DÁIL ÉIREANN

AN COMHCHOISTE UM LEANAÍ AGUS GNÓTHAÍ ÓIGE

JOINT COMMITTEE ON CHILDREN AND YOUTH AFFAIRS

Dé Céadaoin, 2 Bealtaine 2018

Wednesday, 2 May 2018

Tháinig an Comhchoiste le chéile ag 9.30 a.m.

The Joint Committee met at 9.30 a.m.

Comhaltaí a bhí i láthair/Members present:

Teachtaí Dála/Deputies	Seanadóirí/Senators
Kathleen Funchion,	Frank Feighan,*
Denise Mitchell,	Catherine Noone,
Tom Neville,	Fintan Warfield.
Sean Sherlock.	

* In éagmais/In the absence of Senator Lorraine Clifford-Lee.

Teachta/Deputy Alan Farrell sa Chathaoir/in the Chair.

The joint committee met in private session until 10.10 a.m.

Tackling Childhood Obesity: Discussion (Resumed)

Chairman: We are joined by Dr. Cathal McCrory, senior research fellow, Trinity College Dublin, who will make a presentation on the topic of childhood obesity, and by Mr. Mike Neary, director of meat and horticulture at Bord Bia, who will make a presentation on the activities of Food Dudes. I welcome members and viewers, who may be watching proceedings on Oireachtas television, to the public session of the Oireachtas Joint Committee on Children and Youth Affairs.

Before we commence, and in accordance with procedure, I am required to draw witnesses' attention to the fact that by virtue of section 17(2)(*l*) of the Defamation Act 2009, they are protected by absolute privilege in respect of the evidence they give to the committee. However, if they are directed by the committee to cease giving evidence in relation to a matter and they continue to so do, they are entitled thereafter to a qualified privilege in respect of their evidence. They are directed that evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise nor make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable.

Members should not comment on, criticise or make charges against a person outside the Houses or an official or entity by name or in a way to make him, her or it identifiable.

I remind all present to switch off their mobile phones or put them on flight mode. Muted phones have a tendency to interfere with the sound system and make it difficult for parliamentary reporters to report the meeting and for those tuning in through other means.

I wish to advise witnesses that any submissions or opening statements made to the committee will be published on the committee website shortly after this meeting. There will be a series of questions by members following the presentations. I welcome Dr. McCrory and invite him to make his opening statement.

Dr. Cathal McCrory: I thank the Chairman and members of the committee for the opportunity to speak today about a paediatric health issue that is assuming national importance. I am a senior research fellow at Trinity College Dublin and principal investigator of a Health Research Board-funded project examining socio-economic inequalities in population health. The statement I am going to make today is informed by my published research on obesity using the Growing Up in Ireland, GUI, study, a large nationally representative cohort study of child development in Ireland that tracks the progress of two cohorts of approximately 20,000 children over a span of years. These studies are instructive because they allow us to estimate the national prevalence of overweight and obesity in Ireland, how it changes over time and the factors impinging on same. Like many others who have addressed this committee, I do not have good news.

Obesity is considered to have reached epidemic proportions in both adult and child populations. According to figures provided by Growing Up in Ireland, 19% of children aged three years are overweight and 6% are obese. These figures are extremely concerning from a popula-

tion health perspective because obesity tends to track and children who are overweight or obese in childhood are more likely to maintain this status into adolescence and adulthood. Some 55% of obese children will become obese adolescents, and 80% of obese adolescents will become obese adults. Childhood obesity has downstream consequences for disease risk in later life, including risk for type 2 non-insulin dependent diabetes mellitus, NIDDM, hypertension and cardiovascular disease. Psychological sequelae of childhood overweight or obesity include peer-group victimisation, lower self-esteem and depression.

Factors contributing to increased obesity among children are multitudinous and complex. At its most simple, obesity results from a mismatch between energy intake and energy expenditure. A host of factors have been identified at the individual level, including declining rates of physical activity, increased sedentary behaviour and changing dietary habits. The environment in which our children are developing has been described as obeseogenic. Parental overweight is one of the strongest predictors of childhood overweight reflecting the contribution of shared genes and shared environment. We have previously shown that a child is 3.2 times more likely to be obese if one parent is overweight or obese and 9.5 times more likely to be obese if both parents are overweight or obese. Moreover, overweight parents are less likely to spot overweight in their children. Worryingly, our research suggests that 54% of parents of overweight children and 20% of parents of obese children in the Growing Up in Ireland study childhood cohort reported that in their view their children are about the right weight for their height.

Health promotion literature suggests that behaviour change and weight reduction can only come about once the individual recognises the need for change, yet it is clear that many parents have a poor understanding of appropriate body weight. Parents shape their children's eating behaviour not only through the foods they make accessible to their children, but also through parental modelling, parenting practices and reinforcement. Children's and parents' dietary intakes are correlated for most nutrients so intervention efforts should be designed to target parents and family units.

One of the most concerning findings from our research on childhood obesity with the Growing Up in Ireland cohorts is the stark socio-economic inequalities that are evident at a very early age. Indeed, studies have consistently shown that childhood overweight and obesity is more heavily concentrated in lower socio-economic status, SES, households.

Although there is some tentative evidence that rates of childhood overweight and obesity may have stabilised in recent years in some high income countries, this trend has not occurred at an equal pace across all socio-economic groups. Data from the Growing Up in Ireland infant cohort show that 9% of children from lower secondary-educated maternal backgrounds are obese at three years of age compared with 4% of children from degree-educated maternal backgrounds. This means that by the time they arrive at the door of the preschool to avail of the Government's early childhood care and education, ECCE, scheme, children from lower SES backgrounds are already 16% more likely to be overweight and 2.3 times more likely to be obese compared with their higher SES peers. Moreover, the data tell us that these socio-economic inequalities continue to widen thereafter. By 13 years of age, shortly after they have made the transition to secondary school, children from lower SES backgrounds are 56% more likely to be overweight and 3.5 times more likely to be obese. There are no differences in body mass index, BMI, at time of birth but children from lower SES backgrounds will weigh approximately 1 kg/m2 heavier by 13 years of age. This is huge at the population level.

Our analysis of longitudinal patterns indicates that children from lower SES backgrounds are more likely to be overweight or obese at any age, or are more likely to become overweight

or obese if previously non-overweight and are more likely to maintain overweight or obese status over time. This means that children from lower SES backgrounds are quite literally carrying around a heavier burden of disease from much earlier in the life course. In fact, recent evidence suggests excess adiposity represents a major pathway through which social inequality gets underneath the skin to precipitate earlier morbidity and mortality among more disadvantaged groups. These findings reinforce the necessity of challenging the childhood obesity epidemic at early ages because our analysis has shown that these patterns are difficult to change once they become entrenched.

We need to urgently address the material, structural and cultural factors that contribute to the emergence of these inequalities in early life. International research, including our own, suggests that the period from infancy extending through early childhood is a critical one for growth and development. Our research with the Growing Up in Ireland infant cohort shows that children from semi-skilled or unskilled social class backgrounds weigh 135g lighter at time of birth compared with children from professional social class backgrounds, but experience more rapid weight gain thereafter to the extent that they weigh 250g more by three years of age. Factors contributing to this pattern of rapid weight gain in the first nine months of life include: earlier transition to solid foods - before six months of age; lower rates of breastfeeding, which has been shown to be protective against the development of obesity; and prenatal tobacco smoke exposure.

Factors associated with rapid weight gain between nine months and three years of age include lower dietary quality, higher maternal BMI and higher levels of television watching, all of which are socio-economically patterned. Statistical adjustment for this constellation of risk factors, that is, early infant nutrition, maternal prenatal behaviours and child diet and lifestyle, fully explain the class differentials that exist in regard to childhood obesity at three years of age. Importantly, these risk factors are all modifiable which means we can do something about this and it represents an opportunity to intervene and reduce the riskier body mass trajectories of lower SES groups.

It is important that we understand the socio-cultural context in which these social inequalities emerge. Studies of household food purchases generally report a positive association between household SES and the quality and variety of purchased foods. International evidence suggests that high quality diets are more expensive than low quality diets and that those on low incomes are more sensitive to the cost of food. The introduction of the recent sugar tax may lead to a reduction in unhealthy food consumption, but strategies are also needed on the other side to encourage consumption of nutritive-dense foods.

