

PRENATAL & POSTNATAL EXERCISE GUIDE

Bump, New Baby, and Beyond: Smart Fitness for Moms in Any Stage

moms into fitness



PREGNANCY

EXERCISE DURING PREGNANCY

The age-old question of how to properly exercise during pregnancy is one that new moms-to-be, as well as more seasoned moms, often ask their doctors, friends, and fitness professionals. And, rightfully so — the research and recommendations on safe practices during pregnancy change.

When creating pregnancy workouts, I formulate my recipe — from the specific muscles worked to chosen exercise timing and frequency — on proven research with a little anecdotal advice mixed in. If you've taken my [Prenatal and Postnatal Fitness Specialist course](#), you know I rely on research. In this guide you will find a brief summary of that research.

You need your doctor and/or midwife's permission before starting or continuing any exercise program. Your healthcare practitioner will be able to guide you in what is safe and unsafe for YOUR baby and YOUR body. His or her advice supersedes all information found in this guide. While this is a comprehensive guide, it simply doesn't cover all aspects of pregnancy. This guide includes recommendations from the American College of Obstetricians and Gynecologists CO 804 and ACSM Pregnancy Physical Activity.

Before you move forward with exercise, we need to discuss some of the basics of exercising during pregnancy. If pregnancy hasn't taught you already, your body is incredibly smart! As it grows a tiny human being, it adjusts your blood pressure, expands your rib cage, and increases your blood volume, among many other amazing things ... all without you telling it to do so. So, listen to your body! It will tell you what's too much and when you should take it easy. But, keep in mind, these adaptations are unique for every pregnant woman and not every woman will respond to exercise during pregnancy in the same way.

You need to stop exercising and seek medical attention if any of the following occur: vaginal bleeding, regular painful contractions, amniotic fluid leakage, difficulty breathing before starting exercise, dizziness, headache, chest pain, muscle weakness, calf pain or swelling, or anything that doesn't feel right.

PREGNANCY EXERCISE GUIDELINES

You're pregnant, you're used to working out, you're nervous about combining the two.

Or you may be just embarking on your fitness journey. I completely understand your hesitation and I am here to tell you there is a safe and effective way to be both pregnant and remain fit.

Your body is smart — it bears a child — it adapts the second you are pregnant, preparing your body and heart for your baby. So listen to it. Do only what you are comfortable doing. There is no one-size-fits-all exercise for pregnant women. Some days you will be more tired than others. And that means your rate of perceived exertion (RPE) will be different on different days, especially in the first and third trimester. We will discuss RPE in a bit; it measures the intensity of your workouts.

FOR UNCOMPLICATED PREGNANCIES

- If you followed a moderate exercise regimen prior to pregnancy, keep it up!
- If you were previously inactive, don't suddenly start an aggressive exercise routine, but adapt slowly — starting with 10 – 15 minutes.
- If you were a regular exerciser and engaged in high-intensity exercise like jogging and aerobics, you should be able to sustain the same amount of exercise with some modifications as your belly grows.
- Overall you have the same exercise guidelines as a non-pregnant woman. But there are anatomical changes and fetal requirements that warrant modifications as you progress in your pregnancy.
- Aim for an accumulation of 150+ minutes a week including: strength training, aerobic training, and stretching.



QUICK GUIDE: PREGNANCY DOS AND DON'TS [1,2,3,4]

