

ADVICE FOR
MOTHERS-TO-BE
AND NEW MOTHERS

fit
and
Safe

*to exercise in the
childbearing year*



EXCELLENCE
MATTERS

This booklet was compiled by members of the Pelvic Obstetric and Gynaecological Physiotherapists group (POGP).

For the purposes of this booklet the childbearing year is defined as the 12 month period between conception and 12 weeks postpartum.

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Registered Charity No: 239281

Introduction

Studies suggest that exercising during the childbearing year is not harmful to either you or your baby, provided the pregnancy is normal and you are healthy. There are many benefits to exercise but with certain conditions (see p.8) getting consent from your doctor beforehand may be advisable. This booklet is aimed towards any woman in her childbearing year who wishes to exercise safely. You may wish to exercise in a variety of settings from a hospital gym, an exercise class, a health club, sports or leisure centre or at home. The booklet cannot cover all aspects of exercise. You may obtain specialist advice from a women's health chartered physiotherapist at your local hospital or you may meet one at classes or the local health centre.

In most cases, exercise is safe for both mother and baby during pregnancy: research supports starting or continuing with exercise to gain the health benefits associated with physical activity.

Moderate exercise intensity is defined as **being able to exercise at level 3-5 on the Borg Scale (see page 5) and carry on a conversation.** This is also known as the Talk Test.

Every woman will have a different level of fitness before becoming pregnant. The level of fitness you wish to achieve during and after pregnancy will also vary. You may be someone who has never exercised, or you may be an elite athlete.

In order to exercise safely you need to understand the changes the pregnant body undergoes.

Aims of exercise

In pregnancy the aim should be to maintain or moderately improve the level of fitness. After the baby is born the aim is to regain the former level of fitness, or improve on this if previously sedentary/unfit.

Normal physiological changes in pregnancy

Heart and circulation

When you are pregnant there is an increase in the amount of blood in your body and the heart needs to beat more quickly to pump it around. Extra blood supply is needed in your womb and placenta for your growing baby and this sometimes causes your blood pressure to fall, which can make you feel dizzy.

At 16 weeks pregnant and beyond you should avoid lying on your back for long periods and possibly when exercising, as the increasing weight of the baby can press on your blood vessels and make you feel unwell. It is advisable to avoid this position when resting whenever possible although some women turn onto their backs when asleep without a problem.

Talk Test

Your heart rate is faster when pregnant so using a heart monitor is not always accurate; use the Talk Test instead. You will be working hard enough when exercising if you have to breathe through your mouth instead of your nose, and are still able to carry on a conversation. The aim is to be working at level 3 - 5.

Borg Scale of Perceived Exertion		Talk Test Guidelines
0	Nothing at all	Can easily carry
1	Very easy	on a conversation
2	Easy	
3	Moderate	You should be
4	Somewhat hard	able to carry on
5	Hard	a conversation
6		Can't talk
7	Very Hard	continuously
8		Can't talk at all
9		Can't talk at all
10	Maximal	Can't talk at all

If you exercise more strenuously than level 5 it is possible that your health and that of your baby is put at risk.

Changes in your breathing

Your body when pregnant needs more oxygen and so you will find you breathe more rapidly than normal. You may feel short of breath more quickly when exercising even at low levels.

Metabolism

You may feel warmer than usual when you are pregnant because you are carrying a baby who is warmer than you.

Moderate exercise may also help to protect you from developing diabetes associated with being pregnant.

Joint and muscles

You will gradually gain weight when you are pregnant. This alters your centre of gravity and can make you feel off-balance. The natural curves in your spine will tend to increase which can lead to poor posture. Good posture is likely to help prevent or reduce backache. Ligaments provide support to the joints. Increasing hormone levels in pregnancy can make the ligaments more elastic so the joints become less stable. The increased movement in the joints can cause pain, especially in the hips and pelvis. You may be more likely to have back or pelvic pain in pregnancy if you have had it before, during a previous pregnancy or non-pregnancy-related. Ask for advice, help or treatment sooner rather than later in your pregnancy. A specialist women's health physiotherapist will assess your pain and offer treatment and management to help reduce the problems you are having.

