

**WATERMAN & ASSOCIATES**  
**PSYCHOLOGICAL & COUNSELLING SERVICES**  
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**HOW BIOFEEDBACK CAN HELP YOU**

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Biofeedback is a self-regulation treatment in which information about your body is detected by sensors and shown on a computer screen. You are then taught how to change and improve the body's functioning using the feedback given. (For more information about biofeedback, see the article "What is Biofeedback" at <http://waterman-associates.com/articles.htm> written by Dr. Bellerose). Here are some examples of how biofeedback has helped people. Note that all identifying data has been changed to protect confidentiality.

Marvin came for help with panic disorder which had developed when he learned that his spouse was having an affair. This caused a great deal of anguish, long discussions and he had developed intense anxiety. Biofeedback showed he was breathing extremely rapidly and shallowly (about twenty-five breaths a minute, instead of 8-12). It was clear that he was hyperventilating. He was taught breathing retraining and learned how to slow his breathing to between six and twelve breaths a minute and produce a very peaceful and healthy breathing pattern. Within five sessions he no longer needed treatment as he felt back in control of his life.

Dennis is a 30 year old man who clenched his teeth during sleep for the last 3 years. His daily pain was sometimes so severe he had to miss work. His treatment consisted of three sessions of biofeedback and 2 sessions of hypnosis. With biofeedback, he improved his breathing pattern and learned the most relaxed position for his jaw. Hypnosis was also used because the clenching occurred while he slept when there was less voluntary control. Dennis went from pain on 5 out of 7 days a week to no pain at the end of the fifth session. Two years later, Dennis returned for a brief session on family issues. He confirmed that he had been pain free ever since the treatment.

Trina had TMJD pain for 26 years, and had undergone multiple treatments (jaw surgery, medical and dental care, physical therapy, trigger point work, etc.). Because of the longer history of clenching and clenching both during the day and night, more sessions were needed than with Dennis. She initially had daily pain of moderate to severe intensity. After 11 sessions, she no longer has jaw pain. As well, she is now able to short-circuit most of her migraines.

Susan came with a fifty year history of migraine headaches. Many people in her family had migraines including her mother, sisters, aunts and grandmother. Her migraines had started in childhood and she was convinced that there was no effective treatment that could help her. Interestingly her mother had ceased having migraines after biofeedback treatment. Like most migraine sufferers, biofeedback showed she had excessive muscle tension and very cold feet. (Migraine sufferers typically have cold hands and/or feet or temperature that fluctuates too much). Susan was seen for 19 sessions of biofeedback and cognitive-behavioral treatment. Susan went from 4-5 debilitating migraines a week to mild headaches which she could control. "When I feel a headache coming on I do my relaxation and it stops" she said.

Arthur, a young man in her twenties, had been on disability for 6 months because of repetitive strain to his forearms from work activities. He was unable to open jars, use a computer, vacuum, drive or write. He had received multiple treatments including medical care, physical therapy, acupuncture, and massage. Naturally, he was quite anxious and depressed about his situation. After some breathing work, training began to decrease the muscle tension in his forearms. He was able to decrease the tension from extremely high to normal levels. Further training focused on bringing this relaxation into his activities, especially driving and typing. He made steady and excellent improvement over ten sessions and then returned to work, at first part-time and then full-time. A year later, he returned for some sessions on career issues. When asked about the repetitive strain and forearm pain, he reported no limitations, no pain and that he never thought about it any more.

June came seeking help because of tachycardia which means a rapid heart beat. Her heart beat was typically above 100 and even when sleeping was very high. Medication was only partly effective. This problem had started after she had had an accident. June wanted to reduce her fear of the tachycardia and to have some ability to lower her heart rate. Because of the damage we did not know if biofeedback would work but agreed to give it a try. We began with breathing retraining work and heart coherence work that involves slowing the breathing and synchronizing the breathing with the heart rate. Happily she was able to do this and her heart rate dropped into the 80's. Heart coherence work is also very useful with people who have panic attacks and who fear they may be having a heart attack.

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