

CORE REHAB: GUIDE TO A FLATTER TUMMY

Use this guide for non-traditional core rehabilitation moves to slim your tummy, trim your waistline and build a healthy core.

Elyse Klein ACE CPT, ACE GFI, Prenatal & Postnatal Fitness Specialist, PN1 Exercise Nutrition Coach





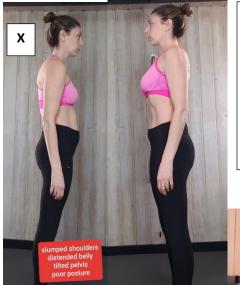
CORE REHAB: GUIDE TO A FLATTER TUMMY

Thank you for downloading this CORE REHAB GUIDE. Welcome to the community of women who refuse to let their role as Mother define how they should look and feel. We deserve to feel confident in our own skin.

I have been a Certified Personal Trainer for over 15 years and there are still things about a woman's body that we are not properly educated about in regards to our core. I am a mother of 3 children, an ACE Certified Personal Trainer, PN1 Exercise Nutrition Coach and a Prenatal and Postnatal Exercise Specialist. I am very passionate about helping women and sharing my knowledge with you.

Whether you had a baby or not, ALL CORE EXERCISES ARE NOT CREATED EQUAL.

Excessive intra-abdominal pressure can be the cause of why you don't have that flat tummy you dreamed of. It is all about activating the inner deep core muscles correctly and effectively.



Bad posture and crunches are perfect examples to show what happens inside your abdomen when pressure is high. When pressure is high, it pushes

- (1) Behind your abdominal mid-line causing your belly to bulge or cone.
- (2) Downward- increasing the chances of pelvis floor dysfunctions
- (3) Upward-compromising proper breathing





Maybe you had a baby recently or even years ago and he or she is almost grown, a woman's body goes through so many changes physically, mentally, emotionally and hormonally during and after pregnancy. A woman's body is an amazing wonder! We should be PROUD of the amazing miracles we can create and what our body can do! But of course after creating a baby for 10 months, afterwards once our body returns to "normal" we are left with loose skin, slack muscles and even cellulite and stretch marks in places we didn't have before.

Whether it has been 8 weeks or 10 years or even 20 years, there is GOOD NEWS! You can tighten up your loose skin. You can tone your muscles and reduce the cellulite. Of course we all may or may not want to get those 6-pack abs, look like a celebrity and have fallen for many of the fitness fads. THIS IS NOT A FAD or A TREND. This is not something that will change overnight. We cannot lose the weight by crunching it away. It is a bit more complex! There is no easy fix or magic pill. We have to exercise our whole body. It is important to concentrate on key core exercises and know how to use them, in addition to a well-rounded fitness program.

Did you know that crunching the wrong way can ACTUALLY CAUSE OUR BELLY TO "PUSH" UP? 90% of us do a crunch the wrong way. Instead of engaging our inner core muscles and flattening our belly, we tend to push our core up causing our belly to "Cone" or "Dome" up as we crunch up. WHY? It takes less time to fill our bellies up than it does to flatten those muscles. So we take the easy route. It seems to be the quickest and fastest way to losing weight...Right? But then why do we still have that dreaded "Muffin Top", "Mommy Pouch", "Distended Bloated Belly"? The truth is you can crunch all you want but it will NOT give you that flattened belly look that we all desire.

Here is another reason by we may not be able to achieve our flat belly goals. Maybe you have an abdominal separation- which was once thought to disappear after a baby is born. That is not always the case. Actually there are certain exercises that can make this worse.

Retraining your Core, Making your brain and your core muscles work together: That is hard work. It takes dedication. It takes patience and time. Once you master these techniques, you will feel better in your skin and be more confident in how you look. You will also be able to progress in your fitness goals.

Women have been at a disadvantage for years. This is not our fault. Doctors do not educate women on who to heal their core after giving birth. Over the past decade, educating on activating your core has increased in popularity over the world through tons of research. It is now a HOT TOPIC. So please hear me: It Is Not Your Fault if you feel as though you are failing at losing your baby belly and not "bouncing back" the way you thought you would. So what do you need to know?



