

Virtual Learning

Medical Interventions Evolution of Diabetes Treatment May 4, 2020



Medical Interventions Lesson: May 4, 2020

Objective/Learning Target:

Describe the evolution of the methods used to diagnose and treat diabetes from the 1800s through today. (4.1.1)



Let's Get Started:

- 1. Review the information on diabetes that you learned about in PBS by reading the information from <u>the CDC</u>.
- 2. What hormone is most associated with diabetes? Why?
- 3. What medical interventions are part of diabetes?



Let's Get Started: Answers

- 1. Review the information on diabetes that you learned about in PBS by reading the information from <u>the CDC</u>.
- 2. What hormone is most associated with diabetes? Why?
 - a. Insulin; people with diabetes either don't produce enough or no longer respond to it
- 3. What medical interventions are part of diabetes?
 - a. Insulin shots, insulin pumps, non-insulin medications, etc.



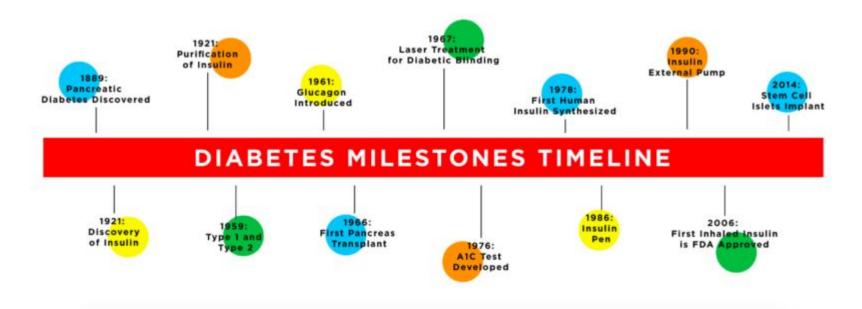
Lesson Activity

Read about the history of diabetes treatments <u>here</u> and use the information to construct a timeline of the most important events.



Lesson Activity - Answer

Read about the history of diabetes treatments <u>here</u> and use the information to construct a timeline of the most important events.





Practice

Use your completed timeline to answer the questions below:

- 1. How was diabetes diagnosed in the 1700s?
- 2. How was diabetes treated up until the late 1800s?
- 3. What was discovered in the 1920s that changed the treatment for diabetes?
- 4. Why was 1978 such an important year for diabetes research?
- 5. The 1990s saw the incorporation of what technology?
- 6. What do modern treatment options include?
- 7. What does the future of diabetes treatment look like?



Use your completed timeline to answer the questions below:

- 1. Urine samples were collected and tested for glucose
- 2. Diet interventions and exercise
- 3. The hormone insulin
- 4. Insulin was synthesized in a lab for the first time
- 5. External insulin pumps
- 6. Non-insulin medications
- 7. Immunotherapy and artificial pancreases



Additional Practice/Resources

- 1. Check your understanding by reviewing with these <u>flashcards</u>.
- 2. What do you believe will be the future of diabetes treatment? Research some of the current strategies being developed and create a top 3 list of what you believe will be the most promising.
- 3. Learn about a potential new non-invasive way to monitor diabetes by reading this <u>article</u>.
- 4. While these interventions are being developed, we must still rely on the production of insulin. This will be our focus for the week; *how do we make insulin in a laboratory?*