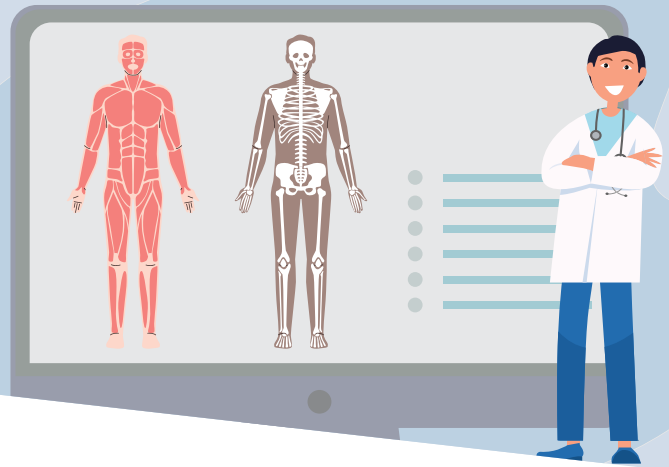


December 2025

Benefits News



What is the Muscle and Bone System?

This document is part of the PEBB December Newsletter, Muscle and Bone (Musculoskeletal) Health. To access other resources, visit the [News and Events](#) page.

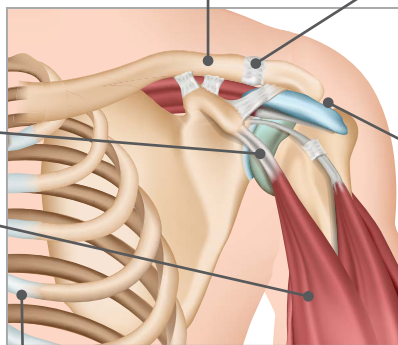
The muscle and bone system gives your body its structure and support. It lets you move around, and it protects important organs. It also makes blood cells and stores minerals.

The system is complex. It consists of bones (which make up your skeleton), muscles, tendons, ligaments, joints, cartilage, and other connective tissue.

Tendons attach muscles to bones. Tendons may also attach muscles to structures such as the eyeball. They serve to move the bone or structure.

Muscles are soft tissues that allow for movement, support, and various bodily functions. This includes posture, breathing, and digestion.

Bones are rigid, connective tissues that form the skeleton of the human body. They provide structural support, protect vital organs, and enable movement.



Cartilage protects your joints and bones. It acts as a shock absorber throughout your body.

Ligaments attach bones to other bones. They usually serve to hold structures together. Generally, they help to keep this complex system stable.

Joints are the connections between two or more bones in the body. They enable movement by providing a point where bones meet and interact.

There are also other **connective tissues** with special functions that help to keep your muscles and bones protected and moving correctly.








Functions of Your Muscle and Bone System

The muscle and bone system provides the framework for your body. It maintains your shape and supports your weight. Other important functions include:

- **Movement:** Bones, muscles, tendons, and ligaments work together to enable motion. This includes simpler movement like walking to more complex athletic activities.
- **Protection:** It shields your vital organs. For example, your skull protects your brain, and your rib cage protects the heart and lungs.
- **Blood cell production:** Bones contain bone marrow. Bone marrow produces red and white blood cells and platelets.
- **Mineral storage:** Bones store essential minerals, such as calcium and phosphorus. They also release minerals as needed to maintain good health.
- **Energy storage:** Yellow bone marrow stores fat. This can serve as an energy reserve.
- **Breathing assistance:** Muscle contractions allow your body to breathe.



Everyday Ways to Keep Your Muscle and Bone System Healthy

	Move it or lose it! If we don't use our muscles, they weaken and shrink. And if we don't move joints through the full range of motion, they can slowly lose their full abilities.
	Always fasten your seatbelt.
	Wear the right protective equipment for all activities and sports. This includes helmets, shin guards, knee and elbow pads, and more.
	Stretch, warm up, and cool down before and after exercising.
	Remove any obstacles at home or if your workplace to prevent trips and falls.
	Use the proper tools or equipment at home to reach things. For example, use a step stool or ladder. Don't stand on chairs, tables, or countertops.
	Use a cane or walker if walking is difficult, or if you're prone to falls.

Sources:

- [Cleveland Clinic](#)
- [Verywell Health](#)