1st: You need to learn how to fire these muscles up before you can properly train them. And the MOST IMPORTANT MUSCLES you need to know is the TRANSVERSE ABDOMINIS (TVA or TA). This is that muscles that will help you conquer that goal of FLATTENING YOUR TUMMY!

I have spent years studying and making this core connection myself. I was tired of having a weak core, flabbier stomach, not being able to see the definition I had before baby #1 and so tired of my back hurting. There have been so many advantages since learning these techniques. I have better posture, a stronger back, no leakage when I am running, and even better SEX! Yes I said SEX! You'd be surprised how many functions these inner core muscles are used in our amazing body! You just need to make the connection.

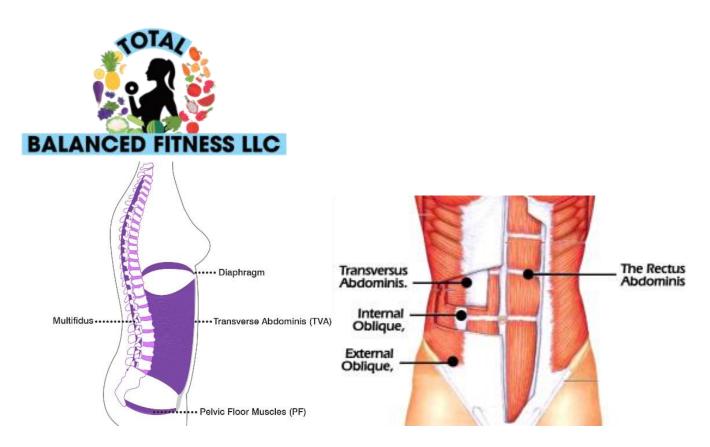
The TRANSVERSE ABDOMINIS (TVA or TA) and the PELVIC FLOOR (PF)

Let's talk about why these muscles are so important. Think about doing a crunch. When you perform a crunch, the usual focus is on the rectus abdominis, but it will not flatten the belly. The TVA (transverse abdominis) is what actually helps you flatten your belly. You have 4 layers of abdominal muscles, and the deepest layer is the Transverse Abdominis. Think of your TVA as a corset that is horizontally wrapped around our torso, connecting the ribcage to the pelvis. When we activate it, we stitch it closed tighter and tighter. On top of the TVA, you have your internal and external obliques, which criss-cross your torso, kind of making an X. These muscles help with twisting. The final layer is your rectus abdominis, aka the 6-Pack Muscle, which helps you bend your upper body forward, also known as flexing the spine.

When these 4 layers of abs are braced together, working in together with muscles that line your spine, you have an engaged core. The main job of the TA is to stabilize your spine and pelvis before you move your arms or legs. We use these muscles all day, every day and we need them to work. When you cough, laugh, take a step, climb a stair, pick up your child, reach overhead, these amazing muscles are working. So words to live by: YOU NEED TO MAKE THE BRAIN TO MUSCLE CONNECTION FIRST BEFORE YOU CAN STRENGTHEN THE MUSCLE. If your brain doesn't know it has a muscle, then how can you expect the brain to engage it? You have to teach your brain how to make the connection. As a trainer, I find that many clients do not know how to correctly activate their TA.

**If you are struggling with getting your core activated and engaged correctly please contact a Women's Health Physical Therapist. There may be other things going on in your body that are preventing your TA from doing what it is supposed to do.

(Exercises in the end of the guide)



2nd: Pelvic Floor: You may or may not know what your Pelvic Floor is. Your Doctor may have mentioned the exercise Kegels before. Well it is so much more than that. Our pelvic floor is what helped support your baby for the 9 months. Think of your PF as a "hammock" that keeps your insides from dropping out. (Sorry I know kind of graphic) Any weight bearing exercise or activity (walking, running, jumping...) increases the strain through the PF. Some women suffer from weakness and dysfunction in this area which causes them pain or incontinence. I have had many friends tell me that they can't run with their kids or jump or even sneeze without peeing themselves, even if it's just a little bit. Women think that this is a normal part of life. It is not! You can selectively retrain the pelvic floor to do its job.

