

NUTRITION



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The food you eat makes a difference in your metabolism, which is how your body turns food into energy.

Supercharge Your Body: The Science Behind Smart Eating

You might love to hang out with your friends. You might also love playing video games or learning guitar. Whatever you love to do, you need energy. Metabolism is the way in which food is turned into energy so that you do the things you love.

When you eat, the metabolic process begins. If you put junk food into your body, you might get a quick burst of energy. But junk food doesn't have the important stuff that your body needs,Äthe vitamins, minerals, and fiber that your body needs. Without these nutrients, your metabolism can't build strong bones, keep a healthy heart, or keep your brain sharp. Too much junk food can cause problems down the line, like feeling tired all the time or getting sick more often.

On the other hand, colorful fruits and veggies, whole grains, and proteins are like high-quality fuel for your body. These foods are packed with the nutrients that help your metabolism work its best.

Imagine having endless energy to play sports, focus in class, and hang out with your friends without getting tired. By choosing nutritious foods, you're not only fueling your body but also giving your metabolism the tools it needs for a healthy and energetic future. So next time you're hungry, think about what your body needs and reach for a healthy snack instead of junk food.



The nutrients that are in fruits and vegetables are important in keeping you healthy and strong.

The Superheroes: Nutrients

Did you know that inside your body, there are tiny superheroes working hard every day to keep you strong and healthy? These superheroes are called nutrients. Nutrients come from the food we eat, and each one has a special job to do.

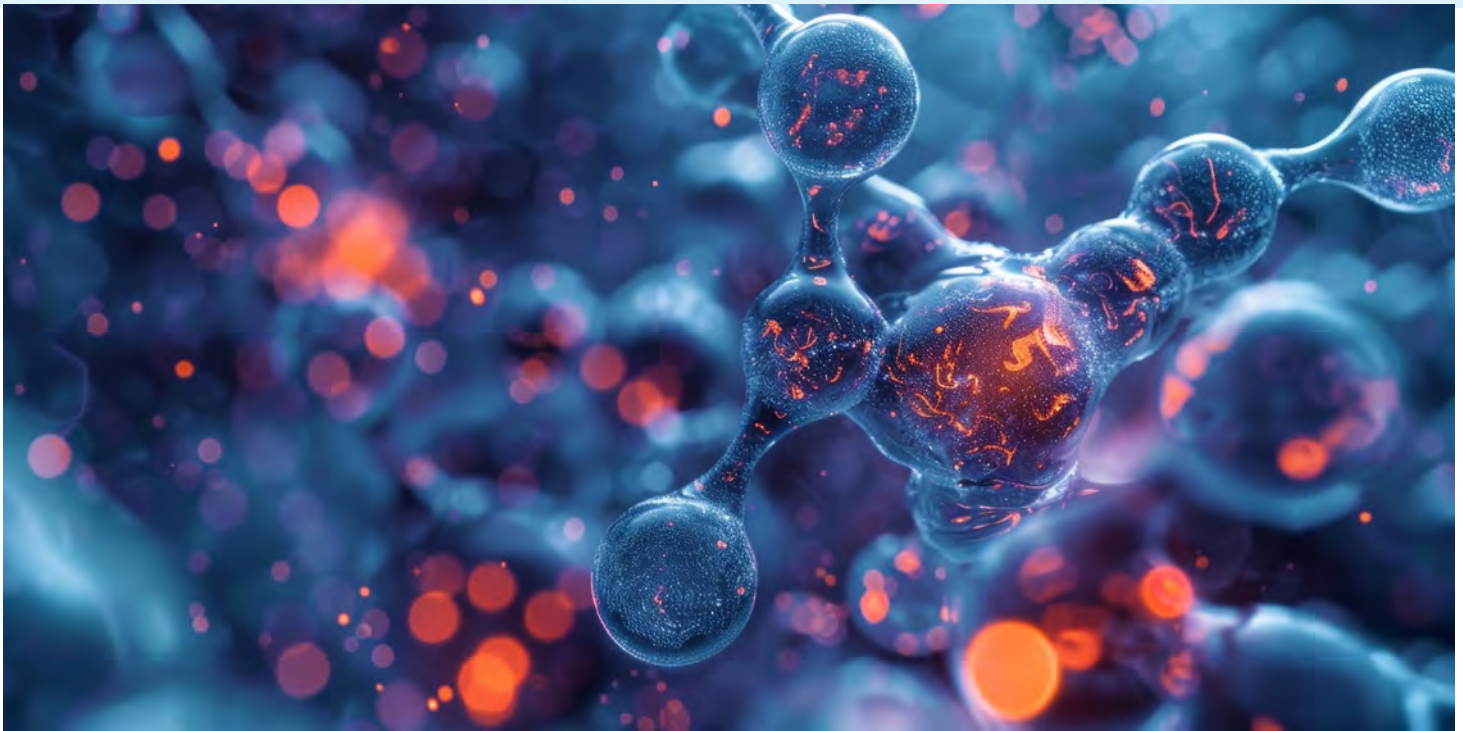
First, we have carbohydrates, the energy superheroes. They give you the power to run, play, and think. Imagine carbs as tiny batteries that keep you charged up all day long. Foods like bread, rice, and fruits are packed with carbs.

Next, meet the proteins, the building superheroes. They help you grow strong muscles, repair your body, and keep you healthy. Think of proteins as little builders fixing and building your body every day. You can find them in foods like meat, beans, and nuts.

Don't forget the fats, the superhero protectors! They keep your brain and heart healthy and give you extra energy. Foods like cheese and fish are full of good fats.

Vitamins and minerals are like the superhero helpers. They don't give you energy or build your body, but they make sure everything runs smoothly. Vitamins keep your eyes sharp and your immune system strong. Minerals like calcium make your bones as strong as steel.

