

Pelvic Floor, Diastasis Recti and Back Pain



Erica Ziel

Health + Human Performance Degree, ISU
Certified Pilates Instructor, Personal Trainer,
Pre/Postnatal Exercise Specialist and
Deep Core Exercise Specialist
Functional Diagnostic Nutrition® Practitioner

Creator of Core Athletica® Inc.
The Core Rehab Program
Knocked-Up Fitness® Membership
Core Studio Workout Membership
Pre/Postnatal Exercise Specialist Course + Certification
Host of The Core Connections Podcast

1

“EVERYTHING IS CONNECTED”

© Core Athletica® Inc. 2022

Fascia

**For Optimal Pelvic
Floor + Deep Core
Function It's
Important to
Understand Fascia!**

© Core Athletica® Inc. 2022

3

What is Fascia?

- Findley and Schleip (2009) have defined fascia broadly to include all of the soft fibrous connective tissues that permeate the human body.
- One system that connects everything in the body together physically and energetically.

© Core Athletica® Inc. 2022

4

Fascia Throughout the body:

- Around nerves
- Around + through muscles
- Bone is made up of similar components as fascia (collagen being the main similarity)
- Ligaments + tendon
- Wraps around organs
- Wraps around entire body
- Intertwined within our nervous system
- Emotion stored in fascia
- Hydration of fascia is important
- Gentle movement increases function
- Key to bringing the body into balance

© Core Athletica® Inc. 2022⁵

Fascial Lines



© Core Athletica® Inc. 2022⁶

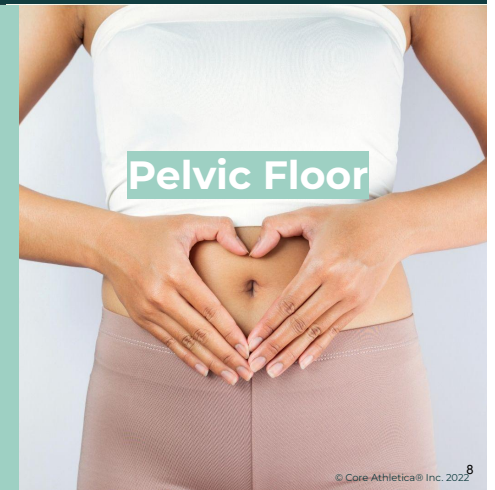
Your Superpower! [why it's important]

- The body is always rejuvenating
- New fascia is always forming (i.e. cellular rejuvenation)
- The body can create more + stronger fascia with the right techniques
- Fascia forms the way the body moves = biomechanics
- Biomechanics = is the study of movement in conjunction with wiring of the brain (i.e. habits).
- **Biomechanics can be improved = say goodbye to pain and dysfunction**

© Core Athletica® Inc. 2022⁷

Understanding Anatomy + Function

Pelvic Floor



© Core Athletica® Inc. 2022⁸

Pelvic Floor Education

Most women are grossly undereducated about their pelvic floor anatomy and function. According to the National Association for Continence's 2020 survey, **1 in 3 people don't even feel comfortable mentioning pelvic floor issues to their doctors.** Half of those who do say that their doctor's education about their pelvic floor issues was less than satisfactory.

This survey found that women often get less time and support from their doctors than men when an issue is present. They also found that doctors tend to push medications and physical product support (e.g. absorbents for incontinence) rather than actual healing modalities.

For most patients with pelvic health concerns, there is no follow up after the initial visit to offer the continuous support needed to truly help people resolve pelvic health concerns.

© Core Athletica® Inc. 2022⁹

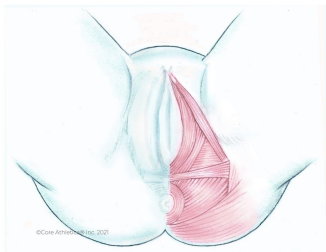
Pelvic Floor Function

Strengthening and maintaining a healthy deep core and pelvic floor through appropriate movement and practices can improve overall energy, strength, function, decrease aches and pains, improve confidence, minimize diastasis recti, set a woman up for potentially easier, and quicker birth and recovery, while reducing the chances of emergency cesarean delivery (ACOG, 2015, Clapp, 2002, Salvesen, 2004, White, 2014, Yan, 2014).

Optimal functioning of the pelvic floor requires that the muscles and fascia of this deep core foundation be able to both engage and relax fully, in a balanced responsive way. All areas of the pelvic floor, from front to back and side to side, must be able to function together, without one side being too tight or too weak. The pelvic floor must not be too tight or restricted.

