Optimizing Breath Make the most of your most basic function

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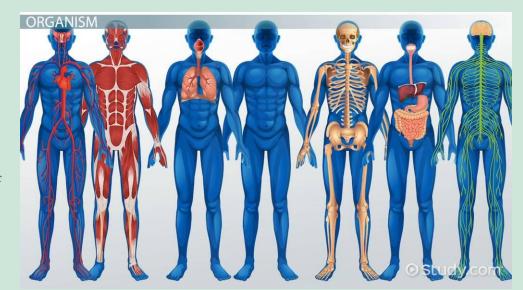


Part 1: Introduction

Why Improve the Quality of Our Breathing?

When you choose to improve your breath, all of your physiological functions improve because you are taking control of both *nourishing* your body with the inhalation and *cleansing* your body with your exhalation.

Chronic health issues (insomnia, issues with blood sugar, cholesterol, blood pressure, asthma, anxiety, etc) can all be aided by improving the quality of your breathing.



Why Improve the Quality of Our Breathing?

Beyond all the physical benefits, controlling your breath is used in many cultures as a spiritual or meditative practice, a tool for connecting to what various cultures identify as the source of life within us.



Breathing is our most basic function and is done unconsciously

Breath is so essential that it is *automatic*. When your breath is on "autopilot" the quality is determined by stress and other external factors.

You must decide to be conscious of and improve your breathing habits.

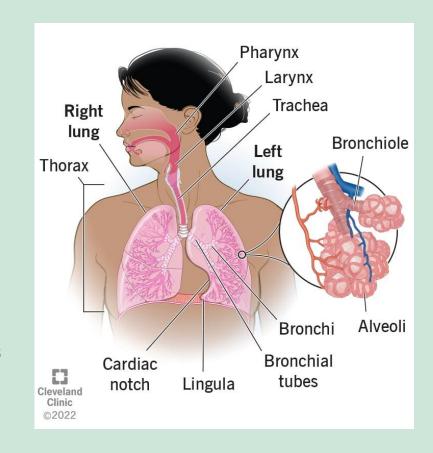


Breathing is Complex

The breathing mechanism includes all of your muscles from your nose to the bottom of your torso.

- Primary muscles are the intercostals between our ribs and our diaphragm. They are the ones we think of as our breathing muscles.
- Auxiliary (supportive/secondary) muscles (everything else between our noses and the bottom of our pelvis).

Coordinating and Strengthening these muscles on both the inhale and exhale is how you optimize the power of your breath.



THE POWER OF THE BREATH LIES IN THE EXHALE!

Our brains are hard-wired to keep us inhaling (pulling oxygen into our lungs)

Our exhale is not hard-wired in the same way, if we don't practice using the muscles of the exhale, they tend to be **weak and poorly controlled**, eventually contributing to a **buildup of waste products in our bodies**, and ultimately contributing to long-term health issues.



Next Steps: Identify, Observe, Adjust, Pace

The following sections of this video series will:

- 1. **Identify** the pieces of the breathing mechanism and process within your own body.
- 2. **Observe** your own style of breathing without making changes
- 3. Adjust the quality of your breath using what you've learned by observing
- 4. **Pace** yourself using the basic 8-4-8-4 breathing technique.

The goal of this series it to get you to commit to a short daily practice which can dramatically improve all components of your health, including your heart and lung health, digestion, sleep, mood, focus, ability to manage your emotions, and much more.

Part 2: Identify

What Are the Pieces of the Breathing Mechanism?

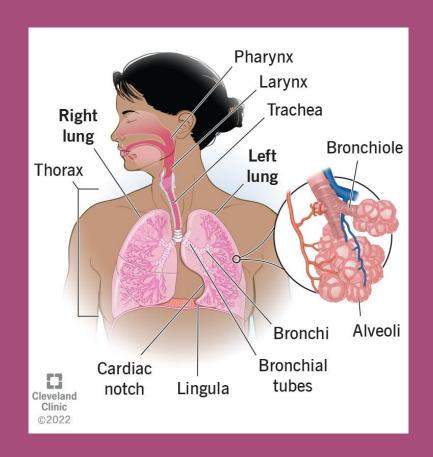
The Many Parts of the Breathing Mechanism

The first step to improving your breathing is to become aware of the many parts of the breathing mechanism by observing them.

