

EDUCATION AND HEALTH STANDING COMMITTEE

COMBATING OBESITY AND OTHER ISSUES AROUND PUBLIC HEALTH



**TRANSCRIPT OF EVIDENCE
TAKEN AT PERTH
WEDNESDAY, 20 JUNE 2018**

Members

**Ms J.M. Freeman (Chair)
Mr W.R. Marmion (Deputy Chair)
Ms J. Farrer
Mr R.S. Love
Ms S.E. Winton**

Hearing commenced at 10.00 am**Dr MICHAEL MOSLEY****Health promoter and author, examined:****Dr PATRICK GARRATT****General Practitioner, examined:**

The CHAIR: Thank you very much for coming. On behalf of the committee, I would like to thank you for agreeing to appear today to provide evidence in relation to ways in which to combat obesity and other issues around public health. My name is Janine Freeman and I am the Chair of the Education and Health Standing Committee. I will introduce the other members of the committee. Bill Marmion is here, Josie Farrer and Sabine Winton, and one of our committee members sends his apologies because he could not be here today. It is important you understand that any deliberate misleading of this committee may be regarded as a contempt of Parliament—I am sure that that is not going to be a problem, but just so you understand. Your evidence is protected by parliamentary privilege; however, this privilege does not apply to anything you might say outside today's proceedings.

Before we begin, do you have any questions about your attendance here today?

Dr MOSLEY: Not at all, I am looking forward to it.

The CHAIR: Good on you. Would you like to make a brief opening statement at all or shall we just go into questions?

Dr MOSLEY: I think probably just go into questions.

The CHAIR: You would be aware of parliamentary committees; they are a big aspect of the British Parliament and our parliamentary committees are similar in our Western Australian Parliament. The education and health committee has over the years done many different reports. A particularly high profile one that the media turned up for was about suicides in fly in, fly out workers and also around early childhood education in previous committees. Our committee is very interested in looking at the issues around public health and obesity and so I suppose my first question is: in drawing on your knowledge of research across the globe, what would you say is the biggest health impact of obesity?

Dr MOSLEY: As you know, obesity rates in Australia are very high; 64 per cent of the adult population are either overweight or obese in very high rates in particular communities. The same is true in the UK. We have the highest rates of obesity in Europe, so the only good thing about leaving Europe is we will no longer be the fattest people in Europe; I think the Germans will! It is a big thing, and the trouble with being overweight and obese is that it leads to other complications, in particular type 2 diabetes, but also, which people are less aware of, things like cancer and what I would call metabolic syndrome, which is a combination of things. It is particularly central obesity: it is weight around the gut, it is fat in the gut, which again affects some people more than others, particularly men more than women, but also people from different communities more than others—they are more vulnerable. If you are, for example, Asian, you are more likely to develop type 2 diabetes at a lower BMI than if you are Caucasian. This is why it is taking off around the world in a spectacular and horrible fashion. As I said, if you are a member of the Indigenous communities, again, they are much more vulnerable to diseases like type 2 diabetes at a much lower BMI. That is why it is, as I said, in places like China, India and Vietnam that type 2 diabetes is absolutely soaring. Type 2 diabetes, it is

very clear, is linked to visceral fat. People are unaware that cancer is very closely related to type 2 diabetes, as is depression. For a long time people thought that depression was a result simply of low self-esteem. You are obese, you are overweight: you get depressed. There is actually very clear evidence now that it goes two ways, particularly via the microbiome, which I have become something of a specialist on, but we know now that things like depression are not simply a product of social circumstances; they are linked with inflammation in the brain, which in turn is linked to inflammation in the gut. We know that half of all Australians suffer from one of four chronic conditions: type 2 diabetes, then there is higher cancer around, then you have some form of, as I said, problems with depression. These are very typical, very common and they affect half of all Australians.

The good news is that you are living longer. The bad news is you are living longer in ill health, which is exactly what is happening in the UK. Unfortunately, most of the strategies which have been adopted to combat obesity have failed. Clearly people have recognised for a long time that this is a significant problem, yet everything that has been done, pretty much, has failed. There are exceptions, and I travel a lot in Europe; I talk to a lot of weight loss specialists. There is a wonderful, wonderful paper in *The New England Journal of Medicine*, which you probably know is the most famous medical journal in the world; it is the most prestigious, it is the one that medics really want to get into. This is a wonderful paper on myths, facts and presumptions about weight loss. It categorises five myths that doctors believe, dieticians believe, the general public believe, which are simply not true. Then it looks at presumptions and it also looks at facts. For entertainment, if nothing else, it is worth looking at this, because it absolutely flies in the face of commonly held beliefs. Sorry, I am talking rather a lot.

The CHAIR: That is all right. We had the Obesity Policy Coalition head, Jane Martin, come in and talk to us as well. She was recently also on the *Four Corners* report that went to air. She talked about the lack of a national strategy around these issues. Are there other countries or does Britain have a national strategy? Is that something you see as important in terms of this as well?

Dr MOSLEY: Important, but you would not look at Britain as an example of where to go, because as I said, we are the fattest people in Europe and whatever we are doing is not working. One of the few places on Earth getting it right is Amsterdam. I was there recently and they are really impressive, I have to say. They have not only managed to reverse obesity in children, but particularly in the poorer communities, the harder to reach communities, where they have seen a spectacular drop in obesity rates. They have a very, very tightly planned strategy, which involves what you might regard as quite draconian measures. For example, fruit juice. People have this illusion that fruit juice is good for them—it is terrible. They ban kids going to primary school taking anything other than water or milk. Again, milk has this terrible reputation, but actually if I was going to drink anything and encourage my kids to drink anything it would be full fat milk, because there is no evidence and there has never been any evidence that low fat milk is better for you. It is a more processed food. Unfortunately, it is tied up with a low fat message, which on the whole again has been counterproductive.