© Core Athletica® Inc. 2022¹⁰

Pelvic Floor



- Base of deep core
- Connects from pubic bone to tailbone, sits-bone to sits-bone
- Inner thighs, hips, hamstrings, and glute connections
- Imbalances in pelvic floor musculature and fascia
- History of working out most likely too restrictive through part of the pelvic floor

© Core Athletica® Inc. 2022¹¹

Pelvic Floor Dysfunction: Incontinence

Stress Incontinence:

- Most common
- When the downward pressure that happens during a cough, sneeze, laugh, heavy lift, or exercise causes one to leak urine

Urge Incontinence:

- Sudden urge to go and pee without meaning to.
- Often caused by something as minor as an infection or something more serious happening neurologically or metabolically.

Overflow Incontinence :

- where the bladder isn't able to empty completely
- someone may experience frequent regular urine leakage

Fecal Incontinence:

- Sudden loss of bowels

© Core Athletica® Inc. 2022¹²

Pelvic Floor Dysfunction: Pelvic Organ Prolapse

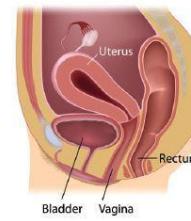
It's when the pelvic muscles and ligaments supporting a woman's organs weaken and the pelvic organs herniate out of place, causing them to collapse toward or beyond the vaginal walls.

This can happen to the bladder, the uterus, the rectum or a combination of these organs.

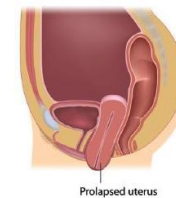
Research shows there are often many co-factors that contribute to prolapse. There is a high correlation with pregnancy and vaginal delivery, which can cause injury to the pelvic floor muscles and fascia. Additionally, prior pelvic surgeries or a history of sustained episodes of increased intrabdominal pressure such as heavy lifting, obesity, chronic cough, and constipation can increase the risk of developing POP.

Pelvic Organ Prolapse

NORMAL ANATOMY



UTERINE PROLAPSE



Deep Core Muscles + Fascia

Deep Core Muscles:

- The pelvic floor muscles and obturator internus muscles (Lee, 2008).
- Transversus abdominis and internal obliques (Lee, 2008 & Neumann, 2002).
- Multifidus, intercostals and thoracolumbar vertebral column (Lee, 2008).
- Diaphragm and psoas muscle due to the fascia that blends with the pelvic floor (Lee, 2008).
- The fascia that intertwines within the core, including the layers of fascia in the abdominal wall (Lee, 2008 & Lee, 2011).

To re-iterate, as Dr. Lee explains, everything within our core (including the pelvic floor) functions together. While they each have individual functions, they do not act alone.

The Importance of Activating the Deep Core Muscles:

"The transversus abdominis (TA) and the obliquus internus (OI) were recruited during all pelvic floor muscle contractions. It was not possible for these subjects to contract the pelvic floor effectively while maintaining relaxation of the deep abdominal muscles. A mean intraabdominal pressure rise of 10 mmHg (supine) was recorded during a maximum pelvic floor muscle contraction. These results suggest that advice to keep the abdominal wall relaxed when performing pelvic floor exercises is inappropriate and may adversely affect the performance of such exercises." (Neumann, 2002).

Deep Core



Abdominal Fascial Layers



© Core Athletica® Inc. 2022 17

Diastasis Recti

- Weak fascial tissue and connections
- Restriction/tightness in obliques and low back
- Poor posture habits
- Poor breathing patterns
- Too many crunches or other intense abdominal exercises
- Pregnancy
- Genetics
- Getting back to intense exercise too soon postpartum
- Do NOT test during pregnancy or until at least 6-10 weeks postpartum
- How to test:

www.ericaziel.com/diastasis-recti

© Core Athletica® Inc. 2022 18

Coning of the Belly

- increased intra-abdominal pressure
- Presence of diastasis recti possible
- Obliques overactive
- Do NOT test during pregnancy or until at least 6-10 weeks postpartum



© Core Athletica® Inc. 2022 19

Back Pain

Most back pain comes from the front of the body...

