

The American Institute of Stress

CONTENTMENT

A Magazine on the Relationship Between Stress, Health and Longevity

Volume 12 Number 1

Spring 2023

Passion Flower
(*Passiflora incarnata*)



**De-stressing
the stress...
naturally**




Wendy Hollender

also

Inside: **Botanical Drawing: A Path of Meditation and Self-expression**, By Wendy Hollender • **Story Talk: Therapy for the Modern Human Narrative**, By Frank Forench • **Aromatherapy: Nature's Essence for Stress Relief**, By Lisa Rabens • **The Scented Garden, A Symphony of Aromatic Floral Notes**, By Stephanie Maxine Ross • **Forest Therapy: An Effective Therapy to Enhance Health and Well-being**, By Stephanie Maxine Ross • **Nature is Not Enough: Electromedical Devices for Stress Management**, By Josh Briley



The mission of the nonprofit American Institute of Stress is to improve the health of our community and the world by setting the standard of excellence of stress management in education, research, clinical care and the workplace. Diverse and inclusive, AIS educates healthcare practitioners, scientists, and the public. AIS is the only Institute in America solely dedicated to providing information, training and techniques to prevent and reverse human disorders related to stress, and to improve the quality of life and increase longevity through building resilience to stress. Credentialed AIS members provide leadership to the world on stress related topics.

Your source for science-based stress management information

CONTENTMENT

We value opinions of our readers.

Contentment is a quarterly magazine published in Spring, Summer, Fall and Winter with news and advertising designed with the general public in mind. It appeals to all those interested in the myriad and complex interrelationships between stress and health because technical jargon is avoided and it is easy to understand. *Contentment* magazine is indexed by EBSCO and archived online at stress.org. Information in this publication is carefully compiled to ensure accuracy.

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A documentary film to revolutionize the way we think about health and the human body.

The American Institute of Stress is an executive producer of Body Electric: Electroceuticals and the Future of Medicine, a documentary film aimed to revolutionize the way we think about health and the human body. This 68 minute movie, by British producer/director/writer Justin Smith, is available online and on DVD for purchase through AIS.



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www.stress.org

IF YOU'RE LOOKING FOR ANSWERS, YOU HAVE TO ASK THE RIGHT QUESTIONS.



For so many Americans, “mysterious” problems ranging from mild to severe are caused by that scourge of modern life – stress. That realization is the first step toward healing, but it often raises many more questions that must be addressed. How is stress affecting my life? My relationships? My work? My happiness? What can I do to reduce or better cope with it? Our Stress Mastery Questionnaire – an easy and confidential online self-assessment that comes with our Stress Mastery Guide and Workbook – can help you find answers. And life-changing solutions.



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Editor's Message

Stephanie Maxine Ross, PhD, MHD, HT, CNC, FAIS
Editor



In the United States, prevalence of psychological stress proliferates unabatedly and in epidemic proportions. Recent studies have shown that stress levels among Americans are higher than the overall world average.

Although stress can be an unpleasant experience, it is a normal part of life. Our capacity to deal with life's stressors in an effective manner ultimately determines how it impacts us, both positive or negative, on every level – mind, body and spirit. For this reason, exploring the natural elements that humankind evolved with, and embracing the gifts of nature which surround us, has the potential to help restore our intrinsic peace and calm in a much-troubled world.

Keeping this in mind, we dedicate the Spring 2023 issue of Contentment magazine to the majestic healing properties of nature, and with sincere appreciation thank the following authors for their contributions.

Wendy Hollender is a botanical artist, illustrator, instructor, and author who's internationally recognized career has spanned decades. Her detailed illustrations have been published in the *New York Times*; *O, The Oprah Magazine*; *Real Simple*; *Good Housekeeping*; and *Martha Stewart Living* magazine. She is currently an instructor at the New York Botanical

Garden, and also at the National Tropical Botanical Garden in Hawaii, and in Greece.

In her article *Botanical Drawing: A Path of Meditation and Self-expression*, Wendy shares her remarkable year-long journey of healing after being diagnosed with breast cancer and how botanical drawing provided an effective stress relieving coping tool. Now 25 years later, Wendy continues to create botanical drawings and teaches thousands of students the techniques that she learned, developed, and used. To this day, she still uses the practice of botanical drawing as a means to de-stress and relax. Come join Wendy in her highly appraised

20-minute
Botanical
Drawing
Meditation and
experience the
feeling of calm
and relaxation.

**Frank
Forencich, DAIS**

has successfully integrated his background in human biology and neuroscience with martial arts and health education. He has a keen interest in human origins and the ancestral environment, and has presented at numerous venues including the Ancestral Health Symposium. A former columnist for *Paleo Magazine*, Frank is the author of numerous books about health and the human predicament including *Beware False Tigers* and *The Enemy is Never Wrong*.

Frank provides a captivating message in his article, *Story Talk, Therapy for the Modern Human Narrative*. As he notes,

***Our capacity to deal
with life's stressors in
an effective manner
ultimately determines
how it impacts us...***

story can function as a control knob for the autonomic nervous system. By turning it in one direction we can move into fight-flight activation, urgency, and vigilance; while at the same time, by turning it in the opposite direction we can experience a sense of warmth and relaxation. The primary message is that stories create the lens through which we see the world and how we interpret even the simplest events. In his words, stories of trauma, neglect, abandonment, engagement, support and curiosity drive our attention and in turn, our encounters and our relationships. In this article, we are invited to witness the natural world that surrounds us, and to embrace the story of connectiveness that we share with nature.

Lisa Rabens is the operations manager for Wyndmere Naturals, a certified women's owned company that is internationally known for its pure, high quality, therapeutically effective essential oils. Through her guidance, we are taken on an immersion course in aromatherapy, the art and science of using pure essential oils to enhance health and well-being. Here we learn how specific essential oils are used for stress relief, their unique mechanism of action, therapeutic properties, and common methods used for application. In addition, we are provided with a visual experience of the most effective, aromatic plants and their respective essential oils that have been shown through research to help relieve stress, insomnia, and anxiety.

Stephanie Ross, PhD, MHD, HT, CNC, FAIS is an internationally recognized

leader in Integrative Health. She served as the Founding Director of the Department of Complementary and Integrative Health at Drexel University. Prior to Drexel, Dr. Ross initiated the first course in phyto-medicine at Temple University School of Medicine, where she taught first year medical students. She holds a passionate love for nature that is clearly expressed in her articles, "The Scented Garden, a Symphony of Aromatic Floral Notes, and "Forest Therapy, An Effective Therapy to Enhance Health and Well-Being."

Josh Briley, PhD, BCMAS, FAIS

is a licensed clinical psychologist and the Clinical Education Director at Electromedical Products International, Inc. Dr. Briley holds a broad range of clinical expertise including drug treatment, crisis intervention, group therapy for PTSD, depression, anxiety and chronic pain treatment. In his feature article, "When Nature is not Enough: Electromedical Devices for Stress Management," he highlights the most effective, commonly used electromedical devices that can be used as a therapeutic alternative, when natural elements are not easily accessible, or as an added supplement for the stress relieving benefits of nature. The areas discussed include but are not limited to light therapy, photobiomodulation therapy, sound therapy and temperature therapy.

Best wishes!

Stephanie Ross

Spring Bulbs in my Garden

Didiers Tulip

Checker Lily

Parrot Tulip

*Botanical
Drawing:
A Path of Meditation
and Self-expression*

Tulip Bulb

Edible Bulb



Wendy Hollender

By Wendy Hollender

I have been taking my cue from plants for 25 years now. Before the advent of cameras, botanical illustrations were the only method to visually document plants, so detailed accuracy was most important. Though photographic technology has developed considerably, I think botanical illustrations are still the best way to describe the intricate details of any plant. In the past, botanical illustrators aimed to capture every detail so realistically that you could almost smell the fragrance emanating from the flowers! I found these old drawings so compelling that I wished I could achieve the same type of three-dimensional illustration with rich colors.

Even though I was a lifelong doodler with a Bachelor of Fine Arts (BFA) from the Rhode Island School of Design, and worked for 20 years as a professional textile designer, I could not draw realistically to save my life. The minute I discovered that there was a program to teach these skills at the New York Botanical Garden, my life changed instantly. I knew I had finally found what I had been searching for.

I joyfully enrolled in the Botanical Illustration Program at the New York Botanical Garden (NYBG), starting with the basic drawing classes required of everyone. Drawing skills that had eluded me my entire career started to make sense, and I was able to progress quickly.

We always worked from an actual live subject as a model, never using a

photograph or someone else's artwork. I was engaging all my senses – seeing how light and shadow interact with the form's surface, feeling the texture, smelling the aroma, tasting edible plants, and with the quiet study and drawing that started to happen, I could even hear the birds singing and appreciate the gentle sound of my pencil moving across the paper.

The repetitive motion of my hand had the power to clear my mind. Many psychotherapists have proven that engaging all our





senses helps us to relieve stress and anxiety, and to be present in the moment, so it makes sense that I had never felt so serene. This newly acquired stress relieving practice would serve as a critical coping tool for what I was about to experience in my life.

