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Pilates Exercises for Pregnant Women

Abdominal Exercises

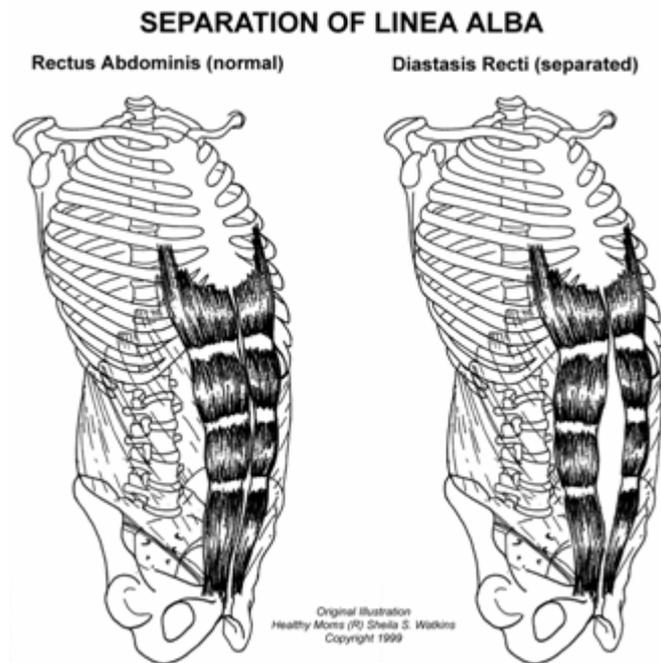
Pregnancy: A Real Ab Stretch

During the course of pregnancy, the abdominal muscles will stretch by over 50 percent of their original length. Strengthening the abdominal muscles is critical during pregnancy to help support the growing uterus, decrease lumbar compression and reduce pelvic pressure. Women who practice safe abdominal strengthening during pregnancy have less low back pain, less pelvic pain, better mobility, easier deliveries and faster recoveries.

During pregnancy, a hormone is present, called relaxin, which helps to increase laxity of all the muscles, joints, ligaments and joint capsules. The purpose of this hormone is to increase mobility of the tissues so that the body is able to accommodate the rapid foetal growth and prepare the body for delivery. The abdominal muscles are most directly affected by the growing foetus and have the ability to stretch significantly as the foetus grows.

The Diastasis Recti At about 20 weeks and often sooner for a second pregnancy, the rectus abdominus will begin to separate along the linea alba with the two rectus halves

moving laterally. This is called a diastasis recti.



This is a normal occurrence during pregnancy, and this will occur in almost all women. However, when the diastasis recti occurs, there is less support for the lower back, which often results in an increase in low back pain or other discomforts. In addition, women who do not control the size of the diastasis may have difficulty closing it postpartum and may be at risk for an umbilical hernia, especially if there is a subsequent pregnancy without proper closure of the separation.

Safe Pregnancy Training

Safe abdominal strengthening during pregnancy should look deeper than the rectus and focus on training of the internal obliques and the transversus abdominus (TVA). Training of the TVA is particularly beneficial because contraction of the TVA directly supports the uterus, and a well-toned TVA will help keep the rectus halves closer together and prevent the diastasis from opening excessively. Therefore, TVA training can reduce the size of the diastasis. In addition, training the TVA also helps women prepare for delivery, as one of the roles of this muscle is to assist during forceful expiration (i.e. pushing).

Training of these muscles can occur in all positions, but pregnant women are often most comfortable in sitting and quadruped positions, especially as the pregnancy progresses.

Gentle supine abdominal exercises—such as knee folds, heel slides, pelvic tilts and head lifts—are acceptable and are often much more challenging than one would expect as the abdominal muscles are becoming increasingly weakened.

Basic Abdominal Program for Pregnancy

Here are some examples of basic core exercises that should be included in every pregnant woman's exercise program:

Seated or Quadruped Transversus Contraction

Helpful for minimizing diastasis, stabilizing spine and pelvis, and maintaining abdominal tone during pregnancy; essential after pregnancy. Transversus is easier to contract seated or on all fours versus lying down. Good position to begin training.