The CHAIR: Are there contradictory messages? You are saying this as fact and as a statement of fact. Is there discussion and counter-opinion?

Dr MOSLEY: Absolutely, 100 per cent. This debate has been running for a very long time, so I do not think anybody is going to claim that drinking water is a bad idea.

The CHAIR: No; too much can hurt you though.

Dr MOSLEY: And nowadays very few are going to claim that drinking large amounts of fruit juice is a good idea. There is this notion of moderation. The trouble is we know that your moderate might

be completely different to my moderate. My moderate might be a small glass of wine, your moderate might be a bottle. Moderation is a completely useless term, plus we know that foods are manufactured to make them irresistible. If I start on a bar of chocolate, I do not stop. If I start on a packet of biscuits, I do not stop. The way that the manufacturers have engineered the food is for maximum palatability, which basically means you go on eating the stuff. One of the things that again we are moving towards in the UK is that we have introduced a sugar tax on fizzy drinks. That came through with almost no opposition. It was introduced by George Osborne, who I am delighted to say was a big fan of my 5:2 diet. I was very sad when he left because every time he was interviewed he talked about it and I sold a few more books. But he introduced the idea of a sugar tax, and obviously it is in places like Mexico, and we are evaluating it more. What was really interesting is we assumed there would be a firestorm, but actually no-one really objected and the manufacturers actually responded before the tax was introduced by removing sugar from their products. As I said, going back to Amsterdam, essentially they encouraged kids—water, milk, nothing else; no unhealthy foods. In the local McDonalds near the schools, kids are not allowed to buy fries. They are only allowed to buy an apple unless they are with their parents.

They have introduced community cooking. A lot of people want to cook healthily but they do not know how. Again in the UK, we got rid of all the cooking lessons. The really important message from Amsterdam was: engage the community. Use the people who are already there. Use the community nurses, the doctors and people like that—people who are already trusted and part of it. They are also very draconian in the sense that they do not allow sponsorship by McDonald's or by Coca-Cola of sporting events because again, one of the ways that food manufacturers get by is by saying, "It is not about the food; it is about the activity—we just need to increase the activity", and that is really not true. We know that sport—exercise—is fantastically good for lots of things. It is a terrible way of losing weight. It is a really good way of keeping off weight. I am on an SBS program on exercise, which will be airing over the next few days. Everybody there—all the exercise people—said, "Exercise is a terrible way of losing weight." In the myths, facts and presumptions, one of the conclusions they come to, along with a lot of interesting other stuff, is that activity programs aimed at children do not work when it comes to obesity. They are very effective for other things but they will not actually affect that. The danger is, if the message is that you simply need to do more exercise, we know from numerous studies that does not work. People start an exercise regime and they are focused on the wrong thing—weight loss. The result is they give up the exercise. They should be measuring other stuff. That is what the food manufacturers want to do; they want to put the emphasis on activity because then they do not have to worry about the calories. To be honest, it is the calories. If you want any sort of weight loss program that is going to work, that is where the emphasis has to be. That is where the results lie.

[10.10 am]

Mr W.R. MARMION: In terms of what you have just said—I am not a health expert; I am an engineer, but I look for results—if you are in charge of introducing something draconian in Western Australia that you think would have results, it sounds to me like the best place to attack it is at the young stage when they are at school. It is interesting that you mentioned water and milk because I have five children and the last two cannot drink anything but milk and water because they have never drunk anything else and they hate anything else. They are not obese. It sounds like if you want to attack it—but I am interested in your comments, not mine—you have to do something at the primary school level so that it carries through.

Dr MOSLEY: Yes, 100 per cent, because that is where the big problems arise and if you start to become obese as a child, then the risks are very high that will continue. It is partly psychological and it is partly physiological but basically you get more fat cells. You also alter your microbiome in an

unhealthy direction. The other things which are not about Amsterdam, but other things which, if I were you, I would be looking at is the extraordinarily high rate of prescription of antibiotics in Australia and the extraordinarily high rate of caesarean sections, both of which have a long-term impact on the microbiome and, in turn, on obesity. I think the stress, for too long, has been placed on the individual and we know that this is largely ineffective. The thing we know for absolute certainty is that fat-shaming does not work. We also know that telling people to go on a weight loss diet does not work. They have to want to do it themselves and therefore you have to kind of convince them. It is a hearts and minds thing. You are absolutely right; the sooner you can start, the better.

Mr W.R. MARMION: Following on from that, the only way you can do that—correct me if I am wrong—is part of the education in grade 1 at primary school should be a section in the morning or during the day at some time about what you should be eating in relation to how you can live a healthy lifestyle.

Dr MOSLEY: And you need to engage families because that, again, is very clear. Any weight loss program with children is only going to work if you engage the families in it as well. That is sometimes about finding ways of producing palatable food, which is healthier. People want to know how to do that—which is lower calorie, which is denser. When I write about these things, my wife produces the recipes. She is a GP. She says it has been the most fulfilling period of her professional life, actually embracing these changes. She works in a deprived part of England with a large number of Asian patients and she gives them copies of the book. She had one of them who came in the other day and said, “I would rather die than eat this stuff!” but he actually went away and did it, and he lost 40 kilos. He was on five different medications; he is now on nothing. I am waving the *British Medical Journal* in front of me. Patrick is going to talk, but he has just come back from a conference in Switzerland because they are introducing a sort of new nutritional supplement, which is absolutely brand new for the BMJ. The other thing I would say is that doctors know nothing about nutrition; we were taught nothing about it.

Mr W.R. MARMION: I will just follow on from this, because I think this is leading to what we have to do. Let us say you are a teacher in a classroom and you have this good education and you have hit on the next issue—the family. For two-thirds of the class, the kids go home, they tell their parents and their parents listen. That happens in my family; they educate us. Then there is one-third that the parents do not give a stuff and the kids are getting mixed messages. What does the school do? What does the state do in that situation?

