

# MIND-BODY TOOLKIT



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# What is Mindful Awareness?

Mindful awareness, or mindfulness, is both a practice and an approach to life. It involves intentionally attending to the present experience with an attitude of inquisitiveness. It is a way of cultivating awareness, acceptance, and the ability to pause between action and reaction in order to choose our response.

Mindfulness practices are an invitation to:

- Become familiar with our own mind and mental state as it changes throughout the day
- Recognize thoughts for what they are, just thoughts, which we can choose to follow or not
- Become more aware of the connections between our mind and body
- Practice engaging in our experience without having to change or influence it in a specific direction
- Learn to experience and to manage stress effectively with the ability to escalate or de-escalate our experience

There are formal and informal techniques for practicing mindfulness. Formal mindfulness practices involve setting aside time (from a few minutes to an hour or more) for daily practice. During this time, we should be free from other activities or distractions so we can devote our full attention to our practice. Informal practice is simply being aware during the tasks and experiences of daily life — paying attention on purpose. At any time during the day we can turn our full attention to what is present in a task or experience that may be considered mundane, such as washing the dishes, eating a meal, brushing our teeth, or walking the dog. In an informal practice, we may choose to bring our full attention to such a task or experience.

Mindfulness has also been shown to reduce symptoms of stress and to increase emotional well-being.<sup>1-4</sup>

Mindfulness research shows that regular practice is associated with lower levels of anxiety, depression, anger, and chronic pain.<sup>5</sup> There is also suggestive evidence that mindfulness can be therapeutic for medical conditions such as Type 2 diabetes, fibromyalgia, rheumatoid arthritis, low back pain, sleep disturbance, hypertension, and attention deficit hyperactivity disorder (ADHD).<sup>1</sup>

As with learning any new skill, mindfulness takes patience and a commitment to consistent practice for the full benefits to be experienced.

# Mindful Awareness Practice

## DESCRIPTION

Mindful awareness, or mindfulness, is the practice of paying attention to the present moment on purpose with an attitude of kindness and non-judgment. As we pay attention in this way, we increase our ability to notice all that is happening within and around us. The very practice of noticing gives us the opportunity to choose our response rather than to automatically, and often unconsciously, react.

## IMPACT and SUPPORT

Research has shown the practice of mindfulness to have beneficial effects on physical and mental health.<sup>1-5</sup> Mindfulness has been associated with more positive health behavior choices (e.g. eating,<sup>6-10</sup> exercise,<sup>11</sup> sleep<sup>12</sup> and substance use<sup>13</sup>), as well as supporting our adaptive responses to difficult emotions and stressful life situations, or resiliency.<sup>1,5</sup>

## PRACTICE CONSIDERATIONS

Mindfulness can be practiced both formally and informally by increasing your attention to everyday activities. In formal practices, you set aside a designated and consistent time each day for mindfulness practice. An example would be to set aside 10 minutes at the start of each day for practice. Informal practices are those where you choose to engage in being mindful during routine tasks and experiences of the day.

The mindfulness practices below can be completed seated, lying down, or standing – although a seated posture with a straight spine is preferable. Pillows or mats may be beneficial if you choose to lie down during your practice.

## SCRIPTS

Two types of formal mindfulness practices include breath awareness and sound awareness:

Breath awareness helps to keep us connected to the present moment by focusing our attention on the flow and sensations of our breath. Our breath is something we always have with us, yet rarely notice. We often breathe in ways that do not best serve us – too shallow and quick. Intentionally practicing breath awareness can help us to return to a more calm, regular and optimal way of breathing.

Sound awareness connects us to the present moment while also cultivating our awareness of the various sounds that repeatedly arise around us. Rather than trying to ignore them, we intentionally pay attention to the sounds surrounding and coming through us. By doing so, it can help to not only keep us present but also stabilize the mind, refine our sense of hearing and strengthen our skill of deep listening.

## SCRIPT #1

### Breath Awareness (5 Minutes)

Begin by finding a comfortable position and gently noticing how your body feels. You can begin this practice with your eyes open or closed. Closing your eyes can help to reduce distractions and make focusing easier. If you open your eyes, let your gaze be soft and directed toward the floor.

Now, softly bring your attention to the place in your body where you can feel the sensations of your breath as it flows in and out. Your focus could be on your mouth, chest, abdomen, or the tip of your nose. Let your focus be on the direct changing sensations of the breath. Let your body continue to breathe naturally. There is no need to control the breath in any way.

As your attention steadies and awareness becomes more sensitive, look closely at the changing and varied breath sensations. Notice the rising and falling of abdomen or chest. Notice the coolness of the in breath and the warmth of the out breath. Notice qualities of the breath: how long it is, how deep it is. You may also begin to notice the space between the breaths.

When your mind moves to something else – perhaps a noise, or a thought, or another sensation; you have not made a mistake. It is just the nature of the mind. Acknowledge that your mind moved and then patiently and kindly bring your attention back to the breath. There is no need to fight thoughts or experiences. Simply choose not to follow them. You may note thinking or feeling and then select to bring your attention back to the breath.

When you practice with your attention on your breath, you can allow yourself to relax deeply in such a way that you drop into a deeper place. Deeper than your story, your personality, or your identity. Simply staying present in the moment. Aware and resting in this moment, in this breath.

Recognizing, sensing that you are already whole and present. That there's nothing more that you have to do and nowhere else to go.

Practice kindness and patience for all of the movements of your mind and for the flow of changing experience through this moment. Noticing, and returning to the breath.

You may choose to end your practice by shifting your focus back to your surroundings, opening your eyes and moving gently.

## SCRIPT #2

### Breath Awareness (10 Minutes)

Begin by finding a comfortable position and gently noticing how your body feels. You may wish to close your eyes or to direct your gaze softly downward. Now gently bring your attention to the place in your body where you notice your breath. It may be the tip of the nostrils, the abdomen, or chest. Without changing the breath in any way, simply notice as it moves in and out of the body.

Allow your focus to be on the direct changing sensations of the breath. Allowing your body to continue to breathe naturally.

As thoughts come and go in the mind, you may simply note thinking, or feeling, or hearing. Without giving any judgement to those thoughts, patiently allow them to pass like clouds in the sky without following them or holding onto them. Simply notice and choose to return your attention to the sensation of the breath.

As your attention steadies and awareness becomes more sensitive, you may notice the changing sensations of the breath. Noticing the rising and falling of the body in the abdomen and chest as the breath moves in and out.

You may notice the length of the breath, a warmth or coolness. The space between the breaths. You may notice that as thoughts come and go, as sensations arise and sensations dissipate, that there is a space between this noticing and reacting. In that space, is the choice to follow the thought, to move with the sensation, or to simply allow it to pass, selecting to focus the attention again on the breath. Deepening the muscle and awareness of the choice to focus our own attention rather than being at the whim of the mind. Gently, with kindness, returning to the breath.

Continue practicing for as long as you like. Let attention on the breath sensations steady and hold you in this moment. Practice kindness and patience for all of the movements of your mind and for the flow of changing experience through this moment.

Recognizing, sensing that you are already whole and present. That there is nothing more you have to do and nowhere else to go. Allowing life itself to come to you thorough the breath.

End your practice when you are ready by shifting your focus back to your surroundings. Noticing the sounds, the sensations of the body, opening your eyes and moving gently.

## SCRIPT #3

### Awareness of Sounds (5 Minutes)

In this guided practice, we will focus on awareness of sounds and hearing. Allow yourself to settle into a comfortable position, softening the belly and relaxing as much as you can. (PAUSE)

When you are ready, open your awareness to the experience of hearing. Bring your full attention to the experience of hearing. Allow yourself to hear any sounds without choosing or judging. (PAUSE)

If you find your mind commenting or reacting to a sound, just notice that and let it be. Gently bring your attention back to the activity of listening and the direct experience of sounds. (PAUSE)

Noticing a sound just as it is — noticing its vibrations, as intense or soft, low or high, near or far. Notice how it changes and how it fades. Listen deeply for the space or silence between the sounds. (PAUSE)

If a thought arises, such as that is a loud car, there goes the telephone, or anything else, recognize they are only thoughts. They are thoughts that take you away from the direct experience of hearing. Let go of the thinking. As best you can and go back to the experience of directly hearing sounds. (PAUSE)

Try to rest in the spaciousness of mindful listening. Allowing the sense of spaciousness to include and hold all the sounds and the silence itself. (PAUSE)

When you are ready to end this practice, gently open your eyes. Take in a few deep breaths, or maybe gently move the fingers and toes and stretch the body if you like. Notice how you feel, then let it go without judgement.

