

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



Disclaimer: This program is intended for at home general wellness use. We encourage you to consult your physician for an opinion as to whether all of the information given in this program is appropriate for you. This is not a substitute for medical advice from a health professional.

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Table of Contents:

1. Introduction.....	Page 1
2. The Autonomic Nervous System.....	Page 2
3. Overview of the Program.....	Page 4
4. Self-Evaluation.....	Page 6
5. Wellness Survey.....	Page 8
6. Daily Recommendations for Living Well.....	Page 12
7. Weekly Symptom Survey.....	Page 13
8. Setup	
a) Steps to Download the ABTS Software Application.....	Page 14
b) ABTS Device Leads and Setup.....	Page 15
9. Chest Breathing.....	Page 17
10. Respiration Training Log.....	Page 18
11. Goal of Heart Rate Variability.....	Page 19
12. HRV Training Log.....	Page 20
13. Relaxation Audio Training.....	Page 21
14. Introduction to Wellness Training.....	Page 24
15. EMG Training Log.....	Page 27
16. Temperature Training Log.....	Page 28
17. GSR Training Log.....	Page 29
18. Exercise Recommendations That May Help with Dizziness/Lightheadedness.....	Page 30
19. Wellness Improvements.....	Page 31
20. Wellness Goals.....	Page 32
21. Nutrition	
a) Supplements.....	Page 33
b) Superfoods.....	Page 35
c) Protein Smoothie.....	Page 36
d) Benefits of Drinking Water.....	Page 37
e) GABA.....	Page 38
f) Serotonin Food Sources.....	Page 39
22. Sleep Recommendations.....	Page 40
23. Exercise Recommendations.....	Page 41
24. Instructions for Sitting Standing.....	Page 42
25. Home Training Plan.....	Page 43
26. Weekly Home Program Log.....	Page 44
27. “Today Is a New Day”.....	Page 45
28. ABTS Schedule.....	Page 46
29. Phases	
a) Phase I.....	Page 47
b) Phase II.....	Page 55
c) Phase III.....	Page 56
d) Phase IV.....	Page 61
e) Phase V.....	Page 62
f) Post Phase V.....	Page 63
30. Wellness Survey.....	Page 64
31. Calendar.....	Page 68
32. Troubleshooting the Software and the Device.....	Page 69



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Dr. Kyprianou is a Senior Fellow of Biofeedback Certification International Alliance. Since 1994, Dr. Kyprianou has dedicated her career to helping patients with dysregulation of the autonomic nervous system, having extensive experience helping POTS, Tachycardia and Dysautonomia patients from all over the world.

Memberships:

Association for Applied Psychophysiology & Biofeedback (AAPB), Biofeedback Society of Texas (BST)

Biofeedback Certification International Alliance (BCIA)

American Autonomic Society (AAS)

The Autonomic Nervous System

SYMPATHETIC (Fight or Flight) vs PARASYMPATHETIC (Rest and Digest)

The heart, blood vessels, lungs, stomach and intestines (viscera) are controlled by the **autonomic nervous system (ANS)**. The ANS is part of the peripheral nervous system and it controls many organs and muscles within the body. Primarily, it functions in an involuntary manner. For example, we are not aware when blood vessels change size or when our heart beats faster. However, one can utilize various lifestyle interventions to better manage some functions of the ANS such as heart rate or blood flow.

The ANS consists of two divisions:

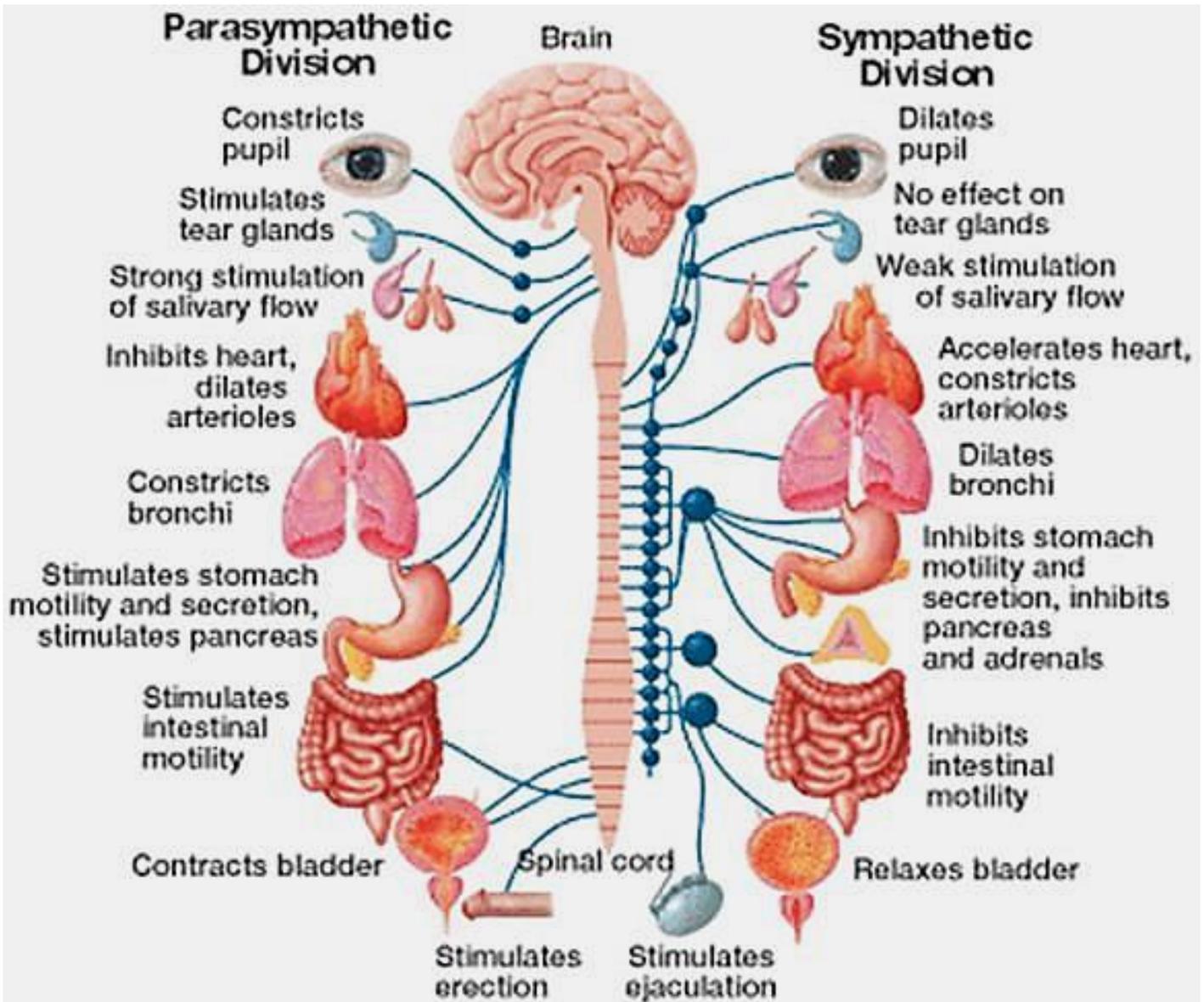
1. Sympathetic Nervous System- activated during emergencies that cause stress and require us to **“fight” or take “flight”** (run away)
2. Parasympathetic Nervous System- in non-emergencies that allow us to **“rest” and “digest”**

It is a nice, sunny day...you are taking a nice walk in the park. Suddenly, an angry bear appears in your path. Do you stay and fight OR do you turn and run away? These are "Fight or Flight" responses. In these types of situations, your sympathetic nervous system is called into action - it uses energy - your blood flow is affected, your heart beats faster, and digestion slows down.

