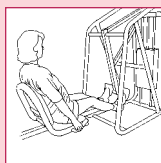


GUIDE TO FITNESS

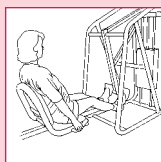
During and After Pregnancy in the CF



GUIDE TO FITNESS

During and After Pregnancy

in the CF



**STRENGTHENING
THE
ÉNERGISER LES FORCES**

**CANADIAN FORCES
PERSONNEL SUPPORT AGENCY**



CANEX

**AGENCE DE SOUTIEN DU PERSONNEL
DES FORCES CANADIENNES**

Acknowledgements

ParticipACTION has developed the Guide to Fitness During and After Pregnancy in the Canadian Forces. In preparing this resource ParticipACTION worked with a distinguished team of experienced exercise scientists, sport medicine specialists, and fitness professionals.

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Strengthening the Forces—Injury Prevention Program
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Strengthening the Forces—Injury Prevention Program
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Strengthening the Forces—Nutritional Wellness Program
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Congratulations on your pregnancy. Women play a very important role in the day-to-day operations of the Canadian Forces and great efforts have been made to help our female personnel strike a happy balance between their professional and family lives. As part of this ongoing effort, under the umbrella of our Health Promotion Program “Strengthening the Forces,” we have developed this guide to help you maintain optimum health and fitness—for you and your baby—throughout your pregnancy. Designed in an easy-to-follow format, it includes advice and guidance from world leaders in pregnancy and exercise.

Enjoying an active lifestyle plays an important part in developing and maintaining the operational readiness of all Canadian Forces personnel. You will also discover as you read and use this guide that exercise plays a crucial role in a healthy pregnancy. Both you and your developing baby will benefit greatly by following the advice in this excellent guide. I wish you the best for a healthy and fit pregnancy.

VAdm GE Jarvis
ADM (HR-Mil)

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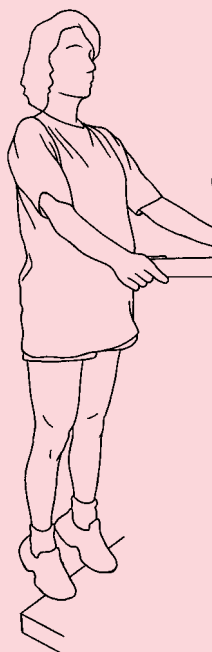
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Getting Started



Getting Started

The American College of Obstetricians and Gynecologists recently changed its position statement on physical activity during pregnancy from “pregnant women *can* exercise” to “pregnant women *should* exercise” for the well being and health of themselves and their baby.

Fitness in the CF

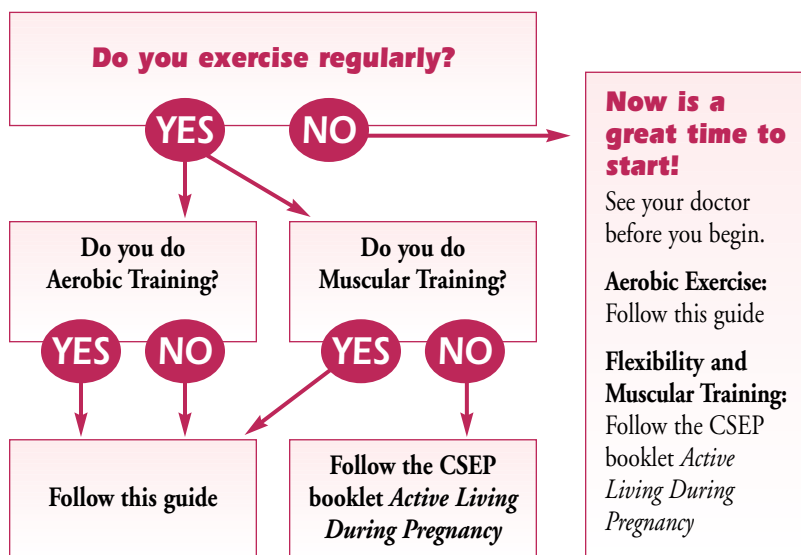
Pregnancy is a wonderful time in a woman's life—a challenging and even magical time. Regular physical activity during pregnancy can help you get through it more comfortably, with fewer health concerns or problems.

The purpose of training during pregnancy is to maintain some of your fitness. It is not a time to try and increase your aerobic capacity or your muscular strength. While the Canadian Forces has developed a number of excellent fitness programs, none of them were designed to accommodate the special needs of the active pregnant woman. This booklet outlines a fitness maintenance program specifically for pregnant women and was designed with the health and safety of you and your baby in mind.

Every pregnant CF member may use this *Guide* as the main source of information for training during pregnancy. If you have not been active before becoming pregnant, a good starting point and reference is *Active Living During Pregnancy*, published by the Canadian Society for Exercise Physiology (CSEP). You may use both booklets for portions of your program and both should be available from your PSP fitness staff.

Take a minute now to take stock. Answer the questions below to determine if you will need just this Guide or the CSEP booklet as well.

Taking Stock



Using the Guide Effectively

Set aside one hour when you can sit quietly by yourself to study this Guide.

- ✓ Scan the *Table of Contents* to get an idea of the overall structure and order of information.
- ✓ Carefully read the *Healthy Eating* guidelines, *Stopping Smoking* advice and the *Exercising Safely* tips.
- ✓ Look over the *Training Routines During Pregnancy* section. It includes the stretching sequence and strength-training circuits that you can do along with information on how to follow them.
- ✓ Review the specific information for each trimester of pregnancy and post-partum in the next four sections. The *Training Prescription* chart in each section summarizes your program during that stage.

Enjoy your training. Be sure to consult the **PSP fitness section** on your base if you have questions about the information in this guide, if you are concerned about your program or if you would like alternatives to some of the recommended exercises.

Healthy Eating

Pregnancy is a time to take care of yourself by eating enough to fuel your needs and to build a healthy baby. Your energy needs are even higher if you are exercising or breastfeeding. Expect to gain about 11 to 16 kg (25–35 lbs) during your pregnancy.

Let the 'rainbow' be your guide. Include a variety of foods from *Canada's Food Guide to Healthy Eating*, both within and among the four food groups to assure that you and your baby get all the essential nutrients. Get a copy of *Canada's Food Guide* from your PSP health promotion or fitness staff and use it to understand serving sizes and the number of servings you require.

Eat meals and snacks at regular intervals to maintain a constant energy source for your developing baby and for your own working muscles during exercise. Try not to skip meals or go too long without eating. Include at least three food groups to balance your breakfast and all four food groups at lunch and dinner. Here are some sample nutritious meals:

- ♦ Breakfast—High fibre cereal, milk and fruit/juice.
- ♦ Lunch—Canned salmon sandwich, garden salad with vinaigrette, 1% milk and an apple.
- ♦ Dinner—Chicken, beef or veggieburger with rice, baked potato, pasta or whole grain roll, plus steamed or raw veggies, fresh fruit and vanilla yogurt.

Use high carbohydrate snacks to fill the gap, especially before and after exercise. Good choices include a banana and yogurt, a crunchy granola bar, chocolate milk, 100% fruit juice, wheat crackers with peanut butter, and trail mix.

Here are some tips to get the most out of the *Canada's Food Guide to Healthy Eating's* four food groups.

Grain Products

Go for the grains—7 to 12 *Food Guide*-size servings per day (or more if you are very active!). Grains are Mother Nature's prime fuels for energy, plus B vitamins, iron and fibre. For long-lasting carbohydrates, trust fibre-rich whole grain breads and cereals.



Here's a long list to choose from:

- ◆ multigrain rolls
- ◆ sesame bagels
- ◆ white and brown rice
- ◆ couscous
- ◆ bulgur
- ◆ muffins
- ◆ whole-grain pancakes or waffles
- ◆ rye bread
- ◆ flaxseed pitas
- ◆ enriched pasta
- ◆ oatmeal
- ◆ cornmeal
- ◆ biscuits and crackers.

Vegetables and Fruit

Enjoy 5 to 10 serving per day! *Put some colour on your plate*—mix dark green, deep yellow, orange and red veggies and fruits to get your antioxidants, fibre and folate. Enjoy fresh and frozen leafy vegetables like broccoli, spinach, rappini and bok choy *and* starchy vegetables such as white and sweet potatoes, green peas, corn, winter squash and plantain. Choose fresh, frozen or canned fruits as well as 100% fruit juices at meals or for snacks.

Looking for fresh ideas? Try ...

- ◆ a spinach salad with strawberries and citrus vinaigrette
- ◆ broccoli, red pepper and snow peas in a stir fry
- ◆ a handful of cherry tomatoes, baby carrots, green pepper strips and celery in a zip lock bag with an ice cube—makes a great snack *to go!*

Milk Products

Aim for 3 to 4 servings per day. Choose lower-fat dairy products for muscle contraction and bone-building calcium. Look for lactose-free milk products or, alternatively, fortified soy drinks if you are lactose intolerant or vegetarian.

