

# KARA AND THE (NOT SO) DIRE BEASTIE

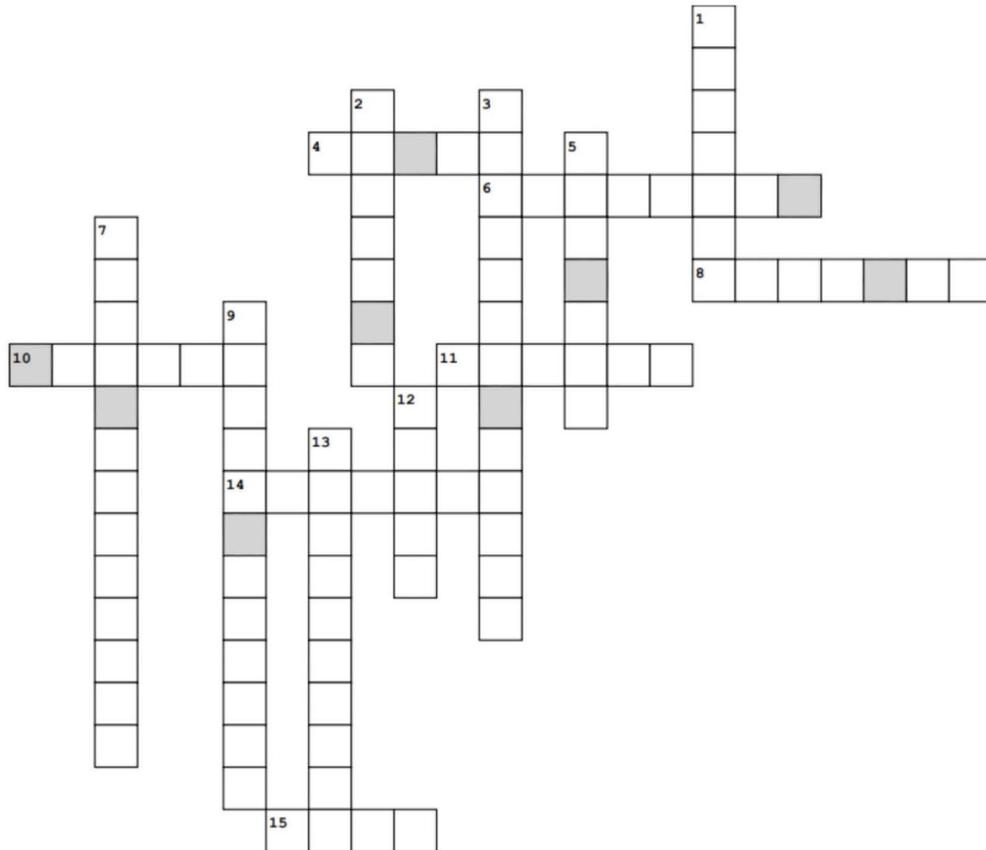
# Activity Book

created by the students of  
Case Western University



EPIISODE 1

# Crossword Puzzle



**Across**

- 4. A common symptom of low blood sugar is feeling \_\_\_\_\_
- 6. The organ that secretes insulin
- 8. The organ that digests food
- 10. Glucose provides \_\_\_\_\_ for the body's cells
- 11. Blurred \_\_\_\_\_ is a common symptom of high blood sugar
- 14. Energy source that the body can use
- 15. The basic building block of living things

**Down**

- 1. The organs that filter waste out of the blood
- 2. One common symptom of diabetes is feeling \_\_\_\_\_
- 3. The disease that Kara has
- 5. The key that allows cells to take in glucose
- 7. (hypo/hyper)glycemia means high blood sugar
- 9. (hypo/hyper)glycemia means low blood sugar
- 12. Nutrients in the body are transported through the \_\_\_\_\_
- 13. The type of disease where your body attacks its own cells

Bonus Question!

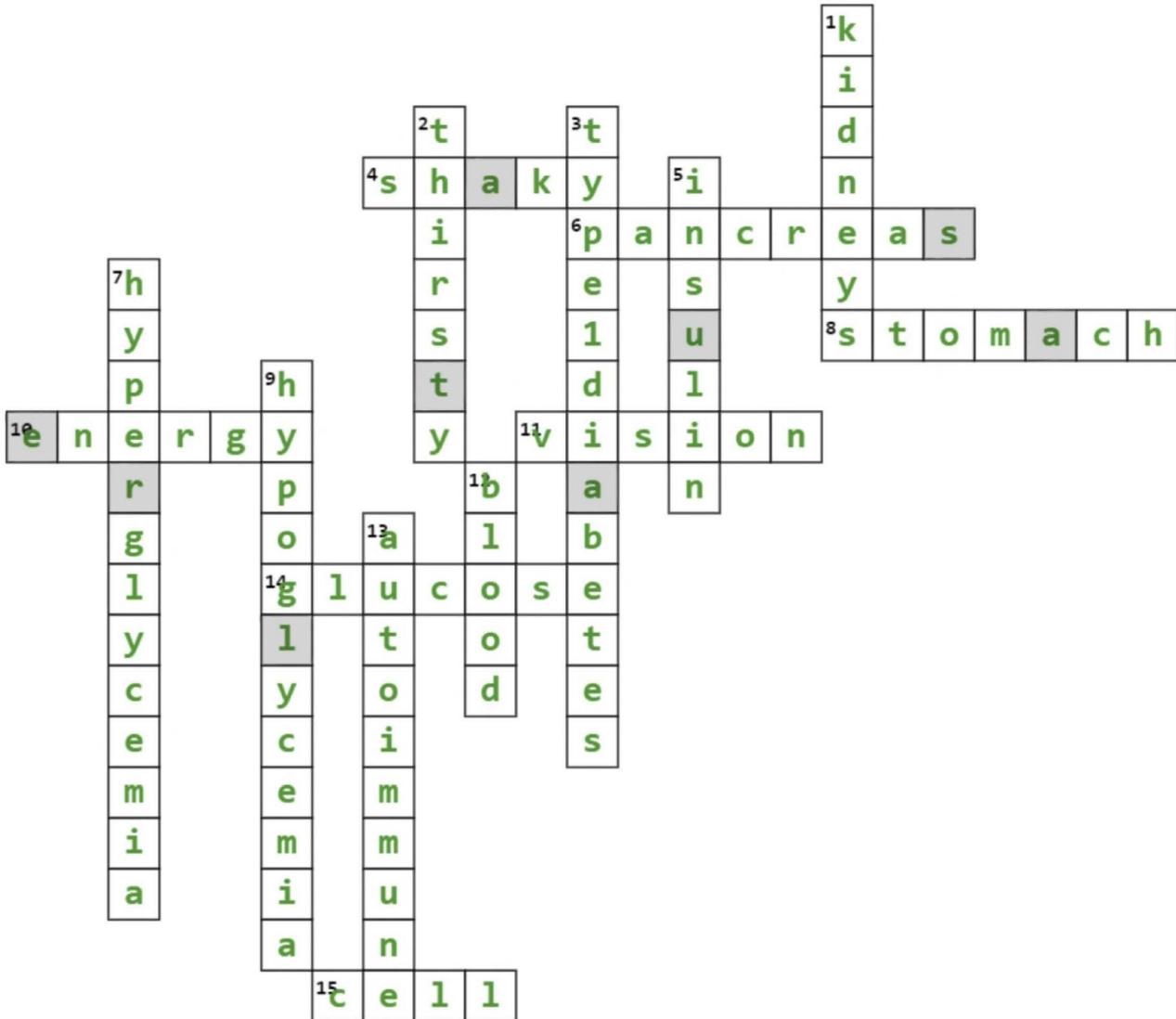
Instructions: Find the hidden word by filling in the blanks. Use the shaded letter from the answer to the designated question.

