

# PPUK - Exercise Guidelines for the Pregnant Client



## COMMON SENSE

By following sensible and research-based guidelines, like these from the American College of Obstetricians and Gynecologists (ACOG - 1994, 2002), we ensure your health and safety, and that of your unborn baby.

## Approval

We will always get approval from your obstetrician before beginning or continuing an exercise programme. Some medical conditions make exercise during pregnancy inadvisable or justify modifications to ensure that your programme is safe.

## Plan

We will design a programme of mild to moderate intensities and avoid exercise to the point of exhaustion. Common sense and perceived exertion rule here. If you are already fit, we will only need to make small changes as your pregnancy advances. If you are new to exercise, we will begin you on a low level programme and progress you slowly.

## Regular

We will use regular and moderate duration exercise sessions. You should exercise at least three days per week because regular activity is safer and more beneficial than intermittent or on-again, off-again exercise protocols. This holds true in non-pregnant populations too.

## Recommended

We only use recommended types of exercise. These include low-impact activities like swimming, walking, stationary cycling, stretching, and light to moderate resistance training. We only use impact activities such as running as individual tolerance and enjoyment allow – you're an individual and your programme will reflect this. We always adapt your programme by changing your activity choices when needed as your pregnancy progresses.

## Avoid

It makes sense to avoid jerky, ballistic, bouncy, and extreme range of movement (ROM) movements as well as exercise that involves severe straining, jumping, or sudden changes in direction. Balance

and hormonal changes during pregnancy make activities with these types of movements higher risk. We avoid stretching to the limits or end of ROM.

We avoid supine exercise after the first trimester. After your fourth month, you should avoid exercise for prolonged periods of time while lying on your back. In the supine position, the growing fetus can compress the vena cava, which is a major vein that runs up the back side of the abdomen and returns blood to the heart. Compression of the vein causes less blood to flow back to the heart. Theoretically, this could decrease blood supply to the uterus, affecting fetal growth and development.

We will also avoid exercising you when it is hot and humid, and we'll encourage you to drink plenty of water. You should attempt to drink six ounces of water every 10 to 15 minutes during exercise, especially during the first trimester, when increases in maternal temperature can put the fetus at risk for neural tube defects.



## Calories

You should increase your caloric intake. Talk to your doctor about appropriate weight gain. Average weight gain is between 25 and 35 pounds (11-15 kg). Pregnancy is not a time to lose weight, control weight (although excessive gain is not healthy for the mother), or restrict calories. It is common to gain about two to four pounds (1-2 kg) during the first trimester, 10 to 11 pounds (4-5 kg) during the second trimester, and 12 to 13 pounds (5-6 kg) during the third trimester. Generally, an extra 200 to 300 calories can be added to your diet by the middle of the second

trimester by gradually increasing caloric intake.

Exercise during pregnancy further increases calorie requirements, and nutrition supplementation should take into account these increased needs. Vitamin and iron supplements are generally recommended for pregnant women, though no double-blind studies of routine vitamin or iron supplementation for pregnant women have been conducted. An exception to this is folic acid, which at a dose of at least 1mg per day prior to pregnancy and during the first trimester has shown to reduce the incidence of neural tube defects.

### **Nutrition**

We will advise you on nutrition/healthy eating during and after your pregnancy. It is our policy to establish healthful eating practices, not only for you and your unborn child, but for your entire family both before and after the birth of your child.

We suggest you eat small and frequent nutritious snacks and meals. Cutting calories during pregnancy puts the fetus at risk (Andrew 1998). You can obtain the extra calories you need by planning simple additions to your diet. Carbohydrates are your primary caloric energy source and the best source of placental and fetal glucose. Without adequate carbohydrates, protein and other nutritional sources will be depleted. Adding a half bagel or half cup of rice, beans or pasta adds 80 to 150 calories to your diet (Andrew 1998).

### **RPE**

You will be taught to use rating of perceived exertion (RPE). The RPE (your perception of how hard you're working on a scale of 1-10) technique will be used at all times during your training – along with heart rate at times – so that we can monitor your individual tolerance and physiological response to exercise. Using RPE helps you learn how to listen to your body and trust your intuition about acceptable exercise stress or intensity.

### **CARDIOVASCULAR EXERCISE**

You will be encouraged to participate in familiar activities and those that are not too skill-dependent. General activities will graduate to non-ballistic, non-jumping, and low-impact or non-weight-bearing activities. At all times you are advised to avoid rapid or abrupt directional changes. Activities such as running are often self-limiting. Toward the end of the first trimester, many women report that running or similar activities no longer feel good. At this time, it makes sense to switch to activities such as stationary cycling, swimming, and walking.

## **RESISTANCE TRAINING**

If you already exercise, you may not want to give up this part of your fitness routine. We will teach you how to continue your strength training programme safely. If you have never strength trained before, we'll start you off slowly and progress you safely. Lower weights and higher repetitions (i.e., 12-20) will maintain tone and strength with less risk of damaging ligaments. Hormonal changes create laxity in ligaments throughout the body, not just in the pelvic region. Lifting heavy resistance will always be avoided in view of the resultant joint instability and the likelihood of performing a Valsalva maneuver in heavy training. This momentary or sustained breath-holding could divert blood from the womb to the working muscles, potentially compromising the fetus, or could unnecessarily increase your heart rate and blood pressure to high levels.



### **Your programme**

We will focus your resistance training programme on the following:

- 1) Maintain muscular strength and endurance.
- 2) Strengthen muscles to help prevent injuries or discomfort associated with postural changes, weight gain, and postpartum activities (e.g., carrying your new-born baby, performing recovery workouts).
- 3) Promote comfort and safety through the use of proper body mechanics and alignment.
- 4) Make each session as fun, effective and safe as possible for you and your unborn child.
- 5) If you're post-partum at least six weeks and want to exercise with your baby, we'll design a programme that you can do together.