PREGNANCY EXERCISE DOS

- ✓ Get your doctor and/or midwife's permission before beginning any exercise program.
- ✓ Stick to what you have been doing. Exercise should not exceed pre-pregnancy levels. ACSM suggests that moderate-to-hard is quite safe for a woman who is accustomed to this level of exercise.
- ✓ Use [core exercises](#) designed for your pregnant body. Research shows core exercise should be a part of your strength training routine — this helps minimize the force on your spine and joints as your belly grows. Core exercises should be modified and include specific pelvic floor and transverse abdominis training.
- ✓ Overall pregnant women have the same exercise guidelines as non-pregnant women — aim for 20 – 30 minutes of moderate activity most days of the week.
- ✓ After 20 weeks gestation, there are certain anatomical and fetal changes that warrant following [prenatal-specific workouts](#).
- ✓ Exercise in a cool environment, avoiding prolonged exposure to heat.
- ✓ Stay well hydrated! Drink about a cup (eight ounces) of water for every 15 minutes of exercise. It is especially important to fuel your workout when you're pregnant. An hour before exercise, eat a snack with complex carbohydrates, protein, and a little fat.
- ✓ Heart rate monitors are not necessary to gauge the intensity of your workout, unless you are an [athlete](#) or elite athlete. Instead use this as a gauge: you should be able to carry on a conversation while exercising. You can also use the RPE (rate of perceived exertion) or talk test below.
- ✓ Make sure you warm up before a workout and cool down after a workout. A warm up for each exercise session gives the body a chance to adapt gradually to movement and exertion, therefore making exercise easier. It gives your body a chance to deliver oxygen to your muscles and your baby. And a cool down returns the body back to normal.
- ✓ If you enjoy running and other high-intensity activities, there are a few extra [fit pregnancy guidelines](#) you should follow.
- ✓ If your workout lasts longer than 45 minutes, maintain adequate caloric intake to prevent low blood sugar.
- ✓ Check in with your doctor or midwife about conditions such as diastasis recti (an abdominal separation), back pain, and pelvic pain. Some exercises are not safe or effective if you have these conditions. Our [pregnancy workouts](#) are modified for diastasis recti.
- ✓ If you are not gaining the proper amount of weight — either too much or too little — check with your healthcare practitioner!
- ✓ Types of exercise that have been studied and found to be safe and beneficial include: walking, stationary cycling, aerobic exercise, yoga (modified), Pilates (modified), dancing, resistance exercises (including weights or resistance bands), stretching, running*, racquet sports*, and water aerobics. *Only if done prior to pregnancy.
- ✓ Try to perform pelvic floor exercises daily. We will talk about the importance of these muscles in a bit.
- ✓ The “intensity” of a prenatal fitness plan is going to depend on a number of factors, including your prior experience with exercise, your health history, the status of the pregnancy, and your own personal tolerance for exertion.
- ✓ Overall, the intensity of your exercise sessions should be fairly light to somewhat hard. On the Borg Scale (on the following page), you will want to stay between a 12 and 14. You can also use the talk test — you should be able to speak a full sentence while working out.
- ✓ Be aware of hypermobility or “overstretching.” Relaxin, the hormone that allows your pelvis and rib cage to expand to fit your growing baby, also creates loose joints, as well as instability. The loose joints allow for more flexibility, but they also may harbor an environment for injury if you are not careful.



15-POINT BORG SCALE RATE OF PERCEIVED EXERTION

RATING	EFFORT	EXERCISE
6	20%	
7	30%	VERY, VERY LIGHT (REST)
8	40%	
9	50%	VERY LIGHT – GENTLE WALKING
10	55%	
11	60%	FAIRLY LIGHT
12	65%	
13	70%	SOMEWHAT HARD – STEADY PACE
14	75%	
15	80%	HARD
16	85%	
17	90%	VERY HARD
18	95%	
19	100%	VERY, VERY HARD
20		EXHAUSTION

PREGNANCY EXERCISE DON'TS

- ✗ Competitive events, contact sports, activities with a high risk of falling or risk of abdominal trauma, scuba diving, sky diving, and activities not performed prior to pregnancy.
- ✗ Avoid activity in the heat, as ACOG states that “temperature regulation is highly dependent on hydration and environmental conditions.” According to ACSM hot yoga/Pilates should be avoided, although “hot” yoga/Pilates is not specifically mentioned in ACOG’s most recent guidelines. To date, the effects of hot yoga/Pilates have not been published in studies.
- ✗ Avoid repetitive, strenuous movements. Also avoid lying on your back or standing still for long periods of time. After 20 weeks, as your baby grows and adds weight, avoid long periods of lying flat on your back — this can decrease venous blood return back to the heart.
- ✗ Take caution to avoid getting overtired — don’t continue if you feel lack of coordination or discomfort. Don’t forget adequate hydration. Don’t forget to warm up and cool down.
- ✗ Discontinue exercise if any of the following happen: vaginal bleeding, amniotic fluid leakage, regular painful contractions, difficult or labored breathing before exertion, dizziness, headache, chest pain, muscle weakness affecting balance, calf pain or swelling or anything that doesn’t feel “right”. If you experience regular contractions 30 minutes after exercise it could indicate preterm labor. Contact your doctor or midwife.
- ✗ Don’t overdo it! If you are not fully recovered within 15-20 minutes of exercise, you overdid it!

WHAT TYPE OF EXERCISE IS BEST?

Overall a combination of strength, aerobic, and flexibility is best.

STRENGTH TRAINING

Research shows substantial strength gains in healthy pregnant women who perform strength training 2x/week.

As your bump increases there is 15 – 25 percent more stress on the musculoskeletal system. Having strong pliable muscles will alleviate some of this stress. Strength training is also part of the recommendation for the general population, and is no different during pregnancy, as long as prenatal guidelines are followed.

AEROBIC (AKA CARDIO)

Cardio is short for cardiovascular, and these activities are designed to elevate your heart to improve the level of fitness of your heart, lungs, and the circulatory system. One thing you should know about the word “aerobic” is that it simply means with oxygen. Activities that require you to bring more oxygen into your system in order to complete them are considered aerobic activities. ACOG notes that “aerobic training in pregnancy has been shown to increase aerobic capacity in normal weight and overweight pregnant women.”

