

4. What is the Difference Between TENS (Transcutaneous Electrical Nerve Stimulation) and EMS (Electrical Muscle Stimulation)?

There is one simple difference between TENS (Transcutaneous Electrical Nerve Stimulation) and EMS (Electrical Muscle Stimulation).

When using a TENS unit, you are trying to reduce your pain.

When using an EMS unit, you are trying to strengthen a muscle. If your muscle is no longer working at all, you may also use an EMS unit to try and retrain the muscle to start working.

An example where you might use a TENS unit would be if you have chronic pain and knots (trigger points) in your upper back, shoulders, and traps and are taking daily pain medication to help control the pain. Using a TENS unit, you may be able to decrease pain AND decrease or eliminate your medication use.

The following is an example where you might use an EMS unit. AN EMS unit is commonly used after knee surgery on the quadriceps muscle. The quadriceps muscle is a set of four muscles that are designed to help straighten the knee. Sometimes after knee surgery, your brain will tell your quadriceps muscles to go into protection mode by not working or not working well. Your brain believes they are protecting the knee by stopping those muscles from contracting (working).

If this continues for a while, it is as though the quadriceps muscles have forgotten how to do their job. The EMS can help retrain the muscles and help them perform the job they are designed to do. The EMS is not designed to bulk up the muscle but rather retrain the muscles and get them to activate.