‘Helping You Fulfill Your Body’s Potential’

Modified Pilates during Pregnancy

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Exercising during pregnancy, is it safe?

Medical and fitness professionals agree that any exercise including Pilates is safe during pregnancy if a mum-to-be has no medical complications or pre-existing conditions such as a history of miscarriages.

The best advice for anyone who is planning a pregnancy is to commence some form of exercise regime prior to becoming pregnant.

The predominant aim is to maintain pre-pregnancy fitness levels rather than improve them.

If you are used to exercising and have a good level of fitness, you may continue to exercise throughout your pregnancy, but you will have to consider making some changes such as doing lower-level intensities and limiting range of movement when stretching.

If you have a more sedentary lifestyle and are not used to exercising, you may start an exercise programme, but it should be an appropriate level for your current fitness level. Low impact activities such as walking, swimming (no breaststroke legs) static bike, gym ball, and core stability exercises are better.

Irrespective of fitness, avoid activities such as running, lifting heavy weights, or standing for long periods of time.

If pregnancy is suspected

- All exercise should be ceased until the pregnancy has been confirmed.

- Medical clearance must be obtained if you wish to continue or commence an exercise programme once you know you are pregnant.

- If pregnancy is as a result of IVF treatment, it may not be advisable to continue with or start an exercise programme. You should seek medical advice about this.

Issues during pregnancy

Back Pain

The increased weight of a baby growing in the uterus changes your posture and this can place strain on your back and cause back pain. Back pain is more likely to occur if you have a history of back pain or hypermobility prior to becoming pregnant. It is more common in the 2nd and 3rd trimesters of pregnancy. The intensity and duration of pain can fluctuate throughout pregnancy. It is not possible to cure back or pelvic pain during pregnancy as not all the contributing factors can be removed. Treatment aims to reduce or prevent the worsening of symptoms, decreasing pain and improving function.

Breathlessness &/or dizziness

As the baby grows, the diaphragm is forced upwards which results in muscles in the top part of the chest, the neck and shoulders being involved to compensate for the lack of downward movement of the diaphragm. This can lead to an imbalance in normal breathing mechanics and shortness of breath which can lead to dizziness due to less oxygen and, in severe cases, can lead to confusion. Becoming aware of how you breathe and developing good breathing patterns promotes more efficient breathing and better lung capacity.

Swollen legs, ankles, leg cramps, varicose veins, haemorrhoids,

During pregnancy, a number of changes affecting venous blood flow occur in the circulatory system which can cause symptoms like cold hands/feet, numbness, tingling ("pins and needles"), muscle cramps, swollen legs, varicose veins, carpal tunnel syndrome, slow-healing wounds, and skin discoloration (pale or blue).

Carpal tunnel syndrome

During pregnancy, carpal tunnel syndrome (CTS) is primarily caused by fluid retention (edema) and hormonal changes, which can be indirectly related to increased blood volume and circulation changes that create pressure in the wrists. While it is commonly referred to as blood circulation issues due to swelling, the direct mechanism is the compression of the median nerve in the wrist caused by that excess fluid.

Venous return is impaired

After 16 weeks (2nd trimester), you should limit lying on your back to only short periods of time because this position can impair venous return. As pregnancy progresses, the heart increases in size to cope with the extra volume of blood and impaired venous return reduces the amount of oxygen to the baby. Exercises that would ordinarily be performed lying down are performed seated either using a chair or stability ball or may even be performed kneeling on hands and knees (if carpal tunnel syndrome is not present) or in a side-lying position (with bottom leg bent for balance).

Changes in hormones, especially relaxin

During pregnancy, your body starts producing a hormone called relaxin as early as 10 weeks and remains in the body for up to 6 months postpartum, longer if breast feeding. The hormone affects ligaments and joints making mums-to-be feel that they have a greater range of joint movement. Over-stretching may increase the risk of issues affecting the pelvis that can lead to debilitating pain, immobilisation, bed rest, and even long-term issues postpartum. During pregnancy, you should limit range of movement even if you feel you could stretch further.

Pelvic Girdle Pain (PGP) including Symphysis Pubis Dysfunction (SPD)
Some women may develop pelvic pain in pregnancy. This is sometimes called pregnancy-related pelvic girdle pain (PGP) or symphysis pubis dysfunction (SPD). It is a collection of uncomfortable symptoms caused by a stiffness of your pelvic joints or the joints moving unevenly at either the back or front of your pelvis.