# Conscious Breathing

## DESCRIPTION

Breathing can be a powerful tool for influencing individual health and well-being. Consciously slowing down and deepening our breath is one of the most effective ways to reduce stress and to create a pause of choice between a situation and our reaction. Most of us routinely and unconsciously breathe quite shallowly, using only a small part of our full lung capacity. Breathing deeply increases oxygen to the brain and body and stimulates the parasympathetic nervous system, calming us down and altering our response to stress.

## IMPACT and SUPPORT

Our body's stress response (fight or flight) prepares us to confront or avoid danger. When appropriately invoked, the stress response prepares us to effectively meet and rise to challenges by increasing heart rate, blood pressure, respiratory rate, muscle tension, cortisol and adrenaline. When evoked on a consistently chronic basis, however, the stress response can affect our health in negative ways – leading to a suppressed immune system, high blood pressure and increased risk for heart disease, anxiety and depression.<sup>14</sup> To counteract the toxic effects of chronic stress, we can utilize our breath to elicit a relaxation response.

Research has shown that breathing exercises can have immediate effects by lowering blood pressure and heart rate, which in turn results in less wear and tear on blood vessels. Deep breathing has been scientifically proven to benefit the heart, the brain, digestion and the immune system. Many studies document the beneficial effects of deep breathing in treating depression,<sup>15</sup> anxiety,<sup>16</sup> PTSD (posttraumatic stress disorder),<sup>17</sup> COPD (chronic obstructive pulmonary disease)<sup>18,19</sup> and asthma.<sup>20</sup>

## PRACTICE CONSIDERATIONS

Breathing practices can be done anytime you think of them, in any location, in a still body or a moving one, seated, standing or lying down. Most frequently, however, breathing practices are performed in a comfortable seated position with spine erect and feet on the floor.

You can practice with your eyes closed or open. Closing your eyes can help to reduce distractions and make focusing easier. If you keep your eyes open, let your gaze be soft and directed downward, and not focusing on anything in particular.

The practices below can be completed seated, lying down, or standing although a seated posture with a straight spine is preferable. Pillows or mats may be beneficial if you choose lie down during your practice.

## SCRIPTS

### SCRIPT #1

Begin by finding a comfortable seated or lying position and noticing how your body feels. (PAUSE)

You can either close your eyes or keep them open with a soft, unfocused gaze, directed downward and not focusing on anything in particular. (PAUSE)

Now, place one hand on your chest and the other hand on your abdomen. Take a few moments to notice your breath without changing anything, softly bringing your attention to the place in your body where you can feel the sensation of your breath as it flows in and out. Your focus could be on your nostrils, mouth, chest, or abdomen – anywhere you feel the air as it flows or your muscles as they move with each breath. (PAUSE)

As you become aware of your breath, it may begin to deepen naturally. As you consciously relax, notice the abdomen rising with the in-breath and falling with the out-breath. Without forcing anything, allow your breath to slow down and deepen. (PAUSE)

Try to feel your breath's sensations as completely and continuously as possible. There's an in-breath, a pause, an out-breath, a longer pause. Allow them to arise, change and disappear. Allow yourself to receive these changing sensations. (PAUSE)

Whenever you notice your attention is distracted by something else – a sound, or a thought pattern, or a habit – acknowledge it and then gently return your attention back to the sensation of the breath. Let go of any sense of fighting the distraction. Keep your attention concentrated on the sensation of the breath. (PAUSE)

Continue breathing in this way for the next few minutes, as long as you would like. Let attention on your breath sensations steady and hold you in this moment. (PAUSE)

When you are ready, you may end your practice by shifting your focus back to your surroundings, opening your eyes if they were closed, and gently moving the body.

### SCRIPT #2

Begin by taking a comfortable position wherever you are. You could sit or lie down, or you might even be standing. Relax and feel the support of the chair, floor, or whatever is holding you. (PAUSE)

If you like, allow your eyes to close. This helps to quiet and calm the mind. Alternatively, you can keep your eyes open or partially closed with a soft, unfocused gaze on the surface in front of you or on the floor. (PAUSE)

Exhale completely to relax the body and empty the lungs of air. Place one hand on your chest and the other on your abdomen. Inhale, noticing how deeply and naturally you inhale following a complete exhalation. (PAUSE)

As you continue to breathe, let your body become more symmetrical and aligned. If sitting or standing, position your feet flat on the floor and your back in an upright position. To help align yourself, you might lean a little forward, then back, to one side, and then the other. You will sense where the center of gravity is in your body and settle into alignment. (PAUSE)

Simply focus on the breath and notice its involuntary nature, without forcing or pushing it, inhaling through the nose and exhaling through the nose or mouth. Bring attention to the rise and expansion of your belly as you breathe in, and the fall or contraction as you exhale – allowing the rhythmic movement to bring inner calmness, balance and grounding. (PAUSE)

Give this breathing your full attention. There is no need to do anything – just sense your breath. You will notice your breath getting slower, deeper, quieter, and more regular. (PAUSE)

Allow your attention to become present in the moment. If thoughts, sounds or other distractions arise for you, acknowledge them and then let them go by refocusing on the breath. (PAUSE)

As you continue breathing, you might add a positive affirmation or phrase on your in-breath. This could be “I am safe,” “I am healthy,” or “I am enough.” This phrase may change depending on the day, the moment or the situation. The goal is to breathe in positive energy and create space to relax into the breath. (PAUSE)

Similarly, as you breathe in positivity, you can breathe out negative energy, thoughts, anxiety, stress and judgment. Breathe in positive energy and breathe out negative energy. (PAUSE)

Continue breathing in this way for the next few minutes, as long as you would like. Breathing in positive energy and breathing out negative energy. (PAUSE)

When you are ready, you may end your practice by shifting your focus back to your surroundings, opening your eyes if they were closed, and gently moving the body.

# Three Deep Breaths

## DESCRIPTION

Awareness and control of our breath are not only helpful as part of a formal mindfulness practice. Our breath provides us with a powerful tool to balance and calm ourselves in the moments of our everyday lives. With only a few deep breaths, we can lower our heart rate, calm ourselves and create a pause between a situation and our response to it.

## IMPACT and SUPPORT

As described above, research has shown that breathing exercises can have immediate effects by invoking the voluntary relaxation response.

## PRACTICE CONSIDERATIONS

Three deep breaths can be used any time, in any location, with your body still or moving, seated, standing or lying down. This is a skill you may want to practice throughout your day, at the start of a meeting, before making an important phone call, after working with a complex interpersonal dynamic, as you ready yourself for sleep, etc.

You can practice with your eyes closed or open. Closing your eyes can help to reduce distractions and make it easier to focus. If your eyes are kept open, your gaze should be soft and directed downward, without focusing on anything in particular.

Once a regular practice is established, you can add a phrase that you silently repeat with each exhale. The phrase can be something that brings you a feeling of support and relaxation. Some people have used phrases such as “I am safe and supported” or “I am resilient and capable.”

## SCRIPT

When first practicing this exercise, you may begin by placing one hand on your chest and the other on your abdomen. You might choose to close your eyes or keep them open with a soft, unfocused gaze that is directed downward. After the practice is familiar to you, you may simply focus on the 3 breaths while keeping your hands in a comfortable position. (PAUSE)

Take a few moments to notice your breath without changing anything. (PAUSE)

As you become aware of your breath, it may begin to deepen naturally. As you consciously relax the muscles of the abdomen, allow it to rise with the in-breath and fall with the out-breath. Without forcing anything, allow your breath to slow down, lengthen and deepen. (PAUSE)

You may notice that as you complete your inhale, there is a pause before exhaling. Allow yourself to experience the changing sensations of your breath. (PAUSE)

Slowly take a deep in-breath through your nose, hold it for a pause, and then slowly exhale through your nose or mouth. On the exhale, you may gently contract your abdominal muscles to release the last bit of air from your lungs. (PAUSE)

Complete two more cycles of a deep in-breath, a pause and then a long, complete exhale. (PAUSE)

As you complete this practice, shift your focus back to your surroundings, opening your eyes if they were closed, and gently move the body. (PAUSE)

# Chair Yoga

## DESCRIPTION

There are many types of yoga practices. The most common yoga practices in this country involve a series of stretching and strengthening body movements, accompanied by relaxed breathing exercises. Yoga movements can be practiced for just a few minutes per day in the office or at home, or for more extended 30-90 minute practices.

