Where Did the Sugar Go?

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Learning Objectives

- Create a meal plan within the constraints of a diabetic's nutrition needs.
- Use glucometers to measure blood glucose levels of simulated patient samples.
- Analyze blood glucose data to determine if a patient is diabetic.
- Use glucose test strips to measure glucose levels in simulated patient plasma samples.
- Analyze glucose data to determine how exercise affects glucose levels.
- Form an argument supported by evidence for how the body moves sugar to different areas of the body.

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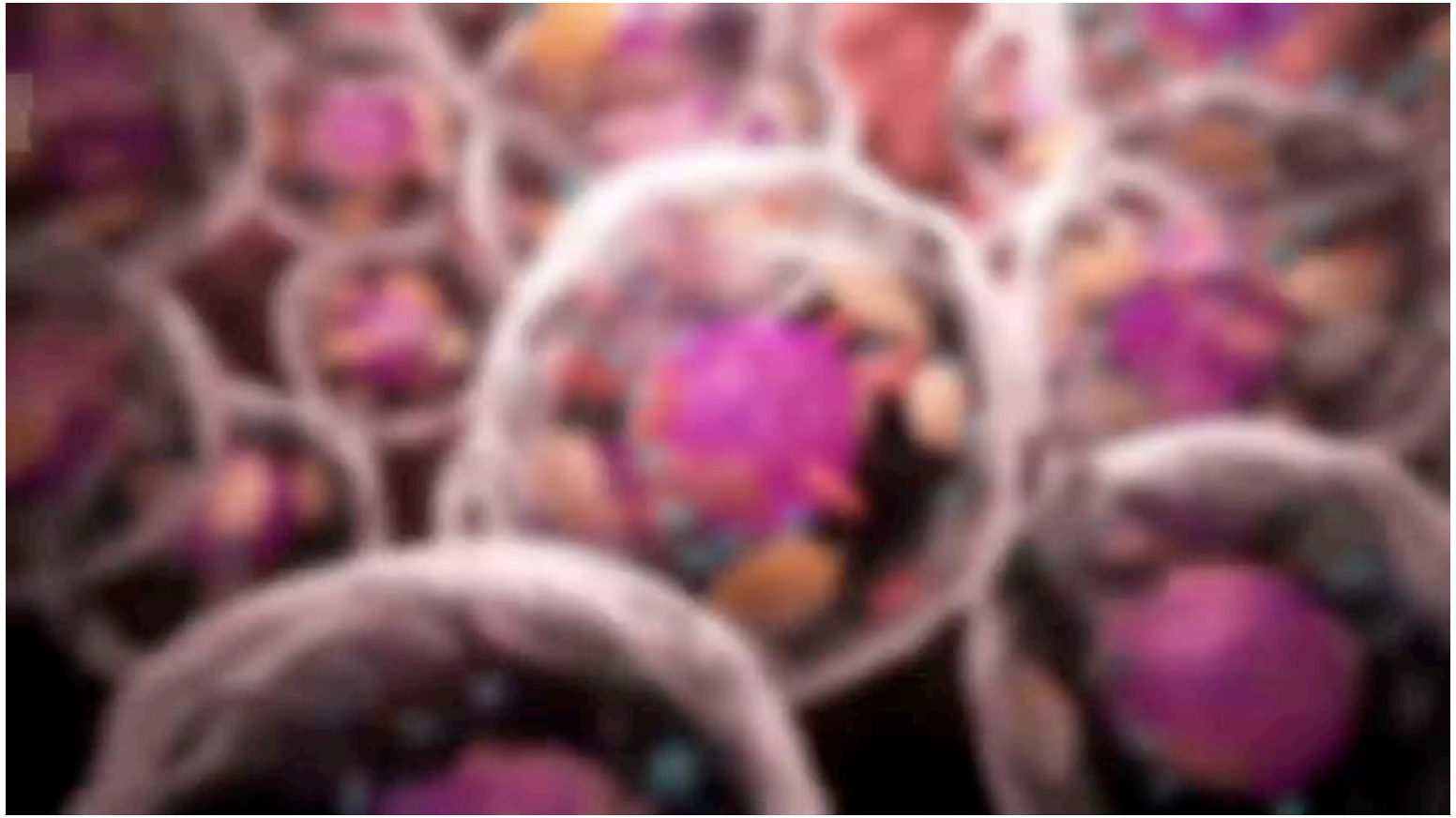
Cells



