

Diastasis Recti Prevention Pregnancy

Diastasis Recti during Pregnancy with Pilates

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Abstract

Pilates exercises are ideal before, during and after pregnancy. Some benefits of practicing Pilates include more room for the baby to grow due to lengthening the spine, feelings of wellbeing and more energy. Proper posture is important during all trimesters of pregnancy to prevent Diastasis Recti. Good posture should be active and dynamic rather than static. The diaphragm, transverse, multifidus, pelvic floor are the deepest core muscles and should be conditioned. Diastasis Recti is a musculoskeletal injury, where the rectus abdominus tears at the connective tissue, separating it from the linea alba - a collagen cord that runs from the bottom of your sternum to the front of your pelvis. As the uterus grows, intra-abdominal pressure causes the abdominals to stretch. My clients attribute a healthy, strong pregnancy and no abdominal separation issues to Pilates.

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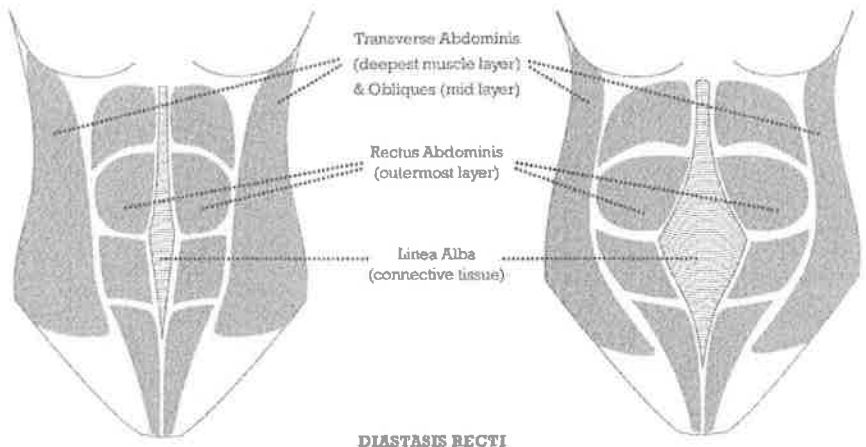
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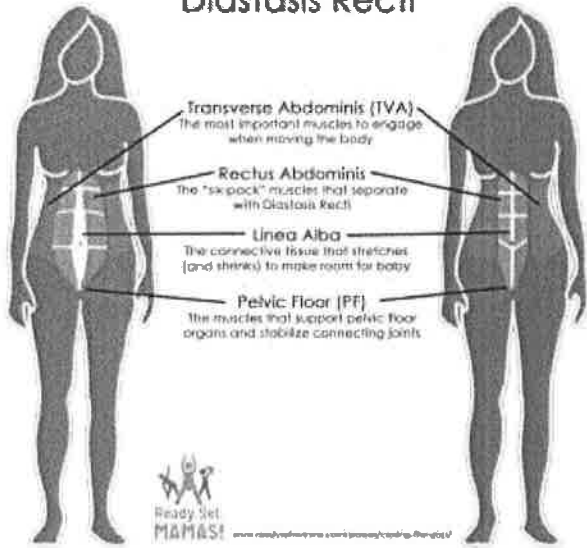


DIASTASIS RECTI

Separation of the Rectus Abdominis muscles due to excessive intra abdominal pressure

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Diastasis Recti



Anatomical description and definition: Diastasis recti is a fairly common condition of pregnancy and postpartum in which the right and left halves of Rectus Abdominis muscle spread apart at the body's midline fascia, the linea alba. During pregnancy, as your baby grows, the uterus pushes against the abdominal wall. Pregnancy hormones allow the connective tissue to relax and soften. As this pressure increases, the right and left sides of the rectus abdominis (the 'six pack' muscles) begin to widen at the linea alba, which is the connective tissue where your abdominal muscles meet. The muscles don't tear or rupture, but a gap occurs between them. Usually the separation occurs in the third trimester but can also happen after pregnancy, when the abdominal wall is weakened and there isn't a baby inside to support the muscles. During pregnancy, there are a few symptoms of diastasis recti – mainly feeling a gap, or even a bulge/dome, on either side of the midline of your belly. There have been studies showing that the condition is more common among who do not exercise or practice good posture during pregnancy. This diagram above shows the difference between a normal abdomen and one that has suffered from DRa.

The Pilates program during all stages in pregnancy generally should focus on pelvic floor, core strength, breathing and joint stability goals. As an instructor, one thing that drives me crazy is seeing women jump back in to high impact workouts without taking the time to rebuild their core. Yes, it's good to get moving again, but if you don't give your body adequate time to recover and take the time to rebuild deep core strength and pelvic floor function, you're setting yourself up for problems down the road (diastasis recti, bladder control issues, and pelvic floor dysfunction to name a few). To be proactive in safe exercise preconception, during pregnancy and after birth of the baby are key in a woman's body.

