Healthy Start to Life Education for Adolescents Project Pacific Region

Diabetes Overview

Student Presentation Slides

Learning Objective 2 | The Issue Learning Objective 3 | An Overview

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Te Maki Toto Vene (T2): E Manamanata no **Toku Iti Tangata**

SPS

DO 1

Bio What is Diabetes?

Diabetes is a disease that occurs when we have too much glucose (sugar) in our blood.

Why is diabetes an issue for my community?

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Rates of type 2 diabetes

(Ministry of Health statistics)

1 in 4 Cook Islanders will be diagnosed with type 2 diabetes in their life time.

1 in 4 Pacific Islanders living in New Zealand will be diagnosed with type 2 diabetes in their life time.



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Rates of type 2 diabetes

(Ministry of Health statistics)

In New Zealand:

1996	2006	Predicted 2011	Actual 2011
80,000 adults	120,000 adults	150,000 adults	237,000 total

In Cook Islands:

100/	000/			
1996	2006	Predicted 2011	Actual 2011	
			3076 total	****

Issue



Rates of type 2 diabetes

Globally, there are as many people again who have diabetes, but are unaware that they have it!



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Rates of type 2 diabetes

(Ministry of Health statistics)

In New Zealand, adults living in the poorest neighbourhoods are more than twice as likely to have diabetes than adults living in wealthier neighbourhoods.

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Rates of type 2 diabetes

(Ministry of Health statistics)

One-third of the increase in the incidence of diabetes is due to obesity.





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Rates of type 2 diabetes

(Ministry of Health statistics)

But, even if all the programmes to reduce obesity are successful, the number of Pacific Islanders with diabetes would still increase.

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What is the cost?

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Issue

In 2006/2007, the healthcare costs for New Zealanders (including Pacific Islanders) with type 2 diabetes was around **\$440 million**.

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What is the cost?

If unchecked, it is predicted to increase to **\$1.78 billion** by 2021, or 15% of the New Zealand Government's health budget.



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Issue

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glucose

What is Diabetes?

Biology

Diabetes is a disease that occurs when we have too much glucose (sugar) in the blood.

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bloodstream

What is glucose?

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Glucose is the main source of energy for the bodies cells.

Biology

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glucose



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Biology



BIDIO BILL HOW DOES GLUCOSE GET DO 15 Into your bodies cells?



A chemical called insulin is produced in the pancreas and its job is to help glucose move into the cells.

Biology



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SPS DO 17

Biolos Types of diabetes

The cells of a person with diabetes have problems taking up glucose due to either:

- 1. a lack of insulin \rightarrow type 1 diabetes
- 2. the insulin cannot work properly (insulin resistance)
 - \rightarrow type 2 diabetes.

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Type 1 diabetes

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- Insulin cannot be made by the pancreas
- Commonly seen in children and young people
- Insulin injections are essential
- A healthy diet is also essential.

Type 2 diabetes

- The pancreas is still making insulin BUT the insulin is not working
- Even more insulin is made the person becomes INSULIN RESISTANT
- Commonly seen in older people
- Obesity and inactivity are major contributors to type 2 diabetes.



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Before 1922, babies born with type 1 diabetes usually died before the age of 1. This changed with the discovery of insulin in 1922.

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To lower the level of glucose in the blood:

- People with type 1 diabetes MUST have insulin injections
- Some people with type 2 diabetes also need insulin injections

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To lower the level of glucose in the blood:

- People with type 1 diabetes MUST have insulin injections
- Some people with type 2 diabetes also need insulin injections
 - Eat healthy food in the right amount or exercise to lower the levels of glucose in the blood

To lower the level of glucose in the blood:

- People with type 1 diabetes MUST have insulin injections
- Some people with type 2 diabetes also need insulin injections
 - Eat foods or exercise which will lower
 the levels of glucose in the blood
- People with type 2 diabetes may take tablets that help insulin production.

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What puts you at risk?

A combination of factors can cause or influence the risk of diabetes

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Risk factors for type 2

• Heredity – runs in the family

Risk factors for type 2 diabetes include:

- Heredity runs in the family
- Lifestyle





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Risk factors for type 2 DO 28 diabetes include:

- Heredity runs in the family
- Lifestyle
- Diet

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Risk factors for type 2 diabetes include:

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- Heredity runs in the family
- Lifestyle
- Diet

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• Early-life environment.

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A combination of factors can lead to diabetes: genes, lifestyle, diet and early-life environment.

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Diabetes can be prevented by modifying the risk factors.

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Obesity is the main preventable cause of type 2 diabetes in the Cook Islands.

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Food and activity

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A balance is needed between the energy you put into your body and the energy you use up.

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Healthy balance

Healthy start to life **Our early-life environment** affects our risk of developing obesity and type 2 diabetes as an adult.

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TO THINK ABOUT: Why are some groups in our community at greater risk than others?

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