What did Kara say when her blood sugar was high?

“ I guess I’m just N 4 2 5 7 4 9 9 Y      6 W 10 10 2 !”



## Crossword Answer Key:



What did Kara say when her blood sugar was high?

“I guess I’m just NATURALLY SWEET!”

EPIISODE 1

# Word Search

## Diabetes Word Search

H	O	N	Y	S	A	B	H	M	O	H	R	M	S
L	N	U	O	E	L	I	Y	S	I	A	S	S	T
N	E	S	A	O	N	H	P	H	S	I	H	I	O
I	M	A	O	O	I	T	E	O	L	M	N	L	M
P	N	D	A	A	D	H	R	C	L	E	P	O	A
M	N	S	T	G	S	A	G	E	E	C	P	B	C
N	C	M	U	N	L	K	L	O	C	Y	A	A	H
O	M	T	G	L	Y	I	Y	D	U	L	N	T	L
I	S	I	L	Y	I	D	C	P	O	G	C	E	E
S	H	S	U	G	D	N	E	N	C	O	R	M	I
I	A	R	C	R	E	E	M	S	R	P	E	R	H
V	K	S	O	E	R	Y	I	S	N	Y	A	L	D
O	Y	E	S	N	A	S	A	P	G	H	S	Y	I
T	A	C	E	E	T	H	I	R	S	T	Y	S	S

INSULIN  
HYPERGLYCEMIA  
PANCREAS  
KIDNEYS  
CELLS  
HYPOGLYCEMIA  
METABOLISM  
BLOOD  
SHAKY  
VISION  
STOMACH  
THIRSTY  
ENERGY  
GLUCOSE

EPIISODE 2

# Building Blocks of a Balanced Diet



Ready in **15 minutes**

Game Time **10-20 minutes**

Players **2+ people**

## Tips

Remember a well rounded diet includes fruits, vegetables, whole grains, and plenty of water! Talk to your doctor about what foods are best for you!

## Supplies

- Sticker paper
- Tumbling blocks game (Jenga)

## Preparation

1. Download the sticker PDF on the next page.
2. Print out the sticker PDF on sticker paper. If you are unable to purchase sticker paper, use printer paper and tape.
3. Cut out the stickers and put each individual sticker on a building block piece.
4. Let's play Jenga! 😊

## Gameplay

1. Each player removes a single block until the tower falls over.
2. Hold on to the blocks that you pull! Each block has a corresponding food item and glucose value
3. At the end of the game add up your glucose points and see what range you are in! Normal is the goal!

<b>Glucose Ranges</b>	
Very low glucose	0-50
Below average glucose	51-79
Normal glucose	80-130
Above average glucose	131-159
Very high glucose	160-200

Stickers to Print Out!	-35		0		
44		0		48	
156		96		12	
20		48		56	
4		0		0	
44		0		6	
36		60		-5	
0		76		0	
4		24		-20	

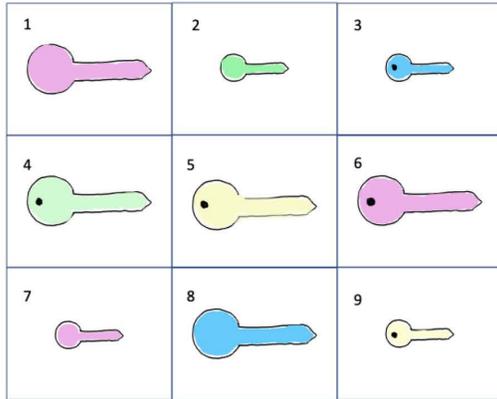
EPISODE 3

# Help Kara Find the Right Key

## Directions

- Print out the Clue Cards (front and back) and the game card.
- Answer the Clue Cards based on Episode 3 of Kara and the Dire Beastie.
- Each question answered correctly will reveal a clue helping Kara to get closer to finding the right key.