Safe aerobic exercise during pregnancy includes: walking, swimming, stationary cycling, low impact aerobics, racquet sports, running, or jogging. Unless you were running or playing racquet sports prior to getting pregnant, these should not be initiated during pregnancy.

FLEXIBILITY

This helps with postural alignment, muscle imbalances, low back pain and overall muscle and joint health. Stretches should be performed when the muscles are warm, with caution in regards to overstretching. The hormone relaxin increases during pregnancy to allow the rib cage and pelvis to grow with the baby. It also creates an environment for overstretching, which can cause injury. So again, listen to your body. Relaxin can be produced up to six months after discontinuation of breastfeeding. A steady strength training routine will help with some of these musculoskeletal issues you might have postpartum.

Muscles are often tight because they have adaptively shortened due to a weakness somewhere else in the body or limited motion at a joint. Hence the reason for a comprehensive workout routine.

What about foam rolling during pregnancy? A foam roller is great tool for your rapidly changing fascia. As long as you are comfortable in the positions and not putting your belly in the way of trauma, foam rolling is a great addition to a comprehensive routine (as long as foam rolling was part of your routine prior to pregnancy).

AS YOUR BUMP GROWS

FIRST TRIMESTER

- Exercise can be challenging because the volume of blood pumped out by the heart increases by 5 – 6 weeks gestation. This major change can cause symptoms such as dizziness, rapid heart rate, and the feeling of not being able to take a deep breath. This can make you feel low on energy, green to the gills, tired, and simply blah.
- You will probably feel more energized from working out than if you skip it, but most importantly, listen to your body.
- The most common concern amongst pregnant women is whether exercising will induce a miscarriage. Exercise actually soothes many of the aches and annoyances of the first trimester, and continuing to exercise throughout the pregnancy can only add benefits to the mother and her baby.[3,4]

TRY A PREGNANCY PROGRAM IN THE STUDIO



SECOND TRIMESTER

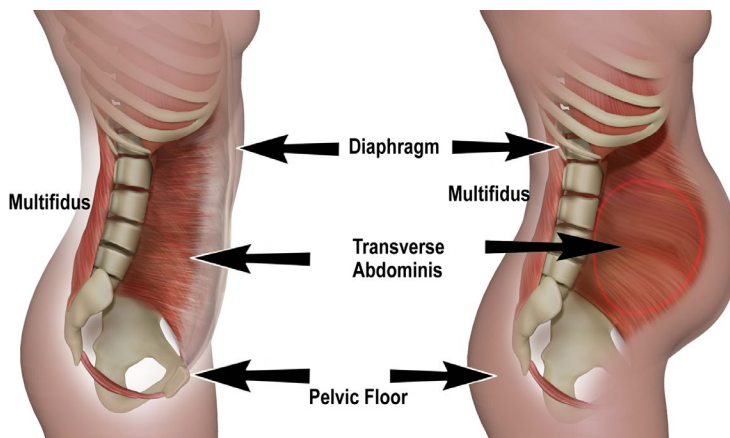
- You will probably feel better than you did in your first trimester. You will start seeing more of your baby bump and an increased appetite!
- Try to be more consistent in your workout routine and refrain from lying on your back for long periods of time, as well as motionless exercises. As your belly grows this supine position (lying on your back) can decrease blood flow back to your heart. After 20 weeks gestation — or halfway through your second trimester — this can cause low blood pressure in 10 – 20 percent of women.
- Into the second trimester, your blood volume is 30 – 40 percent more than pre-pregnancy levels. More blood equals more oxygen to the muscles, which results in more energy. Does that mean go run a marathon? No. But it does mean during the second trimester you might be able to move more and longer. Although you should never get to the point of exhaustion or fatigue.
- If you haven't already, now is a good time for **pregnancy core exercises** that engage your transverse abdominis and pelvic floor. Making sure your core is engaged during pregnancy is so important to your musculoskeletal system, especially as your frontside grows.