How mother and baby react to exercise

Being pregnant protects your baby in the womb from the changes you might undergo when exercising. Your baby is able to continue to get enough oxygen by increasing its heart beat.

Most women will automatically limit how hard they exercise, to a level which is safe for their baby. Research has shown that moderate exercise does not produce too much heat and is safe for your baby.

Regular exercise may be beneficial in preparing you and your baby for the labour ahead.

Musculoskeletal considerations

When you are pregnant your joints are less well protected by the ligaments and therefore more easily injured. This increase in joint laxity plus the change in your weight, centre of gravity and balance may result in you experiencing low back and/or pelvic girdle pain or other joint pain. Lifting objects or toddlers incorrectly, sitting or standing with poor posture or performing exercises with poor technique will all tend to make the discomfort more noticeable.

The 'feel good' factor

Exercising at a moderate level in pregnancy makes you feel good and can reduce any anxiety you may be experiencing. Always 'listen to your body' when exercising and take notice of it. The advice in this booklet is aimed at different groups of 'exercisers' (see p9) and should help guide you towards a level of exercise which is right for you, and is safe, appropriate and enjoyable.

It can be a good time to meet other pregnant women who are also exercising. Exercise should always help you to relieve stress rather than to provoke it. You may also sleep better.

Why exercising in pregnancy may be good for you and your baby

Exercising helps you to:

- keep your heart, lungs and muscles as healthy as possible
- keep your weight within a healthy range
- improve your posture, balance and co-ordination
- improve your circulation

- increase your strength and stamina
- feel better - in body and mind
- be prepared for labour and delivery
- do your best for your baby as it develops
- reduce minor ailments of pregnancy
- become fitter and may help you to recover more quickly after the birth

When not to exercise

If you have:

- vaginal bleeding
- reduced foetal (baby) movements
- serious heart, lung, kidney or thyroid disease
- diabetes Type 1, if poorly controlled
- a history of miscarriage, premature labour or 'small for dates' baby in this or previous pregnancies
- high or low blood pressure (discuss with your doctor)
- placenta praevia after 26 weeks (discuss with your doctor)
- acute infectious disease

Precautions to exercise in pregnancy

The following conditions may require some caution and it is advisable to seek appropriate medical advice before commencing any exercise

- asthma
- diabetes type 1, if well controlled - discuss with your health carer
- history of miscarriage
- high blood pressure before you were pregnant

- early placenta praevia - discuss with your doctor
- anaemia
- extreme overweight or underweight
- heavy smoking
- pelvic and low back pain

Warnings against exercise in pregnancy

You should stop exercising immediately and seek advice from a midwife or doctor if you experience:

- tummy, calf, severe back or pelvic joint pain
- vaginal bleeding
- shortness of breath, dizziness, faintness, or palpitations
- difficulty in walking
- persistent severe headache

What you can do

You should monitor how you feel when exercising and make sure you report any problems to your physiotherapist, doctor, midwife or instructor. This should continue each time you exercise throughout your pregnancy.

What type of exerciser are you?

Broadly speaking, you will fall into one of the following four types of exerciser.

The complete non-exerciser

You dislike exercise and will probably not be persuaded to exercise when pregnant. You may still be encouraged to do pelvic

floor muscle exercises and be active not sedentary.

The non-regular exerciser

You may wish to take up some form of exercise now that you are pregnant.

You should avoid starting a new exercise programme until after the 13th week of your pregnancy. It might be advisable to begin with reduced weight bearing exercises such as those in aquanatal, static cycling or Gym ball based classes. Women's health physiotherapists or fitness instructors should be well placed to advise you and help you to progress from simple and basic levels of exercise, increasing your exercise tolerance gradually, under supervision.