Abdominal separation can occur in different areas along the linea alba, although it is more commonly found near the belly button. The pregnancy hormone, relaxin causes the muscles and ligaments to relax, allowing for the abdominals stretch, and the linea alba to separate much more easily, then if this hormone was not present. If the linea alba tissue is not sufficiently conditioned, which happens over time with proper exercise and movement (and nutrition), it will separate beyond what is normal, causing the DR. The exercise program will be safe for preventing DRa.

During pregnancy, it is important that the multifidus is strong and flexible.

Adductors, glutes, and hamstrings become the secondary stabilizers of the Sacrum. It is also important not to overstretch the adductors or hamstrings. Pilates can help correct posture, lateral breathing and finding a neutral pelvis. The pregnancy pilates program created is also geared toward Pelvic floor, transverse abdominal, and diaphragm conditioning. We will avoid flexion exercises.

My case study, Regina is 31 years old. Regina is pregnant with her second child and in her second trimester. An active athlete and expecting mother with no major injuries or limitations. Regina had Diastasis Recti we discovered after her first pregnancy. She was rehabilitated by a specialist and there is no current gap. During the first trimester she was participating in Pilates mat classes and private equipment sessions. Regina is a runner and a college athlete. During Her first trimester of pregnancy she participated in the same fitness/exercise regimen. She has been cleared by her doctor to participate in private sessions with me. Her energy is fantastic and her pregnancy has been smooth so far. Regina has no other health conditions or concerns at this point in time.

Our program goals are to strengthen the transverse abdominis and core muscles to help minimize the diastasis recti. We will be strengthening the gluteals,

piriformis, and hip flexors to support proper neutral pelvis alignment of the pelvis/hips. I will be teaching lateral thoracic /diaphragmatic breathing to support the exercises as well.

The workout experience customized for Regina:

Roll down

Posture analysis

Lateral breathing

Warm up (Mat):

Pelvic tilts, Pelvic curls, Spine twist supine and Leg circles

Foot Work (Cadillac) a. Parallel Heels b. Parallel Toes c. V Position
Toes d. Open V Heels e. Open V Toes f. Calf Raises g. Single Leg Heels h.
Single Leg Toes

Ab Work (Reformer) a. Hundred prep Modified b. Hundred modified

Hip Work (Reformer) a. Frog b. Circles Down c. Circles Up

d. openings

Spinal Articulation (Reformer) a. Bottom Lift b. Bottom Lift with extensions

Stretches (Reformer) a. Standing Lunge

Full Body Integration (Reformer) a. Upstretch 1

(Cadillac) b. Kneeling cat stretch

Arm work (Cadillac) Arms Standing Series a. Chest Expansion b. Hug-a-Tree

c. Circles Up d. Circles Down e. Punches f. Biceps

More arm work (Cadillac) a. Sitting Adduction Single Arm

Leg Work (Cadillac) Squats

And

Single Leg Side Series a. Changes b. Scissors c. Circles (forward and back)

Lateral Flexion/Rotation (Wunda Chair) a. Side over

Back Extension (Wunda Chair) Swan Basic and Single Arm

Final Assessment- Roll down

Conclusion:

With this research, we can conclude that exercise before and during pregnancy does significantly reduce a pregnant woman's chance of getting Diastasis Recti. Properly conditioned abdominals before pregnancy has several benefits such as decreasing the chance of developing Diastasis Recti. Women who have had multiple pregnancies, or twins, triplets.

Non-exercising women and with weak abdominals are at risk for DRa. Before working with expecting moms in all trimesters (pre-pilates, 1st, 2nd, 3rd and postnatal) I require doctor's approval. Regina found this custom program gave her strength, energy and she noticed dramatic differences in her posture and body in just nine weeks. She feels connected to her body and feels that she is prepping her body well for labor, delivery and postnatal efficiently with Pilates.

QUICK STATS:

How prevalent is Diastasis Recti among exercising women?

90% of non-exercising pregnant women exhibited diastasis recti while only 12.5% of exercising women had the condition.

The occurrence and size of DRA is much greater in non-exercising pregnant women than in exercising pregnant women.

Because of the integral role the abdominal muscles play in functional activities we recommend examining pregnant and postpartum women for the presence of diastasis recti

100% of women may have some level of diastasis of the rectus abdominis in the third trimester. (Gilliard and Brown 1996, Diane Lee 2013)

For many women the gap remains widened at 8 weeks postpartum, and left untreated, the gap at 8 weeks remains unchanged at 1 year postpartum. (Coldron et al 2008, Liaw et al 2011)

66% of women with diastasis recti have some level of pelvic floor dysfunction (Spitznagle et al 2007). Diastasis recti and pelvic floor problems often go together

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