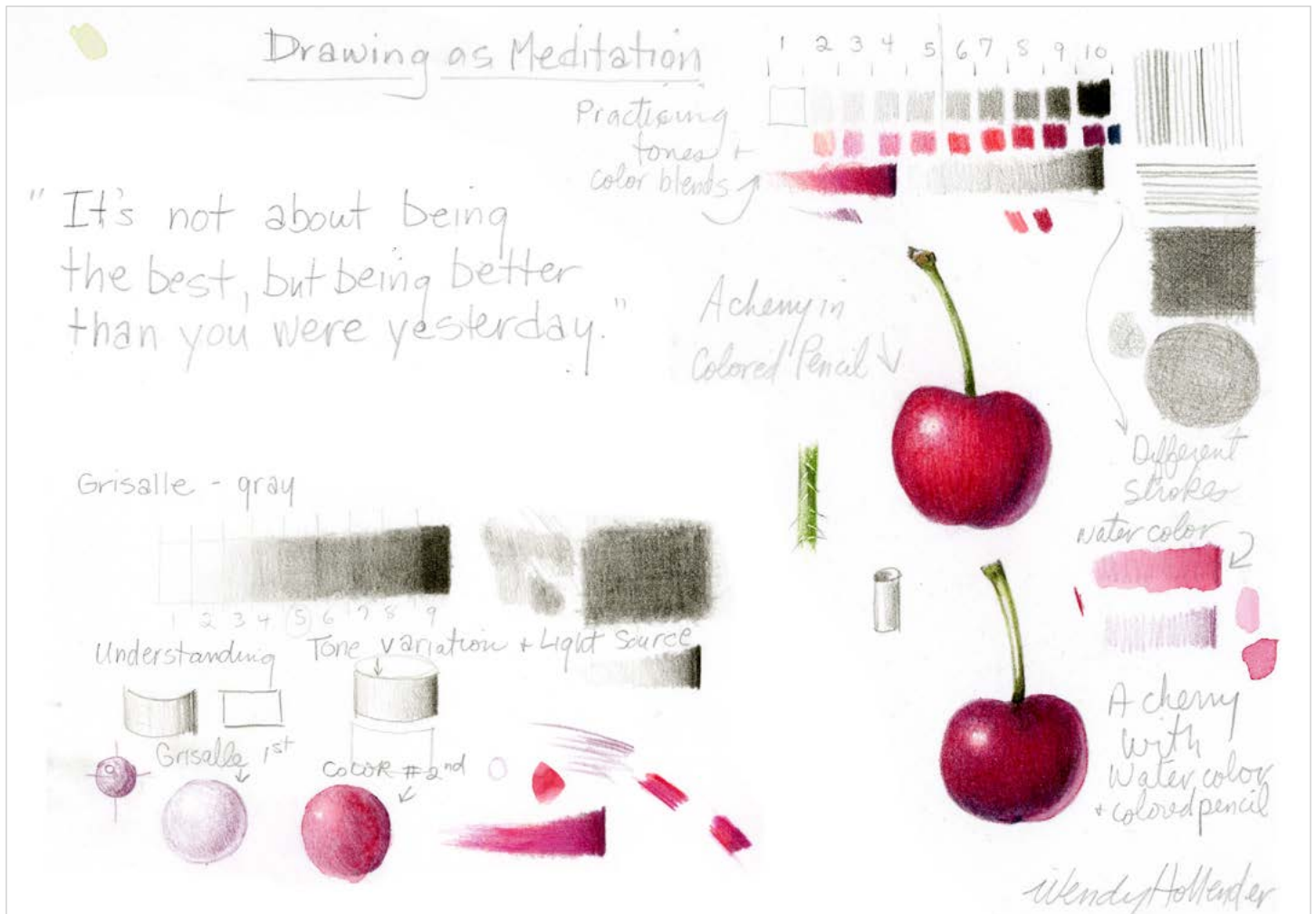
A Personal Healing Journey

Within a few of months of beginning my botanical drawing practice, I found myself in an unfortunate situation, with a diagnosis of breast cancer that started a year-long journey full of 5 surgeries, 6 months of chemotherapy, and 30 days of radiation treatment. This gave me plenty of opportunity to sit quietly and draw with my pencil, paper, and whatever fruit or flower I happened to find that day. I felt very fortunate to have botanical drawing as a new coping tool to help me in my healing journey.

When panic woke me in the middle of the night, I would draw. In hospital waiting rooms, exam rooms, and treatment rooms, I would draw. When I didn't have the energy to get out of bed, I would sit and draw. Drawing helped me focus, not just on something else, but on something that felt good. Most importantly, it kept my mental state in the positive zone, without becoming depressed, overwhelmed, or overly anxious. I think this helped me to heal much quicker.

Botanical Drawing Meditation

Now 25 years later, I am still in that positive zone, endlessly creating botanical drawings and teaching thousands of students the techniques that I have learned, developed, and used. Even though



Allow yourself the luxury of not being an expert, practice being a beginner, and have fun!

botanical drawing is now my day job, I still use the practice to help me de-stress and relax. I find that as little as 20 minutes of drawing can help focus my anxious energy and improve my mood.

After much personal practice, I introduced this 20-minute drawing meditation into some of my workshops. Students really loved it, so I taught some new workshops focusing on botanical drawing as meditation. Try to reserve 20 minutes in your day to use this practice and see how you feel.

I encourage you to try Botanical Drawing Meditation just for the pure joy and relaxation it brings without worrying about the results! Many people don't consider drawing as an option because they think that you need to be extremely talented to practice, but truthfully, you don't have to be talented. You don't even have to be good. Just focus on your joy, and you will improve your drawing skills along the way by mixing colors and other basics of combining watercolor pencils and colored pencils. Allow yourself the luxury of not being an expert, practice being a beginner, and have fun!

Benefits of Botanical Drawing

Botanical drawing provides relaxation in many ways. Here are my “top 3” reasons for why botanical drawing is such an effective tool for de-stressing. First is the repetitive act of stroking a pencil with slight friction on paper, in a slow methodical building of tonal layers with variation from light to dark that helps to facilitate concentration. Second, the use of color for blending and for building the layers of color helps to enhance focus because it is so joyful to be surrounded by color, and finally, the experience of ‘up-close-and-personal study’ of plants provides an all inspiring and uplifting experience.

Connecting with a plant one part at a time, from stem to leaf, from flower to its individual petals, and intimately exploring every detail, color, and pattern presents us with a magical glimpse inside nature's window. Only there, under close observation, and sometimes with magnification, will nature's innermost structural secrets be revealed through different repeating patterns that can amaze us over and over again.

Because nature is part of the landscape, it sometimes fades into the background, and we don't realize the miracle of life that is quietly taking place right outside our door. Every living thing is created to instinctively know how to flourish, survive and reproduce in order to ensure their continuing future. Seeing this up close is heartwarming, reassuring, and nurturing. Nature's way of creating life forms is nothing short of miraculous, and it happens quietly for us to see, if only we take the time to do so.

Basic Lessons

Drawing is relaxing, from the feeling of the friction of pencil on paper to the simple repetitive motion of the hand. It helps us to focus on the present, empty our mind of distractions, and dismiss annoying thoughts. This is why so many people doodle when talking on the phone, listening to a lecture, or waiting for their train to arrive – it channels our jittery energy.

The following Botanical Drawing Meditations illustrate the relaxation and calm experienced with this simple, yet effective practice. Enjoy!

Lesson 1: Botanical Drawing Meditation

Allow 20 minutes to try this toning relaxation technique. Toning is a term that describes light and shadows, it is a technique botanical artists use to make forms look realistically three-dimensional, as if

Snow Farm - The New England
Craft Center

Blue Wild Indigo

Can be used to make a
purple
dye



Be aware of what develops on the page as the texture and lines appear.

you could touch them and pick them up off the page. Before you begin to add these tonal variations of value onto a subject, it is best to initially practice on individual tonal squares, as follows:

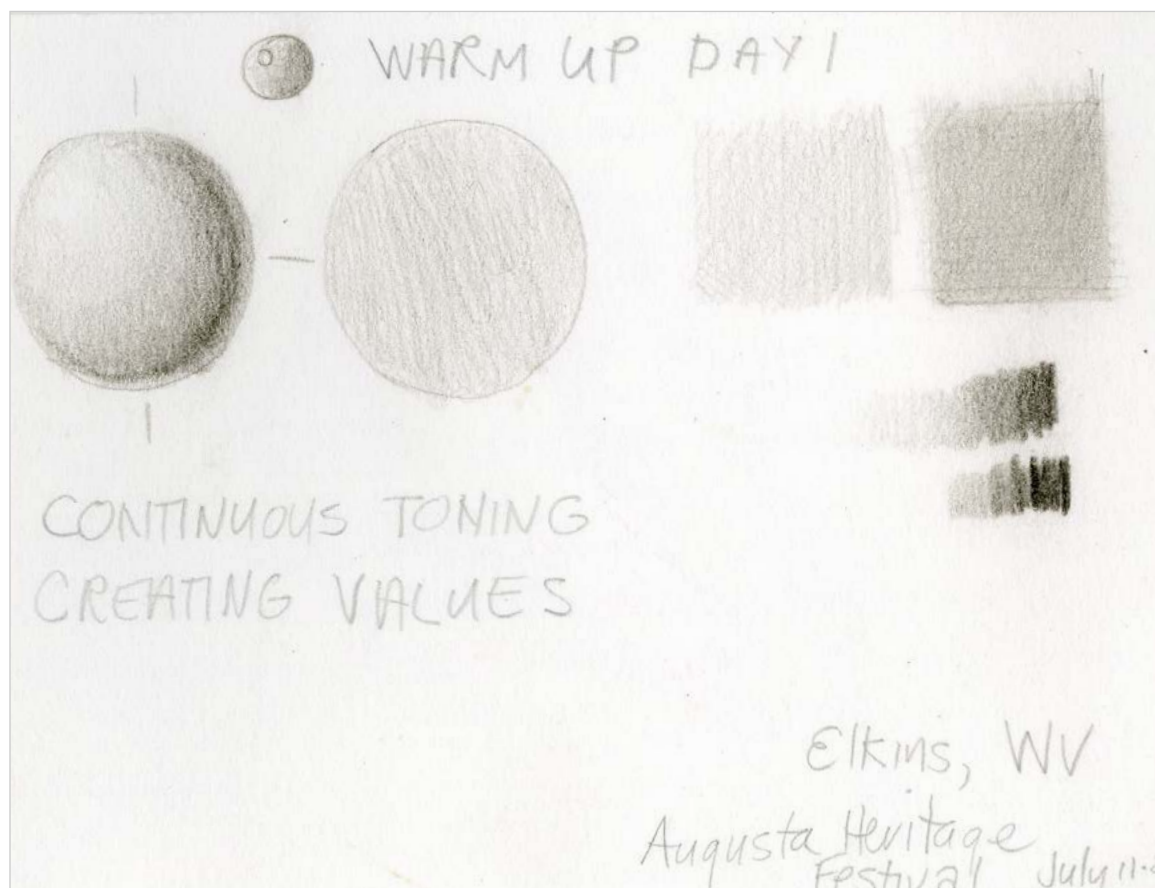
- With a soft pencil and piece of paper, sit at a table in a comfortable chair with a supportive back. Place your feet on the ground. Take a deep relaxing breath, and release any tension in your body, especially in your drawing hand and arm.
- Begin to lightly stroke the paper with the pencil, confining to a one-inch square area. Notice the feeling in your fingertips of the friction as your pencil skates across the paper. Be aware of what develops on the page as the texture and lines appear. Continue to build layers of pencil on your one inch square slowly with gentle strokes until you have reached a value that is as dark as your pencil can make. Next create another tonal value square about half as dark as your darkest square. Afterwards

practice “continuous toning” from as dark as your darkest square, graduating all the way to the lightest value of your paper in one motion, starting to build dark layers that gradually get lighter and lighter.

