

Centerworks® Pilates Institute

Education for Empowerment & The Improvement of Whole Body Health

Breathing Basics

- ◆ The Benefits of Breathing Better.
- ◆ How Pilates Helps Facilitate Good Breathing Habits.
- ◆ Ways to Improve Breathing Techniques.
- ◆ Exercises to Practice Better Breathing.

INSPIRATION

(As defined by the Merriam-Webster Online Dictionary)

Main Entry: **in·spi·ra·tion** Pronunciation: "in(t)-sp&-'rA-sh&n, -(")spi-

Function: *noun*

The act of drawing in; *specifically* : the drawing of air into the lungs

Since Breathing is one of the very first concepts to teach a new student – what better topic to get things off to a good start! There are many ways to help new and experienced students find a deeper meaning to the breath work required for Pilates, improved posture, and a healthier life.

Joseph Pilates in *Return to Life* calls breathing the “shower of life.” Breathing is the first and last thing we do in life. It’s a good thing that we don’t have to think about taking each breath to stay alive, but a little practice with more efficient breathing habits contributes greatly to maintaining our good health.

Pilates Breathing is.....

Posterior-lateral rib breathing. Which means – emphasis is placed on breathing into the back of the ribcage.

Practicing this breathing technique is much easier standing or seated and more of a challenge, especially for new students, when lying on your back learning Matwork and Reformer exercises!

What’s the importance of developing back-rib breathing?

Breathing as practiced with Pilates, with a full inhale and a forced exhale, exchanges a maximum amount of air through our system. This rhythmic expansion and contraction created by our breath patterns helps to take pressure off our joints, makes it easier to move, and helps our brains think better.

The Function and Purpose of Posterior-Lateral Breathing

- ◆ **Inhaling expands the lungs, separates the ribs & helps to increase the natural curves of the spine.**
- ◆ Separating the ribs with each inhalation pulls every segment of the spine apart which reduces pressure on the discs and helps to develop the length and strength through the torso that we strive for with every Pilates exercise.
- ◆ The rhythm of efficient posterior-lateral rib breathing facilitates pumping vital fluids through the spinal column to nourish the brain & body.
- ◆ Breathing this way & increasing the normal thoracic curve helps to:
 - Create joint space for better movement of the spine in all directions.
 - Places the upper spine in a good position for more efficient shoulder mechanics.

Here are a few tips, and exercises, to and practice more efficient posterior-lateral breathing habits:

1. Partner Breathing – Seated or Standing

- ◆ Place the hands on the back ribs with the finger tips close to the spine.
- ◆ Lay the fingers and palms against the back, lightly.
- ◆ Starting with the lowest rib – Inhale to fill the back with air – fingers should lift & spread apart.
 - Be sure weight remains even on the feet – no leaning the whole body backwards.
- ◆ Exhale and as the ribs close, fingers should come closer together.
- ◆ Tap or wiggle the fingers on the back ribs to find sensation for where to begin filling with the air.
(You can do this without a partner – but it’s easier, and a little more fun with help from a friend.)

2. Scarf Breathing – Seated or Standing

(Credit to Dianne Miller for teaching me this one!) This is a marvelous trick for finding the back ribs on your own. We use this technique a lot – it's easy, excellent homework for new students.)



- ◆ Wrap a winter scarf around the back of the ribcage.
- ◆ Cross the ends in front of the body, so that there is a small space between the body and scarf.
- ◆ Hold the crossed ends of the scarf with a palm up grip, elbows by the sides, arms bent at ninety degrees. (Like a bicep curl – ½ ways up – or holding a platter.)
- ◆ Slightly depress the shoulders and pull gently with the arms/hands forward to create pressure against the back of the ribs against the scarf. (A slight tug of war feeling between the hands and back ribs.)
- ◆ Inhale to lift and press the ribs back into the scarf.
- ◆ Exhale and drop the shoulders drop as the ribs close. Arms will pull forward.
 - Maintain good vertical posture and the normal curves of the spine while playing tug of war with the scarf. Inhale the scarf pulls backwards, exhale the scarf pulls forwards.
 - Be sure it is the breath and movement of the ribs that is moving the scarf.

