Chapter 1: Prevention, screening and diagnosis

Test your knowledge

1. Diabetes occurs due to the dysfunction or destruction of which pancreatic cells?
   1. Alpha cells
   2. **Beta cells (correct)**
   3. Epsilon cells
   4. Pancreatic polypeptide cells
2. Which of the following is NOT a risk factor for type 2 diabetes?
3. Low birth weight
4. **Existing autoimmune conditions (correct)**
5. Smoking
6. Visceral adiposity
7. What is the most important role of insulin in the human body?
8. **Allows cells of the body to use glucose as energy (correct)**
9. Breaks down glucose in the bloodstream
10. Promotes glucose excretion
11. Stimulates hepatic glucose production
12. Which of the following is the correct diagnostic threshold for diabetes using a fasting plasma glucose test?
13. ≥6.5 mmol/l (117 mg/dl)
14. **≥7.0 mmol/l (126 mg/dl)** **(correct)**
15. ≥11.1 mmol/l (200 mg/dl)
16. ≥12.2 mmol/l (220 mg/dl)
17. Which of the following is NOT an early symptom of type 1 diabetes, which often appears in childhood?
18. Frequent urination
19. Frequent thirst
20. Often tired
21. **Gaining excessive weight (correct)**

SUMMARY RESULTS

Score: X/5

In this module, we covered the importance of type 2 diabetes prevention, and best practice for screening and diagnosis.

1. CORRECT/INCORRECT

Diabetes is associated with the dysfunction or destruction of the pancreatic beta cells.

1. CORRECT/INCORRECT

Risk factors for type 2 diabetes include overweight or obesity, visceral adiposity, physical inactivity, older age, diabetes in first degree relatives, history of gestational diabetes, low birth weight, cardiovascular disease, smoking, certain ethnicities and certain medications. Existing autoimmune conditions are not a risk factor for type 2 diabetes.

1. CORRECT/INCORRECT

Insulin allows cells of the body to use glucose as energy. Under normal physiological conditions, insulin is secreted in response to an increase in blood glucose levels – after eating a meal, for example – and acts as a ‘key’ to open the cells of the body, allowing glucose to enter.

1. CORRECT/INCORRECT

When using fasting plasma glucose testing for diabetes diagnosis, a result of >7.0 mmol/l (126 mg/dl) is indicative of diabetes.

1. CORRECT/INCORRECT

Symptoms of type 1 diabetes include frequent urination, frequent thirst, blurred vision, feeling tired, and losing weight unintentionally.