Breastfeeding has been shown to be protective against the development of obesity. We have previously shown that being breastfed for a period of six months or more is associated with a 49% reduction in the risk of obesity at three years of age and a 51% reduction in the risk of obesity at nine years of age. Women from lower SES backgrounds are 80% less likely to breastfeed. Measures to increase breastfeeding rates should be a national priority and resources should be allocated to increase breastfeeding rates among more disadvantaged groups. This will involve a commitment to substantially increase the level and provision of support for breastfeeding in Ireland, in addition to providing a sufficient level of central funding to help achieve this goal.

Let me repeat that one in four three year olds is now overweight or obese. Of the older Irish population, 80% are now overweight or obese according to figures provided by the Irish Longitudinal Study on Ageing, TILDA. Ireland is on target to be the fattest country in Europe by 2030 according to the World Health Organization. We need to act urgently to address this

problem. We know that the factors contributing to the increase in childhood overweight and obesity are multitudinous and that solutions will have to be multifaceted. Tackling it will require co-ordinated action across a number of Government Departments and the involvement of stakeholders, including parents, schools, community-based organisations, healthcare providers, and the private and public sectors.

We recommend that the Government: makes a political commitment to tackling childhood obesity and to developing an action plan to achieve this; implements a national screening program for BMI and waist circumference in school-age children on an annual basis; sets national targets for the reduction of childhood obesity and an evaluation programme for monitoring success of this goal; establishes clear targets for reducing socio-economic inequalities in childhood obesity; and considers the use of targeted intervention initiatives for high-risk groups, particularly those of low socio-economic status. I thank the committee members for their time and wish them well in their important work.

Chairman: Thank you very much, Dr. Mc Crory. I now invite Mr. Mike Neary to make his opening statement.

Mr. Mike Neary: I thank the Joint Committee on Children and Youth Affairs for this opportunity to address it and make a contribution on the topic of tackling childhood obesity and the Food Dudes programme, particularly in the context of the work we do in Bord Bia in conjunction with the Department of Agriculture, Food and the Marine through the Food Dudes programme, FDP.

Bord Bia is the agency responsible for promoting the consumption of horticultural produce and the marketing of Irish food and horticulture. Under its horticulture remit, Bord Bia manages and oversees implementation of the Food Dudes programme. This is led by myself in my role as director of meat and horticulture in Bord Bia. While the specific task of tackling obesity is not within the remit of Bord Bia, it is widely accepted that a healthy balanced diet with fruit and vegetables at its core is a key contributor in reducing and minimising obesity levels. As such, the Food Dudes programme can play a role in supporting programmes aimed specifically at obesity, such as the Healthy Ireland schools initiatives.

The Food Dudes programme is an evidence-based, incentivised behaviour changing programme which was developed by Professor Fergus Lowe in Bangor University in Wales and aims to encourage increased consumption of fruit and vegetables by primary school children by changing attitudes and cultivating a liking for fruit and vegetables. The programme is managed by Bord Bia and receives financial support from the Department of Agriculture, Food and the Marine and the European Union through the European school fruit and vegetable scheme.

It is based on three core principles which are called the three Rs which are: repeated tasting of raw fruit and vegetables which cultivates a liking for fruit and vegetables; role models which take the form of cartoon characters called the Food Dudes; and rewards, which are small prizes which incentivise the school children to take part and eat the fruit and vegetables over a number of days.

Through the programme fruit and vegetable portions are provided to primary school children over an intervention period of just 16 consecutive school days, which is called phase 1 of the programme. The graph, which is my opening statement, shows the current range of produce currently being provided to children in primary schools.

Supporting materials include consumption diaries, a DVD of the Food Dude superheroes and some prizes, and there is a graph of these in my opening statement which the committee has. Certificates and school room wall charts are also provided to maintain fruit and vegetable consumption in the longer term. After the initial 16 days of produce delivery, phase 2 of the programme commences, which sees the focus switch specifically to the home and this runs for a number of weeks. This is where the parents become heavily involved. It sees children bringing in their own fruit and vegetable portions from home in specially provided Food Dudes lunchboxes which are distributed at the end of phase 1, the first 16 days of the programme.

The Food Dudes Boost programme was introduced in 2015. It maintains all the key elements of the original programme but uses fewer rewards and has a stronger focus on the junior cycle - that is, the new children coming into the school - ensuring that the programme can reach more children in a school year. How the programme is implemented in schools is detailed in my written statement to the committee, which was forwarded to it.

The Food Dudes programme has been evaluated a number of times. All evaluations showed that the Food Dudes programme effectively increased fruit and vegetables consumption among its target group and that a sustained pattern of eating more fruit and vegetables was established among participating school children. The most recent evaluation was carried out in 2016 by an expert team from UCD and evaluated the long-term impact of the programme on schools that participated in the programme as far back as 2010 and 2011. The results showed that the number of senior pupils bringing and consuming fruit and vegetables, remained significantly higher than before the Food Dudes intervention back in 2010 and 2011.

An interesting finding that emerged from the evaluation is that consumption rates were high both at baseline but remained high at follow-up when increased portions were brought. This suggests that the majority of children ate what was provided in their lunchboxes even when additional portions of fruit and vegetables were provided at follow-up. This underpins and highlights the importance of parental influence on children's eating practices in school.

As part of the EU development of a single school scheme, the Department of Agriculture, Food and the Marine has submitted a six-year strategy to the EU for delivering Food Dudes through the EU school scheme. The strategy includes a period of pilot testing over the next two school years of some new elements and activities that might supplement the core elements of Food Dudes, which are primarily based around the consumption of produce. In future years, this will include activities such as gardening, healthy eating days or weeks and project work on healthy eating around online activities, sport-linked activities, etc. It is envisaged that the additional aspects will be particularly relevant to senior class children. The prime motivation and criterion of success will remain the increased consumption of fruit and vegetables.

Chairman: Thank you very much, Mr. Neary.

I take this opportunity to welcome our other contributors this morning - Ms Aidine O'Reilly, managing director of Real Nation, and Mr. D.O. O'Connor, deputy managing director and director of business development at Laya Healthcare, to discuss Super Troopers with Laya Healthcare. Before I ask the witnesses to make their joint opening statement, I am required to read the following, which these witnesses will have missed. In accordance with procedure, I draw witnesses' attention to the fact that by virtue of section 17(2)(*l*) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of evidence they give to this committee. However, if they are directed by the committee to cease giving evidence in relation to a particular matter and they continue to so do, they are entitled thereafter only to a qualified privilege in

respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise nor make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable.

Witnesses might take the opportunity to ensure that their mobile phones are off because otherwise they might interfere with our sound system and prevent accurate reporting of our activities. I thank the witnesses very much for coming in and facilitating a single session rather than two separate sessions. I invite them to make their joint opening statements.

Ms Aidine O'Reilly: I thank the Chairman and the joint committee for this opportunity to discuss tackling childhood obesity. I am a former teacher and Real Nation is a company of former teachers, project managers, event managers and designers. We design and run educational programmes. We apply psychological principles and learning constructs in these programmes to effect behavioural change. We developed Super Troopers in response to reports that only one in five Irish children met the World Health Organization recommended daily guideline of 60 minutes of activity per day. As former teachers, we inherently knew that a simple premise was being overlooked in schools, namely, that physical education was not being used as homework. We considered this to be a missed opportunity and devised an holistic healthy homework programme which was designed to be easy for teachers to implement and children to follow and in which the whole family could get involved. The programme is underpinned by prompting or nudge theory and the content is centred on the three pillars that are important in obesity prevention, namely, physical activity, well-being and nutrition. We knew Laya Healthcare would be the perfect partner for this initiative. From the outset, the company has demonstrated considerable commitment and passion and been instrumental in helping us to evolve and grow the programme in the past four years.

Mr. D.O. O'Connor: At Laya Healthcare we believe in the importance of instilling healthier habits at a younger age. As a dad, I know the challenges at meal times in the use of technology such as tablets. By embedding healthy attitudes towards nutrition and fitness among families, we will help to combat the challenges of childhood obesity which will ultimately lead to a healthier adult population in the future. Super Troopers is a programme that encourages children and their families to treat health homework with the same importance as traditional homework. By participating in the programme, kids and their families become more active and learn about healthy lifestyles. It is easy for schools to take part. They simply sign up and all materials and literature are provided free of charge.

Ms Aidine O'Reilly: Materials include activity journals, family wall charts and a teacher's guide. The journals contain fun, short activities that prompt children to get moving for at least ten or 15 minutes at a time. This will build towards the recommended 60 minutes of movement each day. Schools are also supported through a team of project officers who help and encourage their implementation of the programme throughout the year. The activities are fun, which means that children will want to repeat them and, therefore, keep moving for longer. They are also encouraged to use the journals to record other activities in which they engage each day, for example, swimming, football or dancing, which help to meet the daily activity target. The journals also contain encouraging messages, mindfulness challenges and extra tips on looking after overall health such as getting enough sleep, drinking enough water and guidelines on healthy eating. The journals are differentiated for two age levels, junior and senior, and encourage progression in order that children and their families will feel a sense of achievement. Once completed, certificates can be downloaded from the Super Troopers website.

