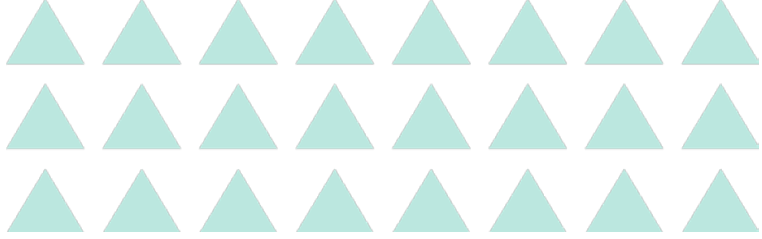


CRUSH

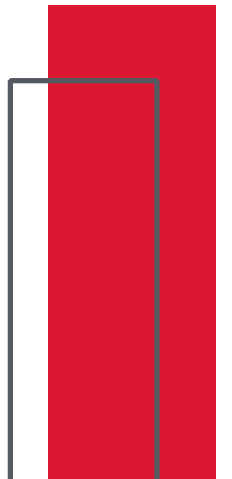
Diabetes

Diabetes 101



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?



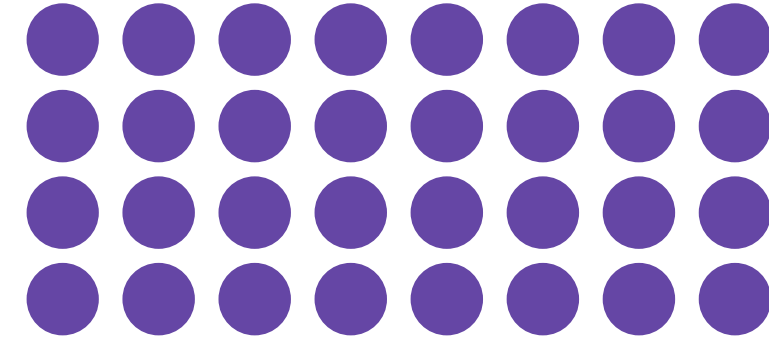
- You consume food which is fuel for your body
- Your body digests the food and turns it into glucose
- Glucose gets into your bloodstream
- Your pancreas provides your body with insulin
- Insulin helps to get the glucose from your bloodstream into your cells
- Your cells are then able to use the glucose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



Insulin



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



Insulin Facts

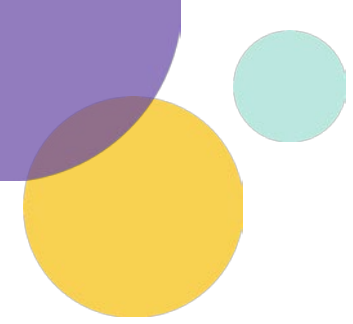
- Hormone made by your pancreas
- Life-saving and life sustaining
- Helps your body use glucose for energy