SPD is caused by the hormone called relaxin that makes the ligaments in the joint between your left and right pelvic bones more relaxed. The extra movement allows the left and right pubic bones to widen when it is time for your baby to be born. However, it can also lead to instability in the joint or the joint moving in ways that it is not meant to. The extra weight of the baby increases the pressure on the pelvic joints.

PGP/SDP Symptoms

- Mild discomfort that tends to remain in the front of your pelvis.
- A sensation that your pelvis is loose and wobbly.
- Pain over the pubic bone at the front in the centre roughly level with your hips.
- A sudden shooting pain coming from the front or back of your pelvis across one or both sides.
- Tingling, burning, stabbing or throbbing pain in your pelvic region.
- Pain in the area between your vagina and anus (perineum) spreading to your thighs.
- You may feel or hear a clicking or grinding in the pelvic area.

Pain can be worse when

- Walking
- Going up or down stairs
- Standing on one leg or lifting one leg ie getting dressed
- Turning over in bed
- Moving your legs apart ie getting out of a car

The pain will eventually disappear postpartum but can be debilitating during pregnancy. Use any oral analgesia pain relief with caution and with medical advice. Never take anti-inflammatory medication such as ibruprofen, nurofen, or deep heat during pregnancy.

Management

- Avoid sitting or standing for long periods.
- Going up and down stairs too often.
- Lifting heavy objects including shopping bags.
- Keep active but avoid doing things that make the pain worse.
- Rest when you can.
- Wear supportive shoes.
- Put equal weight on each leg when standing.
- Sit down when getting dressed or undressed.
- Put a pillow between your legs for extra support in bed.
- Keep your knees together when getting in or out of a car.

Treatment

- Contact your GP or midwife if you have pelvic pain and any of the above symptoms.
- Get it diagnosed as soon as possible.

- You may be referred to a physiotherapy service that specialises in obstetric pelvic joint problems. Physio is aimed to relieve or ease pain, improve muscle function, and improve pelvic joint position and stability. It will include exercises to strengthen the pelvic floor, abdominals, back, and hip muscles. You may be provided with equipment such as crutches or pelvic support belts.

https://www.nhs.uk/pregnancy/common-symptoms/pelvic-pain/

https://my.clevelandclinic.org/health/diseases/22122-symphysis-pubis-dysfunction

Round ligament pain

- The round ligaments are 2 cords of connective tissue located either side of the uterus (womb) and they attach the uterus to the pelvis holding it in place.
- Pregnancy hormones (relaxin) cause the ligaments to become looser and more elastic than they are in a woman who is not pregnant. As the baby grows and the uterus gets bigger, the stretching of these ligaments can cause them to go into spasm, causing pain in the lower abdomen or groin area.

Symptoms

- The pain is usually sharp or stabbing in nature.
- It can be made worse by sudden movement such as standing up from sitting or rolling over in bed, and by the increases in abdominal pressure caused by sneezing, coughing, or laughing.
- Round ligament pain is usually found on the right side; however, it can be felt on left or both sides.

Round ligament pain is not harmful to you or your baby, but abdominal pain can be due to other causes. You should see y our GP if your pain is severe and accompanied by:-

- Fever and/or chills
- Bleeding
- Nausea and vomiting
- Difficulty walking

Management

- Change position slowly, don't rush.
- Lean forward when you are about to cough or sneeze and support under the bump with your hands.
- Rest on your side with a pillow between your knees.
- Take a warm bath.
- If allowed, take paracetamol but check with your GP to see if this is appropriate for you.
- Try antenatal yoga.

https://www.royalberkshire.nhs.uk/media/1l5dy01i/physio-round-ligament-pain-in-pregnancy.pdf

Sciatica
The sciatic nerve can be affected during pregnancy caused by:-

- The growing uterus that affects your centre of gravity.
- The baby's positions (especially in 3rd trimester when the baby drops into the pelvis although it can happen earlier).
- Pregnancy hormone relaxin loosening ligaments.
- Increased weight or fluid retention putting pressure on the nerve.