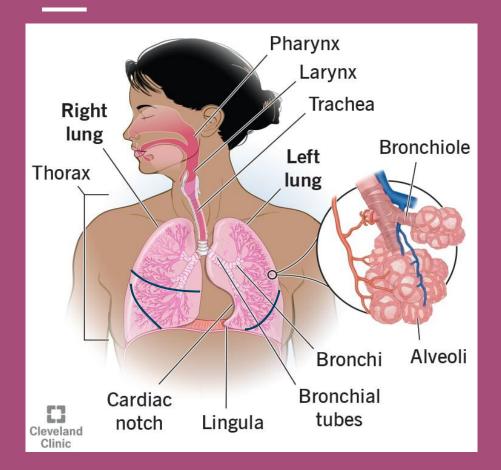
Observation allows us to become aware of our unconscious habits.

Do not change or judge your habits. Instead, observe them in your own body, noticing each of the components as you inhale, hold your breath for a few seconds, exhale and hold again for a few seconds before repeating the process.

Each of us develop unconscious habits and have overdeveloped areas and underdeveloped areas.



Lobes of the Lungs

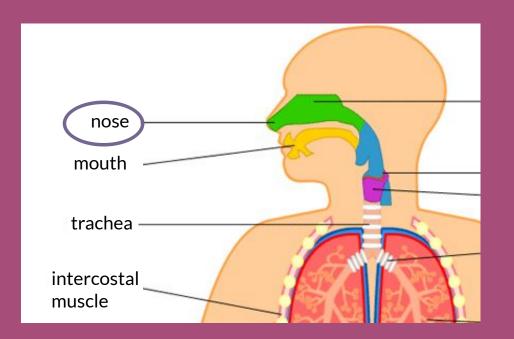


The lungs reach from the collarbone all the way down to the bottom of the ribs.

The left lung is separated into **two** lobes and the right into **three**.

Air must reach the edges of the lung sacks in order to properly exchange fresh air for our waste products.

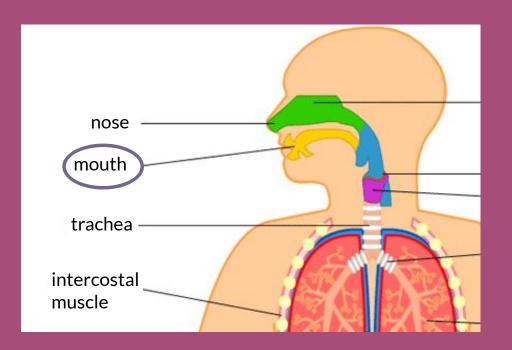
Nose



Keeping your sinuses clear is the first place to start when you want to improve your breathing. The nose regulates air temperature and acts as a natural air filter which protects the brain and lungs from irritants and contaminants.

If your sinuses are clogged you can look on the Breathe page (under Philosophy of Wellness tab) on our website for strategies for clearing them

Mouth



Your mouth is a backup for your nose as a means of inhalation and exhalation.

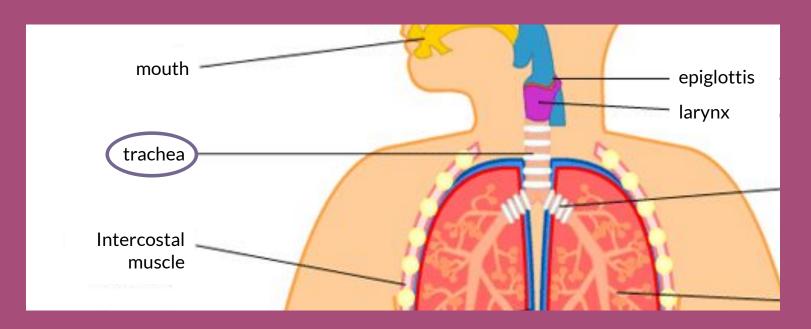
Inhaling through your mouth should be avoided. It is a source of lung damage because it doesn't filter air or regulate its temperature.