Organ	Parasympathetic Function (REST AND DIGEST)	Sympathetic Function (FIGHT OR FLIGHT)
Eye	Contracts pupil	Dilates pupil
Heart	Decreases rate and force of contraction	Increases rate and force of contraction
Lungs	Constricts bronchioles	Dilates bronchioles
GI Sphincters	Relaxes	Contracts
Digestive tract	Stimulates motility and secretion	Inhibits peristalsis
Kidney	Increases urine secretion	Decreases urine secretion
Oral/Nasal Mucosa	Mucus production increased	Mucus production reduced
Sex Organs	Erection	Ejaculation
Adrenal medulla		Norepinephrine and epinephrine secreted



Autonomic Nervous System



OVERVIEW OF THE PROGRAM

AUTONOMIC NERVOUS SYSTEM TRAINING

The autonomic nervous system (ANS) is the part of the nervous system that controls the body's visceral functions, including action of the heart, movement of the gastrointestinal tract and secretion by different glands, among many other vital activities. Many research studies have examined the ANS utilizing the analysis of heart rate variability, or heart rhythms, which serves as a dynamic window into autonomic function and balance.

RESPIRATION RATE

Respiration rate is the rate at which we breathe. It is typically measured in breaths per minute (BPM). Most people breathe at a rate between 12 to 25 breaths per minute. However, when our bodies are at their most relaxed, the average breath rate is around 6 breaths per minute. Respiration rate is impacted by stress and can be positively affected by understanding and implementing health and wellness techniques including Biofeedback - Respiration Belt and Heart Rate Variability. Respiration Belt training gives information about the speed of your breath as well as your ability to use your diaphragm correctly when breathing.

HEART RATE VARIABILITY

During this procedure respiration rate is introduced to correct breathing patterns and establish an ideal number of breaths per minute.

Heart rate variability (HRV) is a measurement of naturally occurring, beat-to-beat changes in heart rate. Systems-oriented models propose that HRV is an important indicator of both physiological resiliency and behavioral flexibility, reflecting the individual's capacity to adapt effectively to stress whether its due to a medical condition or environmental demands. Heart rate variability is a powerful, objective and noninvasive tool to explore the dynamic interactions between an individual's processes.

BIOFEEDBACK

Applied biofeedback consists of a group of lifestyle interventions and techniques that utilize electronic instruments to measure, process and "feed back" to individuals information about their psychophysiological activity. Thus, biofeedback can be like a mirror for individuals to help them become aware of their psychophysiological processes, such as muscle tension, skin surface temperature, blood flow, galvanic skin response and heart rate. Combined with relaxation techniques and step by step instructions, an individual can understand the ANS and accomplish greater balance.

OTHER HEALTH & WELLNESS SKILLS

In addition to those described, the Other Health and Wellness Procedures are **not** considered mental health intervention services. These relaxation and breathing trainings seek to modify the cognitive and social factors identified as important to or directly affecting the individual's health and well-being. The focus is to

improve health and well-being via psychophysiological procedures, which has been shown to help individuals live well with specific disease related problems.

An example of this may include, but not limited to, sessions focusing on educational factors impacting awareness and knowledge about the autonomic nervous system and the use of relaxation and guided imagery techniques that directly impact blood flow and heart rate. Health and behavioral approaches for initiation of an appropriate lifestyle and exercise regimen are also included.

Additional Health and Wellness Skills

- Nutrition
- Coping Skills
- Lifestyle Management
- Relaxation Training
- Sleep Recommendations
- Exercise Protocol

HEALTH AND WELLNESS PROCEDURES HAVE BEEN SHOWN TO HELP INDIVIDUALS LIVE WELL WITH THE FOLLOWING CONDITIONS:

- Headaches: Cluster, Migraine or Tension
- P.O.T.S. (Postural Orthostatic Tachycardia Syndrome) / Dysautonomia
- Anxiety—Depression
- Infertility, stress related
- Cervicalgia (Neck Pain)
- Acute Stress Reaction
- Low Back Pain
- Agoraphobia
- Essential Hypertension (High Blood Pressure)
- Myofascial Pain/TMJ
- Raynaud's Disease
- Irritable Bowel Syndrome
- Asthma/Respiratory Distress
- Arthritis
- Insomnia
- Attention Deficit Disorder (ADD)
- Trigeminal Neuralgia

SELF EVALUATION

What is your **CHIEF COMPLAINT?**

What particular experiences seem to aggravate your physical symptoms?

What one symptom bothers you the most?

Measurable qualities of this symptom:

Frequency:

Duration:

Severity on a scale of 0 to 10:

What makes it better?

What makes it worse?

Are you concerned about difficulties in any of the following areas? What part does your symptom play?

Waking activities (work, activities at home, social, etc.):

Appetite:

What is your greatest fear?

On a scale of 0 to 10, how tense do you think you are, generally?
(0 = no tension, 10 = maximum tension you can imagine)

What do you do to relax?

Any prior formal relaxation training? Biofeedback?

Do you exercise regularly?



Wellness Survey

**Disclaimer: This survey is not intended for diagnostic purposes and is not a substitute for a medical diagnosis.*

Please carefully read each item on the list. Indicate how you experience these symptoms on your worst day.

Light/noise sensitivity

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Tachycardia (fast heart rate)

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Bradycardia (slow heart rate)

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Tension headaches

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Migraine headaches

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Fatigue

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Dizziness

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable



Exercise intolerance

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Chest pain

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Gastrointestinal issues

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Diarrhea

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Constipation

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Shortness of breath

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Insomnia

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Blurry vision

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Joint/muscle pain

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Tingling in the legs

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Sweating

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Muscle weakness

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Nausea

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Menstrual irregularities (female patients only)

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Fainting

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Thermoregulatory issues

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Low mood

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Brain fog

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Frequent urination

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Anxiety

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Cognitive impairment

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Tremors

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Seizures/convulsions

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Adrenaline rush/feelings of heat

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Daily Dietary Recommendations for Living Well

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

1. Fluids: 64oz of water/day.

2. Nutrition:

a. Increase Protein

b. 3 small, balanced healthy meals/day (protein, carbs, and fat). For a more individualized nutrition plan it is recommended that you customize this dietary plan with a Nutritionist.

c. 2 to 3 small, healthy snacks with protein/day

d. EVERY 2-3 HOURS RULE - Every 2-3 hours you need to rehydrate and have some type of nutrition, whether that's a snack or a meal.

i. By following “The Every 2-3 Hour Rule” you may be able to maintain an even blood sugar level. Keeping these levels even throughout the day may prevent the highs and lows that trigger symptoms. This is a preventive approach that helps to maintain wellness.

