TENS stands for Transcutaneous Electrical Nerve Stimulation. TENS units are small electrical units that run on 9 volt batteries and produce harmless, low grade, electrical current which blocks pain. This is an effective, drug free alternative for pain management. Pain is a warning system, letting us know when something is wrong. However, once we have diagnosed the pain, the pain is no longer useful. Therefore, you will feel better and function better if we can decrease or get rid of this pain.

Precautions:

- TENS should not be used if you have a pacemaker, metal in your body, or if you are pregnant.
- TENS should not be used until the cause of the pain is diagnosed by your doctor.
- Do not use TENS anywhere on the head or face (unless instructed by your therapist for TMJ), front of the neck, internally, or on genitals.

Components of your TENS unit:

- There are two channels, allowing for the option of two or four electrodes. The LEAD WIRES insert into Channel 1 and Channel 2 and each wire connects to two electrodes. The intensity of each pair of ELECTRODES can be adjusted independently, and it is not necessary to have both channels running (you can use just one wire with two electrodes).
- Several packages of reusable self adhesive electrodes. To increase the life of your electrodes, it is a good idea to make sure your skin is clean and dry before applying the electrodes to your skin. You should place them on the plastic backing and put in the refrigerator between uses. When you run out of electrodes, you will need to call Kaiser DME department at 559-448-3604 to purchase more.
- A TIMER, under the plastic cover, preset to 30 or 60 minutes. You can also turn the timer off for continuous stimulation.
- Two knobs under the plastic cover that allow you to set the WIDTH and the RATE. It is important that these two settings be set opposite each other for comfort (High rate/low width, or low rate/high width). The Rate is usually between 2-200 Hz, and the Width is normally between 40-300 microseconds.
- The INTENSITY knobs are on the top of the unit and these control the strength of each individual channel.
- Lastly, there is an option of 3 different MODES. These modes are labeled as Conventional (C), Burst (B) and Modulation (M).
- A 9 VOLT BATTERY powers the unit. If the unit is not working, try replacing the battery.
How to Use your TENS unit:

1. Turn the intensity knobs at the top of the machine to zero.
2. Place the electrodes on or around the area of pain.
3. Choose which mode you are going to use:
   - **Conventional** – The most commonly used, it sends a steady rate and width. There are two types of settings for this mode – low frequency and high frequency. Most people tend to use high frequency.

   **Conventional High Frequency** works by creating a “gate” between your nerves and your brain. It blocks the pain from reaching your brain, so you don’t feel it. This setting tends to be most effective for nerve, muscle, joint or dull aching pain. You will feel a “buzz” sensation. The TENS must be worn continuously in this mode in order to get pain relief.

   Mode = C or _________
   Rate = 70-100 or _________
   Width = 70-100 or _________

   **Conventional Low Frequency** works by releasing your own natural endorphins, providing morphine like effect to help manage pain. This setting tends to be most effective for swelling, muscle spasm or sharp intense pain. You will feel a “massage” sensation, with some muscle contraction. At this setting you should wear the unit for 30-60 minutes, and the pain free effect could last from minutes to hours afterward.

   Mode = C or _________
   Rate = 2 or _________
   Width = 200 or _________

   **Burst and Modulation**
   These modes were designed to prevent you from getting used to the TENS. The treatment duration should be 30-60 min.

   **Burst**
   Mode = B or _________
   Rate = 70-100 or _________
   Width = 100-125 or _________

   **Modulation**
   Mode = M or _________
   Rate = 100 or _________
   Width = 100-150 or _________

4. Turn it on! Very slowly increase the intensity from zero up to where you feel the current, but it is not uncomfortable. Eventually, your body will get used to the current and you will no longer feel it as strongly. To get the maximum benefit from TENS you must occasionally ramp up the intensity so you feel the effect.