## IMPACT and SUPPORT

Studies have shown yoga to be effective in reducing stress, anxiety, heart disease, and back pain.<sup>21,22</sup> Yoga has also been associated with improved blood sugar control in those with diabetes,<sup>23</sup> improved lung function in those with asthma,<sup>24</sup> and improved behavior function in children with attention deficit hyperactivity disorder (ADHD).<sup>25,26</sup>

## PRACTICE CONSIDERATIONS

Yoga can be practiced in various settings – the home, office, fitness center, yoga studio, outdoors – with the only real need being an appropriately comfortable surface from which to hold poses. Typically, a yoga mat is used to provide a soft and non-slip surface on which to do the movements. For chair yoga, a stationary chair (no wheels or rockers) serves as the prop and surface from which the poses are performed. Additional props such as yoga blocks and straps may be helpful to accommodate a range of flexibility and mobility.

Chair yoga is particularly suited for people who cannot stand or lack the mobility to move easily from standing to seated positions; these may include people who are senior, obese, or those with neurological conditions. If you have any medical conditions, it is advised for you to seek the guidance of your medical practitioner before beginning a yoga class.

Prior to beginning any yoga or stretching exercises it is important to remember that everyone has a unique range of motion and flexibility. You should pay close attention to your own body – moving and stretching only as far as you feel comfortable. Wear clothing that will not limit your range of motion or create a potential safety hazard. It is best to avoid high heel shoes and restrictive tops/jackets, pants, skirts, or dresses.

## SCRIPT

*See the “Chair Yoga Series” handout following below, which includes photographs and descriptions for each yoga pose/stretch.*

# CHAIR YOGA SERIES

Begin by performing this series of 12 poses 3-4 times during your day. If possible, gradually increase the frequency until you are incorporating some stretching every hour. Begin each pose by taking a deep breath in, moving into the stretch as you breathe out, and then holding the stretch at your comfort level for 10-60 seconds.



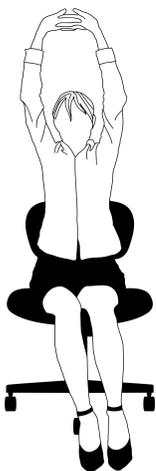
## Pose #1: Neck

From a seated position, lengthen your spine by sitting tall and long. Gaze forward and then allow your left ear to drift toward your left shoulder. Pause where you feel a comfortable stretch. If you would prefer a bit more stretch, you can reach up and let your left hand gently rest, without pulling, on your head. *[Repeat on the opposite side]*



## Pose #2: Shoulder Shrugs

From a seated position, lengthen your spine by sitting tall. Place your arms either along your sides or with your hands in your lap. Gaze forward and then lift your shoulders upwards toward your ears. Pause where you feel a comfortable stretch, then release and let your shoulders drift down toward your hips. *[Repeat 2 to 4 times]*



## Pose #3: Overhead Side Bend

From a seated position, lengthen your spine by sitting tall. Next, inhale as you raise your arms overhead. You may opt to let your palms touch one another, or interlace your hands with your palms facing downward. Keeping your hips in your seat, exhale and slowly begin to lean toward your left, stopping where you feel a comfortable stretch. Inhale as you return to center and exhale as you lower your arms and hands back to your sides. *[Repeat on the right side]*

# CHAIR YOGA SERIES



## Pose #4: Shoulder Expansion

From a seated position, lengthen your spine by sitting tall. Bring your arms behind you and place your hands gently on the lower back at (or just below) the waistline. Next, inhale as you slowly begin to pull your shoulders back and open the chest. Pause where you feel a comfortable stretch. When ready, bring your arms and hands back to your sides.



## Pose #5: Hamstrings

From a seated position, allow your feet to gently rest on the floor. Lengthen your spine by sitting tall. Tighten the muscles of your thighs to lift your feet off the floor. Pause where you feel a comfortable stretch. Then, gently flex your feet to pull your toes toward you. Pause again where you feel a comfortable stretch. When ready, relax your legs and let your feet return to the floor.



## Pose #6: Spinal Twist

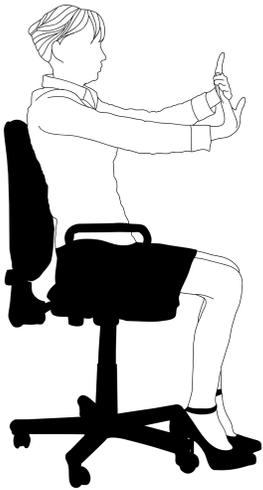
From a seated position, lengthen your spine by sitting tall. Cross your right leg over your left (Note: you do not have to cross your legs if it is uncomfortable). Pause here to again lengthen your spine. Begin to twist from your mid-line so that your head, shoulders, arms and hands twist toward your right. You may find it helpful to place your hands on the outside of your right thigh or on the right side of the chair. Twist only as far as you feel comfortable and then pause. When you are ready, let your spine return to center. *[Repeat on the left side]*

# CHAIR YOGA SERIES



## Pose #7: Chest

Begin by sitting slightly forward on your seat so that your hands have space to reach the chair back behind you. Bringing your arms behind you, lightly grasping the back of the chair from each side (Note: if this is too uncomfortable or not in your range of motion, you may grasp each side of the seat behind you). Next, lengthen your spine by sitting tall and pull your shoulders back as if holding a pencil between your shoulder blades. Slowly turn your gaze and chin upward, pausing where you feel a comfortable stretch. When you are ready, let your gaze and chin return forward. Relax the shoulders, letting them return to a neutral position.



## Pose #8: Wrists

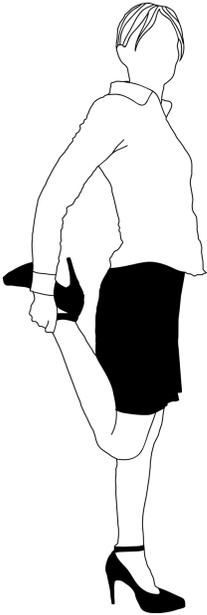
From a seated position, lengthen your spine by sitting tall. Bring your right arm upward to chest height, extended forward. With your left hand, gently pull your upward facing right hand back towards you, pausing where you feel a comfortable stretch. Next, flip your right hand downwards and again gently pull your hand towards you, pausing where you feel a comfortable stretch. When you are ready, lower your arms back to your sides. *[Repeat with the opposite hand]*



## Pose #9: Inner Thighs

Begin by sitting toward the front edge of your chair. Let your feet rest on the floor, approximately the width of your hips. Exhale and lean forward from your hips, bringing your arms and hands toward the floor between your legs. If comfortable, you may continue until your hands rest on the floor. Pause when you reach a comfortable stretch. When you are ready, inhale and return to a seated position.

# CHAIR YOGA SERIES



## **Pose #10: Front of the Thighs**

Begin by standing next to a table edge or behind a chair (for safety, chairs with wheels should only be used if the wheels can be locked). Lengthen your spine by standing as tall as you can and let your hands rest on the table or chair back for support. Bend your right knee, raising your foot behind you. Reach back with your right hand and grasp the raised leg just above the ankle (Note: some may find it more comfortable to use the opposite hand to reach back - i.e. using the left hand to reach back for the right leg). You may pause here, if you like. Or, if you prefer a deeper stretch, you can use your hand to lift your foot further upward and then pause. When ready, release your leg and return to a standing position.