The regular exerciser

If you are a regular exerciser you should:

- 1 discuss with your consultant, GP, physiotherapist or midwife before continuing your exercise regime
- 2 exercise at least three times per week for 20 - 30 minutes to improve aerobic capacity but discontinue contact sports
- 3 keep within the Talk Test limits as pregnancy progresses in order to avoid over-exercising
- 4 not restrict the amount you eat, but don't eat just before exercise
- 5 aim to use different types of exercise in order to avoid overtraining
- 6 not exercise to the point of fatigue
- 7 always aim for low impact activity
- 8 always wear a pair of well supporting shoes/trainers to reduce the wear and tear on your joints

- 9 always drink plenty of water to prevent dehydration
- 10 avoid exercising during hot and humid weather or if you have a temperature or feel unwell
- 11 ensure that you warm up and cool down for at least 5 minutes
- 12 not overstretch because of the hormonal effects on the ligaments
- 13 ask a professional with specialist training for advice on specific exercises, for example, for the pelvic floor and abdominal muscles
- 14 avoid certain movements like low squats, cross-over steps, rapid changes of direction and ballistic exercise as your balance may be affected
- 15 avoid lying flat on your back to exercise if it makes you feel unwell, sick or dizzy

The elite athlete

If you were an athlete just before you became pregnant, then follow the advice given to regular exercisers. Remember that the safe levels of aerobic activity depend largely on your previous exercise habits and ability. You are likely to be able to achieve more concentrated bouts of exercise if you are used to training regimes but the same warnings apply to you as for all pregnant women. Research into the effects of strenuous exercise during pregnancy is scarce but it is likely that you will need and want to lower the intensity of your training.

Women with disabilities

If your ability to exercise is affected by any health problem we suggest that you contact your local specialist women's health physiotherapist (see page 17) who will be able to assess you and offer advice about a suitable exercise programme.

Antenatal exercise

You should listen to your body when exercising and stop if you feel uncomfortable, tired or unwell.

If you are familiar with a sport or leisure pursuit and played until you became pregnant, it is safe to continue many activities such as walking briskly, low impact aerobics, hiking, rowing, swimming (including aquanatal), cycling, dancing, skating and cross country skiing, running and tennis.

Also gym based activities using equipment and weights, static bike, rowing machine, therabands and Gym ball may be continued.

Contact sports such as hockey, football and basketball should be avoided for the safety of you and your baby. Those pursuits with a high risk of falling such as horse riding, downhill skiing, and some racquet sports, such as squash, should also be discontinued.

Some sports such as scuba diving and exertion at altitudes over 6000' (1850m) are dangerous.

Pilates and yoga, both of which can be modified for pregnancy are popular forms of exercise which have proven benefits and are widely used by health professionals for pregnant women. If attending classes, try to ensure that the instructor has had suitable training to teach pregnant women.

The Register of Exercise Professionals is an independent body ensuring members have appropriate training and ongoing learning.

Walking and swimming are excellent types of exercise if the pace is mild to moderate and enough to make you slightly breathless. If pelvic girdle pain is a problem, avoid the breast stroke kicking motion of the legs. You may live in an area where specialist aquanatal or aquaerobic classes are available. If you attend classes or the gym always be sure to inform the instructor that you are pregnant.

Circuit training may be included as part of your training regime as long as the basic advice above is followed. Rest periods between activities may need to be longer and the intensity lowered, using the Talk Test or Borg Scale to assess the level.

Classes 'on land' range from **low impact aerobics**, where the emphasis is on maintaining fitness levels, to modified **Pilates** or **Yoga** where emphasis is on the following:

- flexibility
- control of breathing and relaxation
- core stability exercises
- pelvic floor muscle exercises
- posture
- body awareness

Backcare classes will include exercises to help you care for your back during normal activities while pregnant.