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



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



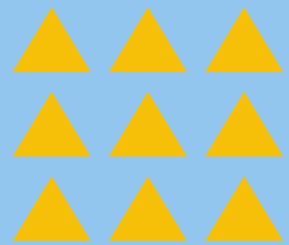
Type 1 Diabetes

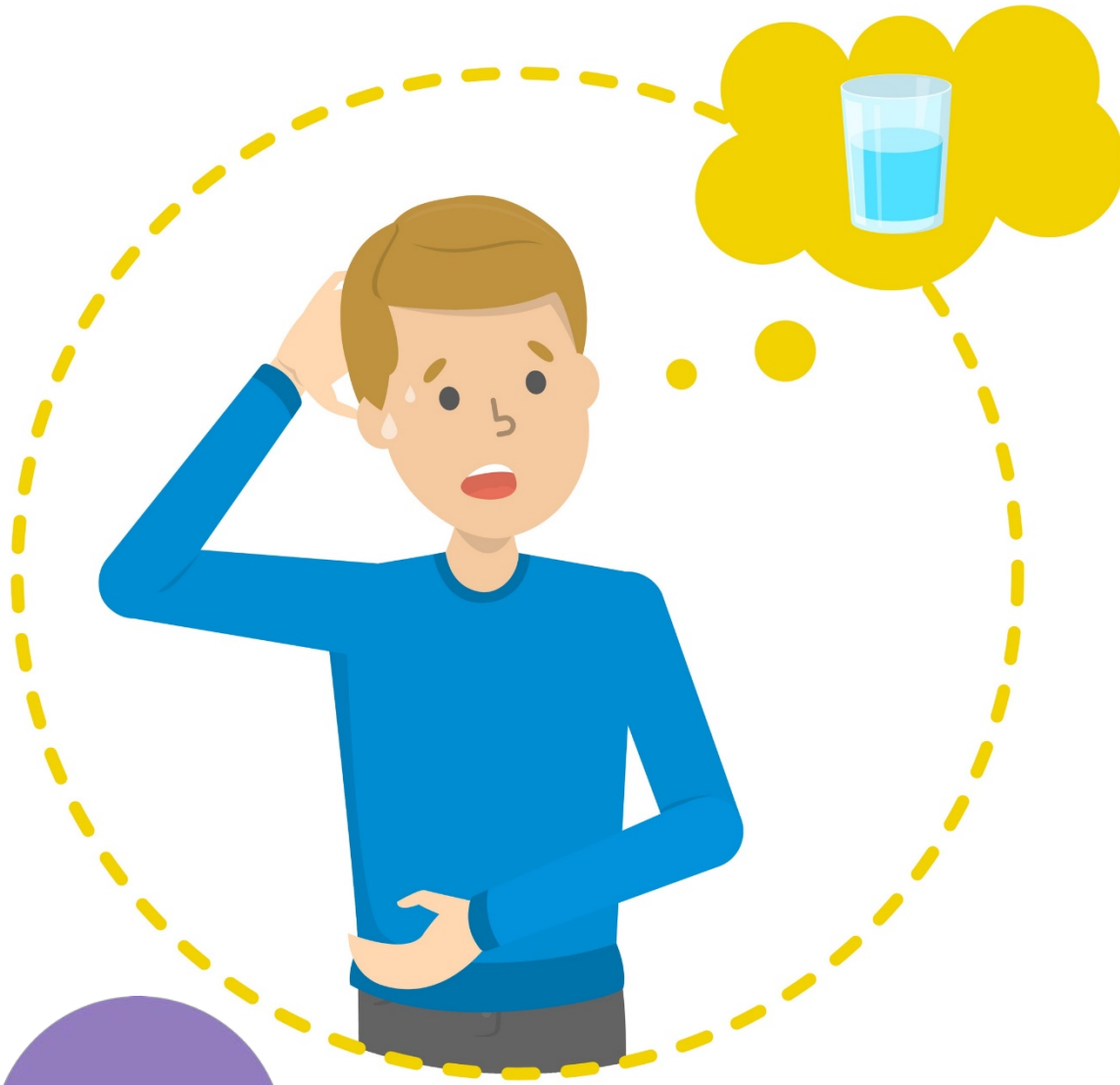


<https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources>

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
 - Was primarily diagnosed in older adults
 - Increasingly common in children and teenagers
- Influenced heavily by lifestyle
 - Can make insulin but cannot make enough
 - 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

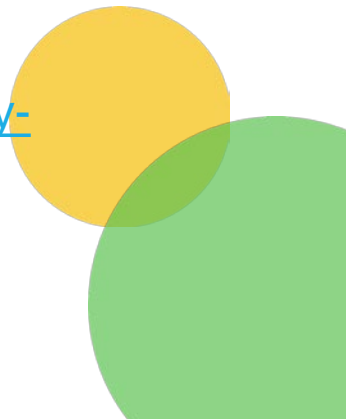
Warning Signs and Symptoms – Can occur slowly over time

- 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

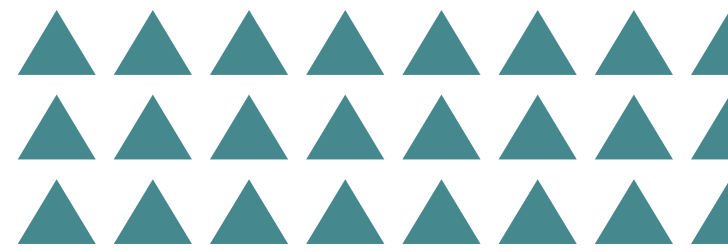


<https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources>



Why are Type 2 Diabetes Numbers Rising?