Anything you can do to open the upper back will make it easier to begin learning back-rib breathing. The following exercises put the body in a good position to facilitate opening the back.

3. Child's Pose – Rest Position

- ◆ This is a Yoga pose, but also the position we utilize to stretch the back after The Swan & Swimming in Matwork.
- ◆ Seated back on the knees – with the spine flexed. Inhale & exhale into the back.
 - With the belly resting on the thighs it's almost impossible to breath into the stomach.



4. Spine Corrector Breathing I (More from my Dianne Miller favorites!)

- ◆ Laying forward over the barrel
 - Hips rest over the top of the Spine Corrector, head & arms by the lip. Use additional pads or pillows if needed to support the head and neck. Body is relaxed and draped over the barrel.
 - This is similar to the Child's pose position. If someone has bad knees and cannot do Child's pose, this would be a safe option.



5. Spine Corrector Breathing II (More from my Dianne Miller favorites!)

- ◆ Seated knees over the barrel
 - Sit with the sitz bones on the edge of the lip, knees draped over the barrel.
 - Inhale & Lift the arms overhead to open the spine.
 - Hinge forward over the legs, and then flex the spine to drape the body over the thighs.
 - Support the head with the arms or pads/pillows so that the head and neck remain in a good posture position.
 - Breath into the back – Inhale lengthens the spine, Exhale the body may be able to reach farther forward over the thighs.
 - Take 3-5 breaths, and then roll up from the bottom of the spine to the top to a good posture position.



6. Hinge Forward to Flex the Spine – Breathe & Roll Up

- ◆ Similar to knees over the barrel – If you don't have a barrel, this can be done seated on the edge of a Reformer, Trapeze Table, or dining room chair.
 - Arms can hang by the sides, or rest on the knees if needed to keep a more supported, shorter range of motion for the spine.
 - Start the tilt forward with the pelvis, lengthen the ribs away from the hips and curve the spine forward over the legs.
 - Take 3-5 breaths into the back ribs, while bent forward.
 - Begin to roll up from the bottom of the spine, one vertebra at a time, until back to a good posture position.



Percussive Breathing

For an additional challenge, and to assist with increasing the expansion of the ribcage and increasing the amount of air exchanged through the lung play with a percussive breathing pattern: The development and use of Percussive breathing with Pilates is credited to Ron Fletcher. It is a marvelous way to work on strengthening the system for a deeper, more functional breath.

1. Single Breath: Inhale - Exhale
2. Double Breath: Inhale-Inhale-Exhale (½ then full)
3. Triple Breath: Inhale-Inhale-Inhale-Exhale (thirds- 1/3, 2/3, full)
4. You could carry this process out to 8 short inhales, followed by 8 short exhales or one long 8 count exhale.

I like to have students take several single breaths, then several double breaths, then several triple breaths – and finish with single breaths. Most of the time you'll find it will be easier to take a much deeper inhale at the end of a series. Try this technique with all of the exercises listed above.

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Alternate One Lung Breathing

This is especially good for clients with scoliosis, asthma, or other physical/health challenges that have contributed to limited lung and rib movement or muscle imbalance through the upper back. One Lung Breathing is easiest to begin with a partner. Have your partner place their hands on your back ribs; tap on the back with the fingers to indicate which side should fill with air. This extra sensory feeling from your partner can make it easier to feel the difference and begin to alternate sides. It's normal for one side to fill easier than the other – however the goal is to develop equal strength and movement on each side while you alternate breathing into each lung.

What to Watch For

Breathing should be full and steady, filling from the bottom of the ribs towards the top – to lift the ribcage off the pelvis and separate each rib. Done well the shoulders and collarbones will elevate slightly as they ride the lift of the ribcage. The shoulder blades should not actively lift or lower with the breath and blades should remain flat against the normal curve of the thoracic spine.