Mouth breathing is the primary source of allergies to pollens and airborne pollutants.

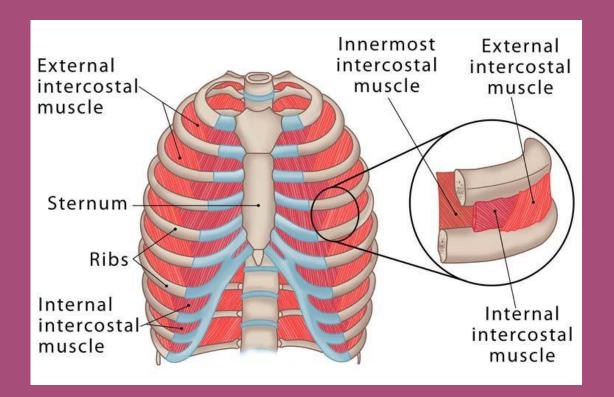
Trachea

Tightness in the trachea inhibits our ability to breathe properly.

This is a common stress response. It often is a function of grinding or clenching the teeth.



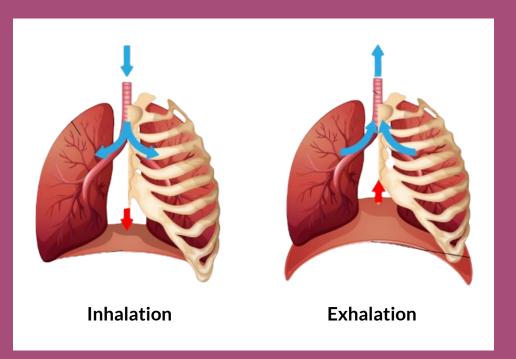
Intercostal Muscles



The internal and external intercostal muscles work together to expand and contract the lungs and the spaces between the ribs, pulling or pushing the air in and out.

Without exercising these muscles, we might only use them to 10% of their capacity. You can sustain life for a long time that way, but it is not *optimal*.

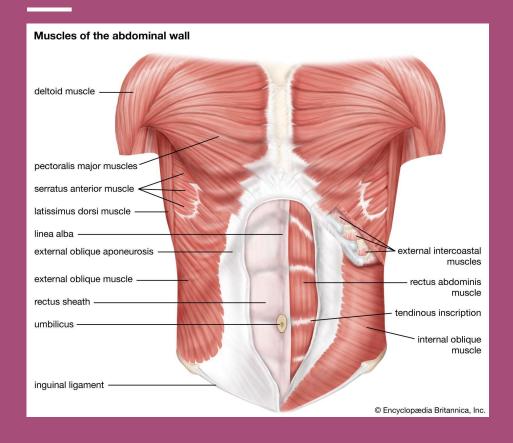
Diaphragm



The diaphragm is a large, dome-shaped *muscle* at the bottom of the rib cage which separates the upper body (where the lungs reside) from the lower body (where the digestive and reproductive organs reside). It has a single opening which allows food to go into our stomach from our esophagus.