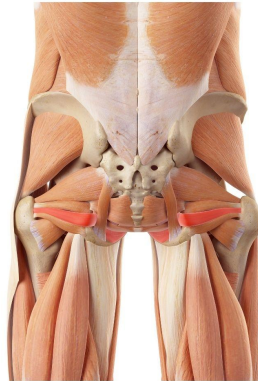
- Psoas fascial line
- Diaphragm and poor breathing patterns
- Tucked pelvis can cause more restriction through front of hips and psoas
- Twisted or misaligned hips and pelvis can cause opposite sides to grip
- Rarely structural causing misalignment



© Core Athletica® Inc. 2022 20

Deep Backline

- Sacral and lumbar spine fascia
- Nerve function needs optimal space
- Inner thighs, hamstrings and deep hip rotators connecting with the pelvic floor
- Hamstring strength and length important for pelvic floor function and pelvic positioning/stability.
- Glute function and glute gripping



© Core Athletica® Inc. 2022 ²¹

Muscle + Fascial Layers



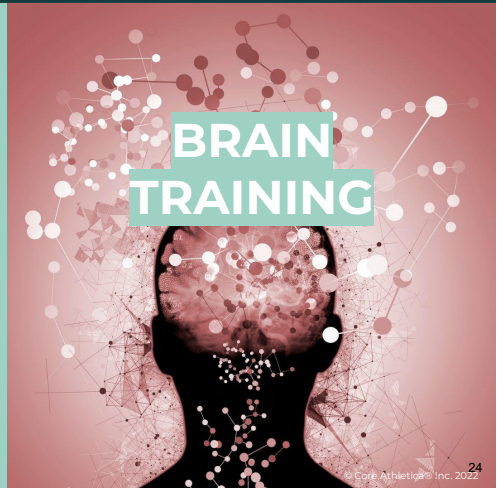
© Core Athletica® Inc. 2022 ²²

Tongue Tie

- Did you know there's a fascial line that runs from the tongue to the pelvic floor?
- Tongue tie can actually be connected to the pelvic floor, and can contribute to a tight or imbalanced pelvic floor.
- Can contribute to TMJ and other symptoms involving the jaw, neck and head.
- Personal experience with a tongue tie release.

© Core Athletica® Inc. 2022 ²³

Rewiring Neural Pathways for Enhanced Results



© Core Athletica® Inc. 2022 ²⁴

Movement Patterns to Avoid:

- **Forcing/squeezing muscles**
 - gripping patterns
- **Drawing belly to spine**
 - restricts breathing
 - shuts off pelvic floor
 - poor posture
 - restricted psoas line
- **Tucking pelvis**
 - puts unnecessary pressure on low back
 - shuts off pelvic floor
 - can contribute to neck and shoulder pain
- **Pulling shoulders back and down**
 - creates restriction in upper back and neck
 - forward head positioning
 - poor posture
- **Intense abdominal crunches/ab exercises**
 - back pain
 - pelvic floor pressure/dysfunction
- **Shallow breathing**
 - poor pelvic floor function
 - poor oxygenation
 - low energy, high stress
- **Gripping glutes**
 - back pain
 - shuts off pelvic floor function
 - imbalances in pelvis and hips
- **Kegels**
 - imbalances in pelvic floor function
 - poor bladder health
- **Poor Posture**
 - overall dysfunction
 - poor breathing patterns
 - aches + pains

© Core Athletica® Inc. 2022 ²⁵

Avoid **FORCING** the
body to try and make
these new connections.

Gentle is best!

Work With Your
Body

© Core Athletica® Inc. 2022 ²⁶

Emotions:

- Frustration even anger with your body can be preventing your body from healing
- Pain and tightness in the body can be linked to stored and stuck emotions + energy in the body. (most people don't realize this...)
- The pelvis and pelvic floor muscles can hold a lot of past emotion

© Core Athletica® Inc. 2022 ²⁷

Kegels, Why I Don't Teach Them

- Taught incorrectly
- Stopping the flow or urine is not a healthy practice for a healthy bladder
- Causes imbalances:
 - too much restriction in part of the pelvic floor
 - in ability to engage the entire pelvic floor
 - many grip their glutes which shuts off the pelvic floor
 - causes postural imbalance
 - can lead to other dysfunction

© Core Athletica® Inc. 2022 ²⁸

Pelvic Floor Exercise Guidelines:

My guideline for how to easily know if an exercise is appropriate for your pelvic floor:

1. Can you lightly connect with your deep core (including pelvic floor)?
2. Can you do that movement without pain?
3. Can you do that movement without incontinence?
4. Can you do that movement without feeling pressure downwards on your pelvic floor?
5. Can you do that movement without creating coning of your belly?

If you are able to answer “yes” to all 5 of the above questions then that exercise is probably appropriate for your body.

If you answered ‘no’ to any of them then it’s important to re-evaluate if you are connecting your deep core correctly, if you are doing the movement correctly, or do you need to modify it?

