

# Pregnancy pilates information sheet

Healthy women with uncomplicated pregnancies can integrate physical activity into their daily lives and participate without significant risks either to themselves or their unborn child. Postulated benefits of such programs include improved aerobic and muscular fitness, promotion of appropriate weight gain, and facilitation of labour. Regular exercise may also help to prevent gestational glucose intolerance and pregnancy-induced hypertension.

**Rate of progression:** The best time to progress is during the second trimester since risks and discomforts of pregnancy are at their lowest at that time. Aerobic exercise should be increased gradually during the second trimester from a minimum of 15 minutes per session, 3 times per week (at the appropriate target heart rate or RPE) to a maximum of approximately 30 minutes per session, 4 times a week (at the appropriate heart rate or RPE).

**Warm-up/cool-down:** Aerobic activity should be preceded by a brief (10-15 mins) warm-up and followed by a short (10-15 mins) cool-down. Low intensity calisthenics, stretching and relaxation exercises should be included in the warm-up/cool-down.

**Prescription/monitoring of intensity:** The best way to prescribe and monitor exercise is by combining the heart rate and rating of perceived exertion (RPE) methods.

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### FREQUENCY

Begin at 3 times per week and progress to four times a week

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### INTENSITY

Exercise within an appropriate RPE range and/or target heart rate zone

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### TIME

Attempt 15 minutes, even if it means reducing the intensity. Rest intervals may be helpful.

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### TYPE

Non-weight bearing or low-impact endurance exercise using large muscle groups (eg. Walking, stationary cycling, swimming, aquatic exercises, low impact aerobics)

### Target heart rate zones

The heart rate zones shown below are appropriate for most pregnant women. Work during the lower end of the HR range at the start of a new exercise program and in late pregnancy.

Age	Heart rate range
<20	140-155
20-29	135-150
30-39	130-145

### Rating of perceived exertion (RPE)

Check the accuracy of your heart rate target zone by comparing it to the scale below. A range of about 12-14 (somewhat hard) is appropriate for most pregnant women.

6	
7	Very, very light
8	
9	Somewhat light
10	
11	Fairly light
12	
13	Somewhat hard
14	
15	Hard
16	
17	Very hard
18	
19	Very, very hard
20	

**TALK TEST:** A final check to avoid overexertion is to use the “talk test”. The exercise intensity is excessive if you cannot carry on a verbal conversation while exercising.

Precautions for muscular conditioning during pregnancy		
Variable	Effects of pregnancy	Exercise modifications
Body position	<ul style="list-style-type: none"> <li>In the supine position (lying on the back), the enlarged uterus may either decrease the flow of blood returning from the lower half of the body as it presses on a major vein (inferior vena cava) or it may decrease flow to a major artery (abdominal aorta)</li> </ul>	<ul style="list-style-type: none"> <li>Past 4 months of gestation, exercises normally done in the supine position should be altered</li> <li>Such exercises should be done side lying or standing</li> </ul>
Joint laxity	<ul style="list-style-type: none"> <li>Ligaments become relaxed due to increasing hormone levels</li> <li>Joints may be prone to injury</li> </ul>	<ul style="list-style-type: none"> <li>Avoid rapid changes in direction and bouncing during exercises</li> <li>Stretching should be performed with controlled movements</li> </ul>
Abdominal muscles	<ul style="list-style-type: none"> <li>Presence of rippling (bulging) of connective tissue along the midline of the pregnant abdomen (diastasis recti)</li> </ul>	<ul style="list-style-type: none"> <li>Abdominal exercises are not recommended if diastasis recti develops</li> </ul>
Posture	<ul style="list-style-type: none"> <li>Increasing weight of enlarged breasts and uterus may cause a forward shift in the centre of gravity and may increase the arch in the lower back</li> <li>This may also cause shoulders to slump forward</li> </ul>	<ul style="list-style-type: none"> <li>Emphasis on correct posture and neutral pelvic alignment</li> <li>Neutral pelvic alignment is found by bending the knees, feet shoulder width apart, and aligning the pelvis between accentuated lordosis and the posterior pelvic tilt position</li> </ul>
Precautions for resistance exercises	<ul style="list-style-type: none"> <li>Emphasis must be placed on continuous breathing throughout exercise</li> <li>Exhale on exertion, inhale on relaxation using high repetitions and low weights</li> <li>Valsalva manoeuvre (holding breath while working against a resistance) causes a change in blood pressure and therefore should be avoided</li> <li>Avoid exercise in supine position past 4 months gestation</li> </ul>	

## Advice for active living during pregnancy

Pregnancy is a time when women can make beneficial changes in their health habits to protect and promote the healthy development of their unborn babies. These changes include adopting improved eating habits, abstinence from smoking and alcohol intake, and participating in regular moderate physical activity. Since all of these changes can be carried over into the postnatal period and beyond, pregnancy is a very good time to adopt healthy lifestyle habits that are permanent by integrating physical activity with enjoyable healthy eating and a positive self and body image.

### Active living:

- See your doctor before increasing your activity level during pregnancy.
- Exercise regularly but don't overexert.
- Exercise with a pregnant friend or join a prenatal exercise program.
- Follow FITT principles modified for pregnant women.
- Know safety considerations for exercise in pregnancy.

### Health eating:

- The need for calories is higher (about 300 more per day) than before pregnancy.
- Choose healthy food from the following groups: whole grain or enriched bread or cereal, fruits and vegetables, milk and milk products, meat, fish, poultry, and alternatives.
- Drink 6-8 glasses of fluid, including water, each day.
- Salt intake should not be restricted.
- Limit caffeine intake i.e. coffee, tea, chocolate, and cola drinks.
- Dieting to lose weight is not recommended during pregnancy.

### Positive self and body image:

- Remember that it is normal to gain weight during pregnancy.
- Accept that your body shape will change during pregnancy.
- Enjoy your pregnancy as a unique and meaningful experience.

### Safety considerations:

- Avoid exercise in warm/humid environments, especially during the 1<sup>st</sup> trimester.
- Avoid isometric exercise or straining while holding your breath.
- Maintain adequate nutrition and hydration – drink liquids before and after exercise.
- Avoid exercise while lying on your back past the 4<sup>th</sup> month of pregnancy.
- Avoid activities which involve physical contact or danger of falling.
- Know your limits – pregnancy is not a good time to train for athletic competition.
- Know the reasons to stop exercise and consult a qualified health care provider immediately if they occur.

### Reasons to stop exercise and consult your health care provider:

- Excessive shortness of breath
- Chest pain
- Painful uterine contractions (more than 6-8 per hour)
- Vaginal bleeding
- Any 'gush' of fluid from vagina (suggesting premature rupture of membranes)
- Dizziness or faintness