Lesson 2: Nature Journaling

A crucial part of botanical drawing is to try to work with a live subject. I like to do this scavenger hunt kind of drawing, that I will share with you as another 20 minute drawing meditation. This lesson focuses on the creation of a nature journal, which combines botanical drawings with words.

Let’s begin by taking a walk outside near a garden, a wooden path or some other natural environment. Now purposefully look at the ground and find one simple subject you would like to draw, perhaps a small branch, seed pod, or leaf. Bring it back inside, or sit comfortably outdoors with pencil and paper on a stiff surface, and spend 20 minutes looking closely at your subject. Lay your chosen object on



BLACK WALNUT JUGLANS NIGRA
LOWER WHITFIELD RD, ACCORD NY



your paper, and draw it life-size, right next to the real subject.

Don't worry about how the drawing looks! Just enjoy studying nature closely and trying your best to copy it.

For a more journal-style page, write down some notes such as the date, location where you found your subject, name of subject, and any other things

you discover or wonder about your subject. Include any questions you have (and perhaps find the answers later). Draw with pencil or a fine point marker. You can even add in some color with colored pencils or watercolors. Try this for 5 days.

Each day, select a different found subject and practice these lessons, soon you will have a collection of these simple

Don't worry about how the drawing looks! Just enjoy studying nature closely and trying your best to copy it.



drawing meditations that will remind you of the pleasure experienced with botanical drawing, and the intimate connection with nature.

Author Comments:

If you enjoyed these drawing sessions, you will probably be curious to continue learning the techniques of botanical drawing. I promise that these techniques will continue to be fun and relaxing, and eventually you will be amazed at your own ability to observe nature and start to create descriptive drawings. To go further with this practice, please feel free to get one of my books on Botanical Drawing Techniques, or sign up for my online subscription program to learn these techniques by watching and drawing from videos.

The basic techniques that are covered are as follows:

- Basic toning techniques to create value variation

- Understanding how to set up and use a consistent light source to create a three dimensional form
- Measuring and drawing in perspective to create accurate drawings
- Mixing realistic colors in nature
- Studying plant structure and learning some basic botany to deepen your knowledge of plants
- Nature Journaling Basics

Books by Wendy Hollender: *The Joy of Botanical*

1. *The Joy of Botanical Drawing: A Step-by-Step Guide to Drawing and Painting Flowers, Leaves, Fruit, and More*, 2020
2. *Botanical Drawing in Color: A Basic Guide to Mastering Realistic Form and Naturalistic Color*, 2010
3. *The Practice of Botanical Drawing*, 2017
4. *Botanical Drawing, A Beginner's Guide*, 2007
5. *Nature Journaling in a Nutshell*, 2023

Online Subscription Program: <https://drawbotanical.com/courses>

Prints of artwork available at: <https://drawbotanical.com/product-category/prints/>

Original art of Passion Flower available by request to: info@drawbotanical.com

Wendy Hollender is a botanical artist, illustrator, instructor, and author whose internationally recognized career has spanned decades. She is a leading expert in using colored pencils and watercolor pencils to create detailed botanical drawings and paintings. Her illustrations have been published in the *New York Times*; *O, The Oprah Magazine*; *Real Simple*; *Good Housekeeping*; and *Martha Stewart Living* magazine. She is currently an instructor at the New York Botanical Garden. In addition, Wendy leads workshops at her farm in Accord, New York, which is nestled between the Shawangunk Ridge and the Catskill Mountains, where she loves to document plants throughout the growing season, and also at the National Tropical Botanical Garden in Hawaii, and in Greece. Her work is exhibited in numerous venues and is part of the Hunt Institute for Botanical Documentation Collection. [View Wendy's Draw Botanical Portfolio.](#)



Wendy Hollender has a remarkable accomplished background that includes:

- BFA in Textile Design from the Rhode Island School of Design
- Certified by the New York Botanical Garden in Botanical Art and Illustration
- Featured in the 13th International Exhibition at Hunt Institute for Botanical Documentation
- Exhibited by Royal Botanical Gardens, Kew, the Smithsonian National Museum for Natural History and the US Botanic Garden
- Author of *The Joy of Botanical Drawing*, *Botanical Drawing in Color* and the self-published *Botanical Drawing, A Beginner's Guide*, and she is the illustrator of *Foraging and Feasting: A Field Guide and Wild Food Cookbook* by Dina Falconi.
- Member of the National Tropical Botanical Garden Florilegium of Artists



THE COST OF STRESS.

The more we learn, the more vital our mission becomes.

The American Institute of Stress is the only organization in the world solely created and dedicated to study the science of stress and the advancement of innovative and scientifically based stress management techniques. AIS provides the latest evidence-based knowledge, research and management techniques for stress and stress-related disorders.

Groundbreaking insights and approaches. World-changing mission.

Hans Selye, MD, PhD (1907-1982), is known as the father of stress research. In the 1920s, Selye coined the term “stress” in the context of explaining his pioneering research into



the signs and symptoms of disease curiously common in the majority of people who were ill, regardless of the diagnoses. Selye’s concept of stress was revolutionary then, and it has only grown in significance in the century since he

began his work. Founded in 1978 at Dr. Selye’s request, the American Institute of Stress (AIS) continues his legacy of advancing the understanding of stress and its enormous

impacts on health and well-being worldwide, both on an individual and societal level.

A forthcoming AIS initiative – called

Engage. Empower. Educate. – will leverage the latest research, tools and best practices for managing stress to make a difference in a world increasingly impacted by the effects of stress out of control. We hope you will consider supporting this critical outreach campaign.



[Click to view *The American Institute of Stress Case Statement*](#)

A campaign to Engage. Empower. Educate.

The AIS campaign will support three key initiatives:

Engage communities through public outreach



Improve the health and well-being of our communities and the world by serving as a nonprofit clearinghouse for information on all stress-related subjects.

The American Institute of Stress produces and disseminates a significant amount of evidence-based information, but there is a need to share this material with a wider audience in the U.S. and around the world.

Support for this initiative will provide funding to expand the organization's public outreach for its website and social media, documentary films, magazines, podcasts, blogs and courses.

Empower professionals through best practices



Establish credentials, best practices, and standards of excellence for stress management and fostering intellectual discovery among scientists, healthcare professionals, medical practitioners and others in related fields.

AIS provides DAIS (Diplomate, AIS) and FAIS (Fellow, AIS) credentials for qualified healthcare professionals.

The AIS seal means a practitioner has training and experience in stress management and access to the latest stress research and techniques. It designates their practices as advanced treatment centers for stress-related illnesses.

Support for this initiative will provide funding to continually update best practices in the field.

Educate all through the development and dissemination of evidence-based information



Develop and provide information, training and techniques for use in education, research, clinical care and the workplace. Some of the research-based information AIS develops and disseminates includes:

- Productions – *Mismatched: Your Brain Under Stress*, a six-part documentary featuring some of the world's leading experts on stress. Released in March 2021.
- Publications – *Contentment* magazine and *Combat Stress* magazine for service members, veterans and first responders.
- Podcasts, webinars and website resources – The free podcast series *Finding Contentment*



The American Institute of Stress

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Story Talk: *Therapy for the Modern Human Narrative*

By Frank Forencich, DAIS

It's one of the most astonishing features of the natural world: certain combinations of words and images, presented to the human brain in a coherent sequence, generate activity in the autonomic nervous system, and in turn, drive the function, health and behavior of the entire animal, for better or for worse. It's really quite astounding; a narrative arc of plot, tone, and character can sway our bodies into an activated, energized state of fight-flight, or into a healing state of rest-and-digest. In the process, stories literally change the structure of our brains, the nature of our behavior, and the trajectory of our lives.

To put it in the simplest possible terms, story can function like a control knob on the autonomic nervous system. Turn it one direction and we move into fight-flight activation, urgency, and vigilance; turn it the other and we sink deeper into the warmth, relaxation, and healing state of feed-and-breed. Watch a romantic comedy and your autonomic nervous system goes one way; watch an action-adventure thriller and it goes the other. All of which has enormous implications for our encounters with adversity and stress. If we get our stories right, we can be calmer, more effective, and more at home in the world. Get them wrong and grief and suffering won't be far behind.

Story Therapy

This story-body connection is familiar ground in the world of therapy, where

counselors routinely leverage the power of stories to shape their client's bodies and ultimately, their life experiences. Stories create the lens through which we see the world and how we interpret even the simplest events. Stories of trauma, neglect, abandonment, engagement, support and curiosity drive our attention and in turn, our encounters and our relationships.

And of course, just as we become attached to certain people, ideas, habitats, and experiences, we also become attached to particular narratives. Over and over, we return to our favorite plot lines, explanations, themes, characters, and moral lessons. Sometimes, this attachment works in our favor and gives us a sense of stability and personal power, but it can also limit what we do and what we might become. In the extreme, narrative attachment becomes dogma, a dysfunctional and destructive relationship to story. And when stories become static and rigid, stress becomes almost inevitable.

Like it or not, our lives sometimes go off the rails. Stress disturbs our harmony, and our bodies begin to seize up or break down. Desperate for relief, we seek out professionals who, we believe, will fix our lives and bring us back to some kind of centered, balanced experience. But maybe what we really need is "story therapy" – a thoughtful revision of our problematic narratives and our relationships to them. If we can relax our hold on particular stories, edit them into new forms, abandon them outright, or create new ones, we've got a path to a calmer, more functional future.

To put it in the simplest possible terms, story can function like a control knob on the autonomic nervous system.



***The smaller we come to feel ourselves
compared to the mountain, the nearer we
come to participating in its greatness.***

– Arne Ness (Deep ecologist, 1912–2009)



Just imagine yourself as a screenwriter working on a script for the narratives that drive your life. You've got a set of stories, but they just aren't lining up with the reality of your life. This calls for a revision. Try telling your stories in some new way. Change the tone, the plot, the characters or the meaning. Above all, try zooming out. Instead of focusing relentlessly on the specific details that give you stress, widen your perspective to include more expansive views of the people, behaviors and culture in question. Move your body, then meditate and allow the problematic stories to soften. Relax your body and allow your stories to become more malleable, permeable, and flexible. Breathe into the process and allow the stories themselves to relax.

