

FAST FACTS: Biofeedback

Biofeedback is a technique that assists a person to learn to improve their health by controlling body functions, such as heart rate, blood pressure, and breathing rate, which are normally involuntarily controlled by the nervous system. Individuals may not recognize that when they have pain or stress, they may also experience body changes that include increased heart and breathing rates, sweating, muscles tightening, and more. Researchers are not sure exactly how biofeedback works, but it seems to assist individuals to become aware of what is going on in their body and to have more control of their actions. By recognizing and monitoring these body changes through biofeedback, it is possible to learn to control them which can have a positive impact on the pain condition.

✓ Key Points

- Biofeedback training can be provided in a clinic, medical center, or hospital from a biofeedback therapist.
- During a biofeedback session, electrodes (small sticky pads attached to the skin) or finger sensors are used. These electrodes or sensors send signals to a monitor, which displays a sound or image that represents different body functions.
- The monitor tracks a variety of body functions such as:
 - Breathing and/or heart rate
 - Blood pressure
 - Skin temperature
 - Amount of sweating
 - Muscle activity
- Information gathered during biofeedback is shared with the person to teach them to change or control their body's reactions by changing their thoughts, emotions, or behavior, which may affect their pain.
- The biofeedback therapist will assist the person to use relaxation techniques to focus on changes in their body. Relaxation techniques may include:
 - Deep breathing- pattern of slow deep breaths
 - Guided Imagery- concentrating on specific images to focus the mind to relax.
 - Meditation- focusing thoughts and releasing negative emotions.
 - Progressive muscle relaxation- tightening and then relaxing different muscle groups.
- Typical biofeedback sessions last less than 1 hour.
- Many individuals see results in 8-10 biofeedback sessions.
- Eventually through biofeedback training, users will learn to control their body functions without the use of biofeedback equipment.



✓ Uses

Biofeedback may help with several pain-related conditions such as:

- Chronic pain
- Lower back pain
- Fibromyalgia

- Headaches
- Migraines
- Rheumatoid arthritis, etc.
- Temporomandibular joint disorder (TMJ)

✓ **What Else You Should Do**

- Write down and share information about your loved one's pain prior to and following their treatment to share with their primary healthcare team.
- Use a [Pain Diary](#) regularly to note important information useful to your loved one's healthcare providers.

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References:

WebMD (2022) Overview of Biofeedback. <https://www.webmd.com/pain-management/biofeedback-therapy-uses-benefits>.

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