*[Repeat with the opposite leg]*

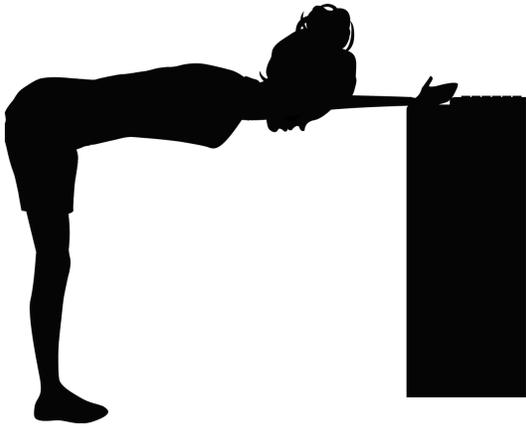


## **Pose #11: Standing Calf Stretch**

Begin by standing 1-2 steps behind a table or chair (for safety, chairs with wheels should only be used if the wheels can be locked). Place your hands on the edge of the table or back of the chair for support. Slightly bend your left knee as you lift your right foot from the ground and step it behind you until your toes reach the ground. Pause for a moment to ensure your upper body/spine is upright, not leaning forward over your front knee. Next, focus on your right foot behind you and allow the heel to slowly begin pressing down toward the ground. Pause where you reach a comfortable stretch. When ready, slowly and carefully step forward with the right foot and return to a standing position.

*[Repeat on the opposite side]*

# CHAIR YOGA SERIES



## **Pose #12: Standing Forward Bend**

Begin by standing 3-4 steps behind a table or chair (for safety, chairs with wheels should only be used if the wheels can be locked). Lengthen your spine and bend your knees slightly. Then, exhale as you begin to bend forward from your hips. Depending on your flexibility and range of motion, you may support your bend by placing your hands on the table/back of the chair or on your thighs. Pause where you feel a comfortable stretch. When ready, inhale as you return to a standing position.

# Progressive Muscle Relaxation

## DESCRIPTION

As we go about the activities of our day, it is often the case that we may not notice the tension in our muscles and the feelings in our bodies. With increased awareness, we are able to both notice and to choose to relax those muscles that tend to hold habitual tension and stress.

## IMPACT and SUPPORT

Progressive muscle relaxation (PMR) is a deep relaxation technique that has been used effectively to control stress and anxiety,<sup>27-34</sup> help with sleep disturbances (fatigue and insomnia),<sup>35</sup> and reduce symptoms of certain types of chronic pain.<sup>35,36</sup>

## PRACTICE CONSIDERATIONS

Progressive muscle relaxation may be done in either a seated or lying position. Pillows or mats may be beneficial if you choose to lie down.

## SCRIPT

Progressive Muscle Relaxation is a process in which systematically tensing and releasing your muscles enhances your ability to relax. It is an opportunity to become more aware of how we hold tension in our body that can lead to chronic pain or discomfort. You will move through the different muscle groups of your body and by tightening and releasing, will be able to consciously bring more relaxation to each part.

You can tighten and hold that tension for about 5 seconds, then relax and just let it go. It can be helpful to hold your breath when you tighten your muscles and exhale as you release your muscles.

Be careful to tighten just enough to notice that the muscles are active and engaged, but not enough to be painful in anyway. We will be tightening and then relaxing each set of muscles twice.

Start by finding a comfortable seated position. If you feel comfortable closing your eyes, go ahead and allow them to close now. If you'd rather leave them open, just hold a light gentle gaze on a point about 3 to 5 feet in front of you.

You'll now move into tensing and relaxing the muscles throughout the body. The first set of muscles will be your facial muscles. Tense your facial muscles by squinting your eyes, wrinkling your nose, bringing the corners of your mouth towards your ears and tensing your jaw. Feel the sensations in your face as the tension in these muscles builds and then relax. Just letting the muscles go soft. Noticing what it feels like as these muscles become more and more relaxed.

Move through each area of the body, tightening then relaxing:

- Neck
- Shoulders
- Back
- Chest
- Abdomen
- Arms and hands
- Legs and feet
- Whole body

You have completed a cycle of progressive muscle relaxation. Take a few moments to slowly scan your whole body, noticing if there are areas that are still holding tension. If any area is still tight or tense, go ahead and tense that muscle group again. Holding the tension for about 5 or 6 seconds and then relaxing. Take in a few deep breaths, just letting any unnecessary tension slip away and letting it be replaced by a sense of relaxation. When you feel as if you are relaxed as possible, just notice the sensations that are present throughout your body. What does your body feel like? Does it feel different than a few minutes ago? If so, how?

When you are ready, whether it is this breath or the next, slowly open your eyes.

# Mindful Walking

## DESCRIPTION

Mindfulness is an ability that can be practiced at any point in our day, either in stillness or in movement. For many of us, the idea of sitting still to meditate can be challenging, especially with long days of commuting and sitting at work. Though generally performed with the primary purpose of getting from one place to another, walking is so intrinsic to our lives that it makes for a natural and easily accessible focus for meditation and mindful awareness.

Mindful walking, or walking meditation, is a way to bring awareness to our bodies and tune into the sensations that arise while in motion. It allows us to practice movement without a goal or intention and to fully appreciate the impact of the external world on our inner experience. It encourages us to let go of the urge to overthink by using our breath to help ground us and connect to our external world with curiosity, open hearts and open minds.

Mindful walking provides an opportunity to meditate during the spaces in our life as we walk to our car in the morning, from our cars into work, down the halls between meetings, or as we leave the supermarket. It can also be a more formal practice, performed in a park, along the beach, in the woods or in a labyrinth. In creating a mindful walking practice, we can become more aware of things outside of ourselves – the wind or sun on our body, the sounds of nature and other humans and machines in our external environments.

## IMPACT and SUPPORT

Mindful walking can be a powerful tool for self-healing by reducing stress and elevating mood,<sup>37-39</sup> as well as increasing focus and attention. When practiced outdoors in nature there are even greater benefits. Forest bathing or forest therapy, which involves walking and spending time in nature, has been scientifically proven to boost immune system function, reduce blood pressure and stress, improve mood, increase focus, accelerate healing, increase energy level and improve sleep.<sup>40-42</sup> Since walking involves movement of the body, a regular practice also creates a healthy habit of regular gentle exercise that supports the physical benefits of an active lifestyle.

## PRACTICE CONSIDERATIONS

Mindful walking can take place anywhere your feet will take you. It is accessible to those who use a wheelchair, as well. When practicing on sidewalks and along streets, remember to pay attention to street lights, traffic and other people. When off the grid in the woods or in parks, be aware of variations in the ground level, tree roots and branches, as well as other people.

If there are not easily accessible outdoor spaces, mindful walking can be practiced indoors by walking in a circle or straight line.

## SCRIPT

Begin by standing straight with your back in an upright but not stiff position. Feeling your feet on the ground, center yourself and let your weight distribute evenly.

You can either clasp your hands behind your back or in front of you, or you can just let them hang at your side — whatever feels most comfortable and natural for you.

Drop your gaze slightly downward, with eyes softly fixed on the ground about 8 feet ahead of you. Step out with your left foot, feeling it swing forward as you gently graze the ground with your foot. Feel the sensation as you then place weight on your heel and then shift forward by placing weight on the ball of your foot. Next step out with your right foot, again feeling it swing forward as you gently graze the ground, shifting weight from the heel to the ball of your foot as you move forward. Notice your back foot slowly start to rise and begin its step forward as the front one completes each of its own.

Continue walking on a single path at a steady, slow pace that feels comfortable to you. Let yourself walk with ease and grace, in a way that feels natural to you, not forced or exaggerated.

Left foot... right foot... left foot... right foot

Allow your attention to become present in the moment. Simply focus on your movement without trying to control it. You are not walking to get anyplace. You are not going anywhere in particular, making it easier to be just where you are. You may try varying your speed to discover a pace that keeps you the most present.

When you reach the end of your path, pause for a moment. Then re-center yourself, turn, and again pause before taking your next step.

Be fully present with every step and every breath. Appreciate the solid ground beneath you, feeling the sensations of your movement – in your feet, in your legs, in your posture, in your gait. Notice your breath coming in and out of your body. Moment to moment. Step by step.

If thoughts, sounds or other distractions arise for you that pull your attention away from the experience of walking, acknowledge them and then let them go by refocusing on the sensations of your movement.

You will now complete this practice by coming to a natural stop. Bring attention to how it feels to just be standing, no longer in motion. Feeling once again your feet on the ground with weight traveling down through your legs, through your feet, into the earth. Experiencing yourself standing and just being as you bring your practice to a close.