Big Stories, Big Stress

Personal, local, and intergenerational stories will always be powerful drivers of our experience, and we'll do well to examine them, edit them, and discard those that no longer serve us. But it's especially important to look at the foundational stories of the human experience, especially those that are embedded in culture and society. These narratives are often invisible to us but are immensely powerful drivers of our experience and behavior in the face of ambiguity and trauma.

For example, a dominant modern narrative tells us that human beings are separate from and superior to the rest of nature. We are categorically different



from the other animals – better, special, blessed with exceptional powers and aptitudes. And while other species in the animal kingdom may be unique, we are *uniquely* unique.

On the face of it, this narrative might seem like little more than innocent, species-level boasting; primate blowhards bragging about how great they are. Everyone likes to feel special and Homo sapiens are no different, so we craft a narrative that emphasizes our exalted position in the cosmos. It makes us feel important, for a while anyway.

But this declaration of superiority is far more than innocent swagger. It's immensely consequential for our experience of stress, adversity and resilience, especially in the



face of emerging planet-scale challenges. In essence, the doctrine of human supremacy creates a cosmic, existential duality, a fracturing of human consciousness and identity, a breaking of the world.

And far from giving us comfort, the narrative ultimately leads us to feel isolated and apart from every other form of life on the planet. In the process, it creates a crushing sense of alienation and what we might call “species solipsism” or “species loneliness.” In turn, this amplifies our stress a thousand-fold. By casting ourselves as superior, unique, and independent, we remove ourselves from the supporting system that keeps us calm, whole, integrated and yes, sane.

Even worse, the story destroys our future. When humans declare superiority and independence from the biosphere, nature becomes nothing more than a resource, a commodity to be converted into profit. And when nature is nothing more than a distant subordinate and a collection of objects, we're free to do as we wish with rainforests, oceans, forests, and the atmosphere. The biosphere has no value beyond what it might do for humans: it all belongs to us.

New-Old Story

As more and more of us are coming to realize, the anthropocentric story of human supremacy isn't just catastrophic for the natural world, it's also bad for humans themselves – physically, mentally and spiritually. Life on a pedestal may be exhilarating and comforting for a time, but it also keeps us isolated from that which gives us life. Just as with individual narcissism, ego and hubris ultimately work against us.

All of which calls for a new story, or maybe a very old story – one of belonging, interdependence and community. The good news is that this story already exists

Life on a pedestal may be exhilarating and comforting for a time, but it also keeps us isolated from that which gives us life.



Our new-old story of commonality, continuity and community of life becomes especially potent when we combine it with lived experience and physical contact with the natural world.

in the cultures of native people around the world. Indigenous people have told such a story for thousands of years; a tale of animism, permeability, continuity, biocentrism, inclusion and participation. The world is alive, and we are very much part of it. And not only does it feel good, it almost certainly activates the parasympathetic branch of the autonomic nervous system; the healing circuitry of our ancient bodies.

Even better, modern science is coming around to almost identical conclusions. The grand history of science is now beginning to read like Joseph Campbell's hero's journey. Starting with the atomism of the ancient Greeks, intensifying with the mechanistic, materialistic world view of the scientific revolution, the life sciences have now come full circle to a rediscovery of our continuity with the natural world. In turn, it reveals our anthropocentric narrative as the delusional story it really is.

In some circles, ecology has been described as "the subversive science" because it undermines the dominant narrative of human supremacy and Western culture-as-usual. But the same might well be said for biology, geology, and especially, big history. All of these large-scale disciplines reveal our modern homo-centric narrative as little more than conceit, pride and hubris. The living world is biocentric, not anthropocentric.

Go Outside

But what does all this mean for those of us who're struggling with chronic stress, suffering under the daily demands of modernity and the constant effort to keep chaos at bay? Do cosmic narratives really matter when the car is broken, you're late for work, the budget is a disaster, and your personal relationships are in turmoil?

In the short term, perhaps not. Urgent daily demands require immediate action and there's no substitute for work, diligence, and practical intelligence. But at the end of the day, the meaning and sense of identity that lives in story can make or break our spirit. If your cultural narrative moves you towards a sense of inclusion and participation in something larger, it can make all the difference between suffering and thriving.

Our new-old story of commonality, continuity and community of life becomes especially potent when we combine it with lived experience and physical contact with the natural world. Going outdoors to wild spaces is an obvious first step, but it's important to get our spirit and attention aligned with our habitat. So go for a hike and find a quiet place to sit and observe. Witness the plants, animals, water and sky around you and view these features through the lens of the new-old story. The life you see around you is not "the environment" that's somehow "out there." These living things are relatives and are

literally continuous with your body. Those trees and animals aren't independent organisms. They are us.

As you sit, think big and most importantly, feel big. "I am the land; the land is me." Breathe into this narrative and make yourself permeable to the totality of the experience. Identify with the nature around you and inside you. Step down off the self-declared pedestal of human supremacy and rejoin the circle of life. Look at the river,

the forest, the panorama before you and say to yourself, "This is my body, my tissue, my flesh. This habitat is me."

This orientation may feel strange and even alien at first, but it's historically normal for human beings and it's extremely therapeutic. When you feel your natural life support systems as continuous with your body, your personal stress feels a lot less significant, and maybe even irrelevant. It's a story that gives us life.

Frank Forencich earned his BA at Stanford University in human biology and neuroscience and has over thirty years of teaching experience in martial art and health education. Frank holds black belt rankings in karate and aikido and has traveled to Africa on several occasions to study human origins and the ancestral environment. He's presented at numerous venues, including the Ancestral Health Symposium, Google, the Dr. Robert D. Conn Heart Conference, and the Institute of Design at Stanford University. A former columnist for Paleo Magazine, Frank is the author of numerous books about health and the human predicament including *Beware False Tigers* and *The Enemy is Never Wrong*. He's a Diplomate member at The American Institute of Stress and a frequent contributor to *Contentment Magazine*. Refer to www.exuberantanimal.com for more information.



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Aromatherapy: Nature's Essence for Stress Relief



By Lisa Rabens

Aromatherapy is the art and science of using pure essential oils to enhance health and well-being. Essential oils are volatile molecules extracted from organic plant material such as flowers, leaves, stems, bark, or resin and are made up of a mixture of chemical compounds. Plants produce these chemicals naturally to defend against disease, drought, or other environmental factors, attract beneficial insects, and communicate with other plants.¹ The chemical profile

of an essential oil correlates to the properties of the plant from which it is derived – essential oils are often called the “essence” of the plant.

These volatile essences are highly concentrated – over one hundred times more than dried herbs – and contain a wide range of chemical constituents including active main ingredients, secondary components, and trace compounds. The diversity found in an essential oil's profile provides a full spectrum of therapeutic properties, which is why purity and non-standardization are important in aromatherapy.



How Aromatherapy Works

The aromatic molecules that make up essential oils are absorbed by the body, usually through one of two methods.² Through the process of inhalation, the molecules enter through the nasal cavity and come into contact with olfactory nerve receptors. This causes a reaction in the limbic system of the brain, which deals

As the aromatic molecules enter the limbic system through olfactory nerve receptors or the bloodstream, they are analyzed and relayed to other parts of the central nervous system where they function to have both psychological and physiological effects.³ These beneficial effects can result in improved mood, increased relaxation, reduced pain, and stimulation of the immune system.



with memories, emotions, and instinctive behaviors. When applied topically, the molecules in essential oils are absorbed through the skin, particularly through the pores and hair follicles, and into the circulatory system via tiny capillaries. Once in the bloodstream they can circulate throughout the entire body affecting various organs and structures. Topical application may also involve a degree of inhalation, allowing the two methods to work in tandem to produce a therapeutic effect.

Aromatherapy and Stress: What's the Connection?

Stress, both acute and chronic, can manifest itself in a wide range of physiological symptoms affecting nearly every system of the body.⁴ It can elevate blood pressure, cause muscle tightness, disrupt the endocrine and immune systems, and increase inflammation. The most commonly recommended stress management solutions include strategies that are all aimed at relaxation and supporting emotional wellness.⁵

Aromatherapy is often used in conjunction with stress reduction relaxation techniques such as therapeutic massage, meditation, and reflexology. For example, certain essential oils are also known to aid meditation by helping to clear the mind and relieve tension and worry. Essential oils can help counteract the physical manifestations of stress by affecting portions of the brain that produce various neurotransmitter chemicals. Chamomile (*Anthemis nobilis*) and Lavender (*Lavandula angustifolia*) essential oils may stimulate the part of the brain that produces serotonin, which

the reasons for this upsurge is because aromatherapy is a non-invasive, easy to administer, accessible, and is safe when used properly. It is also versatile in the sense that an individual has a selection of essential oils to choose from based on their specific needs and preferences at any given time.

The aromatic essence of an essential oil is experienced in a very individual and personal manner. The most common methods for using essential oils include: massage therapy and other topical applications like roll-ons, aromatic baths, room diffusers, and direct inhalation.

In recent years there has been a significant increase in research on the use of aromatherapy to relieve stress, insomnia, and anxiety.



has a sedative effect.⁶ Other essential oils can help relieve symptoms of stress by lowering blood pressure, reducing inflammation, strengthening the immune and nervous system, or invigorating and uplifting emotions.⁷

Experiencing Essential Oils

In recent years there has been a significant increase in research on the use of aromatherapy to relieve stress, insomnia, and anxiety. One of

Massage Therapy

An aromatic massage can be an incredibly effective tool for reducing stress because it can ease muscle tension while providing emotional benefits. Essential oils like marjoram (*Origanum majorana*), lavender (*Lavandula angustifolia*), and coriander seed (*Coriandrum sativum*) work to relax stiff muscles caused by tension, relieve pain, and reduce inflammation.

These essential oils owe their relaxant properties to their high content of terpene esters and alcohols, specifically linalol and linalyl acetate.⁸ The sedative and antispasmodic properties of these oils also have a soothing and balancing effect on emotions which make them ideal for use in aromatherapy massage. Other ways to apply essential oils topically include using a roll-on, which is pre-diluted and great for using on pulse points to relieve stress and symptoms like headaches.

irritating to the skin, add only a few drops of essential oils to a warm bath, since the warmth of the water causes the skin to be more receptive to absorbing the oils.