THE AUTONOMIC BALANCE
— TRAINING SYSTEM —



WEEKLY SYMPTOM SURVEY

Symptom Scale: 0-1 no symptoms * 2-3 mild * 4-5 moderate * 6-7 distressing * 8-9 intense * 10 unbearable/unable to function. Date From: _____ Date To: _____

Symptom	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Sitting BP							
Pulse							
Standing BP							
Pulse							
Tachycardia							
Fatigue							
Dizziness/Lightheadedness							
Brain Fog							
Tension Headache							
Migraine							
Nausea							
Anxiety/ Adrenaline							
Chest Tightness							
Gastrointestinal Issues							
Tremors							
Non-Epileptic Seizures							
Blurry Vision/ Light Sensitivity							
Insomnia							
Pain							
Fainting							
Joint Problems							
Thermoregulation							

Steps to Download The ABTS Software Application

- 1) Click the link under DOWNLOAD, where it says ABTS to begin the download.
- 2) Once it downloads in the left bottom corner, click on it and choose: OPEN WHEN DONE
- 3) Choose SET UP (choose the SET UP that says APPLICATION to the right)
- 4) Click NEXT on the Install Wizard
- 5) Click INSTALL
- 6) After Installation is completed, go to your Home Screen and click on "THE AUTONOMIC BALANCE TRAINING SYSTEM" ICON
- 7) To start, click APPLICATIONS (note you will need the device plugged into your USB port to start)

Steps to Select Training Applications

- Click on the ABTS Icon, then choose APPLICATIONS
- For Respiration Rate and Heart Rate Variability choose: ABTS HRV and RESP belt.
- For EMG, Temp, GSR Training choose: ABTS – EMG TEMP GSR.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —

ABTS Device Leads and Set Up

The following are the 6 leads (wires) that come with the ABTS Unit.

- 1 belt for Respiration Rate and HRV
- 1 black lead for EMG
- 1 white lead for EMG
- 1 green lead
- 1 black lead for temperature (rectangular portal)
- 1 red lead for GSR

When you run the software, a diagram will appear to the right of the screen that demonstrates where each lead should be inserted into the ABTS device. Also, the ABTS device has marked slots for each wire to be inserted.

Respiration Training: The **respiration belt** is placed above the navel and adjusted to fit snugly. You should have enough gap to place one finger between the belt and your body.

HRV Training: The **respiration belt** is placed above the navel and adjusted to fit snugly. You should have enough gap to place one finger between the belt and your body. You will also need to use the **black lead** for ECG (Heart Rate), the **white lead** for ECG and the **green lead** for “ground”. Clean the skin area where the electrodes will be placed with an alcohol prep pad. Snap on the disposable electrodes to the leads before placing on the body. The **black lead** is placed on the **right** side of the chest, below the collar bone. The **white lead** is placed on the **left** side of the chest, below the collar bone. The **green lead** is placed around the knuckle of the thumb with the Velcro strap. **For patients with a pacemaker:** instead of on the chest, place the **black lead** on the inside of the right wrist and the **white lead** on the inside of the left wrist. **Make sure you do not move your arms during training.**

EMG Training: The **black and white leads** are for EMG (muscle tension). Clean the skin area where the electrodes will be placed with an alcohol prep pad. You will snap the leads on the disposable electrodes and place the **white lead on the left side** and the **black lead on the right side** of the back of the neck on the trapezius muscles (shoulders) or on the forehead (directly above the arch of each eyebrow, with the wires going back over the head if using the forehead placement). Wrap or intertwine the black and white leads as this can help strengthen the signal to the device.

The **green lead** is the "ground" lead. This should be used with the small velcro strap. The end of the green lead should fasten to the velcro strap like a button. This strap should be fastened around the knuckle of the thumb. Be sure to wear the green lead as ground whenever you train

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



on EMG (muscle tension). A second option for the green lead is to attach with the disposable electrodes to the spine at the back of the neck (must be on a boney area).

Temperature Training: The black **temperature lead** should be taped to the index finger with medical waterproof tape (which can be purchased at any drugstore). You should only need about one inch of tape.

GSR/SC Training: The **red lead** and **green lead** are for GSR/SC training (sweating activity). These should be used with one of the small Velcro straps. The end of the red and green leads should fasten to the velcro strap like a button. The strap of the red lead should be fastened around the finger tip of the middle finger with the metal sensor opposite the fingernail. Be sure the metal sensor is not on a boney area. The green lead should be fastened around the finger tip of the ring finger with the metal sensor opposite the fingernail. Be sure the metal sensor is not on a boney area.

Where to Purchase Electrodes

Electrodes are available for purchase online. Any pre-gelled, snap on electrode will work with the device. Some inexpensive options available on Amazon and Ebay are listed below.

Amazon: Item name “3M Red Dot Foam Monitoring Electrode, 4.4cm Diam., 50/bag, 3M9640”



Ebay: Search for “BioProtech disposable ECG electrode”



Chest Breathing

It is estimated that more than 90% of people suffering from chronic medical conditions engage in upper chest breathing. This behavior can cause three major health issues that promote chronic problems and lead to low oxygen levels.

Chest breathing decreases oxygen

The lower lobes of the lungs consist of most of the blood vessels and therefore they are more efficient in oxygen transport. They are approximately 7 times more effective than the upper lobes of the lungs. During chest or thoracic breathing there is a lot less oxygen being transported and therefore less oxygenation of the blood.

Chest breathing leads to hyper ventilation and low oxygen levels in cells

Chest breathers generally have a higher respiration rate, which means a lot more breaths per minute. Slowing down the breathing pattern will lead to increased amount of oxygen delivered to cells. Normal breathing is diaphragmatic allowing complete inflation of the lungs with fresh air supply higher in oxygen concentration and best blood oxygenation. In contrast, chest breathing results in reduced blood oxygenation which promotes chronic illness.

Chest breathing leads to increased toxins in the lymphatic system

It is clear that chest breathing interferes with the cleansing of the lymphatic system. Most of our lymph nodes where toxins collect are located under the diaphragm. So, with diaphragmatic breathing, every time we exhale while we push down the diaphragm we remove waste products (toxins) from our vital organs. Unlike the heart that has a pump to move blood, the lymphatic system does not and depends on the diaphragm to create the pressure needed each time it pushes down.

Therefore, chest breathing can cause stagnation of the lymphatic system and accumulation of toxins in vital organs.

Respiration Training Log

Date:	Pre-Training Respiration Rate (BPM)	Post-Training Respiration Rate (BPM)
Monday:		
Tuesday:		
Wednesday:		
Thursday:		
Friday:		
Saturday:		

Goal Of Heart Rate Variability (HRV)

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

The goal of HRV is to use lifestyle interventions to better align the brain and heart. By engaging in wellness exercises designed to slow down our breath and decrease Respiration Rate, we can better manage the heart rate (HR)

Three Concepts of HRV

1. **Harmony** is achieved through wellness training that the different organs of the body can function together to result in healthy functions.
2. **Synchronization/Coherence** of individual heart beats to match with the breath and with each other. Perfect smoothness and order in the HR graph will result in high level of synchronization.
3. **Greater HRV** by increasing the HR by 10 beats per minute or more we can have taller heart waves in the HR graph. This is like lifting weights for the heart muscle, thereby conditioning the heart while in a reclined position. This prepares an individual for a more active lifestyle in terms of exercising with gym equipment.

HRV Training Log

Date:	Pre-Training Heart Rate	Post-Training Heart Rate
Monday:		
Tuesday:		
Wednesday:		
Thursday:		
Friday:		
Saturday:		

Relaxation Audio Training

NOTE: Listen to the audio at least ONCE A DAY.