** If you are consistently working your pelvic floor and seem to be getting nowhere please contact a Women's Health PT. There are times when these muscles and our bladder get damaged or injured and require more invasive intervention by a medical professional.

Now I made the connection of my PF with the image of an arcade claw game. It did take a few months, but once it clicked, IT CLICKED! Imagine how the claw game works. The claw slowly closes as it tries to grab the stuffed toy. That closing and then slow lifting of the claw is how we want to think about activating and lifting our pelvic floor. It is not squeezing our glutes or clenching our butt. This lifting of our PF and our engaging and wrapping of our TA and pulling our belly button into our spine is making the connection of our inner core.



MAKING THE CONNECTION THROUGH BREATHE

So now that we know how the core works, what it does and which muscles we need to fire up, we need to talk about BREATH. Breathing is crucial when it comes to engaging the TA and PF. We want to breathe using our diaphragm (belly breathing). When we inhale, we want to fill our belly up. As we exhale, we will forcefully let the air out in a SSHH or HIIISSS sound while simultaneously pulling our belly button in and up towards our spine, lifting our PF (not clenching our glutes), and stitching our ribcage closed until all the air is released. You want to feel your abs tightening and pulling in but still be able to breathe normally and move. That is our goal. If you squeeze your stomach in without exhaling, you'll actually increase your intra-abdominal pressure, hurting rather than helping the ab separation. OUR GOAL IS ALWAYS TO PULL FROM THE BOTTOM UP!

BREATHING WITH OUR DIAPHRAGM

This is a simple and natural process (if you sleep on your back you can't help but breathe this way). Time and Practice will help this become second nature.

- * Lie on your back on a flat surface or in bed, with your knees bent and head supported. Place one hand on your upper chest and the other just below your rib cage. This will allow you to FEEL you diagram move as you breathe.
- * Breathe in slowly through your nose so that your stomach moves against your hand. The hand on your chest should keep as still as possible. (**We don't want to breathe lifting our chest and sucking in our stomach- this actually closes off our airway.**)
- * Tighten your stomach muscles, letting them fall inward as you exhale through pursed lips. Keep your hand on your upper chest as still as possible.

When you first learn this breathing technique, I find it is easier to make the connection lying down. When you get better at it, you can try it in a chair and move onto standing and then even while exercising. Remember to repeat the steps in the same order as above, no matter what position you are in. Don't forget, inhale through your nose and exhale through your mouth.



THE CORE MOVE YOU NEED TO MASTER

"Core Compression"

This involves a subtle pulsing contraction of your core's deep-lying TA muscle (remember your inner corset).

- * Sit upright with your knees bent at 90 degrees, spine lengthened. Make sure your ribs are not thrusting forward.
- * Place your hands on your stomach and breathe normally.
- * Then, SIMULTANEOUSLY and forcefully emit a tiny exhale (sshh/hiiss sound helps) while squeezing your abs and pelvic floor up and into the spine. You should feel your belly flatten toward the spine as you exhale.
- * Then relax on the inhale.
- * Repeat in a slow, controlled pulsing rhythm, exhaling each time you engage your core.