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





Consequences of Diabetes

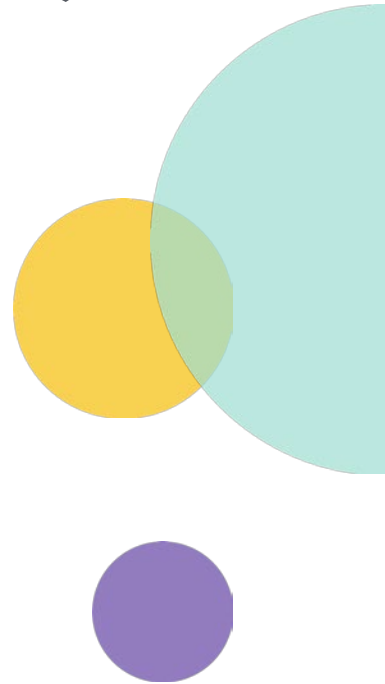
- Having high and uncontrolled blood sugar can lead to many serious health issues
 - Blindness
 - Damage to circulation in hands and feet or amputations
 - Kidney failure
 - Heart disease
- Eating a healthy diet and regular physical activity
 - Helps with blood sugar levels in both Type 1 and Type 2
 - People with Type 1 still need to take insulin



Managing Blood Glucose



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



Managing Blood Glucose



People with both Type 1 and Type 2 diabetes

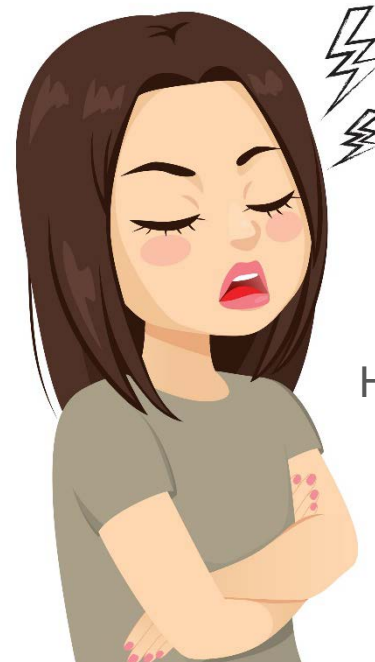
Monitoring blood glucose

- Give themselves finger sticks especially during meal-times
 - For Type 1 – Lets them know how much insulin they need
 - 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
 - Under 5.7% – Normal
 - 5.7%-6.4% – Pre-diabetes
 - 6.5% and above – Diabetes



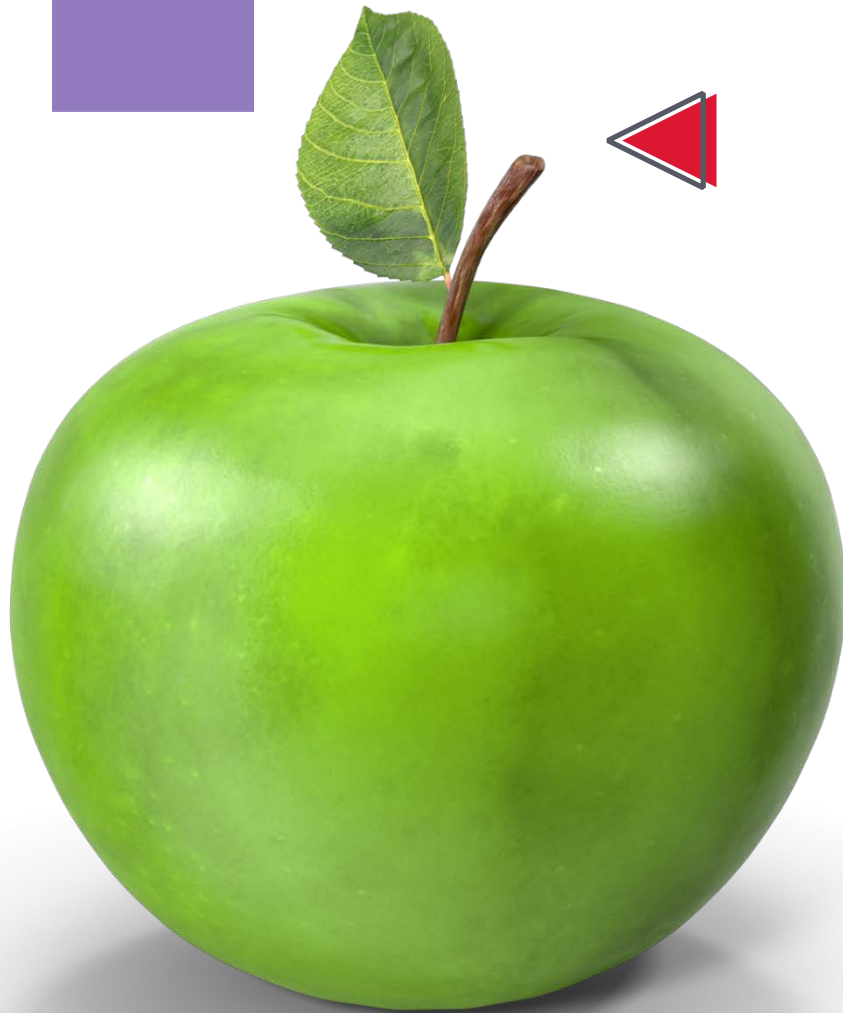
What is Diabetes Burn-Out?