Mr. D.O. O'Connor: When we launched Super Troopers four years ago, approximately 10% of all primary schools took part in a pilot programme. The programme has evolved in the intervening years to the point where almost 250,000 children in 1,500 schools, 15,000 teachers and 162,000 families are taking part. We know that Super Troopers works. Independent research carried out by the health psychologist Professor David Hevey from Trinity College Dublin has found that the programme has been successful in improving healthy behaviours among families. I will briefly outline some of the research findings. We can share the findings of much more research with members, if they wish. It found that 93% of parents had confirmed an increase in children's daily activity levels; 85% of parents had observed increased physical activity at home; 75% of parents had indicated that their child spoke more about his or her feelings; 63% of parents had indicated that their children were eating more fruit and vegetables; and 86% of teachers and 78% of parents had indicated that they would recommend the programme. Almost half of primary schools take part in Super Troopers and our ambition is to extend the programme to all primary schools. We hope we have given members a sense of what it entails and will be pleased to answer their questions.

Chairman: I thank Mr. O'Connor and Ms O'Reilly for their joint opening statement. I also thank the other delegates for their contributions. I invite Senator Catherine Noone to commence the question and answer session.

Senator Catherine Noone: I thank the delegates for attending and the work they are doing. While I found Dr. McCrory's presentation fascinating and applaud him for the work he does, having worked on the issue of obesity for some years, it is my view that it is only now gaining some traction and being taken seriously. That is unfortunate because it has been evident for ten or 15 years that this problem, which is horrifying, has been coming down the tracks. Dr. McCrory has indicated that when both parents are overweight or obese, their perception of how their child is doing is altered. I believe the same applies to society at large in the sense that it no longer views overweight as overweight. I ask Dr. McCrory to comment.

The point made about breastfeeding is important. Dr. McCrory has recommended five helpful steps. How does he define "political commitment"? A series of measures have been announced. Is more funding needed?

Dr. Cathal McCrory: Funding is essential because while we can give a political commitment to tackle an issue and prioritise it, unless we set targets to achieve an objective and establish a means of evaluating or assessing progress, the targets will be missed.

Senator Catherine Noone: Do we not have targets? I am not sure if it is fair to make that argument.

Dr. Cathal McCrory: No, I do not believe targets are absent. The recent Healthy Ireland framework, for example, suggested targets for reducing the rate of childhood obesity by, I believe, 0.5% per annum and socioeconomic inequalities by 10% per annum. However, we must then ask how we measure the success of these programmes and ensure progress will be sustained.

Senator Catherine Noone: Precisely.

Dr. Cathal McCrory: It requires a commitment not only to achieve the targets set but also to evaluate them again in five years' time. Even if we have intervention programmes and see some changes in behaviour, will the changes be sustained over a long period at the population

level?

Senator Catherine Noone: It took a generation and a half, perhaps two, to reach this point. I was involved in a report produced by the British-Irish Parliamentary Assembly. We visited Amsterdam because the Netherlands was ahead of us in the sense that only one in five Dutch children was heading in the direction Irish children were heading. The big issue is patience and knowing that the problem will take time to fix. No more than with weight loss, unless one sees results, it takes great perseverance to continue.

On Dr. McCrory's recommendation that a national screening programme for body mass index, BMI, and weight be introduced, does free general practitioner care for children aged under six years not present a perfect opportunity to do it? Does Dr. McCrory have a sense that it is being done in the way it should among general practitioners? Perhaps he cannot answer that question. Are we adopting the typical Irish way of not wanting to face facts? General practitioners work hard and are often overworked. They do a great job and I do not want to be negative about them, but do they have the wherewithal in the current framework to assess a child properly at two or three junctures? Should we place an onus or responsibility on them to inform parents if their child is heading in a particular direction and that the problem needs to be sorted out?

Dr. Cathal McCrory: I spoke to a few general practitioners who gave me candid feedback on this issue. Many of them told me that they were simply too busy to do this work in their clinics and that it took time to measure patients. The second issue is that they find it difficult to challenge parents about the weight of their children.

Senator Catherine Noone: Is that not the key issue?

Dr. Cathal McCrory: There is a fear of stigmatisation. People are fearful of the word "obese" and parents fear being told that their child is obese. It is sometimes tricky to relay this information to parents. The best way to achieve it is to carry out an annual assessment through schools as part of a public health visit or something similar. At least then we could say there was time to do it in the school environment and that everyone would be measured. If it were done through general practice, some children might attend their general practitioner three or four times per annum, while others might attend only once or not at all, which means that we might not see them and would not know how they were progressing. I work with datasets from other countries. In Portugal, for example, a child is measured every time he or she visits a general practitioner. As a result, the dataset I have for Portugal can show 21 measurements of a child's BMI between birth and two or three years of age. It is quite phenomenal how much they monitor the children. However, the schools are the way to do this.

Senator Catherine Noone: That is interesting. I was a big proponent of the sugar tax and I hope it will have the intended results. Much of the efficacy of the tax is seen in the fact that companies started to reformulate their products well in advance of it being implemented. I heard somebody from the beverage associations mentioning that as part of his argument that the sugar tax is a bad idea, but I believe he was making the point for the tax. Based on his data and knowledge of the area, does Dr. McCrory think we should extend it to confectionary and the high-fat and high-sugar foods that the body needs to make it obese?

Dr. Cathal McCrory: I welcome the introduction of the sugar tax. The international evidence is mixed on how efficacious it is, but there appears to be a relationship between increasing cost and reduced demand for these items. That is only one way to approach the problem.

Senator Catherine Noone: Of course. I do not believe it is the only show in town. Dr. McCrory need not worry about that.

Dr. Cathal McCrory: I understand that. I am a psychologist by background. There are two ways of approaching behaviour - one can punish bad behaviour or incentivise good behaviour. With regard to incentivising good behaviour, we must do things to encourage people. If we discourage consumption of energy-dense foods that is one strand, but we also must increase physical activity and promote interventions that allow people to eat a healthy diet.

Senator Catherine Noone: That is a good segue for a few brief points to our other guests. It is a no-brainer for Laya Healthcare to be involved in schemes such as these and I compliment it on that. I did so publicly four years ago when it was introduced. It is fantastic, as is the work being done with the Food Dudes programme. They are similar. Is there anything to be said for that being rolled out through the Department of Education and Skills? Obviously, there are many different players in this space so I do not know which of our guests will wish to comment on that. They are in many schools, although I am not sure of the extent to which Bord Bia is managing to infiltrate the system. As in other areas, there are many protagonists. Do we need to centralise it from the Department of Education and Skills?

Mr. D.O. O'Connor: There are definitely benefits from centralising it. The challenge is that there are many people doing slightly different things, but many of them are very much aligned. I listened to Dr. McCrory. The Super Troopers programme is not just about tackling childhood obesity, it is about education and changing habits. It is also about involving families and parents. If one educates children about nutrition, food and exercise and they go back to the home environment where it is not understood or there is no participation, it will not work.

Senator Catherine Noone: It is from a health perspective rather than an obesity perspective.

Mr. D.O. O'Connor: That is correct. Currently we have a health homework journal that is inserted into the homework journal. Could we have a standard homework journal that includes health in it and is rolled out to all the schools, for example? It could be issued by the Department of Education and Skills and every school would use the same one, but it would be intrinsically included in the homework journal so it would become part of the conversation all the time.

Senator Catherine Noone: That is interesting.

Mr. Mike Neary: I will comment from the Food Dudes perspective. I will talk about the penetration first. The programme has very significant penetration. The national roll-out started in 2007 and was completed in 2015. It went to 98% of the schools in the country and approximately 475,000 school children. In 2015 we upgraded the programme to what was called the Food Dudes Boost programme and by the end of this school year in 2018 we will have covered nearly 1 million school children and had 6,000 school interactions. The coverage is significant. Our next step in the programme over the coming three years is to look at what we call a maintenance programme where once a school joins it stays in the programme unless it wishes to leave. The aim is to have 2,100 schools in the programme on an ongoing basis and approximately 300,000 children.

Senator Catherine Noone: Are food pyramids and the like used as part of the programme? I have serious doubts about the food pyramid currently being used in Ireland.