## Easy



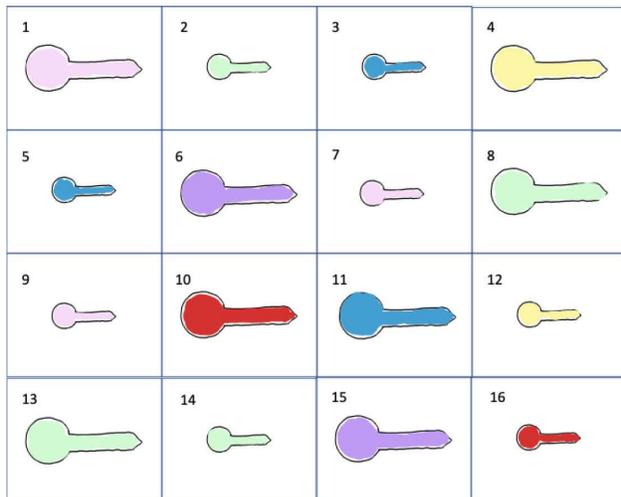
**Front**

Question 1	Question 2	Question 3	Question 4
What is the name of the knight that they were looking for?	How did Kara find the right key for the Beastie?	What happened to Beastie after he got the key?	What does the key represent?
Answer: Sir Rynge Clue: A small key is NOT the right key	Answer: By measuring the keyhole on the Beastie to find the right size Clue: The right key is not pink	Answer: He was able to eat Clue: The right key has a hole in the key	Answer: Insulin Clue: The number of the right key is divisible by two

**Back**

The correct key is key #4

## Intermediate



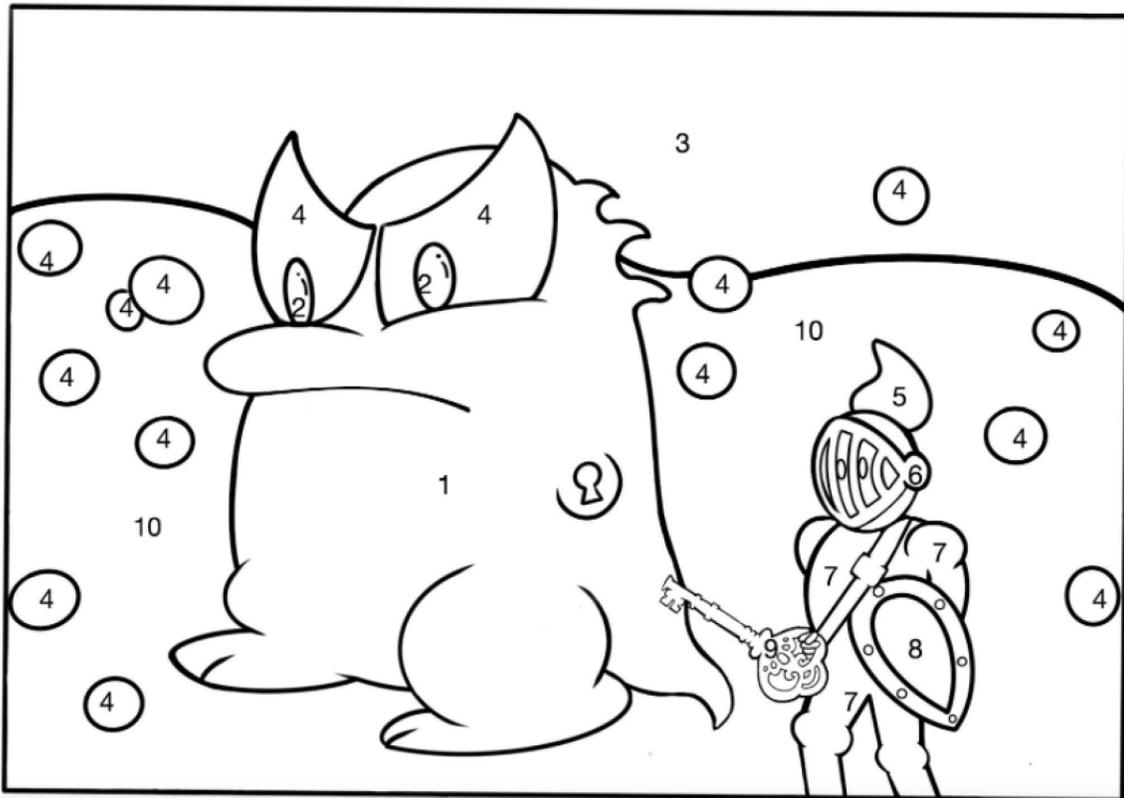
**Front**

Question 1	Question 2	Question 3	Question 4	Question 5
What does the White Knight represent?	What does the key represent?	What happens to the body after it gets insulin?	What happened to Beastie after he got the key?	What is the name of the knight that they were looking for?
Answer: White blood cells (immune system) Clue: The right key is not red	Answer: Insulin Clue: The right key is a large key	Answer: It is able to process the glucose in the food we eat. Clue: The right key is not a multiple of 2	Answer: He was able to eat. Clue: The right key is a prime number	Answer: Sir Rynge Clue: The right key is a number less than 10

**Back**

The correct key is key #1

# Color by Number - Hyperglycemia



**Instructions:**

1. To determine the color of each space, match the missing word to the clue
2. Every space with that number will be the color associated with the missing word!