The goal of the program is to help modify inappropriate responses to stress and other lifestyle factors and better manage physiological processes in order to achieve wellness and balance.

Instructions for use of the guided relaxation training:

- Find a quiet place
- Lay down
- Close your eyes
- Focus on Diaphragmatic breathing
- Follow instructions on the guided relaxation training
- Upon completion of the guided relaxation training, change to a sitting position for 2 minutes

Introduction to Diaphragmatic Breathing

Place your right hand on your stomach and your left hand on your chest. With each deep breath, your left hand (stomach/diaphragm) should rise, while keeping your right hand still. Inhale and exhale through your nose. Breathe in deep breaths and expand your stomach- hold it for a moment. Breathe out slowly as you count backwards from six to one. Focus on your breath the entire time you practice your Diaphragmatic Breathing.

Stressor Management Guided Relaxation Audio Training:

The Pain Control Relaxation Audio can help individuals suffering from tension headaches, neck pain and low back pain live well by targeting the stressors known to cause pain and relax the nervous system, through deep relaxation, imagery, and positive reinforcement. This may stimulate the release of endorphins, the natural pain killers that block the pathway of pain to the brain.

Through repetition and daily practice, you may feel healthier and see your brain work for you instead of against you.

Can Help With Individuals Live Better With:

- Tension Headaches
- Low Back Pain Syndrome
- Cervicalgia (Neck Pain) Generalized
- TMJ
- Spasmodic Torticollis
- Respiratory distress
- Arthritis

Stress Relief Guided Relaxation Audio Training:

The stress relief audio can help you learn to better manage the effect of stress on your body. By changing the external factors that can be changed and then engaging in wellness training regarding appropriate responses to those that remain.

Can Help With Individuals Live Better With:

- Depression
- Anxiety Attacks
- Migraine Headaches
- High Blood Pressure
- Insomnia
- Fibromyalgia
- Raynaud's Disease

Weight Wellness Guided Relaxation Audio Training

By listening to the Weight Wellness Relaxation Audio, the individual can be able to develop will power and self-control that become second nature to his/her personality to help lose the weight and keep it off. The stress management aspect of this program enhances weight loss by inhibiting those stress chemicals that can also be responsible for the weight gain.

Can Help With:

- Motivation
- Changing Lifestyle
- Changing Eating Habits
- Developing Will Power
- Developing Self Control

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

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.

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

EMG Training Log

Date:	Pre-Training – mv	Post-Training - mv
Monday:		
Tuesday:		
Wednesday:		
Thursday:		
Friday:		
Saturday:		

Temperature Training Log

Date:	Pre-Training °F	Post-Training °F
Monday:		
Tuesday:		
Wednesday:		
Thursday:		
Friday:		
Saturday:		

GSR Training Log

Date:	Pre-Training	Post-Training
Monday:		
Tuesday:		
Wednesday:		
Thursday:		
Friday:		
Saturday:		

Exercise Recommendations That May Help with Dizziness/Lightheadedness

Disclaimer: Please consult your physician before attempting the following exercises. This is not a substitute for medical advice from a health professional.

These exercises should be performed for two weeks, 2 times per day (morning before getting out of bed and evening before going to sleep; 4 times on each side; Alternate Sides)

1. This exercise should be performed while in bed.
2. Start by sitting upright.
3. Then move into the side-lying position, with the head angled upward about halfway. An easy way to remember this is to imagine someone standing about 6 feet in front of you, and just keep looking at their head at all times. Stay in the side-lying position for 30 seconds, or until the dizziness subsides. If this is longer, then go back to the sitting position. Stay there for 30 seconds, then go to the opposite side and follow the same routine.

Daily Supplements: ALL SHOULD BE CAPSULES

- Before taking any of the supplements listed, please consult with your physician.
- Stop half way through a meal and take any vitamins and supplements one at a time. Wait one hour after finishing your meal and then drink plenty of fluids.
- This handout is a list of supplements that have benefitted others. It is intended for informational purposes only. These statements have not been evaluated by the FDA.

BREAKFAST:

- Multivitamin
- Curcumin with black pepper extract – 400-600 mg
- Vitamin C – 1000 mg
- Omega-3 – 10000 mg
- Calcium magnesium – 250 mg

LUNCH:

- Multivitamin
- Omega-3 – 1000 mg
- Curcumin with black pepper extract – 400-600 mg
- Vitamin C – 1000 mg

DINNER:

- Calcium Magnesium – 250 mg

Discuss with your physician first before starting any of these supplements.

Sources for Supplements

Pink Salt, and Vitamin Code:

<https://www.amazon.com/>

Bio-Gest, Ascorbic Acid (Vitamin C), and Vitamin D:

<https://www.thorne.com/>

Biofreeze:

<http://www.biofreeze.com/>

Discuss with your physician first before starting any of these supplements.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



SUPERFOODS are packed with great nutrients that support health and can be incorporated into any nutritional plan. Below are some suggestions for you to try; add them to dishes you know and love, create a new dish, or eat them on their own!

Fruit	Vegetables	Grains (gluten-free)	Meat & Seafood
Avocado	Asparagus	Amaranth	Alaskan Halibut
Blackberries	Bell Peppers	Chia	Canned Albacore Tuna
Blueberries	Bok Choy	Gluten-Free Oats	Clams
Grapefruit	Broccoli	Ground Flaxseed	Sardines
Guava	Brussel Sprouts	Millet	Sea Bass
Kiwifruit	Cabbage	Nut Flours	Skinless Chicken Breast
Kumquat	Carrots	Quinoa	Turkey
Lemons	Collards	Rice (white, brown, or wild)	Wild Salmon
Limes	Kale		
Oranges	Mustard Greens		
Persimmon	Pumpkin		
Pomegranate	Romaine Lettuce		
Purple Grapes	Spinach		
Raspberries	Squash		
Strawberries	Sweet Potato		
Tangerines	Swiss Chard		
Watermelon	Tomatoes		
	Turnip Greens		
Dairy	Seeds & Nuts	Beans & Legumes	Tea*
Yogurt	Sunflower Seeds	All Beans	Green
Greek Yogurt	Pumpkin Seeds (pepitas)	Lentils	Mint
Kefi	Almonds	Soymilk	Peppermint
	Walnuts	Soynuts	Chamomile
	Pistachios	Edamame	*de-caffeinated, if possible

Prepared by a Licensed Registered Nutritionist.

Protein Smoothie

1 Banana or Blueberries

1 Orange

2 Tablespoons freshly ground organic nut butter or any nuts

1 tablespoon organic coconut oil

2 teaspoon chia seeds or flax seeds or hemp seeds

1 teaspoon cocoa bits (optional)

1 cup Almond milk or Coconut Milk

2 Tablespoons of Great Lakes Gelatin (Green container or orange if you are Vegan)

2-3 ice cubes

Prepared by a Licensed, Registered Nutritionist.



Benefits of Drinking Water



Water suppresses the appetite naturally and helps the body metabolize stored fat. Studies have shown that a decrease in water intake will cause fat deposits to increase, while an increase in water intake can actually reduce fat deposits. Here's why: The kidneys can't function properly without enough water. When they don't work to capacity, some of their load is dumped onto the liver. One of the liver's primary functions is to metabolize stored fat into usable energy for the body. But if the liver has to do some of the kidney's work it can't operate at full throttle. As a result, it metabolizes less fat more fat remains stored in the body.

