Biology A · Unit 4 · Level 2 (modified)

Food & Digestion



TODAY'S PLAN

- 🍞 Three macromolecules
- 🧱 Building blocks
- 👄 Digestive organs
- 🌀 Into the blood

Review · 5 minutes

Quick Review



⚡ Cells need energy. **Glucose** is the main energy molecule.

🌿 Plants make glucose by photosynthesis.

❓ Where do WE get glucose? (food)

Words to Know

Words to Know



Digestion

How the body breaks food into small molecules it can use.



Carbohydrate

Sugars and starches. Made of glucose. The body's main energy food.



Glucose

The simple sugar in our blood. Cells use it for energy.



Lipid

Fats and oils. Made of glycerol + fatty acids. Store a lot of energy.

Words to Know

More Words to Know



🍗 **Protein**: Made of amino acids. Builds and repairs the body.

🧱 **Building block**: The small molecules that big food molecules are made of.

👄 **Mouth**: Teeth chew food. Saliva (spit) wets it and starts breaking starch.

💪 **Stomach**: A muscle bag that churns food with acid and enzymes.

Learn

Three Macromolecules



🍞 **Carbohydrates**: sugars and starches, made of glucose.

🧈 **Lipids**: fats and oils, made of glycerol + fatty acids.

🍗 **Proteins**: made of 20 kinds of amino acids.

Learn

Carbohydrates



Glucose

simple sugar in blood



Starch

long glucose chain (plants)



Cellulose

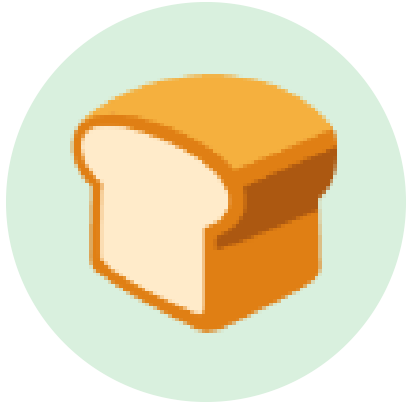
fiber, not digested



Glycogen

animal starch (stored)

🃏 Check 1 of 3



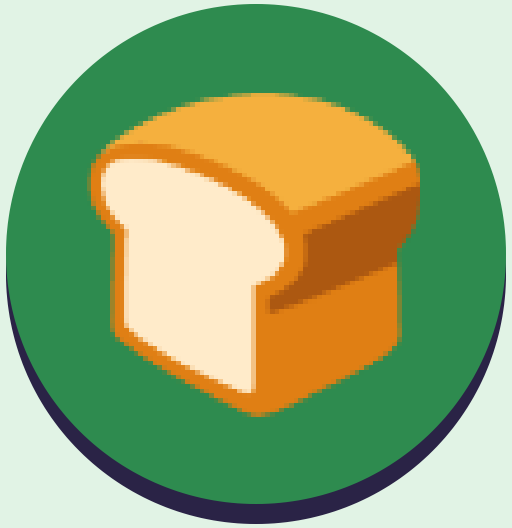
Starch is made of many…

Hold up 1, 2, or 3:

1️⃣ Amino acids

2️⃣ Glucose molecules

3️⃣ Fatty acids

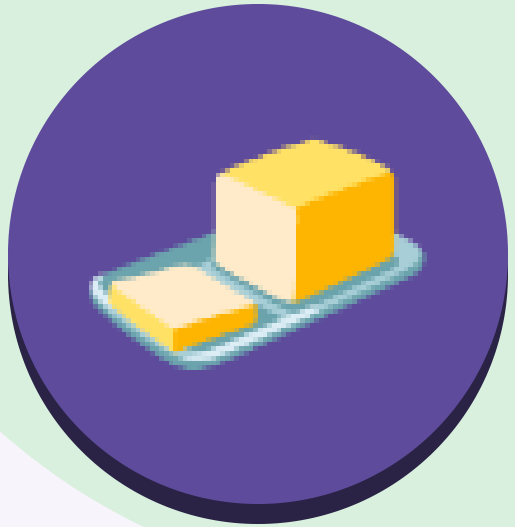


Glucose molecules

Starch = hundreds to thousands of glucose linked like train cars.

Compare

Lipids and Proteins



Lipids



Glycerol + 3 fatty acids
Store energy
Butter, oil

Proteins



Chains of amino acids
Build and repair
Meat, eggs, beans

🃏 Check 2 of 3



Proteins are made of…

Hold up 1, 2, or 3:

1️⃣ Glucose

2️⃣ Glycerol

3️⃣ Amino acids



Amino acids

20 kinds of amino acids.

Learn

Too Much of Any Food



⚖️ Extra protein and extra carbs can be **stored as fat**.

🥬 Fiber (cellulose) passes through without being digested.

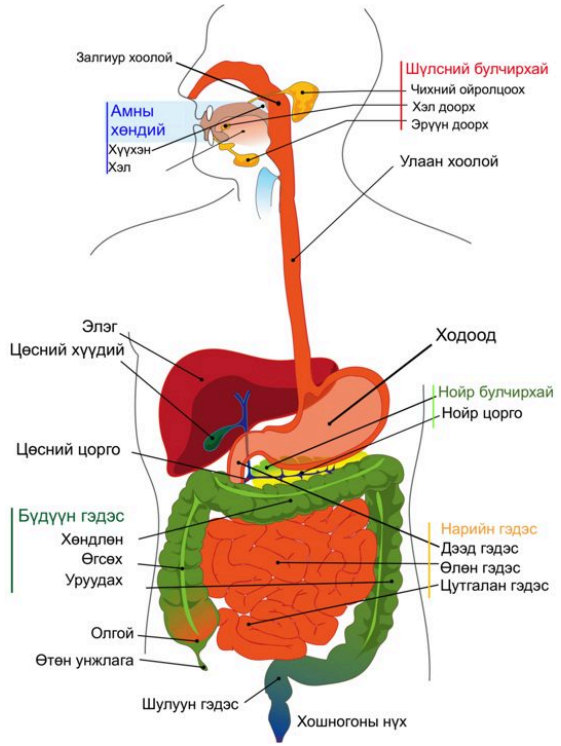
Learn

The Digestive System

👄 Mouth + salivary glands: chew, saliva starts breaking starch.

⬇️ Esophagus: muscles push food down.

🧍 Stomach: churns food with acid and enzymes.



Learn

After the Stomach



🌀 **Small intestine**: digestion finishes; nutrients go into the blood.

🟫 **Liver** makes bile for fats; **pancreas** makes enzymes and insulin.

🚽 **Large intestine**: absorbs water; waste leaves the body.

🃏 Check 3 of 3



Where do nutrients go into the blood?

Hold up 1, 2, or 3:

1️⃣ Small intestine

2️⃣ Esophagus

3️⃣ Mouth

✅ Answer · Card 3 of 3



Small intestine

The small intestine absorbs nutrients.

Steps

Path of Food



1. 👄 Mouth
2. ⬇️ Esophagus
3. 💪 Stomach
4. 🌀 Small intestine → large intestine

Wrap-Up

Recap



Carbs
glucose = energy



Lipids
store energy



Proteins
build and repair



Small intestine
nutrients into blood

Wrap-Up

Exit Ticket



1️⃣ Name the 3 macromolecules.

2️⃣ What building block makes up starch?

3️⃣ Where do nutrients enter the blood?