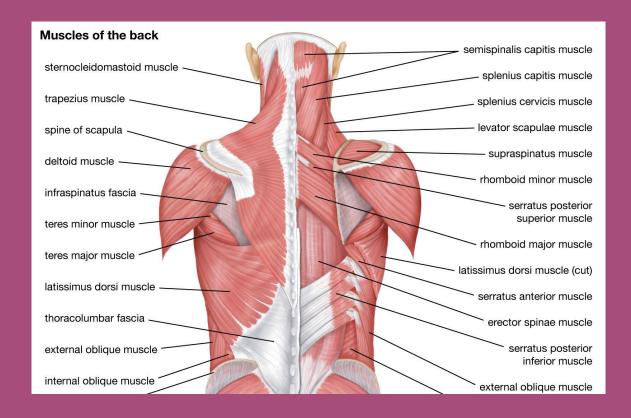
It acts as a very powerful pump for both the lungs and the abdominal area. If you are inhaling well it flattens out and pushes the belly and back away from the spine; when you are exhaling completely it contracts and pulls the belly and back muscles inwards towards the spine, and pushes upwards on the lungs, forcing air outwards.

Chest & Belly Muscles



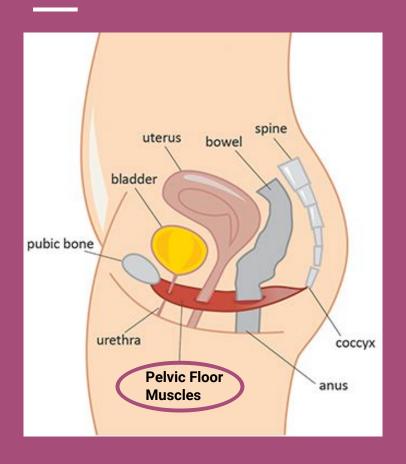
The large muscles on the front of our bodies (chest and belly) aid the breathing process because they are complex and are much larger and stronger than the intercostals and work on both the diaphragm and the intercostals when they are strong and active.

Back Muscles



The large muscles on our back aid the breathing process by expanding and contracting the lungs.
They are also very powerful muscles compared to the tiny intercostals.

Pelvic Floor Muscles



Pelvic floor muscles are a set of muscles that overlap to support your abdominal organs and hold them in place.

Weak or over-tight/spasmed pelvic floor muscles can lead to poorly functioning lower abdominal organs.

Strong, flexible pelvic floor muscles promote healthy lower belly organs that stay properly aligned with each other.

They can actively be engaged to support a more powerful exhale and stretched and make large to enhance the volume of the inhale.

Part 3: Observation

Identify your breathing habits in each part of your body

Observe

Now it's time to observe each part of your own breathing mechanism. I will talk you through each piece discussed in the previous section. As I do so, focus your attention on each piece for several rounds of inhale and exhale.

How does it look? If you are in front of a mirror, watch and see how each piece does or doesn't move. Look for symmetry (or lack thereof) from side-to-side.

How does it feel? Pay special attention to where you do and don't feel movement with each breath. It may be helpful for you to place one or both of your hands on each of the pieces as I talk you through them. If you are lying or sitting down, observe how each breath changes your body as it touches the surfaces you are on and how the interaction changes with the movement of the breath

Assume A Resting Position

A safe, comfortable, quiet place with clean air and without distractions is essential. If you are a highly visual person, you may want to sit in front of a mirror.

Make sure your nose is clear! (see strategies under our allergy page)

Breathing practice won't be successful if you don't feel safe or there is distraction and pollution around you. Your mind and body won't allow it.

Choose a location with live plants (they clean the air and use our exhaled products to nourish themselves) and away from traffic and other types of noise and toxic pollution.



Observe: Assume A Resting Position

- Lying down (savasana/corpse pose)
- Seated in a chair feet flat on the ground
- Cross legged (Lotus pose)







Use a pillow and/or a towel for support



Observe: Assume A Resting Position

- Relaxed jaw with space in the back of the throat and the top and bottom teeth are not touching
- Limbs are resting and doing no work
- Eyes are closed or have a soft focus on a single object in front of you
- Hands are loose and open
- Shoulders are dropped