Mr. Mike Neary: The big focus for us is on the consumption and the tasting. I mentioned

the three Rs - the basis of the programme. There are accompanying measures around the tasting of the produce to encourage children to eat. It is about having super heroes to look up to and messaging around that. Part of the message the superheroes give is about healthy eating, energy and sport. It is not too scientific. It is fun and, as Dr. McCrory said, there is a reward. If one tastes one's product, one gets a reward.

Senator Catherine Noone: What is the reward, as a matter of interest?

Mr. Mike Neary: I do not know if the Senator received a copy of our opening statement.

Senator Catherine Noone: I saw it.

Mr. Mike Neary: We give drinking bottles and school materials such as pencils and erasers-----

Senator Catherine Noone: They are not food-related.

Mr. Mike Neary: We also give pedometers. We have them set up whereby if it is for exercise there is a drinking bottle when getting exercise and a pedometer so one can measure the number of steps one takes. The lunch box is for healthy eating. The idea of the reward is to encourage healthy eating practice if one uses the rewards.

Senator Catherine Noone: I have a final comment and I am sorry for taking up so much time. I have to leave shortly. Holland uses glass bottles of a type that can be engraved by children. I do not know if they are fully glass but obviously they are safe. It is teaching children how to engrave them and it is making water cool. It has been amazingly effective in that country. That is in the report of the British-Irish Parliamentary Assembly, which I can forward to the witnesses. It would be an interesting report for anybody working in this area because it gives an outward perspective. In the British-Irish Parliamentary Assembly we normally speak to each other about what is happening in the different jurisdictions but I said there was no point in us talking to each other about this because we really do not know what we are doing about it in the British Isles. However, that was one interesting thing which might be considered.

Mr. Mike Neary: We continue to look at the rewards to ensure they are effective and work. We do that on an ongoing basis. I wish to make another brief point about the funding. Currently, we use the Food Dudes programme to deliver the EU school fruit and vegetables scheme in Ireland. There are significant funds at EU level. Last year, 42% of the cost of the programme was provided through the European Union and 58% came from national funds. For example, all the fruit and vegetables delivered and provided to school children are 100% funded by the European Union. We are accessing that funding but also making sure that the programme we use it for is effective and delivers. That also allows us to cover more schools and more children and to build momentum around that.

The final point is about working with other groups. As part of our consultations on the programme we also liaise with the Department of Health and the Department of Education and Skills. When we review the programme each year we take views from that group. We are also working closely with Healthy Ireland initiatives in terms of trying to build up collaboration with that network. A number of these initiatives work together but more and more collaboration is starting to happen. However, there needs to be much more and obviously we must be part of that.

Senator Catherine Noone: It has to be from the bottom up, the top down and from the

sides in. It is every angle.

Mr. Mike Neary: There is another point to make. I mentioned earlier the role parents have to play.

Senator Catherine Noone: Exactly.

Mr. Mike Neary: We have carried out evaluations of the Food Dudes programme, particularly phase 2, which runs for a number of weeks, and of getting the parents to be involved with children and to provide the products to be brought to the school. Parents have said in our surveys that they have increased their own consumption because they have to fill the lunch box to be brought to the school. It is not just what is happening in the school but trying to push that back into the home.

Senator Catherine Noone: Is there mostly good buy-in from parents?

Mr. Mike Neary: It has been very good. Our surveys show 95% to 97%. We survey the teachers and the parents who are participating. Aside from a small few, most of them feel it is very encouraging.

Chairman: Is Bord Bia involved in primary schools only or is it both primary and secondary schools?

Mr. Mike Neary: It is the primary school. The view would be that if one can make the behaviour change effective by the time children are 12 or 13 years of age and going to secondary school, that is the benefit.

Chairman: What about Laya Healthcare?

Ms Aidine O'Reilly: It is a primary programme.

Chairman: I wish to add to Senator Noone's remarks. We have talked about vending machines in schools previously. I hope they are rare at primary level. However, they are not rare at secondary level. I was on the boards of a couple of schools and they were in one of them. Have you come across that or have you heard anecdotally of vending machines in secondary schools?

Ms Aidine O'Reilly: They are on the decrease. Schools are becoming more aware as healthy eating policies are becoming the norm for school boards. They are not on the increase. There are machines there. Anecdotally and based on the schools we visit, there are still quite a number of them but they are not on the increase.

Mr. Mike Neary: It is certainly not something that would have come across our radar in primary schools. It is not something we have looked at as part of the programme. When we carry out the evaluations we look at the consumption of produce and at the same time the snack consumption. It is not just what might be in the school but what might be brought to the school in the lunch boxes. By and large, if one gets the produce piece up one finds the snack that is brought in tends to go the other way. There is a correlation between the two.

Chairman: Does Dr. McCrory have a view on the presence of vending machines at third level? I am pretty sure they are in Trinity as I have wandered through the various access and egress points over the years.

Dr. Cathal McCrory: There are vending machines in Trinity. I guess the view there is that

individuals, when they reach a certain age, are perfectly entitled to eat whatever they wish to eat.

Chairman: Yes.

Dr. Cathal McCrory: The vending machines are not the problem. It is what they dispense that is the issue.

Senator Catherine Noone: Yes.

Dr. Cathal McCrory: One can send out a powerful signal to someone by stocking vending machines with wholegrains, nuts, fruit and vegetables. I have visited other European countries where I have seen vending machines that are not populated with crisps, energy bars and chocolate bars but a variety of different items to show people the importance of a balanced diet.

Chairman: It would be very interesting to learn how successful such an initiative has been. It is all well and good saying, "Let us provide nuts, fruit and similar items that are healthy in moderation". We must research how often such items are supplied in vending machines.

Dr. Cathal McCrory: Yes.

Chairman: Clearly, a vending machine supplying healthier alternatives will not be availed of as often as a regular vending machine that only stocks confectionery. We must research whether the healthier alternative is sustainable. I thank Dr. McCrory for his comments. I apologise to Deputy Funchion for taking a bit of her time and ask her to commence.

Deputy Kathleen Funchion: Much of this problem is due to a lack of finance for families. The reality is that it is easier and cheaper to eat badly. It is much easier to buy a frozen pizza from Lidl than it is to buy fresh vegetables and fruit. Also, in rural areas there might be only one local shop so options are limited. We also need to consider how snack-type foods are marketed. When one enters any garage one will see signs claiming two for the price of one or two for €1 when it comes to confectionery. It takes more effort to find healthy snacks and, unfortunately, they are less appealing, particularly to children. Healthy snacks are always more expensive. We need to address these matters. It is all well and good introducing a sugar tax. The reality is people do not want to eat badly but one's finances, etc. are limited if one has a large family and one resorts to convenience foods.

Eating healthily comes down to the approach adopted by the family and a parent or parents. I have children and I know about the food programmes rolled out in schools called Super Troopers and Food Dudes. I am lucky that the school my children attend is so strict about implementing a healthy eating policy that children can never bring in any type of a snack. That situation can be frustrating when one is trying to think of a new item for children to eat at lunchtime in school. My children tell me that they are not allowed to eat snacks, which shows one can change the mentality of children.

I suggest that healthy eating be promoted as part of antenatal care. The majority of people will avail of the public health system for maternity services and I know the service is extremely overstretched at present. One is offered antenatal classes during the first pregnancy. I suggest that a mother's well-being is promoted and that women are provided with information on the best foods to consume during pregnancy, when the baby is born and at all the various stages. When parents bring their toddler into a shop it is easier to buy him or her a packet of snacks to pacify the child rather than buy fruit. Most of this issue concerns trying to change the mindset.

People do not see the long-term damage. Obviously the more sugar one has the more people will want it and all of the rest. I suggest that a programme is run in conjunction with antenatal classes. A little of that information is imparted at checks performed by public health nurses but it is very limited. I suggest that the nutritional aspect of the scheme is increased. I am interested in hearing the opinions of the witnesses on those areas. If my suggestion was implemented then people would benefit from an early age. If schools continue the good work with the healthy lunch policy then everyone will have a better chance of being healthy.

Mr. Mike Neary: I want to comment on the cost of food, which is an issue that was discussed outside of this meeting a minute ago.

I work very closely with the horticultural industry. One thing that we often argue about is the cost of produce on supermarket shelves that has got very cheap in some ways, particularly in terms of a local supply basis. One of the big challenges is a lack of cooking skills, which we have seen in some research. This issue is more complex. One must have the confidence to buy produce, know how to prepare it, have the time to prepare it and to cook same. As well as the financial side, we can do more. From a schools perspective, we could teach home economics in schools thus improving cooking skills.

