

Nutrients

Carbohydrates

Carbohydrates are your body's main source of energy. A carbohydrate is a chemical composed of simple sugars. There are two types of carbohydrates: simple and complex. Simple carbohydrates are sugars. They are easily digested and give you quick energy. Complex carbohydrates are made up of many sugar molecules linked together. They are digested slowly and give you long-lasting energy. Some complex carbohydrates are good sources of fiber. Fiber is a part of a healthy diet and is found in whole-grain foods, such as brown rice and whole-wheat bread. Many fruits and vegetables also contain fiber.

Protein

Proteins are found in body fluids, muscle, bone, and skin. Proteins are nutrients used to build and repair your body. Your body makes the proteins it needs, but it must have the necessary building blocks, called amino acids. Your digestive system breaks down protein into individual amino acids that are then used to make new proteins. Some foods, such as poultry, fish, milk, and eggs, provide all of the amino acids your body needs. Foods that contain all of these essential amino acids are called complete proteins. Incomplete proteins contain only some of the essential amino acids. Most plant foods contain incomplete protein, but eating a variety of plant foods will provide all of the amino acids your body needs.

Fats

Another class of nutrients that is important to a healthy meal is fat. Fats are the energy storage nutrients. Fats are needed to store and transport vitamins, produce hormones, keep skin healthy, and provide insulation. Fats also provide more energy than either proteins or carbohydrates. There are two types of fats: saturated and unsaturated. Saturated fats are found in meat, dairy products, coconut oil, and palm oil. Saturated fats raise blood cholesterol levels. Although cholesterol is a fat-like substance found naturally in the body, high levels can increase the risk of heart disease. Unsaturated fats and foods high in fiber may help reduce blood cholesterol levels. Unsaturated fats come from vegetable oils and fish in your diet. The body needs both kinds of fats.

Water

You cannot survive for more than a few days without water. Your body is about 70% water. Water is in every cell of your body. The main functions of water are to transport substances, regulate body temperature, and provide lubrication. Some scientists think you should drink at least eight glasses of water a day. When you exercise you need more water. You also get water from other liquids you drink and the foods you eat. Fresh fruits and vegetables, juices, soups, and milk are good sources of water.

Minerals

Minerals are elements that are essential for good health. You need six minerals in large amounts: calcium, chloride, magnesium, phosphorus, potassium, and sodium. There are at least 12 minerals that are required in very small amounts including fluoride, iodine, iron, and zinc. Calcium is necessary for strong bones and teeth. Magnesium and sodium help the body use proteins. Potassium is needed to regulate your heartbeat and produce muscle movement, and iron necessary for red blood cell production. If you eat a balanced diet, you should get all of the vitamins and minerals you need.

Vitamins

Vitamins are another class of nutrients. Vitamins are compounds that control many body functions. Only vitamin D can be made by the body, so you have to get most vitamins from food.

Nutrient Review

1.) The five types of nutrients are:

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

2.) Your body's main source of energy: _____

3.) Some complex carbohydrates are good sources of:

4.) These are found in body fluids, muscle, bone, and skin:

5.) Poultry, fish, milk, and eggs are good sources of:

6.) These are needed to store and transport vitamins, produce hormones, keep skin healthy, provide insulation and also provide more energy than either proteins or carbohydrates: _____

7.) Saturated fats raise _____, and high levels of this can increase the risk of heart disease.