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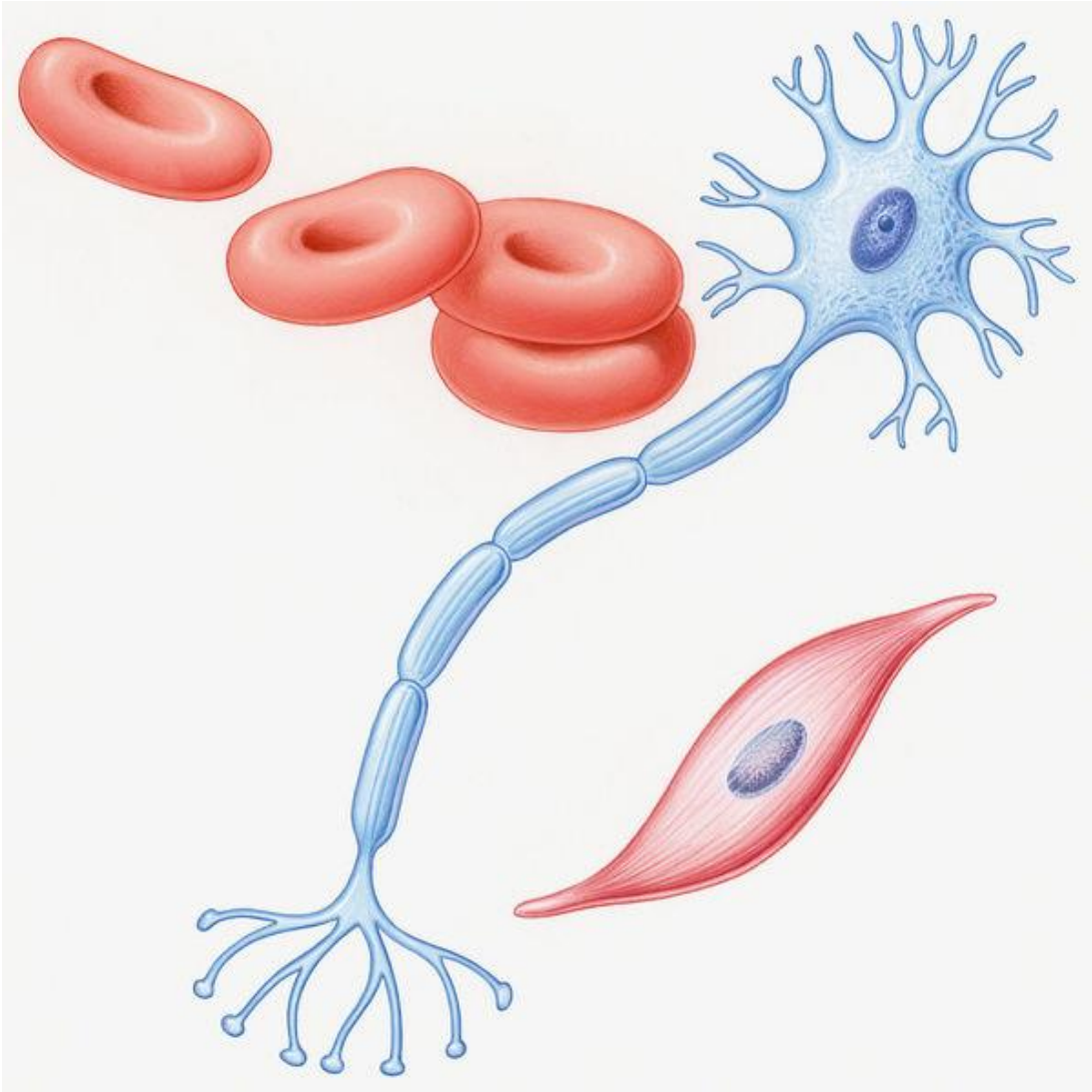

