

As a family physician, you are often faced with the task of counselling women on exercise in pregnancy. This may be for sedentary individuals, recreational athletes and occasionally elite athletes. In September 2015, at the IOC meeting in Lausanne, a group of 16 experts sat down to review this topic and provide a consensus statement on exercise and pregnancy. Part 1 of the consensus statement was published in the BJSM in May 2016.

Here are some highlights of their conclusions/guidelines to date (Part 1):

- 1) The pregnant athlete with a past or current eating disorder should be considered high risk and requires close monitoring involving a multidisciplinary team emphasising early recognition, treatment of symptoms, meal planning, training regimen adjustments and evaluation for maternal or fetal consequences from malnutrition.
- 2) Avoid exercising supine due to compression of the IVC.
- 3) Exposure to increases in temperature above 39 degrees can increase the risk of fetal abnormalities (neural tube defects) during the formation stage which is 35-42 days from the last menstrual period. Of note, exercising in pregnancy at 60-70% VO₂ max in a controlled environment for up to 60min does not raise core temp above 38 degrees.
- 4) Nutritional requirements for a normal pregnancy: 90kcal/day for T1, 287kcal/day for T2, 466kcal/day for T3.
- 5) Borg ratings of perceived exertion (RPE) scale does not correlate strongly with heart rate in T2 and therefore the elite athlete should use heart rate as a measure.
- 6) Refrain from high intensity training regimes at altitudes greater than 1500-2000m.
- 7) The Valsalva Manoeuvre used during heavy weight training should be avoided.
- 8) Heavy weight training may cause large increases in intra-abdominal pressure may harm the pelvic floor support during or after pregnancy.
- 9) Relaxin increases laxity and joint instability and therefore this should be considered in flexibility exercises.
- 10) Avoid high risk sports with risk of trauma (from a collision or being hit by something like a hockey stick or from falling) and avoid scuba diving. Examples of high risk sports include bobsledding, luge, equestrian, pole vaulting, hockey, ski racing)
- 11) As long as symphysis fundal heights are consistent with gestational age, more frequent ultrasound assessments are not required for elite athletes.
- 12) Exercise may decrease the risk of pre-eclampsia and gestational diabetes.
- 13) Different types of exercises and acupuncture significantly reduced pelvic girdle/lumbopelvic pain more than usual care alone.

For more in depth on this topic please see Exercise and pregnancy in recreational and elite athletes: 2016 evidence summary from the IOC expert group meeting, Lausanne. Part 1 – exercise in woman planning pregnancy and those who are pregnant. Bo, K, Atral R, Barakat R, et al. Br J Sports Med 2016; 50:571-589.

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