Drinking enough water is the best treatment for fluid retention. When the body gets less water, it perceives this as a threat to survival and begins to hold on to every drop. Water is stored in extracellular spaces (outside the cell). This shows up as swollen feet, legs and hands.

The best way to overcome the problem of water retention is to give your body what it needs -- plenty of water. Only then will stored water be released.

The overweight person needs more water than a thin one. Larger people have larger metabolic loads. Since we know that water is the key to fat metabolism, it follows that the overweight person needs more water.

Water helps to maintain proper muscle tone by giving muscles their natural ability to contract and by preventing dehydration. It also helps to prevent the sagging skin-- shrinking cells are buoyed by water which plumps the skin and leaves it clear, healthy and resilient.

Water helps rid the body of waste. Again, adequate water helps flush out the waste.

Water can help relieve constipation. When the body gets too little water, it siphons what it needs from internal sources. The colon is one primary source. Result? Constipation. But when a person drinks enough water, normal bowel function usually returns.

When the body gets the water it needs to function optimally, it's fluids are perfectly balanced. When this happens, you have reached the "breakthrough point."

What does this mean?

- Endocrine-gland function improves.
- Fluid retention is alleviated as stored water is lost.
- More fat is used as fuel because the liver is free to metabolize stored fat.
- Natural thirst returns.

If you stop drinking enough water, your body fluids will be thrown out of balance again, and you may experience fluid retention, unexplained weight gain and loss of thirst. To remedy the situation you'll have to go back and force another "breakthrough."

Recommended daily water intake for wellness: 64 ozs

GABA

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

Gamma- Amino Butyric Acid (GABA)- neurotransmitter that enhances brainwaves to operate in harmony and results in calmness (brain rhythm). Without GABA, the muscles would be constantly tensed, the mind would never stop racing and the overall ability to function would be severely impaired.

Helps with: Loss of brain rhythm

-Maintains balance between the mind and body functions

-Symptoms associated with low GABA:

Carbohydrate craving, trembling, twitching, tachycardia, flushing palpitations, sweating, cold clammy hands, chest pain, lump in throat, blurred vision, restlessness, butterflies in stomach, unusual allergies.

Conditions related to decreased brain rhythms:

Anxiety, hypertension, cystitis, GI disorders, tinnitus, PMS

Extreme cases of decreased GABA- seizures, tense muscles

Foods rich in glutamic acid which produces GABA

Bananas/oranges

Broccoli

Spinach

Lentils

Brown rice

Nuts-almonds

Oats/whole grains

Halibut

Herbal teas- e.g. green tea decaffeinated

Prepared by a licensed, registered Nutritionist.

Serotonin Food Sources

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

Serotonin:

- Need tryptophan and complex carbohydrates to enhance sleep
- Decreased serotonin:
 - o Depression, obesity (compulsive eating), decreased self esteem, constant worry, difficulty making decisions

Foods rich in Tryptophan that help the body produce more Serotonin:

Chicken, turkey, beef, lamb, salmon/tuna, Cornish hen

dairy/soy, nuts, beans, cottage cheese, and swiss cheese.

Foods rich in Complex CHO:

bananas, beets, brown rice, fennel, figs, pineapple,

potatoes, spinach, pasta, and whole grains.

Sleep Recommendations

1. Cal-Magnesium capsules, 250 mg at dinner/ 250 mg at breakfast
2. 5-HTP (5-Hydroxytryptophan)-50 mg-100 mg→150 mg→200 mg max if needed (only take for 12 weeks. Gradually stop on the twelfth week) *5HTP→Serotonin→ Melatonin
3. Turkey
4. Banana (Complex carbohydrate needed to absorb tryptophan)
5. Black-eyed Peas
6. Sunflower seeds
7. Sesame seeds
8. Steep a Chamomile tea bag with decaf mint in a cup of hot milk for 10-15 minutes. Add one teaspoon of honey.
9. No news or video games after 9 p.m (including all bright screens: computer/phone).
10. Lukewarm bath with Epsom salt (EPSOAK from Amazon) and eucalyptus or lavender or peppermint. Breathing exercise for 20 minutes while soaking in Epsom bath.
11. Read a relaxing book
12. Breathing/relaxation

Discuss with your physician first before starting any of these supplements. These statements have not been evaluated by the FDA.

Exercise Recommendations

Disclaimer: Always check with your physician before starting any exercise.

1. Stretch
 2. Recumbent bike: 10 minutes while doing diaphragmatic breathing — exhaling through the mouth.
 3. Rest for 5 minutes
 4. Rower: 10 minutes while doing diaphragmatic breathing — exhaling through the mouth.
 5. Another option for exercise is to start by walking 20 mins/day, increasing your steps each day (3x/Week).
-
- Increase each machine by 1 minute daily (or when you are able) until you get to 45 minutes combined.
 - A good rule is to listen to your body and not to push yourself to do more than you can

INSTRUCTIONS FOR SITTING AND STANDING

Note: This is for extreme cases of autonomic dysfunction in which standing causes vertigo.

DISCLAIMER: Please consult your physician for an opinion as to whether this exercise is safe and appropriate for you to perform. If it is determined to be safe and appropriate there must be another person in the same room, nearby for the duration of the exercise.

The more upright you are (from lying down or leaning back, to sitting upright, to standing), the more difficult it may be to use your diaphragm for diaphragmatic breathing and to maintain an upright position.

If you are lying down or reclining and you want to stand, take three deep breaths before moving to a sitting position placing your feet on the floor. Never go directly into standing from a lying down or leaning back position.

While still sitting, take three more deep breaths using your diaphragm and then stand slowly on the third exhale.

Once you are standing, do whatever works for you to remain calm. Possible techniques include using your relaxation techniques to make sure your muscles are relaxed or making your exhale longer to give your body more time to adjust to standing.

Sit down immediately if you are not feeling well

Home Training Plan

Wake up- Breakfast

1. **EMG Training (for 15 mins)** - The goal is to decrease EMG to 2.0-3.0 mv
2. **Temperature Training (for 15 mins)** - The goal is to increase skin temperature to 96-97°F
3. **GSR Training (for 15 mins)** – The goal is to decrease GSR to 2.0-3.0 MHO.

Snack + Fluids (water/electrolytes) 20 MIN BREAK.

4. **Respiration Rate Training (for 15 mins)** – The goal is to decrease respiration rate to 6 breaths per minute.

Lunch

5. **Relaxation Audio Exercise** - *Set alarm to wake you within 90 minutes in case you fall asleep. (It's okay to take a 30-60 minute nap once you finish, if needed)

Snack + Fluids (water/electrolytes) 20 MIN BREAK.

6. **HRV Training (for 15 mins):** The goal is to achieve an increase of 10 beats per minute or more in heart rate variability.

7. **Exercise Protocol (pg. 41).**

Dinner

9:00 p.m. Prepare to sleep

Breathing exercise in bed or while taking a bath

10-11:00pm Asleep. Optional Reading for Motivation: Make time during the day to read “Psychocybernetics”, new edition by Maxwell Maltz, M.D.

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

Weekly Home Program Log

Date:	Pre-EMG	Post-EMG	Pre-Temp	Post-Temp	Pre-GSR	Post-GSR	HRV	BP Sitting	BP Standing	HR Sitting	HR Standing	Relaxation Audio	Exercise In minutes	100 oz of fluid	Extra Notes
Mon															
Tues															
Wed															
Thurs															
Fri															
Sat															



TODAY IS A NEW DAY

This is the beginning of a new day.

