

# Exploring the world mythology of diabetes

✉ Trisha Dunning

*Myths are defined on the one hand as traditional stories concerning the early history of people or explaining a natural or social phenomenon; alternatively they represent a widely held but false belief. There are many half-truths, exaggerations and distortions of reality surrounding diabetes which fall into both of these categories: for example, that diabetes is caused by the retribution of the Gods, or that children who eat too many sweets will 'catch' diabetes.*

*Myths, often passed from generation to generation as oral history, represent a link between the past and present generations. As such, they often contain elements of the truth. However, some myths may act as barriers to progress and, as in the case of diabetes care, cause harm. In this article, Trisha Dunning looks into the implications for people with the condition of some of the most popular diabetes myths from around the world.*



Effective diabetes management not only requires the provision of comprehensive medical care and diabetes education; skilful self care by the person with diabetes is essential. A person's self-care practices are influenced by their diabetes knowledge, their physical ability to undertake tasks such as blood glucose testing, the support they receive from family and health professionals, and their own beliefs and attitudes. A person's beliefs and attitudes develop throughout life as a result of upbringing, culture and life experiences. The current interest in diabetes myths demonstrates recognition on the part of diabetes educators and people with the condition of the potential of these stories to influence self care and therefore diabetes outcomes.

### **Tall tales on the World-Wide Web**

While myths and legends continue to be transmitted by traditional methods (for example story telling or printed books), the genre has received a boost from modern technology. The Internet has not only facilitated the proliferation of myths around the world with previously unimagined speed and

effectiveness, but has also encouraged the generation of new stories and hoaxes on a wide range of subjects, including diabetes-related topics.

The Internet has promoted new stories, including hoaxes and innocent misinformation, on a wide range of subjects, including diabetes.

#### *The Aspartame hoax*

If you type 'aspartame' into an Internet browser, you will find dozens of websites devoted to the perceived horrors of this sugar substitute – also known as NutraSweet. This seems to go back to a study which was completed in 1996 in which an increase in the incidence of brain tumours over time was found to correlate with the increase in aspartame use. That study did not show any causal link, only that both brain tumours and aspartame use seemed to be increasing at the same time. That correlation has since been broken as brain tumour rates have levelled off and aspartame use has continued to increase.

However, an increasing number of messages appeared on the Internet which blamed aspartame for a range of ailments including multiple sclerosis. It was claimed that the substance causes memory loss, confusion, and severe vision loss among people with diabetes. Following US Food and Drug Administration approval of the sweetener, the American Diabetes Association refuted the false assertions in 1999, publicly stating that aspartame

is an acceptable sugar substitute and a safe part of a diabetes meal plan.

#### **The most common diabetes myths**

For the past 12 months, the Consultative Section on Diabetes Education (DECS) of the International Diabetes Federation (IDF) has been collecting diabetes myths from around the world in preparation for a forthcoming publication. Most of the myths were forwarded by health professionals from countries including Australia, Cambodia, Finland, Greece, Tonga, and Vietnam. These myths were studied carefully in order to identify any recurring themes and to discover whether they were widespread, or limited to a particular cultural group or country. Some of the most commonly occurring global myths are examined below.

#### *Eating sugar causes diabetes*

In many cultures, sugar-containing foods, such as fruits and tubers are avoided once diabetes has been diagnosed. Some Chinese groups avoid tea and coffee due to the belief that it can cause diabetes.

Diabetes is caused by a combination of genetic and environmental factors. However, being overweight increases a person's risk of developing Type 2 diabetes. The sugar myth can be explained to some degree by this truth. However, the association between sugar consumption and the development of diabetes is more likely to arise from simple confusion rather than a partial understanding of the causes of diabetes. A healthy diet and regular exercise are recommended to

control weight and prevent diabetes and its complications.

#### *People with diabetes should eat special 'diabetic' foods*

In some cultures, a pig's pancreas is boiled in order to make soup. It is believed that if a problem develops in an organ of the body, consuming food made from the same organ in an animal can be of help. This kind of practice is underpinned by a principle which is similar to the ancient belief in the 'Law of Similars' (one of the basic principles of homeopathic medicine), that substances which cause certain symptoms in a healthy person can cure the diseases which show these symptoms.

Foods which are specifically marketed for people with diabetes offer no special benefits.

It is widely believed that people with diabetes can only consume foodstuffs which have been specifically produced for people with the condition – sugar-free jellies for example, or 'diabetic' chocolate. In fact, the recommended healthy diet for people with diabetes is the same as that recommended for people without the condition – low in fat, salt and sugar, with meals based on starchy foods like bread and pasta and plenty of fruit and vegetables. Versions of sugar-containing foods which are marketed for people with diabetes offer no special benefit. Like all foods, they raise blood glucose levels. What is more, 'diabetic products' are usually more expensive than other foods, and can have a laxative effect. >>



In Western cultures, there is a growing interest in complementary therapies and traditional remedies.

*If you do not need medicines you only have 'mild diabetes'*

A very popular and dangerous misconception is that diabetes is serious only if it requires insulin treatment. The complications of diabetes can occur whether or not insulin therapy is required. Furthermore, if blood glucose levels are not controlled closely, the risk increases dramatically for developing serious and potentially life-threatening complications of diabetes, such as kidney failure or cardiovascular disease.