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



Take Home Message



- 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

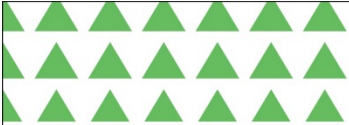
Discussion Questions

- 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



Pancreas Appreciation Day Worksheet

CRUSH
Diabetes

1. Reflect on Prince's and Lizzie's cases and the challenges of living with diabetes. Diabetes particularly Type 1, is considered a lifelong disease. Imagine you were in their



Diabetes 101 Health History Worksheet

CRUSH
Diabetes

1. Interview an adult in your household and create a list of diseases that have been present in their family history.

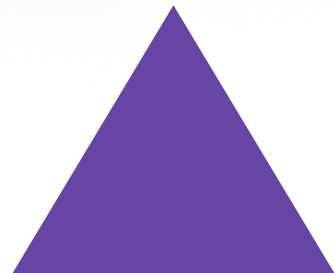
a. _____

b. _____

c. _____

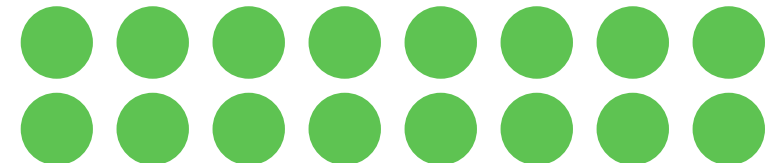
d. _____

2. Choose one of the diseases that run in their family history.



Sugar Babies Film ◀

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



References



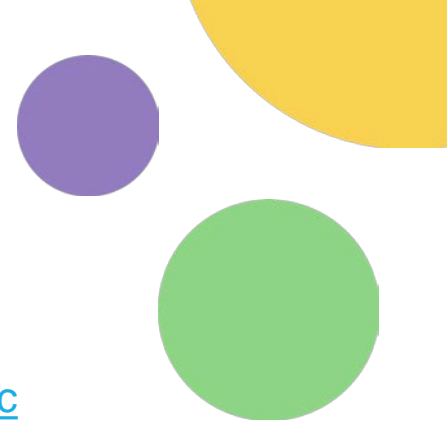
All the sources from the current Crush Diabetes curriculum.

American Diabetes Association (n.d.). Understanding A1C. Retrieved from <https://www.diabetes.org/a1c>

Diabetes State Burden Toolkit. (2020). Retrieved from <https://nccd.cdc.gov/Toolkit/DiabetesBurden/YLL>

Kidshealth (2020). Type 1 Diabetes: What is it? Retrieved from <https://kidshealth.org/en/kids/type1.html>

Sugar Babies: The Bittersweet Truth About Diabetes. (2014). <https://health.utah.edu/nutrition-integrative-physiology/community-outreach/utah-center-community-nutrition/clinical-nutrition-resources>





DRIVING OUT
DIABETES

A LARRY H. MILLER FAMILY
WELLNESS INITIATIVE

LARRY H. & GAIL
MILLER
FAMILY FOUNDATION

