## **BIOFEEDBACK**

Biofeedback is one of the most effective treatments for both tension and migraine headaches. Meditation, yoga and other mental exercises are beneficial, but biofeedback is a more direct approach aimed at eliminating headaches. Well-trained staff and patient compliance with home exercises are essential for achieving a high success rate. Follow-up studies indicate up to 80-90% improvement 5 years after completion of a biofeedback training course. A typical course of treatment consists of 45-minute sessions every week for 4 to 6 weeks. Children can learn to rid themselves of headaches in as few as three to four sessions.

Biofeedback is a form of computer-assisted relaxation training. We use very sensitive measuring instruments that detect and display information about body-states that are normally outside of conscious awareness. By amplifying this information, we help the user learn to gain control over physiological changes that can affect headache and general well-being.

Eventually, as internal awareness is increased, the biofeedback student learns to sense and control physiological changes without the biofeedback instruments. Once biofeedback skills are learned, they are not easily forgotten. Follow-up studies indicate that gains are maintained for years if the patient practices even minimally.

At the New York Headache Center, we use 2 types of biofeedback. Electromyograph (EMG) biofeedback measures electrical activity of the muscles (tension), a function of the voluntary nervous system. Temperature feedback measures skin temperature of the hands, a measure of peripheral blood flow, with blood to this area increasing or decreasing as the level of fight or flight arousal increases or decreases - a function of the autonomic nervous system.

Biofeedback is an extremely useful preventive strategy that leads to less dependency on medications and other more expensive forms of health care.

Many people like to combine biofeedback sessions with cognitive-behavioral therapy. Together, these approaches provide an excellent accelerated course in relaxation training for mind and body.