Room Diffusers

Aromatherapy diffusers have the ability to enhance the ambience of a room by creating a relaxing and soothing environment. Using a diffuser is the easiest and most effective method to achieve the full benefits of essential oils. Through the inhalation of essential oils, you can lift your



Aromatic Bath

Soaking in a warm bath is therapeutic on many levels, relaxing the muscles while soothing the mind. Adding essential oils to a warm bath can bring an added dimension by enhancing the overall relaxing effects. Lavender is a popular essential oil to add to the bath due to its gentle nature and soothing scent. Since essential oils can be

mood, enhance sleep, and create a lovely aroma-filled living space.

Ultrasonic diffusers are a popular choice for dispersing essential oils into the air. This type of diffuser creates a cool and refreshing mist that subtly and consistently adds essential oils into the living space. Because they use ultrasonic vibrations to disperse the aromatic molecules, rather than heat, ultrasonic essential oil diffusers do not alter the

chemical composition of the essential oils. This means that their aromas and therapeutic benefits are not affected in the diffusion process, maintaining their potency and effectiveness. Using an ultrasonic essential oil diffuser is a very natural and stress-free way to add aromatherapy into your daily routine to reduce stress levels.

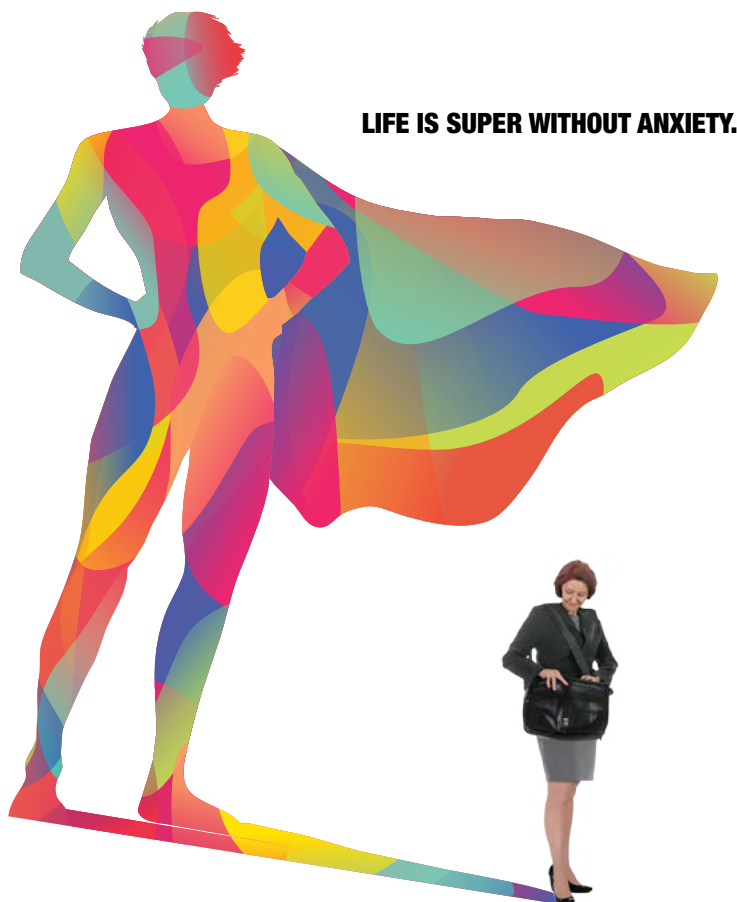
Direct Inhalation

Although you breathe in the aromatic molecules during any topical application, direct inhalation is a common method of aromatherapy that is safe, effective, and easy. In addition to using a diffuser, you can also use various methods of passive diffusion that can be as simple as applying essential oils to a tissue or cotton ball and inhaling the aroma. There are also aromatherapy inhalers which are portable and

convenient, or inhalation patches which adhere to your skin or clothing and allow you to benefit from aromatherapy hands-free.

Stress Reducing Essential Oils

Essential oils can contain over 100 components, which is why they can have a wide range of therapeutic benefits. Usually, one or two chemical components are found in a higher percentage and are thought of as the active ingredient that provides not only the aroma but also the therapeutic effects. These main constituents are supported by tens or sometimes hundreds of other types of molecules, all of which work together in synergy.⁹ Because of this synergy, an essential oil may be described as having seemingly opposite properties (e.g., uplifting and



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Although you breathe in the aromatic molecules during any topical application, direct inhalation is a common method of aromatherapy that is safe, effective, and easy.

relaxing) that combine to have an overall stress-relieving effect.¹⁰

The following list describes some of the most effective aromatic plant essential oils, along with their primary active components for alleviating stress.¹¹

- **Bergamot** (*Citrus bergamia*): Refreshing and uplifting (linalol) while balancing, relaxing, and soothing (linalyl acetate).
- **Cedarwood** (*Cedrus atlantica*): Can act as a nerve tonic and sedative, promotes meditation and clarity of thought (atlantone) and is calming (cedrol) which helps relieve anxiousness (caryophyllene).
- **Chamomile, Roman** (*Anthemis nobilis*): Powerfully soothing, balancing, reduces symptoms of shock, and promotes restful and deep sleep (esters).
- **Lavender** (*Lavandula angustifolia*): Relaxing, emotionally balancing, helps promote restful sleep (linalyl acetate), revitalizing, energizing without overly stimulating (linalol).
- **Mandarin** (*Citrus reticulata*): Soothes anxiousness, nervousness, and stress (citral, citronellal, methylanthranilate) while gently uplifting (limonene); generally regarded as safe to use with children.
- **Rose** (*Rosa damascena*): May help with mental fatigue, nervous exhaustion, and tension related to stress (farnesol, geraniol, nerol); emotionally stabilizing (citronellal).

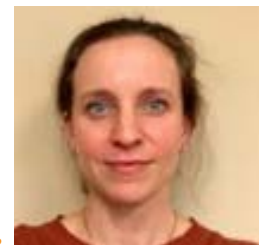
- **Sandalwood** (*Santalum album*): Promotes a sense of inner peace, relaxation, and openness; grounding, reduces tension and worry (santalol).
- **Ylang Ylang** (*Cananga odorata*): Soothes and inhibits frustration, anger, and fear (geranyl acetate), balancing, calms nervous tension (linalol), may help lower blood pressure.¹²

The daily application of aromatherapy in one's lifestyle is a viable means to help deactivate the stress response, while at the same time activating the relaxation response. Bring calm into your life by using nature's aromatic essences.

Suggested Readings

1. Schnaubelt, K. (1998). *Advanced Aromatherapy: The Science of Essential Oil Therapy*. Healing Arts Press. p.9.
2. Cooksley, V.G. (1996). *Aromatherapy: A Lifetime Guide to Healing with Essential Oils*. Prentice Hall, Inc. p. 12-16.
3. Buckle, J. (1997). *Clinical Aromatherapy in Nursing*. Arnold Publishing. Pp. 44-46.
4. American Psychological Association. (2018, November 1). *Stress Effects on the Body*. <https://www.apa.org/topics/stress/body>
5. Buckle, J. (1997). *Clinical Aromatherapy in Nursing*. Arnold Publishing. Pp. 168-169.
6. Cooksley, V. (1996). *Aromatherapy: A Lifetime Guide to Healing with Essential Oils*. Prentice Hall, Inc. P. 222.
7. Cantele, L. & Purchon, N. (2014). *The Complete Aromatherapy & Essential Oils Handbook for Everyday Wellness*. Robert Rose, Inc. Pp. 24-27.
8. Lawless, J. (2013). *The Encyclopedia of Essential Oils*. Conari Press.
9. Schnaubelt, K. (1998). *Advanced Aromatherapy: The Science of Essential Oil Therapy*. Healing Arts Press. p. 57.
10. Lawless, J. (2013). *The Encyclopedia of Essential Oils*. Conari Press. pp. 15-17.
11. Schnaubelt, K. (1998). *Advanced Aromatherapy: The Science of Essential Oil Therapy*. Healing Arts Press. pp. 58-95.
12. Cantele, L. & Purchon, N. (2014). *The Complete Aromatherapy & Essential Oils Handbook for Everyday Wellness*. Robert Rose, Inc. P. 117.

Lisa Rabens is the operations manager for Wyndmere Naturals, a certified woman-owned company that produces aromatherapy products for wholesale and retail markets. Wyndmere is a family-run company that was founded in 1995. As operations manager, Lisa is responsible for working with suppliers to source and purchase essential oils that are pure, non-adulterated, and effective. She continually strives to fulfill Wyndmere's commitment to producing high quality, therapeutically effective aromatherapy products with natural ingredients and sustainable packaging. Outside of Wyndmere she enjoys spending time with her family, reading and writing, hiking, and playing soccer.



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The
SCENTED
GARDEN:
A SYMPHONY
OF AROMATIC
FLORAL NOTES

By Stephanie Maxine Ross, PhD, MHD, HT, CNC, FAIS

Our sense of smell can provide avenues of delight and personal discovery, storing memories and impressions that arise with the first breath of an aroma. A garden infused with a symphony of aromatic floral notes can evoke deep relaxation, spiritual awareness, and a profound connection with nature.

The first scented gardens were planted more than 2500 years ago within the enclosed courtyards of Persian palaces. These gardens were constructed primarily to provide a spiritual sanctuary. Persians were taught from an early age that it was the duty of each individual to conserve and honor nature as part of the divine creation. Although these ancient aromatic gardens were often elaborate, even the smallest of garden spaces, including container gardens, can provide a tranquil retreat from everyday concerns, and a personal sanctuary for contemplation.

Creating A Scented Garden

Creating a scented garden is similar to an artist who paints a colorful landscape, but rather than stroking the canvas with brush and paint, the gardener creates a fragrant masterpiece with a trowel and a palette of aromatic plants.

The aromatic plant portraits that are presented have been selected for

their distinctive captivating aromas and respective characteristics, as well as for their botanical qualities that favor use in small informal garden spaces, the woodland landscape, and the enchanting cottage garden.

Aromatic Plant Portraits

Butterfly bush (*Buddleia davidii*)

Buddleia is commonly known as the “butterfly bush” and is one of the most fragrant of garden plants. Its aromatic scent is sweetly fragrant; cheerful, and intoxicating. As the name implies, its floral scent and nectar are a common attraction for butterflies. This highly scented deciduous evergreen shrub displays spectacular violet-purple flower spikes that bloom from September to early frost. The butterfly bush is an esteemed companion planting for the woodland landscape and cottage garden. Arranging plantings in groups accentuates the fullness of the sweet intoxicating floral scent.