THIRD TRIMESTER

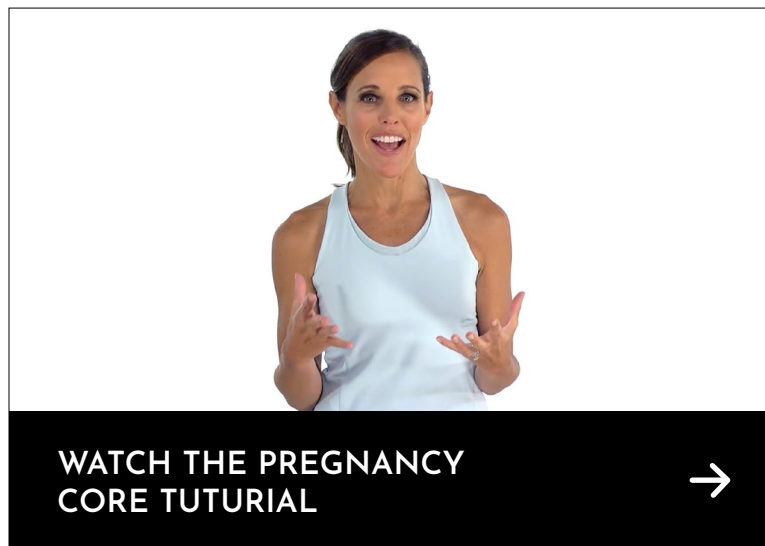
- The relaxin hormone that allows your pelvis and rib cage to expand to fit your growing baby also creates loose joints and instability. This may create an environment for injury if you are not careful. You might also discover that all the postural changes that accompany pregnancy are altering your sense of balance. As your belly grows, you may find yourself tending to “waddle” as you walk.
- Even with all of these changes, you do not need to decrease intensity of exercise during the third trimester if you worked out throughout the entire pregnancy. However, it’s important to keep in mind that those things that were easy in your second trimester might not be in your third trimester. You probably no longer need to lift heavy weights to do lower body exercises, since you are carrying your own “weight” in your belly!
- Listening to your body and your healthcare practitioner is now more essential than ever. Remember the pregnancy exercise don’ts — don’t get overtired, don’t continue if you feel a lack of coordination or discomfort. Don’t forget adequate fluid and rest. Don’t forget a thorough warm up and cool down.
- Core exercises should look different in your third trimester. These should be done on an angle, seated, standing, or on all fours with a focus on the transverse abdominals and pelvic floor. Find these core exercises in our [pregnancy workouts](#).
- Sometimes twisting can throw off your center of gravity or put extra pressure on the belly tissues. Therefore you should stabilize the core in twisting motions, being mindful as you move. You might have heard you should eliminate all torso twisting. But we don’t go through our days without twisting and our exercise should mimic our body’s biomechanics — this is known as functional exercise. If you have diastasis recti, twisting should be kept to a minimum.

CORE PRINCIPLES

Did you know that more than 60 percent of women have back pain? And, more often than not, back pain (as well as other pain) is due to a weak core. Your core is more than just your abs; it comprises all the muscles of your trunk including the glutes. As the top of your pelvis tilts forward during pregnancy and your upper spine tends to round, it’s important to strengthen, stabilize, and stretch all of the muscles around the core.



You may be asking yourself why you should work the abs while your belly is expanding? [Check out this video](#) for more information on the importance of training your core while pregnant:



Some of your core muscles, in particular your pelvic floor and transverse abdominis, are involved in labor. Ideally those muscles will be as strong and flexible as possible during labor to greatly ease your baby's entry into the world — you'll be grateful for the work that you did.

PELVIC FLOOR

The pelvic floor is a group of muscles that act as a sling to the bottom of your core. These muscles stabilize the joints around the pelvis. Pregnancy, childbirth, and decreasing estrogen weaken these muscles. But these muscle fibers can be trained! Like any muscle group, you have to specifically target these muscles.

A study published in the American Journal of Obstetrics and Gynecology found that moms who'd had a C-section were less likely to do pelvic floor exercises. But pregnancy itself affects the pelvic floor, so pelvic floor exercises are a must for every mom. Perform 10 of these intermittently a few times a day. Try them seated, sitting on a Swiss ball, or standing — really you can do these anywhere, but seated on a ball will help you identify the pelvic floor muscles as you “lift” away from the ball.

PELVIC FLOOR EXERCISE

Squeeze and lift the pelvic floor muscles. 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).
And relax for 10 seconds.

It is just as important to learn how to relax these muscles as it is to turn them on, so don't skip that step!

PELVIC PAIN – IS IT SERIOUS?

Pelvic pain during pregnancy is somewhat normal, especially in consecutive pregnancies. But it is important that you know the difference between pelvic pain, pressure, and symphysis pubis dysfunction (SPD).

Pubic pain or pelvic pain, is common later in pregnancy. It can hinder the way you walk and exercise. However, if you are feeling pressure, cramps, groin pain, or a backache, you could be in the beginning stages of labor. If SPD is present, you might hear a clicking noise when you move. All of these types of pain should be discussed with your doctor or midwife.

If you are experiencing pelvic pain, it is best to avoid the following moves and exercises:

- Abductions (where the leg moves away from the body)
- Uneven leg distribution, such as side squats
- Moves where your feet are further than hip-width apart
- Any move or position that causes pain or distributes the pelvis area unevenly, such as crossing your legs

Even though you may be experiencing pelvic pain, it is still important to keep working your core with pelvic strength, kegels, and other core stability exercises.