Seated Transversus: Start seated with body weight cantered over pelvis and shoulders aligned over pelvis, practice pulling belly button to the spine without allowing ribcage to shear forward.

1. 30-Second Hold: Begin with a belly breath and expand the body, then exhale and move the belly button toward the spine. Hold it here for 30 counts. End with a belly breath.
2. Contracting Transverse: Same position as above. Inhale and expand body. Exhale all the way to the spine, hold for one count and then repeat 50-100 reps.

Quadruped: This position is beneficial as it takes weight off the pelvic floor and helps to increase perineum circulation.

Start on hands and knees with hands lined up with shoulders and knees lined up with hips; the spine should be neutral. If wrists are a problem, use fists on the floor. Allow belly to sag toward floor (without changing spine alignment), then pull belly button to spine maintaining neutral spine. Repeat 50-100 reps.

Supine Transversus Contraction: This is the most difficult position in which to engage the transversus due to decreased proprioception.

Start lying on the back with bent knees, feet on the floor hip-width apart. Begin exercise with a belly breath, then exhale belly to the spine without doing a posterior pelvic tilt. Exercise can be performed using the 30-second hold, contracting transversus, or use

traditional abdominal stabilization techniques such as knee folds while keeping the trunk stabilized.

Additional Pilates exercises for pregnancy

Here are some basic Pilates moves suitable for pregnancy that you can try at home.

Take care to:

- Avoid moves performed in the supine position during your second and third trimester. Lying on your back can cut off the oxygen supply to the baby.
- Move within a comfortable range of motion. Your ligaments will loosen during pregnancy, so it's a good idea not to flail around too wildly.
- Stay controlled. Pilates moves often involve holding your torso in place while moving your arms and legs in different directions. Make sure you go slowly so you don't lose your balance or hyperextend your joints.
- Keep your abs contracted and your pelvis neutral as you gently take your body through the motions.
- Don't hold your breath!
- Don't do any exercise that causes dizziness, nausea, shortness of breath or pain.
- If you're a beginner, stick with workouts geared specifically toward pregnancy, which will provide adaptations for some moves that may not be safe.
- Perform each movement three to four times.

The Saw

Sit on the floor with legs extended and spread slightly wider than hips, feet flexed. Stretch arms out to the sides, parallel to the floor and twist torso to the left, bringing your right fingers toward your left toes. Exhale and stretch gently through your chest. Inhale, pull your abs in, sit up, and repeat the move to the other side.

Modified Leg Front Pull

Get on your hands and knees with hands shoulder-width apart and knees under hips. Inhale and contract the abs as you extend your right leg out, lifting it until it's even with the hips. Exhale and return to start, repeating on the left side.

Spine Twist

Sit on an exercise ball or a chair and extend arms out to the side at shoulder height.

Exhale as you gently turn torso to the right, drawing the ribcage to the opposite hip and look at your right hand. Exhale and repeat on the other side.

Side Kick

Lie on your side with head resting on your arm, bottom leg slightly bent. Keeping abs tight to hold your torso steady, exhale and extend the top leg forward until your knee and foot are in line with your hip (or as far as comfortable). Go back to starting position and repeat three to four times before switching sides. Make sure you maintain neutral posture as the leg moves forward.

Back Strength

On hands and knees with abs tight, lift and straighten one leg and the opposite arm, forming a half-X and keeping both limbs in line with the torso. Switch sides and pay close attention to your balance.

Exercises to Avoid During Pregnancy

Diastasis can be made worse are by exercises that require the rectus abdominus to contract strongly against gravity. When the rectus is asked to contract strongly, if the integrity of the muscle is lost, the two halves of the muscle will shorten and contract as two separate units with each half moving laterally. This, in turn, opens the separation further. Precautions need to be taken during any supine (lying on your back) exercises that involve lifting the head and shoulders off the ground or lifting both lower extremities off the ground, as well as during plank or push-up positions. This means that many of the traditional abdominal exercises in the Pilates repertoire are not going to be appropriate and may be potentially dangerous with respect to opening the diastasis.