Dr MOSLEY: Absolutely. What they did in Amsterdam is they introduced community classes and things like that. Again, you are not going to reach everyone that way, but they were startlingly successful at reaching the poorer communities, the harder-to-reach communities and the immigrant communities—the groups who frankly everyone wants to reach, but which have proven resistant until now. Certainly, it does not always transpose but Amsterdam is one of the few successful models on earth. If you ever get reason to go there, do go and see them.

Mr W.R. MARMION: It sounds like we should go there!

The CHAIR: Patrick, did you want to add to that, now that you have been vindicated?

Dr GARRATT: It is a tough one to follow. My role as a GP is to try to implement some of this science, and I think there are a lot of barriers to that. You asked what we should be doing. Should children be taught in school about food? I quite agree. The problem is some of the messages that are currently taught by GPs, by dietitians and nutritionists are messages often based on science that is 50 years old that was not the best. Basically, Michael has done a great job of actually looking at the new science, which is totally different. What we have to do as a group, as a GP, is put that new

science into place. So at school, they have to be teaching the new messages. The children then go back and say, “Mum, dad, actually what you learnt 10 years ago, it’s wrong.” The GPs have got to be up-skilled and taught the new data so when you then go along to your GP, you are getting that consistent message. That is one of the issues that we are facing.

The CHAIR: You have a role—as I understand, you have been invited to be on the WA Primary Health Roundtable. I am not sure whether they have met yet, but how do you do that? Clearly, this is one perspective and there are other perspectives on this. You are putting one perspective about it very forcefully and very strongly, but how do you get consensus so that we have a strategy and a way forward as policymakers?

Dr GARRATT: There are lots of different opinions but I think one of the things that was highlighted is that we are all getting to a place, though, where we are agreeing that lower carbohydrate, better quality good fats, really changing the way we are looking at food and the amounts we are eating—we are moving towards that. The problem is some of the guidelines in all the countries around the world, including the UK, US and Australia, are based on very old data and they are almost contradictory to what we are saying. As a GP, it is actually quite difficult to then put out a new message because I am at some risk when I am introducing you to very, very good research because it is not based on the current dietitian’s guidelines. So there are difficulties there. But certainly the BMJ is moving towards what we are saying. The experts around the world are certainly moving this way. I think there are lots of mixed messages that might be put out there, potentially by the food companies because they do not want to look at the new data. It is not necessarily in everyone’s interest, but I think we have just got to keep on.

Dr MOSLEY: What I would say is there is more consensus than perhaps you think. For example, the Mediterranean diet—about two weeks ago the WHO announced it is the healthiest diet on the planet, along with the Nordic diet, which is very similar. What the Mediterranean diet emphasises is things like oily fish, obviously fruit and veg, but again the fruit tends not to be the sugary stuff, plus plenty of healthy oil; olive oil seems to be particularly efficacious. I do not think anybody is really disagreeing with that sort of stuff. It is a relatively high-fat, relatively low-carb diet but there are good carbs, bad carbs, good fats and bad fats. I think we are moving in that direction. There have been so many big studies which have shown the benefits of this form of diet compared with a low-fat diet. The irony is that countries like Greece and Italy, who gave the Mediterranean diet to the world, are now the countries least likely to do it. The country that is most likely to do it is Sweden. In Italy, 38 per cent of the kids are obese or overweight. Whereas they used to be slim, they ate what their parents ate; now they eat an American junk food diet.

[10.20 am]

Whereas the Swedes are slim and they are eating—well, you could call it the Mediterranean diet or the Nordic diet; they are pretty much the same thing. I do think we are moving towards a consensus on it. It is pretty obvious. It is not a million miles away from some of the guidelines. It is just, I guess, there is more emphasis on healthy fats and less emphasis on piling a plate with starchy potatoes and things like that. I would much rather kids ate lots of veg. You could argue that is really difficult to do, but if you cannot get them as kids, you are never going to get them. What I write about is, basically, about ways to sneak these things into your diet. My wife, for example, has a recipe for chocolate kidney bean cake. Kidney beans, legumes, fantastically healthy, people have abandoned them. Really cheap form of—but people do not know how to cook this stuff. They do not know how to deal with it. As I said, and as Patrick says, it is going to be a challenge for GPs and other people to kind of catch up to date. When you kind of hear it, it is not a keto diet. It is not an Atkins diet. It is

not stuff that would get nutritionists waving their arms and screaming, “This is nonsense!” It really, really is not. It is quite sensible. It is just a slightly different emphasis.

The CHAIR: I do think that one of the things for people, though, is because we individualise it and we make it instead of something that is about a system or a process in our community, is that they wait for a trigger for their own health, and indeed you had a trigger.

Dr MOSLEY: Absolutely. I discovered I was a type 2 diabetic.

The CHAIR: How do we as policymakers move it away from people having that whole life aspect of only reacting to their health and their weight and their health concerns when they have a health crisis or a trigger and they go to a GP concerned? How do we as policymakers encourage people to take an active interest in this, taking into account of time poor, easy to go and get manufactured processed foods and all those sorts of things?

Dr MOSLEY: I think one of the ways, and that is why I bang on about it, is if you do television programs about it, if you do stuff on the BBC, SBS and things like that, which I do regularly, then you scare people, to be honest. I mean, scaring is quite a good tactic. It certainly works to some degree. This is exactly like the tobacco industry all over again. It is exactly the same. It is a combination of stuff, is it not? Basically, you put warnings out. People are surprisingly unaware of the impact of obesity and we have been terribly careful not to scare them, but I think we do need to scare them because actually things like type 2 diabetes, you can reverse it. That is the other message. The message is one of hope in the end. Unfortunately, the message out there is: diets fail, you are doomed.

