

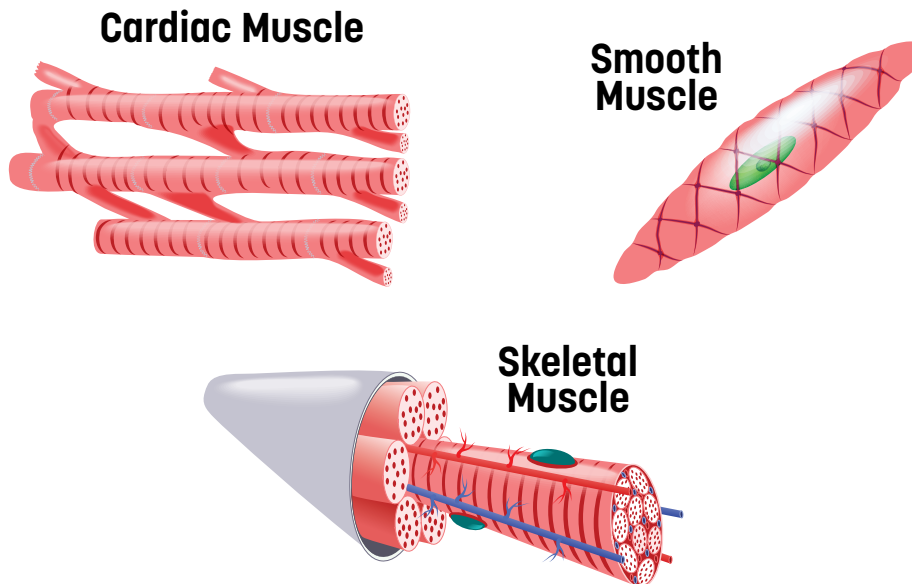
Musculoskeletal System



The System functions:

There are three main types of muscle including cardiac, smooth and skeletal.

3 Muscle Types



- 1 Cardiac muscles** are involuntary muscles known as myocardium that is found in the heart wall used to contract the heart causing heartbeat and visceral.
- 2 Smooth muscle** lining which is another form of involuntary muscle primarily located in the digestive system designed to move food through the digestive and urinary tract as well as the arteries and veins.
- 3 Skeletal muscles** are voluntary muscles and work with the connective tissues which enable the body to move. The skeletal structure consists of bones, cartilage, ligaments designed to provide structure for the body, protection for delicate tissues and organs and joints of the skeletal system act as levers by joining muscle and bone through connective tissue. Its primary role is in the storage of calcium, maintain pH balance and produce red blood cells to the body.

Associated organs:

Bones and Muscles, tendons, ligaments, cartilage, synovial



What you can do to support a healthy Musculoskeletal System:

Recommended Dietary Supplements: Bone Growth Factor™, Essential D™, Joint Complex™, MyoHealth® Essential Amino Acid Complex, Nopaled™, Promeric 95, VitaCal-MagD™ K2.

Essential Vitamins & Minerals: Calcium, Potassium, Protein, Vitamin C, Iron, Thiamin, Magnesium, Sodium and Iodine.

Foods to Include:

Fruit	Vegetables	Protein	Dairy	Nut & Seeds
Oranges	Collard Greens	Wild-Caught Fish	Eggs	Almonds
Pineapple	Broccoli	Grass-Fed Lean Beef/Bison	Cottage Cheese	Walnuts
Tomato	Brussels Sprouts	Free-Range Chicken/Turkey Breast	Grass-Fed Whole Milk	Pumpkin Seeds
Papaya	Artichokes	Lean Pork	2% Greek Yogurt	Chia Seeds
Bananas	Red/Green Peppers	Tofu	Aged Cheese	Pistachios
Strawberries	Kale		Butter	
			Kefir	

Note: Be sure to do your best to shop organic, grass-fed, free-range, unprocessed and low sodium.





What you can do to support a healthy Musculoskeletal System (continued):

Daily morning cleanse: 8-12oz of lemon water

Foods you should avoid or limit:

Do your best to read the labels on packaged food. If the names are too hard to pronounce, they are likely chemical based ingredients and not very good for you.

- Processed and high-sodium foods such as cured ham, bacon, sausage and potato chips
- Foods that contain all-purpose flour such as pizza, bagels, pretzels, white bread, and flour tortillas
- Artificial sweeteners containing Sucralose such as yogurt, cereal, whole grain muffins and breads and microwave popcorn
- Beware of "reduced sugar" labels which are usually loaded with **artificial sweeteners** such as fruit juice, ketchup, jams, jelly, syrup, soda, sports drinks, ice cream and salad dressings. Below is a list of artificial sweeteners you should try to avoid:

■ Aspartame	■ Equal	■ NutraSweet	■ Sorbitol
■ Acesulfame potassium	■ Glucin	■ Nutrinova	■ Sucralose
■ Alitame	■ Kaltame	■ Phenylalanine	■ Twinsweet
■ Cyclamate	■ Mogrosides	■ Saccharin	■ Sweet 'N Low
■ Dulcin	■ Neotame	■ Splenda	■ Xylitol

Recommended Activities:

Physical activity is essential for good health. New studies show even 15 minutes of elevated heart rate from activity has numerous benefits. Find activities you enjoy doing and aim for at least 15 minutes 4 to 5 times per week.

CARDIO: Biking, Hiking, Walking, Running, Swimming and Dancing

STRENGTH: Weight Training, Resistance Training and Pilates

FLEXIBILITY: Yoga, Tai-Chi and Stretching





Additional Information:

Common Symptoms: Common signs and symptoms associated with the Musculoskeletal System include aches, pain, gout, osteoarthritis, rheumatoid arthritis, tendonitis, stiff and painful joints, cramps, spasms, bone infections, fibromyalgia, swelling, and tightness causing nerve pressure leading to carpal, cubital and tarsal tunnel syndromes.

Common Disorders:

- **Bunion** - A deformity of the joint connecting the big toe to the foot.
- **Degenerative Disk Disease** - Osteoarthritis of the spine usually in the neck or lower back that can lead to facet joint impingement and muscle spasm and pain.
- **Gout** - A form of arthritis characterized by soreness and reddening of the big toe joint or foot.
- **Hammer Toe** - A deformity of the toes characterized by an abnormal bend in the middle of the joint.
- **Hernia** - Development of a bulging lump in the groin or abdominal wall.
- **Herniated/Ruptured disk** - A condition which refers to a problem with the rubbery disks between spinal bones that can cause nerve root impingement and radicular pain and spasm.
- **History of broken bones** - This can be the result of injury, fall or thinning of bones.
- **Osteoarthritis** - A type of arthritis that occurs gradually causing wear and tear of joints.
- **Osteoporosis** - A condition in which bones become weak and brittle due to bone calcium loss that can lead to fractures.
- **Plantar Fasciitis** - Inflammation of the thick tissue band that connects the heel bone to the toes causing pain in heel or bottom of foot.
- **Psoriatic Arthritis** - A form of arthritis that affects some people who have the skin condition psoriasis.
- **Restless Leg Syndrome** - A condition that is characterized by leg irritability usually occurring at night and often interferes with sleep.
- **Rheumatoid Arthritis** - Autoimmune disease often affecting joints leading to bony destruction at later or untreated stages.
- **Systemic Lupus Erythematosus** - An autoimmune disorder that affects the entire system by attacking its own tissues.
- **Teeth Grinding** - The Grinding teeth when sleeping or during day.
- **Tendonitis** - A condition in which the tissues connecting muscle to the bone becomes inflamed. This can occur medially (golfers elbow) or laterally (tennis elbow) and see it in excessive arm/elbow use.
- **TMJ** - Chronic pain of the jaw joint and surrounding muscles with movement.