

EXERCISE PRESCRIPTION FOR A HEALTHY LIFESTYLE



Benefits of Regular Exercise

- Improve musculoskeletal health
- Increase strength
 - Activities of daily living, quality of life
 - Increase endurance
- Improve functional capabilities
 - Posture, balance, flexibility, fall prevention
- Improve mental health
 - Improved sense of well being, mental well being, self confidence, independence
 - Stress reduction, increase stamina
- Improve heart and lung health
- Lowers blood pressure (BP)
- Improve lipid profile (increase HDL, decrease triglycerides)
- Improve blood sugar levels
- Weight management

Warm-up

Importance of a Warm-up:

- Gradual increase of blood flow (BF) and heart rate (HR)
- Gradual increase of deep muscle temperature
- Prevent early lactic acid build up
- Lubricate joints
- Improves neural transmission
- Psychological preparation

Details:

- Warm-up should be performed at the start of every workout.
- Low intensity (HR= Less than 40% max HR; Rate of perceived exertion (RPE) = 2-3 “light to moderate”).
**Please see RPE Scale in the back of this booklet.*
- Duration of warm-up should be 5-10 minutes.
- Choose exercises that use large muscle groups that are rhythmic or dynamic in nature (e.g. walking, jogging, biking etc...).

Cardiovascular Training

Importance of Cardiovascular Endurance Training:

- Strengthens the heart muscle
- Weight and fat reduction
- Improves lung function
- Improves blood circulation and lipid profiles
- Improves the utilization and the extraction of oxygen (O₂)

Details:

- Cardiovascular training should be performed 4 to 7 days per week
- Moderate to high intensity (HR= 40%-80% max HR; RPE = 2-5 “light to heavy”).
**Please see RPE Scale in the back of this booklet.*
- Duration of workout should be 20-60minutes.
- Choose exercises that use large muscle groups that are rhythmic or dynamic in nature (e.g. running, cycling, swimming etc...).
- Most importantly--choose an activity you enjoy!
- Keep your feet moving immediately after your cardio workout to prevent venous pooling, dizziness, and fainting.

Resistance Training

Importance of Strength Training:

- Increase muscle strength and endurance
- Increase lean body tissue
- Increase bone and ligament strength
- Decrease body fat percentage
- Reduce stress and tension
- Prevent injuries
- Improve appearance, self image and confidence
- Naturally induce fatigue and relaxation (may help with sleep patterns)

Details:

- Perform exercises 2 to 3 days per week
- Rest at least 48 hours between training sessions
- Start with 1 set of 10-15 repetitions
- Progressively increase to 2-4 sets
- RPE = 2-4 “light to somewhat heavy”
- Exhale during exertion (i.e. pulling); Inhale when returning to starting position.
- Slow controlled movements (2 seconds pulling stage, 4 seconds returning stage)
- Tighten the stomach/core muscles for stabilization
- Avoid locking hinge joints (i.e. knee and elbow joints); keep hinge joints on a “soft lock”
- Listen to your body. Perform exercises to the range of motion that does not elicit pain or discomfort.



RESISTANCE EXERCISES

Chest Press

Muscles targeted: Chest, Triceps, Front Shoulders

Position: Wrap band around back and under arms. Hold the handles with elbows at chest level.

Movement: Squeeze chest and push band out toward the front. Return to start position and repeat.

Alternate Option for Chest Press: wrap band around a stable object behind you instead of around your back



Horizontal Seated Row
Muscles targeted: Upper, Middle back

Position: Sit on chair with back straight and legs extended in front. Place band under both feet. Keep elbows close to midline of body.

Movement: Pull band toward sides of body while pinching shoulder blades back.
Return to start position and repeat.



Alternative option for Horizontal Row

Muscles targeted: Upper, Middle back

Reverse Fly Position:

Hold band shoulder width apart. Both arms parallel to the floor.

Movement: Pull band apart straight across chest. Return to start position and repeat.



Lat Pull down

Muscles targeted: *Back (specifically Latissimus Dorsi)*

Position: Hold band above head. Hands slightly wider than shoulders width apart. Wrists firm and elbows slightly bent above head. Palms facing the front.

Movement: Pull band outward while lowering the arms to shoulder level. Expand the chest by pulling the shoulder blades backward and together. Return to start position and repeat.



Upright Row

Muscle targeted: *Outer Shoulders*

Position: Feet shoulder width apart. Place band under both feet.

Movement: Pull band upward by bending elbows and lifting arms upward. Lift arm until upper arms are parallel to floor. Return to start position and repeat.



Forward Raise

Muscle targeted: *Front Shoulders*

Position: Place one foot in front of the other. Place band under the front foot.