Here are some great combos:

- ◆ a fruit smoothie
- ◆ cheese and crackers
- ◆ vanilla yogurt on a baked apple
- ◆ crunchy cereal with milk
- ◆ a soothing mug of hot cocoa (or cold milk) and a crispy oatmeal cookie





Consume additional fluids when you exercise

1–2 hrs before
500 mL (2 cups) water

During
175–375 mL ($\frac{3}{4}$ – $1\frac{1}{2}$ cups) water, diluted fruit juice or sport drink every 15–20 minutes

After
625–750 mL ($2\frac{1}{2}$ –3 cups) water, fruit juice, sport drink for each .5 kg of sweat lost in exercise

Meat and Alternatives

Count on 2–3 servings a day. Build a strong baby with lean red meat, chicken, fish and other seafood, which provide high-quality protein, iron, zinc and important B vitamins. Alternatively, choose eggs, fortified soy products, cooked dried beans, peas, lentils, peanut butter and tofu.

Need some menu ideas? Try ...

- ♦ spaghetti and meat sauce
- ♦ chicken stir fry
- ♦ beef and veggie kabob
- ♦ grilled salmon steak
- ♦ clam chowder
- ♦ vegetable frittata/omelette
- ♦ vegetarian chili
- ♦ bean burritos
- ♦ soy veggieburger/hot dog
- ♦ chick pea salad
- ♦ Asian tofu stir fry.

Here are some other important practices for good nutrition during pregnancy.

- ♦ **Make your fats count.** Be sure to get essential fatty acids for baby's brain development and eyesight by using canola and soybean oils and soft, non-hydrogenated margarine. Enjoy the benefits of fish such as salmon, tuna, mackerel, sardines and rainbow trout. Other food sources include nuts and seeds. High fat foods to limit include commercial baked goods like pies, cakes, cookies, pastries, fried snacks and batter-dipped and deep-fried foods.
- ♦ **Supplements.** To meet mom and baby's need for extra folic acid before and during pregnancy, a daily supplement with a minimum of 400 mcg of folic acid is recommended in addition to a nutritious diet. Talk with your health care provider about an appropriate prenatal supplement.
- ♦ **Drink lots of fluids.** In addition to the fluid you need during and after exercise, consume at least 2 litres (8 cups) daily from water, milk, juice, sport drinks, soups and decaffeinated beverages. For example, 4 cups water + 3 cups 1% milk + 1 cup orange juice = 8 cups (1 cup= 250 ml)

If you are a sport drink fan, choose one that is 6–8% carbohydrate like Gatorade or Powerade to prevent low blood sugar, to refuel muscles and to replace fluids and electrolytes (sodium and potassium) lost in sweat.

- ♦ **Limit your caffeine.** Limit coffee, tea and colas to (a total of) 0–2 cups per day. Consuming too much caffeine can lead to dehydration which will decrease physical performance and can also reduce breast milk production.
- ♦ **Avoid alcohol.** Drinking beer, wine and spirits throughout your pregnancy can be harmful to your developing baby. Alcohol should also be avoided when breastfeeding as it can be passed along to the baby in breast milk.
- ♦ **Get enough salt.** It is not necessary to restrict salt/sodium intake during pregnancy. If you sweat a lot during exercise, you may need to replace sodium by sensible use of table salt, condiments (mustard, pickles, ketchup, soy sauce, salsa), tomato or vegetable juice cocktail and soups.
- ♦ **Be careful with herbal teas.** Herbal teas generally considered safe by Health Canada when used in moderation (2–3 cups/day) are: citrus peel, ginger, lemon balm, linden flower, orange peel and rose hip. Chamomile teas are likely not appropriate for use during pregnancy. They have been reported to have adverse effects on the uterus. Discuss the safe use of herbal teas with your health care provider.
- ♦ **Choose the right energy bar.** If you enjoy energy bars when you are active, be sure to pick one with more carbohydrates than protein to help you get ready for—or recover from—a workout. Energy bars should *not* be considered as a meal replacement.
- ♦ **Play it safe.** Avoid raw meats, seafood, eggs and unpasteurized soft cheeses, hot dog wieners and pâtés to minimize the risk of contracting food-borne illnesses. Always follow safe food handling practices to reduce the risk of food poisoning. Fresh water fish, swordfish and fresh tuna can be a source of contaminants such as mercury. Contact your local public health office for any restrictions in your area.



Many popular herbal supplements such as ginseng and echinecea have not been proven safe to use during pregnancy and when breastfeeding. You should not take any herbal medicines unless directed to do so by your physician.

Pregnancy is an important time to consider all your lifestyle habits. Along with regular physical activity, other important pillars of a healthy pregnancy include healthy eating, effective stress management, adequate rest, abstaining from alcohol, and not smoking.

Stopping Smoking

Smoking and second hand smoke exposure during pregnancy places the health of you **and** your baby at risk. Problems that can occur as a result of smoking and second hand smoke exposure during pregnancy include stillbirth, spontaneous abortion, lower birth weight, premature birth, placental abruption, reduced fetal growth, sudden infant death syndrome(SIDS), cleft palate, cleft lip and some childhood cancers.

If you are a smoker, quitting smoking prior to becoming pregnant or very early in your pregnancy is ideal. But health benefits can be gained by abstaining from smoking at anytime during your pregnancy. If you wish to stop smoking, please see your physician to discuss treatment options. Your base/wing health promotion director can discuss any concerns you have and provide information on smoking cessation programs that are available.

Exercising Safely

The average weight gain during a healthy pregnancy is 11 to 16 kg, with the greatest increases in the second and third trimesters. Body fat increases as well, particularly in the first two trimesters. These changes will affect your exercise abilities and your level of energy. Weight gain will also alter your centre of gravity and could affect your balance and coordination.

Here are some important general guidelines to follow as you train:

- ♦ Seek medical care early in your pregnancy. First, to ensure that you and your baby are doing well. Second, to organize the specialized and personal care you will require during your pregnancy. Finally, to ensure that you and your baby are protected from unnecessary occupational hazards by the assignment of a temporary medical category and employment limitations. Your temporary category and employment limitations will be removed once you have fully recovered from your delivery. You should obtain clearance to continue participating in an exercise program from the physician that will be following you throughout your pregnancy.

- ♦ Avoid heavy lifting tasks and prolonged standing during pregnancy, particularly in the third trimester.
- ♦ To ensure your baby does not become overheated, avoid exercising in warm, humid environments (including pools where the water temperature is high) and avoid using saunas and hot tubs.
- ♦ Listen to your body. Avoid exercising so strenuously that you feel lingering fatigue. This is especially important in the third trimester when your baby's needs for nutrition and growth rate are the greatest.
- ♦ Use the *Personal Training Record* at the back of the *Guide* to monitor and record your progress. In addition, it is recommended that you check in with your PSP fitness staff on a monthly basis to ensure that your training is going well and that you are doing your exercises properly.

Safe Activities During Pregnancy:

- ♦ Walking
- ♦ Cycling
- ♦ Swimming
- ♦ Rowing
- ♦ Pilates
- ♦ Muscular/strength training
- ♦ Elliptical/cross trainer machine
- ♦ Boxing conditioning training—non contact
- ♦ Jogging
- ♦ Stairmaster
- ♦ Aquafitness
- ♦ Yoga
- ♦ Spinning

Activities to Avoid:

- ♦ Rollerblading
- ♦ Water skiing
- ♦ Skating
- ♦ Basketball
- ♦ Contact activities such as hockey, football, rugby or broomball
- ♦ Parachuting, repelling or rock climbing
- ♦ Rucksack marches and casualty evacuation
- ♦ Cross-country skiing
- ♦ Scuba diving
- ♦ Soccer
- ♦ Obstacle courses

Avoid exercise during pregnancy if any of these conditions are present ...

- ♦ Heart disease
- ♦ Restrictive lung disease
- ♦ Incompetent cervix or cerclage placement
- ♦ Multiple gestation at risk for premature labour
- ♦ Persistent second- or third-trimester bleeding
- ♦ Placenta previa after 26 weeks gestation
- ♦ Premature labour during the current pregnancy
- ♦ Ruptured membranes
- ♦ Preeclampsia/ pregnancy-induced hypertension
- ♦ Intrauterine growth retardation

**Exercise with caution
if any of these condi-
tions are present ...**

- ◆ Severe anemia
- ◆ Unevaluated maternal cardiac arrhythmia
- ◆ Chronic bronchitis
- ◆ Poorly controlled type 1 diabetes
- ◆ Extreme morbid obesity
- ◆ Extreme under-weight
- ◆ History of extremely sedentary lifestyle
- ◆ Intrauterine growth restriction in current pregnancy
- ◆ Poorly controlled hypertension
- ◆ Orthopedic limitations
- ◆ Poorly controlled seizure disorder
- ◆ Poorly controlled hyperthyroidism
- ◆ Heavy smoker

Stop exercising if you experience ...

