

PREGNANCY AND EXERCISE

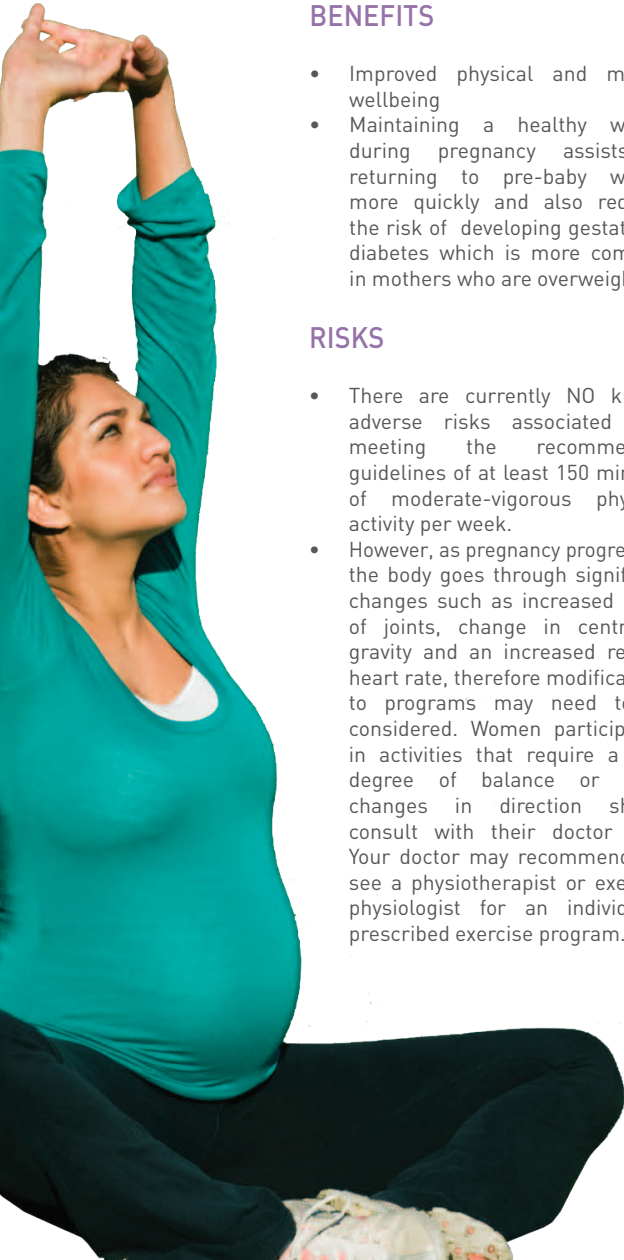
All women without contraindications should be encouraged to participate in aerobic and strength-conditioning exercises as part of a healthy lifestyle during their pregnancy. Reasonable goals of aerobic conditioning in pregnancy should be to maintain a good fitness level throughout pregnancy without trying to reach peak fitness.

BENEFITS

- Improved physical and mental wellbeing
- Maintaining a healthy weight during pregnancy assists in returning to pre-baby weight more quickly and also reduces the risk of developing gestational diabetes which is more common in mothers who are overweight

RISKS

- There are currently NO known adverse risks associated with meeting the recommended guidelines of at least 150 minutes of moderate-vigorous physical activity per week.
- However, as pregnancy progresses, the body goes through significant changes such as increased laxity of joints, change in centre of gravity and an increased resting heart rate, therefore modifications to programs may need to be considered. Women participating in activities that require a high degree of balance or rapid changes in direction should consult with their doctor first. Your doctor may recommend you see a physiotherapist or exercise physiologist for an individually prescribed exercise program.



FREQUENCY

- At least 150 minutes of moderate intensity aerobic physical activity throughout the week; or
- At least 75 minutes of vigorous intensity aerobic physical activity throughout the week; or
- An equivalent combination of moderate and vigorous intensity activity

INTENSITY

- Moderate vigorous intensity should be firstly guided by the Borg Scale of Perceived Exertion or the 'Talk Test' or alternatively heart rate zones
- Importantly, no research to date has identified a 'safe' upper-limit to exercise intensity
- Ultimately, listen to your body. Be aware of signs and symptoms to cease physical activity immediately and consult your doctor

Rating of Perceived Exertion - Borg RPE Scale		
6		How you feel when lying in bed or sitting in a chair relaxed. Little or no effort.
7	Very, very light	
8		
9	Very light	
10		
11	Fairly light	Target range: How you should feel with exercise or activity
12		
13	Somewhat hard	
14		
15	Hard	
16		
17	Very hard	How you felt with the hardest work ever done.
18		
19	Very, very hard	
20	Maximum exertion	
Don't work this hard!		