DIASTASIS RECTI – THE SILENT SEPARATION

Diastasis recti occurs in 33 – 60 percent of pregnant women. And the research shows about 45 percent of women still have this condition six months postpartum. You are more prone to this abdominal gap if you have a weaker abdominal wall, if you are carrying a large baby, if you are carrying more than one baby, if you have a narrow pelvis[5,6], if you have more than one child, if had your children close together, or if you're over 35 when you get pregnant. After that long list of predisposing factors, you can see why 33 – 60 percent of mamas have diastasis recti during the second half of pregnancy. This abdominal separation occurs when the tissue between the right and left recti is distanced by more than two finger-widths. If the condition goes undetected, it can lead to low back pain, poor posture, muscle imbalances, bloating, or incontinence.



If you have been diagnosed with a diastasis, there are a few things you can do to improve your condition: use proper posture, incorporate functional movements into daily activities, perform exercises to strengthen the transverse abdominis and pelvic floor, and avoid exercises that add extra pressure to the belly tissues.

Assess yourself with this [diastasis self-test video](#). If you are not comfortable performing a crunch later in pregnancy, you can scoot forward in a chair and lean back against the back of the chair. Then attempt to sit up from this position without the use of your hands. You can then place your fingers along the linea alba, or look for a “ridge” along the midline.

While this condition may be unique to you, there are some general guidelines that we follow in our [pregnancy workouts](#). We minimize twisting, planks, and exercises that put added pressure on the belly tissues. We also cue up the transverse abdominis to create core stability.

Pay special attention to the transverse ab exercises in the [Foundation Core Workout for Pregnancy](#). These specific core exercises are safe for diastasis recti during pregnancy.



RUNNING WHILE PREGNANT

Is it safe to continue running while pregnant? If you were a runner prior to getting pregnant, you can continue to run as long as you adjust your runs over time and as your belly gets bigger. If you didn't run before you got pregnant, now is not the time to start a running routine. Below are some helpful articles to read if you decide to continue running during your pregnancy:

- [Top 10 Tips for Running During Pregnancy](#)
- [Fit Pregnancy — The Pregnant Athlete](#)

WARMUP AND COOL DOWN

As with any workout routine, a proper warmup and a cool down are essential. The warmup serves to get the blood flowing, to slowly raise your heart rate and to prime the body for exercise. You should always warm up with dynamic stretching and/or by walking around for a few minutes before beginning any workout. Once the exertion section of the workout is over, you should always cool down by walking around. The cool down helps to gradually bring your heart rate back to its normal level while giving you the opportunity to elongate those muscles that were worked and strengthened. During the cool down, you can use dynamic stretches, static stretches and/or walk around for a few minutes to bring your body back to a more relaxed state.

Our pregnancy workouts will gradually warm you up (even on those days when you find yourself riding the struggle bus!) and will leave you feel relaxed and rejuvenated after a proper cool down session.

PRENATAL HYDRATION AND NUTRITION

Fitness and nutrition go hand-in-hand. And, as you've read above in some of our dos and don'ts, it's imperative that you properly fuel your body within the hour of pregnancy workouts. It's extremely important that you remain hydrated. Not only will you feel better during the workout, but you will also get more out of each session if your body is properly fueled. For more information on the right types of foods to eat during pregnancy, in addition to other pregnancy-related nutrition tips, be sure to check out our [prenatal nutrition information](#).



POSTNATAL

THE FIRST DAYS: POSTPARTUM CARE

The nursing staff or your midwife should play a central role in teaching you how to care for your body and your infant after birth. All instructions should go home with you so that you encounter few surprises, and also remain on file so your healthcare practitioner can adjust treatment if necessary. Topics to discuss before discharge include: lochia (postpartum vaginal discharge) appearance and frequency, acceptable physical activities, attendance to the breasts, perineum, bladder, and/or C-section incision, nutritional needs, recommended exercise, emotional and psychological reactions to the major life change of having a baby, and signs of complications.

You might be surprised to discover that you retain your baby belly for weeks, even months, after giving birth. But if I might point out that your body has just housed a human being who demanded luxurious living quarters for nine months, and now your muscles and skin must adjust to the baby's absence. The uterus needs a little while to contract into its pre-pregnancy size, and the organs — such as the stomach, intestines, and bladder — must shift back to their original locations, having been nudged out of place by the growing womb. On top of these changes, the increased blood flow and hormones from pregnancy need time to wane.

