Fact or Fiction?

Type 1 diabetes is caused by eating too much sugar.
What is Diabetes?

https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources
How Does My Body Use Fuel for Energy?

• You consume food which is fuel for your body
• Your body digests the food and turns it into glucose
• Glucose gets into your bloodstream
• Your pancreas provides your body with insulin
• Insulin helps to get the glucose from your bloodstream into your cells
• Your cells are then able to use the glucose for energy
Insulin

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Insulin Facts

• Hormone made by your pancreas
• Life-saving and life sustaining
• Helps your body use glucose for energy

1. Type 1 Diabetes:
   - Pancreas is unable to produce insulin

2. Type 2 Diabetes:
   - Pancreas is not able to produce enough insulin
   - Body is resistant to using insulin
Type 1 Diabetes

https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources
Type 1 Diabetes

- About 5-10% of people with diabetes have Type 1
- Autoimmune disorder – Body attacks itself and destroys cells in pancreas which produce insulin
- Pancreas is unable to produce insulin and cannot use glucose
- Must inject themselves with insulin through shots or insulin pump
- This is a blood glucose monitor used to measure blood sugar levels
Type 1 Diabetes Warning Signs

Warning signs and symptoms – **Usually occur suddenly**

- Excessive thirst
- Frequent urination
- Increased appetite
- Rapid weight loss
- Unexplained fatigue
- High amounts of sugar in blood/urine
  - Sweet odor may be present in urine or breath/body
Type 2 Diabetes

https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources
Type 2 Diabetes

• About 90-95% of people with diabetes have Type 2
  o Was primarily diagnosed in older adults
  o Increasingly common in children and teenagers

• Influenced heavily by lifestyle
  o Can make insulin but cannot make enough
  o Pancreas is not able to make enough insulin and/or the body doesn’t use it properly

• Can be controlled through nutritious diet and regular physical activity
Type 2 Diabetes Warning Signs

Warning Signs and Symptoms – **Can occur slowly over time**

- Blurred vision
- Tingling or numbness in legs, feet or fingers
- Recurring skin, gum or urinary tract infections
- Drowsiness
- Slow healing of cuts and bruises
- Any symptoms that occur with Type 1 diabetes
Impact of Sugary Foods and Sedentary Lifestyles

https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources
Why are Type 2 Diabetes Numbers Rising?

• Teenagers and children are spending more time being inactive
  o Video games
  o Television
  o Computers
• Increased consumption of processed junk foods
  o Easy to access
  o Can be lower cost
• Added sugars
  o Soda
  o Candy
  o Cookies
  o Ice Cream
Consequences of Diabetes

- Having high and uncontrolled blood sugar can lead to many serious health issues
  - Blindness
  - Damage to circulation in hands and feet or amputations
  - Kidney failure
  - Heart disease

- Eating a healthy diet and regular physical activity
  - Helps with blood sugar levels in both Type 1 and Type 2
  - People with Type 1 still need to take insulin
Managing Blood Glucose

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Managing Blood Glucose

People with both Type 1 and Type 2 diabetes

Monitoring blood glucose

• Give themselves finger sticks especially during meal-times
  o For Type 1 – Lets them know how much insulin they need
  o For Type 2 – Lets them know what foods and activities affect their blood sugar

Low Blood Sugar
• Dizziness, weakness or fainting

High Blood Sugar
• Extreme thirst, blurry vision, weakness or dizziness
What is an A1C Test?

• Blood test
• Reported as a percentage
• Tests what your blood sugar has been over the last 2-3 months
• Is used to diagnose Type 1, Type 2 and pre-diabetes
• Levels
  o Under 5.7% – Normal
  o 5.7%-6.4% – Pre-diabetes
  o 6.5% and above – Diabetes
What is Diabetes Burn-Out?

https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources
Diabetes occurs when your blood sugar is higher than normal and affects how your body changes food into energy.

- **Type 1 diabetes** – Autoimmune disorder where the body attacks itself and destroys cells in pancreas which produce insulin.
- **Type 2 diabetes** – When the body either cannot make enough insulin or the body doesn’t use it properly.
- Diabetes numbers are on the rise because of -
  - Increased consumption of junk food
  - Added sugars
  - Inactivity
- Eating a healthy diet and regular physical activity helps with blood sugar levels in both Type 1 and Type 2 diabetes.

Take Home Message
Why is Type 2 diabetes referred to as the “lifestyle” disease? What are the most common steps taken to try and control Type 2?

How does Type 1 diabetes differ from Type 2?

The number of cases of Type 2 diabetes is rising quickly in teenagers and even in children. What do you think is contributing to these increasing numbers in our culture?

What role does insulin play when it comes to Type 1 diabetes?

What is an A1C test?
Choose 1 Activity

- Diabetes 101 Health History Worksheet
- Pancreas Appreciation Day Worksheet
Sugar Babies Film

https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources
References

All the sources from the current Crush Diabetes curriculum.