Use a pillow and/or a towel for support

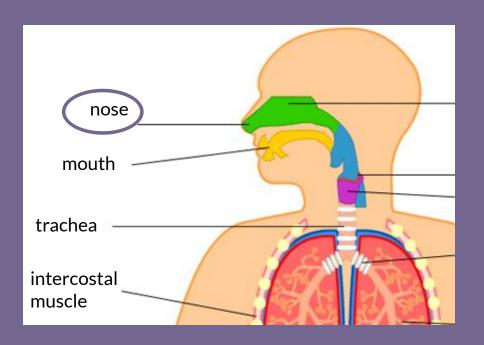


Observe: Track the Pieces of the Breathing Mechanism

Now that you're comfortable in a resting position I am going to walk you through each of the parts of the breathing mechanism and help you focus on what you unconsciously are doing with them as you breath.

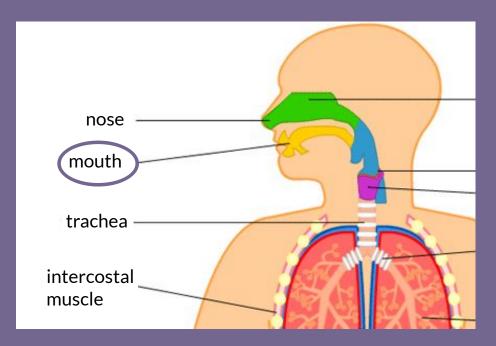
- Nose
- Mouth
- Trachea (throat)
- Chest,
- Intercostal muscles (your ribs will expand)
- Diaphragm
- Belly, and Lower Back Muscles
- Pelvic floor muscles

Nose



- Does the air enter and leave equally on both sides?
- Do you feel the air as it reaches the sinus spaces above your eyes?
- Do you feel the air as it reaches your cheekbones?
- Can you feel it reach the back of your head at the base of your skull?
- What sounds do you hear as the air passes through this area?

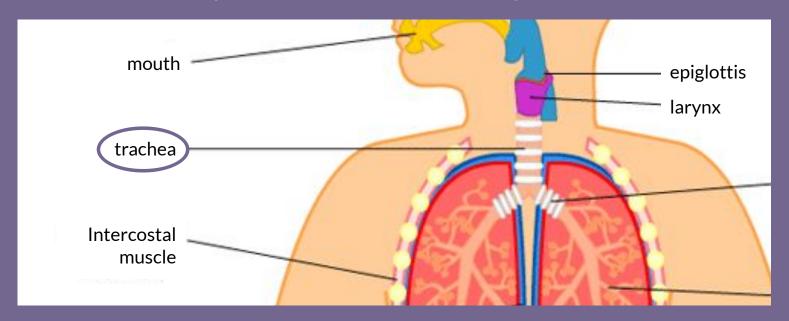
Mouth



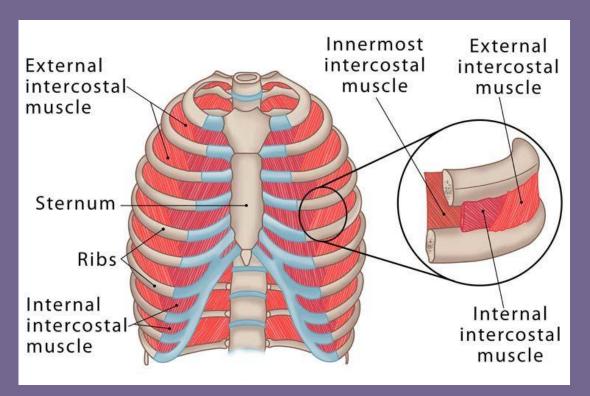
- Is your mouth open or closed when you are at rest?
- Is your jaw relaxed?
- Are your teeth touching each other?
- What do you feel in the back of your throat? Is it closed off or is the space wide and relaxed?
- What does the air feel like as it travels down the back of your throat?
- What sounds do you hear as the air passes through this area?