Worryingly, some health professionals, particularly general practitioners continue to advise people with Type 2 diabetes that they only have a 'touch of sugar' and that therefore there is no need to be concerned by the condition. The medical health professionals who perpetuate this myth put people at increased risk from the complications of diabetes; if a person does not believe

their diabetes is serious, they are less likely to take adequate measures to manage the condition. The fact that this myth continues to be perpetuated indicates that some health professionals are in as much need of diabetes education as people with the condition.

*Type 1 diabetes is more serious than Type 2 diabetes*

This idea, similar to the myth described above, is widespread. Once more, we can trace an historic explanation for the origin of this mistaken idea. Before the discovery of insulin in 1922, the diagnosis of Type 1 diabetes signified certain death within months. While all people with Type 1 diabetes require insulin to survive, it is possible to control Type 2 diabetes without the need for insulin therapy. However, a person may have Type 2 diabetes for months or years before a diagnosis is given. As a result, serious diabetes complications, such as diabetes nerve damage (neuropathy) or eye damage

(retinopathy), or life-threatening complications such as kidney failure or cardiovascular disease may be present at diagnosis. Thus, in certain circumstances, the threat from latent Type 2 diabetes could in fact make it potentially more serious than Type 1 diabetes.

Research indicates that people with diabetes are more likely to take appropriate action and attend regular diabetes clinic if they are aware of the seriousness of their condition. Therefore, the need exists for health professionals to ensure the communication of the message that Type 2 diabetes is a serious medical condition.

*When people with Type 2 diabetes begin insulin therapy, they are in the 'final stages' of diabetes*

Insulin treatment is considered by people with Type 1 diabetes to be a life-saving therapy. However, insulin is feared by many people with Type 2 diabetes. In Australia, it is sometimes believed that insulin causes diabetes complications. Again, there are some grounds for belief in this myth; the incorrect administration of insulin can lead to hypoglycaemia. However, the belief that insulin is a 'death sentence', a common theme in the responses from Italy, is not true. The reality is that in order to properly control their blood glucose levels, many people with Type 2 diabetes

develop the need for insulin therapy. With the correct self care, a healthy diet and active lifestyle, people who undergo insulin therapy are able to live full and 'normal' lives, whether they have Type 1 diabetes or Type 2 diabetes.

Whether they have Type 1 or Type 2 diabetes, a person who takes insulin is able to lead a normal life.

A link also exists in the mythology between insulin and death. It is believed that insulin is an addictive narcotic, and that once a person starts taking insulin it becomes impossible for them to stop. However, insulin is not addictive, nor is it a narcotic. Insulin is a hormone which occurs naturally in the human body. It is taken in order to replace or supplement a person's own insulin when their body no longer produces sufficient amounts to control their blood glucose levels. The myth of addiction may be explained in part by the fact that, until a cure is found for the condition, people with Type 1 diabetes cannot safely interrupt insulin therapy.

#### *Diabetes is the disease of the rich*

At one time, only the wealthy people were able to afford high fat, high sugar and refined foods in abundance, whereas the poor could not. There is a strong association between overweight and obesity, and diabetes. Traditionally, poverty rarely leads to excess weight. Bizarre though it may appear now, in some cultures having diabetes was considered a status symbol. Type 2 diabetes was proof of a person's ability to afford expensive food.

Today, however, the massive rural-urban migration which is a key demographic feature in the developing countries is having important health consequences. Lifestyles and diets have changed radically among the poor people in less-wealthy countries of Asia, Africa and Latin America. People's lives have become increasingly sedentary; the high-fat, high-sugar 'junk foods' which are affordable to the urban poor have taken the place of the fresh vegetables and pulses of the traditional rural diets. As a result, obesity levels have risen dramatically and, consequently, diabetes has become a major threat to health in the developing countries (for a more detailed explanation of the socio-economic issues behind the diabetes pandemic, see *Diabetes Voice* special issue on prevention, 2003).

#### *Traditional medicines are safer than modern treatments because they have no side effects*

In Western cultures, there is a growing interest in complementary therapies and traditional remedies. While research has shown that many of the naturally occurring substances which are used to treat diabetes can produce a reduction in blood glucose levels, they can produce negative secondary effects and interact with conventional medicines. Furthermore, not all complementary therapies are effective and their use may delay appropriate treatment. This can increase the risk of diabetes complications.

However, many complementary therapies such as yoga, massage, meditation and positive thinking are now widely accepted and applied in the

management and prevention of diabetes. These should not be seen as a substitute for conventional treatment. Complementary therapies can offer a safe and effective adjunct to conventional treatment when used with the consultation of trained, qualified health carers (for further analysis of complementary therapies, see *Diabetes Voice* 2002, 7 (2) 10-13).

#### **Implications for education**

The myths presented above can be a barrier to effective diabetes self care. However, they should not be disregarded out of hand, but explored, explained, and used as the basis for a discussion of the essential elements of diabetes care and education. Myths appear to be culturally shaped. As such, they should be acknowledged as the contemporary health beliefs of people with and without diabetes.

We are very interested in hearing about any diabetes myths you may be aware of. If you would like to contribute to the compilation of material for the IDF DECS publication on diabetes myths, please contact the author by email: [trish.dunning@svhm.org.au](mailto:trish.dunning@svhm.org.au); or fax: +61-3-9288-3590.

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