# Reflective Writing

## DESCRIPTION

Many people use reflective (or expressive) writing and journaling to allow their inner thoughts to be expressed. Often we are moving so quickly in our lives that we do not take the time to truly listen to ourselves. Instead, we revisit stressful circumstances over and over again without a deeper connection to our deepest thoughts and feelings. Setting aside a period of time each day to write or journal, without editing our thoughts and feelings in any way, can be a positive contribution in our health and resiliency.

## IMPACT and SUPPORT

Research has shown that reflective writing or journaling can actually reduce physical symptoms and, in some instances, reduce the need for medication.<sup>43-45</sup> Writing about painful situations can create an “off-loading” effect that boosts immune function, improves mood and lowers stress.<sup>46</sup> Journaling for just 20 minutes daily can increase creative problem solving.

## PRACTICE CONSIDERATIONS

Be sure to have paper and something with which to write. You can use pens, pencils, markers, or crayons. Paper can be in single sheets, a notebook, or a journal. Some people may prefer to write or journal electronically.

There are no limits to the topic. You may find it useful to journal about stressful life and work events or what satisfies or fulfills you. It is not necessary to write in grammatically correct sentences. You can let go of sentence structure and spelling. It is often useful to write “stream of consciousness” or whatever comes into your mind rather than directing or editing it. You might find it helpful to be prompted by an open-ended sentence such as, “Today I feel...” or, “What I find most difficult/satisfying/fulfilling/sad is...”

The scripts below provide a few examples of prompted topics on which to write: what brings you joy and three good things and your role in it.

## SCRIPTS

### SCRIPT #1

#### What Brings You Joy?

First, close your eyes or gaze softly downward and consider what brings you joy in your life.

When you are ready, lift your gaze or open your eyes and use your paper and pen/pencil/crayons/markers to draw an expression of what brings you joy. Your work can be abstract, concrete or random. Let your pen/pencil/crayons/markers do the work without stopping to judge. You may use extra paper as needed.

Pause now so you can study your drawing. Consider the following questions and write your thoughts on a new piece of paper.

1. What is the essence of what brings you joy? How is it reflected in your drawing?
2. How can you concretely bring this essence of joy into your daily life?

Additional Questions to Consider:

1. How might you use this experience to keep joy in the forefront of your daily life?
2. Who found this type of experience challenging? What may have made it less challenging?
3. How might you use this reflective writing activity in the future for yourself, or those you serve?

## Script #2

### Three Good Things

The “Three Good Things” exercise is a powerful positive psychology technique. From a biological perspective, our brains are hardwired to reflect, notice and remember the negative as a survival mechanism and a way to avoid that which causes physical and emotional discomfort. This tendency to focus on the negative can feed depression and burnout. Taking time to reflect upon three good things that happened in the day, along with what led to them, brings awareness to the positive heartfelt moments of the day and reminds us of the positive role we have played.

Studies have shown that individuals are better able to recognize more good/positive things and feel increased happiness after only 1 week of doing the exercise.<sup>47-50</sup> It is not that more good/positive things are happening, just that they could be recognized more often. Research has also demonstrated that participants who regularly used this technique for 4 weeks and longer have increased levels of happiness and decreased symptoms of depression when compared to a control group.<sup>47,48,50</sup> Additional studies using this technique with Duke Neonatal ICU Staff showed an increase in happiness and decrease in burnout. Results with Duke Internal Medicine Residents showed lower burnout, fewer depressive symptoms, greater happiness, improved work-life balance, fewer conflicts with colleagues, and improved sleep quality.

Before we begin, you will need to have paper and something to write with such as a pen or pencil.

When you are ready, take a few moments to think of the events of today. You may close your eyes or gaze softly downward. Reflect upon the good things that have happened today. They don't have to be grand things like a big job promotion or winning a lottery. They can be simple such getting outside for a walk with a friend in the mild weather or making someone smile from ear to ear.

When you are ready you may open your eyes or lift your gaze. Write down three good things that happened today and your specific role in making them happen.

# Mindful Eating

## DESCRIPTION

How many of us have had the experience of eating an entire bag of chips or a pint of ice cream without even realizing it? When this happens, most (if not all) of us notice and appreciate the full taste of our first few bites, but can hardly remember the rest. Mindless eating can happen when we are simultaneously doing other activities such as working, driving, watching television or talking on the telephone. Eating becomes a secondary, almost less important, experience rather than the enjoyable and nurturing one that it should be.

Mindful eating allows us to savor our foods and have a full sensory experience with every meal. It encourages us to take time when eating to enjoy each and every bite and how the foods make us feel. Mindful eating also promotes taking a pause when choosing foods so that we are more likely to make choices that are nurturing and healthy for us. Not only is it a practice of listening to our bodies, noticing what it needs or does not need in the moment, but it tunes us into the joy of eating – the tastes, smells, textures and activation of pleasure centers in the brain.

## IMPACT and SUPPORT

Mindful eating has been shown to reduce binge eating, emotional eating and the eating of sweets<sup>7,9,10,51</sup>. On a physiological level, mindful eating has been associated with lower fasting glucose levels.<sup>51</sup> Slowing down when eating also allows for increased enjoyment of foods, improved digestion, optimal nutrient absorption and signaling of satiety (or fullness).<sup>52-55</sup>

## PRACTICE CONSIDERATIONS

If you do not have raisins for this exercise, or do not want to eat raisins, any food will do. Other foods to consider include baby carrots, Hershey kisses, or apple slices.

## SCRIPT

First take a raisin and hold it between your pointer finger and thumb. Bring your attention to the raisin as if it were a novel item, imagining that you have never seen one before in your life. (PAUSE)

Take the time to observe the raisin carefully - really see it - gaze at it with care and full attention. Let your eyes explore every part of it, noticing its shape, colors and surfaces. Examine its grooves, where the light shines and shadows. (PAUSE)

Rotate and move the raisin between your fingers, continuing to explore its texture. Apply a small bit of pressure to notice whether it is soft or hard. You might close your eyes if that helps you to focus and enhance your sense of touch. (PAUSE)

In now recognizing this is a raisin, note any thoughts you might have about raisins - any memories around them or feelings of liking or disliking them. (PAUSE)

Hold the raisin under your nose, and inhale naturally. With each in-breath, notice any aroma or smell that arises. Bring awareness also to any effect in your mouth or stomach. (PAUSE)

Now bring the raisin slowly up to your mouth, noticing how your hand and arm know exactly how and where to position it. Also being aware if you are salivating as the mind and body anticipate eating. (PAUSE)

Place the raisin gently into your mouth, without yet chewing. Hold the raisin in your mouth for at least 10 seconds, exploring it with your tongue, feeling the sensations of having it there. Notice this pause and how it feels to take some time before eating the raisin. (PAUSE)

When you are ready, prepare to chew the raisin. Take one or two bites into it and notice what happens, bringing your full attention its taste and texture as you continue chewing. (PAUSE)

Take time to chew without swallowing, noticing the taste and texture of the raisin in your mouth and how they may change over time. (PAUSE)

When you feel ready to swallow the raisin, bring awareness to the sensation so that even this is experienced consciously. (PAUSE)

Lastly, notice what is left of the raisin as you swallow and it travels down to your stomach. Notice how your body as a whole is feeling after completing this exercise.

## DEBRIEF

Take a few moments to write down your reflections on the following questions:

- How was this experience the same or different from how you normally eat?
- What, if anything, surprised you about the experience?
- What did you notice with the raisin (or whatever food) in terms of sight, touch, sound, smell, and taste?
- What thoughts or memories popped up while doing this practice?
- What is one tip for yourself that you are going to take from this experience to apply to your eating habits in the future?

## DAILY PRACTICE

Many people find it helpful to start out with a particular mealtime when practicing mindful eating. You might choose a specific location to eat, such as the dining table or the lunchroom at work. Maybe choose a favorite plate or bowl that is just the right size for the serving you want to eat. Eat without distraction, television off and

cell phone placed out of reach, giving your full attention to the sensory experience of your meal. Put your fork or spoon down between each bite so that you can fully appreciate each mouthful.

You can also try switching up how you eat. If you generally eat with customary utensils, try using chopsticks instead. Take smaller portions, eat more slowly and look at your food more closely. The preparation of food in itself, washing and cutting vegetables, serves to keep us present in the moment, detach from distractions and feel greater joy in the food we eat.

