

De-stress in the Garden

Stress and Stress Management

This program will help to answer the following questions:

- What is stress?
- How does stress effect my body, mind, and behavior?
- How does gardening and the use of therapeutic plants help to manage stress?
- Which plants help with what?

What is Stress?

"Stress is not a useful term for scientists because it is such a highly subjective phenomenon that it defies definition. And if you can't define stress, how can you possibly measure it? The term "stress", as it is currently used was coined by Hans Selye in 1936, who defined it as "the non-specific response of the body to any demand for change"."

The American Institute of Stress: <http://www.stress.org/what-is-stress/>

A longwinded way of saying that stress is subjective and stress is different for everyone. What may be stressful for one person may not be for another.

The Stressed Mind and Body

- Stress can be a side effect of or a catalyst to mental, physical, or environmental health problems
- Nervous System
- Hormones

Key Players in Stress

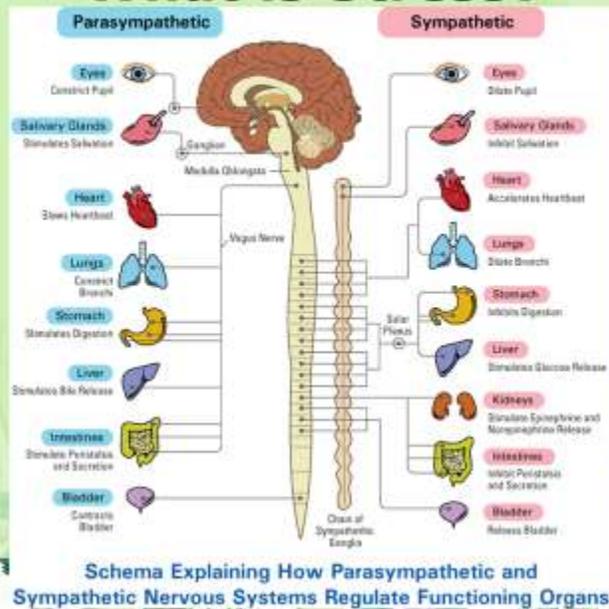
Nervous System

- Sympathetic- Fight or Flight
- Parasympathetic- Calming

Hormones

- Adrenaline
- Oxytocin
- Cortisol

What is Stress?



Amygdala>behavior(reactions)>autonomic>hormones

Parasympathetic Nervous System is the calm state –Peaceful state

Sympathetic Nervous System is the Stressed state.

Eyes are dilated because your body is trying to take in as much information as possible. Mouth can become dry because salivating is part of the digestive system that shuts down when the sympathetic nervous system is engaged. Heart rate accelerates, breathing quickens. Digestion is inhibited in the stomach. The liver releases more glucose into the body, making stress management very important for those with diabetes. The kidneys releases highly addictive hormones and biochemical into the system, making the state of stress actually addictive. Some people seek out stressful events and situations

because they are unknowingly addicted to the stress chemicals. Our intestines, part of our digestive system, slow their process, causing us to have problems going to the bathroom. Finally, the bladder muscles are weakened when stressed. Some people notice that when faced with a stressor, they all the sudden have to pee.

Which of these organs do we have control over? –Lungs. Breathing is the best way we get reconnected to the parasympathetic nervous system.



Loss of memory and ability to learn- when you look at the brain cells of stressed vs. non-stressed people and animals, we see that the cell limbs from the stressed brain are shorter. This causes us to have difficulty remembering things and learning new things. Example: Have you ever been expected to learn something new in a short amount of time or had a teacher who was not very patient. It's more difficult to learn in these situations because they are stressful. In some cases, we are able to learn this way if the stakes are high - the stress is facilitating learning or doing something but retaining that information is much less likely.

Mood: How we perceive stress effects our behaviors and our overall health. In studies with animals, we see that lower ranking animals are much more stressed, contributing to poor eating habits and social habits. Animals do not have the cognitive ability to change their perceptions of their situations like humans do. Humans have the ability to think about situations from a more positive perspective and practice positive stress management techniques. One study conducted by Stanford University found that patients with identical stressors were much less likely to die from heart disease if they perceived their experience of stress as a positive thing. Those who saw stress as a way their bodies help them rise to certain occasion were much less likely to experience heart disease compared to patients with identical stressors who found symptoms of stress to be damaging. And, when looking at the arteries of positive thinkers compared to stressed participants, there was a noticeable difference in plaque buildup.

The Garden



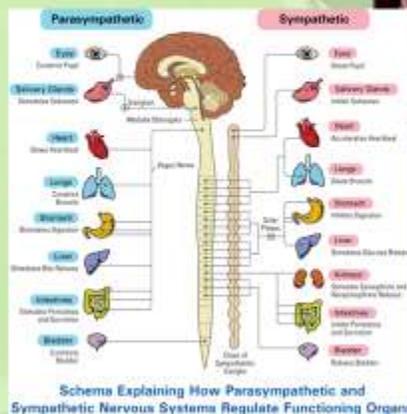
Why is working in the garden helpful?

Physical activity, scenery, and new studies have shown that the smell of the plants contribute to a feeling of less stress. Using scents to alter your mood is known as...”aroma therapy”

The effectiveness of this treatment used to be associated with the placebo effects but research has now found that aroma therapy reduces the level of stress hormones in the body. When researchers took blood or saliva samples from participants in the aroma therapy study, they found that levels of hormones like cortisol were lower than participants in a control group who were exposed to the same stressors but received no aroma therapy.

Stress Management in the Garden

- Physical Activity
- Scenery Therapy
- Aromatherapy
- Breath/Meditation
- Rituals or Routines



We talked about the positive effects of physical activity, scenery therapy, and aromatherapy but some other activities that can be done in the garden or with the products yielded by the garden are breathing activities, meditation, and rituals.