Deputy Kathleen Funchion: Yes.

Mr. Mike Neary: An ability to cook is part of the overall jigsaw, which needs to be addressed.

Deputy Denise Mitchell: I thank the witnesses for their presentations.

The school programmes, Super Troopers and Food Dudes, are fantastic. I know them because I have three young children. I dread when the charts are brought home but my children love hanging them on the wall and keeping a writing record of their physical activity and healthy eating. However, one of my children is in sixth class and she finds the charts less relevant. We all know that older children in sixth class think they know it all and feel more grown up because they will soon head off to secondary schools. Can the programmes be updated for the older participants?

The Food Dudes programmes is fantastic. I have seen the excitement etched on my children's faces when they get their lunchboxes, etc. I agree with Deputy Funchion that when parents experience the scheme it leaves them more conscious of the types of food they give their children. I wish the organisers of both schemes the best of luck.

I have a few questions for Dr. McCrory. Can he explain why overweight parents are less likely to recognise when their children are overweight? I find that a strange suggestion. My weight has fluctuated but that has left me more conscious of the weight of my children. He said in his opening statement: "Women from lower SES backgrounds are 80% less likely to breastfeed." Why?

Dr. McCrory recommended that the Government implement a national screening programme. I know, as a parent, that sometimes children are conscious of their weight and they may already be anxious about their weight. Would a screening programme place greater pressure on children? I have noticed that my 12-year old daughter is very conscious of size and weight. Would a screening programme add to people's anxieties? How does Dr. McCrory envisage the scheme being rolled out?

Dr. Cathal McCrory: I will answer the questions in order. In terms of parents not recognising overweight or obesity in their children, I think what has happened is when one tends to get a shift to the right in BMI distribution, and that has happened at a societal level so, on average, we, as a society, are heavier now than we were ten years ago. It is also most likely that we, as a society, will be heavier again in another ten years as weight gain continues to go unchecked. As people start to gain weight they stop seeing it. If all of one's peers are moving in the same direction one just stops seeing it. As I said, 54% of parents of overweight children could not see it in their children. Let us remember that I am referring to objective measurements that used the body mass index, BMI. The parents thought their children were about the right weight. Also, of the 20% of children who were obese, their parents said they were about the right weight. That suggests that the parents did not recognise the problem in their children. Possibly, that is because one tends to find that the nutrients for children and parents correlate, for the most part. Also, overweight parents might not like to think of themselves as overweight and, therefore, might be less likely to see the same in their children. I gleaned that information from the research conducted on almost 10,000 children as part of the Growing Up in Ireland study.

In terms of breastfeeding, the economic inequalities are stark. Ireland is very bad when it comes to breastfeeding in general, and that applies right across society. We talked about the setting of targets and missing targets. In 2005, a national breastfeeding strategy was developed that sought to increase breastfeeding rates by 2% per annum and, within disadvantaged socio-economic groups, we sought to increase it by 4% per annum. Who has evaluated the success of those goals? I can tell the committee, from work conducted by Professor Anne Nolan in the Economic and Social Research Institute, ESRI, that the increase in the incidence of breastfeeding in this country has been driven mostly by migrant mothers who are much more likely to breastfeed. By the shift to the right, in terms of the age at which mothers are having their first children, older mothers are more likely to breastfeed.

Chairman: Why do so few women choose to breastfeed?

Dr. Cathal McCrory: Part of the reason is a lack of knowledge.

Deputy Kathleen Funchion: Another reason is that there is zero support at the hospital level given to first-time mothers. If one is struggling to cope with a new baby one may think breastfeeding is one option one can dispense with, and choose to bottle feed as others will find it easier to help with that. Unfortunately, that is the reality.

Deputy Denise Mitchell: Yes.

Dr. Cathal McCrory: Breastfeeding is stigmatised. Thankfully, society is losing this but we need to continue to challenge the idea that there is something wrong with breastfeeding one's child. Breastfeeding is normative. We need to promote the message that breastfeeding is normative. The evidence seems to suggest that breastfeeding is best for the child not just in the context of obesity. It reduces the risk of respiratory infections and so on. A bond develops with the mother and child as a result of breastfeeding. The evidence shows that if the grandmother of the child has breastfed, the mother is 237% more likely to breastfeed. That reinforces the importance of the knowledge. It is having the knowledge within families and we need to develop that. The baby-friendly hospitals initiative, or at least, the work we did with Growing Up in Ireland, suggested that by the time a woman left hospital, if she was in a baby-friendly hospital, she was more likely to breastfeed at this juncture. It was not sustained so that shows that we need to continue to support breastfeeding beyond that initial 48 or 72-hour window until a lady is discharged from hospital. It was with concern that I noted that the baby-friendly hospital

initiative has ceased. Funding for that has been withdrawn. I know there are steps towards this but we need to urgently consider implementing a new breastfeeding framework to encourage breastfeeding in this country.

Deputy Denise Mitchell: When I had my daughter in 2005, there was a big push on breastfeeding. I remember how there was a breastfeeding clinic in the Rotunda that was so helpful to mothers starting off. There were breastfeeding support groups when women came out into the community and the community mothers scheme whose members used to pop in. It is important that someone has support. One of the big issues is that we must get rid of the stigma and make facilities available. Nobody is asking for shops to do everything. It is just about providing a quiet place. Some department stores in town have a chair and a quiet place for women to feed their babies. We need to address that because it is so important.

Dr. Cathal McCrory: The final point was about the success of the national screening programme. This has to do with the idea of parents not recognising their children are overweight. If we have a national screening programme where every September when the child arrives back in school, they have their BMI and waist circumference, which is a measure of central adiposity, measured, it is almost like a report card. One can see what has been happening and how the child has been developing. I agree with the concern about stigmatising children but the idea was that one would raise the matter with the parents.

Deputy Denise Mitchell: What would one do then? A teacher would probably raise it if they had concerns because a child was struggling during PE. How can it be taken to the next level? Is it a case of saying to parents "excuse me, Ms Mitchell, your children are..." and hoping for the best or will we supply the parents with advice on healthy eating and exercise regimes?

Dr. Cathal McCrory: Absolutely, the idea is that this would be part of a multifaceted approach. I do not think there is any single silver bullet. I wish there was as it would be a lot cheaper but there is none. This must be accompanied by health promotion literature and the realisation that some lower-income families simply cannot afford a nutrient-dense diet. They cannot afford a nutritionally balanced diet and we must be aware of that. Sometimes instructing people about what and how they should eat does not work. When one blames people, it does not work. When one enables people, tells them they can eat better and healthier and shows them how they can succeed in doing so, it works much better than blaming them.

Ms Aidine O'Reilly: I thank Deputy Mitchell for her compliment about Super Troopers. I agree with her that it has always been in the plan to have a junior, intermediate and senior journal. Unfortunately, the budget is not there at the moment but it is definitely something where we have tons of ideas about what we could do for fifth and sixth class that would be more age-appropriate. In the teachers' guidelines, we ask teachers to pitch up the senior materials but it is something about which we would agree with the Deputy.

As a former teacher, I think there would be push back on the idea of an annual weighing, measurement of BMI and a waist check of children. It would have to be done very sensitively because most children know they are overweight. Most adults would know they are also overweight. First of all, it is awkward to bring this knowledge to a parent's attention. Often, a teacher is met with "so what?" and "what now?" so that is an issue. It would need to be done sensitively and be very normative and very much part of the school framework so that this is just something every school does, nobody is being singled out and there is no need for any child to feel uncomfortable, worry about it weeks or days beforehand and be embarrassed in front of their peers.

Deputy Tom Neville: I thank the witnesses for coming here today. I was really taken aback when they spoke about the stigma around breastfeeding. Could they elaborate on the reasons for that? I am reading bits and pieces about it such as isolation, the fear of continued isolation and not being able to go out. It is a subject about which I do not have knowledge and I work a lot in the mental health area. I put my hands up, which is why I asked the question.

I agree about foods. I can only speak for myself. I do not have kids but even when I walk into a store and try to find a healthy snack without sugar or less sugar, I find it extremely difficult. I am searching for ten or 15 minutes and I am not a kid. I am not a parent with the weight of three or four kids hanging off them, having to get to school or dealing with lunch boxes or whatever it is - all those weights on top on them. Frequently, it is about convenience. It is about trying to get something fast and convenient. Much of that is around education. It is also about the market. The market just does not have it. I go into stores that just do not have it. They are not providing it. In respect of Deputy Funchion's point, probably lower-income parents in particular walk in looking for the best value for money for their budget when they have three kids. Number one, it is legal. It is in the shops so it must be okay in some way. It is being bought. It is not cigarettes or alcohol. It is food. That is probably the psychology behind it. The second thing is that for a certain amount of money, a person can get "X" amount of it, which is great because it will feed so many people over so many days and can be preserved because it will last in a fridge or freezer as opposed to fresh fruit and vegetables, which are quite perishable and go off. The time it takes to prepare food is another factor. All these weights are bearing down on people when they are making their decisions so it goes back to consumer behaviour.