# Loving Kindness

## DESCRIPTION

The positive experiences of social connection, caring relationships and community are linked to happiness, resiliency and well-being.<sup>56,57</sup> At times we find ourselves in situations where we are unable to affect a change or make a difference in our own or someone else's life. The ancient practice of loving-kindness meditation (also known as "metta" meditation) focuses on developing feelings of goodwill, kindness and warmth – feelings that we do have the ability to control. Loving-kindness meditation serves as one way to take a pause, relieve stress and to extend kindness and compassion to ourselves and others.

## IMPACT and SUPPORT

Research as shown routinely practicing loving-kindness mediation can induce the relaxation response and increase feelings of love, joy, hope, well-being, compassion and social connection.<sup>58-64</sup> It has also been shown to decrease emotional tension and symptoms of depression and posttraumatic stress disorder (PTSD).<sup>65</sup>

## PRACTICE CONSIDERATIONS

This practice is appropriate for any location at any time of the day. Loving-kindness meditation can be practiced seated or lying down, with the eyes closed or open with a soft downward gaze.

Classically, the meditation is practiced using 6 categories and 4 phrases.

## SCRIPT

Start by sitting or lying down in a comfortable position. You may choose to close your eyes or have a soft downward gaze. Relax the breath by taking three slow, deep breaths. First direct your mind toward a loved one. Bring their image to mind, the way that you feel around them, think of the gifts they bring to your life.

Silently repeat the following phrases directed towards this person:

- May he/she be happy
- May he/she be healthy
- May he/she be peaceful
- May he/she be safe

If these phrases do not resonate with you, feel free to choose other phrases that speak more clearly to what you want for this person.

You may repeat these phrases several times directed towards this person. When you feel complete, let the image or sense of this person fade.

Repeat the above using some or all of the following categories:

- teacher or mentor who has had a positive influence in your life
- a neutral person such as a grocery store clerk or a neighbor or someone at work
- a difficult or challenging person
- yourself
- all people and beings

End the practice when you feel complete.

# Guided Imagery

## DESCRIPTION

Guided imagery, or visualization, encompasses a number of techniques meant to explore our beliefs and attitudes about ourselves and the world around us by tapping into our subconscious mind. This exploration is intended to impact our physical and mental well-being, bringing about positive changes such as relaxation, better focus and improved performance. Guided imagery has many uses that include: stress reduction, sleep improvement, pain management, promotion of healing with surgery or illness, behavior change (e.g. losing weight, smoking cessation), and enhancing performance (e.g. athletics, public speaking).

Guided imagery works by utilizing our imagination and the mind-body connection. It involves the eliciting of mental images that allow us to re-create memories or to visualize future and hypothetical experiences. Using all of our senses – sight, sound, taste, smell, movement and feeling – we invite our minds to imagine every detail related to our visions. In doing so, we can influence our behaviors and responses to help achieve a desired outcome.

## IMPACT and SUPPORT

The body tends to respond to visualization in the same way as if it were an actual experience. For example, if we imagine slowly sucking on a lemon slice with great detail – the sour, tart taste and the soft, juicy texture – we will soon begin to salivate. Research has shown mental rehearsing or motor imagery to be as effective as physical practice in athletics or other types of performance.<sup>66-71</sup> Guided imagery has also been shown to reduce stress, anxiety, pain, nausea, depression, fatigue, insomnia and fear of medical procedures in patients with arthritis, cancer, sickle cell and other chronic conditions.<sup>72-77</sup>

## PRACTICE CONSIDERATIONS

Guided imagery can be led either in-person by a trained practitioner or by using audio recordings to facilitate the technique with participants. No special equipment is needed, though cushions or mats may be desired if your practice takes place while sitting or lying on hard surfaces.

## SCRIPT

### Easing into Sleep

Find a comfortable position. (PAUSE)

For the next few minutes, I invite you to experience a gentle way of easing into sleep. (PAUSE)

So your task right now is only to listen (PAUSE) as you begin finding a sense of comfort. (PAUSE)

You might start by noticing the support beneath your body, allowing your muscles to soften and let go. (PAUSE)

You might feel that support all the way down your body from your face and neck, into your back, chest and belly, down into your arms and legs and into your toes. (PAUSE)

As I begin to lead you in a period of deep relaxation (PAUSE), you might also prepare yourself mentally. Some people do that by thinking of a time when they felt extremely comfortable. When they felt cocooned by covers. Other people do that by remembering a place where they were safe and comfortable, where there was nothing asked of them at all. Just a sense of peacefulness and well-being.

So however you choose to prepare yourself, it's just nice to notice how the mind has access to so many wonderful relaxing sensations and memories. (PAUSE)

How the mind has the ability to support muscles unwinding and the breath easing comfortably and effortlessly. (PAUSE)

Tucking into that soft, supportive space into a position of ease and a deeper state of relaxation. And that state of relaxation is such a nice place to be, such an inviting opening into rest. (PAUSE)

As you rest, you could imagine yourself somewhere with the beginning of a sunset. You may notice how the light changes, you might notice how the colors begin to paint the sky. It's fascinating as you watch the sunset just how much you can become absorbed into its incredible beauty. It's restful to notice how the colors are blending from one moment to the next, and how the pinks and oranges with this moment may become purples and blues of the next.

And that whole process of allowing the sun to set and your job is only to watch and become absorbed. And it's such an interesting process. You can't speed the sunset. You just have to experience it as it unfolds, softly and gently. Just allowing yourself to be there easing comfortably and thoroughly into the moment. And as you become gently cocooned in this image of a sunset it's nice to remember that deep inside the body and mind are at rest, just watching as the colors change and begin to fade into night.

In a moment I'm going to be quiet. And during that time your mind can make whatever associations that are most helpful to you to support your sleep and allow you to become fully absorbed in the setting sun. (PAUSE)

The mind is able to find just what is most supportive and what part of this most resonates as a way to support you even more deeply than you would imagine. Knowing that the sunset happens every day. It's nice to know that you can choose to watch it whenever you wish. Breathing in and out gently, softly as you rest.

# Establishing Your Practice

## ACTIVATING THE RELAXATION RESPONSE AND STRENGTHENING RESILIENCY

We have experienced 9 practices to activate the relaxation response and strengthen our resiliency: three deep breaths (with phrase or not); yoga, progressive muscle relaxation (PMR); mindful walking, reflective writing/journaling; mindful eating, loving-kindness meditation, three good things and your role in it, and guided imagery.

**1. Which of these will you choose to practice over the next 3 months?**

**2. When will you practice?**

**3. How will you keep your motivation strong?**

**4. What barriers to practice might arise and what strategies will you use to overcome them?**

**5. What are your backup strategies?**

**6. What difference do you think this practice will make in your everyday life, both personally and professionally?**

**7. What difference do you think this practice will make 3 years from now as you continue to have it as part of your life?**