My guru is this guy called Professor Roy Taylor of Newcastle University, who has done some amazing work demonstrating that type 2 diabetes is reversible with a rapid weight loss diet. Again, one of the truths that emerges out of the myths, facts and presumptions is that if you want to lose weight, the best thing is a rapid weight loss diet—800 calories for 12 weeks. This is astonishing.

The CHAIR: That is hard.

Dr MOSLEY: That is hard and the doctor said it was impossible. There was a big paper in *The Lancet* recently. I could go into it. Have a look at it. Really impressive—in February. There were 298 individuals randomly allocated to either an 800-calorie diet for up to 12 weeks or to standard best advice. This group lost 10 kilos and kept it off for at least a year. They will follow them for another two years. This lot lost less than half a kilo. This lot, half of them reversed their diabetes. This lot, it was four per cent. Clearly, more studies need to be done, but this was a big study done across general practices, and that is one of the messages of hope. Type 2 diabetes and obesity are reversible conditions.

We know a lot about the science now of how to lose weight and how to keep it off. Professor Susan Jebb at Oxford University, who I am close to, says that she finds it astonishing that governments are not more interested in what the obesity research shows, that so little interest is displayed. We have moved on enormously over the last 20 years and that is kind of why I am so passionate about it. For example, prediabetes is unbelievably common in Australia, and you do not know you have it until you have the blood test. I am not sure whether a screening program is the way forward, but certainly my wife finds, as a GP, that her moment of opportunity is broadly when the patient comes in and she is going to tell them they are a type 2 diabetic. Then she has a choice. She says, “You can either do this weight loss diet or I can put you on medication but we know what that leads to. It leads to more medication and all the complications of type 2 diabetes.” Almost everyone, not everyone, kind of goes, “I want to try this”.

The assumption has always been that pills are the answer and that patients just want pills, but I am genuinely optimistic that that has moved. I am not sure how helpful it is as a policymaker, but I think it is worth getting the message out there. It is also absolutely worth getting the message out to GPs that talking to patients about weight is okay, because, again, Jebb's research has shown that most doctors do not because they are embarrassed. They assume the patient will be embarrassed. That is not what her research shows. Currently patients are embarrassed to bring it up, but they do want to engage. She says if the GP offers advice, then they see significant weight loss, whatever the advice, frankly, a year on. Again, her message would be to use a tape measure. Do not just rely on scales. This is personally more embarrassing, but it is more reliable. You do not really want to put your—my wife actually gets them to hold it and runs around the large patient! It is all about the gut. One of the simple messages is that your waist should be less than half your height. You can get a bit of string, measure that, tie it around the waist. You have to go around the belly button, because men in particular tend to underestimate their waist size by around five to six centimetres because their gut is kind of hanging over and they go by the trouser size and it ain't that. It is about the gut and much more than it is about BMI.

The CHAIR: Have you seen the Western Australian-produced TV advertisements around fat on the gut?

Dr MOSLEY: No.

The CHAIR: Jane Martin again from the Obesity Policy Coalition said that has been very effective advertising. Patrick, have you seen that? Have you noticed that with your —

Dr GARRATT: I have seen that. It is a very good point because we have done some studies in WA and one of our programs that we run reduces the visceral fat, so this fat, by about 18 per cent in 12 weeks and that is in nondiabetic patients as well. There are lots of interventions that can be done, but really you have got to start speaking to people about it. Bringing up Michael's point, I think one of the reasons doctors do not ask patients about their obesity is partly they are embarrassed, but they do not know. I speak as a GP.

The CHAIR: Is it also because the norm has moved? Is there a whole idea that we now have a different normative framework of what is an average size?

Dr MOSLEY: No, the data is still unbelievably clear that if you have a BMI over 25, particularly—it shifts when you are over 60. Basically, being a little bit overweight after 60 is not problematic. You would be pleased. You looked delighted at that point. But broadly, over 25, but it is very dependent on your ethnic origin. For example, if you are Asian, it is 23, so there is variability. But the problem is it becomes normalised because in communities people see other people who are the same weight as them, so they think it is normal. Then you look at films from the 1950s and you go, "Bloody hell! They were skinny!" They were not skinny. They were just healthy. Unfortunately, we have accepted as a community that this is an inevitable process. Oddly, obesity is infectious. You kind of go with the people around you. If you live in an affluent region, you tend to see people who are—that is the challenge again. In poorer communities, they see people—and they have different challenges.

Oddly, the assumption is that poverty is directly linked with obesity. Certainly, in the UK it is not. It tends to be gender specific. In the UK women in higher social economic class are slimmer than women from social classes 4 and 5 but this is not true of men. You have more fat men in the higher socioeconomic class and it also depends on your ethnic origin. It varies depending on whether you are Afro-Caribbean, Asian or whatever, so it is more complicated. The reality, of course, is that we can do surprisingly little about social class, but we can do things about the other stuff. I mean, one of the things we have been collaborating on is an online program, because I think one of the ways of reaching people in a cost-effective way is via online programs with support. Because the one thing

we know with absolute certainty is that losing weight is the minor part of the challenge. Keeping it off is the bigger challenge. That really does need the support of your friends, your families and the community. We have an online community that offers this stuff, but also you would encourage your friends and families. I always encourage couples to do it together because there is much more chance of it succeeding, whatever it might be. That is one of the really big and important dimensions that often gets overlooked, and that is where the fatalism comes in when people say, “Diets always fail.” It is just not true. There are 50 000 diets out. Most of them are terrible. They have been invented by some celebrity on the back of a cornflakes packet. But there are some really, really good long-term studies and, as I said, it would be very interesting to look at Taylor’s work because he has shown, certainly over the course of a year, that an 800-calorie diet is unbelievably effective, and they are going to follow them for another couple of years. There is similar research going on in Australia and other countries.