- ◆ Persistent uterine contractions
- ◆ Unexplained pain in the abdomen
- ◆ Any “gush” of fluid from the vagina
- ◆ Bleeding from the vagina
- ◆ New or increased back or pelvic pain
- ◆ Sudden swelling of the ankles, hands, or face
- ◆ Pain, redness, and swelling in the calf of one leg
- ◆ Persistent headaches or disturbances of vision
- ◆ Dizziness or faintness
- ◆ Fatigue, rapid heart beat, chest pain, or difficulty breathing
- ◆ Failure to gain weight (i.e., less than 1 kg per month during the last two trimesters)
- ◆ Absence of—or a change in—fetal movements
- ◆ Elevated heart rate or blood pressure following exercise (after 1 hour)

If any of the symptoms in the ‘Stop exercising’ list occur during your activity or as result of it, consult your doctor immediately.

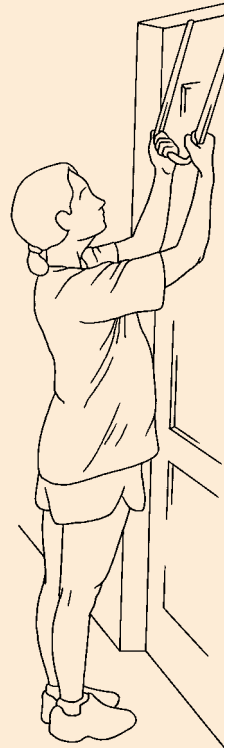
Certain conditions may mean that you cannot exercise at all during pregnancy or you must be extremely careful when you are exercising. These are set out in the accompanying lists. Your physician will play an important part in identifying these medical concerns and guide you accordingly.

What to do if you get injured?

Anyone who exercises is at risk of becoming injured and this will be no different during your pregnancy. In fact, pregnancy itself may put you at greater risk of developing certain injuries. Changes in your body weight, body shape and the release of hormones that increase the laxity of your ligament and joint structures may increase your risk of developing strains and sprains. Despite these inevitable changes, research has shown that women who exercise throughout pregnancy are not at increased risk of injury. Should you develop an injury during your pregnancy, see your physician for an assessment and treatment recommendations. Many of the over-the-counter medications that we use to treat ourselves for a variety of common medical problems are potentially harmful to your developing baby and should not be taken without medical advice. As a general rule, for most musculoskeletal injuries you cannot go wrong by initially applying the RICE principle—**Rest, Ice, Compression and Elevation.**



Training Routines During Pregnancy



Training Routines During Pregnancy

Your training sessions will include aerobic activity, strengthening exercises and easy stretching movements for warm-up and cool-down. Follow the guidelines provided for safe and effective training. The *Training Prescription* chart for each trimester will refer you to the strength training circuits detailed in this section. Use the *Personal Training Record* at the back of the *Guide* to keep track of your workouts.

Warm-up, Cool-down and Stretching

A good *warm-up* is an important component of your training routine. At the beginning of each session do approximately five to ten minutes of light aerobic activity—brisk walking, easy marching, or jogging. Follow this with a 5 minute period where you perform the stretching sequence shown here to help prepare you for the *workout*. Take your time with these exercises. To *cool down* at the end of the session, run through the stretching sequence again.

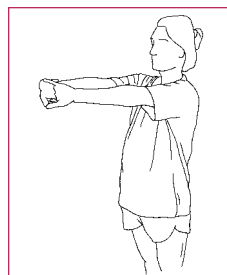
- ◆ For each exercise, stretch *slowly* to the end of your range of motion and hold for 20–30 seconds.
- ◆ Most of these exercises involve stretching one side of the body at a time. Pause briefly after the stretch, then repeat on the other side.
- ◆ Stretch until you feel a gentle tightness and hold at that point. Don't bounce in an attempt to be able to stretch further. If you feel pain, you are stretching too far.
- ◆ Breathe naturally and try to relax all your muscles as you do each stretch. Don't hold your breath.
- ◆ Exercise number 8 may become more difficult as your pregnancy progresses.

Stretching Sequence

1

Neck and Upper-Back Stretch

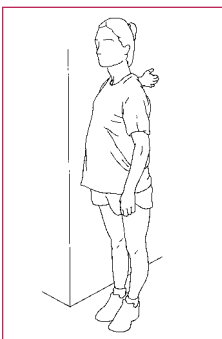
While standing, grasp hands together and reach the arms out in front at chest height. →



2

Shoulder/Chest Stretch

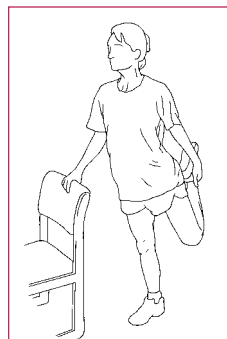
Stand facing the wall, placing your palm and forearm against it, then turn your body away from the wall until you feel a gentle stretch in your chest and shoulder. Maintain a small bend in your elbow.



3

Thigh Stretch

Holding onto the back of a chair for balance, bend one leg up behind you and grasp the ankle. Slowly move the leg back until you feel a gentle stretch. To increase the stretch you can push your hips gently forward. →



4

Hamstring Stretch

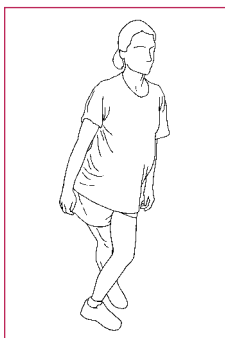
Using a chair for balance, place one leg in front with the heel on the floor. Keep your leg straight and bend forward from the waist until you feel a gentle stretch in the back of your leg and buttocks. Remember not to bounce during this exercise.





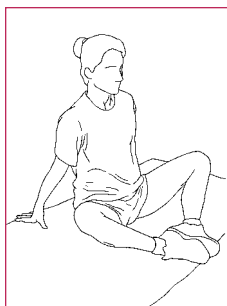
5 Calf Stretch

Using a chair or the wall for support, extend one leg out behind, keeping both feet flat on the floor with toes pointing forward.



6 Iliotibial Band Stretch

In the standing position, cross your left leg in front of the right, then lean to the left side while sticking your right hip as far to the right as possible. Repeat for the opposite side of the body.

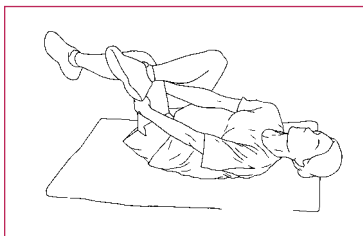


7 Inner Thigh Stretch

In a sitting position, put the soles of your feet together. Placing your hands behind for support, lower your knees toward the floor.

8 Gluteal Stretch

Lying on your back with one knee bent, the other crossed over with ankle against the knee/upper thigh, reach and pull your bent knee towards you. The position is like you are sitting in a chair with one leg crossed over the other.



Strength Training

There are five circuits included here:

- ♦ two for upper-body (UB) strength
- ♦ two for lower-body (LB) strength
- ♦ one for Core strength.

Do the circuits on the required days as set out in the *Training Prescription* charts. You should also do daily ‘Kegel’ exercises to help strengthen your pelvic floor muscles and these are explained below.

UB and LB Circuits

- ♦ When doing body-weight or stack weight circuits, do the number of repetitions shown. Going to ‘Failure’ means doing as many repetitions of an exercise as you can until you can’t do another one. Recognizing that you are pregnant, your training now involves *conservative* maintenance routines and so we don’t recommend that you work to failure. Instead you should initially aim to complete 12–14 repetitions of each exercise. As your pregnancy progresses the number of suggested repetitions will gradually get smaller. You will have to estimate how you feel so you stop before the reps get too difficult or demanding. Remember you are supposed to be training conservatively—so don’t overdo it!
- ♦ If the stack-weight equipment you need for a particular exercise isn’t available or it feels uncomfortable when you use it, you can substitute the exercise from the body-weight circuit that works the same muscle group. It is very important to replace exercises with alternate exercises that work the same muscle group in order to maintain proper muscle balance. If you have concerns about the correct choice of exercise consult your PSP fitness staff.
- ♦ Breathe comfortably when doing the exercises. Inhale and exhale on each repetition—exhaling on effort.
- ♦ Use the illustrations and descriptions for each exercise as a guide to make sure you do the right technique. If you are unsure if you are doing the exercise correctly ask your PSP fitness staff for assistance. For each

exercise, go from the start position to completion, then under control return back to the start position ... and repeat.

