



Babies cry when they're hungry.
Dogs bark and howl. When you feel hungry,
your stomach grumbles, your legs feel weak.
You don't cry or howl, but sometimes you feel cranky.



In the nick of time your dinner is ready. It looks good, it smells good, it tastes good.



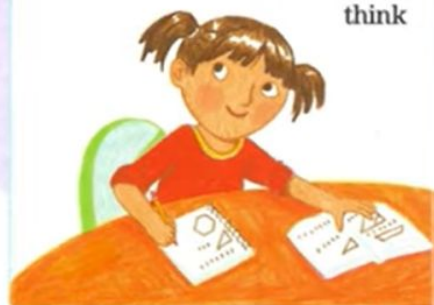
As soon as you eat, you feel better.

Hunger sends you strong signals. It lets you know that eating is the most important thing you do each day. The food you eat and drink keeps you alive. It builds, protects, and energizes your body.

Food makes you able to . . .



grow



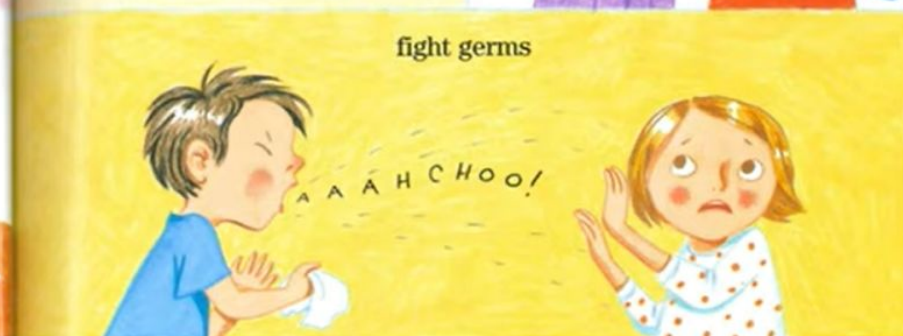
think



stay cool



stay warm



fight germs

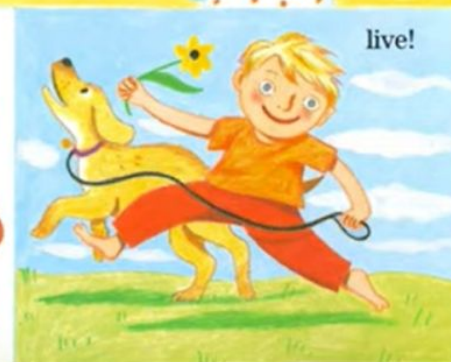


breathe

move



heal

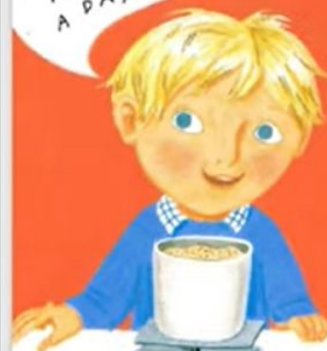


live!

YOU NEED ABOUT THIS MUCH OF EACH NUTRIENT A DAY.

NUTRITION IS THE SCIENCE OF FOOD.

SCIENCE DOESN'T LOOK AS YUMMY AS DINNER.



300 grams

CARBOHYDRATES

supply main source of energy.



30 grams

PROTEIN

supplies energy and builds muscle, skin, and internal organs.



60 grams

FAT

supplies energy and adds flavor to foods.

Nutrients are the parts of food that your body uses to do its work. There are six different kinds of nutrients. You need large amounts of some nutrients and very small amounts of others in your diet.

A GLASS OF SODA HAS ONLY WATER AND CARBOHYDRATES.

A GLASS OF MILK HAS WATER, CARBOHYDRATES, FAT, PROTEIN, VITAMINS, AND MINERALS.



About 2 liters

WATER

is the main ingredient in your body. It cleans and cools you.



13 different VITAMINS

< 1 gram

VITAMINS AND MINERALS

make nutrients work together. Everything your body needs to do is helped by vitamins or minerals.



20 different MINERALS

8 grams

Every food contains at least one nutrient, but healthy foods have lots of them. Your body uses different nutrients in different ways.



Digestion is the way food is broken down so that nutrients can be absorbed into your body.

For healthy digestion you should eat plenty of fruits, vegetables, and whole grains. These foods supply fiber. Fiber does not get absorbed during digestion. It helps carry bad chemicals and excess fats out of your body.



WHEN YOU DIGEST FOOD



MOUTH grinds food and mixes it with saliva.

ESOPHAGUS pushes food down to your stomach.