# References

1. Carlson LE. Mindfulness-Based Interventions for Physical Conditions: A Narrative Review Evaluating Levels of Evidence. *ISRN Psychiatry*. 2012;2012.
2. Gilmartin H, Goyal A, Hamati MC, Mann J, Saint S, Chopra V. Brief Mindfulness Practices for Healthcare Providers - a Systematic Literature Review. *The American journal of medicine*. 2017.
3. Keng SL, Smoski MJ, Robins CJ. Effects of Mindfulness on Psychological Health: A Review of Empirical Studies. *Clinical psychology review*. 2011;31(6):1041-1056.
4. Lomas T, Medina JC, Ivtzan I, Rupprecht S, Eiroa-Orosa FJ. A systematic review of the impact of mindfulness on the well-being of healthcare professionals. *Journal of clinical psychology*. 2017.
5. Gotink RA, Chu P, Busschbach JJV, Benson H, Fricchione GL, Hunink MGM. Standardised Mindfulness-Based Interventions in Healthcare: An Overview of Systematic Reviews and Meta-Analyses of RCTs. *PLoS ONE*. 2015;10(4).
6. Godsey J. The role of mindfulness based interventions in the treatment of obesity and eating disorders: an integrative review. *Complementary therapies in medicine*. 2013;21(4):430-439.
7. Katterman SN, Kleinman BM, Hood MM, Nackers LM, Corsica JA. Mindfulness meditation as an intervention for binge eating, emotional eating, and weight loss: a systematic review. *Eating behaviors*. 2014;15(2):197-204.
8. Keesman M, Aarts H, Hafner M, Papias EK. Mindfulness Reduces Reactivity to Food Cues: Underlying Mechanisms and Applications in Daily Life. *Current addiction reports*. 2017;4(2):151-157.
9. O'Reilly GA, Cook L, Spruijt-Metz D, Black DS. Mindfulness-based interventions for obesity-related eating behaviours: a literature review. *Obesity reviews : an official journal of the International Association for the Study of Obesity*. 2014;15(6):453-461.
10. Warren JM, Smith N, Ashwell M. A structured literature review on the role of mindfulness, mindful eating and intuitive eating in changing eating behaviours: effectiveness and associated potential mechanisms. *Nutrition research reviews*. 2017:1-12.
11. Kang Y, O'Donnell MB, Strecher VJ, Falk EB. Dispositional Mindfulness Predicts Adaptive Affective Responses to Health Messages and Increased Exercise Motivation. *Mindfulness*. 2017;8(2):387-397.
12. Garland SN, Zhou ES, Gonzalez BD, Rodriguez N. The Quest for Mindful Sleep: A Critical Synthesis of the Impact of Mindfulness-Based Interventions for Insomnia. *Current sleep medicine reports*. 2016;2(3):142-151.
13. Li W, Howard MO, Garland EL, McGovern P, Lazar M. Mindfulness treatment for substance misuse: A systematic review and meta-analysis. *Journal of substance abuse treatment*. 2017;75:62-96.
14. Mariotti A. The effects of chronic stress on health: new insights into the molecular mechanisms of brain-body communication. *Future Science OA*. 2015;1(3).
15. Dhruva A, Miaskowski C, Abrams D, et al. Yoga breathing for cancer chemotherapy-associated symptoms and quality of life: results of a pilot randomized controlled trial. *Journal of alternative and complementary medicine (New York, NY)*. 2012;18(5):473-479.
16. Aritzeta A, Soroa G, Balluerka N, Muela A, Gorostiaga A, Aliri J. Reducing Anxiety and Improving Academic Performance Through a Biofeedback Relaxation Training Program. *Applied psychophysiology and biofeedback*. 2017.
17. Kim SH, Schneider SM, Kravitz L, Mermier C, Burge MR. Mind-body practices for posttraumatic stress disorder. *Journal of investigative medicine : the official publication of the American Federation for Clinical Research*. 2013;61(5):827-834.
18. Borge CR, Mengshoel AM, Omenaas E, et al. Effects of guided deep breathing on breathlessness and the breathing pattern in chronic obstructive pulmonary disease: a double-blind randomized control study. *Patient education and counseling*. 2015;98(2):182-190.

19. Liu YQ, Yan LX, Zhang LY, Song QH, Xu RM. Conspicuous effect on treatment of mild-to-moderate COPD by combining deep-breathing exercise with oxygen inhalation. *International journal of clinical and experimental medicine*. 2015;8(6):9918-9924.
20. Singh V, Wisniewski A, Britton J, Tattersfield A. Effect of yoga breathing exercises (pranayama) on airway reactivity in subjects with asthma. *Lancet (London, England)*. 1990;335(8702):1381-1383.
21. Chang DG, Holt JA, Sklar M, Groessl EJ. Yoga as a treatment for chronic low back pain: A systematic review of the literature. *Journal of orthopedics & rheumatology*. 2016;3(1):1-8.
22. Cramer H, Lauche R, Haller H, Dobos G. A systematic review and meta-analysis of yoga for low back pain. *The Clinical journal of pain*. 2013;29(5):450-460.
23. Innes KE, Selfe TK. Yoga for Adults with Type 2 Diabetes: A Systematic Review of Controlled Trials. *Journal of diabetes research*. 2016;2016:6979370.
24. Yang ZY, Zhong HB, Mao C, et al. Yoga for asthma. *The Cochrane database of systematic reviews*. 2016;4:Cd010346.
25. Herbert A, Esparham A. Mind–Body Therapy for Children with Attention-Deficit/Hyperactivity Disorder. *Children*. 2017;4(5).
26. Cerrillo-Urbina AJ, Garcia-Hermoso A, Sanchez-Lopez M, Pardo-Guijarro MJ, Santos Gomez JL, Martinez-Vizcaino V. The effects of physical exercise in children with attention deficit hyperactivity disorder: a systematic review and meta-analysis of randomized control trials. *Child: care, health and development*. 2015;41(6):779-788.
27. de Lorent L, Agorastos A, Yassouridis A, Kellner M, Muhtz C. Auricular Acupuncture Versus Progressive Muscle Relaxation in Patients with Anxiety Disorders or Major Depressive Disorder: A Prospective Parallel Group Clinical Trial. *J Acupunct Meridian Stud*. 2016;9(4):191-199.
28. Isa MR, Moy FM, Abdul Razack AH, Zainuddin ZM, Zainal NZ. Impact of applied progressive deep muscle relaxation training on the level of depression, anxiety and stress among prostate cancer patients: a quasi-experimental study. *Asian Pacific journal of cancer prevention : APJCP*. 2013;14(4):2237-2242.
29. Li Y, Wang R, Tang J, et al. Progressive Muscle Relaxation Improves Anxiety and Depression of Pulmonary Arterial Hypertension Patients. *Evidence-based Complementary and Alternative Medicine : eCAM*. 2015;2015.
30. Vancampfort D, Correll CU, Scheewe TW, et al. Progressive muscle relaxation in persons with schizophrenia: a systematic review of randomized controlled trials. *Clinical rehabilitation*. 2013;27(4):291-298.
31. Zhao L, Wu H, Zhou X, Wang Q, Zhu W, Chen J. Effects of progressive muscular relaxation training on anxiety, depression and quality of life of endometriosis patients under gonadotrophin-releasing hormone agonist therapy. *European journal of obstetrics, gynecology, and reproductive biology*. 2012;162(2):211-215.
32. Zargarzadeh M, Shirazi M. The effect of progressive muscle relaxation method on test anxiety in nursing students. *Iranian Journal of Nursing and Midwifery Research*. 2014;19(6):607-612.
33. Sundram BM, Dahlui M, Chinna K. Effectiveness of progressive muscle relaxation therapy as a worksite health promotion program in the automobile assembly line. *Industrial Health*. 2016;54(3):204-214.
34. Manzoni GM, Pagnini F, Castelnuovo G, Molinari E. Relaxation training for anxiety: a ten-years systematic review with meta-analysis. *BMC Psychiatry*. 2008;8:41.
35. Charalambous A, Giannakopoulou M, Bozas E, Marcou Y, Kitsios P, Paikousis L. Guided Imagery And Progressive Muscle Relaxation as a Cluster of Symptoms Management Intervention in Patients Receiving Chemotherapy: A Randomized Control Trial. *PLoS ONE*. 2016;11(6).
36. Akmes ZB, Oran NT. Effects of Progressive Muscle Relaxation Exercises Accompanied by Music on Low Back Pain and Quality of Life During Pregnancy. *Journal of midwifery & women's health*. 2014;59(5):503-509.
37. Teut M, Roesner EJ, Ortiz M, et al. Mindful walking in psychologically distressed individuals: a randomized controlled trial. *Evidence-based Complementary and Alternative Medicine : eCAM*. 2013;2013:489856.



38. Demarzo MM, Montero-Marin J, Stein PK, Cebolla A, Provinciale JG, Garcia-Campayo J. Mindfulness may both moderate and mediate the effect of physical fitness on cardiovascular responses to stress: a speculative hypothesis. *Frontiers in physiology*. 2014;5:105.
39. Gotink RA, Hermans K, Geschwind N, De Nooij R, De Groot WT, Speckens AEM. Mindfulness and mood stimulate each other in an upward spiral: a mindful walking intervention using experience sampling. *Mindfulness (N Y)*. 2016;7(5):1114-1122.
40. Hansen MM, Jones R, Tocchini K. Shinrin-Yoku (Forest Bathing) and Nature Therapy: A State-of-the-Art Review. *International journal of environmental research and public health*. 2017;14(8).
41. Li Q, Kawada T. Possibility of clinical applications of forest medicine. *Nihon eiseigaku zasshi Japanese journal of hygiene*. 2014;69(2):117-121.
42. Li Q, Kobayashi M, Wakayama Y, et al. Effect of phytoncide from trees on human natural killer cell function. *International journal of immunopathology and pharmacology*. 2009;22(4):951-959.
43. Redwine L, Henry BL, Pung MA, et al. A pilot randomized study of a gratitude journaling intervention on HRV and inflammatory biomarkers in Stage B heart failure patients. *Psychosomatic medicine*. 2016;78(6):667-676.
44. Smyth JM, Stone AA, Hurewitz A, Kaell A. Effects of writing about stressful experiences on symptom reduction in patients with asthma or rheumatoid arthritis: a randomized trial. *JAMA*. 1999;281(14):1304-1309.
45. Zhou C, Wu Y, An S, Li X. Effect of Expressive Writing Intervention on Health Outcomes in Breast Cancer Patients: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *PLoS ONE*. 2015;10(7):e0131802.
46. Baikie KA, Wilhelm K. Emotional and physical health benefits of expressive writing. *Advances in Psychiatric Treatment*. 2005;11(5):338-346.
47. Gander F, Proyer RT, Ruch W, Wyss T. Strength-Based Positive Interventions: Further Evidence for Their Potential in Enhancing Well-Being and Alleviating Depression. *Journal of Happiness Studies*. 2013;14(4):1241-1259.
48. Mongrain M, Anselmo-Matthews T. Do positive psychology exercises work? A replication of Seligman et al. (2005). *Journal of clinical psychology*. 2012;68(4):382-389.
49. Proyer RT, Gander F, Wellenzohn S, Ruch W. Positive psychology interventions in people aged 50–79 years: long-term effects of placebo-controlled online interventions on well-being and depression. *Aging & Mental Health*. 2014;18(8):997-1005.
50. Seligman ME, Steen TA, Park N, Peterson C. Positive psychology progress: empirical validation of interventions. *Am Psychol*. 2005;60(5):410-421.
51. Mason AE, Epel ES, Kristeller J, et al. Effects of a mindfulness-based intervention on mindful eating, sweets consumption, and fasting glucose levels in obese adults: data from the SHINE randomized controlled trial. *J Behav Med*. 2016;39(2):201-213.
52. Miquel-Kergoat S, Azais-Braesco V, Burton-Freeman B, Hetherington MM. Effects of chewing on appetite, food intake and gut hormones: A systematic review and meta-analysis. *Physiology & behavior*. 2015;151:88-96.
53. Angelopoulos T, Kokkinos A, Liaskos C, et al. The effect of slow spaced eating on hunger and satiety in overweight and obese patients with type 2 diabetes mellitus. *BMJ open diabetes research & care*. 2014;2(1):e000013.
54. Kokkinos A, le Roux CW, Alexiadou K, et al. Eating slowly increases the postprandial response of the anorexigenic gut hormones, peptide YY and glucagon-like peptide-1. *The Journal of clinical endocrinology and metabolism*. 2010;95(1):333-337.
55. Andrade AM, Greene GW, Melanson KJ. Eating slowly led to decreases in energy intake within meals in healthy women. *Journal of the American Dietetic Association*. 2008;108(7):1186-1191.
56. Feeney BC, Collins NL. A New Look at Social Support. *Personality and Social Psychology Review*. 2014;19(2):113-147.
57. Waldinger RJ, Schulz MS. What's love got to do with it? Social functioning, perceived health, and daily happiness in married octogenarians. *Psychol Aging*. 2010;25(2):422-431.

58. Bankard J. Training Emotion Cultivates Morality: How Loving-Kindness Meditation Hones Compassion and Increases Prosocial Behavior. *Journal of religion and health*. 2015;54(6):2324-2343.
59. Galante J, Bekkers MJ, Mitchell C, Gallacher J. Loving-Kindness Meditation Effects on Well-Being and Altruism: A Mixed-Methods Online RCT. *Appl Psychol Health Well Being*. 2016;8(3):322-350.
60. He X, Shi W, Han X, Wang N, Zhang N, Wang X. The interventional effects of loving-kindness meditation on positive emotions and interpersonal interactions. *Neuropsychiatr Dis Treat*. 2015;11:1273-1277.
61. Hofmann SG, Grossman P, Hinton DE. Loving-kindness and compassion meditation: potential for psychological interventions. *Clinical psychology review*. 2011;31(7):1126-1132.
62. Leung MK, Chan CC, Yin J, Lee CF, So KF, Lee TM. Increased gray matter volume in the right angular and posterior parahippocampal gyri in loving-kindness meditators. *Soc Cogn Affect Neurosci*. 2013;8(1):34-39.
63. Shahar B, Szsepsenwol O, Zilcha-Mano S, et al. A wait-list randomized controlled trial of loving-kindness meditation programme for self-criticism. *Clin Psychol Psychother*. 2015;22(4):346-356.
64. Zeng X, Chiu CP, Wang R, Oei TP, Leung FY. The effect of loving-kindness meditation on positive emotions: a meta-analytic review. *Frontiers in psychology*. 2015;6:1693.
65. Kearney DJ, McManus C, Malte CA, Martinez ME, Felleman B, Simpson TL. Loving-kindness meditation and the broaden-and-build theory of positive emotions among veterans with posttraumatic stress disorder. *Med Care*. 2014;52(12 Suppl 5):S32-38.
66. Di Rienzo F, Blache Y, Kanthack TF, Monteil K, Collet C, Guillot A. Short-term effects of integrated motor imagery practice on muscle activation and force performance. *Neuroscience*. 2015;305:146-156.
67. Hadjibalassi M, Lambrinou E, Papastavrou E, Papathanassoglou E. The effect of guided imagery on physiological and psychological outcomes of adult ICU patients: A systematic literature review and methodological implications. *Australian critical care : official journal of the Confederation of Australian Critical Care Nurses*. 2017.
68. Hetu S, Gregoire M, Saimpont A, et al. The neural network of motor imagery: an ALE meta-analysis. *Neuroscience and biobehavioral reviews*. 2013;37(5):930-949.
69. Ranganathan VK, Siemionow V, Liu JZ, Sahgal V, Yue GH. From mental power to muscle power--gaining strength by using the mind. *Neuropsychologia*. 2004;42(7):944-956.
70. Ridderinkhof KR, Brass M. How Kinesthetic Motor Imagery works: a predictive-processing theory of visualization in sports and motor expertise. *J Physiol Paris*. 2015;109(1-3):53-63.
71. Ruffino C, Papaxanthis C, Lebon F. Neural plasticity during motor learning with motor imagery practice: Review and perspectives. *Neuroscience*. 2017;341:61-78.
72. Dobson C. Outcome results of self-efficacy in children with sickle disease pain who were trained to use guided imagery. *Appl Nurs Res*. 2015;28(4):384-390.
73. Dobson CE, Byrne MW. Original research: using guided imagery to manage pain in young children with sickle cell disease. *Am J Nurs*. 2014;114(4):26-36; test 37, 47.
74. Giacobbi PR, Jr., Stabler ME, Stewart J, Jaeschke AM, Siebert JL, Kelley GA. Guided Imagery for Arthritis and Other Rheumatic Diseases: A Systematic Review of Randomized Controlled Trials. *Pain management nursing : official journal of the American Society of Pain Management Nurses*. 2015;16(5):792-803.
75. Onieva-Zafra MD, Garcia LH, Del Valle MG. Effectiveness of guided imagery relaxation on levels of pain and depression in patients diagnosed with fibromyalgia. *Holistic nursing practice*. 2015;29(1):13-21.
76. Posadzki P, Lewandowski W, Terry R, Ernst E, Stearns A. Guided imagery for non-musculoskeletal pain: a systematic review of randomized clinical trials. *J Pain Symptom Manage*. 2012;44(1):95-104.
77. Meeus M, Nijs J, Vanderheiden T, Baert I, Descheemaeker F, Struyf F. The effect of relaxation therapy on autonomic functioning, symptoms and daily functioning, in patients with chronic fatigue syndrome or fibromyalgia: a systematic review. *Clinical rehabilitation*. 2015;29(3):221-233.