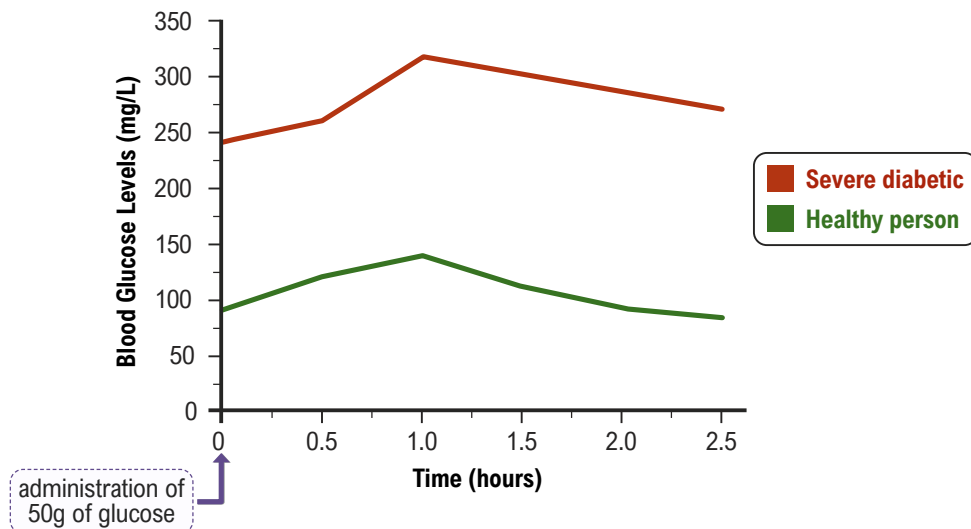


TOPIC: DIABETES

What is Diabetes Mellitus?

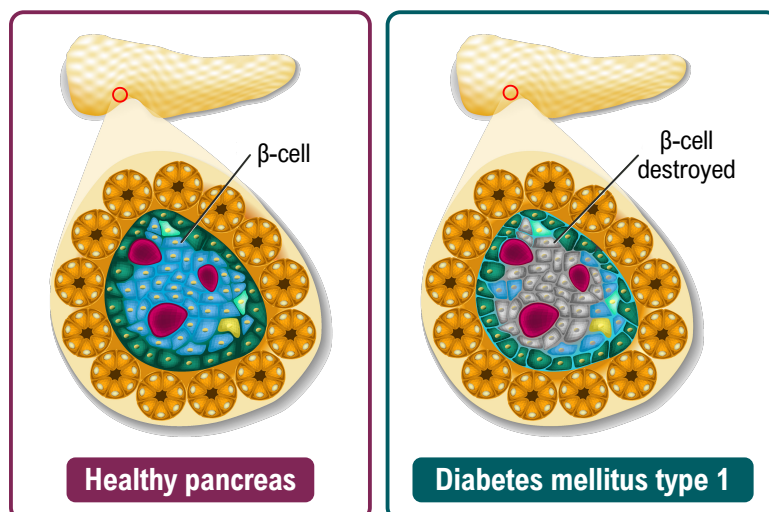
- ◆ **Diabetes:** chronic disease where body either does NOT produce enough _____ or cannot effectively use it.
 - Can result in _____ *glycemia*.
 - Extremely dangerous if not treated; can lead to blindness, kidney failure, limb amputation, or death.
- ◆ Diabetes is prevalent: >10% of global adult population suffers from diabetes, including >35 million people in the US.



Note: There are several types of diabetes, including Type ____ and ____.

What is Type I Diabetes?