Have there been any studies around consumer behaviour and how that can be educated or altered when people make these decisions in the supermarket or shop given all the added pressures they face? This is not coming from the days of old. One could ask whether this is about the mollycoddled generation and how everything has been done for them. It is not that. It is just that the pressure is different. Pressures are fluid so the environment changes. What was there 30 or 40 years ago was very different from the pressures that are there today. They had pressures as well but they were different types of pressures. Are there studies around that because I do not know about putting a sugar tax on confectionery, any of these types of foods or processed foods like burgers because everything will rise together because there is not enough choice out there? This will not help less well-off people. I am thinking about less well-off or vulnerable families who have to make these quick decisions but who do not have that space to do it. I would like to hear the opinions of the witnesses or whether there are any studies around that.

Dr. Cathal McCrory: I can begin. One of the most controversial subjects at the moment is whether a healthier diet costs more than an unhealthy one. People have debated whether a healthy diet has to cost more than an unhealthy one. A meta-analysis of 27 studies across ten countries by researchers from Harvard University in 2013 showed that the cost of a healthy diet was $1.50 more per day than an unhealthy diet. If one scales that up to an individual over a year, it adds up to $550 and if one scales that up to two parents with two children, all of a sudden, one is talking about a difference of $2,000 per annum in terms of eating a healthy diet. It costs more to eat a healthy diet. I am aware that other people have argued that it does not cost more, but the available evidence seems to suggest that it does. An evaluation exercise, as carried out by two other researchers called Darmon and Drewnowski, looked at the price of all foods in France and put the numbers into a computer system. They looked at the recommendations for a nutritionally-balanced diet and used a technique called linear programming to generate a nutritional diet for this amount of food. They found that €3.50 per day was the lowest amount of money that could be spent while ensuring a nutritionally-balanced diet. When they

compared that to what people in France are spending on food in low-income households, the most they could afford was €2.50. The programme could not crunch enough to allow them a balanced diet at that price. We speak regularly about how we can get people to eat healthy diets, but we have to recognise that cost is a huge factor. Another study conducted by *safe*food in 2010-11 suggested that for people on welfare budgets, to eat a healthy diet costs approximately 25% of their income, while they spent 19% to 20% of their income on food. It does cost more, and we need to be aware of that.

In many low socio-economic status, SES, households, food is considered to be a flexible part of the budget. If one has utility bills, rent and car bills, what gives? Sometimes the food budget gives a little bit more because it is considered more flexible, and people might end up making poorer choices in terms of their diet. They might make sense to the person because he or she has a restricted budget available, but they might not make sense to a more affluent person who tells the poorer person what to eat. We need to be aware of the context in which that advice is given.

Research from the Growing Up in Ireland study shows that lower SES households are located further from supermarkets. We know that convenience stores offer restricted choice. Going into a shop to look for a healthy snack was mentioned. Convenience shops tend to stock fewer products, with more energy-intense products.

Deputy Tom Neville: I do not want any misinformation to go out. I am not talking about convenience stores, but rather convenience food. People walk in and make a decision on the fly; they do not have two hours to go around a shop and choose things. I am talking about convenience and good food together. I am not talking about convenience stores versus supermarkets. The same problem exists in the major supermarkets.

Dr. Cathal McCrory: The convenience stores stock fewer products, and they are more likely to stock more energy-dense products and less products with fruit and vegetables. They also tend to be more expensive. All of these things contribute to worse dietary intakes among the lower SES groups.

Mr. Mike Neary: In terms of convenience, all of the consumer trends we see in Bord Bia suggest that dashboard dining is very common. People have less time and they are going into shops and grabbing something quickly. Whether healthy food is at the top of their minds when they do this is the question. The grocery market in Ireland is worth about €10 billion a year, and €1.5 billion of that is spent on fresh produce. Bord Bia is most interested in the fruit and vegetable element of that. We are told to aim for a diet which includes five or seven portions of fruit and vegetables a day, and frozen vegetables or canned vegetables count towards that. It is probably cheaper than the fresh product and is more convenient. It comes down to choice and education; it is still possible to have a healthy diet at a low price, although perhaps not as low as would suit people.

We have seen a huge growth in the amount of washed, diced and prepared produce on the supermarket shelf now. This contrasts to the loose product in that one just opens the pack and the product can be used straight away. However, as Dr. McCrory says, it tends to be a little bit more expensive, so one pays for the convenience. The products are there, but it comes back to the consumer's wish to buy it. It comes down to education. It must be said it gets more difficult to change behaviour or habits as we get older. Can we change the habits at a young age, and try to carry that through life? That is a big challenge. It is a choice. People go into supermarkets and make a choice to select healthy, convenient products, with price also factored in. It will be

a challenge going forward. Many products available now are marketed as innovative products and many companies are bringing out health-related food products, be it gluten free, high in fibre or high in certain vitamins. That ties into the fact that consumers want a healthier diet, but it comes down to the convenience and affordability of same.

Deputy Tom Neville: I would use the word "knowledge" as opposed to "education". Education might be seen as too unachievable, whereas I would focus on turning this information into general knowledge. I will put my hand up and say that I used to eat food that I thought was good for me. However, things change, and I learned more and realised these things were not good for me.

Mr. Neary spoke about gluten-free diets, etc. It is not a matter of just telling people that certain things are not good for them. We have to tell them why certain foods are not good and explain the knock-on effects. The learning will kick in when there is a tangible connection to and understanding of the subject, as opposed to just baldly hearing that something is bad for a persons. Explanations can help. This is a massive area.

Chairman: Convenience food and dashboard dining are things that perhaps should be discussed more widely. I do not want to force a societal issue on one group of individuals, but I believe retailers have a role to play in this, in terms of trying to promote healthier eating. In the last committee hearing on obesity a number of weeks ago it was mentioned that one or two of the multiples, in my experience, had incredibly colourful displays of fresh produce, including fruit and vegetables, as one walks into their store as a rule. In order to enter the store one had to pass all of the fruit and vegetables. However, there was then a change of ownership and that policy changed and it was suddenly half the entrance, then it got smaller again. The fruit and vegetable display has got bigger again in recent months. The retailer might have a role to play during that three minutes a person has standing behind someone at a deli counter at lunchtime. Can they do something about the options that are displayed above one's head? In many bigger stores they are visual choices. Do the witnesses have a view on the retailers playing their part by offering visual choices that are actually healthy as opposed to a fridge display unit resplendent with all sorts of products that have tons of mayonnaise thrown in on top of them, as opposed to the things they have never tried that they might equally like. That is just one observation, on foot of what Deputy Neville had to say.

Dr. McCrory, at the outset of the conversation, remarked that 19% of children aged three are overweight and 6% are obese, which is a shocking statistic. I imagine that the Chairman of the Committee on Health ten years ago would have been greeted with a lower figure but one that was heading to the level we have now reached. Perhaps, as Dr. McCrory pointed out, we will have another report unless we arrest this issue now. It is very clear to me, given the programmes that the other guests today present to primary schools, that education is of absolute importance. As Deputy Neville has quite rightly said, knowledge via public awareness campaigns rather than just education is great at changing mindsets. That certainly worked for me. The witnesses referred to BMI. I worked out my own BMI. People probably would not guess it and it is not very healthy. My BMI is 28 because of my height. BMI does not work for me and never has because I have always been heavy and tall. For someone of an average height, however, BMI is a good barometer. Returning to the figure of 19%. As someone put it to me, a three year old does not come home from work at 6.15 p.m. and say "Feck it, I'll order a takeaway" and the three year old does not do the weekly shop. I am the father of a six year old and a four year old. It is parents who have ultimate responsibility in this area.