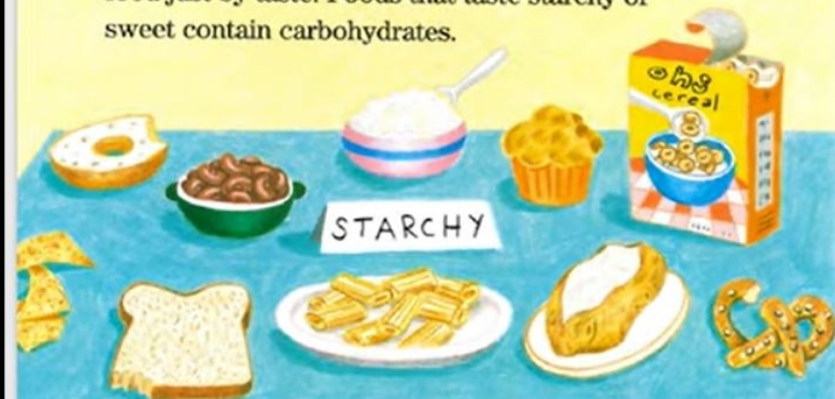
STOMACH churns food and mixes it with acids. Turns food into a thick liquid.

SMALL INTESTINE absorbs nutrients through its spongy lining. Nutrients enter the bloodstream.

LARGE INTESTINE absorbs water and leads unused parts of food out of your body when you go to the toilet.

As soon as food is digested, nutrients start to work. Carbohydrates, protein, and fat get turned into energy. The amount of energy they supply is measured in calories. You use a lot of energy to run and play. You also use energy to stay warm, pump blood, breathe, think, heal, and grow.

Carbohydrates should supply most of the energy your body uses. You can detect carbohydrates in food just by taste. Foods that taste starchy or sweet contain carbohydrates.



Starchy foods give long-lasting energy.

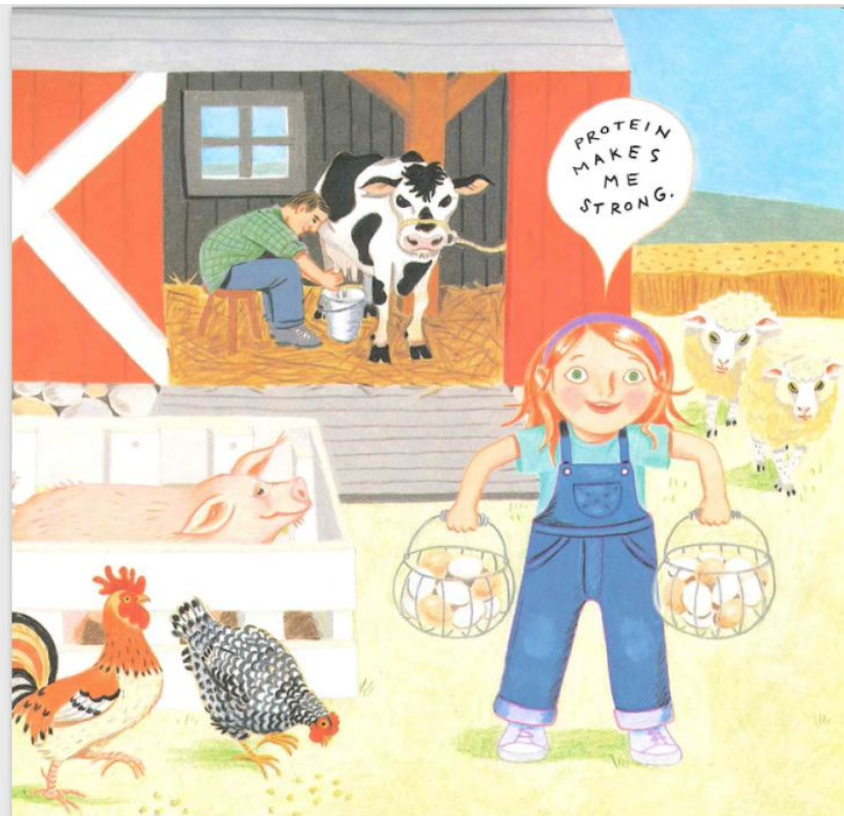
IF YOU ATE CANDY FOR BREAKFAST, SOON YOU WOULD FEEL TIRED AND HUNGRY. A BREAKFAST OF WHOLE GRAIN CEREAL WOULD KEEP YOU GOING 'TIL LUNCH.

THIS ONE IS DEFINITELY SWEET!



Sweet foods give quick boosts of energy.

The energy from very sweet foods is used up very quickly.



Protein supplies energy. It also builds and repairs your muscles, skin, brain, blood, bones, and internal organs. You get protein when you eat animal foods, such as fish, meat, eggs, milk, and cheese.



You also get protein from plants. The parts of a plant that can sprout and grow, such as seeds, dry beans and peas, nuts, and grains, are good sources of protein.

Just as an old-fashioned lantern burns oil, you burn fat for heat and energy. Fat also helps make food taste good. But it is easy to eat too much fat. Fat has more calories than the other parts of food. If you eat more calories than you need, the unused calories are turned into body fat. Eating too many fatty foods can make you heavy.