Trachea

- Do you feel a widening of the trachea as you drop your jaw?
- Can you feel the back of your neck resting on your bolster and moving as the air moves through the trachea?
- Do you feel tickling or irritation in the throat as the air passes through the trachea
- What sounds do you hear as the air passes through this area?

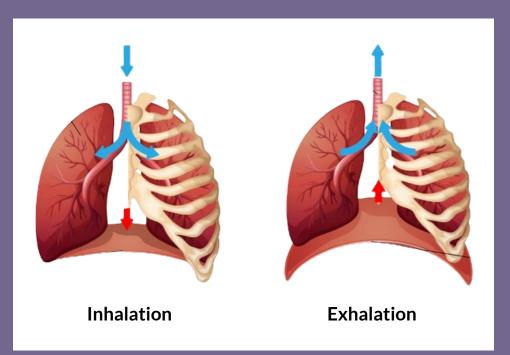


Intercostal Muscles



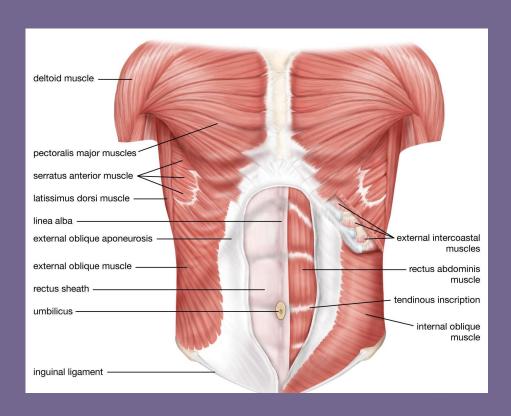
- Do you feel the spaces between the ribs lengthen and shorten?
- Are the spaces between all of them moving the same amount or do some move more than others?
- Do you feel your ribs stretch in all directions away from the sternum and the spine or do only one or two areas do the bulk of the movement?
- How does your chest plate/sternum react to the stretching of the ribs
- What sounds do you hear as the air passes through this area?

Diaphragm



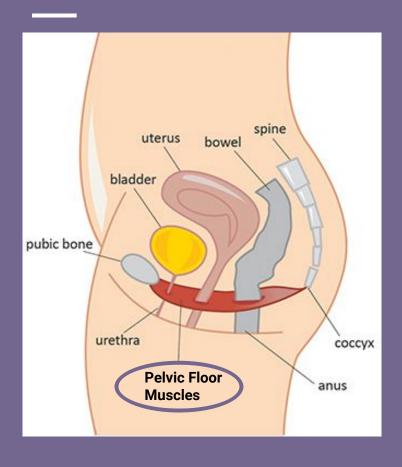
- Can you intentionally control the rising and falling of the diaphragm?
- What happens in your ribs, sternum and upper body as the diaphragm moves?
- What happens in the lower body as the diaphragm moves?
- Do you feel the separation of the upper body and lower body
- Can you expand the upper and lower body parts at the same time while moving the diaphragm?
- Can you expand them all directions away from the spine?
- Do you feel the effect of changes in the shape of the diaphragm on your ribs, collar bone, belly muscles,, shoulders and arm?

Chest, Belly, & Back Muscles



- Focus on the sensations in your chest muscles, the rib cage on both the front and back of your body and your belly button--how do these areas move with the breath?
- Do you use these muscles to inhale and exhale or are they passively moving with the ribs and diaphragm doing the work?
- Which other body parts are pushed and pulled around with their movement?
- How does everything change in relation to the floor, chair, cushion, etc.

Pelvic Floor Muscles



- Identify your pelvic floor muscles by lifting and dropping the urethra, as if you plan to start or stop urinating.
- As the pelvic floor muscles expand do you feel a relaxing of pressure on your bladder?
- Is there a sensation of pushing against the floor with the buttocks?
- Is there a sensation of pointing the pubic bone upwards toward the sky?
- Do you feel a shifting in sensation in your legs and feet with the movement of the pelvic floor muscles?

