

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

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/>

