

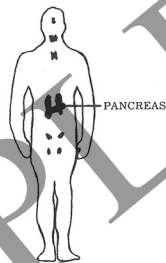
6 GLAND - x.s. (190x)

In the last slide you learned something about the nervous system and the way it sends electrical messages to parts of your body, directing them what to do. Your body has another system that sends chemical messages to different parts of your body. These chemicals help digestion, make your heart beat faster when you are excited, make you grow, and then stop you from growing.

The chemicals that do all these things and more are called **hormones** (HOR-mohnz). They are produced by parts of your body called **glands** (GLANZ).

This slide shows part of a gland called the **pancreas** (PAN-kree-us) that sends chemicals into the digestive system. The part of the gland marked with the arrow is of special interest. It produces a hormone that controls the use of sugar in your body. If this gland doesn't produce enough of its hormone, called **insulin** (IN-su-lin), a serious disease called **diabetes** (di-a-BEE-tes) can result.

Glands and hormones are part of your body's **endocrine** (EN-do-krin) system.



THE ENDOCRINE SYSTEM

7 SKIN - x.s. (80x)

Your skin is the largest organ in your body. It is part of several different systems. Your skin protects you from germs and injury. It stores food in its fatty layers. It helps keep your inside parts at the right temperature. It contains parts of the nervous system which tell your brain what is happening outside of your body.

This slide shows many sweat glands. One of these glands is labeled (S). *Can you find others?* (D) is a straight section of one gland. At (P) you can see an opening in the skin through which sweat leaves your body. Sweat on your skin keeps you cool. *Can you also see that your skin has more than one layer?*

8 WHITE BLOOD CELL - e.m. (25,000x)

This slide introduces you to part of another body system called the **immune** (im-MY-oon) system. Its job is to keep germs out of your body and, if germs do get in, find them and kill them before

they can harm you. The part of the system you see here is a white blood cell (W). It is gobbling up a bacteria (B) that has gotten into the body.

YOUR BODY

INTRODUCTION

Your body is a wonderful machine. Whether you are eating, playing, or sleeping, your body is working. Your heart pumps, your lungs breathe, your muscles stretch. And all this happens with you hardly noticing it. How does your body do all of these things? This set was written to help you begin to learn the answers to this question.

As you study this set you will see what some parts of your body look like under a microscope. You

will also learn about what these parts do. The parts you will study will introduce you to this interesting subject. You can then learn more about each of the parts by studying other sets in this series and books your teacher will tell you about.

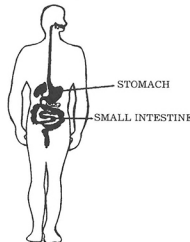
The magnification given, for example, Slide 1 (50x), means that the microscope was set at that power when the photograph was taken.

1 SMALL INTESTINE (50x)

Your body needs fuel to keep it running smoothly. It gets its fuel from the air you breathe and the food you eat. But food can't be used by your body just the way you eat it. It first must be changed into simple chemicals that can travel through your body and reach every one of your body's cells. The group of parts of your body that help bring the food into your body, break it down into usable form and eliminate the unused waste, is called the digestive system.

This slide shows a tiny piece of the part of the digestive system called the **intestine** (in-TES-tin). It is very important. Here is where food is absorbed and enters your bloodstream. Once the food is in your bloodstream, it can then travel to feed the rest of your body. *Can you see the small, finger-like parts in the slide labeled (V)?* They are called **villi** (VILL-i). They act like sponges, soaking up

the food. If you study Microslide Set 116, you will learn much more about the parts of the digestive system and how they work.



THE DIGESTIVE SYSTEM