Part 4: Learn the Technique

8-4-8-4 Pattern

10 Cycles

Remove distractions and find a comfortable place to lie or sit

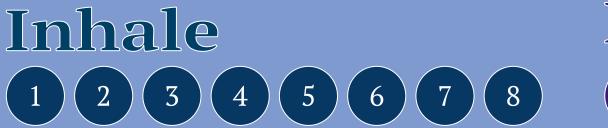
Make sure your spinal alignment is good

- Support the normal curves of the low back, and neck with a bolster (towel, pillow, etc) if necessary
- If you are sitting,
 place your feet flat on
 the ground and
 support yourself to
 hold that position as
 a posture of rest.



Inhale

- **Inhale** for a count of **eight** using only your nose. Try to match your counts with the natural pace of your breath
- Use the muscles that pull air in as if you were playing an accordion: use all the muscles
 of the breathing mechanism to expand the lung cavities, because you are actively pulling
 air downwards and away from the spinal column in all directions, which will cause the
 low back and belly to expand as well as the chest and upper back.
- The jaw, neck, shoulders, arms, hip muscles and legs should stay relaxed and unengaged, allowing the active muscles to move them slightly as they remain gently touching the pillows, bolsters and the floor beneath them.
- Hold your breath for a count of four at the end of the inhale.





Exhale

- Exhale for a count of 8 (use either the nose or mouth), reversing the
 process to actively exhale the entire contents of the lungs; pull your
 muscles upwards and towards the spinal column to push the air up
 and out, assisting the intercostals and diaphragm to expel the air. Do
 this for a count of 8
- Hold for a count of 4 at the end of the exhale.



Inhale

1 2 3 4 5 6 7 8

Hold

1 2 3 4

Exhale

1 2 3 4 5 6 7 8

Hold

1 2 3 4

The "Monkey Mind"

The main reason this practice is so difficult is that the mind is hardwired to respond to distractions. This is completely normal. Do not be discouraged if you don't get it right away.



ONLY Repeat the 8-4-8-4 process 10 times

When you first start, it can be discouraging and exhausting to do more than 10 repetitions of this pattern without losing the form.

It is important to not do more than 10 at a time until you can maintain the form through all 10 cycles.

A simple way to incorporate this into you daily routine is to start and/or end your day with it or find a quiet place during a lull in your day and practice at that time.

Remember: less is more; mastering the form is the key to getting maximum benefit from this exercise and being able to get the desired results from the final step in this process.



Part 5: Practice & Pacing

10 Breaths, then 10 Minutes

Use a Metronome

Once you have practiced the 8-4-8-4 technique in cycles, it's time to start using a metronome*. The objective here is to inhale and exhale completely and evenly, obtaining optimal nutrition from your inhale and optimal cleansing from your exhale.

Set the tempo to one that is comfortable to you. Choose a tempo that best matches your resting breathing rate and practice for 10 minutes.

Once you can keep a steady pace for 10 minutes at your natural breathing rate, the goal is to slow down the pace in order to have deeper, more complete inhales and exhales.

*You can find many free metronome apps or search for a free website (google has a metronome feature in their browser)



Switch up Your Resting Position

Once you can do a 10 minutes practice of breathing at a slow, steady pace it is time to explore how you adapt your breathing in different positions.

- Lying on your back
- Lying on your left side
- Lying on your right side
- Sitting cross-legged (lotus pose)
- Standing (mountain or tadasana pose)
- Child's pose







Moving On

Once you can keep the 8-4-8-4 pace in various resting positions for 10 minutes, you are ready to practice as you walk, pacing your steps with your breath.

This is the foundation for incorporating steady, full, complete breathing into your everyday activities, as practice will become habit and habit will become HEALTH!



If you have questions about any of the material in this presentation - or any other topic - you can email us at

herbalist@remediosnaturalesnm.com

Or check out our website where we provide information on many common health issues

RemediosNaturalesNM.com