- ♦ For exercises done in a standing position, the feet should be shoulder-width apart for good balance, the knees slightly bent to prevent strain on the lower back and the toes pointing slightly outward.
- ♦ Always perform the movement through the full range of motion, making sure not to lock the joints in the extended position.
- ♦ When using stack weights, hold the bar with the thumbs facing in toward one another unless noted otherwise.
- ♦ Make it a habit to train with a partner. You can spot one another and provide technique guidance and encouragement. If this is not possible, please advise the PSP fitness staff that you are using the facilities so that they can be available to you in the event that you require assistance.

Abdominal/Lower back— Core Circuit and Kegel Exercises

Strengthening the body core and pelvic floor muscles can help offset many of the discomforts commonly experienced by women during pregnancy and postpartum. Potential discomforts include bladder-control problems, hemorrhoids and lower-back pain.

The *Training Prescription* chart for each stage of your pregnancy notes when the Core circuit should be done. Protect your lower back by doing a pelvic tilt when doing these Core strengthening exercises—and when stretching or doing the UB and LB circuits. (See Exercise #1 on page 19.)

To locate your pelvic floor muscles for doing *Kegel exercises*, try to stop the flow of urine when urinating. (If it stops, you're contracting the right muscles!) Also try to contract the anal sphincter and the vagina at the same time. Once you have located these muscles, you can perform this exercise anytime—when you're reading, watching TV, driving, or even standing at the kitchen sink. Build up to 10-second 'hold'/contractions. Do 20 to 30 repetitions each day.

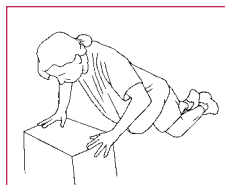
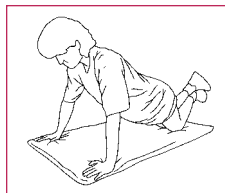
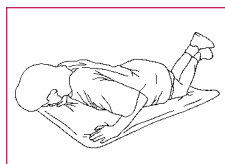
Upper-Body Circuit #1

Body-Weight Exercises—the number of repetitions of each of these exercises will be shown on the training charts that are provided for each trimester of your pregnancy and after your delivery.

1

Push-Ups (fingers forward)—for Chest/Shoulders

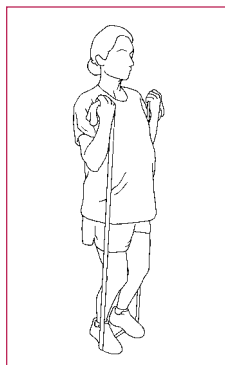
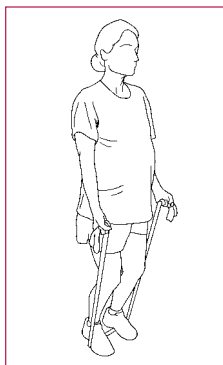
With the back firm and flat (not sagging) and hands under the shoulders, push up straightening the arms. To maintain comfort, use the knees instead of your toes as the pivot point/support or use a table or bench for hand placement. As your pregnancy progresses, doing push-ups to a table or a bench may accommodate the growing abdomen and help you maintain proper posture while doing the exercise. →



2

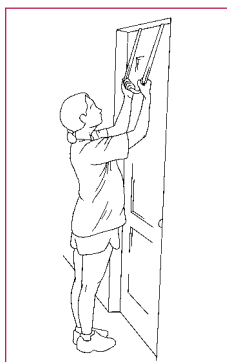
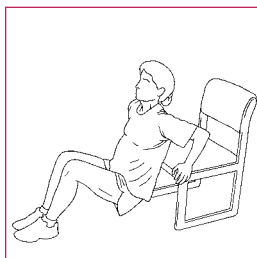
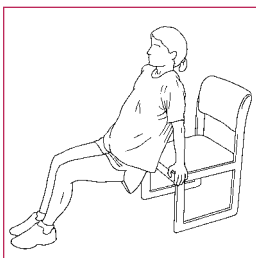
Bicep Curls—for Biceps

While holding the ends of your tubing in your hands, stand on the centre of your tubing such that you have equal lengths of tubing on either side. Standing with your knees slightly bent and your shoulders back, grasp the tubing such that you feel resistance at the start of the curl. Keeping the elbow against your side, flex the arm at the elbow and raise your hand to shoulder height. Slowly return to the start position and repeat. This can be done with both arms at the same time or by alternating your arms.



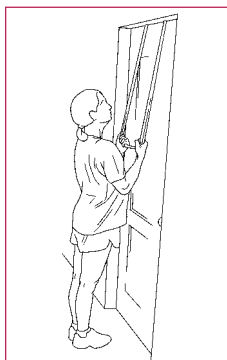
3 **Dips—for Chest/Shoulders/Triceps**

With the palms supported on a sturdy chair or bench, behind your back, extend the arms until they are straight. Lower your body so that your upper arm is parallel to the ground. For varying levels of difficulty, you can keep your legs fully extended and pivot off your heels or you can bend your knees and keep your feet flat on the ground. If necessary, use a support booster under your buttocks.



4 **Pull-downs—for Mid-back/Posterior shoulder**

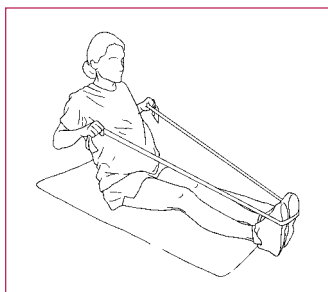
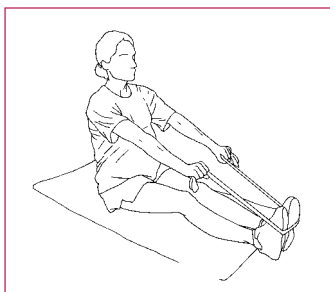
Drape your tubing evenly over the top of an open door, with a towel between the tube and the door to protect the tubing. Reach up with your arms and grasp the tubing such that there is some resistance at the start of the pull-down. While bending at the elbows, pull downward with your arms until your hands reach shoulder height. Slowly return to the start position and repeat. Note that as your pregnancy progresses it may become difficult to get close enough to the door. At this stage a hook in the wall or a sturdy shower rod may be a good alternative.



5

Seated Rowing—for mid/upper back/Posterior shoulders

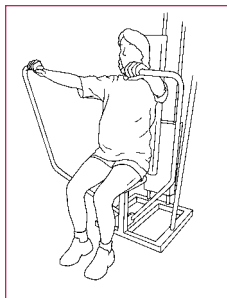
Sitting on the ground with your legs extended, back straight or slightly leaning back, hook the tubing under the soles of your feet. Reach forward and grasp the tubing such that you have some resistance when you start rowing. With your elbows bent, pull backwards until your hands are at your side. At the end of this movement your shoulder blades should be squeezed together and your chest pushed forward. Slowly return to the start position.



Note: you should be able to get the rubber tubing needed for these exercises from your PSP fitness staff. If you are uncertain about the written instructions ask the PSP fitness for a demonstration and explanation.

Upper-Body Circuit #2

Using Stack Weights—the number of repetitions of each of these exercises will be shown on the training charts that are provided for each trimester of your pregnancy and after your delivery. As your pregnancy progresses, the weights you will use and the number of repetitions of each exercise will decrease.



1

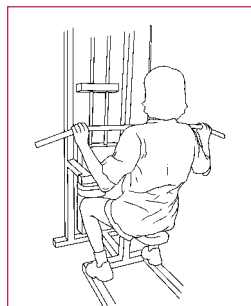
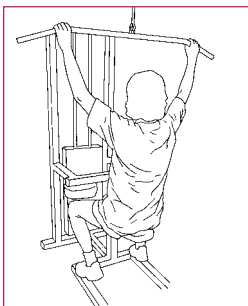
Chest Press—for Chest/Shoulders

Extend the arms in front at chest height pushing the handles out and then under control return to the starting position.

2

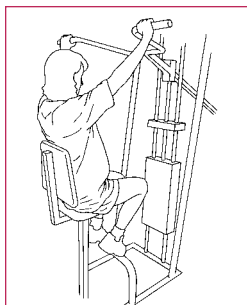
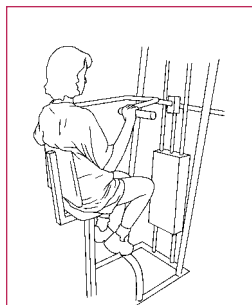
Lat Pull-Downs—for Mid-back/ Posterior shoulders

Seated on a bench (or kneeling on one knee) grip the bar slightly wider than shoulder width apart, pull the bar down in front of your face to shoulder level and then under control return to the start position.



