangerous, but the mixed messages are worrying. How can we communicate this to people in my constituency?

Professor Fenton: PHE shares your concerns. On young people, the data suggests that while young people are experimenting with e-cigarettes, regular use is very rare, partly

because if people are not addicted to cigarettes or nicotine it is hard for them to become addicted to e-cigarettes. The data doesn't indicate that young people are moving from e-cigarettes to cigarettes. The other point about the mixed messages is key: we have a problem that too many smokers believe switching to vaping would be more harmful than staying on cigarettes and we have a responsibility to produce clear and consistent messages on the harm reduction of e-cigarettes and we are committed to doing that in our campaigns. We began introducing this message in our Stoptober campaign this year.

The second opportunity is working with local smoking cessation services and they need to incorporate into their messages, information about e-cigarettes as a safer alternative to smoking and an option to support quitting. We will be producing guidance for them to ensure this message gets across. Finally, we have to work with local directors of public health and the public health community to ensure these messages are being reinforced.

Professor Newton: The heart of the problem is that it is a complex, nuanced message and the only way to get through it is to collect really good data so we have a clear message based on enough data to give us some certainty. We need good data on whether children are using e-cigarettes in the long term and we will have to change the message if they are, but we need data. At the moment they are not doing so.

Chair: Now let us turn to obesity. Do schools also have a role to play, as well as the other options we have discussed this morning?

Dr Tedstone: There have been big strides in what happens in schools around food. We have School Food Standards now and children can no longer buy fizzy drinks in school. School meals also have to be provided within tight criteria. In the US we see far worse food provision. We now have cooking integrated back into the National Curriculum so children are able to learn to cook savoury dishes.

Schools are going in the right direction, but in wider society, things are going in the wrong direction. There are no national standards in early years' settings, although there are voluntary standards; what happens in the early years period is obviously really important for the formation of habits and to make inroads into childhood obesity statistics.

The Minister mentioned people like health visitors. Undoubtedly, the opportunities that health visitors have for contact with new mothers, is a way of influencing diet; promoting physical activity is also important.

Comment and question by Baroness Hollins: we have not mentioned people with mental health problems and learning disabilities, but both are so important in the context of health inequalities. On sugar, we see that the advertising and marketing strategies of the food companies really damage the health of people with learning disabilities. They are so vulnerable to those strategies and price promotions. People

with learning disabilities, trying to live independent lives, but all drink Coca Cola; this is not surprising as they sponsor the Special Olympics. They also have obesity and dental problems. They represent approximately 2.5% of the population, which is a significant proportion.

If you get it right for people with learning disabilities you get it right for everyone. We should try to keep that message within public health. Also, obesity is not just about changing the way you eat, and doing more exercise, and about being in work; a lot of the reason why people are not in work or are overweight is because they have mental health problems and/or lack essential life skills. There must be a mental health dimension to public health, but where is public mental health?

Duncan Selbie: What kills you it's not what ails you, it's what causes you difficulty, and the leading cause of illness and poor health is poor mental health. If you combine poor mental health and joint pain, that accounts for more than 50% of morbidity in the nation. Over 50% of sick notes are for not coping with life and joint pain. This is not about top end psychiatric disorders, but about not coping with life and joint pain. It's a huge public health issue. I also believe with as passion, based on evidence, that having work is good for your health. It's an outcome in itself. We need to encourage enterprises on how to try to create new work for local people, through skills colleges, for example, and all the things that go to make places where people want to live. I fundamentally believe that if you get it right for people who have the least, you get it right for everyone.

Dr Tedstone: There is no evidence about learning disabilities and mental health in the sugar report because we only looked at the available evidence – and we have no evidence of the effect of sugar on people living with mental health or disability. On advertising and marketing we included about 45 quality controlled studies and we can see some differences according to some socio-economic characteristics, but we have no data on diet and people with mental health problems or disability. But, we do know that people with mental health problems and learning difficulties are at increased risk of being overweight and probably at increased risk of having a bad diet and we have produced a separate briefing on that. One of the areas PHE is working on at the moment is trying to get equal access to treatment services for people with a disability because they don't have equal access to obesity treatment services (the availability across England is poor anyway, but it is probably particularly poor for people with disability), but in our sugar work we didn't feature this because of the evidential approach PHE adopted.

Baroness Hollins: *One of reasons that the evidence is not there is because money is not being spent on researching this area.*

Dr Tedstone agreed with that.

Comment by Michael Baber, Health Action Campaign: I was interested in Duncan's suggestion that 'wealth begets health'. We have just published a report called "Healthy and Wealthy?" which asks whether it is possible to mass produce food that is good for health and good for business.

On reformulation, how much has been looked at the feasibility of reformulating foods? The food industry says it's difficult, but I wanted to make three points on this:

The food industry is very adept at tailoring for national markets - for example there are different salt levels in products aimed at different countries; the drinks industry has corporation tax relief for research and development, but if that R&D was focussed on developing healthier food, there could be more rapid progress; and there are now a range of processes that allow food to be produced with less sugar, salt and fat and no one notices the taste difference. Early technologies do seem promising and suggest we could make major progress on producing healthy food.