A garden infused with a symphony of aromatic floral notes can evoke deep relaxation, spiritual awareness, and a profound connection with nature.



German chamomile (*Matricaria recutita*)

Chamomile enjoys a rich history of use as an aromatic herbal medicine. The name itself is derived from the Greek words *chamos* (ground) and *melos* (apple), referring to its low-growing habit and the warm apple scent of its daisy-like blossoms. Chamomiles' white composite flowers infuse the garden space with a rich, sweet scent that is both relaxing and profoundly soothing. Both the form and fragrance of chamomile make this aromatic plant a perfect addition to any natural landscape.



Gardenia (*Gardenia augusta*)

Gardenia's fragrant flowers exude a warm greeting when placed close to entryways or near outdoor living areas. It is a small, tender evergreen shrub, characterized by glossy, dark green leaves and fragrant ivory, double inflorescent flowers. Gardenia's exotic, uplifting aroma and graceful form have earned it a prominent place in conservatories and sunrooms. The intoxicating, sweet-floral scent is still occasionally used in expensive oriental perfumes.



Honeysuckle (*Lonicera periclymenum*)

One only needs to recall sipping the sweet nectar from honeysuckle blossoms on those lazy, warm summer days of youth to realize how this aromatic vine acquired its name. The sweet floral bouquet of honeysuckle is uplifting, as well as refreshing, and adds charm to any naturalistic landscape. Often growing in the wild, the pervasive and evocative aroma of honeysuckle can transform its surroundings into a garden



design, either planted in groups or as an accent planting in decorative ceramic pots.

Rose (*Rosa damascena*)

The sweet-floral aroma of rose has been used historically to help ease grief and subdue sadness, inspire creativity, and activate intuition. Of the estimated 5000 or more species of rose, *Rosa damascena* is one of the most fragrant and is used in the production of essential oils. The aroma of *Rosa damascena* helps to support and soothe the emotions. It is known to ease anxiety and panic, elevate the spirit, and reduce stress and tension. In aromatherapy, it is used to calm the nerves and helps to overcome hyperactivity and insomnia.



of floral enchantment. Honeysuckle is an exceptional woodland and cottage garden vine that trains easily over arbors, gateways, trellises, and along fences. The sweet nectar-filled flowers attract hummingbirds and butterflies.

Rosemary (*Rosmarinus officinalis*)

Rosemary has been a favorite of gardeners throughout the ages. It is a small evergreen bush with silvery-green, needle-shaped leaves. It has a refreshing, invigorating scent, which has a reviving, uplifting effect on the spirit. This fragrant evergreen is an essential component to any garden



You can enjoy the benefits of a scented garden that enhances your mood, relieves stress, and improves your well-being. Aromatic plants make excellent additions to outdoor spaces because they naturally release essential oils into the air creating a soothing, and relaxing environment.

References

- Ross SM. Aromatic plants, spirituality, and sacred traditions. *Holist Nurs Pract* 2010;24(6):355-357.
- Ross SM. Aromatic plants, spirituality, and sacred traditions II. *Holist Nurs Pract*. 2007;21(6):331-332.
- Damian P, Damian K. *Aromatherapy Scent and Psyche*. Rochester, VT: Healing Arts Press; 1995.
- Lloyd C, Bird R. *The Cottage Garden*. New York, NY: DK Publishing; 1999.
- Price S, Price L. *Aromatherapy for Health Professionals*. Philadelphia, PA: Elsevier; 2007.
- Tisserand R. *The Art of Aromatherapy*. Rochester, VT: Healing Arts Press; 1977.

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Forest Therapy:

An Effective Therapy to Enhance Health and Well-being

By Stephanie Ross PhD, MHD, HT, CNC, FAIS

In the United States, prevalence of psychological stress proliferates unabatedly and in epidemic proportions. Recent studies have shown that stress levels among Americans are higher than the overall world average. Without a doubt, Americans are stressed about the future of the nation, money, work, the political climate, violence and crime.¹ Current research suggests there is a direct connection between our increasingly stressed-out nation and the decrease in U.S. life expectancy. A 2017 report indicates that life expectancy was the lowest it had been in a decade and is linked to an increase in what researchers refer to as “deaths of despair” — opioid overdose, alcohol-related liver cirrhosis and suicide.¹

Although stress can be an unpleasant experience, it is a normal part of life. Our capacity to deal with life’s stressors in an effective manner ultimately determines how it impacts us, both positive or negative, on every level – mind, body and spirit. For this reason, exploring the natural elements that humankind evolved with, and embracing these gifts of nature which surround us, has the potential to help restore our intrinsic peace and calm in a much troubled world.

Forest Therapy

Forest therapy evolved from the Japanese practice of shinrin-yoku, or “forest bathing,” and involves conducting

forest-based treatment activities to improve one’s health in a forest environment. Shinrin-yoku originated in Japan in the 1980’s in response to a national spike in stress-related illness that was attributed to people spending excessive amounts of time working in technology and industrial settings. In response, certified trails were created to guide people in outdoor experiences. After decades of research, the practice of Shinrin-yoku continues to show its effectiveness in helping to reduce stress, improve attention, boost immunity, and uplift mood.

Defining Forest Therapy

Forest therapy differs from a guided nature walk that focuses on identifying trees or birds, but rather relies on trained forest guides, who utilize a slow pace to engage people to experience the pleasures of nature through all of their senses. The practice of forest therapy encourages people to be present in the body or in the moment, enjoying the sensation of being alive and deriving profound benefits from the connection between ourselves and the surrounding natural world.

Studies have shown that forest therapy increases immunity and improves one’s health by utilizing various elements of nature, such as fragrance and landscape.^{2,3} The primary elements of forest therapy are walking, experiencing the forest with the five senses (seeing, hearing, touching, smelling, and tasting), forest meditation, Qi-Gong, aromatherapy, herbal tea therapy,

Our capacity to deal with life’s stressors in an effective manner ultimately determines how it impacts us, both positive or negative, on every level – mind, body and spirit.



and making crafts using natural materials.⁴ Forest activities focus mainly on walking in the forest, yoga, appreciating the natural elements, breathing or walking meditation, and experiencing the aromatic scents that characterize the forest environment.

Benefits of Forest Therapy

Forest therapy involves not only the healing factor of the forest environment but also the positive experiences derived from the natural scenery and the enhanced attitudes towards nature. Research confirms that the forest environment not only brings changes to one's physiological indicators — such as heartbeat, muscle tone, blood pressure (BP), heart rate variability (HRV),⁵⁻⁷ cortisol levels,⁸ pain relief,⁹ respiratory function,¹⁰ but also improves one's

mental state. Psychologically, the forest landscape has positive effects on stress and anxiety,¹¹ depression,¹² quality of life (QOL),¹³ mood,¹⁴ emotional burnout,¹⁵ and cognitively, on concentration¹⁶ and cognitive function improvement.¹⁷

Author Summary

Forest therapy provides a natural, effective approach to reduce stress, elevate mood, and improve over-all well-being. It incorporates various natural healing elements that include sunlight, volatile essential oils, water, earth and rock, woody and green landscapes, sound, temperature and humidity.¹⁸ Spending at least 20 minutes a day in nature has been shown to enhance health and well-being. By embracing our relationship with nature, humans have an opportunity to connect

with our source and healing potential, and to live a life of purpose and fullness.

References:

1. American Psychological Association. Stress in America: The State of Our Nation. Stress in America Survey. 2017
2. Li Q. (Ed.) What is Forest Medicine? In Forest Medicine; Nova Science Publisher: New York, NY, USA, 2013; pp. 3–10.
3. Kim BJ, Jeong H, Park S, Lee S. Forest adjuvant anti-cancer therapy to enhance natural cytotoxicity in urban women with breast cancer: A preliminary prospective interventional study. *Eur. J. Integr. Med.* 2015; 7:474–478.
4. Lee I, Choi H, Bang K, Kim S, Song M, Lee B. Effects of forest therapy on depressive symptoms among adults: A systematic review. *Int. J. Environ. Res. Public Health.* 2017;14: 321–339.
5. Niedermeier M, Grafetstätter C, Hartl A, Kopp M. A randomized crossover trial on acute stress-related physiological responses to mountain hiking. *Int. J. Environ. Res. Public Health* 2017; 14:905.
6. Wu Q, Ye B, Lv X, Mao G, Wang S, Chen Z, Wang G. Adjunctive therapeutic effects of *Cinnamomum camphora* forest environment on elderly patients with hypertension. *Int. J. Gerontol.* 2020; 14:327–331.
7. Mao GX, Cao YB, Lan XG, He, et al. Therapeutic effect of forest bathing on human hypertension in the elderly. *J. Cardiol.* 2012; 60:495–502.
8. Jia BB, Yang ZX, Mao GX, Lyu YD, et al. Health effect of forest bathing trip on elderly patients with chronic obstructive pulmonary disease. *Biomed. Environ. Sci.* 2016; 29:212–218.
9. Kang B, Kim T, Kim MJ, et al. Relief of chronic posterior neck pain depending on the type of forest therapy: Comparison of the therapeutic effect of forest bathing alone versus forest bathing with exercise. *Ann. Rehabil. Med.* 2015; 9:57.
10. Janik H, Kraft K, Trabandt A. Efficacy of healing forest therapy for patients with chronic obstructive pulmonary disease (COPD). *Eur. J. Integr. Med.* 2021; 48:23.
11. Lee, JY, Lee DC. Cardiac and pulmonary benefits of forest walking versus city walking in elderly women: A randomised, controlled, open-label trial. *Eur. J. Integr. Med.* 2014; 6:5–11.
12. Bang KS, Lee IS, Kim SJ, Song MK, Park SE. The effects of urban forest-walking program on health promotion behavior, physical health, depression, and quality of life: A randomized controlled trial of office-workers. *J. Korean Acad. Nurs.* 2016; 46:140–148.
13. Brown DK, Barton J, Pretty J, Gladwell VF. Walks4Work: Assessing the role of the natural environment in a workplace physical activity intervention. *Scand. J. Work Environ. Health* 2014;40:390–399.
14. Wu, Q.; Ye, B.; Lv, X.; Mao, G.; Wang, S.; Chen, Z.; Wang, G. Adjunctive therapeutic effects of *Cinnamomum camphora* forest environment on elderly patients with hypertension. *Int. J. Gerontol.* 2020;14:327–331.
15. Mao GX, Lan XG, Cao YB, Chen ZM, et al. Effects of short-term forest bathing on human health in a broad-leaved evergreen forest in Zhejiang Province, China. *Biomed. Environ. Sci.* 2012; 25:317–324.
16. Sonntag-Öström E, Nordin M, Lundell Y, et al. Restorative effects of visits to urban and forest environments in patients with exhaustion disorder. *Urban For. Urban Green.* 2014; 13: 344–354.
17. Shin WS, Shin CS, Yeoun PS, Kim JJ. The influence of interaction with forest on cognitive function. *Scand. J. For. Res.* 2011;26:595–598.
18. Park KJ, Shin CS, Kim D. Interpretation of the forest therapy process and

Forest therapy provides a natural, effective approach to reduce stress, elevate mood, and improve over-all well-being.