Movement: Pull bands upward to shoulder height with arms extended. Return to start position and repeat



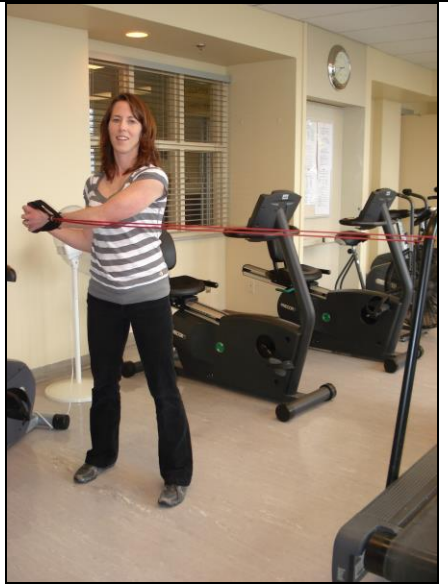
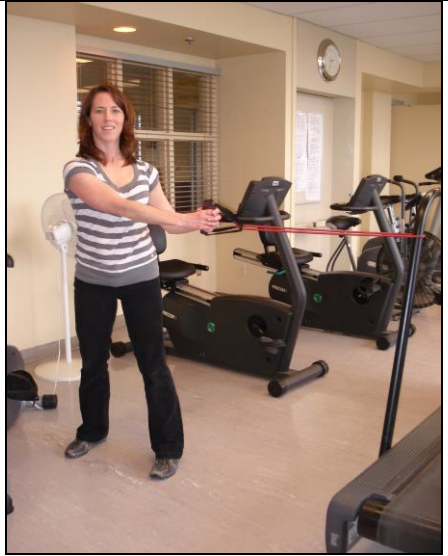
Trunk Rotation

Muscles targeted: Trunk

Position: Loop band around stationary object. With arms extended in a soft lock hold band starting at midline of body.

Movement: Pull band outward and away from object. Return to the start position and repeat. Perform 10-15 reps. Repeat on the opposite side.

* Keep hips stable and abdominals contracted.

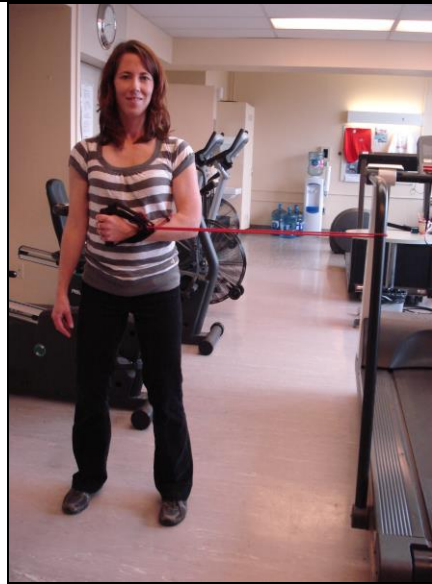
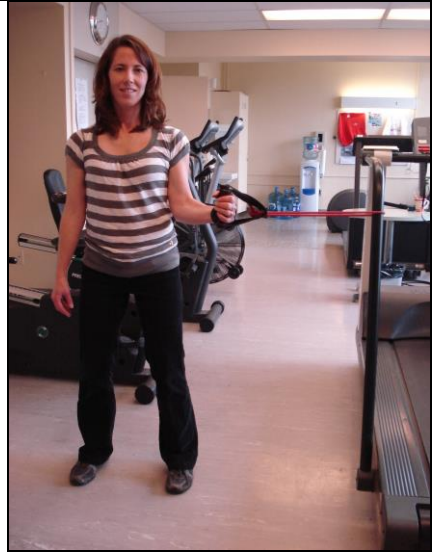


Internal Rotation

Muscles targeted: *Rotator Cuff (Shoulder Joint Stabilizers)*

Position: Secure band on stationary object. Hold band with elbows close to midline of the body. Arm at 90° angle.

Movement: Pull band toward body while keeping elbows to midline of body. Return to start position and repeat. Perform 10-15 reps. Repeat on opposite side.

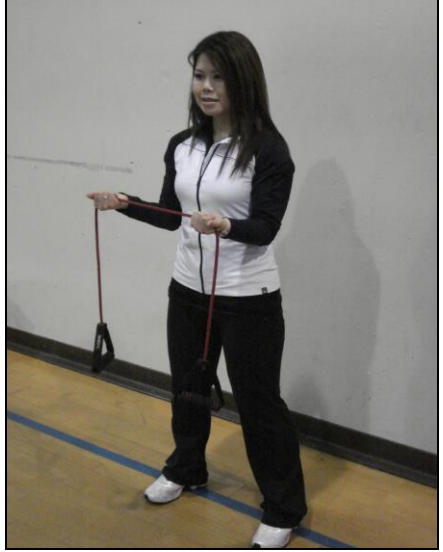


External Rotation

Muscles targeted: *Rotator Cuff (Shoulder Joint Stabilizers)*

Position: Hold band with palms facing upwards.

Movement: Pull band outward while keeping elbows close to midline of body. Return to start position and repeat.