8.) _____ and foods high in _____ may help reduce blood cholesterol levels

9.) Your body is about seventy percent

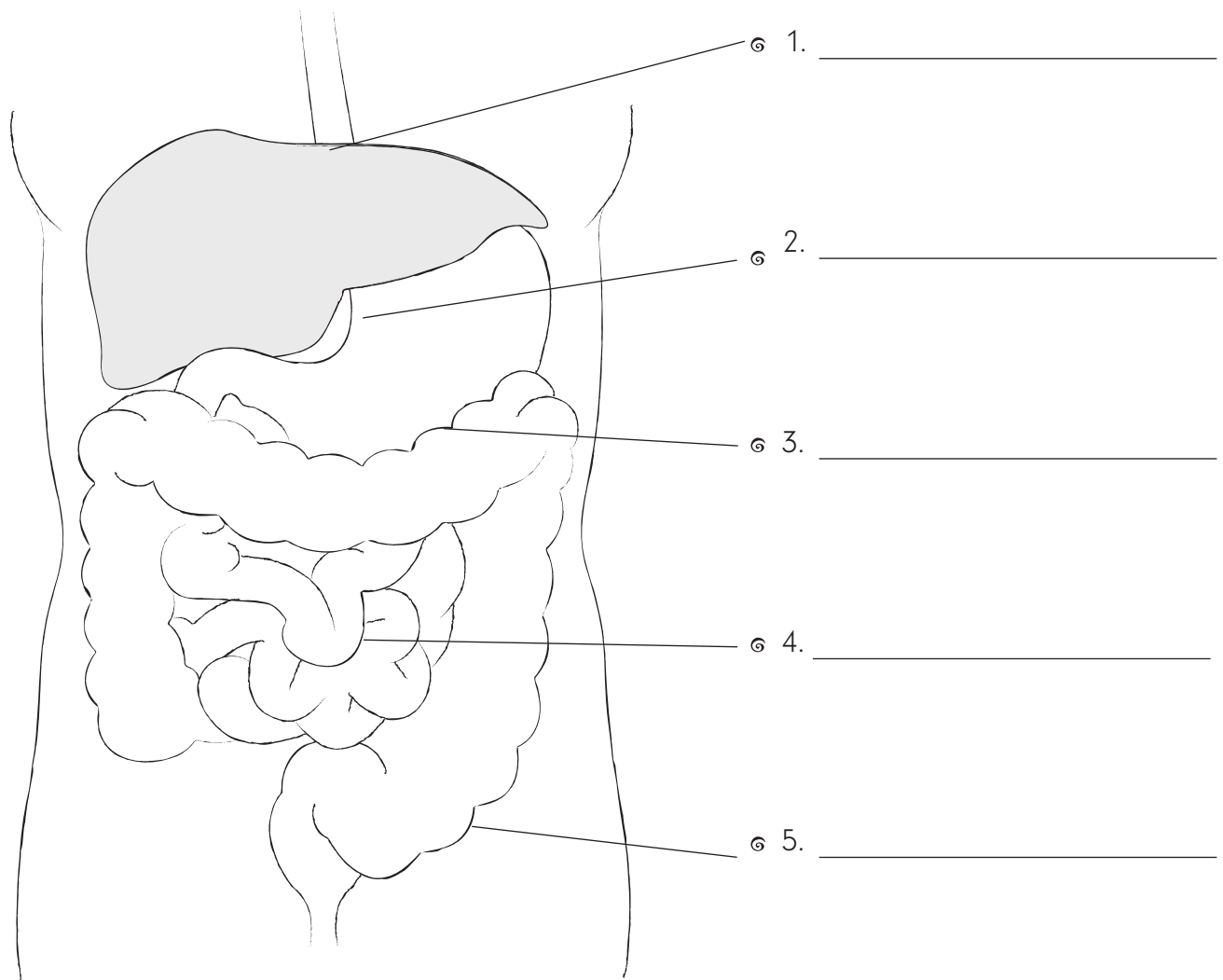
10.) If you eat a balanced diet, you should get all of the _____ you need.

Label the Digestive System

Can you name the parts of the digestive system?

esophagus
stomach
liver

large intestine
small intestine



The Human Body Detectives Need Your Help!

Solve the mystery of the missing words. Robbie is at it again. He has eaten up some of the words in this text about digestion. See if you can help Merrin and Pearl put the words back where they belong. Good luck!

It all starts with that first bite of delicious fruit salad. Your _____ glands go right to work producing a much needed supply of liquid as your teeth chew and your _____ begins to push the chewed food, called a _____, toward the back of your throat.

Next, your muscles move the mushy mass of food into a tube called the _____. The muscles in your esophagus begin squeezing without you even knowing. This strong muscle action is called _____.

As the muscles squeeze the food down your esophagus, a small valve opens and the food drops directly into the _____. Hydrochloric acid squirts down on the food as your strong stomach muscles continue to flex, breaking the food into even smaller bits. These then pass into the _____.

Digestive juices are sent from the liver, pancreas and gallbladder to continue to break down the food. The small intestine looks like a forest filled with pink fingers called _____. These absorb large amounts of _____ from the food that you eat. From here the nutrients will flow directly into your _____.

The leftovers that your body will not use then travel into a larger tube called the _____. The end is near, my friend. It is time for the waste, which is called a _____, to leave your body. You might think this sounds gross, but when this happens it brings relief!

The End.
Really!

small intestine
bolus
large intestine
esophagus

stool
peristalsis
tongue
stomach

nutrients
villi
salivary
bloodstream

Digest that Joke



Here are some of Merrin and Pearl's favorites! Do you have any?

Why was the skeleton afraid to go down the esophagus?

Because he didn't have the GUTS to do it!

What is the strongest and most powerful muscle in the human body?

The MUSCLE SPROUT!

What vegetable would you not want to take on a boat?

A LEEK!

Say this 5 times fast:

Digest that small intestine! Digest that small intestine! Digest that small intestine!

Digest that small intestine! Digest that small intestine!

Why did the yellow banana peel?

It forgot to put on SUNSCREEN!

Why did the banana go to the hospital?

He was not PEELING WELL!

Why did the leaf go to the doctor?

He was feeling a little GREEN!

Knock Knock

Who's there?

Bean

Bean Who?

Bean to the bathroom lately?

Say this 5 times fast:

Uvula Uvula Uvula Uvula Uvula



Quest to Digest



What is your QUEST to DIGEST story? Create your own story and add your own quotes too!

