

## References

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The National Women's Health website has accurate and up to date information which you may find helpful.

[www.nwhealthinfo.co.nz](http://www.nwhealthinfo.co.nz)

You can find this leaflet in the [A-Z fact sheets](#) section

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# TENS - Transcutaneous Electrical Nerve Stimulation

Tena koutou katoa | Kia orana | Talofa  
lava | Malo e lelei Fakaalofa lahi atu |  
Taloha Ni | Ni Sa Bula Vinaka  
欢迎 | こんにちは | ابحرم  
Greetings and Welcome to

National Women's Health  
Auckland District Health Board

### **Patient Information**

A TENS machine is a small, portable, battery operated device that can fit in your pocket. It is attached to your skin over the painful area via sticky pads and wires. The TENS machine is controlled by the user.

A TENS machine transmits a low electrical current that can help lessen pain signals from reaching the brain. This is done by blocking a nerve pathway from transmitting signals from the peripheral nerves up the spinal cord. It is thought that pain signals can be altered by the tiny electrical impulses, and as a result the brain will receive fewer signals of pain from the source of the pain.

It can be used with or instead of pain relief medication.

In our experience, at National Women's Hospital, we have found TENS machines to be very helpful for patients experiencing pain related to endometriosis, menstrual pain, as well as for obstetric patients with nerve related back pain.

You can purchase a TENS machine online, however, we recommend consulting with your doctor or physiotherapist first as there are contraindications for some users e.g. those with a pacemaker, pregnant women, or those with a history of epilepsy. If you are pregnant caution needs to be taken with electrode placement. If you are on the ward you can ask advice from a physiotherapist or a pain nurse specialist.

There are several different brands of TENS machines you can purchase – it is important to read the safety information that is provided with the machine. See here for more information <http://www.mobilitycentre.co.nz>.

### **Application of TENS**

- The area of skin where you want to place the sticky pads should be clean and free from any skin oils.
- Make sure the skin where you want to place the sticky pads is healthy with no cuts or other broken skin as this could be very painful.
- Place the electrodes on muscly areas rather than bony ones – muscly areas conduct easier and will be more comfortable for you. NEVER place electrodes over a pregnant abdomen.
- Place the pads at least 3cm apart from each other.
- Start the TENS with a continuous pulse setting. For long term use, change the TENS setting on the modulated (m) setting to decrease your body's likelihood of getting used to the electrical signals.
- Use the middle pulse frequency and duration, then slowly turn it up until you can feel the impulses but you are still comfortable. Trial and error is needed to establish the best settings for you.
- Caution must be taken when turning up and down as the intensity can change suddenly.

- The sticky pads are disposable and need to be replaced from time to time. Once they no longer stick to your skin, they need to be replaced.
- There are no set rules for how long to use your TENS machine for, but generally it becomes less effective the longer you use it. Aim for one to two hours a day – it is okay to increase this on more painful days.



TENS therapy is not for everyone but it can be a relatively inexpensive, well tolerated treatment option with few side effects. It is important to note that TENS is not a treatment cure but rather helps with symptom control.

The sticky pads can cause skin irritation – this can be reduced by not always placing the pads on the same areas of skin.

Do not get the TENS machine or the wires wet.