Symptoms

- The pain is sharp and radiates in the lower back, buttocks, or legs.
- Numbness, tingling, or weakness in the lower back, buttocks or one leg.
- It is important to differentiate sciatica from regular pregnancy backache, as sciatica specifically radiates down one leg.

Management

- Warm compresses
- Prenatal massage
- Yoga
- Improve posture and alignment of spine
- Physical therapy

The condition typically resolves on its own after giving birth, though some postpartum issues can arise if the baby was in a breech position or after a difficult labour.

Lightning Crotch

- Lightning crotch occurs when the foetus presses on your cervix or on the nerves around the cervix (cervix being the lowest part of the uterus which is where the foetus/baby grows during pregnancy).
- It doesn't matter what position the foetus/baby is in. You can experience the pain from kicks and punches made by the foetus/baby and not just the head position. However, it is most common to feel lightning crotch when the foetus/baby is head down and dropping into the pelvis.
- Even the slightest movement made by the foetus/baby can cause lightning crotch.
- It is more likely to occur in 3rd timester (but it can be weeks 28-40) due to the foetus getting bigger and dropping further into the pelvis before delivery.
- It can be a sign that labour is near, but you can also have lightning crotch pain for weeks or months before going into labour. Pregnancy care providers don't use it as an indication of labour.
- The pressure of the foetus can cause the cervix to open or thin which can lead to contractions, but lightning crotch does not cause contractions to begin.

Symptoms

- A sharp, burning or shooting nerve pain in your vaginal and/or pelvic area during pregnancy.
- The pain should be brief but strong and doesn't last more than 30-45 seconds. If it is longer, you should consult your GP or midwife.
- You shouldn't have pain all day. If you have pain more than a few times each day, you should consult your GP or midwife.
- It doesn't feel like contractions or menstrual cramps.

- It feels more like a stabbing or shooting pain.
- It can feel like round ligament pain, but the area of pain is different and the timing is different (round ligament pain in 2nd trimester; lightning crotch more likely to be in 3rd trimester).

Management
You can't cure it or prevent it. You can help reduce how often it happens or how painful it is by doing the following:

- Make slower movements (deliberate and slow) ie when getting out of bed, turning over in bed, getting in or out of a car, standing to sitting and vice versa.
- Quick jerky movements can lead to more lightning crotch pain.
- Shift position when you feel the pain.
- Wear a belly support band or belt.
- Gentle and regular exercise routine throughout pregnancy, including swimming.
- Warm bath.
- Prenatal massage to relax muscles and joints.

https://my.clevelandclinic.org/health/symptoms/lightning-crotch

Separation of the linea alba ligament (diastasis recti)
The linea alba ligament runs down the length of the abdominal muscles and forms the navel. During pregnancy, it is at risk of separation and if it stretches more than 3cm, it becomes a condition called diastasis recti. When this happens, use of the core muscle called transversus abdominis (TA) is prevented so it is then essential to strengthen pelvic floor muscles.

Separation is more likely to happen if the abdominal muscles are weak; if excess weight is gained during the pregnancy; if pregnancies occur close together; if the baby is large; in the case of multiple births.

Stop exercising immediately and contact your GP or midwife if you experience any of the following:

- Vaginal bleeding or excessive discharge from vagina
- Abdominal or chest pain; heart palpitations or shortness of breath
- Sudden swelling of hands, feet, or face
- Severe, persistent headaches, dizziness, faint feeling or excessive fatigue
- Raised blood pressure
- Severe anaemia
- Severe pain in pubic area or hips
- Severe nausea or vomiting
- High temperature (over 100°F or 38°C)
- Placenta Praevia (placenta too low or too close to cervix)
- Uterine contractions or breaking of waters
- Baby small for date

Modified Mat Pilates & Reformer during pregnancy

Starting Modified Mat Pilates and Reformer is ideal preparation for pregnancy and should be considered prior to becoming pregnant. Both disciplines can reduce the risk of issues and health conditions pertaining specifically to pregnancy and address such issues should they arise.

Movements like pelvic tilting can address issues such as back or pelvic pain. Backwards pelvic tilting stretches the tightness out of the low back that develops as the baby grows. When tilting the pelvis forwards, care should be taken not to tilt the pelvis too far forwards to reduce the risk of a dull pain in the sacrum area due to ligament issues.

