

Metabolism

http://kidshealth.org/teen/your_body/body_basics/metabolism.html

Every time you swallow a bite of sandwich or drink a smoothie, your body works hard to process the nutrients you've eaten. Long after the dishes are cleared and the food is digested, the nutrients you've taken in become the building blocks and fuel needed by your body. Your body gets the energy it needs from food through a process called metabolism.

What Is Metabolism?

- Metabolism is a collection of chemical reactions that take place in the body's cells.
- Specific proteins in the body control the chemical reactions of metabolism, and each chemical reaction is coordinated with other body functions. Thousands of metabolic reactions happen at the same time — all regulated by the body — to keep our cells healthy and working.
- Metabolism converts the fuel in the food we eat into the energy needed to power everything we do from moving to thinking to growing.

The **basal metabolic rate**, or BMR, is the rate at which a person's body "burns" energy, in the form of calories, while the body is at rest.

Factors that can influence a person's BMR:

- **Muscle Mass:** The more muscle you have, the more energy your body needs
- **Age:** As you get older, your BMR slows
- **Body Size:** People with bigger bodies have a larger BMR
- **Gender:** Men have a faster metabolism than women
- **Genetics:**
- **Physical Activity:** Regular exercise increases your metabolism
- **Hormones:**
- **Environmental:** The temperature increases your metabolism
- **Drugs:**
- **Diet:**

Check for Understanding

- What is the process of converting the food that we eat into energy?
- What might happen if your metabolism slows down?
- What can you do to improve your basal metabolic rate (BMR)?
- How would improving your BMR be beneficial to you?

Coach's Reflection: