

Our face alone has over 40 muscles. The muscular system covers our whole body and consists of over 650 muscles. It enables us to smile, run, stand upright, bend and do other everyday actions that we don't even think twice about. The system is also responsible for involuntary action, like the beating of our heart. The muscular system is made-up of three main muscle types: 1. smooth muscle, which lines certain organs like the intestinal tract, the uterus and blood vessels, 2. skeletal muscle, which is attached by tendons to our bones, 3. cardiac muscle, from which our heart is made of. All three kinds of muscle are made-up of fibers, which are basically muscle cells bundle firmly together. These fibers contract and expand by means of signals sent by the nervous system, which ultimately cause force and motion. This process produces almost all the movements in the human body. Most of the muscular system consists of skeletal muscle. They make up about 30 to 40% of the body's weight and create most of its motion. All skeletal muscles are connected to the somatic nervous system, which gives us voluntary control over our movements. This muscle group also consists of two types of muscle fibers to enhance our motions even further. Slow twitch fibers, which support endurance activities, Fast twitch fibers, which support quick, powerful movements. While skeletal muscle is managed by the somatic nervous system. The body's cardiac and smooth muscles are controlled by the autonomic nervous system. the autonomic nervous system acts largely unconsciously and regulates involuntary bodily functions such as heart rate, breathing, contraction of the uterus during childbirth, as well as contractions of the esophagus in digestion functions of the muscular system. The muscular system is responsible for movement, voluntary and involuntary. It is also responsible for some other important functions in the body such as posture, joint stability, circulation of fluids, organ protection, to name just a few. Muscle also plays an important role in maintaining adequate body temperature, which is produced through muscle metabolism. Almost 85% of the heat produced in the body is the result of muscle contraction. Most common health problems associated with the muscular system is myositis, which refers to any condition causing inflammation in muscles. Myositis can be caused by infections, injury, and or drug side effects. The most common symptoms include swelling, pain and weakness. When large muscle groups are affected by the weakness, other symptoms may appear. They can include a rash, fatigue, difficulty swallowing, thickening of the skin on the hands, and difficulty breathing. If someone is suspected of suffering from myositis, their doctor might conduct a series of tests, which may include blood tests and MRI scan, a muscle biopsy, and an EMG which involves the insertion of needle electrodes into the muscle. Treating myositis varies depending on the cause. so a patient who is suffering from this condition due to alcohol and drug abuse will not have the same treatment as a patient whose condition was caused by an injury. It is well documented the inflammatory conditions causing myositis may require treatment that suppress the immune system. A common treatment method is using a drug called Prednisone. Prednisone is an anti-inflammatory or immunosuppressant medication. The muscular system interacts with the skeletal system, the nervous system and the circulatory system furthermore. The muscle tissue found in the esophagus and the diaphragm highlights the important role the muscular system plays in digestive and respiratory functions. Remember that although most of the muscular system is not visible to us, it plays a key role in many body processes and systems.