[10.30 am]

The CHAIR: Patrick, do you use or refer people to the CSIRO diet?

Dr GARRATT: No. Basically, what I do is really base my work on Michael’s books and also Professor Taylor’s work. In my own surgery, people come in with diabetes, and eight to 12 weeks later there is no diabetes and they are off insulin and off medication. It can be done. They need that support, so they need to come in. I now actually need to talk to them about cooking and food. Part of my training did not involve those things, but they are things that I have learned. Again, we have the support of our team as well that helps me. But it can be done. The best time to get them is when they have been diagnosed with diabetes, or they come in with renal disease, or cellulitis—various conditions. But you can reverse it.

Dr MOSLEY: I am aware of the CSIRO work and they have also recently moved towards what I describe as a more low-carb diet, which is obviously revolutionary from their point of view, but to be honest the data has been out there for some time. So, it is great. As I said, I do not talk about low-carb diets, mainly because it is utterly anathema to dietitians and people like that. That is why I talk about the Mediterranean diet, but the Mediterranean diet I am describing is essentially a low-carb diet. It is not a low-carb diet, as I said, in the keto—because I am obsessed by the microbiome, I do think it is important to have a diversity of food. It is very, very clear that diversity in the microbes is important for health. It is also very, very clear the way to achieve that is by eating a range of foods, rather than cutting a load of foods out of your diet. That said, obviously, eating junk food and sugary food, on the whole, is not great.

Mr W.R. MARMION: Getting back to a holistic strategy—lifetime strategy—we talked about the child strategy and I guess you would have to push them. I think there is a cultural thing here that you are talking about.

Dr MOSLEY: Hearts and minds, absolutely.

Mr W.R. MARMION: So, a forced culture on the child—that is what you have to do. But once you turn 18 and perhaps you do not have the family discipline, which you may not have ever had—you might have had the school discipline, but say you came through the cracks—and you are living life and you are happy drinking a beer and whatever it is you eat, then you have the crisis, like Janine was saying. You need a strategy, which I think you alluded to through Patrick, which is a possible GP intervention, but is there also a government role to sell the message? I know we have the gut ad on TV, but how do you change the culture of the 18-year-old to the 60-year-old who thinks, “Life’s fine, I don’t mind being whatever weight I am” and then they have the crisis and think they could have enjoyed the last 40 years if there had been a bit fitter or healthier? What is the role of government in this whole life cycle?

The CHAIR: State government, by the way, because —

Dr MOSLEY: Of course. I think the good news is that if you have introduced them—I have kids who have gone through the terrible teens and are now in their 20s and they just utterly ignored anything I had to say when they were teenagers—obviously—but they have reverted. The things we introduced them to when they were under the age of 10—to be honest, give me a child until the age of seven and he is mine for life, but not in the teen years. Now, they positively eat a healthy diet. They are interested, they engage and they talk. I think that they are interested. I think people in their 20s and 30s are under a lot of stress, they are sleeping badly, they are probably living on a beige diet and a lot of them have irritable bowel syndrome or whatever and they want to know. I gave a talk last night at UWA and at least half the audience were under 30, so there is kind of a real genuine interest out there.

I would say, you know, making programs about it, you are going to find people who they trust, because the trouble is they often do not trust government. That is why those adverts often fail. You have to get the messages out there via people they believe in. This is obviously true for different communities. The Indigenous community—it is never going to work with some white guy coming and telling them what to do. It absolutely has to be from within the community from people who have learnt it, done it, lived it and who are utterly, totally believable. I would say that is true across information. I think people want to know. Obviously, there is a hard core who just want to smoke, drink and they really do not give a damn what happens in 20 years' time but, unfortunately, as Patrick said, it is often a crisis—it could be a heart attack or it could be the death of a family member. Who knows what the triggers are? My wife is currently working with Oxford University on people who are insulin-dependent diabetics and trying to reverse that via diet. That will be an interesting challenge.

Ms S.E. WINTON: I wanted to touch on addiction in this whole process. We have this increase in obesity, but what is it about someone that makes them turn that way when they might have the same social circumstances and same economic circumstances? Is it something in peoples' make up in terms of the addictive behaviours? The other part of it in terms of the food manufacturers, are they playing to that in terms of making the food palatable and trying to make people become addicted to this stuff?

Dr MOSLEY: I think there is very clear evidence that people have different responses to food. Some people have more tastebuds in the bitter range, the sweet range or whatever. Without a doubt, there is a genetic component to this. I am not sure whether “addiction” is a helpful term. The danger of telling someone they are addicted is they then think, “I can't do anything about it. It's not my fault.” It abdicates all personal responsibility. On the other hand, I hate the idea of fat shaming and saying, “It's all your fault.” There is a halfway house here. What I would say is that we do know that sugary things—it is not just sugar. There is a very clever combination which the manufacturers have hit on; it is broadly a ratio of two to one of sugar to fat. What I say to people is, “I'm never going to eat a bowl of sugar. If it was sitting there in front of me, I would not be guzzling it. I would never drink a pint of cream. But if you mix them together, add some vanilla and stick it in the freezer, then I'm going to eat lots of it!” That is because there is this magic ratio of two to one, which applies to an awful lot of foods that we find unbelievably irresistible. It is true of chocolate. It is true of crisps—two to one carbs. It is the salt in it. It is all these things, and if you are aware of it, it is kind of helpful.

