

--- Intro ---

You are listening to Supporting Supporters, a ChangetoChill podcast. This is a free mental well-being resource offered by Allina Health. My name is Tonya Freeman. I'm a licensed psychologist and regional lead psychologist with Allina Health.

These podcast episodes are aimed with the goal of providing quick, tangible resources and information from Allina Health mental health providers on a range of mental health topics relevant to day to day lives of the listener. We invite you to join us in any way you please, whether you sit back and kick your feet up, or as you engage in movement, your daily commute, or as you prepare for your day. However you choose to join us, we welcome you and we honor your time.

--- Episode ---

Hi everyone! My name is Tonya Freeman, I am an early lifespan primary care psychologist with Allina Health and I want to start by thanking you for listening to our podcast, where we are hopeful to cultivate a space to give back to you. Our teachers who are day in and day out serving our next generations in a time of so much uncertainty. I first want to thank you for showing up today. This podcast project is especially meaningful to me as a first-generation scholar of higher education. Without teachers who supported, motivated, and cared for me, I certainly would not be where I am today, and for that I will be forever grateful. Because of those teachers, I myself have become a lifelong learner and I strive to find opportunities to give back and serve in unique ways.

I value your time and feel honored you have chosen to spend a few minutes with me, for you, your students, your family, and your community as without filling your cup, it is significantly more difficult to serve others, even if serving others fills your cup. There are certainly components that drain our cups completely dry, even when we love our jobs, especially in times of so much change and uncertainty. As I honor your time, I will dive right into the next episode topic - deep breathing.

I have 3 topics in today's episode:

Topic 1: What is it?

Topic 2: The science of diaphragmatic breathing

Topic 3: So, what now?

Topic 1: What is it?

Deep breathing is also referred to as belly breathing or diaphragmatic breathing. There are many research articles both from medical and psychological entities on the effectiveness of diaphragmatic breathing but let's start with what it is and how it may be a tool you choose to implement.

Diaphragmatic breathing involves taking a breath through your nose, all the way down to your diaphragm, activating the abdomen and stomach muscles. This is also referred to as 360 breathing as you can feel your stomach, rib case, and abdominal muscles extract around your diaphragm.

The Cleveland clinic defines the diaphragm as the most efficient muscle for breathing. The diaphragm is a dome-shaped muscle, located at the bottom of your lungs, activated by abdominal muscles. No, you do not need to do crunches or sit ups to become an efficient diaphragmatic breather. Singers and musicians are often familiar with diaphragmatic breathing as it is one of the most efficient forms of breath that allows us to fully breathe in and excrete the air fully and slowly.

Topic 2- the science of diaphragmatic breathing:

Scientifically, this kind of breathing stimulates the vagus nerve. The vagus nerve is a cranial nerve from the spinal cord, traveling through the neck and responsible for a number of critical components including but not limited to internal organ functions such as respiratory rate, heart rate, digestion, and reflexive actions such as swallowing, vomiting, coughing, and sneezing. Stimulation of the vagus nerve activates that parasympathetic nervous system. For the sake of this short podcast episode, I want to highlight the parasympathetic and sympathetic nervous system. The sympathetic nervous system is referred to as our fight/flight/freeze response. This is activated and needed when we are in times of true, significant threat and distress to protect our body. Think back to our ancestors and running from a saber tooth tiger, or as simple as today, going on a roller coaster ride, each body responds differently based off of life experiences and activation of the sympathetic nervous system. The goal of the sympathetic nervous system is to protect us. The difficulty here is that once in distress, the nervous system can have difficulties differentiating between a true threat and stressors. A body in chronic sympathetic activation is at risk for increased inflammation in the circulatory system, increased risk for illness, hypertension, heart attacks, strokes, difficulties with sleep, and difficulties with mood and behavioral regulation. The parasympathetic nervous system on the other hand is the nervous system known for rest and digestion. The main purpose of the PNS is to conserve energy to be used later and regulate bodily functions. To bring us back to homeostasis and promote overall regulation (e.g., decreasing risk for the above mentioned, regulate emotions and behaviors, and promote sleep). Many situations can activate the sympathetic nervous system such as conflict with friends or family, high stress jobs, and worldwide events (sounding familiar?)

