It’s worrying to hear that one in six people in the UK suffers from type 2 diabetes, and even more worrying to know that one in three of us is prediabetic. That means we all know someone in this position or are in that state ourselves. Worrying, yes – but when does this become alarming? Of course, from the perspective of NHS funding issues, this really is alarming. But at what point are sufferers made to feel the urgency in the situation?

If our experience is anything to go by, the answer is that they are not. We have spent the last two years trying to restore our Dad, Geoff’s health as a type 2 diabetic with all its associated complications, plus a few others besides. From his point of view, he was taking a sizeable handful of pills for high blood pressure and cholesterol anyway, so adding in metformin was nothing to get excited about. His type 2 diabetes was just a ‘progressive but manageable condition’, he was told.

It wasn’t until nine years after his diagnosis that circulatory complications, Charcot foot and diabetic ulcers brought home the very real threat of amputation. For a variety of reasons, the prognosis for someone who survives a diabetic amputation is worse than the survival rates of almost all cancers; and, as a family, we weren’t ready to lose our Dad – even one piece at a time.

The problems he faced, and to a lesser extent still faces, are all due to the systemic assault that type 2 diabetes has launched on his body. The damage to the circulatory system caused by the disease had already resulted in alarming complications from the loss of sensation and blood circulation in his fingers and toes, to the increased risk of heart attack and stroke. Dad’s initially nihilistic view that ‘everyone has to die of something’ was not only unhelpful and tough on his family, there was also a big hole in this argument. From Dad’s point of view, death from a heart attack or stroke may not have been a bad way to go, although the thought of that was devastating to the rest of us. The reality, and possibly worst case scenario, would be that he would suffer a stroke or heart attack.
Diabetes is associated with other conditions that would have just as big an impact on all those that love him. Blindness is a very real concern for diabetics, as is dementia. Either or both of these and the rehabilitation needed following an amputation would push his support network of family and friends to its limit, both emotionally and financially. Dad still needs to work as a security guard to pay his bills. Any deterioration in his health would be made much worse by the immediate financial hardship that would follow.

DIET OVERHAUL
Everyone was busy with their own work and family commitments, but we knew that if we didn’t step in, things would only get worse for Dad. We started by overhauling his diet.

This was a challenge. Decades of terrible dietary habits had literally shaped Dad into the man he had become. Food was not only his sustenance, it was also his solace, his hobby, his entertainment, even his rest time. Surprisingly, though, at no point was Dad interested in cooking this food. Despite our Step mum’s best efforts, she could never shake the grip that fast food, ready meals, takeaways and pub lunches had on him. Part of overhauling his diet meant getting him to actually pick up a saucepan.

The next part involved convincing him to eat more vegetables, as he didn’t eat anything like the amount he needed to. This meant teaching him that there were more ways to eat them than boiling them to mush. He also learnt that you can make some amazing and hearty salads once you get over the ‘tip it out of the packet’ mentality.

On the recommendation of cardiologist Dr Aseem Malhotra, we decided to keep Dad on a low carbohydrate diet. This wasn’t because it was a popular diet fad, but because it makes sense for a type 2 diabetic. Dr Malhotra explained that carbohydrates drive insulin. Insulin is a fat-storing hormone and as Geoff was experiencing high levels of insulin resistance, this had to be part of our diet strategy.

The way Geoff’s GP, Dr Bill Warrilow, described what was happening in his body helped us to make sense of it all. He explained that in a situation of insulin resistance the cells no longer respond to insulin, making it difficult for them to take up glucose from the blood. All the insulin spikes Dad had experienced over the years had made it more difficult for the cells to respond to it. He said it is a bit like when someone is shouting at you. Before long, it gets too much and you put your fingers in your ears – and that makes them shout louder. This is what was happening in Dad’s body. His pancreas was flooding his body with insulin, but the cells weren’t responding as they should. They weren’t listening, as Dr Warrilow put it.

What is the best way to make someone listen to you when they’ve got their fingers in their ears? You stop shouting and start whispering. This is what Dr Malhotra’s low carb diet did for Dad. With reduced carbs there were fewer insulin spikes and, slowly, the cells in his body have started to reset. Whether they will right themselves entirely still remains to be seen, but so far it has worked. Under careful medical supervision, he has gone from four metformin tablets a day to just one.

The diet has done something else too: Dad has lost six stone. He is eating less than he was, but he is much better nourished because he is eating lots more fresh, home-cooked food. He is even starting to enjoy cooking it!

Weight is a sensitive subject and it’s worth remembering that you don’t have to be very overweight to develop diabetes or even be prediabetic. Professor Roy Taylor (Head of Metabolic Medicine at Newcastle University and pioneer of a programme successfully reversing type 2 diabetes in hundreds of patients) explained that sometimes it will happen in a person that is as little as 10% over their natural weight. It is hard to know what your natural weight is, though. He told us that, as a guideline, it is quite often the weight you were when you were 21.

