

Pregnancy & the road bike



Saskfit November 2018

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Cycling is a partial weight bearing, fun and effective workout. There are many formats and finding the right one for each client is critical. Mountain, hybrid, cycle-cross, road, commuter and fat bikes are all examples of current outdoor options. Stationary indoor bikes also vary with examples such as basic, spin specialized to recumbent.

Pregnancy is a temporary condition that limits the ability for a client to cycle but risk can be evaluated on a 'case by case' basis.

Symptoms and discomforts in pregnancy include:

- morning [all day] sickness
- fatigue
- weight gain
- headache
- sleeplessness
- constipation & hemorrhoids
- heartburn
- varicose veins
- swollen & sore joints
- leg and muscle cramps
- pelvic floor weakness
- Low self esteem
- postpartum depression
- breast tenderness
- dizziness
- round/broad ligament pain
- urinary incontinence
- shortness of breath
- anxiety & mood swings

Additional problem areas during pregnancy:

- Foot & calf cramps
- Shin splints
- Patella femoral syndrome
- TFL, IT band & hip discomfort
- Sciatica
- Lordosis
- Kyphosis
- Tension headaches
- Oblique stretch discomfort
- Shoulder impingement
- Hand & wrist aches
- Neck & upper back aches

The **blue highlighted** symptoms & discomforts are particularly relevant to cycling trainers, coaches and instructors.

The first step when working with a **prenatal client [after first trimester]** is to have them complete a ***PARQ Med X [Physical Activity Readiness Questionnaire]** for pregnancy.

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If your client is **postnatal [up to 1 year after birth]** a *PARQ Med X is the form to use. PARQ's are screening and authorization forms that require a healthcare giver to sign off their patient prior to them participating in fitness training. These forms allow you to review their current training, contraindications, risks and caregiver contacts should you require them.

As a pregnancy progresses most symptoms increase and cycling does become contraindicated. Here are the areas for concern:

- Pelvic realignment in combination with the bike saddle increases pelvic floor pressure that can cause pain, swelling and risk preterm labour.
- Hip mechanics move into an externally rotated position making clean sagittal plane tracking problematic for hips, knees and ankles.
- Decreased core stability can leave the sacral/lumbar spine loaded and the lordotic posture can lead to sciatica, numbness and decreased leg power.
- Prolonged hand grip and load on handle bars can cause pressure on the ulnar nerve and increase risk of carpal tunnel.
- Forward flexed position when cycling promotes a kyphotic posture which is compounded by increased breast and abdominal weight & size. Neck and shoulder pain can easily be worsened by this position
- Gastrocnemius [charlie horse] and plantar muscle [plantar fasciitis] cramps/pain are common due to increased front load for prolonged periods. Cycling can exacerbate this type of cramping, tendinitis and general irritation.
- Resting heart rate and blood pressure increase over the last 2 trimesters and more importantly thermoregulation is modified. **Longer warmups and cool downs** are required to avoid overheating and HR/BP should be monitored.

Mothers who have uncomplicated births need to **re-establish core stability, pelvic strength, musculoskeletal alignment/symmetry, optimal posture and main mover strength**. This generally takes 6-12 weeks for those with previously trained fitness and longer if untrained prior and during pregnancy. **At 6 weeks postnatal they can sign themselves off with a *PARQ .**

Complicated deliveries can create many challenges for both mother and baby and clients need to be approached 'day by day' with caregiver support and authorization. **Complicated deliveries should not train prior to their 6 week followup with their caregiver and a completed *PARQ Med X.**

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General Cycling Guidelines		
Prenatal/Postnatal Weeks	Symptoms/weakness/instability/misalignments that can increase risk	Recommended or may be suitable
Trimester 1	Joint laxity, core stabilization, lower body musculoskeletal alignment/stability, pelvic floor, thermo regulation, blood pressure, cervical/lumbar function, varicose veins/hemorrhoids, carpal tunnel, shoulder impingement, incontinence, nausea, fatigue and foot/calf cramps	Exception if mod/high risk or multiple pregnancy
Trimester 2		Caution
Trimester 3		Not recommended
After birth 0-6 weeks		Not recommended
Postnatal 7-12 weeks		Not recommended
Postnatal 13-24 weeks	Cycling contraindicated for a multiple pregnancy -Repeat pregnancies may have greater or exaggerated symptoms. -Please note outdoor cycling creates significant risk of collision and falling	Caution with complicated births
Postnatal 25-37 weeks		
Postnatal 38-52 weeks		
After the postnatal year		

Postnatal mothers still have increased front load due to heavy breasts and carrying the baby. As a result, it is common still see lordotic and kyphotic postural deviations that lead to low back, neck and shoulder pain. I suggest targeted training for postural strength be prescribed prior to progressing to cycle training. Nursing mothers will still have laxity throughout most main mover joints and so standing climbing early postnatal is contraindicated.

The stationary bike is a good way to re-introduce low risk cycling after 12 weeks. Start with 15- 20 minute sessions with low resistance, heart rate in target range and no standing climbing. If the mother is nursing she may need nutritional fuel 1.5 hours before and immediately after training. Hydration prior, during and after training is also imperative as dehydration is a common postnatal problem. Nursing mothers will need to wear a supportive workout bra to decrease neck/shoulder strain. Focus on solid core stability while pedalling and symmetrical power. Solid cycling technique is important as sleep deprived mothers need feedback on technique and tend to have decreased body awareness.

For more information or to request a specialized trainer/instructor workshop please contact info@conquereducation.guru

*PARQ Med X and PARQ Med X Pregnancy is a screening tool created by the Canadian Society for Exercise Physiology [CSEP] and can be found at <http://www.csep.ca/forms>