



# TENS for Back Pain

TENS, or transcutaneous electrical nerve stimulation, is a back pain treatment that uses low voltage electric current to relieve pain.

TENS is typically done with a TENS unit, a small battery-operated device. The device can be hooked to a belt and is connected to two electrodes. The electrodes carry an electric current from the TENS machine to the skin.

## How TENS Might Help Back Pain

There is little research to support how -- or even if -- TENS really works. Its use dates back to the 1960s with the introduction of the gate control theory of pain. According to the theory, stimulating nerves closes a "gate" mechanism in the spinal cord, and that can help eliminate the sensation of pain. During a TENS treatment for back pain, electrodes are placed on the skin over an area of pain in the back. This creates electrical impulses that travel along nerve fibers and create a tingling sensation. The pain relief usually starts immediately and stops shortly after treatment.

Another theory is that stimulating the nerves may help the body produce natural painkillers called endorphins.

Research, though, has for the most part failed to support the use of TENS alone for back pain. In one review of four studies comparing TENS to placebo, conflicting evidence made it difficult to determine whether TENS is beneficial in reducing back pain intensity.

## Using TENS

TENS, when properly used, is generally safe. If you think you would like to try TENS for back pain, speak to your doctor. The technique works differently for different people, and it's not for everyone. Your doctor may advise against using TENS if you have a pacemaker or you are in the first weeks of a pregnancy.

Before starting TENS, have your doctor or physical therapist show you how to use the TENS machine. Be sure to follow directions carefully and take these precautions:

- Use TENS only for the reason your doctor orders it. Let your doctor know if your condition changes.
- Do not leave electrodes in place for long periods of time without checking and cleaning the skin beneath them.
- If a rash or burn develops beneath the electrodes and lasts more than six hours, stop TENS. Also call your doctor or physical therapist.

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- Do not place electrodes on broken or irritated skin.
- Do not drive while using a TENS unit.
- Do not use the device in the shower or bathtub.
- Do not use a TENS unit with heating pads or cold packs.
- Do not use TENS while sleeping.

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Sources 

SOURCES:

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