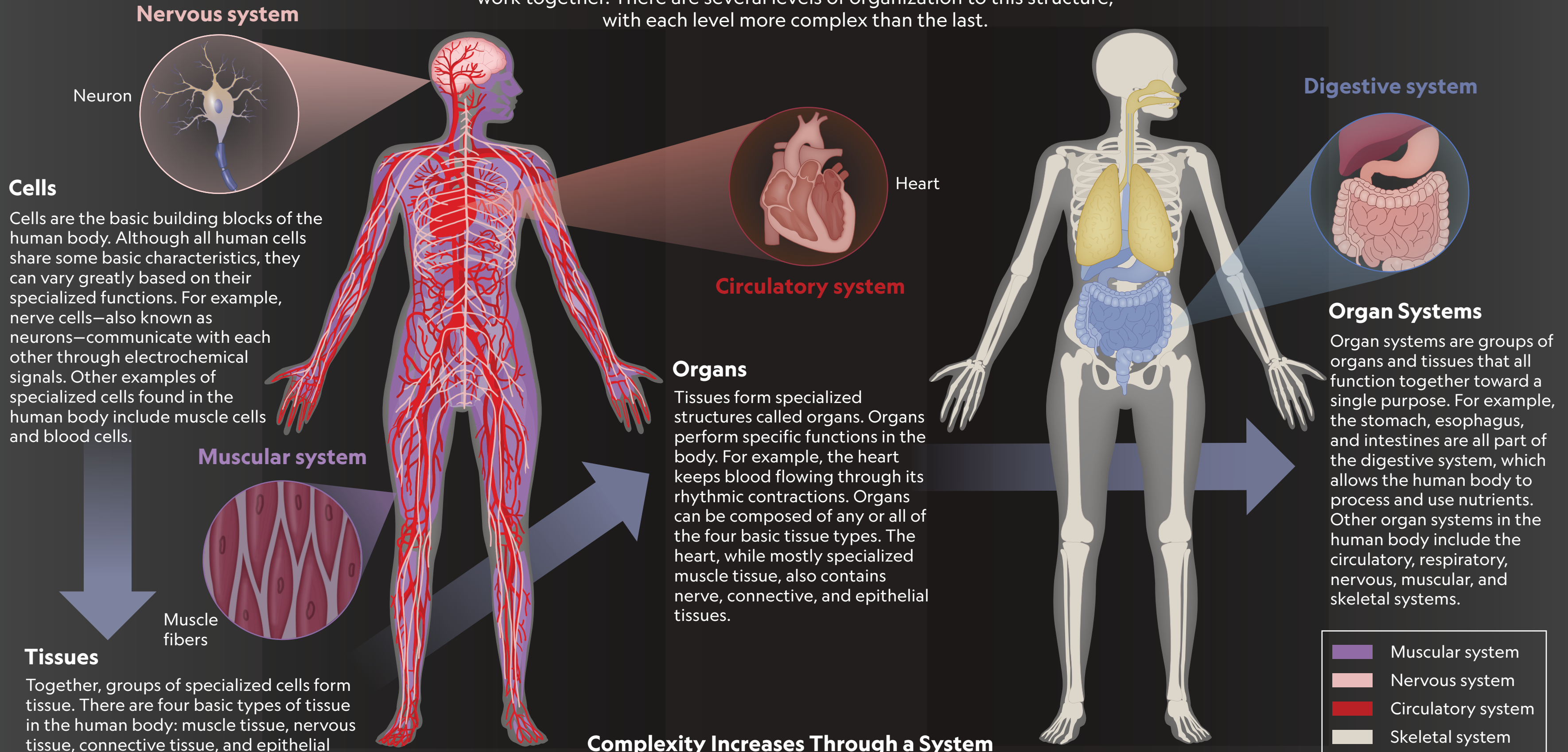


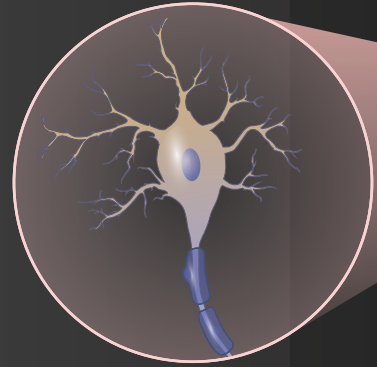
# THE ORGANIZATION AND STRUCTURE OF THE HUMAN BODY

The human body is made up of a complex structure of systems that all work together. There are several levels of organization to this structure, with each level more complex than the last.



## Nervous system

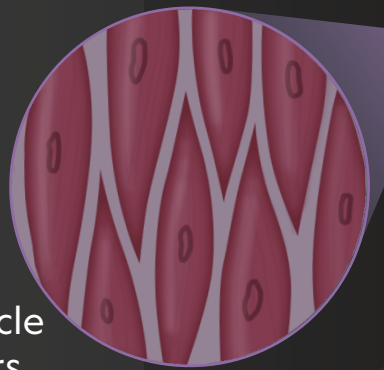
Neuron



## Cells

Cells are the basic building blocks of the human body. Although all human cells share some basic characteristics, they can vary greatly based on their specialized functions. For example, nerve cells—also known as neurons—communicate with each other through electrochemical signals. Other examples of specialized cells found in the human body include muscle cells and blood cells.

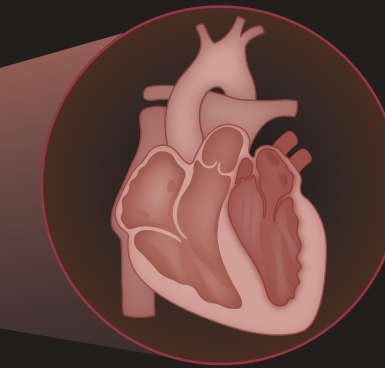
## Muscular system



Muscle fibers

## Tissues

Together, groups of specialized cells form tissue. There are four basic types of tissue in the human body: muscle tissue, nervous tissue, connective tissue, and epithelial tissue. Muscle tissue might be the first thing that comes to mind when thinking about body tissue, but blood and bone are considered tissue as well—in this case, connective tissue. Epithelial tissue covers surfaces on both the inside and outside of the body; skin tissue is an epithelial tissue.



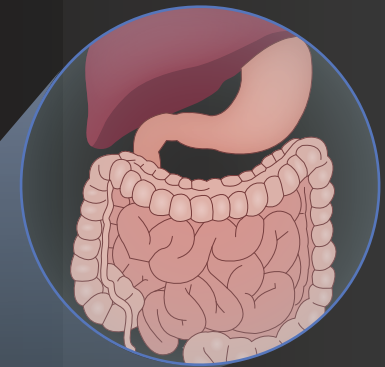
Heart

## Circulatory system

## Organs

Tissues form specialized structures called organs. Organs perform specific functions in the body. For example, the heart keeps blood flowing through its rhythmic contractions. Organs can be composed of any or all of the four basic tissue types. The heart, while mostly specialized muscle tissue, also contains nerve, connective, and epithelial tissues.

## Digestive system



## Organ Systems

Organ systems are groups of organs and tissues that all function together toward a single purpose. For example, the stomach, esophagus, and intestines are all part of the digestive system, which allows the human body to process and use nutrients. Other organ systems in the human body include the circulatory, respiratory, nervous, muscular, and skeletal systems.

- Muscular system
- Nervous system
- Circulatory system
- Skeletal system
- Digestive system
- Respiratory system

## Complexity Increases Through a System

