

Types

Main article: *Muscle tissue*

Classification of muscles

The body contains three types of muscle tissue: (a) skeletal muscle, (b) smooth muscle, and (c) cardiac muscle

Muscle tissue is a **soft tissue**, and is one of the four fundamental types of **tissue** present in animals. There are three types of muscle tissue recognized in **vertebrates**:

- **Skeletal muscle** or "**voluntary muscle**" is anchored by **tendons** (or by **aponeuroses** at a few places) to **bone** and is used to effect **skeletal** movement such as **locomotion** and in maintaining posture. Though this postural control is generally maintained as an unconscious reflex, the muscles responsible react to conscious control like non-postural muscles. An average adult male is made up of 42% of skeletal muscle and an average adult female is made up of 36% (as a percentage of body mass).^[5]
- **Smooth muscle** or "**involuntary muscle**" is found within the walls of organs and structures such as the **esophagus**, **stomach**, **intestines**, **bronchi**, **uterus**, **urethra**, **bladder**, **blood vessels**, and the **arrector pili** in the skin (in which it controls erection of body hair). Unlike skeletal muscle, smooth muscle is not under conscious control.
- **Cardiac muscle** (myocardium), is also an "**involuntary muscle**" but is more akin in structure to skeletal muscle, and is found only in the heart.

Cardiac and skeletal muscles are "**striated**" in that they contain **sarcomeres** that are packed into highly regular arrangements of bundles; the myofibrils of smooth muscle cells are not arranged in sarcomeres and so are not striated. While the sarcomeres in skeletal muscles are arranged in regular, parallel bundles, cardiac muscle sarcomeres connect at branching, irregular angles (called intercalated discs). Striated muscle contracts and relaxes in short, intense bursts, whereas smooth muscle sustains longer or even near-permanent contractions.

<https://en.wikipedia.org/wiki/Muscle>