Modified Pilates will improve posture, reduce muscular tension, and strengthen weak muscles. By improving posture, you improve your centre of gravity and balance. Postpartum you may find that your posture returns to its former state quite quickly, and you may even find that your posture is better than it was prior to being pregnant.

Reducing muscular tension in neck, shoulders, and upper back will reduce the likelihood of headaches.

Increased shoulder strength is ideal preparation for after your baby is born.

- Lifting and carrying a baby.
- Lifting and carrying a baby whilst in a car seat.
- Getting a car seat or buggy in and out of a car.

Increased upper back strength avoids issues arising from enlargement of breasts. Better upper back mobility will reduce the likelihood of a stiff and immobile spine causing muscles and soft tissues to become inflamed, joints to become compressed and discs to harden.

Increased abdominal strength is helpful during labour and after childbirth. Sometimes the abdominal muscles may appear taut and toned as the abdomen enlarges to take the weight of the uterus, but this impression can be false. Stronger abdominals also help in reducing the likelihood of diastasis recti (see above).

Strong pelvic floor muscles that can contract strongly and quickly aids childbirth. Weak pelvic floor muscles that are overstretched may not return to normal length post pregnancy, increasing the likelihood of pro-lapse and incontinence later. Strong pelvic muscles are beneficial should there be a separation of the linea alba ligament during pregnancy.

Focusing on breathing techniques addresses blood circulation issues that might occur during pregnancy. This can also aid relaxation and sleep resulting in more energy and good sleeping patterns will speed up recovery postpartum.

The mindful approach enhances mental health, ideal preparation for labour and recovery postpartum.

Unlike classical Pilates whereby you perform the original movements as taught by Joseph Pilates, Modified mat Pilates is suitable for all irrespective of age, gender, posture type, injury or health condition including pregnancy because each movement is segregated into different levels of intensity varying from rehabilitation level to higher levels.

Reformer movements can also be modified. We can adapt positions on the reformer making it feel more comfortable and to address issues that arise during pregnancy. There are certain reformer movements that we would discourage you from doing whilst pregnant, but we always provide an alternative.

Our reformers are raised from the ground, and they convert to beds for mat classes. For mat classes, you won't be exercising on the floor, and the height of the beds are ideal for seated exercises.

Exercise modifications

- Limit range of movement especially when stretching.
- Avoid lying face up for long periods and towards the end of pregnancy have head raised and supported (using a foam block or pillow).
- No head lifting as you might do in classical Pilates. With the head down, you can focus on lengthening the back of the neck which is ideal during pregnancy when posture changes cause the upper back to round and the back of the neck to shorten. Also, keeping the head down focuses on core strength which is ideal during pregnancy.
- Perform leg circles with a bent leg instead of a straight leg which is safer and just as effective.
- Restrict arm movements to one arm at a time especially towards the latter end of pregnancy (3rd trimester).
- Towards the end of pregnancy, limit rolling actions to pelvic tilting. During pregnancy, rolling actions should be performed with caution to reduce the risk of separation of the linea alba (diastasis recti) and to reduce the risk of cramp being felt if the enlarged uterus shifts suddenly (sharp stabbing pain in the lower and outer quadrant of the abdomen either on the right or the left). The ability to roll during pregnancy becomes more challenging as the baby grows, so towards the end of pregnancy most mums-to-be can only perform pelvic tilting.
- When lying on side, bend bottom leg and keep in contact with the floor to aid stability. Towards the end of pregnancy, many exercises that are normally performed lying face up can be performed in a side-lying position.

Guidance when using a stability ball

Using a stability ball may be encouraged during pregnancy. Balancing on a suitably inflated stability ball is extremely challenging and is advisable only for those who already possess a high level of core strength and balance.

Those who do not possess sufficient core strength or balance would be advised to use a chair or stool initially as this will facilitate an upright spine alignment and a more stable surface, both essential when strengthening the core muscles.

If using a stability ball, choose one that is the correct size for your height and ensures that your hips are slightly higher than your knees when it is inflated to its maximum (for most women 50cm is about right).

A soft stability ball offers little challenge and may result in poor spine and/or hip/knee alignment.

Postpartum

You cannot start or resume exercise including Pilates activities until you have attended the 6-week check-up (8-10 weeks for Caesarean Section) and obtained medical clearance to return to exercise. This timescale allows time for the abdominal muscles to close and re-align.