Age	Heart Rate Range (beats per minute)	Heart Rate Range (beats per 10 seconds)	Talk Test	
			Moderate Intensity	Can talk, but can't sing
Less than 20 years old	140-155	23-26	Vigorous Intensity	Hard to talk
20-29 years old	135-150	22-25	BORGS Perceived Exertion Scale (scale of 1-10)	
30-39 years old	130-145	21-24	Moderate Intensity	RPE 3-4
40 or older	125-140	20-23	Vigorous Intensity	RPE 5 or greater

As the "talk test" implies, the woman is exercising at a comfortable intensity if she is able to maintain a conversation during exercise; she should reduce the exercise intensity if this is not possible. Exercising women can also use a visual scale to assess their exercise intensity. A target rating of 12 to 14 on Borg's scale of perceived exertion is suggested during pregnancy

EXERCISE PRESCRIPTION (FITT)

TIME

- Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.
- Aim to do at least 150 minutes of moderate intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous intensity aerobic physical activity throughout the week or an equivalent combination of moderate and vigorous intensity activity
- Aerobic activity should be performed in bouts of at least 10 minutes duration

TYPE

- Aerobic conditioning and strength training of all major muscle groups and pelvic floor
- Specific activities to avoid include contact sports, high-altitude exertion and scuba diving. Additionally, exercise in the supine position (lying on back) should be avoided after the first trimester or 16 weeks gestation. Modifying the position of the exercise to instead be performed on one's side, sitting or standing is a safe alternative
- Aerobic exercise includes:
 - Walking/Jogging
 - Swimming
 - Cycling (on a stationary bike)
 - and/or low impact aerobic exercise classes.

Women active before pregnancy can continue with their regular exercise / sport as long as associated risks and recommended modifications are considered, as outlined on flyer (leg contact sports and downhill skiing, rapid changes in direction etc).
- Strength training exercise includes:
 - For examples of strength training exercises suitable during pregnancy, see the Canadian PARmed-X for Pregnancy: <http://www.csep.ca/cmfiles/publications/parq/parmed-xpreg.pdf>
- Pelvic floor exercises include:
 - Sit and lean slightly forward with a straight back
 - Squeeze and lift the muscles as if you are trying to stop a wee
 - Hold the squeeze for up to 5 seconds, and then relax for up to 10 seconds.
 - Repeat up to 10 times, 3-4 times per day
 - Keep breathing through the exercise

All exercise should consist of a warm-up and cool-down phase. Stretching exercises are also useful but should be done gently due to the increased joint laxity during pregnancy.

SIGNS & SYMPTOMS TO CEASE EXERCISE

Abdominal pain, any “gush” of fluid from the vagina, calf pain or swelling, chest pain, decreased foetal movement, dizziness or presyncope, dyspnea before exertion, excessive fatigue, headache, pelvic pain, excessive shortness of breath, painful uterine contractions and vaginal bleeding.

ELITE ATHLETES

Elite athletes who continue to train during pregnancy require supervision by an obstetric care provider with knowledge of the impact of strenuous exercise on maternal and foetal outcomes. Women with special needs may require a referral to a physiotherapist, exercise physiologist or sports medicine specialist to develop an appropriate exercise program.

TIP

It is important to stay well-hydrated, wear comfortable and non-restrictive clothing (such as a correctly fitted bra and appropriate footwear) and where possible avoid excessive over-heating.



FOR FURTHER INFORMATION



Sports Medicine Australia

www.sma.org.au • www.smartplay.com.au
03 9674 8777

Australian Breastfeeding Association

www.breastfeeding.asn.au

Sports Dietitians Australia

www.sportsdietitians.com.au

References

For a full list of references, contact Sports Medicine Australia.

Acknowledgments

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