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Tissues

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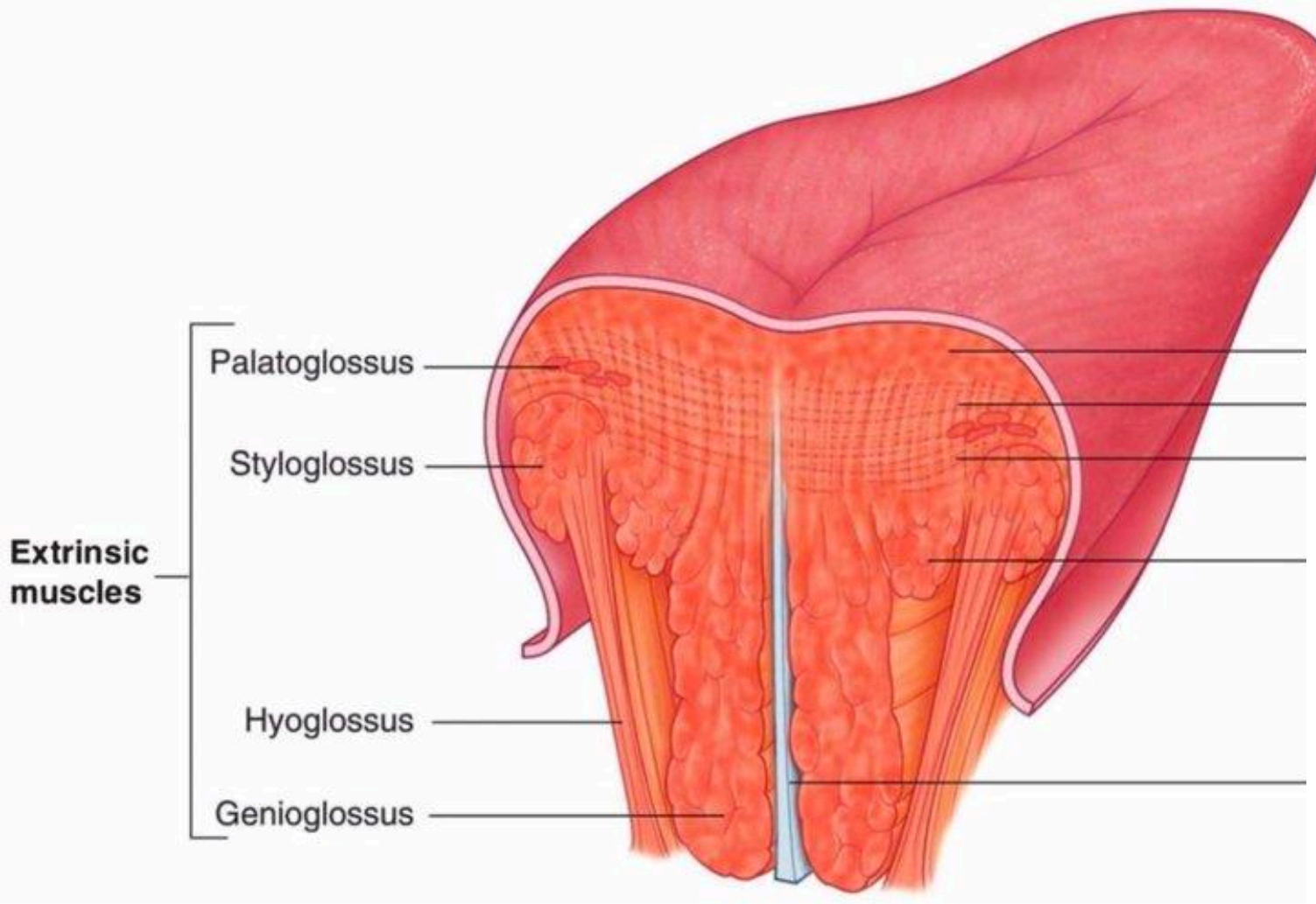