POSTPARTUM DEPRESSION

You will not only need time for physical healing after delivery, but also emotional healing. Doctors take postpartum depression very seriously; the condition affects 20 percent of patients. And it affects a higher rate of patients who undergo in vitro fertilization. New mothers can feel so low that they are unable to get out of bed to tend to their babies, to feed them, bathe them, change them, or dress them. They might feel no connection to their infants at all, and even consider suicide. If you have mild or intense signs of PPD you should seek medical advice as soon as possible. There are hotlines and anonymous chat groups at [apa.org](https://www.apa.org) and [nimh.nih.gov](https://www.nimh.nih.gov).

WHEN CAN I START EXERCISING?

If you delivered without complications or surgery and your doctor or midwife has given you permission, resumption of exercise is encouraged. According to ACOG, pelvic floor exercises are encouraged immediately postpartum (again given your practitioner is on board).

Within the first four to six weeks your postnatal body is considered “normal” in the fact that all systems are back to “normal.” But you will certainly notice weak or loose muscles, extra fat, fluid retention for breastfeeding, and sometimes some cellulite that did not reside on your thighs prior to getting pregnant.

Your body is going through many, many changes in those first few precious weeks. With these changes you will see some weight loss. This weight comes from: the baby, amniotic fluid, placenta, extra blood volume, breast tissue, fat storage, urination, and the uterus involution. With all of this in mind, notice how hard your body is working in the first few weeks postpartum — it is a delicate time for your body! Ease into exercise and only if it can be done pain free.

Exercising after a C-section should be done with extra caution. As long as your doctor or midwife is okay with it, you should be able to perform pelvic floor exercises shortly after delivery — see Hold ‘Ems and Quick Squeeze ‘Ems on the following pages. After you are cleared to exercise around the 6 – 8 week postpartum mark, you can start with our [Core Foundation exercises](#), which create stability to take the strain away from the incision area. They should be done pain free. If this is not the case, you need to back off. You had major surgery, you’re dealing with a newborn’s sleep schedule — your body is stressed.

VAGINAL DELIVERY

Vaginal deliveries with midline episiotomies, especially 4th degree (1st being smallest) can create dysfunction of the pelvic floor, which also interrupts core function. Tearing during delivery causes major scarring and needs to be addressed. Several of the tools and instruments that are used to assist you in giving birth, vacuums and forceps for example, can cause injury and dysfunction. Our goal is to get you back to pain free movement. If you experienced extensive tearing or pelvic organ prolapse, you might need to seek extra support from a physical therapist who specializes in women’s pelvic health. Otherwise our [postnatal program](#) will help strengthen your pelvic floor and your core, which is so important in your postnatal recovery.

C-SECTION DELIVERY

A C-section is a surgical procedure, but unlike what most women think, your doctor will not be cutting through muscle with the exception of the uterus. When a C-section is performed the skin and fascia is cut horizontally, then the abdominal muscles are separated from one another and moved to the side. These muscles are rarely cut, and if they are they are usually put back together. While the muscles are not cut, the procedure greatly interrupts the function of the muscles and their ability to respond to movement.

C-Section Scar Rehab

Normal tissue in our bodies is aligned in a nice uniform direction. However, when scar tissue forms, it is kind of like your toddler played pick-up sticks and tossed them all over the floor. The tissue is laid down in haphazard directions. Your C-section scar is no different. The scar tissue can stick to the tissues underneath, to the abdominals, and the transverse abdominis (TA).



For you ladies who have undergone one or multiple C-sections, I would strongly encourage you to follow up with a women’s health physical therapist or physiotherapist to help you on your journey. You have already likely met your out-of-pocket expense with insurance, and your ability to take care of those sweet kid(s) of yours is impacted by how well you take care of yourself. Your body has gone through so much, and women’s health physical therapists have specialized training to address not only your scar tissue, but how to get your muscles firing correctly. It will get you feeling stronger and more like yourself sooner and more effectively than you may be able to on your own.

We need our TA to fire for the health of our spine, hips, pelvis, shoulders, knees, neck ... everything in our bodies, as far as musculoskeletal health is involved, is impacted by the ability of our TA to fire efficiently and correctly. Scarring can prevent this. Megan, DPT and author of our Core Intensive unit in our Prenatal and Postnatal Fitness Specialist course, sees this in her patients often. Women who have struggled with back and pelvic pain for years and are doing all the exercises and movements that they can think of to improve their symptoms and are feeling defeated, only to find out their C-section scar is preventing them from being successful. Let's work those scars and get them conquered early in the game so you can move on to the fun stuff! We will talk about the TA on the following pages.

Scar tissue responds very well to mobilization. I know ... big words ... sounds fancy but it is quite easy to do on your own. If you have a thick scar that is super tender and angry, or are dealing with issues with back pain, incontinence, or diastasis recti, please find a physical therapist/physiotherapist who specializes in women's health/pelvic health. They will be able to address your scar and other issues and get you back to being supermom much more quickly than if you just do a simple scar tissue mobilization at home.