If we look at our nervous system again, which part of our body effected by the nervous system do we have the most control over? – Our lungs. By taking control of our breath we enact of parasympathetic nervous system. It's the easiest, most effective way for us to engage this calming system.

Activity: Timed breath for 1 minute. 12-20 breaths/minute is typical for a healthy adult.

Rituals or Routines help to manage stress as well. It's a way for our minds to focus on a single act and our bodies to relax. Some people have morning rituals or evening activities they do to unwind. What are some rituals or routines you have? How do they make you feel?

Some people enjoying crafting or practicing some sort of activity to improve their health. The activities we are going to do later can be considered a ritual or routine because we are focusing on one thing which helps us to calm our minds and bodies.

Research shows that individuals who activity seek out ways to understand and manage their health, report feeling healthier compared to individuals who leave their health and health decisions up to a doctor.

So, whether or not you believe stress management is physically improving your health, if you enjoy these things, it's worth practicing. As I mentioned earlier, how we perceive stress makes a difference in our health. Everyone has stress in their life and most of us have a lot of the same stressors but it's how we look at stress is what is going to affect our health.



If you want to get the most out of your garden then consider planting these plants. These plants were picked for their many uses but also because they grow well in Indiana and are easy to care for.

Peppermint *Mentha piperita*

Therapeutic uses:

Apathy, arthritis, asthma, bad breath, back pain, bowel disorders, bronchitis, colds and flu, coughs, cramps, faintness, fatigue, flatulence, digestive problems, headaches, mental exhaustion, migraine, mouth and gum infections, muscular pain, nausea, poor circulation, sinus congestion, shock, sunburn, tired feet, travel sickness, vertigo

Forms of use:

Ingestion (fresh, dried or in tea), topical (oil), aroma (fresh, dried, or oil)



Rosemary *Rosmarinus officinalis*

Therapeutic uses:

Acne, arthritis, asthma, back pain, cellulite, colds and flu, constipation, dandruff, depression, diarrhea, enthusiasm, fatigue, fluid retention, greasy hair and skin, headaches, memory enhancement, menstrual pain, migraines, muscular pain, nervous exhaustion, respiratory infections, rheumatism, self-confidence, sinus problems, stiff neck

Forms of use:

Ingestion (fresh, dried or in tea), topical (oil), aroma (fresh, dried, or oil)



Basil *Ocimum basilicum*

Therapeutic uses:

Anti-viral, arthritis, anxiety, colds and flu, concentration, depression, headaches and migraines, menstrual regulation, mental and physical fatigue, muscular spasm, tension, respiratory disorders, rheumatism, stress, weak nervous conditions

Forms of use:

Ingestion (fresh, dried or in tea), topical (oil), aroma (fresh, dried, or oil)



Sage *Salvia officinalis*

Therapeutic uses:

Appetite, arthritis, bronchitis, constipation, cough, fluid retention, indigestion, low blood pressure, memory, menopause, menstruation, over-exercised muscles, respiratory problems, rheumatism, trauma

Forms of use:

Ingestion (fresh, dried or in tea), topical (oil), aroma (fresh, dried, or oil)



Lavender Lavandula

Therapeutic uses:

Acne, alopecia, anxiety, asthma, bee and wasp stings, bronchial problems, depression, eczema, dermatitis, menstruation regulation, migraine, minor cuts and burns, mood swings, nervous tension, nightmares, psoriasis, rashes, sleep aid, stress, sunburn

Forms of use:

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Stress Management

Relax & Unwind



Invigorate & Inspire



Different scents will evoke different emotions. Some are more helpful for relaxation and some invigorate the senses.

Relax and Unwind: Lavender, Sage, Basil

Invigorate and Inspire: Rosemary, Peppermint

Stress Management Techniques Review

- Timed breath- breathe normally for one minute while counting your breath. 12-20 breath/minute is typical for a healthy adult.
- Salt scrub- mix 2-3 tbsp. spoons of Epsom Salt, 1 tsp. of olive oil, 3-5 drops of essential oil in sealable, waterproof pouch or container. Pour in tub to soak or use with water to scrub body.
- Sachets- mix a ½ tbsp. of either the relaxing or invigorating blend of dried herbs into a sachet pouch, leaving at least 1-2 inches of room left at the top of the bag. Place sachet in home, car, or carry in your pocket.
- Alternate Nostril Breath- pinch one nostril closed as you inhale through the other, switch nostrils and exhale through the opposite nostril and then inhale, switch nostrils and repeat.
- Gradual Inhale of Essential Oil- place a small drop of essential oil in the palm of your hand, rub your hands together and cup your hands. Hold your cupped hands about arms-length away from your face. Slowly inhale and exhale, as you exhale slowly move your cupped hand closer to your nose and mouth until you are eventually cupping your nose and mouth. Take one long, deep inhale with your hands cupped over your mouth.

Always use essential oils as directed by the producer of the product. Some oils may be harsh on skin or irritating to some individuals.

References

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The logo for Purdue Extension Steuben County is located at the top of the page. It features the word "PURDUE" in a large, bold, brown serif font, with "EXTENSION" in a smaller, brown sans-serif font directly below it. To the right of "EXTENSION" is a vertical line, followed by the words "STEBEN COUNTY" in a brown sans-serif font. The background of the entire page is a light green color with a collage of various plants and flowers, including a red flower at the top right, a succulent in a vase at the bottom right, and several other smaller floral images scattered throughout.

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De-Stress in the Garden

Herbs, Recipes, Techniques, and Tips

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Tips– Spend at least 5 hours a month meditating outside, Practice meditation in the morning, evening, and before meals, Breathing through the right nostril increases energy while the left nostril inducing relaxation