Bord Bia is funded by the State, whereas Laya is not. My view is that if this issue is to be

arrested, the State must pay for it. Senator Noone mentioned the sugar tax earlier. I would go further. I am not a big proponent of sugar tax but if we are going to do it, we should do it properly and also look at fatty produce, sugar-sweetened drinks and all the various things that we find convenient and hence consume in large volumes. I would also like to see the State subsidise, in equal measure, healthy food produce. We have already seen the effect of the tax on sugar-sweetened drinks. Outside one of the very first of these meetings, I mentioned the question of the sugar tax to the Minister for Finance. He told me it had been delayed but it was already having a fantastic effect because the manufacturers are all changing their formula. It is not about revenue raising but about changing mindsets. Nevertheless, if it is to raise revenue, whether it is €5 or €10 million, then we should put that into healthy eating, for example, the consumption of vegetables. We could subsidise prepared convenience vegetables that have been washed, diced, sliced and so on. Then a diced carrot could be similar in price to, if not cheaper than, a carrot. The one that has been diced would obviously have been handled and chopped so there are costs associated with that. Although ring-fencing is a much-used term in politics but rarely put into effect, I would love to see the moneys from the sugar tax ring-fenced for the production of healthy convenience food or towards subsidising it.

I turn now to the healthy programmes run by the Department of Education and Skills. The Departments of Agriculture, Food and the Marine and Education and Skills may part fund these and the witnesses noted that 40% of the funding comes from the EU. Is there an educational programme in the Department of Education and Skills specifically targeted at primary school-children? Are the witnesses part of that or is it an overarching Government approach which has Bord Bia working on it?

Mr. Mike Neary: The programme is our way of implementing the European school fruit and vegetable scheme, which comes under the remit of the Department of Agriculture, Food and the Marine. Obesity is not the point where we, as an organisation, would start from, but rather trying to increase the consumption of fresh produce, that is, fruit and vegetables. It just happens that it is complementary to the issue of tackling obesity because it is a key part of a balanced, healthy diet. We are using the funding available from Europe and nationally to double the benefit. We have closely consulted the Department of Health and other Departments in how we shape and develop the programme and how it can evolve and be built in order that it is integrated. We are also part of the Healthy Ireland initiative network. We are one part of the overall effort. On an everyday basis, our starting point is in promoting produce in the context of where it will have that benefit.

Funding is critical. None of these schemes is cheap to run, but one must look down the road at the costs if these schemes were not in place. Close to 50% of the funding comes from a European fund. That is €150 million and it goes towards the school scheme, which is a European initiative, and another €100 million goes into the milk scheme. We need to make the programme as effective as possible, get it into as many schools as possible and ensure that as many children as possible are exposed to it on an ongoing basis. That is our key task. However, we do not do it in isolation. We do it with other entities, although we run and look after the programme exclusively.

Ms Aidine O'Reilly: The Department of Education and Skills's flagship programme in this area is the Active School flag, which operates in a similar way to the Green Schools flag. It is like an umbrella, where many other programmes could feed into getting an Active School flag which is flown outside and which denotes the school as being a healthy school. For example, if a school does Super Troopers or Food Dudes, that will go towards the award of an Active

School flag. They are in approximately 600 schools.

Mr. D.O. O'Connor: To return to Deputy Neville's point, it is not necessarily a socioeconomic issue. There are different challenges in each of the groups. Knowledge is critical. We also do a lot of this among adults where there is a slightly different approach. When we talk about the healthy diet, our approach is one of encouraging people to eat healthily two days a week, rather than seven days, or to encourage people to start off with one day a week, to choose brown bread over white or porridge over cereal. In middle class families, when a child who has his or her own money goes into a store to make a choice, we would encourage him or her to buy an apple or a banana rather than a bar of chocolate. The approach is about educating people about making those simple choices, giving them the power and knowledge to make those simple decisions and choose those habits. Returning to Senator Noone's point, it will take time. We have missed a generation in educating people about the importance of this and we have to do it bit by bit. There is only one way to eat an elephant, which is one bite at a time.

Deputy Sean Sherlock: I had to attend another committee to defend an amendment on an item of legislation, so I apologise if I repeat any earlier questions. I have read the submissions, which I found fascinating, and have listened to the witnesses. Will Dr. McCrory tell us about the cohort for Growing Up in Ireland?

Dr. Cathal McCrory: There are two cohorts in Growing Up in Ireland. There is an infant cohort of approximately 11,000 children, who were nine months old at the beginning and to whom the researchers returned when they were three years and five years and who researchers will return to at nine years. There is a childhood cohort to whom researchers first went to at nine years, then 13 years, 17 years and they are considering whether to return to them at 21 years.

Deputy Sean Sherlock: Is the programme funded entirely by the Health Research Board, HRB?

Dr. Cathal McCrory: I am totally funded by the HRB.

Deputy Sean Sherlock: Is Growing Up in Ireland funded in its entirety by HRB?

Dr. Cathal McCrory: I think that Growing Up in Ireland is part-funded by Government.

Deputy Sean Sherlock: It is a longitudinal study.

Dr. Cathal McCrory: Yes.

Deputy Sean Sherlock: Dr. McCrory said that 19% of children aged three are overweight and 6% are obese and that 50% of obese children will become obese adolescents. How do we disrupt the behaviour? What happens to the other 50% who do not become obese? Where do the two cohorts separate, one becoming obese and the other non-obese?

This committee's goal is to support anything that disrupts behaviour. Both programmes before us, Food Dudes and Super Troopers, are about behavioural change. How do we create Government policies that give effect to disrupting behaviour in a positive way?

Dr. Cathal McCrory: The figure of 50% of obese children becoming obese adolescents and 80% of obese adolescents becoming obese adults were not taken from Growing Up in Ireland study. They are based on a meta-analysis of 200,000 children across a series of countries and cohorts. It shows the importance of tackling this issue early. I would tackle it much earlier

than even the programmes in question which are great interventions for primary schoolchildren.

Deputy Sean Sherlock: I was going to come to that. My next question was going to be about the zero to three-year age category. Dr. McCrory spoke about breastfeeding and it being a disrupter of obesity in kids. Will he give me some sense of how we can disrupt behaviours at a much earlier age?

Deputy Tom Neville took the Chair.

Dr. Cathal McCrory: We have to get into homes. We have to work both within schools and homes. The evidence available internationally suggests either-or is not as effective as the two together. I refer to the interventions made here with Food Dudes and Super Troopers. There should also be an attempt to get into the home to affect parents' behaviour to make them aware of childhood overweight and obesity problems. Many are not even aware that there is a problem. We have to make them aware of their own overweight or obese status. As the Chairman said, he was not aware of his own BMI until he calculated it. It has to be a whole family unit intervention; therefore, it cannot be either-or.

Deputy Sean Sherlock: Some 54% of parents of overweight children and 20% of parents of obese children in the Growing Up in Ireland cohort reported that they were about the right weight for their height. Will Dr. McCrory help us to understand how it is possible to get into those houses? He made a specific reference to lower socio-economic groups having a greater propensity towards obesity. If children have already been involved in an early childhood scheme, a crèche and primary and post-primary education, how do we talk to or educate the parents? Are we talking about public health nurses having a role or direct intervention in primary healthcare services? Are we talking about resourcing such interventions to a greater extent or carrying out studies to a greater extent? Where does the intervention take place to disrupt behaviours in the zero to three-year age cohort?

Dr. Cathal McCrory: The intervention has to be multifaceted and identify a number of strands. If we really want to disrupt the trajectory, the first thing we have to do is get in when it is first identified that the mother is pregnant. When I speak to mothers who are pregnant, that is the stage when they want to do the utmost for their children. They are really thinking about this issue. I refer to the health promotion literature, advice and the direct supplementation of diet, in particular for low income groups.

The second aspect is breastfeeding the infant, for which there are a number of reasons. People have argued over why breastfeeding is protective against the development of obesity. Generally, the energy density of breast milk is much less than formula milk. Mothers who breastfeed also tend to delay the introduction of solid foods and we know that the introduction of solid foods before the age of about six months is also associated with an increase. We know that children who are breastfed also grow more slowly. The study I referenced in my submission shows that individuals who are bottlefed gain weight more quickly.

Deputy Sean Sherlock: The metrics Dr. McCrory has shown us create a picture that is - I am not saying it is dystopian - negative. If we are talking about a longitudinal societal scenario, for want of a better expression, the future does not look too bright. Is Dr. McCrory suggesting we have more public health nurses at the very early intervention stage and that their role be expanded? We all know what they do at the early childhood stage, but are we talking about greater public interventions and developing a cohort of public health nurses who would deal specifically with trying to disrupt that pattern? Does that make sense?

Deputy Alan Farrell took the Chair.