If the breastbone rises first on the inhale – the breath is filling from the top, and only into the front of the body, not what we're looking for. This action will pull the upper spine into extension, may cause the shoulder blades to wing, restricts getting air into the bottom of the lungs, and prohibits lengthening the natural curves of the spine-shutting down the possibility for movement in any direction.

Feeling Dizzy?

It is normal to feel lightheaded or dizzy as you begin to practice different breathing habits. Especially when focusing on expanding the lungs and spine for a deeper inhale and more forceful exhale. Don't over do it! If you start to feel lightheaded or dizzy, go back to a shallower, more normal breath until the dizzy feeling goes away – This might take only a few seconds, or possibly a minute or two. The easier it gets to breath into your back, the stronger your muscles become to accomplish the separation of the ribs and lift of the spine as you inhale, the less dizzy you will become when breathing into the back-ribs. ***If you have any doubts as to the appropriateness of how your body feels when practicing new breathing habits and/or exercise – you are advised to check with your doctor and be sure it is safe & appropriate for you to participate, or practice the exercise suggested here.*

Good Visual Imagery for Posterior-lateral breathing:

1. Air fills the body like filling a water balloon – from the bottom to the top.
2. Breathe into your back like a turtle breathing into its shell.
3. As you inhale – feel your back spread apart like pulling a slinky (child's toy!) – ribs lift away from the hips.

Food for Thought

Here's something to ponder...Breathing Rates & Lifespan.*

A horse / dog breathes greater than 20 times per minute – average lifespan 15-20 years.

A human breathes approximately 12-18 times per minute – average lifespan 70+ years.

A snake/turtle breathes approximately 1-2 times per minute – average lifespan 300-400+ years some up to 1,000!

A Qi Gong master breathes approximately 2-3 times per minute. – Lifespan well longer than an average human. (We'll discuss in more detail what Qi Gong is in another issue. – However, Pilates is a form of Qi Gong Training.)

The ability to take in a deeper breath, means that you will take fewer breathes per minute. Follow this out from the information above and one could say that – “Faster breath = shorter life. Slower breath = longer life.”

*(from lecture notes Bigu Qigong Instructor Training Program: **Dr. Qizhi Gao**, D.O.M., Dipl. Ac. and CH, The International Institute of Oriental Medicine.)

One-Minute Breath Rate Test: To help track improvements in your ability to take in a good, full deep breath. Sit quietly and count the number of breaths taken in one minute. Repeat the one minute test once a month and chart improvements and progress.

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Ending Inspiration “I long to accomplish a great and noble task, but it is my chief duty to accomplish small tasks as if they were great and noble.” --Helen Keller

Finding a variety of ways to help ourselves, and our clients learn and practice more efficient breathing habits, sets the body up for the development of improved strength, flexibility, and better movement patterns. It will make it easier to teach the Pilates exercises and help your students get the most from their Pilates training. To a healthy & fit client, spending extra time practicing “new ways” to breathe – may seem like a waste of time, but to your special needs clients with back & neck troubles, scoliosis, or asthma – learning better breathing habits really is the “shower of life!” Helping to explain to everyone – the importance of changing habits will give your students incentive to pay attention to you and practice all the exercises you have to teach.

Our goal with these publications is to provide you with a key resource for effective continuing education and training. Helping to increase your knowledge, enhance awareness, and further develop professional and practical skills through information related to mind-body movement for whole-body health. **Inspiration** for your continued success as a teacher and student of the Pilates method!

There are many paths to the same destination. As teachers, the more different ways we can explain the same concepts – the easier it is to convey our message to students. My hope is that the information I have to share can add value and substance to your personal “bag of tricks” and you’ll have lots of resources available to draw from to be an inspiring and effective teacher.

Questions, comments, or topics you’d like to learn more about, Let us know what you think!

Take a deep breath in.....exhale.....and go PLAY!

Peace & Blessings,



Aliesa George,
President, Centerworks® Pilates Institute