

# Human anatomy essay examples

[Health & Medicine](#), [Body](#)



## **Introduction**

Anatomy deals with the study of the structure of the body. It relates to physiology that looks into how the body functions (Morrison 698). The human anatomy is complex and consists of several systems that work together for the nourishment of the body. They consist of the skeletal system, the digestive system, the urogenital system, the endocrine system, and the nervous system. There are several types of anatomical studies. Microscopic anatomy deals with the study of microscopic body structures. Functional anatomy deals with the interrelations between functions and body structures.

Human anatomy encompasses a close study into the organization of the human body. There is a hierarchy in this organization: from simple cells to complex organ systems. The human body can be divided into body region such as the back and trunk, the head and neck, and the upper and lower members. When conducting a study of the human body, an individual is in the anatomical position. This means the body is erect with the arms on the side and the head facing forward. The direction or point of view of the body can be anterior, posterior, proximal or distal. Anterior means viewing from the front of the body while posterior means from the back of the body. Proximal refers to a view near the shoulder or hip joint. Distal, on the other hand, refers to viewing further away either of these joints.

The most basic unit of the human anatomy is the human cell. It comprises of cell organelles with different functions. Cells multiply through cell division with the help of centrioles. Manufacture of proteins occurs in the ribosomes

under the instructions of the genes. Transfer of materials from cell to cell occurs through the endoplasmic reticulum. Digestion of intracellular materials and bacteria by enzymes occurs in lysosomes. The energy required for the working of the cell comes from the mitochondria. The cytoplasm is the jellylike fluid holding all cell organelles. The nucleus controls all the activities occurring in the cell.

Several cells working together to accomplish a common function comprise a tissue. Tissues include the epithelial tissue, the skeletal tissue, the connective tissue and the nervous tissues, among others. Tissues work together to make up an organ. Epithelial tissue covers the surface of the body tissues or organs. This tissue can be columnar, squamous or cuboidal, depending on the function (Meskell 631).

Connective tissue holds tissues together so as to provide the required support. This tissue manufactures a material referred to as the matrix that helps fill up spaces. Connective tissue can be in fibrous, cartilage, bone or fat form. Bones consist of osteoblasts that make and repair the bone. The bone tissue can be compact or spongy. Muscle, smooth, cardiac and skeletal tissues facilitate movement since they can shorten.

The nervous tissue is responsible for response to stimuli and transmission of vital information in the body. Detection and transmission of signals occurs through nerve cells or neurons. The junction between two neurons is the synapse. The largest organ in the human body is the skin or the integument proper (Heer and Noreen 62). It consists of the epidermis, which is the outer layer, and the dermis, which is the inner layer. There are several skin pigments that determine an individual's skin and hair color. Absence of these

pigments is the cause of albinism in some individuals.

Serous cavities, located between two moving surfaces, act as lubricating surfaces. For example, a bursa reduces friction between a muscle and a bony surface. Other serous cavities include the pericardial cavity holding the heart and the peritoneal cavity suspending the digestive system.

The bones form the human skeleton. This aids in support, motion, formation of blood cells and protection of soft body structures. A bone consists of a central shaft known as diaphysis and protruding ends known as epiphyses. A meeting of two bones forms a joint. There are several kinds of joints such as fibrous joint, bony joint, synovial joint and cartilaginous joints. Cartilaginous joints are non movable while synovial joints allow for motion. Synovial joints have synovial fluid to facilitate lubrication of the joint. The spine consists of bony blocks called vertebrae. It consists of the cervical region, the thoracic region, the lumbar region and the coccyx. The skull is a hard bone structure that protects the brain and holds facial organs.

The urogenital system consists of urinary and genital organs. The urinary system consists of two kidneys, urethra, two ureters and a urinary bladder. The nephron is the functional unit of the human kidney and plays a vital role in excretion. The circulatory system ensures supply of necessary nutrients to the body and efficient mechanism of excretion. This system consists of the lymphatic system and the cardiovascular system.

## **Conclusion**

The human anatomy is a complex structure made of many body tissues, organ systems and other body structures to ensure all the basic body

functions occur with precision. The constituents of these systems are less complex but it is in these simpler units that basic body processes occur.

## **Works Cited**

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