First, you need to let that scar heal all the way. Do not get over eager too early in the game — you can pull open your incision. Wait until your incision is fully healed. Then put your fingers down along the incision and move your incision/scar in every different direction. Start gently. All of this should be fairly pain free. After you can do this with gentle pressure, deepen your pressure. A little soreness is ok, but do not torture yourself! Be patient, it is not going back to normal overnight, regardless if your scar is 4 weeks old or 10 years old.

TRANSVERSE ABDOMINIS EXERCISE

Because the transverse abdominis (TA) is known as the corset muscle, it is the one we want to focus on to get those pre-mommy tummies back. We need to train all four of our abdominal muscles (TA, rectus abdominis, internal and external oblique), but the TA is essential for getting a flatter tummy and to kick the “bread loaf” or “ab doming.”

The TA runs horizontally across the front of the abdomen and acts like a corset. The main job of the TA is to stabilize the spine and pelvis before you move your arms or legs. These guys need to work all day, every day. Every time you take a step, climb a stair, reach overhead, cough or laugh so hard you cry, these lovely little muscles are kicking in. It's not just about the 30 minutes of exercise we do, but the other 23.5 hours of the day when this muscle needs to serve you.

A series of core-specific workouts (found in our [Postnatal Exercise](#) program) will help you train your core from the inside out by selectively strengthening the TA.

TA exercises approximate the recti bellies and strengthen the integrity of the linea alba, which in turn helps to get rid of the muffin top, mommy belly, or whatever ugly name you have for it. It also helps to close an abdominal separation or gap, otherwise known as diastasis recti!

CHECK OUT THE POSTNATAL LIBRARY IN THE STUDIO



PELVIC FLOOR EXERCISE

The pelvic floor, the bottom of your core, is a group of muscles that serve as a hammock to your pelvic organs. Any weight bearing activity (walking, running, jumping) increases the strain through the pelvic floor. Weakness and dysfunction in the pelvic floor can cause incontinence and pain. Way too often I hear ladies say, “I’ve had babies, so peeing my pants is just part of life.” Let me tell you, my friends, this is not true. You can selectively retrain the pelvic floor to do its job. Now, to be fair I will say, there are times when these muscles and the bladder get damaged or injured and require more invasive intervention including surgery. If you are consistently working your pelvic floor and are getting no-where, please, please get in touch with a women’s health PT.

EXERCISES TO RETRAIN YOUR PELVIC FLOOR

Hold Em’s

1. Squeeze and lift the pelvic floor muscles by thinking of pulling on both ends of that hammock I talked about. You can also think about using the muscles that you use to stop the flow of urine or hold in gas.
2. Hold for 5–10 seconds (you should be able to talk while you do these so you don’t hold your breath). And relax for 10 seconds. It is just as important to learn how to relax these muscles as it is to turn them on, so don’t skip that step!
3. Do 10 contractions. Try to get in about 4–5 sessions of these puppies a day.

Quick Squeezes

1. Now contract those same muscles quickly 5 times. Don’t hold. We’re training motor control here ... fancy term for retraining that brain to turn them on/off quickly. Relax for 10 seconds after your fifth quick contraction.
2. Repeat 10 times.

COMMON MUSCULOSKELETAL ISSUES POSTPARTUM

Our bodies have just remolded their structure to house a tiny human being. So it’s completely normal to have some musculoskeletal (bones, muscles, tendons, ligaments, joints) changes too! This is what provides your body with stability and allows your body to move. Here we outline 3 common issues, but we have oodles of information on [back pain](#), [pelvic pain](#), [lordosis/kypnosis](#), [sciatica](#), and more on our website.

DIASTASIS RECTI

Many moms experience postpartum body changes. One of these is an incredibly common condition called diastasis recti — the separation of your recti abdominal muscles. It commonly occurs during pregnancy to make room for your growing baby. Diastasis recti occurs in 33 – 60 percent of pregnant women. Recent research suggests even more than this concrete statistic, suggesting most pregnant women will have some form of diastasis in the late stages of pregnancy. Research shows about 40 percent of women still have this condition 6 months postpartum.[7]

You are more prone to this abdominal gap if you have a weaker abdominal wall, if you are carrying a large baby, if you are carrying more than one baby, if you have a narrow pelvis, if you have more than one child, if had them close together, or if you’re over 35 when you get pregnant. After that long list of predisposing factors, you can see why diastasis recti is common. That said our bodies are made to bear children and are also resilient in getting back to their prior self!

Symptoms of Diastasis Recti

The symptoms of this condition can vary from woman to woman, so it’s important to understand what to look for if you have recently given birth.