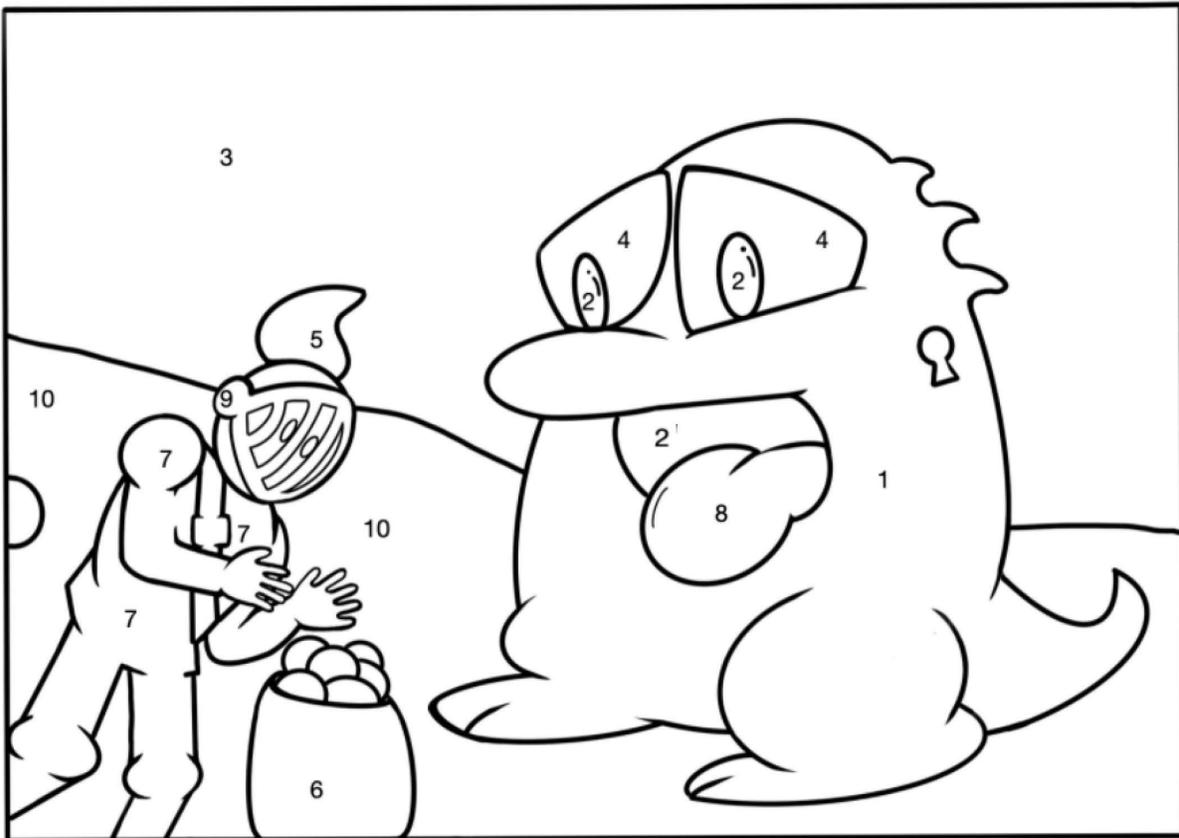
**Clues:**

1. Eating \_\_\_\_\_ your blood sugar
2. High blood sugar is also called \_\_\_\_\_
3. You can lower your blood sugar by taking \_\_\_\_\_
4. Without insulin, glucose can't enter cells and stays in the \_\_\_\_\_
5. Without glucose, your cells use other forms of energy like \_\_\_\_\_, which can make you feel like breathing heavily or vomiting
6. If you feel like you have to \_\_\_\_\_ a lot, this could be a sign of hyperglycemia
7. Other symptoms of hyperglycemia include headaches and stomach aches: True/False
8. If your blood sugar is high, you can lower it by not eating: True/False
9. Sometimes, doctors have to check your \_\_\_\_\_ to see how much sugar has been in your blood
10. Fruits, breads, and potatoes are examples of foods high in \_\_\_\_\_

**Word Bank**

- Carbohydrates - Green
- Pee - Dark Grey
- Bloodstream - White
- Ketones - Red
- Hemoglobin - Yellow
- Insulin - Blue
- Raises - Red
- Hyperglycemia - Black
- True - Grey
- False - Light Grey

# Color By Number - Hypoglycemia



**Instructions:**

1. To determine the color of each space, match the missing word to the clue
2. Every space with that number will be the color associated with the missing word!

**Clues:**

1. If you skip a meal, this can cause \_\_\_\_\_ blood sugar
2. Low blood sugar is also called \_\_\_\_\_
3. In type 1 diabetes, the body does not make enough \_\_\_\_\_
4. Insulin helps move \_\_\_\_\_ from your blood into the cells
5. The organ that produces insulin is the \_\_\_\_\_
6. When your blood sugar is low, \_\_\_\_\_ is something you can do to raise it
7. It's important to keep \_\_\_\_\_ with you, in case you experience hypoglycemia
8. The best foods for quickly raising blood sugar contain \_\_\_\_\_
9. Feeling shaky, dizzy, confused, tired, or hungry are possible signs of hypoglycemia: True/False
10. Exercise raises your blood sugar: True/False

**Word Bank**

- Hypoglycemia - Black
- Glucose - White
- Snacks - Grey
- Sugar - Pink
- Pancreas - Red
- Low - Purple
- Insulin - Blue
- Eating - Brown
- False - Green
- True - Dark grey

# My Plate, Your Plate, and a Carbohydrate?



Ready in **15 minutes**

Game Time **10-20 minutes**

Players **2+ people**



## Tips

Complex carbohydrates are found in foods such as whole grains, fruits, and vegetables. Don't confuse them with simple carbs found in sugary foods!

## Supplies

- Paper
- Container (basket, bowl)
- Timer

## Preparation

1. Download the Category Cards PDF on the next few pages or use the QR code.
2. Print out the PDF. Cut out the individual foods and categories. Place in a container (bowl or basket).

Note: You may color in the images for some extra FUN!

3. Place the categories (carbohydrate, protein, and fat) in different corners of the room.
4. Let's play! 😊

## Gameplay

1. Start the timer
2. Match the foods to their respective categories! First begin matching the foods to the following categories: carbohydrate, protein, and fat.
3. Stop the timer once matching is complete.
4. Check the table for the correct answers and deduct 5 seconds for every wrong answer.
5. The person who finished in the least amount of time wins!
6. Let's increase the difficulty level! Start the timer.
7. Match the foods to the following categories: simple carbohydrate, complex carbohydrate, protein, and fat.
8. Stop the timer once matching is complete.
9. Check the table for the correct answers and deduct 5 seconds for every wrong answer.
10. The person who finished in the least amount of time wins!