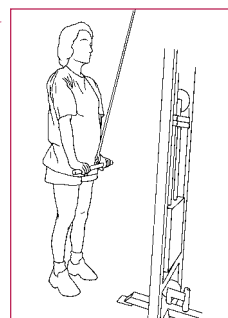
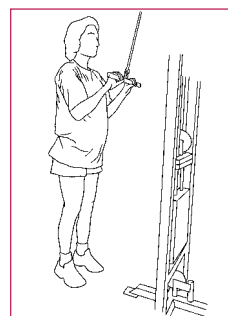
3 **Shoulder Press—for Shoulders**

Seated, push the handles up from shoulder height until the arms are fully extended overhead and then under control return to the start position.



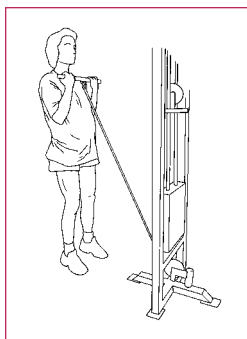
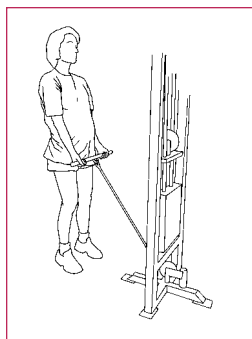
4 **Tricep Extensions—for Triceps**

Hands close together and elbows bent 90°, push hands down until the arms are straight and then under control return to the start position.



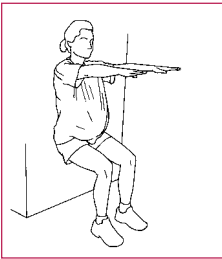
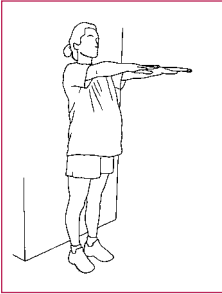
5 **Bicep Curls—for Biceps**

Arms down in front and fully extended, grasping the bar with the thumbs facing out. Curl the bar, pulling the hands up under the chin and then under control return to the start position.



Lower-Body Circuit #1

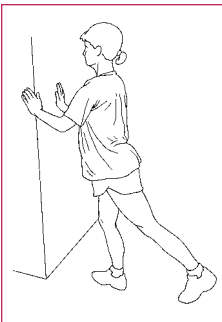
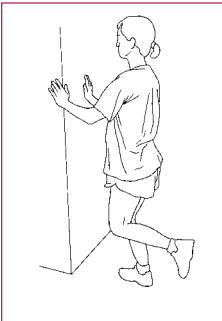
Body-Weight Exercises—the number of repetitions of each of these exercises will be shown on the training charts that are provided for each trimester of your pregnancy and after your delivery.



1

Squats—for Thighs/Buttock

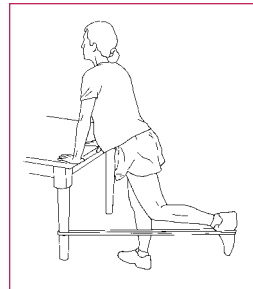
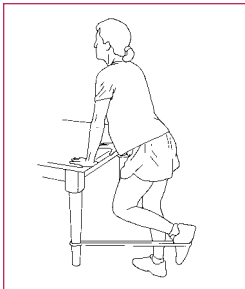
With your arms held out front for balance, feet shoulder-width apart and toes pointing slightly outward, bend the legs squatting (no lower than thighs parallel with the floor) then return to full standing position. Try to keep your knees directly above your ankles during this exercise. Use a wall for back support if you wish. As your pregnancy progresses try holding onto a chair or ledge for support. Alternatively, you can perform a front lunge by stepping forward with one leg, bending the knee and shifting your weight over it while keeping the upper body erect and back 'flat'. Repeat alternately to the other side.



2

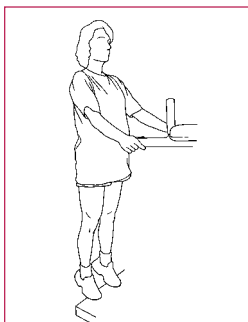
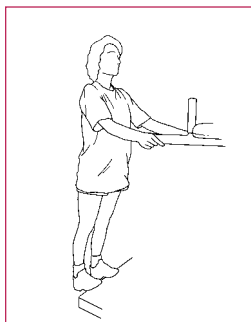
Kick Backs—for Hamstrings/ Buttock

Stand facing the wall, using it for support. With one knee bent and hip flexed, extend the opposite leg back then slowly return to starting position. To increase the load, hook a piece of tubing around the leg of a sturdy table. Stand facing the table, using it for support. Hook the tubing around the sole of one foot and extend that leg back then slowly return to starting position. Be sure to keep the knee bend and hip flexed in the supporting leg.



3 Calf Raises—for Calfs

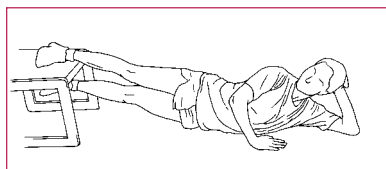
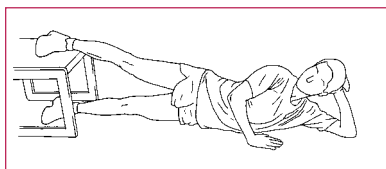
Forefeet supported on a low board, raise up on the toes then slowly lower heels to the floor.



Note: For exercises 4 and 5, as your pregnancy progresses you may want to place a towel or small pillow under your belly for comfort and support.

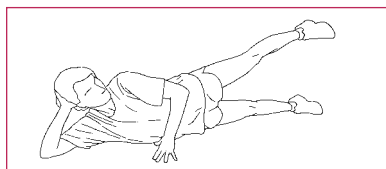
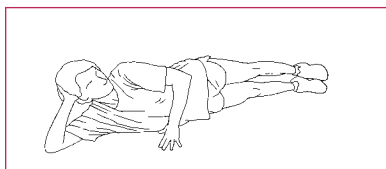
4 Hip Adduction—for Inner thigh

Lying on your side, rest the foot of the top leg on a bench about 30 cm high then pull the bottom leg up to the top one. Switch sides and repeat.



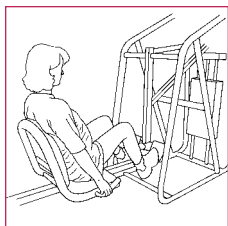
5 Hip Abduction—for Hips

Lying on your side, raise your top leg 10–15 cm. Switch sides and repeat.



Lower-Body Circuit #2

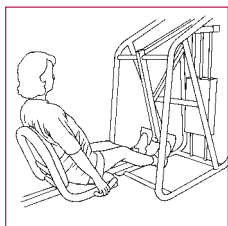
Using Stack Weights—the number of repetitions of each of these exercises will be shown on the training charts that are provided for each trimester of your pregnancy and after your delivery.



1

Leg Press—for Thighs/Calfs

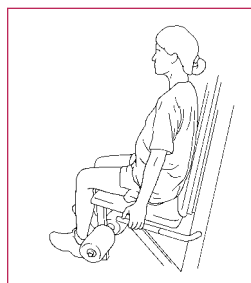
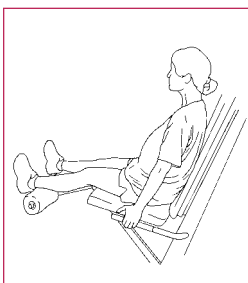
Set seat for a 90° bend at the knees and with the insteps on the pedals, push the pedals away extending the legs fully. Under control return to the starting position.



2

Hamstring Curls—for Hamstrings

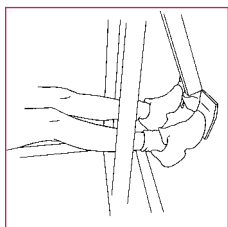
From a sitting position with your legs fully extended and both heels resting on the padded bar, bend your knees as far back as they will go. Under control return to the starting position.



3

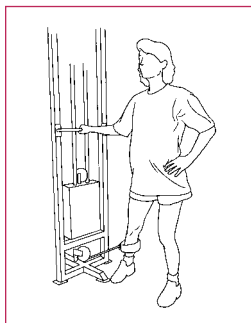
Calf Extensions—for Calfs

Insteps on the pedals and legs straight, push pedals away from you with your toes. Under control return to the starting position.



4 **Hip Adduction—for Inner thigh**

With the padded loop just below the knee, draw the leg closest to the pulley across in front of the other. Under control return to the starting position.

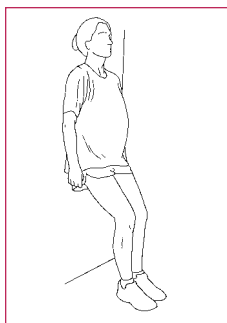


5 **Hip Abduction—for Hips**

With the loop on the leg farthest away from the pulley, draw that leg up and away. Under control return to the starting position.