I do believe there are huge genetic variabilities. I do believe the biggest risk we have at the moment is that we also know that the exposure—crudely, the biome you have is inherited from your mum. So you come down the birth canal and you swallow her poo and that seeds it for life. If your mum is hugely overweight and she has type 2 diabetes, we know this will carry on. There are epigenetic

changes, so there is a serious risk that we are moving towards a world with ever-larger children—evermore caesarean sections. We have already done it with bulldogs, and there is some evidence this is happening with humans as well. It would be catastrophic if we got the point at which, frankly, caesarean sections were the norm, which is the truth in places like Brazil. It has long-term consequences, it is unbelievably expensive and, as I said, there is a clear intergenerational effect, which is why it is so important to do it now, because it is only going to get worse.

Dr GARRATT: Just touching on the point of addiction, as a practitioner, I do not see that people are addicted to certain foods. I think there are lots of factors—genetic is one. I think socio aspects are another. What I find, though, is if you work with people closely, after a couple of weeks their tastebuds change. Once they see that, they do not go for the sugary things because they just do not like it. You can reverse that sort of craving after a couple of weeks. The other thing to point out is that I am one part of this support package for my patient, but I also have a team online of other people who are in the same boat and who have that same craving addiction. If you get that group together, even though it is in that sort of virtual community, and they say, “I really want this”, “Yes, me too, but you stick with it.” You can actually help that whole group that has those cravings—it is not an addiction, but that sort of want—and they can help each other.

Dr MOSLEY: One of the really clear things that has come out of the research is that people want support from their peers. Above everything else, they want not necessarily professional support, although we offer support, and fortunately because we are in Australia and the UK, we can pretty well offer 24-hour support, but what they really want is other people who have been through it and people who they can identify with.

[10.40 am]

Dr GARRATT: And who are going through it at the same time, so they can say, “Actually, I really need that chocolate now.” “No, we can’t do it”. “No, I was there yesterday. You can do it.” You need that 24/7.

The CHAIR: Can you not have 98 per cent dark chocolate? Is that not better?

Dr MOSLEY: It is better. The great thing about it is that I do not feel like eating more than a square or two.

The CHAIR: We as a committee have the privilege of being able to do inquiries into various areas. I discussed that before we came. If we were able to investigate a particular aspect of obesity and the crisis that we are now facing, which is probably a good word for it, what would you think—considering that we are a state government, so we cannot tax, and we have limited capacity. We cannot do major investigations. We cannot go in and look at our own stomachs and stuff like that. As policy makers, what do you think would be of benefit in terms of how we go ahead?

Dr MOSLEY: I do not know whether you can sponsor such stuff but I would love to see more research done in reversing type 2 diabetes via the tailored-type of approach.

The CHAIR: We cannot sponsor, but we can look at what is out there in terms of working with people with diabetes. We can focus on that.

Dr MOSLEY: I think it is an unbelievably promising area of research and, as I said, in the UK it was funded by Diabetes UK. They just had one person on the committee. It just takes one person to change the world, and one person who believes in it enough to put £6 million into the research otherwise it would never have happened. The thing we know is that nutritional research is massively underfunded. It takes a lot of time. It takes a lot of commitment. You have to have people who really believe in it. As I said, I can put you in touch with Professor Roy Taylor, with people at Oxford—people like that who are genuine. I synthesise other people’s stuff. I promote other people’s stuff.

I do not do the research but I know an awful lot of people who are world-class researchers. Certainly, Australia has abundant numbers. I am just unaware of anyone who is adopting this particular approach. Although, certainly in the area of the microbiome, you guys are really doing wonderful stuff. But I think of type 2 diabetes, and you were at this conference in Switzerland, and in the states they are kind of doing it but I am surprised Taylor is not better known. I was at the UWA with Professor Barry Marshall and it feels like exactly the same story. I made a documentary with him in '94 and at that time everybody said, "Ulcers are irreversible. You have to take this drug and if it doesn't work, you have a partial gastrectomy." He already had all the data you ever needed, but for whatever reason it took another 10 years—he wins a Nobel prize. Suddenly it is, "Hurrah! We all believe it." I do think we are at that point with type 2 diabetes. I think it just needs that extra push. Taylor has done unbelievably good work and I just want the message out there.

Dr GARRATT: When Michael and I first met a couple of years ago and I heard about this—I was taught at medical school that type 2 diabetes is irreversible. You take the medication and then a bit more medication, and that is exactly what I was telling patients just a few years ago. When I heard about this—read about it—and then started trialling it with my patients, their diabetes was going away. I was getting them off these medications. It was like, wow! It is huge! Clare, Michael's wife, is doing this in the UK. There are a number of other practitioners around the world doing this. It does work. There were a lot of people at the Zurich conference talking about what is the best diet and macronutrients and this and that, and they were, "Okay, yes, we've all agreed on a consensus with what we're doing. But actually implementing this work is what we should be doing now." We have been doing a small trial in WA helping people to lose weight. That is why we found that we can reduce in 12 weeks, 18 per cent of visceral fat just with a 5:2 diet and exercise. I think we should be looking at maybe the public hospitals, people who go in for—and we have surgeons referring to us already. They want their patients to lose some weight before a hip replacement. They refer to us now. Maybe we should be looking at that in the public hospitals: rather than going in for standard treatment, go back to your GP and lose some weight, or "No, you are going on a 12-week program and you will get support. Now let's see what the outcome is to that." See if it means that people do not need that knee replacement. See if it does reverse their diabetes. See if it does actually mean they do not go onto dialysis. This is also important for populations far away from Perth that maybe do not have that support. Can we help them by using online virtual support? Whereas currently they probably do not have a lot there.