I can waste it... or use it for good,
but what I do today is important, because
I am exchanging a day of my life for it!

When tomorrow comes,
This day will be gone forever,
leaving in its place something
that I have traded for it.

I want it to be **gain**, and not loss;

good and not evil;

success, and not failure;

in order that I shall not regret
the **price** that I have paid for it!



The ABTS Program Daily Schedule

PHASE I

DAY 1

1. Before You Start
 - a. You may print the entire “ABTS Workbook”.
2. Watch “Introduction” video.
 - a. “Introduction” handout (p. 1)
3. Overview of the Program 1
 - a. “Self-Evaluation” handout (pg. 6)
 - b. “Wellness Survey” handout (pg. 8)
4. Overview of the Program 2
 - a. “Overview of The Program” handout (pg. 4)
5. Daily Recommendations for Living Well
 - a. “Daily Recommendations for Living Well” handout (pg. 12)
6. Watch “Introduction to The Autonomic Nervous System” video and print the corresponding handouts:
 - a. “The Autonomic Nervous System” handout (pg. 2)
7. Take at least a 20 min. BREAK to rehydrate with water and a snack.
8. Download The Autonomic Balance Training Software Application (from the website).
9. How to Set Up The Autonomic Balance Training System Device for Respiration Rate Training and print the corresponding handout:
 - a. “ABTS Device Leads and Set Up” handout (pg. 15)
10. Resources Needed for Respiration Rate Training
11. Watch “Introduction to Respiration Rate Training” video and print the corresponding handout:
 - a. “Chest Breathing” handout (pg. 17)
12. Watch “Respiration Rate Training Log” video and print the corresponding handout:
 - a. “Respiration Rate Training Log” handout (pg. 18)
13. How to Set Up the Device for HRV Training, and print the corresponding handout:
 - a. “ABTS Device Leads and Set Up” handout (pg. 15)

Note: The same set up of the device and sensors to the body as Respiration Rate Training.
14. Resources Needed for HRV Training
15. Watch “Introduction to Heart Rate Variability Training” video and print the corresponding handout:
 - a. “Goal of Heart Rate Variability (HRV)” handout (pg. 19)
16. Watch “HRV Training Log” video (using the same device/electrodes/respiration belt set up you were introduced to in the “Respiration Rate Training” video) and print the corresponding handout:
 - a. “HRV Training Log” handout (pg. 20)
17. Watch “Introduction to Relaxation Audio Training” video and print the corresponding handout:
 - a. “Relaxation Audio Training” handout (pg. 21)
18. Watch “Note on Removing Sensors (Post-HRV and Respiration Training)” video.
19. Fill out the “Weekly Symptom Survey” handout, rating your symptoms. (pg. 13)
20. Set Up the Device for Respiration Rate and HRV Training
21. Take at least a 20 min. BREAK to rehydrate with water and a snack.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —

DAY 1 CON'T

22. Record your initial readings in the following handouts:
 - a. “Respiration Training Log” (pg. 18)
 - b. “HRV Training Log” (pg. 20)
23. LISTEN TO “STRESS RELIEF” RELAXATION AUDIO (while hooked up) and follow the steps.
Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
24. START RESPIRATION RATE TRAINING for 15 minutes, just focusing on the Blue Graph.
25. Once the 15 minute Respiration Rate Training is over record your ending readings in the “Respiration Training Log”. (pg. 18)
26. Record your initial HRV readings in the “HRV Training Log”. (pg. 20)
27. START HRV TRAINING for 15 minutes. Focus on the BLUE AND RED lines. Handouts needed:
 - a. Review “Goal of Heart Rate Variability” (pg. 19)
 - b. “HRV Training Log” (pg. 20)
28. Once the 15 minute HRV Training has ended, record your ending readings in the “HRV Training Log”.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 2

1. How to set up The Autonomic Balance Training System Device for EMG Training and print the corresponding handout:
 - a. “ABTS Device Leads and Set Up” handout. (pg. 15)
2. Resources Needed for EMG Training
3. Watch “Introduction to EMG Training” video and print corresponding handout:
 - a. “Introduction to Wellness Training” (pg. 24)
4. Watch “EMG Training Log” video and print the corresponding handout:
 - a. “EMG Training Log” (pg. 27)
5. How to set up The Autonomic Balance Training System Device for Temperature Training and print the corresponding handout:
 - a. “ABTS Device Leads and Set Up” handout (pg. 15)
6. Resources Needed for Temperature Training
7. Watch “Introduction to Temperature Training” video and print corresponding handout:
 - a. “Introduction to Wellness Training” (pg. 24)
8. Watch “Temperature Training Log” video and print the corresponding handout:
 - a. “Temperature Training Log” (pg. 28)
9. Watch “Note on Removing Sensors (Post-EMG/Temperature Training)” video.
10. Take at least a 20 min. BREAK to rehydrate with water and have a snack.
11. Watch “Sit to Stand Exercise” video.
12. Fill out the “Weekly Symptom Survey” handout, rating your symptoms. (pg. 13)
13. Place the sensors on your body for EMG and Temperature Training.
14. Record your initial readings in the following handouts:
 - a. “EMG Training Log” (pg. 27)
 - b. “Temperature Training Log” (pg. 28)
15. LISTEN TO “STRESSOR MANAGEMENT” RELAXATION AUDIO (while hooked up) and follow the steps. Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
16. START WITH EMG TRAINING for 15 minutes on your own. Note: You will need to go immediately into Temperature Training when EMG training ends (you do not need to record your ending EMG readings until Temperature Training ends).
 - a. “EMG Training Log” (pg. 27)
17. START TEMPERATURE TRAINING for 15 minutes on your own.
18. Once the 15 minute Temperature Training has ended, record your ending readings in the “Temperature Training Log” (pg. 28) AND also record your ending EMG readings from this ending point.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —

DAY 3

1. How to set up The Autonomic Balance Training System Device for GSR Training and print the corresponding handout:
 - a. “ABTS Device Leads and Set Up” handout (pg. 15)
2. Watch “Introduction to Galvanic Skin Response (GSR)” video and print corresponding handout:
 - a. “Introduction of Wellness Training” (pg. 24)
3. Watch “GSR Training Log” video and print the corresponding handout:
 - a. “GSR Training Log” (pg. 29)
4. Watch “Troubleshooting” video.
5. Watch “Introduction to Balance Exercises for Dizziness and Lightheadedness” video and print the corresponding handout:
 - a. “Exercise Recommendations That May Help With Dizziness/Lightheadedness” (pg. 30)
6. Watch “Exercise for Dizziness and Light Headedness” Video.
7. Take at least a 20 min. BREAK to rehydrate with water and have a snack.
8. Fill out the “Weekly Symptom Survey” handout, rating your symptoms. (pg. 13)
9. Place the sensors on your body for GSR Training.
10. Record your initial GSR readings in the following handout:
 - a. “GSR Training Log” (pg. 29)
11. LISTEN TO “WEIGHT WELLNESS” RELAXATION AUDIO (while hooked up) and follow the steps.
Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
12. START WITH GSR TRAINING for 15 minutes on your own.
13. Once the 15 minute GSR Training has ended, record your ending readings in the “GSR Training Log” (pg. 29).
14. Place the sensors on your body for EMG and Temperature Trainings (REMINDER: removing the red lead, and moving the green lead to a bony area to be used now for EMG training).
15. Record your initial EMG readings in the following handout:
 - a. “EMG Training Log” (pg. 27)
16. LISTEN TO “STRESS RELIEF” RELAXATION AUDIO (while hooked up) and follow the steps.
Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
17. START WITH EMG TRAINING for 15 minutes on your own. Note: You will need to go immediately into Temperature Training when EMG training ends (you do not need to record your ending EMG readings until Temperature Training ends).
18. START TEMPERATURE TRAINING for 15 minutes on your own.
19. Once the 15 minute Temperature Training has ended, record your ending readings in the “Temperature Training Log” AND also record your ending EMG readings from this ending point.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 4