PELVIC FLOOR EXERCISES

Holds

- Squeeze and lift your pelvis floor muscles by thinking of pulling that hammock up by both ends. You can also think about using the muscles that you use to stop the flow of urine or hold in gas.
- Hold for 5-10 seconds (you should be able to talk while you do these so you don't hold your breath)
- Relax for 10 seconds (relaxing is just as important as turning the muscles on) DON'T SKIP THIS STEP
- Do 10 Contractions (I do these a lot when I am driving) Try to get in 4-5 sessions a day

Quick Pulse Squeezes

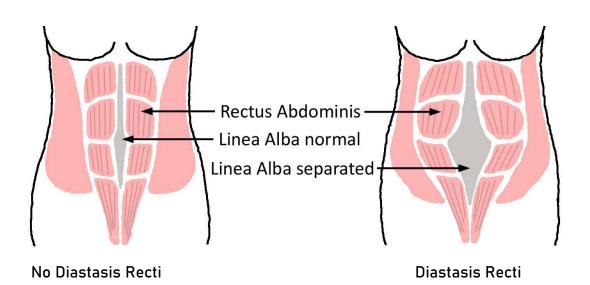
- Now contract these same muscles quickly 5 times. Don't hold them. Think of Pulsing the contraction.
 This is where we are training MOTOR Control.
- Relax for 10 seconds after your 5th Pulse Squeeze
- Repeat 10 times.

So we talked about the TA and PF and how important it is to make connection to train them correctly. The TA is essential for getting that flatter tummy and get rid of that "pouch", but it can't be the only thing you do. You need to get your NUTRITION on the right page as well. TOTAL BALANCED FITNESS LLC has lots of resources to help as well. We offer Nutrition Coaching to get you completely balanced during this journey.



Core stability and strength take time and consistence. Stick with it. I believe that it takes about 4-6 weeks of performing specific training exercises about 4-5 times a week to see a measurable change.

ABDOMINAL SEPARATION? DO I HAVE IT? No matter if or how you gave birth



Diastasis Recti occurs in 33-60% of pregnant women. Excessive and harmful intra-abdominal pressure can cause diastasis recti in non-pregnant women. Research shows that all women have some form of an abdominal separation during pregnancy in the 3rd trimester. You are more prone to this abdominal gap if you have a weaker abdominal wall, your genes, your posture, if you are carrying a large baby, if you are carrying more than 1 baby, if you have a narrow pelvis, if you had more than 1 child, if you had them close together or if you are over 35 when you get pregnant. There are also many different variated of DR. Don't let this list of predisposing factors scare you, women were made to bear children and we are also resilient in getting back to our prior self!

Diastasis Recti is an abdominal separation that occurs when the tissue between the right and left recti is distanced more than 2 finger widths or greater between the 6-pack muscles (rectus abdominus). Since the 2 parts of the abs separate, all abdominal muscles are affected and their function is compromised. The core foundation becomes weaker and unstable, leaving the abdomen



unsupported—thus the dreaded pooch. To better this condition, you can: correct your posture, include daily functional TA exercise patterns, stretching and avoiding some exercises (until you know how to properly engage the deep ab muscles).

Different Variations of Diastasis Recti



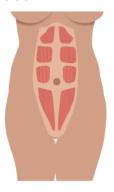




Open Below Navel Diastasis



Open Above Navel Diastasis



Completely Open Diastasis

WHAT DR LOOKS LIKE?



Belly with DR

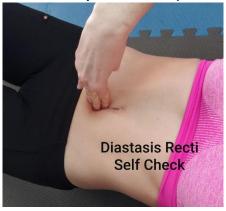


Belly with DR

Belly Without DR



HERE IS A <u>SELF TEST</u> to help you determine if you should speak to your doctor about this condition.



- (1) Lie on your back and Place your fingers above or below your belly button (this is the largest diameter where DR takes place). DR commonly occurs above the belly button, although it can occur below the belly button as well.
- (2) Place your hands touching the opposite shoulder, perform a small crunch. If you feel your fingers sink in between the belly muscles, it's time to see your doctor for a diagnosis. It is VERY important that you seek medical attention for several reasons; it could be a hernia or a mild-moderate-severe case of diastasis recti.

DIASTASIS RECTI: WIDTH vs. DEPTH: WHAT DO WE HAVE CONTROL OVER?