Dr Tedstone: Some companies are producing sugary food and drinks using substantially less sugar, but further reductions are possible. There is no technical reason why some yogurts are made up of 25% sugar. Levels of sugar in products can be reduced gradually and people won't notice. We can do large steps with sugar replacers. We know that different countries have slightly different recipes, which proves the point.

The hard point though is if we want to grow our food industry we will continue to grow our obesity problem. The additional calories have to go somewhere and there is no solution other than selling and buying less food as a nation, unless the food goes to landfill, which is not good either. We have also seen a massive expansion in out of home consumption: 20% of the food we purchase is through out-of-home sales.

There is no reason why pizza bought from a retailer should have less salt than pizza bought from a leading pizza chain, but there is a difference. It makes no sense at all. There is great scope for the industry to do more. It is not all about novel ingredients and technologies and doing the same and selling more. This will not solve the problem.

Comment by Professor Graham MacGregor, Chair, Action on Sugar: We have worked out that if we reduce sugar by 40% and fat (focussing on saturates such as palm oil) that would remove 200 kilocalories from the UK diet. This would prevent children and adults from becoming obese and developing Type 2 diabetes. Reformulation is by far the most important way of changing things, as we did with salt - although we are no longer doing it. Salt content has been reduced in most supermarket products by 30-40% and this has been done without people realising it - it's been a brilliant public health policy success. But we have lost the mechanism for reformulation.

We now have the Responsibility Deal under which the food and alcohol industry are responsible for policing themselves. This has failed. We need to go back to an

independent agency for nutrition because, as John Newton said, what we eat now through salt, saturated fat, sugar and lack of fruit and vegetables, is the major cause of death; without an independent agency we cannot tackle the problem.

Q. Stephanie Creighton, BMA: On the sugar tax, how do experts feel about the fact that the Government has ruled out a sugar tax despite the evidence? And on reformulation, which is an important area for action, what we saw over last five years in the previous Government, were a lot of voluntary agreements through the Responsibility Deal. On reformulation the food industry actually used reformulation to expand their product ranges. For example, Coca Cola produced 'green' Coke with 33% reduced sugar, rather than dealing with the real problem of red Coke. They also introduced a new portion size of 250ml cans of coke, but we all know from the SACN report that 330 ml red coke is the real problem. It contains nine teaspoons of sugar. And we are not seeing the 250ml cans on sale, rather the 330ml cans and 500 ml bottles. Don't voluntary agreements allow industry to continue to modify their product ranges?

Dr Tedstone: PHE are clear that in its sugar report - we need to tackle volumes as well as averages. PHE suspects that the introduction of green coke led to more sugar sales even it was an unintended consequence. The work on salt work, which is held up as a shining example, including by PHE, was a voluntary agreement and we shouldn't forget that, but thing that was different about it compared with under Responsibility Deal is that it was very managed and that is what PHE is proposing in our sugar report. As someone involved in EU processes around some of the food regulation that exists, the minute you get into regulation, you can end up with compromises that don't take you as far a voluntary approach could take you. On reformulation, PHE is proposing a stepwise setting of targets year on year.

Duncan Selbie: We need to see calorie reduction, and, for the record, there was no political interference at all in the evidence we presented. However, we cannot expect to get anything done if we don't work through the political process. We work in a democracy and need to present evidence; it is not sufficient to be right but you have to take people with you and that is what Parliament is for. We will work with and through Government. But political interference has not existed or been part of anything presented this morning. Whether its e-cigarettes, sugar or on the burden of disease, we are fierce and protective about the evidence as we find it and present it. But it's for Government and Parliament to make the choices and decisions about when to act and in what order. We have to work together and that is the case everywhere in the world. PHE has more freedom of action than almost any comparable organisation in the world; do not confuse political interference, with telling PHE what we can say, as this is not the case.

Comment by Sir Kevin Barron MP: I chaired the Health Select Committee under Labour and we looked at alcohol and made some strong recommendations which

politically were not accepted, on unit pricing to reduce consumption, but it will come around again at some stage and people involved in public health issues whether alcohol and obesity need to keep knocking on the door and at some stage action will be taken. If the time is right, legislation will come, if it's the right thing to do, but have to get it when time is right.

Q. A student from Glasgow: How do we get health messages to the public effectively, especially parents? It is quite difficult to get messages across to the public, so how do we not just change policy, but also helping with changing lifestyles?

Dr Tedstone: PHE is very committed to marketing. We have our [Change4Life](#) programme which promotes health eating messages through marketing and social media. The information is available online too and it's a big part of the mix and helps to inform parents, but PHE is clear that we need to go beyond the marketing. The best marketing in world won't solve the problem, but it's also about bringing people along with you to enable change to happen.

Close of meeting by the Chair: Sir Kevin Barron MP (who stepped in as Chair at the end of the meeting) thanked the speakers and concluded saying, hopefully this is the beginning of a debate about changing minds and making sure we protect society, as lifestyle is the biggest threat to public health in this century.

End

Note: This transcript of the meeting is as accurate a representation of the discussion as possible, within the limits of the audibility of the recording.