The most obvious symptom is a postpartum pooch around your ab muscles. However, that doesn't always mean you have diastasis recti. It could indicate a weak TA or weak core. You might also think you have diastasis if your belly has a "bread loaf" or ridge or it cones as you roll to sit up.

The following are also symptoms of diastasis recti: pelvic floor dysfunction, feeling of flabby abs, incontinence, pelvic pain, back pain, poor posture, or an umbilical hernia.

How to Tell If You Have Diastasis Recti

You can do a self-check exercise at home 6 – 8 weeks after you've given birth to determine if you have diastasis recti. After performing the self-test, you can decide if you should speak with your doctor about this condition.

[Watch the video.](#)



If you feel a separation of two finger widths (finger placement is horizontal), you likely have a mild case of diastasis recti. Separation of three to four finger widths indicate a moderate case, while four or more finger widths points to a severe case.

Talk to your doctor or a physical therapist to get a definitive measurement/diagnosis, particularly if signs point to having a moderate to severe case.

WHY DO WE USE THE CRUNCH FOR THE SELF-TEST?

An excerpt from our [Prenatal and Postnatal Fitness Specialist Course](#):

We use the crunch because it fires rectus abdominis, which tensions up and pulls on the the linea alba. When the linea alba is healthy, it can fire the rectus and withstand this pull and there is the normal <1 cm gap all along the linea alba. However, when the diastasis is present, the tissue can't hold up under stress and separates. This is why strengthening the TA is so important ... because it runs horizontally and gives that stability to our structure vs. the rectus that runs vertically and adds stress to the linea alba.

INCONTINENCE AND PELVIC FLOOR DYSFUNCTION

Both vaginal and cesarean deliveries can cause incontinence postpartum. Mommas who have had vaginal deliveries tend to have more difficulty with incontinence, but not always. From overloading of our pelvic floor during pregnancy to the trauma of delivery, our plumbing takes a hit, ladies! But there is hope!

The pelvic floor is the bottom of your core. This somewhat elastic, sling-like system can weaken during pregnancy and labor. Think of it as a hammock that holds your bladder and reproductive organs in and attaches to the front and back of your pelvis. Its primary job is to keep that baby in and then afterwards to keep your insides ... well ... in. These muscles work all day long and in conjunction with the TA to stabilize the core. Any insufficiencies in these muscles can cause pain, incontinence, and altered movement.

A study by Poświata in 2014, found that 45.54 percent of the 112 elite female endurance athletes (runners and cross-country skiers) polled suffered from incontinence. It is so common ladies! Researchers also determined that running and high-impact aerobics were the most identified sources of the incontinence. As a result, high-impact aerobics became the single most abandoned type of exercise once women had experienced loss of urinary control.

We need to train those pelvic floor muscles that hold up our bladder, uterus, and rectum and give the bottom of our abdominal canister some integrity. These muscle fibers can be trained! Like any muscle group, you have to specifically target these muscles. You wouldn't swim to train for a marathon right? So let's find the correct muscles to train.

So, when you work your TA with these [workouts](#), you are also getting those pelvic floor muscles to fire. However, we also need to intentionally activate those muscles to get them stronger and have better endurance. See the Pelvic Floor Exercise on page 15.

NUTRITION NEEDS FOR POSTNATAL EXERCISE AND BREASTFEEDING

Do I need to eat before exercising? It really depends on when you work out. If you exercise first thing in the morning, you can exercise on an empty stomach. Your body's glycogen stores are full from the day before, so if you feel okay, you can go without food prior to your workout. But if you feel you need a little something to get you going, try eating half an apple or banana. Unless you're planning on a high-intensity workout of at least 50 minutes in length or you're breastfeeding, you should have enough energy stored in your body to fuel your workout.

If you work out in the late-morning, afternoon, or evening, and are within a couple of hours of having eaten a meal, your muscles are full of energy and should have enough glycogen to power you through your workout.

If you are breastfeeding, make sure you eat a snack of protein and unprocessed carbohydrates (e.g., an apple with peanut butter, milk and a slice of bread, or yogurt and a few almonds) within an hour either pre- or post-workout. Also, be sure to stay well hydrated before, during, and after the workout.

Breast milk is made mostly of water, so it's important that you're drinking enough liquids throughout the day. Staying hydrated will not only help you maintain an adequate milk supply, but will also allow you to feel your best.

The Institute of Medicine recommends that lactating women consume about 128 ounces of water per day or about 16 cups. Sixteen cups may seem like a lot, but you can consume more than water alone to help you reach your daily hydration needs. Any non-caffeinated, non-sugary drink counts toward the 16 cups and foods (such as fruits and vegetables, which contain high concentrations of water) usually account for about 20 percent of water intake.

In order to reach your hydration goals, create routines around liquid consumption. If your milk supply drops, many times it is due to dehydration, or not consuming enough water.

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