THE WIDTH--You have your right and your left abdominal muscles (rectus abdominus), so the width is the space between. Your Linea Alba is in that middle. (Picture shown pg8) The linea alba, when are pregnant or just had a baby or if you have intra-abdominal pressure, stretches. How much it stretches depends on the person, genetics, age, your size, how much weight you have gained, how big the baby was, how close your pregnancies are, how many babies you had at once. There are a lot of factors that contribute to how much it stretches.

Therefore the Width = how far that Linea Alba stretched. This is normally re-trainable. We train the ab muscles to come closer back together through our DR strengthening exercises.

THIS WE HAVE CONTROL OVER.



DEPTH--is connective tissue between the right and left abdominal muscles (rectus abdominus). The depth measures the integrity of that tissue. You cannot train your connective tissue. This tissue rebuilds on its own; it just takes longer.

Note: Nursing affects this because the hormone relaxin is being produced and its job to keep your joints and ligaments and connective tissues loose. This is a reason why that connective tissue, your linea alba is still loose. It will start to rebuild and tighten back up when you are no longer nursing.

What you can control is the Width- the retraining of your core to come back together, to have your stomach lie flatter, and to have your core muscles work functionally and effectively. Remember there is a difference between the width and the depth and they are both important. They both matter to how your stomach lies.

TRAINING WITH DIASTASIS RECTI: FIT TIPS

There are a number of exercises you can do to strengthen the TA, the key muscle in helping diastasis, thus FLATTENING YOUR BELLY. But here is the most important thing to know: WE NEED TO KNOW how to activate our TA throughout the day because we spend so much time sitting, standing, lifting and walking.

EXERCISES TO AVOID AND BEWARE OF FIT TIP #1

So before I go into any TA exercises you need to know what exercises to avoid (At least until you can correctly activate your inner core muscles)

DON'T'S:

- *Any crunch style exercise (sit-ups, bicycle crunches, Reverse crunches, V-sit,....)
- * Most (not all) twisting
- * Planks
- * Push Ups
- * Quadruped Positions

Be mindful that anytime you hinge at the hips, support your torso.

THE MAIN IDEA IS TO

AVOID APPLYING EXTRA.

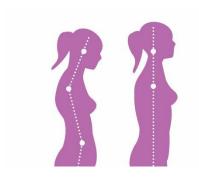
INTRA-ABDOMINAL PRESSURE

BEWARE OF:

- * Pull Ups
- * Cable Exercises
- * Exercises with weight (kettle bell, dumbbells, barbells...)
- * Jogging/Running/Jumping



Consider and Correct Your Body Alignment



FIT TIP #2 POSTURE

YOUR POSTURE IS EVERYTHING.

*From a standing position, stack your rib cage over your pelvis and keep your pelvis stacked neutrally over our feet. (Think stitching or closing your ribs) Don't stand with a swayback or tilted pelvis and open rib cage.

Be careful with how you get out of bed in the morning. Instead of sitting straight up, try rolling to your side. When working out, be sure to use good form and to not do the moves carelessly. When carrying your kids, be very careful with how you do it. Same goes with lifting heavy objects-USE YOUR LEGS TO LIFT NOT YOUR CORE! Good posture is essential for core activation – if your posture is slumped your core abdominal muscles won't work as well. Sitting tall with your chest lifted, spine tall and normal inward curve in your low back is the best position for core activation.

ACTIVATE THE TA DURING EVERYDAY ACTIVITY: FIT TIP #3 NORMAL FUNCTIONALITY

This means we need to activate and fire up our inner core muscles throughout the day, not just for the 30-60 minutes we worked out. Every time you pick up your child, lift something heavy, are driving in the car, sitting, standing, walking (lots of opportunities) ACTIVATE YOUR TA!

STRENGTHEN AND STRETCH: FIT TIP #4 DAILY EXERCISE IS ESSENTIAL

Muscles want to be moved. That can mean just 20 minutes a day. Toning movements keep the muscles healthy and soft and flexible. Stretched muscles will treat us well! We need to find the time to take care of our body so our body can take care of us.