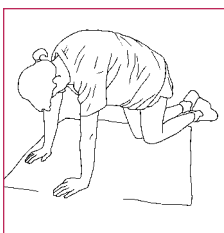
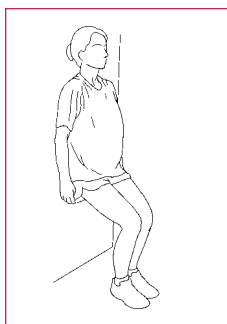


Abdominal/Lower back (Core) Circuit



1 Pelvic Tilt

Stand facing away from the wall, with your feet shoulder-width apart and 12–30 cm from the wall. Bend the knees and tilt the pelvis backward so the lower back is pressed against the wall. Slowly extend the knees keeping the lower back against the wall and your abdominal muscles tight. Hold 20 seconds, relax, and repeat 5 times. (You can make this exercise more difficult by doing it with your feet closer to the wall.)

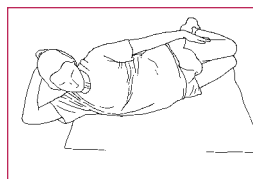
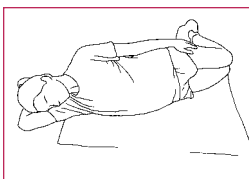


2 Cat Arch

On your hands and knees, do a pelvic tilt making sure your back doesn't sag. Contract your abdominal muscles and arch your back. Hold for 20 seconds and then relax. Repeat 4–6 times.

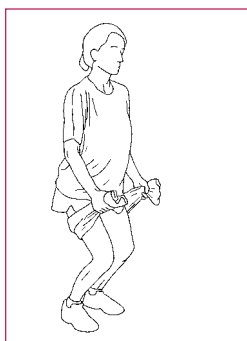
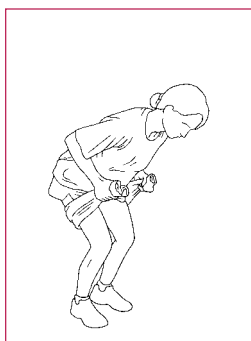
3 Oblique Curls

Lie on your side with your knees bent, and your shoulders, hips and knees in line. Lift your upper body off the floor by reaching toward your feet with your top arm. Do 10–15 repetitions on each side.



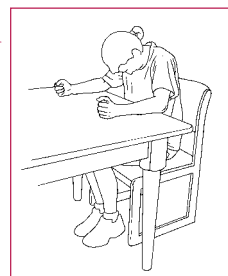
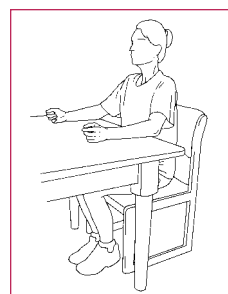
4 Low-Back Lift

Put a skipping rope or long towel under both thighs and hang onto both ends. With your knees bent 45° and hips at 90° , straighten at the waist using your lower back. Hold for 20 seconds and then relax. Repeat 10–15 times.



5 Chair Curl-Ups

Sit in a chair facing a table. Place your forearms on the table. Tighten your abdominals and push your head down toward the table while providing resistance with your forearms. Do 10–15 repetitions.



Kegel Exercises

Contract the muscles around the vagina and around the anal and urinary sphincters. Build up to 10-second 'hold'/contractions. Do 20 to 30 repetitions per day. Do some during your regular training sessions. You can do them at all sorts of other times as well—when you're driving the car, sitting at a desk, taking the elevator or at work standing in your kitchen!

First Trimester



First Trimester

The Effect of Body Changes on Exercise

In the first trimester there are not many noticeable physical changes. However, there are changes occurring in your body that may affect your ability and desire to exercise. Some of these include:

- ♦ increased urination
- ♦ nausea
- ♦ tender breasts
- ♦ minor weight gain (0.5 kg to 2 kg)
- ♦ increase in blood volume
- ♦ increased fatigue (although some women actually feel *more* energetic!).

Because of the increased demand on your cardiovascular system to provide oxygen to your baby, you may also notice:

- ♦ an increase in resting heart rate of 7–15 beats/min
- ♦ some breathlessness with exertion like climbing stairs.

The Effect of Exercise on Your Pregnancy

There are many benefits associated with physical activity now and throughout your entire pregnancy. Regular exercise:

- ♦ helps with circulatory improvements for providing oxygen to your baby
- ♦ helps to decrease discomforts such as nausea and muscle cramps
- ♦ helps to keep your weight gain at a healthy rate and helps avoid gestational diabetes
- ♦ provides stress release
- ♦ helps prepare you for the physical demands of labour
- ♦ decreases the risk of spontaneous abortion.

Even if you are feeling tired and nauseated at this time, it is a great idea to try and fit activity into your schedule.

Safety & Comfort

Review the *Exercising Safely* tips on page 8 and use them as your guide during this trimester.

For comfort during activities such as walking and running, be sure to wear:

- ♦ a supportive bra
- ♦ loose and cool clothing that allows for heat loss
- ♦ running shoes with a thick sole and good support under the forefoot and around the heel. (The staff at a running shoe store can give you advice on shoe selection.)



Nutrition & Hydration Reminders

- ♦ Carry a water bottle, and take small, frequent drinks throughout the day.
- ♦ Many pregnant women feel sick from time to time, especially during the first few months of pregnancy. Seek medical attention if you are vomiting frequently and can't manage to eat anything.
- ♦ And remember to abstain from alcohol.

Research shows that babies of mothers who exercised during pregnancy are at lower risk of developing diabetes and have also shown to score higher on mental tests at age five.

Exercise Guidelines

The first and second trimesters are very similar with continuous aerobic sessions on three days and strength (circuit) training on two others. Day 3 is for active rest—easy walking, gardening, biking with the family and other similar activities. Day 7 is a total rest day.

During aerobic activity

- ♦ For your own safety and the safety of your baby, it is very important to monitor and control the duration and intensity of your aerobic sessions. Go at a “just



Myth:

Taking baths will cause germs to get in the vagina and infect your baby.

The Truth:

Baths are great for pregnant women for easing aches and pains—and for relaxation. The temperature is what can be the problem. Avoid hot tubs or baths with temperatures above 38° C (100° F).

talk” pace for comfort and safety. “Just talk”—or JT—means you are able to talk comfortably (without laboured breathing) while exercising.

- ◆ If you have been exercising for *longer* than 45 minutes per session, reduce your time to 45 minutes.
- ◆ If you have been exercising for less than 45 minutes, stay at the same duration you have been doing.
- ◆ *If you were inactive before becoming pregnant*, gradually increase your aerobic activity to 20–30 minutes per session.
- ◆ Drink plenty of fluids, before, during and after exercise!
- ◆ If anything starts to hurt or you feel faint or dizzy, **STOP**. You should see your doctor before exercising again.

During strength training

- ◆ Use proper breathing. Exhale on the effort of each repetition and don't hold your breath.
- ◆ Do not go to failure on any of your weight sets.
- ◆ Take sufficient rest periods between exercises and sets.
- ◆ Sip on fluids throughout each training session!

Training Prescription

For the First Trimester—Weeks 1–13 of Pregnancy

Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Up to 45 min at 'JT' pace Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Load: 15RM Reps: 12 Sets: 2 Kegel Exercises	ACTIVE REST	Continuous Aerobic Up to 45 min at 'JT' pace Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Load: 15RM Reps: 12 Sets: 2 Kegel Exercises	Sport or other continuous activity Up to 45 min at 'JT' pace Strength Core Circuit Kegel Exercises	REST

BW body weight • **JT** just talk pace • **RM** Repetition Maximum



BW—body weight

JT—just talk pace

RM—stands for **R**epetition **M**aximum. It is the load that you can lift a specific number of times when you are rested. For example, a 15RM load is the load you could lift 15 times but would have trouble doing 16 repetitions in your 1st set.

The exercise prescription will give the load as an RM and then a number of repetitions of that load to perform in each set. For example:

♦ **Set 1**

Load: 15RM

Reps: 14

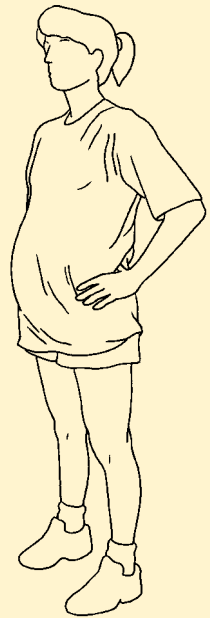
♦ **Set 2**

Load: 15RM

Reps: 12

This means that for each exercise in set 1 select a load that you could do 15 times to failure but only do 14 reps [stop 1 rep before failure]. In the 2nd set, use the same load but only do 12 repetitions.

