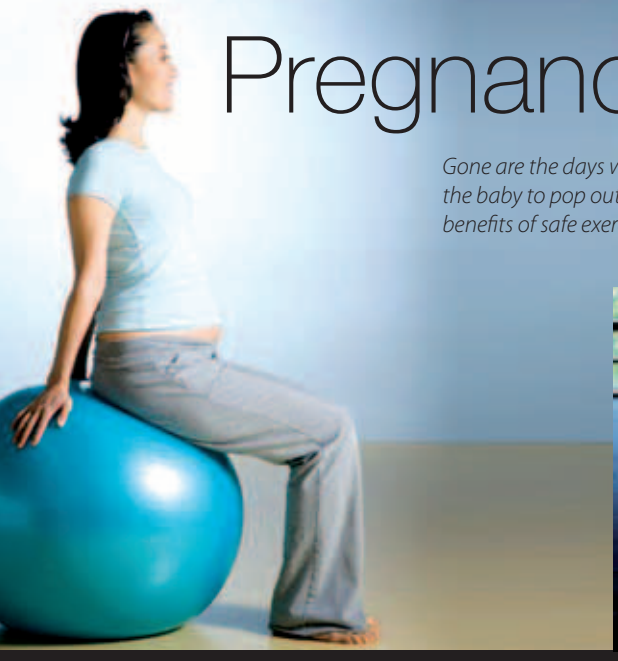
Pregnancy and Exercise

Gone are the days when pregnant women were bound to their beds and made to rest until it was time for the baby to pop out. New mum Cindy Ng, Senior Physiotherapist, Singapore General Hospital, espouses the benefits of safe exercise during pregnancy and shows you to get ready for the big D-day and beyond.



It is a misconception that it is not safe to exercise in the first and last trimesters of pregnancy. As a new mum, I beg to differ. Exercise is safe for all pregnant mums unless advised against it by their obstetricians. However, there are some exercises or postures that are best avoided in the second or last trimesters. For example, pregnant mums may find it tough to lie on their backs during this stage. Hence, exercises in a supine position are best avoided.

In Australia, it is common to see pregnant mums doing simple aerobics on mats and even on gym balls during various stages of their pregnancy. Appropriate exercises help to build up pelvic floor muscles that are often stretched and weakened during pregnancy due to relaxin. As the ligaments are lax, the pregnant woman finds it difficult to control the bladder, resulting in urine-leak when she coughs, sneezes or is stressed.

Pelvic muscle strengthening also helps to tone up ones abdominals indirectly. Walking is also a safe exercise for cardiovascular fitness. This helps to build up your stamina despite carrying an extra 8 to 20 kg of weight. It definitely prepares you for labour during delivery.

Exercise to tone up the back, abdominal and leg muscles can be done safely. Seek professional help in tailoring these exercises for the various trimesters. However, in the second and third trimester, avoid lifting weights while in a standing position. Do not stand in one position for prolonged periods either. Backache may be caused by poor posture-increased lumbar lordosis and kyphosis and knee-pain is often triggered by climbing stairs or squatting, while hip-pain is due to the weight of the foetus bearing down. It is, therefore, very important to strengthen your hip and knee joints, back and abdominals to avoid these aches.

Exercise and keeping fit help you watch your weight and allow you to return to your pre-partum weight easily in weeks. Of course, sensible diet is essential too. Keeping fit also helps prevent the risk of gestational diabetes and pre-eclampsia (pregnancy-induced a hypertension). Other benefits include an improved sense of well-being, less complicated labour, improved flow of blood to the foetus which facilitates healthy tissue and placental growth, reduction of stretch marks, stronger abdominals and less subcutaneous fat.

	Parameters
Frequency	3 to 5 times a week
Intensity	140 beats per minute or less for no longer than 15-20 minutes. Ensure adequate warm up and cool down. Low to moderate intensity (able to converse during exercise). Rate of perceived exertion (RPE) or 6 out of 10. Resistance training: 1 set of 10-12 repetitions.
Type	Walking Aqua aerobics Pilates (avoid prone position and exercises that go beyond normal range of motion) Yoga (avoid uncomfortable and extreme poses) Light resistance training using light weights and elastic tubings or bands sitting on gym balls
Duration	20 to 45 minutes

Contraindications to exercise:

1. Multiple pregnancy
2. Vaginal bleeding
3. History of three or more spontaneous miscarriages
4. Pregnancy induced high-blood pressure
5. Heart disease
6. Placenta praevia (low lying placenta)
7. Venous thrombosis or pulmonary embolism (blood clots in the deep veins or in the lung)

On average, people with type 2 diabetes will die five to ten years before people without diabetes, mostly due to cardiovascular disease.

Symptoms indicating that one should stop exercising:

- Pain
- Fever
- Vaginal bleeding
- Dizziness
- Shortness of breath
- Severe backache
- Absence of usual foetal movement
- Sudden swelling
- Abnormally rapid heart beat
- Muscle weakness
- Blurred vision
- Amniotic fluid leakage

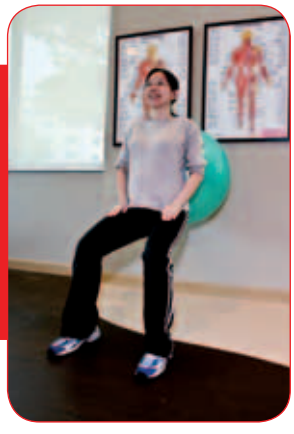
Reference:
American College of Obstetricians and Gynacologists. Exercise during pregnancy and the postpartum period. ACOG Technical Bulletin No. 189: Washington, DC. ACOG press, 1994.
www.preggibellies.com

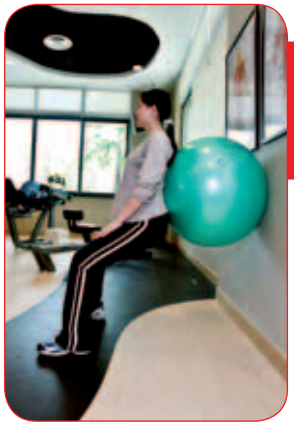
Here are some simple mediBall® exercises (suitable for all trimesters):

Wall Squat (uses all muscles of the legs)

Stand and lean on the ball, keep abdominals tight, feet in line with knees and hip but slightly away from the wall.

Do a ¼ or ½ squat keeping the whole back in contact with the ball.





Ensure that you can still see your toes in the squat position.
Return to start position.

Seated Hip Flexion
(uses abdominal and hip muscles)

Sit on ball with feet flat on floor.

Keep neck neutral and place hands on the ball beside one's buttocks.

Lift one foot slightly off the floor, then slowly lower the leg and repeat the same with the other leg.

Seated Row with Elastic Band
(uses upper back and bicep muscles)

Sit on ball with feet flat on floor, abdominals slightly tuck and neck neutral.

Pull the band back so elbows go back behind.

Slowly return to start position and repeat with other arm.

Four Point Kneeling
(uses back muscles)

Start with both hands and bent knees on the floor, keeping back and neck in one straight line.

Slowly lift one arm and opposite leg up.

Then slowly lower the arm and leg and do likewise for the other arm and contralateral leg.

Diabetes is the fourth leading cause of global death by disease.