Dr. Stephanie Ross is an internationally recognized leader in Integrative Health. She served as clinical professor and the founding Director of the Department of Complementary and Integrative Health at Drexel University, College of Nursing and Health Professions, a pioneering program that partnered with the Andrew Weil Center for Integrative Medicine. Prior to Drexel, she initiated the first course in phytomedicine at Temple University School of Medicine, where she taught medical students. In addition to her scholarly achievements, Dr. Ross is a skilled and dedicated Integrative Health Practitioner, who guides her patients in achieving optimal health and wellness, with emphasis on integrative stress solutions. Dr. Ross has garnered numerous awards, is listed in *Who's Who in Health Sciences*, and is a Fellow of the American Institute of Stress where she serves on the Executive Advisory Board and as Editor of *Contentment*, their peer-reviewed international publication.



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When Nature is Not Enough:

*Electromedical Devices for
Stress Management*

By Josh Briley, PhD, BCMAS, FAIS

In this issue, we are discussing the beneficial effects nature can have on stress levels. Going for a walk outside, exposing yourself to moderate amounts of sunlight, the smell of an ocean, or the sounds of a rainstorm are just some of the natural elements that have been shown to reduce both acute and chronic stress. As a part of an overall self-care plan, these natural elements can help diminish the emotional and physical risks of chronic stress levels.

But what if such interventions are not readily available? What if you live in a land-locked area and cannot easily go for a walk on the beach, or open your window and smell the ocean? What if you live in an area that is dark or cloudy for several days or weeks at a time? Or if you are already taking advantage of these natural elements and just need a little something extra to help reduce your chronic stress? Regardless of whether these apply to you, taking advantage of electromedical devices as an alternative or a supplement for the stress relieving benefits of nature can be beneficial. This article will not promote specific devices. Rather, it will discuss a few of the more common or most effective electromedical technologies that can provide similar stress relieving benefits as nature.

Light Therapy

Sunlight, in moderation, has many benefits, both for physical and mental

wellbeing. Sunlight can increase Vitamin D levels, which has both mood and physical health benefits. Cultures throughout history have known that prolonged periods of stormy weather have a negative impact on mood and stress levels compared to periods of ample sunshine. One of the many techniques this author recommends to clients who are struggling with anxiety and depression is to go outside and walk for at least 15 minutes. Clients who consistently follow this suggestion report feeling less stressed and more optimistic.

Photobiomodulation (PBM), more commonly known as “light therapy,” is the use of different wavelengths of light, including lasers, for health benefits. Research indicates PBM may have several beneficial effects on the body, including antioxidant and immune system effects that improve cardiac and circulatory functioning.¹ PBM use is increasing in fields such as dentistry, diabetes management, and dermatology. PBM is also demonstrating promising treatments for nervous system disorders such as Major Depressive Disorder, Parkinson’s, traumatic brain injury (TBI), and spinal cord repair.¹ There are PBM devices that are designed for use by healthcare practitioners, and those that are designed for home use. Do not attempt to use home-based light therapy devices to treat any disease without consulting a physician.

Perhaps the best-known type of light therapy is the use of full-spectrum sun lamps, also called light boxes. One contributing factor to Seasonal Affective

Research indicates PBM may have several beneficial effects on the body, including antioxidant and immune system effects that improve cardiac and circulatory functioning.



Disorder may be the lack of sunlight in areas with harsh climates. This decrease in available sunlight has a negative impact on emotional wellbeing. Sun lamps are believed to help offset this lack of sunlight by providing light in similar frequencies as sunlight, and therefore providing similar benefits to sunlight to both emotional and physical wellbeing.

Infrared therapy is another type of light therapy. This approach uses light in the infrared spectrum to achieve the physical and emotional benefits of PBM treatment. Research demonstrates infrared light may be the most potent stimulus for the physical benefits of PBM.² These benefits include reducing inflammation in the body. Infrared light has been shown to be an effective treatment option for wound healing, hair regrowth, pain reduction, and skin rejuvenation. Infrared therapy has also demonstrated benefits in reducing

depression, anxiety, insomnia, and other emotional effects of chronic stress.

Sound Therapy

The auricular nerves, which carry sound from our ears to our brain, activate the limbic system in our brains, which are directly associated with emotional states. Therefore, noises in our immediate environment can evoke feelings of tranquility and safety, or of stress and danger. Many people relax quickly when they hear the sounds of water, whether a babbling brook or the rolling ocean waves. Gentle rainstorms can also generate sounds that promote feelings of relaxation. Hearing natural ambient sounds such as birds singing, a gentle wind, or leaves rustling promote calmness and has natural stress reduction properties. However, other sounds in nature, such as a sudden and complete cessation of all ambient

animal noises, sharp cracks of thunder, or a loud roar or howl from a predator, instills a sense of stress and danger. In more urban areas, chaotic sounds such as those of traffic, construction, emergency vehicle sirens, and airplanes, create a sense of unrest and increase our stress responses, both physical and emotional.

Finding ways to escape the cacophony of urban noises is beneficial for both short-term and long-term stress management. While natural environments are best for this type of escape, such options may be limited for people living in large urban areas. Also, escaping to a quiet, natural area may not be possible during one's workday. However, there are ways to use devices to achieve a similar effect.

Listening to music not only evokes emotional memories, but also results in

a decrease in heart rate, warming of the skin, and an overall sense of well-being,³ which are all indications of profound reductions in stress levels. Music can also help to block out the more chaotic sound elements in the environment, further enhancing stress reduction. Massage therapists, spas, and many psychotherapists frequently use soft, pleasant music in their offices to enhance a sense of calm and reduction in the stress levels for visitors.

Electromedical devices, including the use of apps, can provide recordings or recreations of nature sounds. Recorded nature sounds have been shown to be more pleasant and reduce physiological effects of stress more than ambient urban noises or nonspecific ambient noise.⁴

The researchers suggested that one

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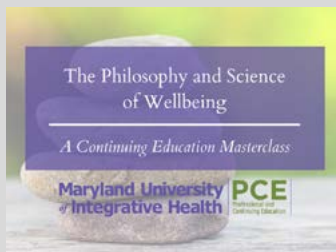
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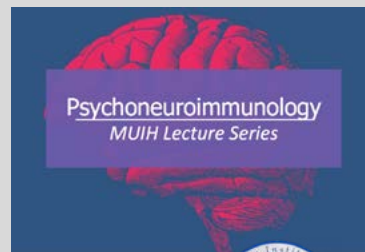
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contributing factor to a faster recovery with recorded nature sounds is the pleasant association associated with such sounds.

Ambient sound frequencies have also been shown to have a beneficial effect on stress levels. It has long been known that loud, chaotic, and intrusive noises have a negative effect on stress management, productivity, and creativity. Low frequency ambient noise, however, has a calming effect on the nervous system and therefore can reduce immediate and long-term stress levels. Noise generators provide different sound frequencies, such as “white noise,” “brown noise,” “pink noise,” or “green noise,” that can induce relaxation. These noise generators can be standalone devices, but there are also apps, such as Calm and BetterSleep, that generate these frequencies as well. Many therapists utilize ambient noise generators both to provide

a soothing soundscape for clients, but also to prevent what is said in the therapy room from being heard in the waiting room. It is believed that such noises can help block more disruptive background noises and therefore improve stress reduction and sleep. However, systematic reviews of this claim have found mixed evidence. For some people, such ambient background noise may improve quality and quantity of sleep, but others may find such noises disruptive to sleep.⁵

Additionally, subsonic and repetitive frequencies, such as binaural beats, can have a beneficial effect on the nervous system and physical effects on stress levels (including high levels of stress), ability to sleep and dream, and even focus or concentration.⁶ Al-Shargie et al. demonstrated quite profound stress reduction, even mitigating the response during a stress-inducing condition, when

participants listened to 16 Hz binaural beats.⁶ Other repetitive frequencies have been shown to have a beneficial effect on relaxation, sleep, meditation, and emotional distress. This author utilized an isochronic tone of 20 Hz to aid in focus improvement during the writing of this article.

Temperature Therapy

Brief exposure to either heat or cold can have a beneficial effect on stress reduction and mitigating the physical effects of stress. Cold temperature therapies have been shown to alleviate the physical effects of stress, reduce inflammation, and aid in recovery. Almost all of us, when treating the swelling associated with an injury, have been advised by our doctors to “ice it.” Additionally, “ice baths” are commonly used among athletes to reduce muscle inflammation and promote healing. Similarly, cryotherapy is gaining in popularity, availability, and acceptance to

reduce pain and irritation, improve mood, and to reduce the inflammatory and oxidative effects of stress. Whole-body cryotherapy treatment (WBCT) has been shown to help reduce pain and/or inflammatory processes and improve quality of life.⁷ WBCT also significantly reduced depression^{8,9,10} and anxiety.^{9,10} WBCT significantly enhances the psychological and physical well-being of users, and consequently has a positive impact on their quality of life.¹⁰

Heat treatments can have similar physical and emotional benefits. Heating pads are commonly used to relieve short-term pain in backs, shoulders, and other parts of the body. Heating pads may also be utilized to promote relaxation in the muscles, which helps to directly counter the muscle tension that accompanies stress, especially periods of prolonged stress. By relaxing these taut muscles, an emotional relaxation often follows.

Saunas have long been used to aid in recovery after physical activity, for

Brief exposure to either heat or cold can have a beneficial effect on stress reduction and mitigating the physical effects of stress.