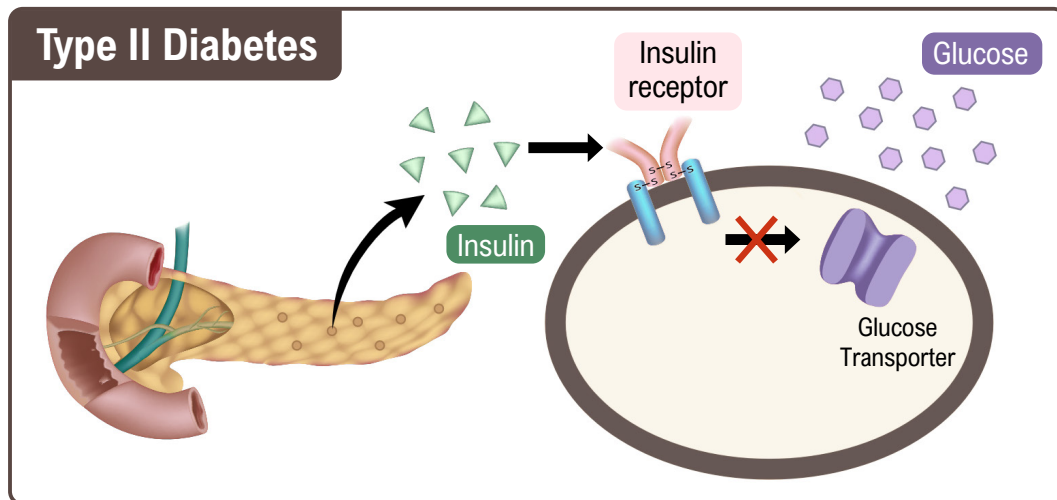
- ◆ **Type 1 Diabetes:** an autoimmune disorder, where body's immune system destroys _____-producing β -cells.
 - Leads to little to _____ insulin production by pancreas & requires _____ insulin therapy.
 - Currently the only treatment for type 1 diabetes is the administration of insulin (via injection or pump).
 - Type I accounts for ~_____% of diabetes cases & is often diagnosed in adolescents between ages 10-14.



TOPIC: DIABETES

What is Type II Diabetes?

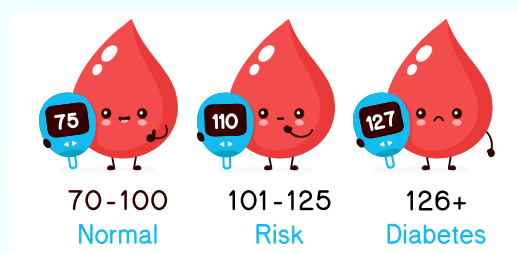
- ◆ **Type 2 Diabetes:** disorder where body cells gradually become insulin _____ (insulin is less effective).
 - Pancreas tries to compensate with excess insulin until it is *overworked*, leading to _____ insulin production.
 - Achieving a healthy weight via healthful diet & regular exercise can often “_____” type II diabetes.
 - Type II accounts for ____ - ____% of all diabetes cases (most are diagnosed after age 45).



EXAMPLE

Prediabetes is a condition where blood glucose is elevated beyond normal levels but is not high enough for a type 2 diabetes diagnosis. People with prediabetes often show no obvious symptoms, but they have an increased risk of progressing to type 2 diabetes. A fasting blood glucose level of under 100 milligrams per deciliter (mg/dl) is considered “negative” for diabetes, while 126 mg/dl or higher is considered a “positive” test for diabetes. A reading between 100 mg/dl and 126 mg/dl is classified as prediabetes. Considering that prediabetes, like type II diabetes, can often be reversed or managed with lifestyle modifications, which of the following interventions should be recommended to someone who has prediabetes?

- Starting regular insulin injections to decrease blood glucose.
- Increasing protein and fat intake.
- Decreasing intake of added sugars & foods with a high glycemic load & exercising more frequently.
- All of the above.



TOPIC: DIABETES

PRACTICE

What's the difference between type 1 & type 2 diabetes?

- a) Type 1 diabetes occurs in young children, type 2 diabetes occurs in adults over the age of 65.
- b) Type 1 diabetes is an autoimmune disorder, type 2 diabetes occurs when cells develop insulin resistance.
- c) Type 1 diabetes patients cannot produce insulin, while type 2 patients cannot produce glucagon.
- d) Patients with type 1 diabetes need to completely avoid sugar, but type 2 patients do not.

PRACTICE

Which of the following statements about diabetes is true?

- a) Type 1 diabetes is far less prevalent than type 2 diabetes – type 1 accounts for less than 10% of cases.
- b) Over 30% of the world's population have diabetes.
- c) Diabetes cannot occur in patients under the age of 20.
- d) Type 2 diabetes is usually diagnosed in patients under the age of 35.

PRACTICE

There is growing concern among medical professionals about the increase in type 2 diabetes in the past few years, and the fact that doctors are starting to see younger patients diagnosed with the disease. Why do they have this concern?

- a) Younger type 2 diabetes patients will likely live with the disease for longer, thereby increasing the risk of developing serious complications.
- b) An increase in young type 2 diabetes patients may be an indicator that people are living less healthy lifestyles & are consuming a less healthful diet than they did in the past.
- c) It can have a severe impact on the quality of life for young people.
- d) All of the above.