

**Diabetes - The Facts** 

## What is diabetes?

In people with diabetes, blood glucose levels are higher than normal because the body either does not produce enough insulin or cannot use insulin properly. The body needs insulin to turn the food we eat into energy.

There are two main types of diabetes type 1 and type 2, but other types also exist.

### Type 1 diabetes

Type 1 diabetes is an auto-immune disease that occurs when the pancreas cannot produce enough insulin, because the cells that make the insulin have been destroyed by the body's own immune system.

The 'missing' insulin has to be replaced, resulting in life-long daily injections. While type 1 diabetes can and does occur at any age, it usually develops in childhood and affects 10-15% of all people with diabetes.

Usually, onset is abrupt and the symptoms are obvious. Symptoms can include excessive thirst and urination, unexplained weight loss, weakness, fatigue, irritability, muscle cramps, blurred vision, skin infections and slow wound healing, and in some cases, tingling or numbness in the feet.

The exact cause of type 1 diabetes is not yet known, but we do know that it is not caused by a poor diet or lack of physical activity.

Presently nothing can be done to prevent or cure type 1 diabetes.

### Type 2 diabetes

With type 2 diabetes the pancreas makes insulin, but it does not work as well as it should and upsets the balance of glucose in the body.

Type 2 is the most common form of diabetes representing approximately 85-90% of people with diabetes in Australia and is the result of a combination of



both genetic and environmental factors.

Type 2 diabetes can be delayed and even prevented in up to 60% of cases by adopting a healthy and active lifestyle and diet.

Symptoms are similar to those of type 1 diabetes. Although some people with type 2 diabetes do not have any symptoms at all. For others, the first indication may be a complication of diabetes such as a heart attack, vision problems or a foot ulcer.

### Gestational Diabetes

Gestational diabetes is a form of diabetes that occurs in around 5% of pregnancies and is diagnosed when higher than normal blood glucose levels appear for the first time during pregnancy.

While maternal blood glucose levels usually return to normal after the birth of the baby, there is a known increased risk for type 2 diabetes in the future for the mother and baby.

Impaired glucose tolerance, impaired fasting glucose and pre-diabetes

Impaired glucose tolerance (IGT) and impaired fasting glucose (IFG) are conditions where blood glucose levels are higher then normal but not high enough for a diagnosis of type 2 diabetes.

The term 'prediabetes' is sometimes used to describe these conditions.

# Complications of diabetes

Although the causes and treatments for type 1 and type 2 diabetes can be different, the complications or damage to the organs of the body resulting from high blood glucose levels are similar for both.

- People with diabetes are up to four times more likely to develop cardiovascular disease. More than two-thirds of Australians who die of cardiovascular disease (heart attack and stroke) had diabetes or pre-diabetes five years earlier.
- Retinopathy affects about one in six people with diabetes and is the most common cause of blindness in people aged 30–69 years.
- People with diabetes develop impaired kidney function at three times the rate of those who do not have diabetes, and diabetes is a leading cause of kidney failure
- Neuropathy (or peripheral nerve

disease) and blood vessel damage may lead to leg ulcers, serious foot problems and limb amputation. It is estimated that amputation is 15 times more common in people who have diabetes than in people who do not.

- Erectile dysfunction, oral complications and complications during pregnancy are also more common in people with diabetes.
- Premature mortality caused by diabetes results in an estimated 12-14 years of life lost.

Early diagnosis and treatment, and effective ongoing management also reduce the risk of diabetes-related complications.



### Risk factors for type 2 diabetes

People who have a family history of type 2 diabetes

People who have a parent with type 2 diabetes are two to four times more likely to develop the disease than the average population. If both parents have type 2 diabetes, the likelihood of their children developing it increases to one in two.

It is important to remember that although genes may predispose an individual to type 2 diabetes, lifestyle factors such as being overweight, inactivity and a poor diet are also significant in triggering the underlying risk.

diabetes

Gestational diabetes significantly increases a woman's risk of developing type 2 diabetes later in life. If a woman has had gestational diabetes, there is a 50% chance that 25 years following the birth, she will develop type 2 diabetes.

Women with a history of gestational diabetes usually do not perceive themselves to be at an elevated risk of type 2 diabetes.

### People who are overweight or obese

Being overweight is a risk factor for type 2 diabetes. In particular, people who have excess weight around their

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waist or abdomen, often described as central obesity, are at an even greater risk of developing type 2 diabetes. A person's waist measurement can be a good indicator of whether they are overweight or obese.

### Aboriginal and Torres Strait Islander communities

The prevalence of type 2 diabetes in some Aboriginal communities may be as high as 30%.

# Culturally and linguistically diverse backgrounds

Type 2 diabetes is found in higher rates among people with a CALD background.

## Type 2 diabetes can be prevented

People classified as overweight are twice as likely to develop type 2 diabetes and the obese are four times as likely to develop diabetes compared to people in a normal weight range.

Maintaining a healthy weight, being physically active and following a healthy eating plan can reduce a person's risk of developing type 2 diabetes by up to 60%.

### Diabetes the facts and figures



### Diabetes in Australia

- In Australia the number of new cases of diabetes each year would fill the Melbourne Cricket Ground: approximately 275 people develop diabetes every day.
- The average weight of Australian adults (aged18-70) has increased by 0.5-1kg per year for the last 20 years.
- It is currently estimated that 1.5 million Australians are living with diabetes. It is thought that half of these people are living with undiagnosed type 2 diabetes.
- By 2031 it is estimated that 3.3 million Australians will have type 2 diabetes.
- Nearly one in four Australians over the age of 25 years has either diabetes or prediabetes.
- The total number of Australians with diabetes and prediabetes is estimated at 3.2 million.

- The cost of diabetes to the Australian community and the individuals affected is significant government health budgets are impacted to the extent of an estimated \$6 billion each year, while people living with diabetes are hit with greatly increased personal health costs.
- There are over 900,000 people diagnosed with diabetes registered on the National Diabetes Services Scheme.\*

type 1 130, 324 type 2 694, 783 gestational 71, 180

#### Source:

- NDSS Registrants database, 2008
  Dunstan et al, AusDiab, 2002.
- \*The National Diabetes Services Scheme is an initiative of the Australian Government administered by Diabetes Australia. For more information visit ndss.com.au

### Diabetes around the world

- Diabetes is the world's fastest growing chronic disease.
- Diabetes currently affects 246 million people worldwide and is expected to affect 380 million by 2025.
- In 2007, India, China, the United States, Russia and Germany had the highest rates of diabetes.
- Every 10 seconds two people develop diabetes and one person dies from diabetes-related causes.
- It is estimated that more than 2.5 million people worldwide are affected by diabetic retinopathy.
- Diabetes is the largest cause of kidney failure in developed countries and is responsible for huge dialysis costs.

Source: Diabetes Atlas, 3rd Edition, International Diabetes Federation, 2007.

#### **Diabetes Australia**

Diabetes Australia is the national peak body for diabetes in Australia providing a single, powerful, collective voice for people living with diabetes, their families and carers. Diabetes Australia works in partnership with diabetes health professionals and educators, researchers and health care providers to minimise the impact of diabetes on the Australian community.

Diabetes Australia is committed to turning diabetes around through awareness, prevention, detection, management and a cure.

#### **Contact Diabetes Australia**

Level 2, Bird Cameron House 103-105 Northbourne Ave, Turner ACT 2612 GPO BOX 3156, Canberra ACT, 2601 T: +61 2 6232 3800 F: +61 2 6230 1535 admin@diabetesaustralia.com.au

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turning diabetes around