Fat is in vegetable oil, butter, and cream. You can also see fat in the white and yellow parts of uncooked meat and chicken. Often, you cannot see the fat you are eating. To find out where fat is hiding, get a large piece of paper, a pencil, and samples of foods.





You don't need to worry about having too much water in your diet. Water is your body's main ingredient. Seventy percent of your body, including your blood, saliva, tears, urine, and sweat, is made with water.



Water escapes easily from your body. In a day you lose two cups of water just by breathing. When you cry, go to the bathroom, and sweat, you lose even more water. But as it leaves your body, water carries out wastes and cools you.

Vitamins and minerals are needed in tiny amounts to perform many important jobs in your body. They help all the nutrients in food work together.

VITAMIN C HELPS MY SKIN TO HEAL.



VITAMIN C

Found in:



WITH THE HELP OF VITAMIN A, I CAN SEE WELL, EVEN IN THE DARK!



VITAMIN A

Found in:



Vitamins are found only in plants and animals.

B VITAMINS HELP ME FIGHT GERMS AND INFECTION.



B VITAMINS TURN PROTEIN, FAT, AND CARBOHYDRATES INTO ENERGY.



B VITAMINS ALSO KEEP MY BRAIN AND NERVES WORKING WELL. THEY HELP ME FEEL HAPPY.



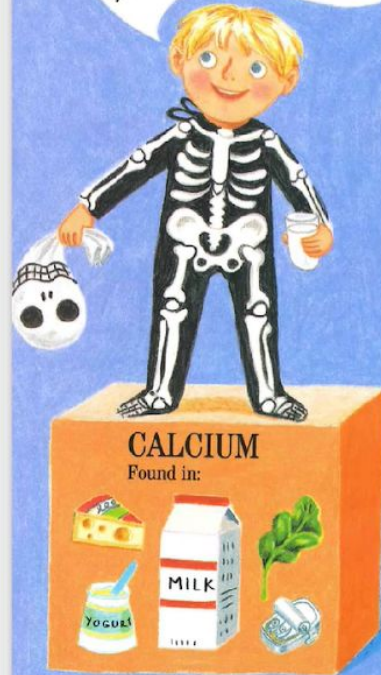
B COMPLEX VITAMINS

Thiamin (B₁), Riboflavin (B₂), Niacin (B₃), Pantothenic Acid (B₅), Biotin, B₆, B₁₂, Folic acid
Found in:

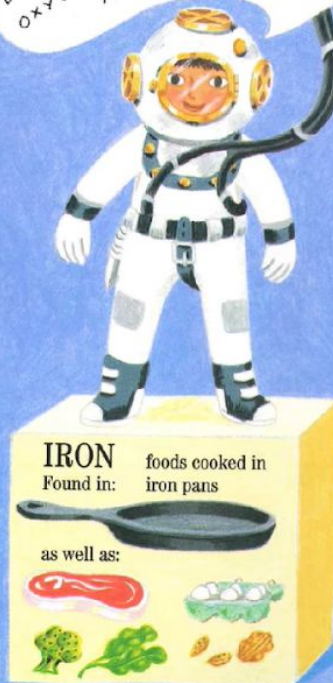


Minerals are tiny particles of rock and metal.

CALCIUM HELPS BUILD
AND REPAIR MY
SKELETON AND TEETH.



IRON HELPS BUILD RED
BLOOD CELLS, WHICH BRING
OXYGEN TO MY BRAIN, HEART,
AND MUSCLES.

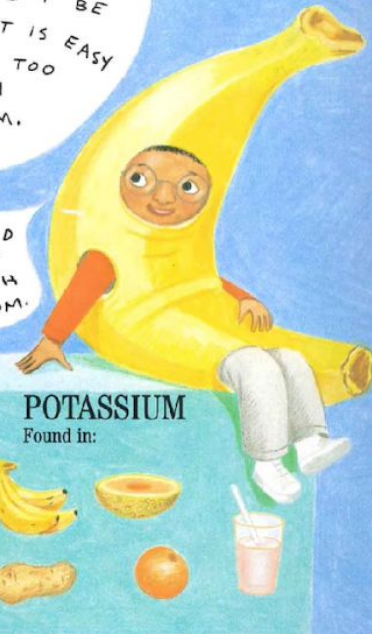


The best way to get all the vitamins and minerals you need is to eat a variety of fresh foods, including plenty of fruits and vegetables.

SODIUM AND
POTASSIUM WORK
TOGETHER TO CONTROL
MY BODY'S WATER
BALANCE. BUT BE
CAREFUL. IT IS EASY
TO EAT TOO
MUCH
SODIUM.



IT'S HARD
TO EAT
TOO MUCH
POTASSIUM.



It's important to eat at least 5 servings
of fruits and vegetables each day.

Today, what will *you* choose?





Food keeps you alive, healthy, and strong.
It gives you energy and makes you grow.
Food is fun to make.



And food is fun to eat.