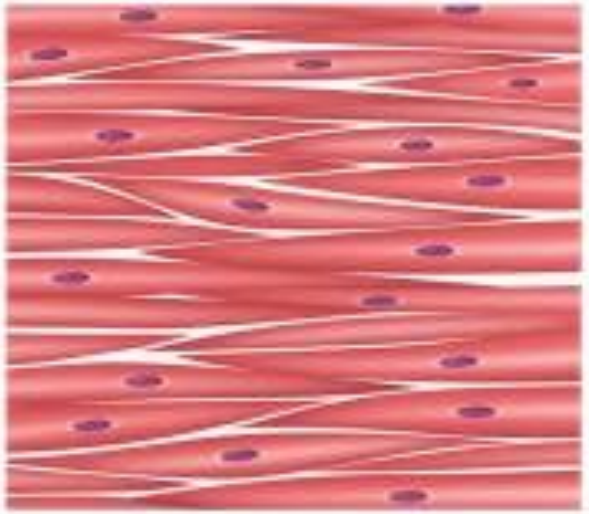

Smooth muscle

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Organs

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Body Systems

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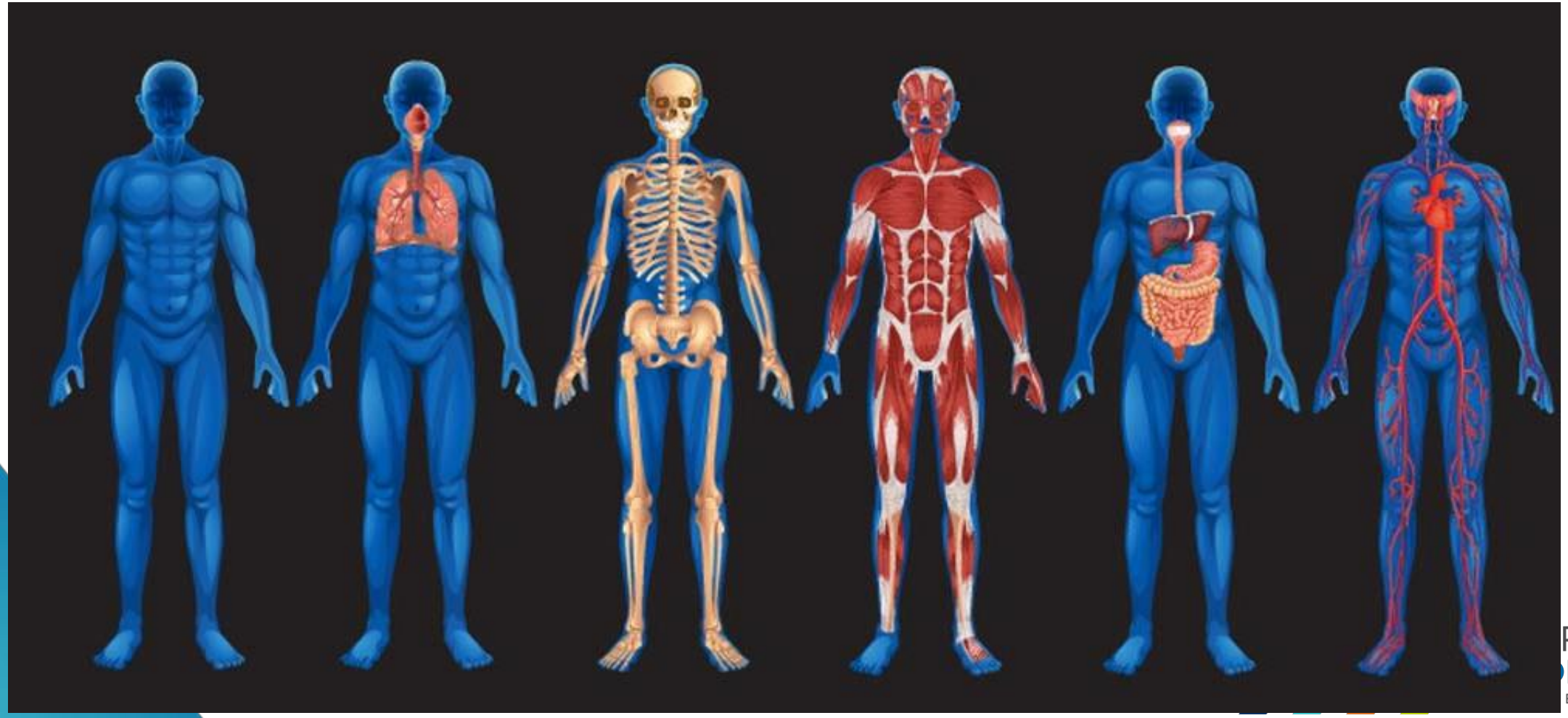
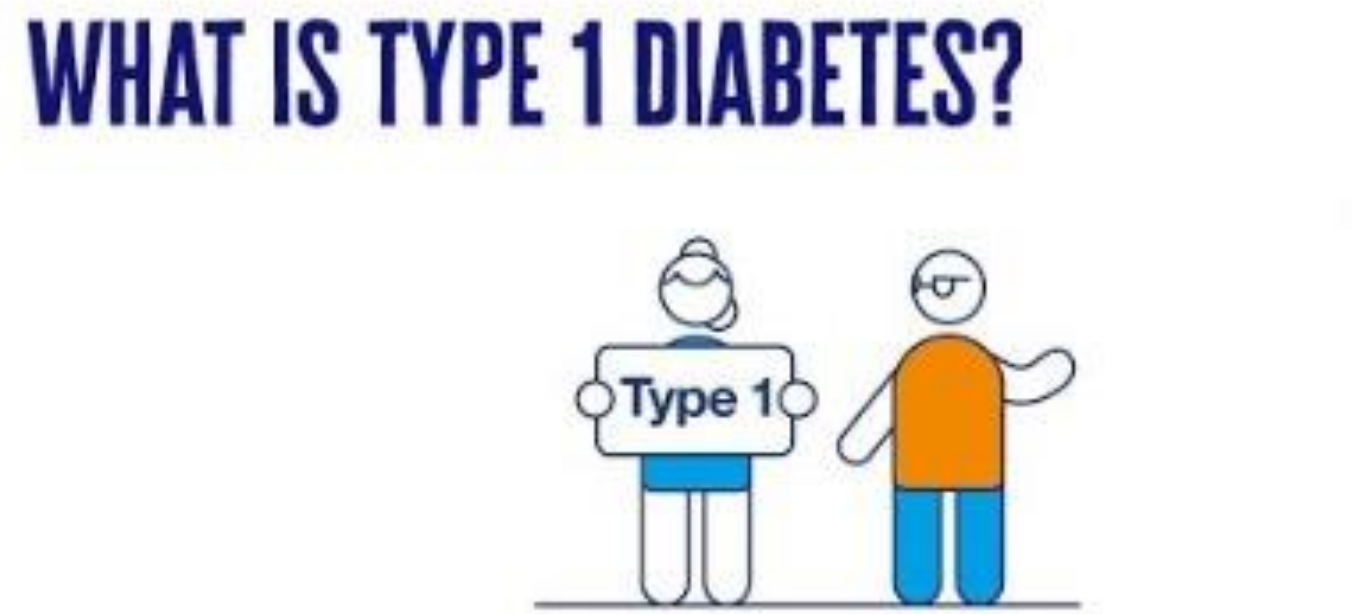
Body Systems



