

UPGRADE to the Bundle

Crash Course ANATOMY & PHYSIOLOGY 48 Episode Series Bundle

- ✔ Classroom Ready - Just Print and Go!
- ✔ Active Engagement - Keep Students' Attention
- ✔ Direct Video Link Included

WATCH VIDEO



ALL 48 Episodes with Answer
Keys and Direct Video Link

CLICK HERE



Crash Course Anatomy & Physiology #37: Metabolism and Nutrition, Part 2

Name: _____ Date: _____

You can access the video here → <https://youtu.be/kb146Y1igTQ?si=FxVtYbInqYIf60V4>

1. Carbohydrates and fats can be directly _____ into usable energy.
2. Unlike carbs and fats, excess amino acids cannot be stored directly; they must be converted and stored as _____ or glycogen.
3. The main fuel for most cells in the body, especially the brain, is _____.
4. The law of conservation of energy states that it can neither be _____, only changed in form.
5. The process that converts glucose and oxygen into ATP, CO₂, and water is called _____ respiration.
6. In cellular respiration, one glucose molecule usually produces about _____ molecules of ATP.
7. The first stage of cellular respiration that breaks down glucose into pyruvic acid is called _____.
8. The absorptive, or fed, state occurs during or right after _____.
9. When blood sugar rises after a meal, the pancreas secretes _____ to move glucose into storage.
10. The process of linking glucose molecules together to form glycogen is called _____.
11. The process of converting glucose to triglycerides for storage in adipose tissue is called _____.
12. Lipids are transported in the bloodstream by specialized particles called _____.
13. The "good cholesterol" that gathers excess cholesterol and returns it to the liver is called _____.
14. When blood sugar drops, alpha cells of the pancreas secrete _____ to raise it back up.
15. As a last resort when glucose is low, the body performs _____ to make glucose from fats and amino acids.

Crash Course Anatomy & Physiology #37: Metabolism and Nutrition, Part 2 KEY

1. Carbohydrates and fats can be directly **oxidized** into usable energy.
2. Unlike carbs and fats, excess amino acids cannot be stored directly; they must be converted and stored as **fat** or glycogen.
3. The main fuel for most cells in the body, especially the brain, is **glucose**.
4. The law of conservation of energy states that it can neither be **created nor destroyed**, only changed in form.
5. The process that converts glucose and oxygen into ATP, CO₂, and water is called **cellular** respiration.
6. In cellular respiration, one glucose molecule usually produces about **32** molecules of ATP.
7. The first stage of cellular respiration that breaks down glucose into pyruvic acid is called **glycolysis**.
8. The absorptive, or fed, state occurs during or right after **eating**.
9. When blood sugar rises after a meal, the pancreas secretes **insulin** to move glucose into storage.
10. The process of linking glucose molecules together to form glycogen is called **glycogenesis**.
11. The process of converting glucose to triglycerides for storage in adipose tissue is called **lipogenesis**.
12. Lipids are transported in the bloodstream by specialized particles called **lipoproteins**.
13. The "good cholesterol" that gathers excess cholesterol and returns it to the liver is called **HDL**.
14. When blood sugar drops, alpha cells of the pancreas secrete **glucagon** to raise it back up.
15. As a last resort when glucose is low, the body performs **gluconeogenesis** to make glucose from fats and amino acids.

15 Questions

Answer Key Included

Save 85% per worksheet!