A survey of visitors to a hot spring in Australia revealed most respondents reported improved health and sleep following bathing in the spring.



relaxation, and detoxifying the body. Heat treatment utilizing saunas was found to have several stress-reduction benefits for people in high stress occupations (such as law enforcement, firefighters, and military personnel).¹¹ A single sauna bathing session improves metabolic functioning, blood pressure, cardiovascular function, and increases tolerance to future stressors.¹¹ The benefits are increased with repetitive treatments.

Immersion in hot springs has been long known to have significant health benefits. A survey of visitors to a hot spring in Australia revealed most respondents reported improved health and sleep following bathing in the spring.¹² Hot tubs or jacuzzis may have similar beneficial effects, adding the soothing effects of submersion in water to aid in relaxation and reduction of muscle pain or tension. Warm water immersion resulted in physiological changes that are indicative of stress-reduction and health benefits, including decrease in blood pressure,

improved heart rate variability, and core body temperature.¹³ Such physiological improvements are also believed to have a positive effect on stress-reduction and mental wellbeing.

Neuromodulation

Neuromodulation” is a general term referring to any technology that has a direct effect on the nervous system. These devices are medical devices to treat symptoms of anxiety, insomnia, and depression, among other mental health difficulties. Such mental health difficulties are often exacerbated by, or even primarily caused by, prolonged stress. Therefore, while not expressly cleared for stress management, these devices can alleviate the nervous system responses to stress and provide relief from the physical and emotional reactions to stress. While some neuromodulation devices require administration in a doctor’s office, there are hand-held devices that can be used

by patients at home. Two such devices are vagal nerve stimulators and cranial electrotherapy stimulation (CES) devices.

Vagal nerve stimulators, once solely available through surgical implant, are now being designed as hand-held devices that can be utilized as needed. Vagal nerve stimulators work by activating the vagus nerve, which is the nerve that runs from the brain stem into the neck and abdomen. This nerve is involved in activating the parasympathetic nervous system (known as the “rest and digest” system, activating this system ceases activation of the sympathetic nervous system, the “fight or flight” system, which is often activated in response to stress). Vagal nerve stimulators activate the vagus nerve in an attempt to stop the

fight or flight response and reduce both the physiological and emotional effects of chronic and/or severe stress.

Another hand-held neuromodulation technology is cranial electrotherapy stimulation (CES). CES devices are designed for home use. Although CES devices do require an order from a licensed health care provider in the U.S., they are over the counter in other countries, and treatments can be conducted by the patient in the comfort of their home at a time and place convenient for them. In the United States, CES is cleared by the FDA for anxiety, insomnia, and depression, which can result from chronic or severe stress. CES involves the conduction of microcurrent (in the microamp or



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milliamp range) across the head by the application of electrodes on the earlobes, over the ears, or temples (depending on the device). The current travels along the cranial nerves to the brain stem and then has a balancing effect on the nerves in the brain. An alpha state (a sense of tranquility) is automatically induced, and users report feeling very relaxed and calm at the end of a CES treatment. CES has been shown to improve the physical and emotional effects of stress, such as skin temperature, muscle tension, and pulse rate,¹⁴ as well as anxiety,^{15,16} insomnia,^{16,17,18} and depression.^{15,16,19}

Summary

Incorporating natural elements into your self-care and stress management routines are best. Partly because our bodies are designed to be in nature, and partly because anything utilizing nature will incorporate multiple senses and have a cumulative effect on stress reduction.

For example, a simple walk in the woods provides sunlight, pleasant scenery and sounds, fresh air, and movement. Each of these elements individually reduce stress and improve a sense of well-being, so the additive benefit of combining these elements increases the physical and emotional benefits exponentially. However, the use of electromedical devices can augment or be used as a short-term substitute for natural interventions to reduce stress and improve wellbeing. PBM, sound therapy, heat and cold therapies, and neuromodulation devices can provide similar physical and emotional benefits. Best of all, such electromedical devices can be used together with natural elements to enhance stress-relieving effects. For example, one can listen to music or take a walk in a park while conducting a CES treatment and experience a greater effect than either modality used separately. Electromedical devices are an effective,

and possibly frequently overlooked, resource for effective stress management.

References

- Dompe, C., Moncrieff, L., Matt's, J., Grzech-Leśniak, K., Kocherova, I., Bryja, A., Bruska, M., Dominiak, M., Mozdziak, P., Skiba, T., Shibli, J.A., Voploni, A.A., Kempisty, B., & Dyszkiewicz-Konwińska, M. (2020). Photobiomodulation – Underlying Mechanisms and Clinical Applications. *Journal of Clinical Medicine* (9), 1724.
- Glass, G.E. Photobiomodulation: A review of the molecular evidence for low level light therapy, *Journal of Plastic, Reconstructive & Aesthetic Surgery*, Volume 74, Issue 5, 2021, Pages 1050-1060, ISSN 1748-6815, <https://doi.org/10.1016/j.bjps.2020.12.059>.
- Salamon, E., Kim, M., Beaulieu, J., & Stefano, G.B. (2002). Sound Therapy Induced Relaxation: Down Regulating Stress Processes and Pathologies, *BioSonic Enterprises*. Retrieved March 5, 2023 from Microsoft Word - Sound Therapy Research - formatted.doc (lbdtools.com)
- Alvarsson, J.J., Wiens, S., & Nilsson, M.E. (2010). Stress Recovery during Exposure to Nature Sound and Environmental Noise, *International Journal of Environmental Research and Public Health*, 7, 1036-1046; <https://doi.org/10.3390/ijerph7031036>.
- Riedy, S.M., Smith, M.G., Rocha, S., & Basner, M. (2021). Noise as a Sleep Aid: A systematic review. *Sleep Medicine Reviews*, 55, <https://doi.org/10.1016/j.smrv.2020.101385>.
- Al-Shargie, F., Katmah, R., Tariq, U., Babiloni, F., Al-Mughairbi, F., & Al-Nashash, H. (2022). Stress Management Using fNIRS and Binaural Beats Stimulation, *Biomedical Optics Express*, 13, <https://doi.org/10.13664/BOE.455907>
- Vitenet, M., Tubez, F., Marreiro, A., Polidori, G., Taiar, R., Legrand, F., & Boyer, F.C. (2018). Effect of whole-body cryotherapy interventions on health-related quality of life in fibromyalgia patients: A randomized controlled trial, *Complementary Therapies in Medicine*, Volume 36, 6-8, ISSN 0965-2299, <https://doi.org/10.1016/j.ctim.2017.10.011>.
- Doets, J.J.R., Topper, M., & Nugter, A.M. (2021). A systematic review and meta-analysis of the effect of whole body cryotherapy on mental health problems, *Complementary Therapies in Medicine*, 63, <https://doi.org/10.1016/j.ctim.2021.102783>.
- Rymaszewska J, Ramsey D, Chłodzińska-Kiejna S. Whole-body cryotherapy as adjunct treatment of depressive and anxiety disorders. *Arch Immunol Ther Exp (Warsz)*. 2008 Jan-Feb;56(1):63-8. doi: 10.1007/s00005-008-0006-5. Epub 2008 Feb 5. PMID: 18250970; PMCID: PMC2734249.
- Szczepańska-Gieracha J, Borsuk P, Pawik M, Rymaszewska J. Mental state and quality of life after 10 session whole-body cryotherapy. *Psychol Health Med*. 2014;19(1):40-6. doi: 10.1080/13548506.2013.780130. Epub 2013 Mar 27. PMID: 23535078.
- Henderson KN, Killen LG, O'Neal EK, Waldman HS. The Cardiometabolic Health Benefits of Sauna Exposure in Individuals with High-Stress Occupations. A Mechanistic Review. *International Journal of Environmental Research and Public Health*. 2021; 18(3):1105. <https://doi.org/10.3390/ijerph18031105>
- Clark-Kennedy, J. & Cohen, M. (2017). Indulgence or therapy? Exploring the characteristics, motivations and experiences of hot springs bathers in Victoria, Australia. *Asia Pacific Journal of Tourism Research*, 22, 501-511. <https://doi.org/10.1080/10941665.2016.1276946>.
- Becker, Bruce E.; Hildenbrand, Kasee; Whitcomb, Rebekah K.; and Sanders, James P. (2009) "Biopsysiologic Effects of Warm Water Immersion," *International Journal of Aquatic Research and Education*: Vol. 3: No. 1, Article 4. DOI: <https://doi.org/10.25035/ijare.03.01.04>
- Heffernan, M. (1995). The Effect of a Single Cranial Electrotherapy Stimulation on Multiple Stress Measures. *The Townsend Letter for Doctors and Patients*, 147, 60-64. Presented at the Eighth International Montreux Congress on Stress, Montreux Switzerland, February 1996.
- Barclay, T.H. & Barclay, R.D. (2014). A Clinical Trial of Cranial Electrotherapy Stimulation for Anxiety and Comorbid Depression. *Journal of Affective Disorders*, 164, 171-177. Presented at the American Psychological Association National Conference, Honolulu, HI, July 2013.
- Morriss, R., Xydopoulos, G., Craven, M., Price, L., & Fordham, R. Clinical Effectiveness and Cost Minimisation Model of Alpha-Stim Cranial Electrotherapy Stimulation in Treatment Seeking Patients with Moderate to Severe Generalised Anxiety Disorder. *Journal of Affective Disorders*, 253, 426-437.
- Aseem, A. & Hussain, M.E. (2019). Impact of Cranial Electrostimulation on Sleep: A Systematic Review, *Sleep Vigilance*, 3, 101-112.
- Price, L.R., Briley, J., Hitching, R. (2020). A Meta-Analysis of Cranial Electrotherapy Stimulation in the Treatment of Insomnia. *Annals of Psychiatry and Mental Health*, 8.
- Price, L., Briley, J., Haltiwanger, S., & Hitching, R. (2021). A Meta-Analysis of Cranial Electrotherapy Stimulation in the Treatment of Depression. *Journal of Psychiatric Research*, 135, 119-134.

The use of electro-medical devices can augment or be used as a short-term substitute for natural interventions to reduce stress and improve wellbeing.

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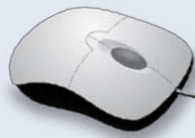
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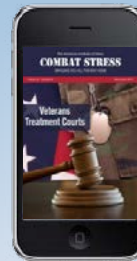


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