

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists Excellence in Women's Health

Exercise during Pregnancy

There are many benefits to be gained from regular exercise during pregnancy. These include physical benefits and the prevention of excessive weight gain, as well as benefits for psychological wellbeing.

In addition to pregnancy-specific benefits, there are significant lifelong benefits of regular exercise for all adults including reduced risk of cardiovascular disease, type 2 diabetes and some cancers.

Before you start an exercise program in pregnancy, speak with your doctor or midwife to make sure that you do not have any health issues that may prevent you from participating in regular exercise during your pregnancy.

If there are no health or pregnancy reasons why you should not exercise, you should be encouraged during your pregnancy to participate in regular aerobic and strengthening exercises. Importantly, there is no evidence to suggest that regular exercise during a healthy pregnancy is harmful to the woman or her baby.

How often should I exercise?

Aim to be physically active on most, preferably all days of the week. If you are currently inactive or overweight, start with 3 to 4 days per week on non-consecutive days.

How hard should I exercise if I am fit?

Most women should aim for a 'moderate' intensity. This means a rating of 12 to 14 on Borg's rating of perceived exertion scale (see Table 1). You should feel like you are working 'somewhat hard'.

For women with a high level of fitness who are accustomed to regular vigorous exercise, there is no evidence to suggest that vigorous exercise during pregnancy is harmful, provided that you listen to your body and adjust your routine over time. A rating of 15 to 16 (equating to 'hard') may be appropriate. However, athletes should be wary of pushing too hard. Pregnancy is not a time for serious competition or aiming to reach peak lifetime fitness.

How long should I exercise for?

Aim to accumulate 150 to 300 minutes of moderate intensity physical activity each week. Ideally, this should be achieved by being active on most days of the week for at least 30 minutes at a time.

If you are currently inactive or overweight, start with 15 to 20 minutes and slowly build up to 30 minutes per session. While no evidence exists for an upper limit to exercise duration during pregnancy, it is not advisable to extend exercise duration beyond 60 minutes per session, unless the intensity is relatively light.



What type of exercise should I do?

You should be encouraged to participate in both aerobic and strengthening exercises.

Aerobic exercises

Aerobic exercises involve continuous activities that use large muscle groups and elevate the heart and breathing rates to cause some 'huff and puff'. Common examples include:

- walking (aim for a 'brisk' pace)
- stationary cycling
- swimming and other water-based activities (avoid heated spas and hydrotherapy pools)
- if you are already running regularly prior to your pregnancy, there is no scientific evidence to say whether you should continue or not. This should be decided on an individual basis and in consultation with your doctor or midwife. Listen closely to your body and monitor the intensity appropriately

Strengthening exercises

Strengthening exercises should be performed twice per week, on non-consecutive days, covering the main muscle groups of the body.

Resistance can be provided by light weights, body weight or elasticised resistance-bands.

Aim to perform 1 to 2 sets of 12 to 15 repetitions for each exercise. These strengthening exercises should be performed at a



'moderate' intensity (rating of perceived exertion 12 to 14), with slow and steady movements and proper breathing technique (i.e. exhale on exertion).

Avoid heavy weight-lifting and activities that involve straining or holding the breath. Exercises should not be performed lying flat on the back after the first trimester and walking lunges are best avoided to prevent injury to the pelvic connective tissue.

General considerations for exercise during pregnancy:

- include a gradual warm-up and slow and sustained cool-down with each session
- avoid exercising in high temperatures and humidity, ensure adequate hydration and wear loose-fitting clothing
- avoid activities with the possibility of falling (i.e. horseriding, skiing) or impact trauma to the abdomen (i.e. certain team sport games)
- perform regular exercises to strengthen the pelvic floor muscles. Avoid activities that add extra load to the pelvic floor (i.e. jumping or bouncing)
- take care with weight-bearing exercise and activities involving frequent changes in direction (i.e. court sports) due to increased risk of injury and changes in balance
- reduce inactive behaviour: minimise the amount of time spent in prolonged sitting and breaking up long periods of sitting as often as possible



Warning signs to stop exercise and seek medical attention:

- chest pain
- unexplained shortness of breath
- dizziness, feeling faint or headache
- muscle weakness
- calf pain, swelling or redness
- sudden swelling of the ankles, hands or face
- vaginal bleeding or amniotic fluid loss
- decreased fetal movement
- uterine contractions or pain in the lower back, pelvic area or abdomen (potentially indicating preterm labour)