Dr. Cathal McCrory: Absolutely. It is all contingent on funding. When Deputy Sean Sherlock was not present, I talked about the baby-friendly hospital initiative. I was concerned when the funding for it was cut. We need to implement something urgently, but it all comes down to funding. People say to me all the time, as a public health advocate, "Cathal, you must understand this costs money." I respond by saying I do understand it costs money, but Professor Ivan Perry has told us that if we do not challenge the childhood obesity epidemic, he has a projected cost of about €1 billion if we do nothing. It would be cheaper, therefore, to do something. I know that involves an upfront commitment from the Government in the next few years, rather than being kicked down the line. The reality is that we will need increased numbers of public health nurses and visitations.

My wife gave birth 15 months ago to a little boy and had a visit from the public health nurse. My wife said the public health nurse was absolutely essential in continuing to breastfeed. She went to a group, which is important, as is the frequency. It was not just about the provision of support with breastfeeding techniques; it was also about the provision of support in considering how to raise the child and such matters as deferring the introduction of solid foods, etc., some of the things we know that are important to a child's growth later in life.

That is one way we can do something active to disrupt the trajectory. The best way to do it is always through interception and prevention, rather than remediation. When we arrive at a stage where a child is already overweight or obese, we are trying to remediate the problem and it becomes much more difficult. That is the multifaceted intervention that was mentioned. It involves increased physical activity, better diet and changing parents' purchasing habits, etc. It becomes more complicated further down the line.

Deputy Sean Sherlock: Dr. McCrory is in Trinity College Dublin, as is Professor David Hevey. Has Dr. McCrory spoken to him about the Laya Healthcare research?

Dr. Cathal McCrory: I have not. I am in Trinity College Dublin, but I am affiliated with the Irish Longitudinal Study on Aging, TILDA. I understand Professor Hevey is in the School of Psychology. I am in the School of Medicine.

Deputy Sean Sherlock: I am a former Minister of State with responsibility for research and a great believer in breaking down silos. We can see the effects of the research when we look at the translational elements of the Laya Healthcare and Super Troopers programmes. The metrics for the satisfaction levels under the Super Troopers programme probably somewhere map the GUI longitudinal study. When we, as a society, start breaking down silos and get two eminent researchers such as Dr. McCrory and Professor Hevey to work across platforms such as psychology and health, perhaps we might start to see the programmes have a greater translational effect. I thank Dr. McCrory for his interaction.

I have been reading the Super Troopers handbook which is mightily impressive. I have a little fellow at home who is almost ten months of age and look forward to engaging in the animal antics, doing the scissors jumps, the pasta dance, the magic numbers and taking part in the ball alley and potato races. It is about creating something that is about fun and subtle behavioural change. It is very positive. The statistics for take-up rates by schools speak for themselves. There were 330 primary schools in the pilot project; there are now 1,500 schools, with 238,000 children. If we, as policymakers, can do anything to help to have it fully translated into all schools, I ask Dr. McCrory to please contact us. It is a very worthy programme. Perhaps

we might kick the tyres a little more on the research Professor Hevey has conducted and then bring it back to the Government and especially the Department of Education and Skills and the Department of Health. I would love to see bodies such as Science Foundation Ireland putting more funding into this space to see if we can really disrupt the trajectory towards obesity. I do not need to tell Laya Healthcare how much it is costing by way of interventions every year. We all pay our subscriptions to the Layas and VHIs of this world. Our premia are increasing and this is obviously because we have community rating and we are funding more and more health interventions for probably preventable diseases. Therefore, anything we as policymakers can do that, in the long term, supports such initiatives as Super Troopers, we absolutely must do.

The one question I have is where this needs to go. If the witnesses had one ask of Government as to the next steps, what would it be? They mentioned resources earlier. Are they satisfied they have the resources to take this a step further? What would be their wish list if they had the Minister for Health or the Taoiseach here, for instance? Mr. O'Connor can answer the questions after Ms O'Reilly.

Ms Aidine O'Reilly: Does Mr. O'Connor want to take this one?

Mr. D.O. O'Connor: I think we have mentioned it already. The booklet that members have in front of them is the health homework journal, which slots into one's homework journal, but it is not consistent across all primary schools. Some schools actually sell advertising in the journals to support the cost of them to the schools. Having a national homework journal that ingrained Super Troopers or the equivalent in respect of the importance of health and nutrition as part of homework would be one way of getting into the homes. Ultimately, for us, it is about the cost and trying to justify it. We decided a long time ago that we would not wait. We had various conversations and we decided we could not wait. We are not necessarily going to wait now either. We want to drive on and get the programme to all the schools. We just have to figure out how to do so.

Deputy Sean Sherlock: What is the ballpark cost?

Mr. D.O. O'Connor: We have invested approximately €1.5 million so far, since we started the programme.

Deputy Sean Sherlock: Has Mr. O'Connor done some figures as to how much it would cost to take the programme to the full rate of penetration of all schools?

Mr. D.O. O'Connor: It depends on the complexity. We have a junior and a senior cycle. There are some challenges as to how we get to the fifth and sixth classes, which require some modifications and slightly different programmes. It depends on how complex we make it, and, again, we want to keep it as simple as possible so it is easy to adopt. We are probably looking at the same amount again to get to all schools.

Deputy Sean Sherlock: A €3 million headline overall budget.

Mr. D.O. O'Connor: Yes.

Deputy Sean Sherlock: To be fair, that is not a massive-----

Chairman: What is Mr. Neary's budget?

Mr. Mike Neary: In the last full school year, 2016-17, we spent €3 million on the programme, but 42% of that came from the European Union through the scheme I mentioned ear-

lier, with 58% coming through the Department of Agriculture, Food and the Marine.

Deputy Sean Sherlock: Perhaps I can make a practical suggestion that we as a committee write to either the Minister for Health about it or the Minister of State at the Department of Health with responsibility for health promotion. Perhaps we could also write to the Taoiseach directly to see if there is any way we could either meet with him or facilitate some meetings between the stakeholders here and the Taoiseach, with a view to seeing how we can translate a programme such as this right across the schools and whether there is anything we can do to assist the programme.

Chairman: I do not have an issue with that. I would have thought the sectoral Minister of State with responsibility for food promotion would probably be the first port of call, and we could go from there.

Deputy Sean Sherlock: For health promotion.

Chairman: Yes.

Deputy Sean Sherlock: And the Taoiseach.

Chairman: Yes.

Mr. D.O. O'Connor: May I pick up on just one other point? Deputy Sherlock spoke about getting into the homes. Employers, and when I say employers I mean the State as well, have a big role to play here also. I know there is a proposal coming before the Houses for some incentives in this regard and for the provision of showers and fitness equipment. This could potentially be included around knowledge and education of parents in the workplace, which complements what we are trying to do with the children in getting them to educate their parents on fitness. There is probably some complementary approach, incentivising the employers to promote knowledge and education of the parents as well.

Deputy Sean Sherlock: On that point, Ms O'Reilly referred to the active flag and the fact that Super Troopers is a stakeholder in that regard. We have all visited schools as Deputies and Senators where there has been the raising of a green flag, and one need only see how that behavioural change is having an effect translating into the home. I have not seen the evidence of this yet in respect of the active flags. That is not to say it does not exist; I just have not seen any research.

If we are talking about positive public health policy, obviously there would have to be some more tyre-kicking regarding the research the witnesses have conducted. However, I do not see any reason that could not be done. If we are serious about tackling obesity, it will require the deployment of resources, and if there are programmes that one can just take on or partner with, that is the model we must use because there is an evidence base here of it having an effect. This is why I would love Dr. McCrory to talk to Professor Hevey. Perhaps that can be facilitated because that is the space we need to be in. The different sides are quite complementary, I would argue, and they are both within the same organisation. If there is a way of talking to one another to see how we can work on this one and come up with practical solutions, we should try to do so.

Mr. Mike Neary: I have a final comment on funding. I should acknowledge that it is only since 2009 that the European Union has provided funding, and at that early stage it was at a much lower level. We got significant funding through the Department of Agriculture, Food and

the Marine at the time. Without that funding over a number of years while the EU money built up, the programme would not be where it is today, so it should be acknowledged that we have secured some good funding from the Department as well and it has helped us to leverage much more money from the European Union. This is a positive.

We mentioned earlier the penetration of the programme. By the end of this school year, we will have covered almost 1 million schoolchildren, and there have been approximately 6,000 school interactions. We want to build on that, so there is a great momentum there. Obviously, the funding helps to build that further.

Chairman: On behalf of the committee, I thank the witnesses for their presentations and for dealing with members' questions in such a comprehensive manner.

The joint committee adjourned at 11.45 a.m. until 4.10 p.m. on Wednesday, 9 May 2018.