

Introduction to Wellness Training

Disclaimer: This is not a substitute for medical advice from a health professional.

Thank you for your interest in this non-invasive wellness program.

We hope the information contained in this document will further your understanding of what to expect from The Autonomic Balance Training System.

It consists of a group of lifestyle interventions that utilize electronic instruments to measure, process and "feed back" to individuals information about their neuromuscular and autonomic activity. Thus, this system can be like a mirror for individuals to help them become aware of their psychophysiological processes. A person is given immediate information about their own autonomic functions, such as: muscle tension, skin surface temperature/blood flow, galvanic skin response, adrenaline surges, and heart rate. An individual who can better manage breathing can easily learn to calm the mind and body to relax at any time and place.

1. Electromyographic (EMG) Training:

Muscle tension and relaxation can be measured and fed back by EMG training. Sensors placed on the skin over a muscle will detect the activity of the muscle. The user can use this information and other wellness techniques to better manage muscle abnormalities.

The purpose of electromyographic training is to increase the user's ability to discriminate between different levels of muscle tension and use this technique to relax muscles. High levels of muscle tension may be related to undesirable emotional and physical symptoms.

EMG training is extensively used in neuromuscular re-education programs and other wellness strategies to help individuals live well with: stroke, temporomandibular joint disorder, trigeminal neuralgia, bruxism, tension headaches, chronic pain and other syndromes.

2. Thermal Training for Better Management of Blood Flow:

The Sympathetic Nervous System (SNS) controls the smooth muscles in the blood vessel walls and therefore the diameter of the blood vessels. Stress increases activity of the Sympathetic Nervous System whose basic function is to mobilize the body to perceived emergencies. SNS triggers adrenaline surges, which supplement and prolong many sympathetic responses that result in the fight-or-flight reaction. This causes the vascular smooth muscle to produce vasoconstriction. As a result, constriction of the peripheral blood vessels or arterioles the blood is forced back to the heart which increases heart rate. The blood is also sent to the head causing the face to feel hot and the hands get cold.

When the person relaxes, the Parasympathetic Nervous System (PNS) takes over which causes vasodilation. The SNS activity decreases, the muscle relaxes and blood vessels dilate. Blood flows freely to the peripheral blood vessels and the hands feel warm again, while heart rate decreases. As a result, the body returns to Homeostasis.

The purpose of Temperature Training is to help the user better manage stress and other environmental triggers that impact blood flow. Low levels of temperature may be related to undesirable emotional and physical symptoms. Thermal Training has been shown to help individuals live well with conditions, such as chronic pain, Raynaud's disease and migraine headaches.

3. Galvanic Skin Response (GSR) Training or Skin Conductance (SC):

During this training, arousal changes due to SNS changes, are measured by the galvanic skin response. It measures changes in sweat gland activity on the surface of the skin, usually the hand.

The GSR sensor is placed on the surface of the skin, usually wrapped around the finger. Relaxed hands are dry and therefore there is no moisture to measure conductivity. Lower conductivity means higher resistance. In this case the GSR measurements are low.

The reverse is also true: stress, or high sympathetic activity stimulates sweat gland secretion and the hands get wet. Since moisture is a good conductor there is an increase in conductivity and consequently a decrease in resistance. This means high GSR measurements. GSR has been shown to help individuals live well with gastrointestinal problems, adrenaline surges and anxiety related to other conditions.

Goal of The Autonomic Balance Training System:

The goal of the Autonomic Balance Training System is to help individuals understand inappropriate responses and better manage their physiological processes in order to live well with Autonomic Disorders or other conditions impacted by stress and other environmental stimulants. It is totally computerized and can provide wellness feedback for muscle activity, galvanic skin responses, vascular changes and heart rate. I believe that by changing the external factors that can be changed and then managing inappropriate responses to those that remain, we are doing most of what can be done to maintain balance and wellness with the Autonomic Nervous System.

Weight Wellness:

Weight Wellness is included within this program. The user is supported in his/her journey, educated on the importance of maintaining a healthy lifestyle and is provided motivation for a healthy weight. This program aims to be an effective support system in terms of providing proper nutrition, motivation, changing lifestyle and eating habits permanently. An individual may be able to develop will power and self-control that become second nature to his/her personality to help with weight wellness.

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