

Vocabulary

bones

muscles

blood vessels

heart

kidney

liver

stomach

intestines

brain

lungs

skin

organ

organism

cell tissue

epithelial

connective

nerve

circulation

excretory

digestive

The human body is organized in levels that range from microscopic - a single cell - to huge - the body as a whole. The order of the levels of organization from smallest to largest is as follows:

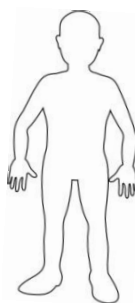
cell > tissue > organ > organ system > organism

The cell is the smallest unit in the human body that carries out all life functions. Groups of similar cells that work together to carry out a function form tissues. The four basic types of tissues in the human body are epithelial tissue (covers the outside of the body and lines organs), connective tissue (supports or joins other tissues), muscle tissue (shortens and relaxes), and nerve tissue (sends and receives electrical signals).

Organs are made of two or more kinds of tissues. Each organ carries out one job or group of jobs. Organ systems are groups of organs that work together to carry out major tasks such as circulation, waste removal, and digestion.

The human body has eleven main organ systems:

**immune – circulatory – nervous – respiratory – digestive -
reproductive – endocrine – integumentary - muscular – skeletal -
excretory**



The Human Body



HeartRate

Exercise and Your Pulse

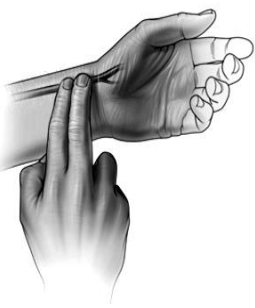
If you check your pulse while you're exercising or immediately afterwards, it may give an indication of your fitness level.

Most adults have a resting heart rate of 60-100 beats per minute (b.p.m).

The fitter you are, the lower your resting heart rate is likely to be. For example, athletes may have a resting heart rate of 40-60 b.p.m or lower.

To find your pulse in your wrist:

- hold out one of your hands, with your palm facing upwards and your elbow slightly bent
- put the first finger (index) and middle finger of your other hand on the inside of your wrist, at the base of your thumb
- press your skin lightly until you can feel your pulse – if you can't feel anything, you may need to press a little harder or move your fingers around
- using a stopwatch, count the number of beats in 15 seconds and multiply it by four to get your b.p.m (beats per minute)



1. Check you heart rate at rest.
2. Check your heart rate after 30 seconds of hard exercise.
3. Check your heart rate at one minute intervals up to five minutes.
4. Record the data in the table.
5. Transfer your group's data on to the graph.

Your Heart Rate

at rest	after exercise	after one minute	after two minutes	after three minutes	after four minutes	after five minutes
bpm	bpm	bpm	bpm	bpm	bpm	bpm