Dr MOSLEY: But understandably, nobody is going to implement this as public policy until there is a good body of evidence behind it. In order to achieve that, you need to get people enthused and prepared to fund it and do it. This is a three or four-year project. I suspect you do not have the power that the Mayor of Amsterdam does to implement the sorts of changes that were done there, so I think that will be a challenge. I have no idea how your educational system works and whether there is any possibility of being able to teach kids and things like that. Certainly, at that level, that would be by far the most effective. I do not know whether you even have the power to introduce more water fountains but I would love less bloody plastic bottles. One of the messages that came out of that is that we have too many bloody plastic bottles—please, please, please. You do not have to drink bottled water. Really, honestly, it is no better for you than the stuff that comes out the tap—honestly!

Mr W.R. MARMION: And it is a thousand times dearer.

Dr MOSLEY: Probably more than that. It is ludicrous. How do we make water sexy? How do we make milk sexy again?

Mr W.R. MARMION: Just on another topic about general medication. I am now 64 and I hate taking tablets. I now have to because I have been told by my GP. I am on a statin, I am on blood pressure and half a little aspro or whatever they are now, and I play hockey.

Dr MOSLEY: Unfortunately, physical activity, as I said—I cannot see you standing up, so I have no idea what your waist looks like now.

Mr W.R. MARMION: My doctor was not happy with the reading, so I have now gone from 10 to 20 milligrams. I would rather not take anything. Are we taking too many tablets; and, if so, what can we do about it?

Dr GARRATT: Again, by changing the way I practice really over the last few years and putting an emphasis on diet and actually having the knowledge to be able to do that, you can de-prescribe. It is certainly something that is happening a lot more in the UK.

The CHAIR: De-prescribe?

Dr GARRATT: It is a new word but it works and patients are happy with it and you can show them the results. If you lost, I think it is one kilo or one per cent of your body weight, you can drop your blood pressure by two millimetres. If you lose three kilos, you decrease by 10 on your top number. It can be done. Again, it does work but you need to educate GPs on that. You potentially need to give them more time to talk about diet. Again, it can be done and then you look at the health savings.

Dr MOSLEY: My wife, for example, in her practice, she is now saving the practice \$40 000 a year just for diabetes medication. But there is no benefit to the practice. In fact, they get penalised under the NHS system because in the NHS, you get paid for putting diabetics on medication, irrespective of what the long-term consequences are, which is insane.

Dr GARRATT: From my point of view as a private GP, it is sometimes a better business model to get patients to come back. I am far happier saying, “Stay away. You don’t need me. Come back in six months.” It is counterintuitive.

The CHAIR: It is a bit like the Water Corp making people save water. It is counterintuitive but it has to be done.

Ms J. FARRER: I guess I have a different view with regard to how a lot of us Aboriginal people have the intake of the sort of food that we eat. I do not know whether there has been much study on how people who have come from a traditional background and are now starting to consume man-made food, processed foods. With myself being probably a second generation, my mum was very traditional. I was probably one of the first children from my family clan who was introduced into eating different sorts of food. We came from a hunting and gathering background, so a lot of food that I ate when I was growing up was mainly off the land. But after they put us in missions and that, we were introduced to milk. We never drink milk. That is one of the biggest things about a lot of the Aboriginal kids. A lot of them are lactose intolerant and having milk plays against your body. We were taught to eat five vegies and fruit. That also has a tremendous effect on our health. A lot of our kids had things like diarrhoea and everything else. Doctors or GPs were never able to find out what is the cause of all that. But my observation of how we have come from that traditional background and the food that we ate, I see now my grandchildren cannot consume some of the man-made products. I do not know whether there has been any sort of real study into how it affected our people as Aboriginal people coming from that hunting and gathering background and the food that we ate and are now eating a lot of these processed foods. I think this is probably the reason why—it is just my thinking—we have had a huge number of people who have had issues like renal failure, heart disease and all that. Our GPs say it is a contribution of stress and everything else.

We know it is not that. But I do not think too much study has been done. I would like to hear whether you may have had any experience in this area.

[10.50 am]

Dr MOSLEY: No. As you said, there have been shockingly few studies done on—do I say Indigenous Australians? Are you comfortable with that?

Ms J. FARRER: I guess we come from different parts of Australia. The types of food that we eat, that is associated with our traditional country or estates, as white people call it, and the food that you can gather within your own areas—

The CHAIR: The question was: does he use the Aboriginal or Indigenous reference?

Dr MOSLEY: What is the phrase?

Ms J. FARRER: We say Aboriginal.

Dr MOSLEY: Thank you. As you say, there has been shockingly little research into the impact of diet on Aboriginals. We know that rates of type 2 diabetes, renal failure and things like that are very high in those communities.

Ms J. FARRER: The thing is that now, in this day and age, we have members of our families or siblings and that have moved around Australia. They are located in various places in Australia. Some of the intake of the sort of food that we have, we need it for our bodies, but you cannot get it somewhere else if you are living out of that area. The problem that we find is that with the cross-section of—you cannot take food into another territory: “You cannot take this sort of thing.” Some of the seasonal foods —

The CHAIR: They do. I am sure they drive across the —

Ms J. FARRER: No, that is one of the hardest things because they have border controls. Some of the seasonal fruits that we need, sometimes you cannot get it there, like the gums and stuff that we get—the sap off certain trees.

Dr MOSLEY: There was a professor whose name eludes me who did a study in the 1980s with the Aboriginal population—indeed, working with the local community—and she demonstrated that you could massively improve health. I wanted to and I have been trying to persuade SBS and the BBC to let me go and make a documentary in this area but, obviously, huge sensitivities and, as I said, white guy going into a community—probably not the best way of doing it. But it might be —

The CHAIR: You would not be the first white guy going into community.

Dr MOSLEY: It would be better if I could find somebody within the community who I could work with, frankly, because I think it is a huge problem. You know it is a huge problem. I think we know terribly little about it. We do know that unfortunately somebody told me that the major source of protein in the Aboriginal diet now is white bread, which is tragic.

Ms J. FARRER: That is probably one of them.