Second Trimester



Second Trimester

The Effect of Body Changes on Exercise

The second trimester will bring a variety of physical changes, including:

- ♦ increase in uterus size
- ♦ resting heart rate increase of another 3–4 beats/min
- ♦ increase in body weight of 3–5 kg
- ♦ heartburn/constipation
- ♦ leg cramps
- ♦ decreased fatigue and nausea
- ♦ increased feeling of energy.

The Effect of Exercise on Your Pregnancy

When you reach this stage of your pregnancy, you will likely begin to feel better if you experienced fatigue and nausea in the first trimester. Exercising throughout this trimester can:

- ♦ decrease perceived discomfort
- ♦ keep weight gain at recommended levels
- ♦ decrease the risk of gestational diabetes
- ♦ decrease constipation
- ♦ reduce the risk of muscle cramps
- ♦ help you prepare for labour and delivery
- ♦ improve your psychological outlook and self-esteem
- ♦ help you feel better about the amazing changes your body is going through.

An old wives' tale has that lifting your arms above your head could cause the umbilical cord to wrap around your baby's neck. This is pure fiction. Nothing you might do can cause (or prevent) this from occurring.

Safety & Comfort

Review the *Exercising Safely* tips on page 8 and the *First Trimester 'Safety & Comfort'* information on page 33 and use this as a guide for activity during this trimester as well.

Even though you may be feeling better and more energetic, you should maintain your exercise duration and intensities. *Do not* increase them.

- ♦ After the fourth month of pregnancy you should avoid exercising while lying on your back, since this may cause light-headedness and can interrupt blood flow to your baby.
- ♦ Your doctor will watch for diastasis recti (separation of the connective tissue in the abdominal muscles) during your regular check-ups. If this occurs, you will be advised if you should modify or discontinue abdominal exercises.

Remember that pregnancy affects each woman differently. If you are having trouble performing the prescribed program for this trimester, see your doctor. It may be wise for you to move on early to the third-trimester program.



Nutrition & Hydration Reminders

- ♦ Fuel at regular intervals with meals and snacks to maintain a constant energy source for your developing baby and mom's working muscles during exercise.
- ♦ Heartburn is a common discomfort during pregnancy. Eating smaller meals often helps. Not eating before lying down at bedtime may also help.

Exercise Guidelines

Review the first trimester guidelines for aerobic activity and strength training on pages 33–34.

Abdominal exercise must now be done on the hands and knees or on your side. See the recommended exercises.

Your uterus and breasts are growing! Be sure to wear supportive clothing that allows for heat dissipation during exercise.

Remember to hydrate with more fluids when you exercise:

1–2 hrs before:
500 ml

During:
175–375 ml every 15–20 minutes

After:
625–750 ml for each .5kg of sweat lost in exercise

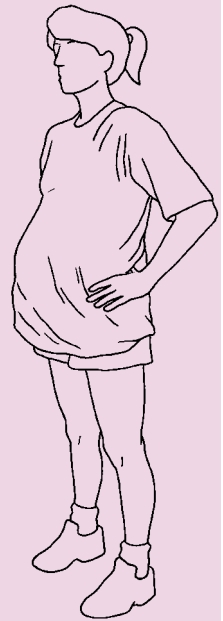
Training Prescription

For the Second Trimester—Weeks 14–26 of Pregnancy

Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Up to 45 min at ‘JT’ pace Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 11 Sets: 2 or Circuit #2: Load: 15RM Reps: 11 Sets: 2 Kegel Exercises	ACTIVE REST	Continuous Aerobic Up to 45 min at ‘JT’ pace Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Load: 15RM Reps: 12 Sets: 2 Kegel Exercises	Sport or other continuous activity Up to 45 min at ‘JT’ pace Strength Core Circuit Kegel Exercises	REST

BW body weight • **JT** just talk pace • **RM** Repetition Maximum

Third Trimester



Third Trimester

The Effect of Body Changes on Exercise

Physical changes in the third trimester include:

- ◆ increased uterus size
- ◆ continued weight gain of 3–6 kg
- ◆ return of fatigue
- ◆ increased need to urinate
- ◆ increased looseness in your joints
- ◆ heartburn and indigestion
- ◆ muscle cramps
- ◆ swelling in the hands, feet and ankles
- ◆ disrupted sleep.

The Effects of Exercise on Your Pregnancy

Exercise in the third trimester helps you prepare for the birth of your baby. Maintaining a regular exercise routine at this stage can help offset many of the discomforts of late pregnancy.

The exercise you have done throughout your pregnancy offers benefits *during* labour and delivery. It can lead to:

- ◆ increased pain tolerance
- ◆ shorter labour with less intervention
- ◆ decreased incidence of vaginal tearing
- ◆ decreased chance of needing a c-section
- ◆ decreased chance of needing a forceps delivery

Safety & Comfort

Review the ‘Exercising Safely’ tips on page 8 and the First Trimester ‘Safety & Comfort’ information on page 33 and use this as a guide for activity during this trimester as well.

- ◆ Your centre of gravity changes with advancing pregnancy. This may cause you to lose your balance more easily. Be careful even when walking and exercising!
- ◆ Your joints are also becoming looser at this stage in preparation for delivery. This can also affect your stability. Be sure to decrease your exercise intensity at this time.

It is important to listen to your body, particularly near the end of pregnancy. Even if you are feeling really energetic it is important not to overdue it. Follow your program and allow your body to store energy for labour and delivery.

Nutrition & Hydration Reminders

- ◆ You need to maintain your energy. Follow the ‘Healthy Eating’ tips and advice on pages 4–7 and *Canada’s Food Guide* for best results!
- ◆ It is important to gain a healthy amount of weight during pregnancy. Pregnancy is not a time for dieting. Eat well and stay active—but while you are eating for two, you don’t need to eat like two!

Exercise Guidelines

- ◆ Move to activities with less risk of falling. Activities such as stationary cycling, stairmaster, brisk walking, swimming, elliptical/cross trainer machine or aquafitness exercises may be more comfortable and safer than running or cycling as pregnancy progresses.
- ◆ Reduce your exercise duration to a maximum of 30 minutes if you have been exercising for longer.
- ◆ Move from circuit training using stack weights/machines to body-resistant exercises only.
- ◆ Stretching should be gentle! Do not stretch to the point of pain.
- ◆ Be sure to stop if you experience pain or fatigue. Your goal is to go into labour and delivery feeling well rested and physically ready!



Training Prescription
For the Third Trimester—Weeks 27–40 of Pregnancy

Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic 30 min 'JT'	Strength One UB Circuit One LB Circuit	ACTIVE REST	Continuous Aerobic 30 min 'JT'	Strength One UB Circuit One LB Circuit	Continuous Aerobic 30 min 'JT'	REST
Strength Core Circuit	Circuit #1: Load: BW Reps: 9 Sets: 1		Strength Core Circuit	Circuit #1: Load: BW Reps: 9 Sets: 1	Strength Core Circuit	
Kegel Exercises			Kegel Exercises		Kegel Exercises	

BW body weight • JT just talk pace • RM Repetition Maximum

Post-Partum



Post-Partum

Congratulations on the birth of your baby! The speed at which you return to a normal training routine will depend on the length and difficulty of your delivery. If you had any complications or medications, more rest and recovery time will be needed. It is also important to note that many of the physical and physiological changes that occur with pregnancy will persist for several months after delivery. Your doctor will advise you on this.

The Effect of Body Changes on Exercise

Your body is undergoing many changes at this time, including:

- ◆ a decrease in uterus size
- ◆ loss of weight
- ◆ hormonal changes
- ◆ changes in your breasts
- ◆ tightening of muscles stretched in pregnancy
- ◆ tightening of your joints
- ◆ decrease in blood volume and a corresponding drop in heart rate.

Remember that you cannot return to your normal unit/personal physical training program *immediately* following the birth of your baby. As your body recovers from pregnancy and labour, you need to gradually re-condition yourself in preparation for the physical demands you will encounter on returning to work. In addition to the training routine in this guide, your unit may have other programs to assist with this gradual return.

The Effect of Exercise on Your Recovery from Labour and Delivery

Continuing with your physical activity routine is very important at this stage. It will help:

- ◆ improve your muscle strength and stamina
- ◆ tone muscles stretched during pregnancy and delivery

- ◆ relieve stress and muscle tension
- ◆ reduce the risks of depression
- ◆ improve self-confidence and self-image
- ◆ improve your energy level.

Safety & Comfort

Listen to your body especially in the early weeks after delivery. Sleep deprivation as well as recovery from labour can affect your balance, agility and your energy level. It is still best to stick with low-impact, low-risk activities until you feel completely recovered.

- ◆ Prior to returning to your exercise routine you should see your physician to ensure that it is safe to resume exercising
- ◆ Start slowly with walking and the body-weight strength training circuits.
- ◆ If you had diastasis recti during pregnancy, you will need to modify your abdominal program until the muscle separation is less than one finger width. Your doctor can advise you on this.
- ◆ Should you develop an injury and are breastfeeding your baby see your physician prior to taking any medication or homeopathic compound. Many substances are potentially harmful to your baby and can be transmitted through your breast milk.



