**An Overview of the 11 Human Body Systems and Their Functions**

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The 11 human body systems work together and make it possible to breathe, move, speak, digest food and carry out many other functions. Learn about each system to better understand how it works.

**Nervous System**

One of the most important of the 11 human body systems is the nervous system. The nervous system consists of the central nervous system and peripheral nervous system. The job of the central nervous system is to receive information and send out instructions. This system consists of the brain and spinal cord. The peripheral nervous system consists of the nerves in the body. These nerves send out messages to other parts of the body. The brain acts as the control centre of the body, as it helps control all of the organs and tissues. The brain also lets humans remember things and experience the five senses of touch, taste, smell, sight and hearing.

**Skeletal System**

The skeletal system consists of all the bones and tissues that connect them together. This system protects the organs from injury, provides support for the body and allows the body to move. The skull protects the brain. The vertebral column protects the spinal cord. The tissues that connect bones to muscle and bones to other bones include ligaments, tendons and cartilage.

**Muscular System**

The muscular system consists of three types of muscle. Smooth muscle pushes food through the digestive tract, pushes food back up to the oesophagus when someone vomits, and helps push a baby out of the body during childbirth. Cardiac muscle is the muscle in the heart. This muscle relaxes and contracts to circulate blood throughout the body. Skeletal muscles aid in movement and support the body.

**Circulatory System**

The circulatory system consists of the heart and blood vessels. These tissues circulate blood throughout the body. The blood transports all the nutrients and wastes around your body so it sometimes called the “transport” system

**Respiratory System**

The respiratory system has two main functions. It is responsible for supplying the blood with oxygen and releasing Carbon Dioxide from the blood – both of which occur in the lungs. The respiratory system consists of the lungs, diaphragm, mouth, trachea and nose.

**Digestive System**

The digestive system breaks down food and absorbs the nutrients. Food enters the mouth, where it mixes with saliva. The saliva helps soften and break down the food so it is easier to swallow. From the mouth, food passes through the esophagus, a muscular tube that pushes the food into the stomach. The stomach contains enzymes and acids that break down food into smaller pieces. This makes the food easier to digest. Food moves from the stomach to the small intestine which has millions of villi, which are small projections that aid in the absorption of nutrients. Any undigested food in the small intestine moves to the large intestine. This organ removes water from the undigested food and forms feces, or solid waste. The rectum stores this solid waste until it is ready to leave the body.

**Endocrine System**

The endocrine system controls the production and secretion of hormones. Hormones control growth, sexual development, metabolism and other body functions. This system consists of the pituitary gland, hypothalamus, thyroid gland, pineal body, adrenal glands, parathyroid glands and the pancreas.

**Reproductive System**

The male reproductive system produces sperm and produces male sex hormones that keep the reproductive system working normally. The external structures of this system include the penis, testicles and scrotum.

The female reproductive system has several functions. It produces eggs and transports eggs to the fertilization site. This system also participates in the gestation of a baby and the process of childbirth, menstruation and menopause. The female reproductive system include the uterus, ovaries, vagina and fallopian tubes.

**Excretory System**

The excretory system helps the body get rid of waste products. The major organs in this system are the kidneys, lungs and skin. Carbon dioxide and other waste gases exit the body via the lungs. The skin helps remove sweat and dead skin cells from the body. The kidneys remove wastes from the blood by filtering the blood, sending nutrients back into the body and expelling wastes in the urine.

**Integumentary System**

The largest of the 11 human body systems is the Integumentary system. This system consists of the skin, hair, nails glands and hair follicles. This system controls body temperature, protects the body from damage, absorbs nutrients, helps maintain homeostasis and works with the nervous system to control the sense of touch.

**Immune System**

The immune system protects the body against harmful organism. This system consists of organs, tissues, proteins and specialized cells that help prevent infections and keep us healthy – including bone marrow, the thymus gland and spleen.