

What is NMES?

Electric muscle stimulation, known as **Neuromuscular Electrical Stimulation (NMES)**, is a machine that conducts electrical currents directly to specific muscles in order to inhibit pain, increase muscle tone, strength, and range of motion.

How the Machinery Works

The NMES machine works by conducting electrical currents from the machine to the muscle at a safe, current and rate. Procedure:

1. First, self-adhesive electrodes are placed on the desired muscles.
2. Next the dial on the machine is slowly adjusted until the patient can feel the current passing through the skin and into the muscle. The higher the setting on the dial, the faster the muscle will contract and relax. It is recommended that the setting be as high as the patient can tolerate without it being painful, or causing severe involuntary muscle contractions.
3. Once the setting is correct, the treatment continues for a varied amount of time depending on the size of the muscle the NMES is trying to stimulate.

How Muscles Work Using NMES

With NMES, instead of your brain sending a signal to your muscles through the spinal cord, the NMES machine electrically stimulates the nerves attached to the muscle at the motor point. Once the nerves are stimulated, they cause the muscle to expand and contract, much in the same way as conventional exercise. It can stimulate damaged or injured muscle tissue which may not be affected by traditional rehabilitation and therapy. It can stimulate tissue that may be otherwise unreachable.

Reasons to Use Electrical Muscle Stimulation

NMES is great for those who have been recently injured, or those who have an older recurring chronic injury or condition. It helps:

- relieve swelling and pain
- relax muscle spasms
- relieve muscle aches and joint pain
- increase blood circulation to the muscle
- improve muscle flexibility and range of motion
- prevent muscle atrophy in patients unable to use parts of their body – like a sprained or broken ankle.

At BODYWORKS CHIROPRACTIC we use NMES therapy regularly, although not routinely. Most all our patients have some amount of pain, stiffness, or muscle instability that can clearly benefit from this type of treatment. If you have any questions or concerns regarding Electric Muscle Stimulation Therapy, please let us know.