YOU CAN’T OUTRUN A BAD DIET
The other thing that Professor Taylor clarified for us were the principles of weight loss. He explained that, ‘You can’t outrun a bad diet.’ On our journey to fixing Dad, we had upped his exercise from ‘zero’ to ‘some’ to ‘really quite a lot’. We were preparing him for the London-Surrey 100 cycle, which is no mean feat at any age, but tough at 62 when you haven’t exercised since junior school. We thought that it would also help him to lose weight. Professor Taylor set us straight: ‘If you want to lose weight, you can’t exercise it away. It is all about food consumption.’ He explained that while regular exercise is important for maintaining a healthy weight and helps to stop you gaining...
more weight, you won’t lose weight through exercise.

For us, this emphasised the importance of keeping Dad active well after the cheering crowds on the finish line of his marathon cycle race had faded to a happy memory. If he was going to stay in good shape, he would be working hard for it. Luckily, this is one habit that has really taken hold of Dad. He loves cycling, the freedom it gives him both mentally and physically, the places it takes him and the people he meets along the way. It is helping to keep him trim both mentally and physically, the places it takes him and the people he meets along the way. It is helping to keep him trim through a myriad of complex biological processes, but on a very simple level it is doing something else. In expending all this energy, as his body was designed to do, his brain is sending much clearer messages about what his body is designed to eat to fuel this exercise. This has helped him stick to his new, healthier diet without having to think about it too much. He can feel the difference in his cycling when he is properly nourished compared with when he has tried to take shortcuts.

That said, Dad’s body is still not the temple we would like it to be – but it isn’t a dumping ground either. It is, at least, a very respectable place and somewhere that he is now comfortable and very happy to be living in.

SMALL MANAGEABLE CHANGES

It has taken a great deal of work on all our parts to get Dad to this point, and at times he hasn’t been the most amenable participant in the project. Now 63, he is a proud man of his generation and can be astoundingly stubborn. We found that inspiring him to make small, manageable changes has been more effective than preaching at or nagging him to take control of his health could ever have been. Educating him in the implications of not getting his diabetes under control served a purpose, but the real improvements happened when he was inspired to get better. It was the combination of hope, support and continual and consistent action that has meant his doctors have been able to substantially reduce his medication and he feels healthier and happier than he has in years.

We still have to keep an eye on him and his blood glucose levels from time to time, but his quality of life has improved unrecognisably. The best part is that not only do we have the hope of many more years with our Dad; we have made the most amazing memories whilst ‘fixing’ him. The documentary following his story, Fixing Dad, is aiming for TV release this winter. For more information on the project, please visit www.fixingdad.com or www.facebook.com/fixingdad.

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**Commentary: teamwork matters**

**MIKE KIRBY**

_Mike Kirby, GP and Visiting Professor, University of Hertfordshire and the Prostate Centre, London_

_Jen Whittington describes how her family all helped to ‘fix their Dad’. The stimulus for the change was his first complication of diabetes, Charcot neuropathic osteoarthropathy, commonly referred to as the Charcot foot. This is a condition affecting the bones, joints, and soft tissues of the foot and ankle, characterised by inflammation in the earliest phase. Diabetic neuropathy has become the most common aetiology. The interaction of several component factors (diabetes, sensory-motor neuropathy, autonomic neuropathy, trauma, and metabolic abnormalities of bone) results in an acute localised inflammatory condition that may lead to varying degrees and patterns of bone destruction, subluxation, dislocation, and deformity. For Geoff, his Charcot foot and diabetic ulcers came nine years after his diagnosis. The complication obviously highlighted to both the family and Geoff not only the dangerous nature of this disease, but the impact that it was going to have on his working and family life._

_This motivated both Geoff and the family to do something about it. This case underscores the importance and effectiveness of diet and exercise in managing diabetes. Men and women with diabetes need to be motivated, and an explanation of why lifestyle is so important and how it works can be very helpful. Twenty to thirty minutes of moderate exercise increases insulin sensitivity for 15 hours, hence the need to exercise twice per day. One of the keys to the improvement in Geoff’s health was the fact that he took up cycling. Cycling is hard work unless you are fit, and getting and staying fit is of course, another motivating factor. His conversion from ‘pub grub’ to a more ‘Mediterranean style’ diet with salads and vegetables, combined with reducing carbohydrate, not only led to weight loss but improved his glycaemic control. Mark Twain said, ‘you can’t throw a habit out of the window, you have to coax it downstairs one step at a time’. Geoff made many small changes in his life, none of which cost the NHS any money, but potentially saved many thousands of pounds that would have been spent on managing future complications. It looks as though these have been pushed into distance by the simple changes made by Geoff, encouraged by his family. Teamwork matters!_