Category Cards to Print, Cut, and Place in Corners of the Room

Carbohydrates

Proteins

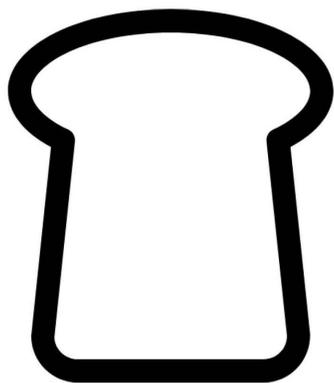
Fats

Simple Carbohydrates

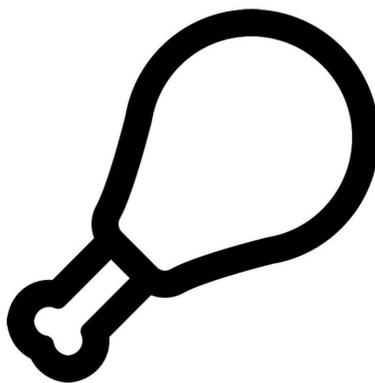
Complex Carbohydrates

Nutrient Cards to Print, Cut, and Sort

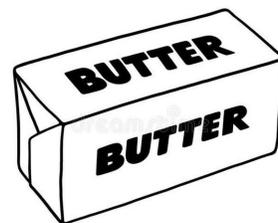
White Bread



Chicken



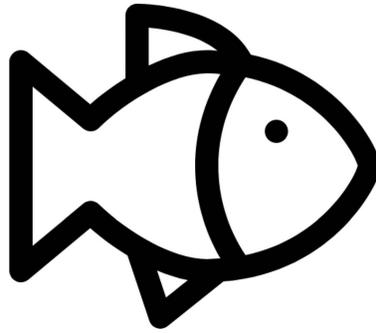
Butter



Muffin



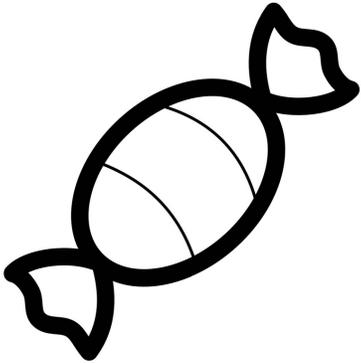
Fish



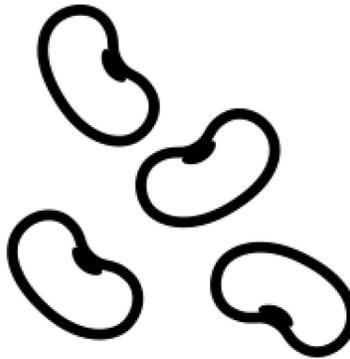
Olive Oil



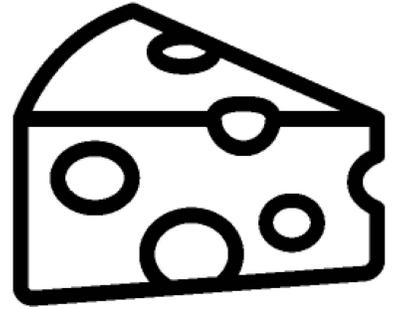
Candy



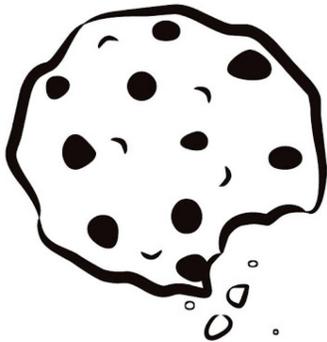
Beans



Cheese



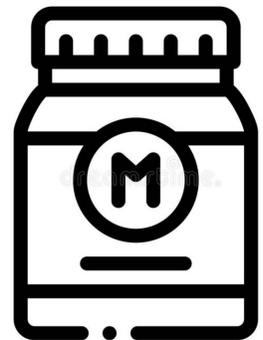
Cookies



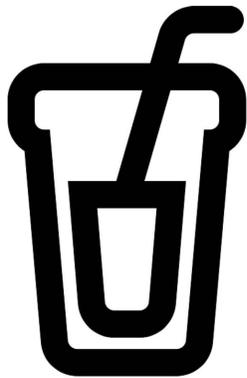
Steak



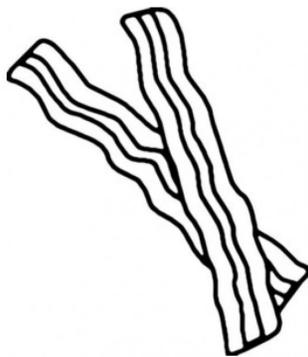
Mayo



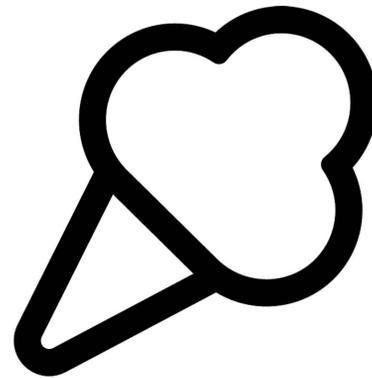
Soda



Bacon



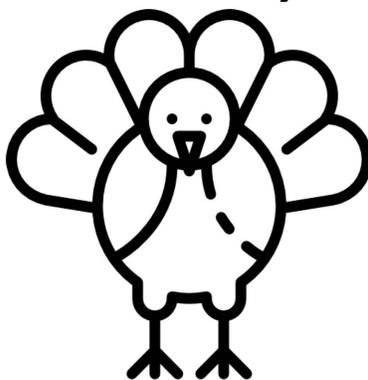
Ice Cream



Cereal



Turkey



Apple



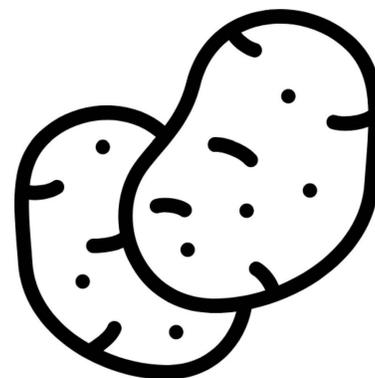
Cake



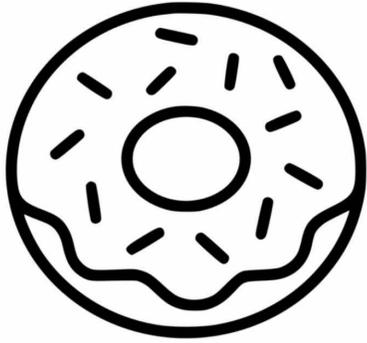
Pork



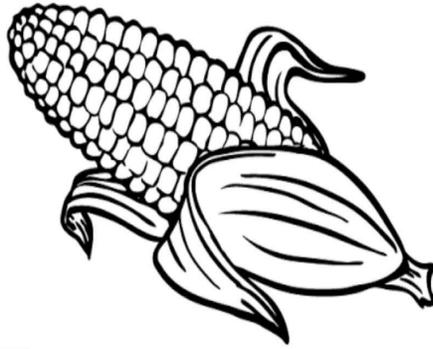
Potatoes



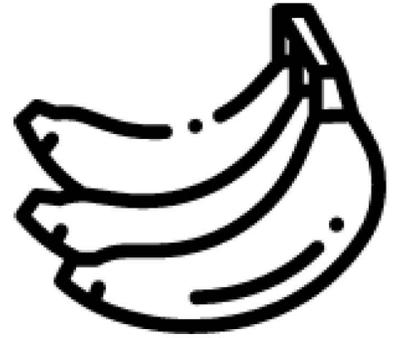
Doughnut



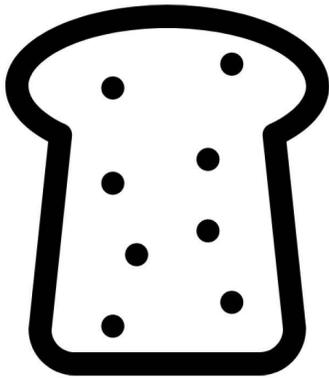
Corn



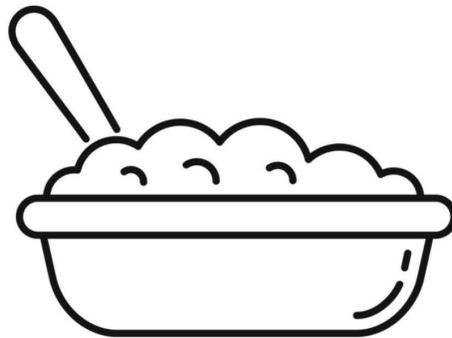
Banana



Whole Grain Bread



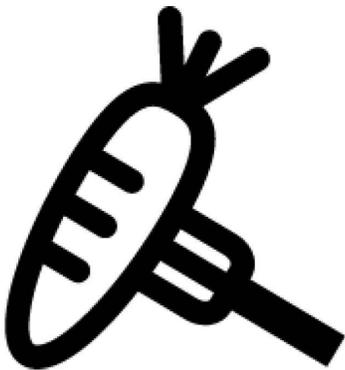
Oatmeal



Broccoli



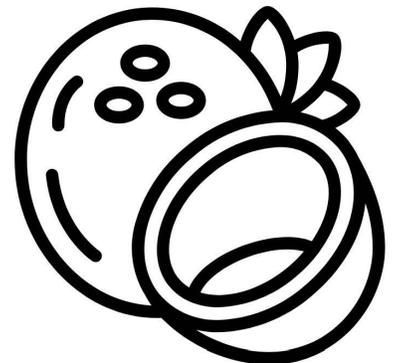
Carrots



Brown Rice



Coconut



**ANSWER KEY:**

EASY		
Carbohydrate	Protein	Fat
White Bread	Chicken	Butter
Soda	Fish	Olive Oil
Candy	Beans	Cheese
Cookies	Steak	Mayo
Pasta	Shrimp	Ice Cream
Muffin	Bacon	Coconut
Cereal	Turkey	
Cake	Pork	
Doughnut		
Whole Grain Bread		
Carrots		
Broccoli		
Apple		
Potatoes		
Banana		
Corn		
Oatmeal		
Brown Rice		

HARD	
Simple Carbs	Complex Carbs
White Bread	Whole Grain Bread
Soda	Carrots
Candy	Broccoli
Cookies	Apple
Pasta	Potatoes
Muffin	Banana
Cereal	Corn
Cake	Oatmeal

## EPISODE 7

# Blood Sugar: It's a Balancing Act



Game Time **5-10 minutes**

Players **1+ people**

## Supplies

- 2 of your favorite toys that you can hold in each hand

## Beginner Mode

1. Grab your two items and hold your arms straight out to the side for as long as you can
2. Do 30 jumping jacks!
3. Grab your two items again and hold your arms straight out to the side for as long as you can
  - a. Was it more difficult this time?

4. Do 30 more jumping jacks!
5. Grab your two items again and hold your arms straight out to the side for as long as you can
  - a. Was it more difficult this time?

## Advanced Mode

1. Balance on one foot, grab your two items and hold your arms straight out to the side for as long as you can
2. Do 30 jumping jacks!
3. Once again, balance on one foot, grab your two items and hold your arms straight out to the side for as long as you can
  - a. Was it more difficult this time?
4. Do 30 more jumping jacks!
5. Once again, balance on one foot, grab your two items and hold your arms straight out to the side for as long as you can
  - a. Was it more difficult this time?