1. Wellness Improvements. Download the following handout and fill out:
 - a. “Wellness Improvements” (pg. 31)
2. Wellness Goals. Download the following handout and fill out:
 - a. “Wellness Goals” (pg. 32)
3. Daily Journal
4. Watch “Nutrition and Sleep Optimization” video and print the corresponding handouts:
 - a. “Supplements” (pgs. 33-34)
 - b. “Superfoods” (pg. 35)
 - c. “Protein Smoothie” (pg. 36)
 - d. “Benefits of Drinking Water” (pg. 37)
 - e. “GABA” (pg. 38)
 - f. “Serotonin” (pg. 39)
 - g. “Sleep Recommendations” (pg. 40)
5. Fill out the “Weekly Symptom Survey” handout (pg. 13), rating your symptoms.
6. Take at least a 20 min. BREAK to rehydrate with water and have a snack.
7. Place the Respiration Belt and sensors on your body for Respiration Rate and HRV Training.
8. Record your initial readings in the following handouts:
 - a. “Respiration Training Log” (pg. 18)
 - b. “HRV Training Log” (pg. 20)
9. LISTEN TO “STRESSOR MANAGEMENT” RELAXATION AUDIO (while hooked up) and follow the steps. Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
10. ENGAGE IN RESPIRATION RATE TRAINING (you may watch the “Respiration Rate Training” video from Day 2, if needed), just focusing on the Blue Graph. Handout needed:
 - a. “Respiration Rate Training Log” (pg. 18)
11. Once the 15 minute Respiration Rate Training is over record your ending readings in the “Respiration Training Log”.
12. ENGAGE IN HRV TRAINING (using the same device/electrodes/respiration belt set up you were introduced to in the “Respiration Rate Training” video). You may watch the Heart Rate Variability (HRV) Training” video from Day 2, if needed. Focus on the BLUE AND RED lines. Handouts needed:
 - a. Review “Goal of Heart Rate Variability” (pg. 19)
 - b. “HRV Training Log” (pg. 20)
13. Once the 15 minute HRV Training has ended, record your ending readings in the “HRV Training Log”.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 5

1. Fill out the “Weekly Symptom Survey” handout, rating your symptoms (pg. 13).
2. Place the sensors on your body for EMG and Temperature Training.
3. Record your initial readings in the following handouts:
 - a. “EMG Training Log” (pg. 27)
 - b. “Temperature Training Log” (pg. 28)
4. LISTEN TO THE “STRESS RELIEF” AUDIO and follow through with the steps (you can watch the “Introduction to Relaxation audio Training” video, if needed). Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
5. START WITH EMG TRAINING for 15 minutes on your own. Note: You will need to go immediately into Temperature Training when EMG training ends (you do not need to record your ending EMG readings until Temperature Training ends).
6. START TEMPERATURE TRAINING for 15 minutes on your own.
7. Once the 15 minute Temperature Training has ended, record your ending readings in the “Temperature Training Log” AND also record your ending EMG readings from this ending point.
8. Place the sensors on your body for GSR Training (adding the red lead).
9. Record your initial readings in the following handouts:
 - a. “GSR Training Log” (pg. 29)
10. ENGAGE IN GSR TRAINING for 15 minutes on your own.
11. Once the 15 minute GSR Training has ended, record your ending readings in the “GSR Training Log”.
12. Read “Exercise Recommendations” (pg. 41).
13. Take at least a 20 min. BREAK to rehydrate with water and have a snack.
14. Place the sensors on your body for Respiration and HRV Training.
15. Record your initial HRV readings in the following handouts:
 - a. “HRV Training Log” (pg. 20)
16. EXERCISE for 20 minutes on your own.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 6

1. Read “Instructions for Sitting and Standing” handout (pg. 42).
2. Fill out the “Weekly Symptom Survey” handout (pg. 13), rating your symptoms.
3. Place the Respiration Belt and sensors on your body for Respiration Rate and HRV Training.
4. Record your initial readings in the following handouts:
 - a. “Respiration Training Log” (pg. 18)
 - b. “HRV Training Log” (pg. 20)
5. LISTEN TO “STRESSOR MANAGEMENT” RELAXATION AUDIO (while hooked up) and follow the steps. Note: You will be hooked up to the sensors during the Relaxation Audio Training, getting ready for the following trainings:
6. START RESPIRATION RATE TRAINING for 15 minutes, just focusing on the Blue Graph.
7. Once the 15 minute Respiration Rate Training is over record your ending readings in the “Respiration Training Log” (pg. 18).
8. Take at least a 20 min. BREAK to rehydrate with water/electrolytes and have a snack.
9. START HRV TRAINING for 15 minutes (using the same device/electrode/respiration belt set up you were introduced to in the “Respiration Rate Training” video). Focus on the BLUE AND RED lines.
Handouts needed:
 - a. Review “Goal of Heart Rate Variability” (pg. 19)
 - b. “HRV Training Log” (pg. 20)
10. Once the 15 minute HRV Training has ended, record your ending readings in the “HRV Training Log”.
11. Practice Sitting and Standing Exercise using the “Instructions for Sitting and Standing” handout on pg. 42 (if you have issues with vertigo when standing).

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 7

1. Watch the “Daily Home Training Plan” Video and print the corresponding handout:
 - a. “Home Training Plan – Phase II” (pg. 43)
2. Watch the “Weekly Home Program Log” video and print the corresponding handout:
 - a. “Weekly Home Program Log” (pg. 44)
3. Watch “In Closing” video and print the corresponding handout:
 - a. “Today Is a New Day” (pg. 45) (Frame this and read it every morning)
4. Fill out the “Weekly Symptom Survey” handout (pg. 13), rating your symptoms.
5. FOLLOW THE “HOME TRAINING PLAN and print the corresponding handouts:
 - a. “Home Training Plan” (pg. 43)
 - b. “Weekly Home Program Log” (pg. 44) From now on you will record ALL your readings here instead of using the individual EMG, GSR, Respiration, HRV, and Temperature Training logs.

THE AUTONOMIC BALANCE — TRAINING SYSTEM —

PHASE II

DAY 8 – DAY 12

1. Follow the “Home Training Plan” handout (pg. 43).
2. Record all your readings on the “Weekly Home Program Log” handout (pg. 44).
3. Each day alternate between Aerobic and Strength Training, engaging in an exercise that wasn’t done the day before, but increasing by 5% from the previous workout.

PHASE III

You will be watching the training videos from Phase I again to thoroughly master the program. Watch for anything you might have missed the first time.