Dr MOSLEY: It is one of those things and we know that diversity—there have been studies of the Hadza, who are the hunter-gatherers in Africa. It is clear that they have a very healthy biome because they have a very wide, diverse diet. They eat a lot of different things. I think the tragedy for some populations is that they have adopted essentially an American-style lifestyle and that has had devastating consequences.

The CHAIR: Did you want to add to that for Josie, in terms of the gut health, because they have gone from a diet which would have had a broad ranging contribution, to a much narrower range and western-based and European-based foods.

Dr MOSLEY: Unfortunately, a lot of these foods are cheap. Unfortunately, whether you are drinking your fizzy drink or white bread, they are very cheap foods. They tend to be really bad for you but, nonetheless, they are cheap and the sort of stuff that is advocated like vegetables and legumes tend to be bloody expensive. It is partly a question of: can it be subsidised? Are there ways of producing foods? As I said, what is vitally important is that whoever leads this is a member of that community because they know much better than anybody else is ever going to know what sort of foods are acceptable, what are not, and how you can change things. We know, as you said, without a doubt that you need diversity. You need in some way to kind of return to a more traditional diet, but how you achieve that is something that only the community can do.

I was on an SBS show recently about the biome and there was a member of a community there. She was very eloquent and she had lost huge amounts of weight, reversed her diabetes, and she was now an advocate and she wanted to go out there and talk. I think this is an area which desperately needs more research.

Ms J. FARRER: It certainly does, especially when you see—like I see my people going in to see a GP and all they are coming out with is just packages of tablets and this, that and the other. I say, “Why do you have to have tablets?” There should be some mechanism in place to help us and GPs to understand.

Dr MOSLEY: I think it is not going to come from the GPs. I do not think it is going to come from the doctors. It has to be more like Amsterdam, where it comes from local community workers and people like that who are funded.

Ms J. FARRER: I am talking about GPs who work in our area up in the remote areas. We have a lot of GPs who travel. They go on locum. They go to Alice Springs and work with the Aboriginal people there. They come over to Western Australia—wherever. But the thing is that these GPs are well informed on how they can, when speaking to their clients, diagnose whatever the problem is. They say to our people, “You should go back and have proper food that is more applicable to your body, your consumption.” We do not have to look at diets they say because diets consist of processed foods—fruit and vegetables, we have never had that. There are a lot of native plants around, seasonal fruits and all that, and vegetables that we are not really doing anything about as a government.

Dr MOSLEY: We should have a conversation. I would love to make a documentary about it. As I said, I would like to engage in it but I just think it is a fantastic area.

Dr GARRATT: There is an intervention happening in New South Wales shortly that they are going to have a cookery class in a GP surgery. It is a different demographic but, again, I think it is the kind of thing that we probably need to move forward to.

Dr MOSLEY: Certainly in the UK and probably in Australia, we get no training in nutrition at medical schools. Again, I am agitating for that and hopefully it will happen. That is why GPs on the whole—indeed, most doctors—are useless at offering nutritional advice because we have learnt nothing.

Ms J. FARRER: I was seconded onto this committee about health and education, and where I come from in the Kimberley we have had a very high rate of suicide. Sometimes I wonder whether the food that our young people eat is contributing to how it affects them psychologically in the brain and everything else.

Dr MOSLEY: Indeed, 100 per cent.

Ms J. FARRER: Nobody talks about this.

The CHAIR: I notice we have done an hour, but if you wanted to wrap up just talking about —

Dr MOSLEY: I am very happy. As I said, there is some really good research done on it by, I think, Deakin University on food and mood. Again, you are not going to go and say to the community, “You’ve all got to eat Mediterranean-style food” because it would probably be totally inappropriate. But what this study absolutely demonstrates is that it is possible to treat mental illness with a food diet and have long-term consequences. They are doing further follow-up studies looking at the impact of diet on the microbiome, on the brain. There is a whole new area of science called psychobiotics, which is kind of the relationship between the gut and the brain. I think it could yield hugely interesting stuff. At the moment—antidepressants, that is what you get given. I do not think that is the long-term solution for many people.

The CHAIR: Thank you very much. We have taken an hour of your time and we are really appreciative. Is there anything that you wanted to add before you leave that you think you have not had an opportunity to impress upon us?

Dr MOSLEY: Not at all. I would love to find out what happens next.

Dr GARRATT: I just want to add that I think it is very important that governments are involved in making these decisions and actually looking at diet. We spend a whole lot of money on health and very little on preventive health.

Mr W.R. MARMION: A third of the budget.

Dr GARRATT: We were not going to talk about that. You could save the WA government or the federal government a lot of money. This is an area that needs a great deal more investment for the long term as well as the short term.

The CHAIR: Certainly there is a Sustainable Health Review and the draft report is out at this point in time. I think submissions are still coming in and there will be the final report in November. It is trying to work out how you use the funding in health in a manner that is much more sustainable in the long term. Preventive health would seem to be a big way of ensuring that and certainly that is one of the things that they want to focus on.

Dr MOSLEY: What I find astonishing is that the NHS would balk, for example, at paying £50 for an online course to help people reverse obesity, whereas you spend that in a weekend on drugs—when I say drugs, I mean medication. The priorities are very, very strange.

Dr GARRATT: Just on the thing about the NHS, they are ploughing a lot of money into online health—I think £4.5 billion over the next five years into online interventions because it is cost effective and it does work.

The CHAIR: Thank you again. I just want to leave you with one final thing. When I was at a Liberian function recently, they talked about the fact that it is very important for the women to make sure that the men have really large stomachs because in their community, that means that they are good wives. I did think at the time: not sure that that is particularly great for your health. I will leave you with that. Thank you very much.

Dr MOSLEY: I think plenty of men have embraced that idea already on their own!

Hearing concluded at 11.00 am