Some people believe that you should not exercise while breastfeeding as the lactic acid can sour your breast milk. Lactic acid may affect the taste of the breast milk, like many of the foods you eat, but will not make your milk sour, make your baby reject the breast or cause gassiness in your baby.

Nutrition & Hydration Reminders

- ◆ Moms should continue to follow the Healthy Eating guidelines on pages 4–7 to recover from pregnancy as well as to support breastfeeding. Most women are able to breastfeed with success throughout the baby's first year.
- ◆ Don't be too concerned with weight loss during the first few months post partum. As you eat well and start back into Active Living, your weight will gradually adjust.
- ◆ Alcohol is passed to your baby in breast milk. You should still avoid alcoholic beverages while breastfeeding your baby.



Remaining Smoke Free

For both your health and the health of your baby, it is still recommended that you not smoke. In order to decrease the risk of ear infections, colds, SIDS (Sudden Infant Death Syndrome) and respiratory problems in your baby, smoking should not be allowed near your baby or in the baby's home.

Exercise Guidelines

Recovery from pregnancy is highly individual and some women will require more time before they can return to their normal exercise program. This is normal and you should return to an active lifestyle as you feel comfortable. Ensure that you begin this program at least 18 weeks prior to returning to work.

- ◆ For *warm-up, cool-down and stretching*, follow the guidelines and exercises outlined on pages 14–16 of this manual.
- ◆ For your *continuous aerobic sessions* beginning Week 7, follow the Level 3 routine in the *CF EXPRES Programme Guide*. (Do the program outlined there for Weeks 1 to 11.)
- ◆ For *aerobic intervals* beginning Week 13, follow the routine and interval paces shown in the *Training Prescription* chart in this manual. The approximate distance you should cover in the work interval is noted in the chart.
- ◆ For *strength training*, do Kegel and Core strengthening exercises as well as the upper-body and lower-body circuits as noted in the charts that follow.

Depending on individual circumstances, as early as week 18, you should be able to return to the *Army Fitness Manual* or *CF EXPRES Programme* as your sole training guides. The choice will depend on the program you were involved in prior to your pregnancy.

Army personnel should do the Fitness Check as outlined in the *Army Fitness Manual* at this time. All other members can resume the regular *CF EXPRES Programme* routine.

Training Prescription For Weeks 0–17 Post-Partum

WEEKS 0 – 6						
Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic 15–30 minutes walking Strength Core Circuit Kegel Exercises	Strength Circuit #1: Load: BW Reps: 11 Sets: 1 Kegel Exercises	ACTIVE REST	Continuous Aerobic 15–30 minutes walking Strength Core Circuit Kegel Exercises	Strength Circuit #1: Load: BW Reps: 11 Sets: 1 Kegel Exercises	Continuous Aerobic 15–30 minutes walking Strength Core Circuit Kegel Exercises	REST

BW body weight • **JT** just talk pace • **RM** Repetition Maximum

WEEKS 7-12						
Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Load: 20RM Set 1: Reps: 18 Set 2: Reps: 18	ACTIVE REST	Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Load: 20RM Set 1: Reps: 18 Set 2: Reps: 18	Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	REST

W E E K 1 3						
Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Set 1: Load: 15RM Reps: 12 Set 2: Load: 15RM Reps: 13	ACTIVE REST	Aerobic Intervals 1 min work/ 1 min easy x 10 Expres: 160m/min AFM: 175m/min Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 12 Sets: 2 or Circuit #2: Set 1: Load: 15RM Reps: 12 Set 2: Load: 15RM Reps: 13	Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	REST

WEEK 15						
Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 13 Sets: 2 or Circuit #2: Set 1: Load: 12RM Reps: 10 Set 2: Load: 12RM Reps: 9	ACTIVE REST	Aerobic Intervals 1 min work/ 1 min easy x 10 Expres: 175m/min AFM: 200m/min Strength Core Circuit Kegel Exercises	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 13 Sets: 2 or Circuit #2: Set 1: Load: 12RM Reps: 10 Set 2: Load: 12RM Reps: 9	Continuous Aerobic Expres Level 3 Strength Core Circuit Kegel Exercises	REST

W E E K 1 6						
Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Expres Level 3	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 13 Sets: 2 or Circuit #2: Set 1: Load: 12RM Reps: 10 Set 2: Load: 12RM Reps: 9	ACTIVE REST	Aerobic Intervals 1 min work/ 1 min easy x 12 Expres: 175m/min AFM: 200m/min	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 13 Sets: 2 or Circuit #2: Set 1: Load: 12RM Reps: 10 Set 2: Load: 12RM Reps: 9	Continuous Aerobic Expres Level 3 Strength Core Circuit	REST

W E E K 1 7						
Day 1 MONDAY	Day 2 TUESDAY	Day 3 WEDNESDAY	Day 4 THURSDAY	Day 5 FRIDAY	Day 6 SATURDAY	Day 7 SUNDAY
Continuous Aerobic Express Level 3 Strength Core Circuit	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 13 Sets: 2 or Circuit #2: Load: 10RM Reps: 8 Sets: 2	ACTIVE REST	Aerobic Intervals 2 min work/ 2 min easy x 6 Express: 350m/ interval AFM: 400m/ interval Strength Core Circuit	Strength One UB Circuit One LB Circuit Circuit #1: Load: BW Reps: 13 Sets: 2 or Circuit #2: Load: 10RM Reps: 8 Sets: 2	Continuous Aerobic Express Level 3 Strength Core Circuit	REST



Getting Back into Your Regular Program

Depending on individual circumstances, and discussion with your physician, you might be able to return to your regular training program as early as 18 weeks. See your PSP fitness staff for help transitioning back into your regular training. Remember that you will probably have to start back in at a lower level than where you were prior to your pregnancy.

In the coming weeks and months you will still have many challenges—balancing your responsibilities at work and your activities as a new mom. Look after yourself. Pace your efforts and don't let yourself get overly tired. Tend to your baby's needs and enjoy your time together.

Additional Resources

Additional Resources

The following are some additional resource materials on the topic of exercising and nutrition during and after pregnancy:

- ♦ **Mothers in Motion**—is a Website produced by the Canadian Association for the Advancement of Women in Sport.
www.caaws.ca/mothersinmotion
- ♦ **Canadian Academy of Sports Medicine**—has a position paper on Exercise and pregnancy
www.casm-acms.org
- ♦ **American College of Sport Medicine**—has a comment on Exercise and Pregnancy.
<http://www.acsm.org/health%2Bfitness/pdf/currentcomments/Pregnant.pdf>
- ♦ **Your Pregnancy: Expect the Benefits of Exercise**—“Health Track” is a series of articles from *The Physician and Sportsmedicine*.
http://www.physsportsmed.com/issues/1996/07_96/pregnant.htm
- ♦ **Active Living During Pregnancy**—a booklet produced by the Canadian Society for Exercise Physiology (ISBN 1-896900-06-2)
www.csep.ca 1-877-651-3755
- ♦ **Gregory A.L. Davies, Larry A. Wolfe, Michelle F. Mottola, and Catherine MacKinnon**—Joint SOGC/CSEP Clinical Practice Guideline: Exercise in pregnancy and the postpartum period.
Can. J. Appl. Physiol. 28(3): 329-341. 2003
- ♦ **Health Canada**—*Nutrition For a Healthy Pregnancy: National Guidelines For the Childbearing Years*. Ottawa: Minister of Public Works and Government Services Canada; 1999
www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/national_guidelines_cp_e.html
- ♦ **Best Start and Nutrition Resource Centre**—*Healthy Eating For a Healthy Baby*. Toronto: Best Start; 2002
www.beststart.org

Personal Training Record



Personal Training Record

To ensure maximum protection of the rights of CF members and their dependents under the Pension Act, members should maintain a daily record of their authorized Physical Fitness Program activities. The *Personal Training Record* forms on the next two pages make it easy for you to do this.

Follow these instructions to get the most out of this recording system:

- ◆ Do not write on the *Personal Training Record* forms in this *Guide*. Make photocopies of the front and back of the next sheet and use these pages to record your progress.
- ◆ Put the sheets together in a booklet with a good cover to protect them.
- ◆ Write your name, address and telephone number on the cover or across the top of the first page so if your record goes missing it can be easily returned.
- ◆ Follow the *Notes* provided to keep your records accurate and up to date.

Unit

A PROGRAM

Week	Day	Date
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B	AEROBIC	L	T	D	R

[illegible]

Unit

A PROGRAM

Week	Day	Date
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B	AEROBIC	L	T	D	R

[illegible]

Your Comments

[illegible]

Notes

[illegible]

[illegible]