Type 1 Diabetes



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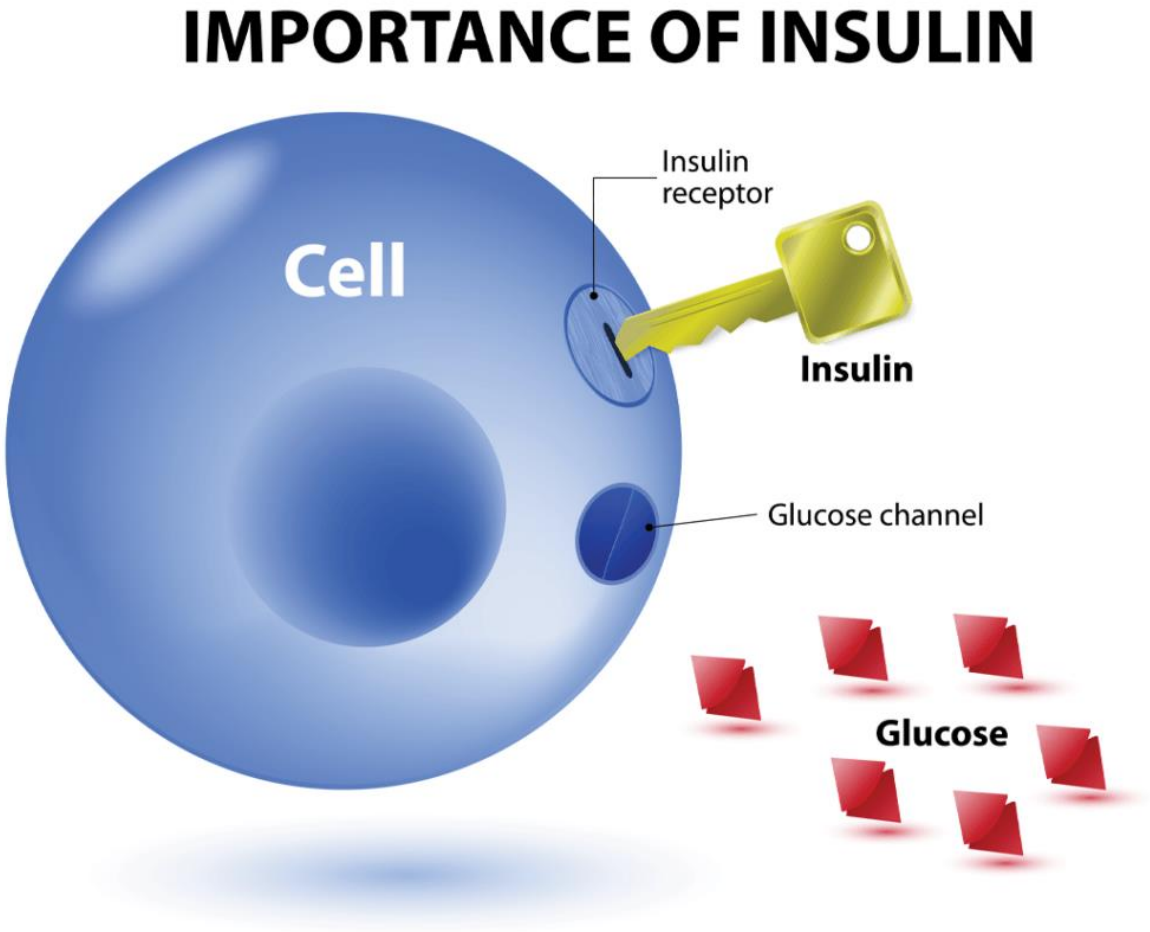
Type 1 Diabetes



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Today's Investigation

- How do body systems work together to move sugar around the body?

- What does a person with diabetes have to change or add to their daily routine to maintain healthy blood glucose levels?

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Station 1: Meal Planning

Main Meal Options	Price	Carbohydrates (g)
Buffalo Vegan Chicken Nuggets with Roll	$4.00	57
Cheese Enchiladas	$4.50	29
Rotini with Meat Sauce and Roll	$3.00	43
Veggie Burger on Bun	$3.50	37

Beverage Options	Price	Carbohydrates (g)
Juice	$2.00	16
Milk	$2.00	13
Water	$0.00	0

Side Dish Options	Price	Carbohydrates (g)
Baby Carrots with Ranch	$0.75	11
Baked Fries	$1.50	17
Chili Soup	$2.00	27
Garlic and Herb Broccoli	$1.00	5

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Station 2: Monitoring Blood Glucose after Eating

	Sample 1 (0 min after eating)	Sample 2 (1 hr after eating)
Patient A		
Patient B		

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Station 3: Motion

	Sample 1 (30 min before exercise)	Sample 2 (30 min after exercise)
Patient C		
Patient D		