Waiting until the 6-week check-up (8-10 weeks C-Section) does not mean you cannot exercise at all.

- Daily walking complimented by posture education at this stage is an excellent form of exercise. When buying a pram make sure that the handle height allows the mother to walk with correct alignment.
- Pelvic floor exercise can be started as soon as the mother is ready and within days of childbirth.
- Breathing techniques should be considered especially lateral thoracic breathing if you have exercised with us during pregnancy and wish to resume afterwards.
- Gentle pelvic tilting can be introduced 3-4 days after childbirth and may be performed standing, lying, or kneeling on hands and knees.
- Advice should be sought from a doctor or midwife before starting swimming as there is a chance of infection.
- During this time clients should limit their range of movement considerably when stretching and movements that were restricted after the 1st trimester will remain restricted postpartum especially if there has been a separation of the linea alba ligament (refer above to diastasis recti). After giving birth and if not breastfeeding, limit stretching for at least 3-5 months. If breastfeeding, limit stretching for at least 12 months after the day you finish breastfeeding.

When to start Modified Mat Pilates & Reformer during pregnancy

Ideally, you should start prior to becoming pregnant. However, many women wait until they are pregnant and are often unprepared for how much there is to learn resulting in very little benefit in the short time that they attend classes.

If you haven't done any Pilates prior to pregnancy, we recommend starting during the 1st trimester. You will most likely have to stop at some stage during the 3rd trimester, but you may have to stop sooner if your baby is big, if you are having a multiple birth, or if you must stop exercising. Certainly, during the 2nd and 3rd trimesters, contraindications arise that limit movements.

For those used to mainstream exercise and those who may have led a more sedentary lifestyle prior to pregnancy, Modified Pilates involves learning how to use a completely different set of muscle groups which can be challenging and frustrating. The slow, purposeful movements can cause discomfort, especially for those who were more sedentary prior to pregnancy, and this slower pace of exercising does not suit everyone.

Whilst you may feel that you can commit to Pilates, during pregnancy there are additional things to consider. During the early stages, you will experience hormone changes that may cause nausea, lethargy, tiredness or even exhaustion that hinders regular class participation. As the pregnancy progresses and baby grows, there will be restrictions and you will have to be prepared to adapt the way you perform certain movements.

Consideration must also be given to the length of time that it will take to sign up for membership. You can't start partway through a month and the month before you would start classes, you must attend a group reformer introduction session so that we can assess any issues you may have when using a reformer during pregnancy.

Our classes

We don't offer specific classes for mums-to-be because Modified Mat Pilates is appropriate for all health conditions including pregnancy and we can modify movements on the reformer to accommodate pregnancy.

All our classes are Mixed Level ability which enables us to include all ages and all fitness levels within the same class, irrespective of posture issues, injuries, or health conditions including pregnancy. Everyone learns the exercise level that is the safest and most effective for them considering any personal issues they may have. Therefore, this style of exercise is slower in pace until people learn the various movements and the appropriate modifications and progressions applicable to them personally.

Our members are used to having the pace of a class slowed down for newcomers whilst we explain the basics of the technique and exercises. However, to avoid long-term disruption to classes it is incumbent on everyone to learn the exercise modifications providing them with the safest and most effective intensity level whilst exercising.

In the early stages, private tuition will provide an environment in which you can learn the various exercise movements and modifications that will enable you to participate in a group class with better understanding. However, not everyone can afford the cost of private tuition in addition to a monthly class fee. You can book private tuition via your member account once you are a member attending classes.

Members of our studio who have done Pilates for several years and who have become pregnant have had no problems whatsoever continuing class participation right through to the 3rd trimester, and some right up to the birth of their baby.

For the 1st trimester, they continued to exercise at the level that they exercised pre-pregnancy if they were not experiencing any pregnancy-related issues. If they experienced any issues, they exercised at a lower intensity level.

They started to modify movements from midway through the 2nd trimester and continued to modify movements further as the pregnancy progressed. Their knowledge and understanding of the Modified Pilates technique gained prior to being pregnant enabled them to adapt movements as they progressed through their pregnancy.

Most resumed Modified Pilates postpartum, but there are always some who find it difficult to get back to regular class attendance until they have established a routine after returning home with their baby especially if there were issues during childbirth or postpartum.