How you might describe your exertion	Borg rating of your exertion	Examples
None	6	Reading a book, watching television
Very, very light	7 to 8	Tying shoes
Very light	9 to 10	Chores like folding clothes that seem to take little effort
Fairly light	11 to 12	Walking through the grocery store or other activities that require some effort but not enough to speed up your breathing
Somewhat hard	13 to 14	Brisk walking or other activities that require moderate effort and speed your heart rate and breathing but don't make you out of breath
Hard	15 to 16	Bicycling, swimming, or other activities that take vigorous effort and get the heart pounding and make breathing very fast
Very hard	17 to 18	The highest level of activity you can sustain
Very, very hard	19 to 20	A finishing kick in a race or other burst of activity that you can't maintain for long

© RANZCOG 28/07/2016

Reproduction of any content is subject to permission from RANZCOG unless permitted by law.

DISCLAIMER: This document is intended to be used as a guide of general nature, having regard to general circumstances. The information presented should not be relied on as a substitute for medical advice, independent judgement or proper assessment by a doctor, with consideration of the particular circumstances of each case and individual needs. This document reflects information available at the time of its preparation, but its currency should be determined having regard to other available information. RANZ-COG disclaims all liability to users of the information provided.



College House, 254-260 Albert Street East Melbourne, Victoria 3002, Australia. Ph: +61 3 9417 1699 Fax: +61 3 9419 0672 Email: ranzcog@ranzcog.edu.au ranzcog.edu.au



1.1 DISCLAIMER

If you are pregnant or have recently given birth, please seek medical advice before participating in KX Workouts.

Our workouts, whether part or all of the workouts, may not be suitable for pregnant or post-natal women. You can only attend KX Pilates group classes up until you are 13 weeks pregnant. After 13 weeks you can attend Private 1:1 classes or a Pilates Pre/Post-natal class (subject to availability).

Please refer to Pre/Post-natal information under the FAQ section and provide a completed Authority to Exercise form. Pre & Post Natal

1.2 EXERCISE ADVICE

It's fantastic that you're considering KX Pilates at this time in your life, as the benefits of a wellstructured exercise program during pregnancy can be beneficial for both mums and bubs. However, it's no secret that we like to do things a little different and our high intensity classes are of a special variety.

If you are new to KX, we ask that you not start our classes until after pregnancy, unless you book into a private one on one session or have been recently exercising.

If there is pain or discomfort, ease off! Exercise during pregnancy should not be about improving muscle tone. It should be about maintaining health, posture and a positive mental attitude.

1.3 UP TO 13 WEEKS

- → Have your Obstetrician fill out the Pregnancy Authorisation to Exercise Form and return to us upon arrival to your first class.
- → You may continue group classes up to the 13th week, if/when you are beyond 13 weeks, see below.
- → Before booking your first group class, please contact your local studio for a list of pre and post-natal trained instructors.
- → Please ensure the instructors are informed what week you are up to at the beginning of each class, as modifications of certain exercises will need to be given

1.4 BEYOND 13 WEEKS

- → You cannot attend our group classes after you are 13 weeks as our group classes are too intense, too dynamic and are not appropriate nor tailored for you or your baby.
- → You can continue with a reformer Pilates pre/ post-natal classes.
- → These classes have been designed for those of you expecting right up until birth. They combine strength training, light cardio and gentle stretching appropriate for your body during pregnancy.
- → If preferred, private one to one reformer
 Pilates is also available with our pre/postnatal qualified Trainers. These sessions are individually tailored to your changing needs



at each stage of your pregnancy.

→ Please have your Obstetrician fill out the Pregnancy Authorisation to Exercise Form and return to us upon arrival to your first class.

For all pregnant clients, extra guidance and/or doctors advice should be sought if you have:

- \rightarrow Diabetes before or during the pregnancy
- ightarrow High blood pressure or thyroid disease
- ightarrow Anaemia or blood disorders
- \rightarrow Any cardiac or pulmonary disorders
- ightarrow A history of premature labour
- → Placenta previa where your placenta has implanted completely over, or near your cervix
- \rightarrow Experienced three or more miscarriages
- → Experienced cramping, spotting or bleeding during pregnancy
- → Been told you're expecting more than one baby