Topic 3- So what now?

Based on the brief and certainly not extensive overview of the sympathetic and parasympathetic nervous system, it is probably popping through your head “okay, so how can I get that parasympathetic nervous system activated” because rest sounds great, right? Deep breathing or diaphragmatic breathing is one of the many ways we can stimulate the parasympathetic nervous system. Good news, it is free, can be used relatively anywhere, and can be taught to individuals of all ages. We have to breathe to live so we may as well learn to do it in a way that benefits us in the long term right? The hard news? Many of us breathe with our chest when we are distressed, referred to as panty/puppy breathing. That means, this is going to take some awareness and practice on your end. But it can be fun and is intuitive once we get started.

I teach diaphragmatic breathing to children, adolescents, adults, families, and individuals suffering from significant trauma or panic. It is incredibly advantageous and effective. I invite you to give it a try with me.

You can do this either lying flat on your back or with your feet flat on the ground, spine intact but not rigid.

First, we will start with a simple 4, 4, 6, 4, count (in for four, hold for four, out for six, and holding for four). The numbers are not as important as fully engaging your diaphragm. A longer breath out increases parasympathetic nervous system stimulation. If you find this difficult, do your best, but certainly practice with the counts to find a rhythm that feels best for you. First, we will start by placing one hand on your chest and one hand on your stomach. The goal here is to notice what is moving? The chest or the stomach? Ideally, our stomach will expand and move up as we breathe in, holding on the pause, and

down on the out breath, completely emptying the diaphragm. If you notice your chest moving, that is okay, that means this will be a great way to retrain your muscles for breathing. If you are driving, please pause this episode and start when you are in a safe, nonmoving environment.

When you are ready, sit with your feet flat or lie down, I invite you to close your eyes or look at a nonmoving item near staring distance from your face:

--Breathing through your nose breathe in for one, two, three, four, hold two, three, four, out, two, three, four, five, six, hold: two, three, four.

Let's do that again: breathe in for one, two, three, four, hold two, three, four, out, two, three, four, five, six, hold: two, three, four

breathe in for one, two, three, four, hold two, three, four, out, two, three, four, five, six, hold: two, three, four.

breathe in for one, two, three, four, hold two, three, four, out, two, three, four, five, six, hold: two, three, four

breathe in for one, two, three, four, hold two, three, four, out, two, three, four, five, six, hold: two, three, four

Notice, how you feel. Maybe your mind was wondering, maybe you were noticing judgements, all of these experiences can be normal, and our goal is to do this without judgement, to slow down our heart rate, and activate the PNS. I highly recommend doing this at least 10 times a day, often people like to do this before bed. THEN you can start using this in times of distress. If you only reserve this for times of distress, you may notice difficulty doing so which is similar to learning to play a sport during the biggest game or tournament of the year. You likely will experience increased anxiety and activation of the sympathetic nervous system, the opposite of our goal.

I invite you to try this out. You can use this with children as well, either sitting or lying down. You can play around and use stuffed animals on the tummy to see the animal move up and down, you can do hand breathing by tracing your pinky to your thumb, one finger at a time, breathing in on the trace up, pause at the top, and out on the way down. This adds a tactile sensation and distraction.

While we certainly did not cover the entire complexity of the nervous system, I am hopeful you found this episode helpful and can walk away with a useful tool for yourself and options to share with others. This tool can be used in the classroom at the start, middle, or end of activities, or during times of transitions.

Thank you for all you do for our students and community at large. Truly, I cherish your work and your time. See you in the next episode, Dr. Freeman.

---Outro---

On behalf of Allina Health and Change to Chill, we thank you for taking the time to listen to our podcast. We do hope you enjoyed this episode and we hope that you join us in other episodes covering even more interesting topics with mental health providers. As always, you can find the show notes and any accompanying research and tools at the change to chill website at www.changetochill.org. In health and wellness, take care and see you next time!