

Welcome to this lesson today, titled body systems overview.

Today we will be taking a look at the characteristics of the 11 different organ systems within our body.

Life is organized into various different types of levels. This level starts on the smallest level with atoms, which compose molecules, which compose cells, which compose tissues, which then will compose organs, and organs make up organ systems, and organ systems make up organisms. So you can see that there's this, starting from the smallest level to the largest level, of how life is organized.

Today we were going to be taking a look at the level of organization that involves organ systems. And since this is a human biology course, we will be looking at the 11 different body systems in the human body.

I have here a diagram that shows an illustration of the 11 systems that we're going to be talking about today.

The first system we're going to discuss is the integumentary system. This system is basically made up of our outer layer-- upper body-- of our skin. So this body system, the purpose of it is for protection of our body. It also helps to regulate our temperature, and it can receive sensory information.

Our second body system that we're going to talk about is our nervous system. Our nervous system, the main role of our nervous system is to detect stimuli in our environment, and then control responses in order to react to that stimulus.

Our muscular system is the third system I'm going to talk about today. Our muscular system basically coordinates our movements. It allows for movement, I'm sorry. So it allows for our body to be able to move. And it also helps to generate heat for our body, to maintain a constant internal temperature, to help maintain homeostasis. So that's our muscular system.

Our skeletal system is the next system we'll discuss. Our skeletal system works in conjunction with our muscular system to allow for movement. It also gives our body its shape. It supports our body. It protects internal organs. And it also can store minerals. Different minerals, like calcium, for example, are stored within our skeletal system. And another important part of our skeletal system is that it makes red blood cells.

Our next body system here is the cardiovascular system. Our cardiovascular system is another important body system because its main role is to transport blood and other materials throughout our body. Blood is what carries oxygen to the tissues in our body, and other different important materials, and it also helps dispose of carbon dioxide waste. So that's the main role of our cardiovascular system, is to transport blood and materials.

The endocrine system is our next system. And this body system, its main function is to control our body function with the use of hormones. It produces and secretes hormones that help control different body functions.

The lymphatic system is our next system here. The lymphatic system, the purpose of the lymphatic system is to collect, and then return, tissue fluids back to the blood. So it plays a role in our immune system in protecting our body from different invaders. So that's our lymphatic system.

Our respiratory system is our next system. Our respiratory system, its main role is to deliver oxygen to our different body tissues, and also help remove carbon dioxide waste.

Our digestive system is our next system. The purpose of our digestive system is to ingest, and then break down and process, foods or liquids that we take into our body. It helps us to intake foods and liquids, digest it, process it, and then get the nutrients from it that we need.

Next we have our urinary system. Our urinary system, its job is to control the volume and composition of blood, and it also acts to excrete extra fluids or waste from our body, that we don't need.

Lastly, we have our reproductive system. The reproductive system varies between the male and female. For all of our other body systems, it's the same for male or female, but for the reproductive system, it varies from a male to a female. Male and female have different reproductive systems, but the basic purpose of the reproductive system is to develop a fetus. So the structures are different from male to female, but the purpose of the reproductive system is to help develop a fetus.

If you're interested in learning more about the structure and function of any of these different body systems, you can certainly research that more, but this lesson has just been an overview, a brief overview on the 11 body systems in the human body.