So, next time you eat, remember you're fueling your body with superhero nutrients! Eating a variety of foods makes sure all your superhero teams are strong and ready to help you conquer the day.



This shows a chemical reaction in a human cell started by an enzyme.

Enzymes: The Magical Helpers

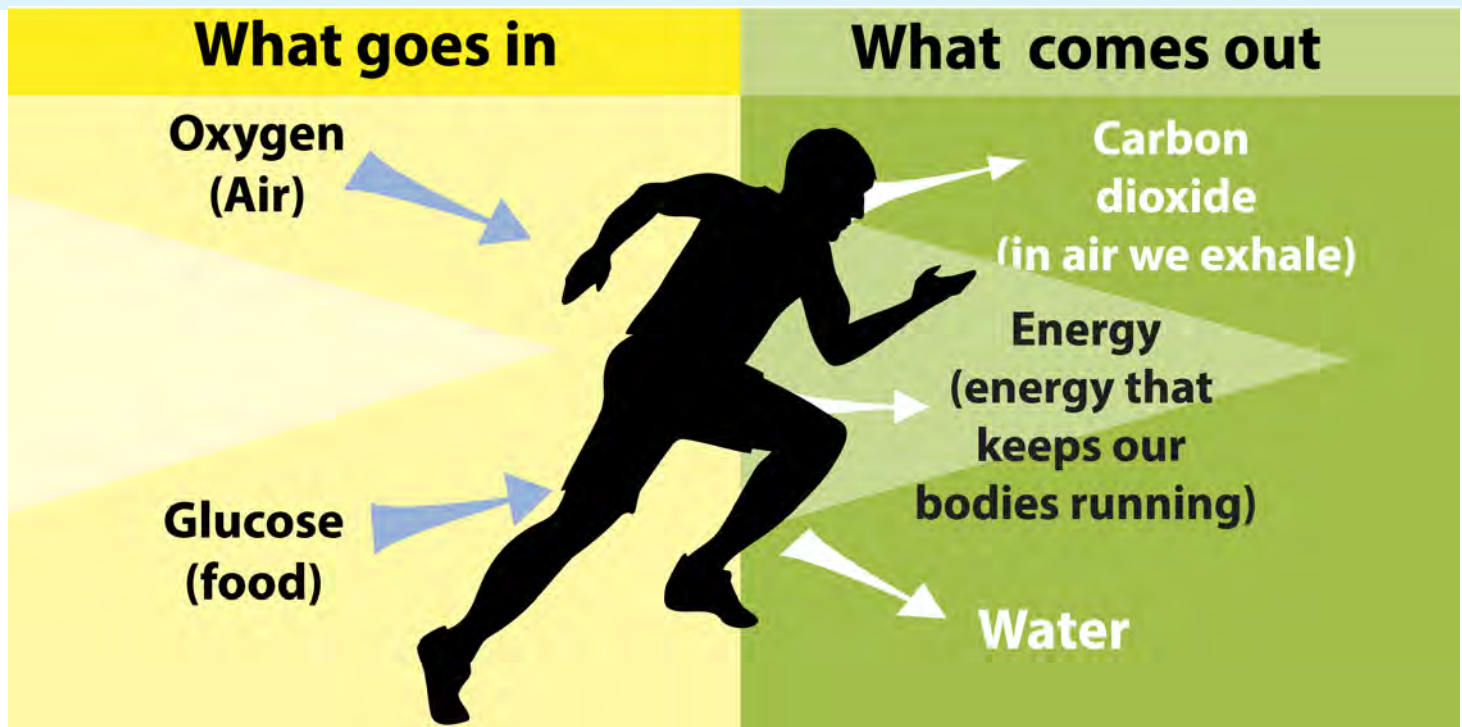
Imagine having a team of magical helpers inside your body, making sure everything you eat gets turned into the energy you need to run, play, and learn. These helpers are called enzymes, and they work like tiny magicians to keep your body running smoothly.

Enzymes are special proteins that speed up chemical reactions in your body. Think of them as super-fast chefs in a kitchen, preparing your meals in record time. When you eat food, enzymes jump into action to break it down into smaller pieces that your body can use.

For example, when you eat a piece of bread, enzymes in your saliva start breaking it down right in your mouth! Then, other enzymes take over in your stomach and intestines, making sure all the nutrients get to where they're needed.

Each enzyme has a special job. There are enzymes that help break down carbohydrates, like those found in bread and rice. Other enzymes work on proteins from meat and beans, and still others break down fats from foods like cheese and fish.

Without enzymes, your body would be like a car without a key, it wouldn't run. So, next time you eat, remember the magical helpers working hard inside you, making sure you have the energy to be your great self every day!



During cellular respiration, food and air is changed to energy.

Cellular Respiration: The Energy Factory

Imagine your body is a huge and very busy city. This city is filled with countless buildings. Inside each building is a power plant that keeps everything running smoothly. In your body, these buildings are called cells. This power plant uses a special method called cellular respiration to turn food into energy, which is a key part of your metabolism.

Here's how it works: When you eat, your body breaks down the food into tiny pieces called glucose. This is like the fuel that the power plant needs to make energy. Glucose travels through your blood to every cell in your body.

Inside each cell, there are tiny parts called mitochondria. Think of mitochondria as mini power plants. They take the glucose and mix it with oxygen, which you breathe in from the air. This method is like a magical recipe that creates energy, water, and a gas called carbon dioxide.

The energy made by cellular respiration powers everything you do, running, jumping, thinking, and even sleeping! It's like having a battery inside you that never runs out as long as you eat and breathe.

The water made by this method is used by your body. You breathe out the carbon dioxide. So, every time you take a breath, remember you're helping your tiny power plants make the energy you need to do great things every day.