## Things to Think About

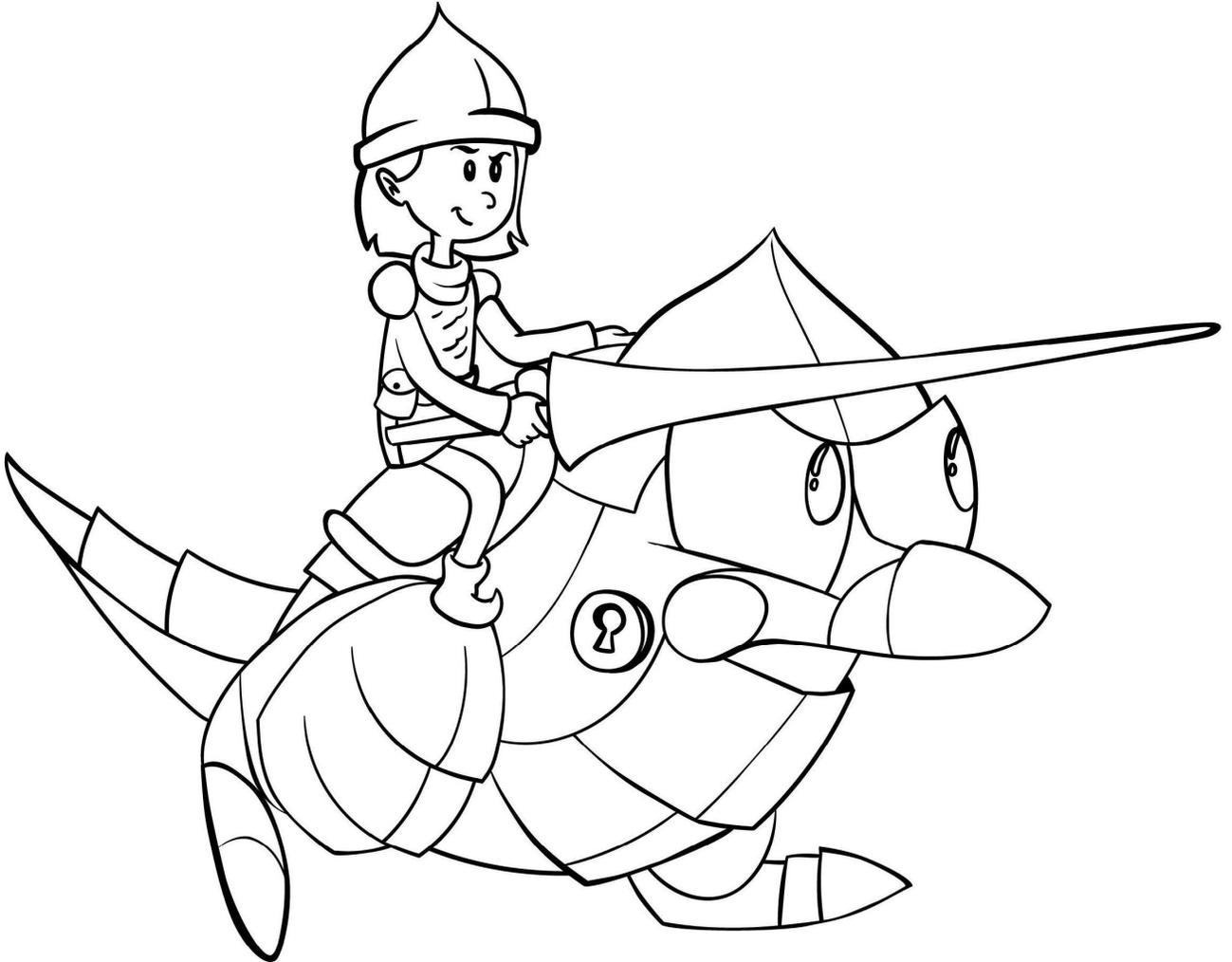
- Why do you think you lost your balance?
- What role did tiredness play in your ability to balance? What could it represent?

## Big Takeaway

- Exercise lowers your blood sugar; make sure to eat after you exercise to keep your blood sugar balanced!

EPIISODE 7

# Coloring Page: Joust like Kara!



## EPISODE 8

# Better Together



Game Time **20 minutes**

Players **You and a Trusted Adult**

## Supplies

- A pen, pencil, or marker (anything you can write with is fine!)
- Either or both of the print-out(s) on the following pages

## Preparation

1. Print the connect-the-numbers activity on the following page
2. Grab your favorite trusted adult

## Gameplay

Work together to answer the following questions in any order. Each time you work together to answer a question, draw the corresponding number of lines connecting the dots on the print-out. For example:

- What is the name of the main character in these videos that you watched?

If you said Kara, draw two lines connecting dots 1, 2, and 3 on either print-out!

---

Don't forget to ask for help or look up information if you need it!

## Questions to Work On Together:

Connect three dots for answering any of the following:

- In an emergency when you're feeling sick, who do you call?
- Where do we keep extra insulin?
- When do you need your insulin?
- Name 3 carbohydrate food items (Hint: Activity 6)
- What should you do after you exercise?
- What is your favorite snack to raise your blood sugar?
- How do you feel when you have low blood sugar?

Connect four dots for answering any of the following:

- How do you feel when you have high blood sugar?
- How often should you check your blood sugar?
- Can you eat sugar when you have diabetes?

Connect five dots for answering any of the following:

