



# Debunking diabetes myths

People newly diagnosed with diabetes may start their journey with the condition weighed down by myths and false information.

Healthcare professionals need to help them through what can otherwise be a barrier to effective treatment and control, says Health Psychologist **Dr Nicola Davies**

**A**ccurate knowledge about diabetes is shrouded by a number of common and enduring myths and assumptions surrounding the condition. This article tackles some of these myths in an effort to raise awareness about the reality of diabetes. Use it as a discussion and awareness tool, particularly with those patients who are newly diagnosed and likely most in need of having those myths challenged

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### **Myth 1: Only overweight and obese people develop diabetes**

**FACT:** According to Bupa<sup>1</sup>, the more fatty tissue you have, the more resistant your cells can become to insulin. However, 20 per cent of people with the condition are not overweight at the time of diagnosis. Nzinga Cotton, Media Officer at Diabetes UK, said: "Type 1 diabetes has nothing to do with lifestyle and can't be prevented. Type 2 diabetes is closely linked to lifestyle and being obese or overweight is a major risk factor for the condition. However, other risk factors include being over the age of 40, having a family history of diabetes and being of South Asian and Black African and Caribbean descent, so it is possible to develop the condition with a healthy body mass index."

### **Myth 2: People with diabetes should limit physical activity**

**FACT:** One of the pillars of diabetes treatment is regular exercise as it helps metabolise glucose in the blood and reduces the overall build-up of fatty tissue. Justin Janoska, a Professional Fitness Coach, Certified Nutritionist and Consultant, said: "If you have diabetes, regular exercise, including resistance training, is probably one of the most important interventions you can do to manage it. It's key to improving insulin sensitivity and glucose uptake into muscle tissue."

**BUT . . .**

It is advised that people who have diabetes discuss any exercise regime with their physician to ensure they are guided as to the appropriate intensity and frequency of physical activity. People with diabetes should also take steps to reduce the risk of injuries and to manage hypoglycaemic episodes.

### **Myth 3: You will know when your blood sugar levels are high**

**FACT:** Although people with diabetes with elevated blood sugar might experience certain symptoms, this is not necessarily the same for everyone. In fact, there are many people with diabetes and very high blood sugar readings who are totally asymptomatic, and their hyperglycaemic state is only discovered during a routine check. "There is a range of blood glucose levels that will be high but this cannot be recognised by symptoms alone," said Cotton, "It is therefore important not to rely on symptoms to judge whether blood glucose are high, as symptoms related to high glucose levels usually appear when levels are well over the normal range."

Dr Pete Davies, Consultant in Diabetes and Endocrinology at Sandwell Hospital in the West Midlands, said: "It is not uncommon for patients to say that they know when their sugar levels are high. Personally, I don't find it helpful to challenge their belief. Rather, if they are using insulin to give corrective doses for high glucose levels, I would instead take the debate on to the importance of them knowing exactly how high glucose is in order to calculate a more exact corrective insulin dose, and of course that means fingerstick testing."

**BUT . . .**

In some cases, people can experience a wide range of symptoms associated with high blood sugar, including extreme thirst and hunger, increased urinary frequency, blurred vision, fatigue, and numbness or tingling of the hands and feet. In Type 1 diabetes, other signs and symptoms can reveal more severe underlying conditions, such as diabetic ketoacidosis – abdominal pain, nausea and vomiting, dry skin and mouth, fruity breath odour, deep rapid breathing and a flushed face. The bottom line is that people with diabetes need to regularly monitor their blood sugar levels, even if they are feeling fine. They should not rely on symptoms alone to monitor their blood sugar.



### **Myth 4: Injecting insulin is painful**

**FACT:** According to Dr Naveed Sattar, Professor of Medicine at the University of Glasgow: "Injecting insulin can be painful, but with modern pens pain is minimal/negligible and accepted by the vast majority of people." In fact, many people injecting insulin for the first time have been surprised by the easy and relatively painless effort needed to do so. One of the features of insulin pens that enhances the ease and painless administration of insulin is the extremely small needle calibre and the relatively low volume of insulin required for each shot.

**BUT . . .**

Ideally, needles for injecting insulin should not be reused, since they can become dull or start to bend, leading

to pain on administration. Specially engineered needles with sharp points, fine diameters and lubricated coating are some of the best needles to reduce pain – they quickly penetrate the skin without affecting surrounding tissue. It is also preferable to inject insulin at room temperature, since cold insulin can be painful. Another way to reduce pain is by rotating the points of injection; this gives the injected areas time to recuperate and prevents skin irritation.