Movement Patterns to Re-Wire:

- Lightly engaging pelvic floor, zipping up and lengthening through the top of your head
 - ~~belly to spine~~
 - ~~oblique gripping~~
- Neutral to slight anterior pelvic tilt to allow for improve posture and overall function
 - ~~tucked pelvis~~
 - ~~glute gripping~~
- Lengthen tall, using midback to lift and relax shoulders
 - ~~drawing shoulders down~~
- Bring awareness to improving deeper breathing
 - ~~shallow breath~~
- Lightly engage pelvic floor
 - ~~kegels~~
- Improving posture as you sit, stand, walk though day
 - ~~poor posture~~

Visualization:

- The brain like visuals
- Movement cues are key for improving connections faster
- Helps to enhance results
- Re-wire pathways in the brain more quickly
- Manifesting what you **DO** want for your body and your health!

CORE REHAB MASTERCLASS WITH ERICA ZIEL

Breathwork:

- Activates stress release
- Calms the mind + body so one can focus more easily (Body-Mind)
- Activates the pelvic floor and deep core muscles effectively
- Strengthen the deeper layers of the body
- Works synergistically with the autonomic nervous system and fascial system
- A key in optimal pelvic floor + core function

Slow Down To Speed Up:

- Increase confidence + energy.
- Become healthier, stronger and live pain-free.
- It takes time at a cellular level to create more + stronger fasci
- Learn to work with the body to enhance their mind-body and body-mind connections.

33
© Core Athletica® Inc. 2022

How to Effectively Strengthen The Pelvic Floor:

Don't rely on movement alone to effectively strengthen the deep core.

- Breath is important to help open up and activate the deeper layers of fascia and muscles throughout the deep core.
- Practice releasing and relaxing through the belly, pelvis and pelvic floor
- Lengthen tall through the top of the head
- Move slowly through each deep core exercise/movement
- Initiate each movement with gentle breath
- Think gentle engagement of pelvic floor + deep core
 - less is more
 - experiment with engaging 50%, 25%, etc.
- Bring awareness to what muscles are doing the work:
 - are glutes or obliques taking over?

Key for improving effectiveness of workouts, walking, running, etc. even when when it means slowing down, decreasing intensity, weights, etc to teach the body how to find and engage the deep core effectively

34
© Core Athletica® Inc. 2022

How to Effectively Strengthen The Pelvic Floor:

1. Sitting comfortably tall, relax your hips as you take in a slow deep inhale. Visualize your breath going down into your pelvis and assisting your pelvic floor to relax.
2. As you gently exhale, lightly draw that diamond (four corners of pelvic floor) together, and zip up through your low belly and lengthen tall through the top of your head.
3. As you inhale, continue to lengthen tall while relaxing your pelvic floor.
4. Gently exhale as you lightly draw the diamond together, zipping up through your low belly and lengthening tall through the top of your head.

It's very normal to feel nothing in the beginning. Once you feel you have the instructions understood practice with eyes closed and visualize the instructions.

35
© Core Athletica® Inc. 2022

Pelvic Tilts + Hip Rolls

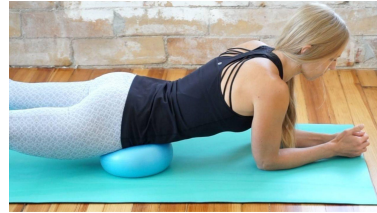
Watch my full video here: <https://www.ericaziel.com/blog/pelvic-tilts-hip-rolls>



36
© Core Athletica® Inc. 2022

Small Ball Fascial Lengthening + Activation

Watch my full video here: https://www.youtube.com/watch?v=TqB_ksffCDY



© Core Athletica® Inc. 2022 37

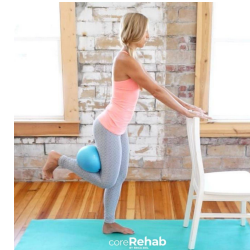
Standing Cat Cows + Hamstring Pulses

Watch my full Standing Cat Cow video here:

<https://www.ericaziel.com/blog/how-to-create-space-along-your-spine>

Watch my full Hamstring Pulses video here:

<https://www.ericaziel.com/blog/3-leg-toning-exercises>



© Core Athletica® Inc. 2022 38

Resources:

- Pelvic Floor Guide
 - www.ericaziel.com/pelvicfloor
- Diastasis Recti Guide
 - www.ericaziel.com/dr
- Core Rehab Program
 - www.ericaziel.com/core-rehab
- Knocked-Up Fitness® Prenatal Membership
 - www.ericaziel.com/knocked-up-fitness-membership
- Pre/Postnatal Exercise Specialist Course + Certification
 - www.ericaziel.com/prenatal-instructor-course
- COMING SOON... Core Exercise Specialist Certification
- Affiliate Program (receive 30% for all sales)
 - www.ericaziel.com/affiliate_users/sign_up

© Core Athletica® Inc. 2022 39