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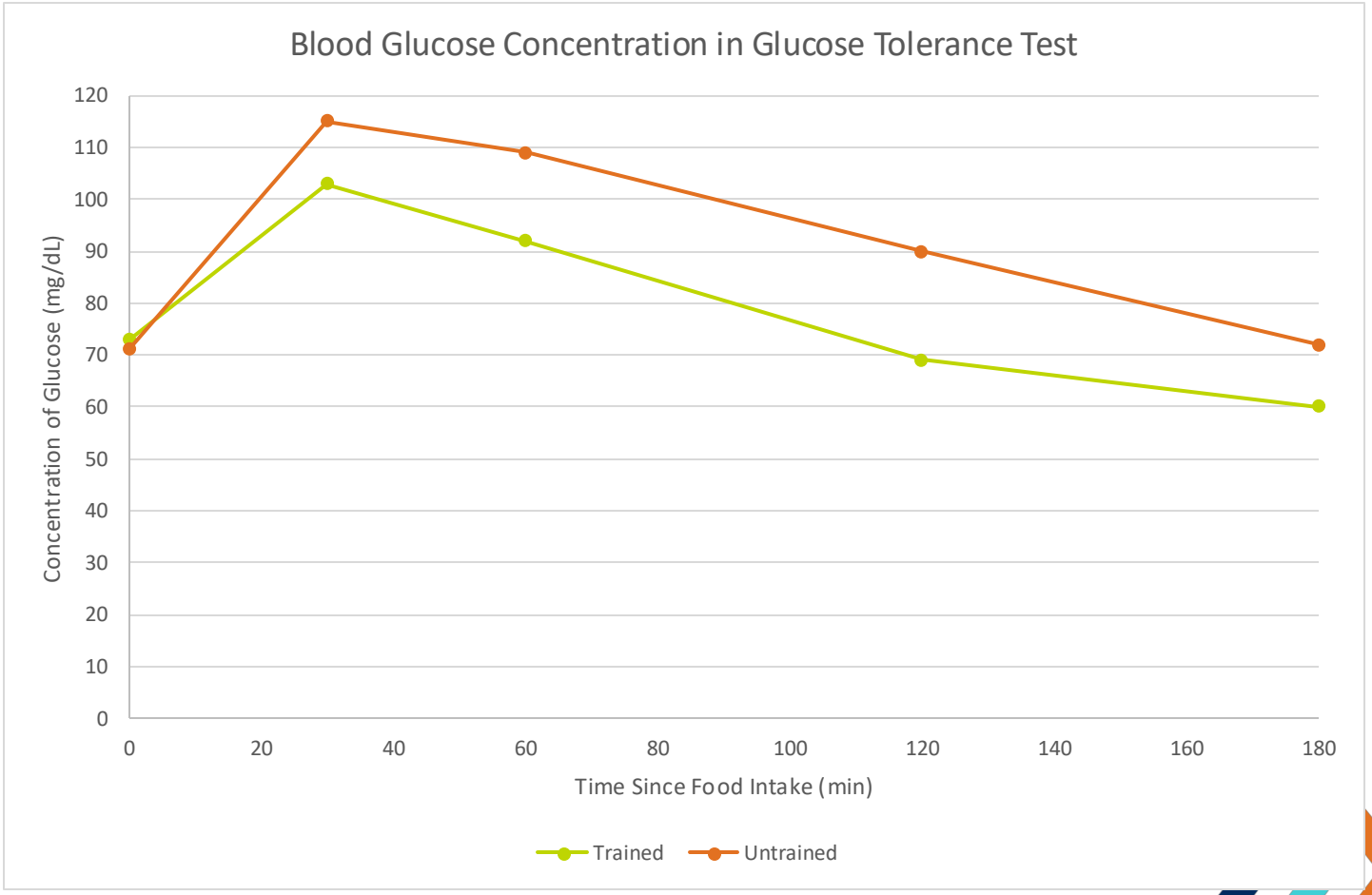
Forming an Argument



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Forming an Argument

Claim			
Evidence			
Reasoning			