

# EXERCISE FOR PREGNANT PATIENTS

A brief review of exercise in pregnancy



## WHAT TYPE OF EXERCISE

The Society of Obstetrics and Gynaecology of Canada recommends a **minimum of 150 minutes of moderate-intensity activity split over a minimum of 3 days per week.**

### Recommended activities:

- Moderate-intensity aerobic exercise
- Resistance training
- Gentle stretch or yoga

### What is moderate intensity exercise?

Exercise reaching **40-60% of your max heart rate.** You should be able to **maintain a conversation** during moderate-intensity exercise.

## Rx

Each week:

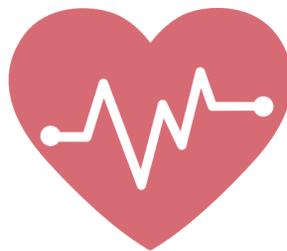
- 150+ min of exercise split over 3 days
- Moderate Intensity



## SAFETY AND BENEFITS

Exercise **is** associated with **decreased risk** of:

- Gestational diabetes or hypertension
- Prenatal depression
- Excessive gestational weight gain
- Macrosomia.



Exercise is **NOT** associated with increased:

- Miscarriage
- Preterm birth
- Low birth weight
- Perinatal mortality

Exercise is safe for **most** pregnant women. There are certain precautions that should be taken to maximize safety.

- Monitor for **warning signs** to stop exercise
- **AVOID** activities that can limit blood flow to fetus:
  - Exercise in excessive heat (ex. hot yoga)
  - Extreme conditions (ex. scuba diving or altitude training)
- **AVOID** activities involving risk of falls or physical contact including:
  - Non-stationary cycling, downhill skiing, or hiking difficult terrain
  - Most team sports

The medical contraindications to exercise during pregnancy are listed below:

Absolute Contraindications	Relative Contraindications
<ul style="list-style-type: none"> <li>• Ruptured membranes</li> <li>• Preterm labour</li> <li>• Hypertensive disorders of pregnancy</li> <li>• Incompetent cervix</li> <li>• Growth restricted fetus</li> <li>• High order multiple gestation (triplets)</li> <li>• Placenta previa after 28th week</li> <li>• Persistent 2nd or 3rd trimester bleeding</li> <li>• Uncontrolled type 1 diabetes, thyroid disease, or other serious cardiovascular, respiratory, or systemic disorder</li> </ul>	<ul style="list-style-type: none"> <li>• Previous spontaneous abortion</li> <li>• Previous preterm birth</li> <li>• Mild/moderate cardiovascular disorder</li> <li>• Mild/moderate respiratory disorder</li> <li>• Anemia (Hb &lt;100 g/L)</li> <li>• Malnutrition or eating disorder</li> <li>• Twin pregnancy after 28th week</li> <li>• Other significant medical condition</li> </ul>

**Figure 1.** Contraindications to exercise in pregnancy  
Modified and reprinted from the Canadian Society for Exercise Physiology

## COMPETITIVE ATHLETES & HIGH INTENSITY EXERCISE

There is currently **insufficient evidence** to counsel those who engage in high-intensity, speed, endurance, or weight training while pregnant. However, it is important to **counsel women on theoretical risks.**

While some studies have shown changes in fetal heart rate, umbilical artery doppler measures, and uterine artery blood flows during **intense aerobic exercise**, the findings have **not been correlated** with detrimental effects on the newborn.

### General Advice:

**Avoid** activities that **raise the body temperature above 39°C**

- This may increase risk of neural tube defects

**Avoid** exercises that cause **excessive pressure towards the pelvic floor**

- This may occur with the **Valsalva maneuver**
  - such as during strenuous strength training
- Contracting the pelvic floor muscles during heavy lifting can counteract increased intra-abdominal pressure on pelvic floor

**Ligament laxity** is increased during pregnancy due to changes in hormone levels. This can **increase risk** of soft tissue injury, pelvic floor dysfunction, low back pain, and pelvic girdle pain.

*If unsure about guidance, consider consulting a local obstetrical care provider or sport and exercise medicine physician experienced in caring for athletes in pregnancy*

## WARNING SIGNS TO STOP EXERCISE

- Vaginal bleeding
- Regular painful contractions
- Amniotic fluid leakage
- Dyspnea prior to exertion
- Pre-syncope/syncope
- Headache
- Chest pain
- Muscle weakness
- Calf pain or swelling



For references and more information please visit:

<https://sportsandexercisemedicine.ca/tips/>