### Myth 5: Taking insulin is a sign of failure

**FACT:** Insulin is a key component of diabetes treatment, and its use should never be seen as a sign of failure. Indeed, as Dr Davies said: "We train our team carefully to try to avoid giving the impression that a move to insulin in Type 2 diabetes signifies failure." In Type 2 diabetes, insulin injections might not be needed initially, since the other pillars of treatment, such as diet, exercise, education and oral therapy, can sometimes keep glucose levels in the blood fully compensated. However, over time, the residual amount of insulin produced by the body can decrease to a point where insulin is needed. With Type 1 diabetes was formerly known as insulin-dependent diabetes, for insulin plays a primary role in treatment. Insulin must be taken to keep blood glucose levels within an acceptable and safe range.

### Myth 6: People with diabetes need a special diet

**FACT:** "It is a myth that people with diabetes need a special diet," said Cotton. "People with diabetes can enjoy a wide variety of foods as part of healthy eating," she assured. "Just like everyone else, people with diabetes should follow a healthy balanced diet that is low in salt, fat and sugar and includes plenty of fruit and vegetables. They can still eat treats but this should be kept to a minimum." In addition, people with diabetes are advised to keep carbohydrate intakes to an optimum level that guarantees sufficient glucose in the blood, without any episodes of either hyperglycaemia or hypoglycaemia. Usually, sources of carbohydrates with low glycaemic index are recommended. "You can eat carbohydrates, but the amounts must be carefully monitored according to your individual requirements as well as your overall nutritional goals," advised Janoska.

### Myth 7: Diabetes is not really a serious disease

**FACT:** This myth is by far one of the biggest mistakes that people make. According to Janoska: "Diabetes is extremely serious as it is a metabolic disease." Some implications of the condition include a significant reduction in time and quality of tissue healing, leading to risk of amputation when the lower limb is involved. The vision can also be affected, leading to a gradual loss of sight. Diabetic nephropathy, a progressive kidney disease, can lead to kidney failure. The medical and economic repercussions of diabetes cannot be underestimated

### Myth 8: Type 1 diabetes is more serious than Type 2 diabetes

**FACT:** Despite Type 1 and 2 diabetes having very different risk factors, onset, and long-term prognosis, they are equally serious. According to Cotton, "Diabetes is a very serious condition. If not managed well, both Type 1 and Type 2 diabetes can lead to devastating complications, such as strokes, blindness and amputation." Type 1 might seem worse because it isn't avoidable through lifestyle, unlike Type 2, but the latter can be harder to manage. Both types have challenges and the potential for life-threatening complications.

### Myth 9: Diabetes is caused by eating too much sugar

**FACT:** This guide concludes with one of the most common misconceptions about diabetes, but which has been declared false by Diabetes UK and many other organisations<sup>2</sup>. Of the three main types of diabetes, none is caused by too much sugar, but rather by the pancreas not working as it should. This means insulin is either not produced, or does not work properly, so glucose builds up in the blood.

#### BUT . . .

Excess sugar is converted to fat, eventually leading to weight gain and obesity. Dr Sattar said: "It's total calories and weight gain that matter." Therefore, eating excess sugar can predispose a person to the development of an important risk factor of Type 2 diabetes – obesity. Diabetes UK has made the recommendation of limiting sugar consumption from sweetened beverages such as high energy drinks, fizzy drinks, fruit drinks and sweetened teas<sup>3</sup>. Likewise, it is recommended that other forms of sugar, such as starchy foods, are consumed in moderation.

### In conclusion...

There are many myths surrounding diabetes, both Type 1 and Type 2. These have a huge impact on how people with diabetes, healthcare professionals and the general public view the condition. Debunking these myths can help to break some of the common stereotypes and reinforce initiatives aimed at prevention, early detection and adequate treatment of diabetes.

### REFERENCES

- 1 Bupa (2013). The obesity and Type 2 diabetes connection. [www.bupa.co.uk/individuals/health-information/health-news-index/2013/The-obesity-and-type-2-diabetes-connection](http://www.bupa.co.uk/individuals/health-information/health-news-index/2013/The-obesity-and-type-2-diabetes-connection)
- 2 Diabetes UK (2010). Diabetes isn't caused by a sweet tooth – but nearly half of people think it is. [www.diabetes.org.uk/Type-2-diabetes-sugar](http://www.diabetes.org.uk/Type-2-diabetes-sugar)
- 3 Diabetes UK (2013). Study shows link between sugary soft drinks and risk of Type 2 Diabetes. [www.diabetes.org.uk/soft-drink](http://www.diabetes.org.uk/soft-drink)