In the **gym** you may choose to use a static bicycle, the treadmill or cross-trainer, which all encourage aerobic activity. You need to be extra careful with strength training;

avoid very heavy weights, choose lighter ones and do more repetitions aiming to use both upper and lower body muscle groups and vary the exercises. Weights, sets and repetitions should be decreased further as pregnancy progresses. Use resistance according to how you feel.

Take care with new types of exercise classes, and listen to your body to see if they suit you and feel safe.

Tips for Safer Exercising

Eat to give yourself energy, but not immediately before exercising

Support yourself with chair, wall or support pole to help balance

Drink plenty of water before, during and after exercise

Breathe out with effort, eg when lifting weights

Keep movement slow and controlled

Keep cool

Don't overstretch

Don't work to your maximum ability

Vary your workout concentrating on different forms of exercise such as swimming, walking and low impact aerobics

Stretch and relax after exercise in sitting, standing or possibly left side lying - to avoid problems of lying flat on your back

Pelvic floor muscle exercises

Urinary leakage is common in pregnancy especially when exercising. It is important that you know how to exercise your pelvic

floor muscles correctly to prevent leakage during and after your pregnancy. Squeeze and lift the muscles, drawing your front and back passages upwards and forwards. Try to hold the squeeze for as long as you can. Squeezing up quickly before a sneeze/cough may stop leakage of urine. Whether or not you have had any problems with leakage continue these pelvic floor muscle exercises after your baby is born. If leakage persists ask to be referred, or refer yourself to a specialist women's health physiotherapist.

Exercising after the baby is born

There are many good reasons for exercising once your baby is born. Becoming active again as soon as possible after delivery may mean that there is less chance of developing postnatal depression, provided the exercise relieves the stress rather than making it worse. Your return to exercise should be gradual. You should do the exercises given to you in the post natal exercise booklet/leaflet, or by the physiotherapist, whilst in hospital and continue with them when you return home. The hormonal changes in pregnancy can still affect your joints for up to 5 months after the birth so care should be taken not to start high impact activity too soon. As a competitive athlete you may well discover that the break in your usual training due to pregnancy has not had a negative effect on your post natal training programme.

Physiotherapists are well placed to encourage all women with their new babies to continue exercising for life

Before you start

Regular, moderate exercise is recommended for 30 minutes or more a day. If you exercise in a gym or health club the physiotherapist or instructor should ask you some questions before you start. These will include questions on your general health as well as your present and/or past pregnancies. This is to ensure that it is appropriate for you to start the particular form of exercise and that it is as safe as possible. You should always report changes in your pregnancy, for example, change in blood pressure or new aches or pains.

General advice

- wear a well-supporting sports/maternity bra
- wear loose, cool clothing
- wear supportive training shoes
- do not exercise when feeling overtired or unwell
- do not exercise when in pain and show caution if experiencing discomfort
- try to listen to your body - don't ignore it
- avoid overheating
- drink enough when exercising
- have a healthy diet and eat properly but not just before exercising
- exercise within the limits of the Borg Scale / Talk Test
- do warm up before and stretch after the aerobic content of a workout.
- have fun and enjoy exercising

Booklets

Useful POGP booklets

- Pregnancy-related Pelvic Girdle Pain (for mothers-to-be and new mothers)
- The Mitchell Method of Simple Relaxation
- Fit for Birth
- Fit for Pregnancy
- Aquanatal Guidelines
- Pilates

For details of these and other reading, see website

pogp.csp.org.uk

Further information

The Chartered Society of Physiotherapy,
14 Bedford Row, London WC1R 4ED.

Telephone: 0207 306 6666

Contact information

If your ability to follow the advice in this booklet is affected by any health problem, contact your local specialist physiotherapist who will be able to help with appropriate alternatives.

To find your local specialist physiotherapist, please contact:

POGP Administration,
Fitwise Management Ltd,
Blackburn House, Redhouse Rd,
Seafield, Bathgate,
West Lothian EH47 7AQ

T: 01506 811077 E: info@fitwise.co.uk
or visit the POGP website at pogp.csp.org.uk