1.5 PREGNANCY EXERCISE TIPS

- → Pelvic floor exercises are very beneficial, but it is just as important to practice releasing/ relaxing the pelvic floor as it is to contract it (vary the range of contractions, 100%, 50%, 25% etc. up and down).
- → Avoid exercise in a warm/hot environment as core body temperature increases when pregnant.
- → Keep well hydrated and avoid exercising on an empty stomach (your glycogen levels may drop too low). Bring a water bottle to class/ exercise.
- \rightarrow Wear a supportive bra.
- → Avoid ballistic (bouncing) stretching. Your joints are more flexible through elevated levels of the hormone relaxin.
- → Avoid holding prolonged positions, as this may increase blood pressure



1.6 THINGS TO REMEMBER

- → Always remind the instructor you are pregnant before every class.
- → You must avoid abdominal curls (flexing your upper body). This can make your abdominals separate further than they should. As you progress into your 2nd trimester, your abdominals separate naturally.
- \rightarrow Keep your spine mobile.
- → Do not over-stretch. The hormone relaxin is released during pregnancy. This can make your joints more flexible (especially for women who are already quite flexible).
- → Avoid squeezing hard on fitness circles.
 These can create pressure on your pelvis.
 Slow controlled shallow pulses are best.
- → Avoid painful movements and positions. If you are feeling pain in your tailbone or feel pubic pain, stop exercising immediately.
- → Listen to your body if you feel dizzy, nauseous, experience numbness, pins and needles, or it doesn't feel right, stop.
- → Avoid static positions for long periods. This may increase blood pressure. Keep moving.
- → Adhere to the five-minute rule. Never spend more than five minutes lying on your back at any one time, particularly in the second and third trimester. Roll onto your left side when laying down and coming up.
- → Check alignment. Neutral pelvic position will constantly be changing throughout your pregnancy so constantly check your alignment and adjust accordingly.

1.7 GENERAL REMINDER

Remember the general rule, if there is pain or discomfort ease off immediately. Remember that each pregnancy is individual, there will always be cases that don't fit the norm.

1.8 FIRST TRIMESTER

You can effectively do everything you usually would in the first trimester; however, please keep your head down when lying on your back and **do not** overload on springs/resistance.

1.9 SECOND & THIRD TRIMESTER

You can do the following:

- → Exercise when the spine is in neutral position (on a block/box for seated work).
- $\rightarrow~$ Perform lots of seated arm work and back and chest.
- → Perform Footwork again, do not overload on your springs/resistance
- → Place feet in straps only perform small range of movement.
- → Articulate your spine cat stretches are recommended.
- → Watch your balance, especially when in the third trimester of your pregnancy.

Do not do the following:

 \rightarrow Lie on your stomach.



- \rightarrow Overload on springs/resistance.
- \rightarrow Cross your legs to close to your chest.
- \rightarrow Execute abdominal curls lying on your back.
- → Perform hip rolls or hip lifts watch for supine hypertensive syndrome, where baby lies on the vena cava. This prevents normal circulation of blood back to the heart. This may lead to a lack of oxygen in the mother's blood system that in turn affects the baby's blood supply.
- → Lay or lie down on your back too long. Every 5 minutes roll on your side and pull yourself up using your hands.

1.10 POST PREGNANCY

Our reformer Pilates are great ways for new mothers to get back in shape after pregnancy and give themselves some much needed 'me' time, following clearance from your GP or Obstetrician.

It is also strongly recommended that whenever you start back at KX after a break, ensure you begin again in a Beginner class.

For those of you wanting to train with your baby, we have both pre and post natal classes and Mums and Bubs classes available for you.

Please ensure you complete the following before attending your first class:

- $\rightarrow \,$ Ask your GP Obstetrician to complete a clearance to exercise letter.
- → Complete our Post Natal Exercise Questionnaire.

1.11 PRIVATE PARENTS CLASSES

We provide specialty classes for parents with babies in capsules or on a mat next to the reformer up to 6 months, or crawling age. With the use of a reformer, this class specialises in regaining and rebuilding your strength.

1.12 TIPS BEFORE YOU START TRAINING:

- \rightarrow Ensure that bleeding has stopped.
- → Even with no complications, ONLY fundamental exercises should be performed with a very gradual progression. Some women may find it hard to connect pelvic floor.
- → Pilates advises you to concentrate on overall corset contraction and stability in neutral and closed chain.
- → If the delivery has involved complications, medical clearance must be obtained before starting back.
- → Contraction of the pelvic floor is extremely important and can be completed out of class as well as in.
- → The hormone Relaxin stays in the body for about 6 months or till breastfeeding stops. Therefore, watch your mobility and stability after pregnancy (particularly with flexion and rotation).
- → Watch stability exercises where the back is unstable, e.g. Plank, push up.