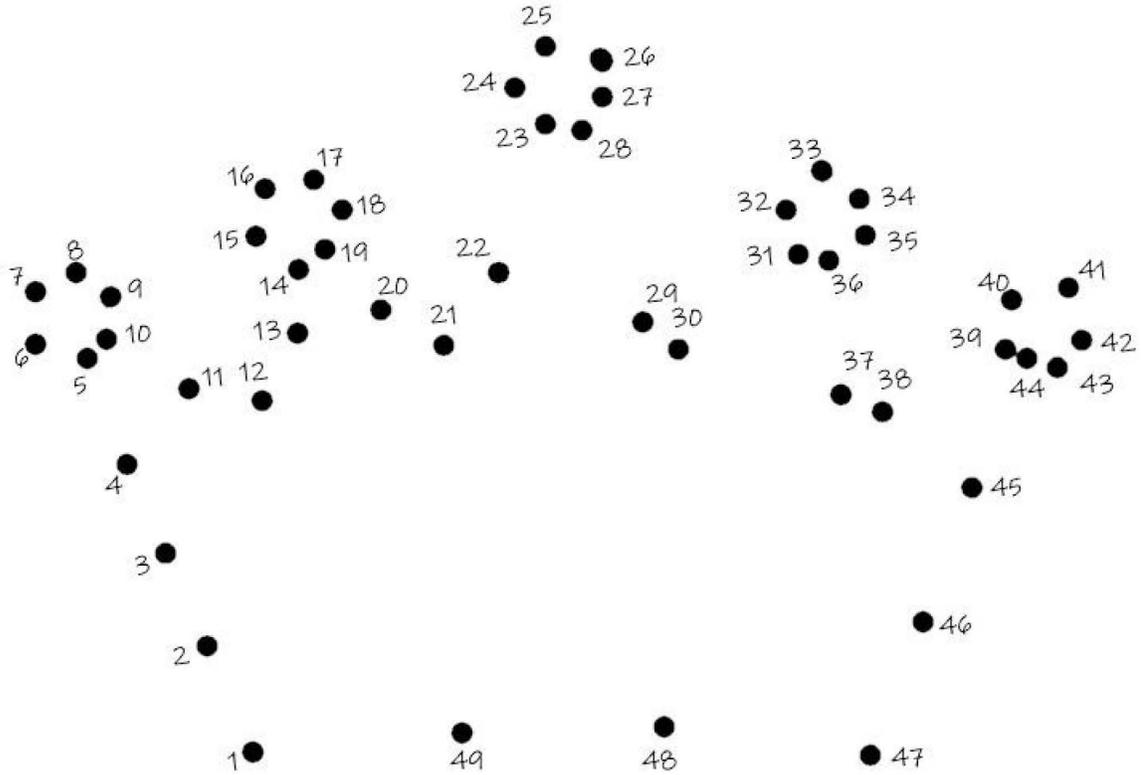
- Why is daily exercise important?
- What does insulin do?
- What does glucose bind to in your body?
- What is the difference between simple and complex carbohydrates?
- Describe the job of your favorite character
- What was beastie's role in the videos?
- What is a normal blood sugar level range? (Hint: Activity 2)

Connect six dots for answering any of the following:

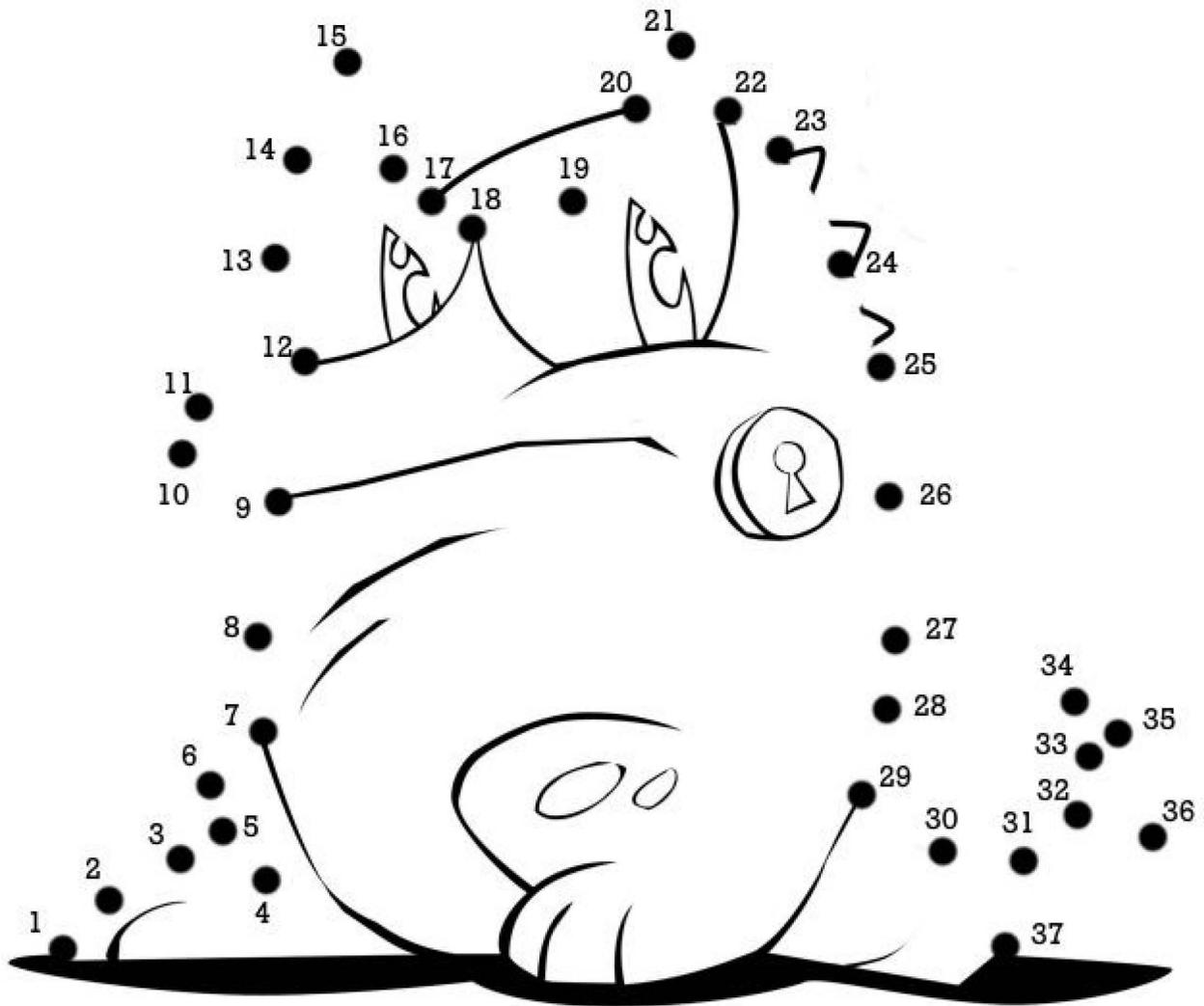
- What animal did Kara fly on in the videos?
- How does the White Knight contribute to diabetes?
- What is the importance of monitoring what you eat?



# Better Together Activity 1:



# Better Together Activity 2:



# Special Thanks

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