DAY 13

1. Continue following the “Home Training Plan” handout (pg. 43) handout and recording all your readings on the “Weekly Home Program Log” handout (pg. 44).
2. Review Daily Recommendations for Living Well and Managing Symptoms
 - a. “Daily Recommendations for Living Well and Managing Symptoms” handout (pg. 12)
3. Throughout your day watch:
 - a. Watch “Introduction to The Autonomic Nervous System” video and review the corresponding handouts:
 - i. “The Autonomic Nervous System” handout (pg. 2)
 - ii. “Overview of The Program” handout (pg. 4)
 - b. “Introduction to Respiration Rate Training” video and print the corresponding handout:
 - i. “Chest Breathing” (pg. 17)
 - c. “Introduction to Heart Rate Variability Training” video and print the corresponding handout:
 - i. “Heart Rate Variability (HRV) (pg. 19)”

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 14

1. Continue following the “Home Training Plan” handout (pg. 43) handout and recording all your readings on the “Weekly Home Program Log” handout (pg. 44).
2. Throughout your day watch:
 - a. “Introduction to Relaxation Audio Training” video and print the corresponding handouts:
 - i. “Relaxation Audio Training” (pg. 21)
 - b. “Introduction to EMG Training” video and print corresponding handout:
 - i. “Introduction of Wellness Training” (pg. 24)
 - c. “Introduction to Temperature Training” video and print corresponding handout:
 - i. “Introduction of Wellness Training” (pg. 24)
 - d. Watch “Sit to Stand Exercise” video (if you have vertigo when standing).

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 15

1. Continue following the “Home Training Plan” handout (pg. 43) handout and recording all your readings on the “Weekly Home Program Log” handout (pg. 44).
2. Throughout your day watch:
 - a. “Introduction to Galvanic Skin Response (GSR)” video and print corresponding handout:
 - i. “Introduction of Wellness Training” (pg. 24)
 - b. Read:
 - i. “Introduction of Wellness Training” (pg. 24)
 - c. “Troubleshooting” video

THE AUTONOMIC BALANCE — TRAINING SYSTEM —

DAY 16

1. Continue following the “Home Training Plan” handout (pg. 43) handout and recording all your readings on the “Weekly Home Program Log” handout (pg. 44).
2. Throughout your day watch:
 - a. “Nutrition and Sleep Optimization” video and print the corresponding handouts:
 - i. “Supplements” (pg. 33-34)
 - ii. “Superfoods” (pg. 35)
 - iii. “Protein Smoothie” (pg. 36)
 - iv. “Benefits of Drinking Water” (pg. 37)
 - v. “GABA” (pg. 38)
 - vi. “Serotonin” (pg. 39)
 - vii. “Sleep Recommendations” (pg. 40)
 - b. “Introduction to Balance Exercises for Dizziness and Lightheadedness”
 - c. “Exercise for Dizziness and Lightheadedness” video and print the corresponding handout:
 - i. “Exercise Recommendations That May Help With Dizziness and Lightheadedness” (pg. 30)

THE AUTONOMIC BALANCE — TRAINING SYSTEM —



DAY 17

1. Continue following the “Home Training Plan” handout (pg. 43) handout and recording all your readings on the “Weekly Home Program Log” handout (pg. 44).
2. Throughout your day watch:
 - a. Review “Exercise Recommendations” (pg. 41)
 - b. “Closing Statements about Home Training” video and print the corresponding handout:
 - i. “Today Is A New Day” (pg. 45)

THE AUTONOMIC BALANCE — TRAINING SYSTEM —

PHASE IV

DAY 18 – DAY 59

1. Continue following the “Home Training Plan” handout (pg. 43) handout and recording all your readings on the “Weekly Home Program Log” handout (pg. 44).

PHASE V

DAY 60- 90

1. Alternate “Home Training Plan” (pg. 43) components:
 - a. Mondays, Wednesdays and Fridays train on:
 - i. EMG
 - ii. Temperature Training
 - iii. GSR Training
 - iv. Stress Relief Relaxation Audio
 - v. Aerobic Exercise
 - b. Tuesdays, Thursdays, and Saturdays train on:
 - i. Respiration Rate Training
 - ii. HRV Training (reclined)
 - iii. Strength Training
 - iv. Stressor Management Relaxation Audio Training
 - c. Sundays
 - i. Listen to a Relaxation Audio

POST PHASE V

1. Listen to your body and use the Home Training Plan as needed.
2. Continue listening to the Relaxation Audio Trainings each day (alternating each day between the “Stress Relief” audio and the “Stressor Management” audio).
 - a. Mondays, Wednesdays and Fridays listen to the “Stress Relief” Relaxation Audio.
 - b. Tuesdays, Thursdays, and Saturdays listen to the “Stressor Management” Relaxation Audio.
 - c. Sundays listen to any relaxation audio (“Stressor Management ” or “Stress Relief” or “Weight Wellness” Relaxation Audio)
3. Fill Out the Wellness Survey (pg. 64) you took on your first day to see any improvements in your wellness,

Wishing you the best of health and wellness!

Wellness Survey

Please carefully read each item on the list. Indicate how you experience these symptoms on your worst day.

Light/noise sensitivity

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Tachycardia (fast heart rate)

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Bradycardia (slow heart rate)

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Tension headaches

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Migraine headaches

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Fatigue

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Dizziness

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable



Exercise intolerance

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Chest pain

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Gastrointestinal issues

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Diarrhea

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Constipation

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Shortness of breath

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Insomnia

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Blurry vision

0 1 2 3 4 5 6 7 8 9 10
no symptoms mild moderate distressing intense unbearable

Joint/muscle pain

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Tingling in the legs

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Sweating

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Muscle weakness

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Nausea

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Menstrual irregularities (female patients only)

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Fainting

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Thermoregulatory issues

0	1	2	3	4	5	6	7	8	9	10
no symptoms		mild		moderate		distressing		intense		unbearable

Low mood

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Brain fog

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Frequent urination

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Anxiety

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Cognitive impairment

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Tremors

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Seizures/convulsions

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

Adrenaline rush/feelings of heat

0 1 2 3 4 5 6 7 8 9 10
 no symptoms mild moderate distressing intense unbearable

THE AUTONOMIC BALANCE
— TRAINING SYSTEM — 

MONTH _____						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Troubleshooting and Tips:

- Make sure all cellphones are turned off and away from equipment.
- Do not have any fluorescent lights on while training on the equipment.
- Clean the skin with an alcohol wipe before placing disposable electrodes
- Be sure not to sit or lay on the leads while training with the device. This may interfere with the signal, loosen the leads from the connection or damage the leads. Make sure you place the electrodes on the shoulders and back of the neck (they should not be placed on the upper back).
- Wrap or intertwine the black and white leads for EMG training. This can help strengthen the signal to the device.
- Be sure to place the white lead on the left side and the black lead on the right side.
- The green “ground” lead needs to be placed on a boney area on the knuckle of the thumb with a Velcro strap or on the spine at the back of the neck with a disposable electrode.
- Insert the leads fully into the device ports to ensure a good connection. Make sure the leads are in their appropriate, labeled ports (green lead in “green” port, red lead in “red” port, etc).
- Once you have completed all troubleshooting, exit from the application screen and go back to the home screen. Select application again to start a new session.
- When checking the signal make sure you are in a sitting or reclined position. Once you click to check the signal, lie completely still for a few moments and wait for your muscles to relax and then take the reading.

THE AUTONOMIC BALANCE
— TRAINING SYSTEM —