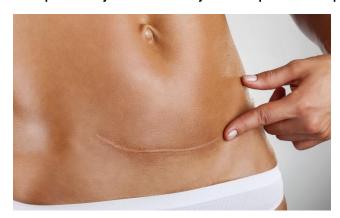
THIS IS FOR YOU NEW MOMS!! FIT TIP #5: NORMAL DELIVERY OR C-SECTION

You cannot add additional mental stress if you just had a baby by assuming that you have diastasis recti if your belly isn't flattening after birth or a C-section. Be sure to perform the SELF TEST and see your doctor if you think you have DR.



For those who had a C-section

- (1) Exercising should be done with caution. As long as it is okay with your doctor you can perform the Pelvic Floor exercises provided in this guide.
- (2) After your doctor releases you to exercise (6-8 week postpartum), you can start TA exercises. *** These should be done pain-free. If not, STOP.
- (3) The best exercises to start with one approved by doctor and can be done pain free are the Rolling Bridge and Clamshell exercises (explained later)
- (4) Abdominal scarring can contribute to DR, pelvis floor and low back issues. Breaking down the scar tissue is an essential part of your core and pelvic floor recovery. Most scars respond well to mobilization- we need to retrain the brain to desensitize the scar. Your doctor and/or a Women's Health PT can provide you with many techniques to help you.





RETUNE: RETRAIN WITH POSITIVITY:

FIT TIP #6 LOVE YOURSELI

Have you ever stood in front of the mirror and been the most critical of yourself? I definitely have. We need to be kind and loving with our body! We often make the most negative and degrading judgements about ourselves. We tend to be blind to the beauty that we hold. We forget how amazing we are and how proud we should be of all that we have accomplished physically, mentally and emotionally. Fixing your core with a positive mindset will make all the difference.

CAN I RUN WITH DR? FIT TIP #7 SLOW PROGRESS IS STILL PROGRESS!

It all depends on many factors, though it is not recommended. Now don't burn me at the stake here. I know that runners are a unique breed and an amazing group, who are driven to return to that feeling of the road under their feet. I am one of you. My hope is to help you heal and strengthen your



core with less impact on your DR and PF. Taking time to re-train, re-strengthen and re-educate your pelvic floor before you return to running and while you run is VERY IMPORTANT. It is not normal to pee every time you laugh, sneeze, cough, jump, run...... Women tend to put others needs, especially their kids and family first, before their own. You do not have to just deal with pelvic pain and incontinence.

When you run, your core/torso transfers energy for your entire body. Running can dramatically increase the amount of force through your core, pelvis floor and legs. If you have DR, then your core is already compromised. When running with DR, your body will tend to compensate for this compromised structural integrity and can lead to other issues like knee pain, back pain, IT band pain., plantar fascitis and hip flexor issues. Not to mention the strain on your pelvic floor. It is a difficult statement but retraining your core to work functionally and effectively translates to so many other parts of our body when running. Listen to your body, running is not safe for your DR and PF if you have not trained it to work properly.

One definite running technique to avoid is SPRINTING. This can cause added stress to the compromised muscles as the amount of force being transferrered through the body is greater.

REMEMBER SLOW PROGRESS IS STILL PROGRESS. Now is not the time to push yourself.





4 Foundational Ab Exercises for Engaging the Transverse Abdominis (TA), Pelvic Floor (PF) and Diaphragm + 2 Bonus Advanced Exercises

- ** Note these are safe for anyone postnatal who has been cleared by their Doctor.
- ** These are safe for anyone with diastasis recti- an abdominal separation

TRANSVERSE ABDOMINAL BRACING



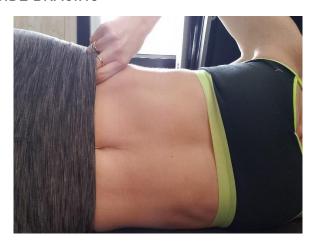
Setup: Begin lying on your back with your knees bent, feet resting on the floor, and your fingers resting on your stomach just inside your hip bones (just under the waist band of your pants).

Tighten your abdominals, drawing your belly button in towards your spine. You should feel your muscle contract under your fingers. Hold this position, then relax and repeat. If this exercise is new to you, keep your back flat against the floor, without tilting your pelvis, and breathe throughout the exercise. Perform 30-60 seconds.

• Do this exercise frequently throughout the day during your normal activities (lifting your child or a heavy object, unloading laundry, driving the car, etc.) to train your brain to contract the TA in functional positions.



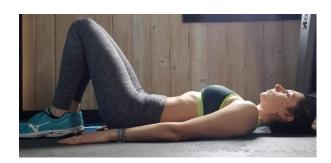
TRANSVERSE ABDOMINAL SIDE BRACING



Setup: Begin lying on your side with your knees bent, feet resting on the floor, and your fingers on your top hand resting on your stomach—just inside your hip bone.

Tighten your abdominals, drawing your belly button in towards your spine. You should feel your muscle contract under your fingers. Hold this position, then relax and repeat. Breathe. Perform for 30-60 seconds.

BENT KNEE FALLOUTS





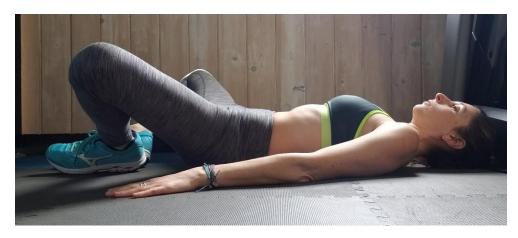
Setup: Lie on your back with your knees bend and feet resting flat on the floor.

Tighten your abdominals. Without letting your hip bones move, slowly lower one knee out towards the floor- only as far as you can without your pelvis moving or lifting. Slowly return to starting position. Alternate with the other leg, repeat.

Brace your core so you pelvis is stationary. Perform 30-60 seconds.



ADVANCED BENT KNEE FALLOUTS: CLAMSHELLS



*only if you are able to maintain your core bracing throughout the exercise and your pelvis remains stationary

Setup: Lie on your back with your knees bend and feet resting flat on the floor.

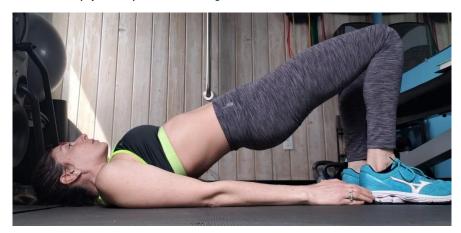
Tighten your abdominals. Without letting your hip bones move, slowly lower both knees out towards the floor- only as far as you can without your pelvis moving or lifting. Slowly return to starting position. REPEAT. Brace your core so you pelvis is stationary. Perform 30-60 seconds.

ROLLING BRIDGE

Setup: Begin lying on your back with both legs bent and your feet resting on the ground.

Tighten your abdominals. This will engage your deep core muscles to lift your hips off the ground into a bridge, HOLD.

Lower by rolling down one vertebrae at a time, then repeat. Your body should be in a straight line at the top of the movement. Keep your hips level throughout the exercise. Perform 30-60 seconds.





ADVANCED ROLLING BRIDGE: BRIDGE HOLD

*only if you are able to maintain your core bracing throughout the exercise and your hips remain level without dropping or dipping, while breathing throughout the hold.

Setup: Begin lying on your back with both legs bent and your feet resting on the ground.

Tighten your abdominals. This will engage your deep core muscles to lift your hips off the ground into a bridge, HOLD for 30-60 seconds. Your body should be in a straight line at the top of the movement. Keep your hips level throughout the exercise without dipping or dropping. You should maintain normal diaphragm breathing throughout the exercise.

For tutorials of these exercises

Visit the links below.

For More information about

Core Training Prenatal and Postnatal Exercise Strength Training **Functional Training Endurance Training Group Fitness Exercise Nutrition Coaching**

CHECK OUT THE WEBSITE

TOTAL BALANCED FITNESS