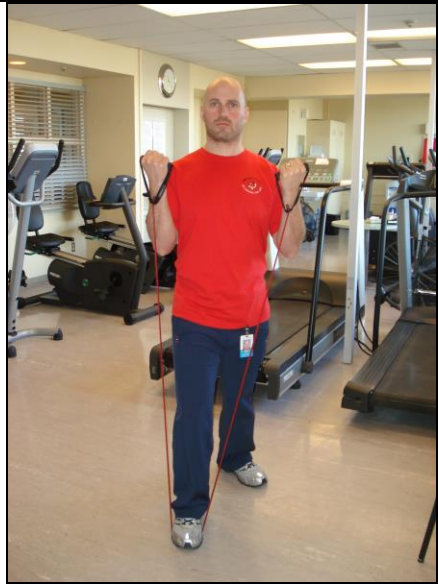


Hammer/Biceps Curl

Muscles targeted: Biceps

Position: Feet shoulder width apart. Place band under both feet.

Movement: Curl forearms toward shoulder keeping elbows close to the midline of body.
Return to start position and repeat.



Triceps Extension

Muscles targeted: Triceps

Position: Place band over shoulder. Hold band with one hand at the same level as chest. With opposite hand, hold band from below forming a 90° angle.

Movement: Extend the left arm pulling band downward.

Return to start position and repeat. Perform 10-15 reps. Repeat on opposite side.



Squat

Muscles targeted: *Thighs, Buttocks*

Position: Feet shoulder width apart. Toes pointed straight forward. Keep head up and back straight in neutral spine.

Movement: Bend knees until your thighs are slightly above parallel to the floor. Return to start position and repeat.

*Ensure body weight is on heels and knees are directly above ankles.



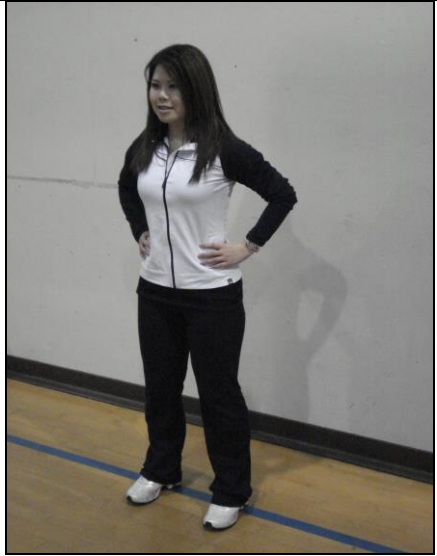
Lunge

Muscles targeted: *Thighs, Buttocks*

Position: Stand tall in neutral spine position with arms to the sides. Toes pointed straight outward.

Movement: Lunge forward. Lower the body until top leg at 90° angle. Return to the start position and repeat.

*Ensure front knee is above ankle.



Calf Raise

Muscle targeted: *Calf*

Position: Stand tall in neutral spine position. Legs are extended with knees in a soft lock.

Movement: Lift heels off floor keeping whole body aligned. Return to the start position and repeat.

Option: Use object to increase range of motion. (Refer to picture)



Hip Abduction

Muscles targeted: *Outer thigh, Buttocks*

Position: Stand tall with your hand against wall. Keep pelvic bone parallel to the floor.

Movement: Push heel toward the floor. Extend leg outward away from midline body with the outer sole of foot leading. Return to the start position and repeat. Perform 10-15 reps. Repeat on the opposite side.



Hip Adduction

Muscle targeted: *Inner thigh*

Position: Stand tall with hands on sides of body. Keep pelvic bone parallel to floor. Toes pointed toward the back.

Movement: Extend leg inward toward midline of body with the inner sole of foot leading. Return to the start position and repeat. Perform 10-15 reps. Repeat on the opposite side.



Cool-down and Stretching

Importance of a Cool-down:

- Prevents venous pooling & rapid drop in BP
- Removal of Lactic Acid
- Reduce delayed onset of muscle soreness (DOMS)
- Decrease HR, O₂ uptake, and body temperature to resting levels
- Reduce exercise hormones which can cause disturbances in cardiac rhythm

Details:

- Cool-down should be performed at the end of every workout.
- 5 to 10 minutes of slow jogging/walking, and then followed by stretching exercises.
- Low intensity (HR= Less than 40% max HR; RPE = 2 “light”)
**Please see RPE Scale in the back of the booklet.*
- Choose exercises that use large muscle groups that are rhythmic or dynamic in nature (e.g. walking, jogging, biking etc...)

Importance of Flexibility:

- Improve circulation
- Improve performance, posture and balance
- Improve or maintain the range of motion of joints
- Improve mental and spiritual health
- Reduce risk of injury
- Reduce muscular tension and improve muscular relaxation
- Reduce stress

Details:

- Static stretches (stretches without movement) should be held to a comfortable tension for 15 to 60 seconds.
- Static Stretching should be performed ideally 5 to 7 days/week.
- Listen to your body. Stretching should not induce pain or discomfort.



FLEXIBILITY EXERCISES

Across-the-Shoulder Stretch

Areas stretched:
Shoulders, upper back

Keep back straight in neutral spine. Cross right arm across left shoulder. Using left hand, gently pull arm as close to body as possible.

Hold stretch and repeat with opposite arm.



Chest Stretch

Area stretched: Chest

Place both arms up and depress the shoulders down and back. Pinch shoulder blades together. Push chest outwards.

Hold stretch.

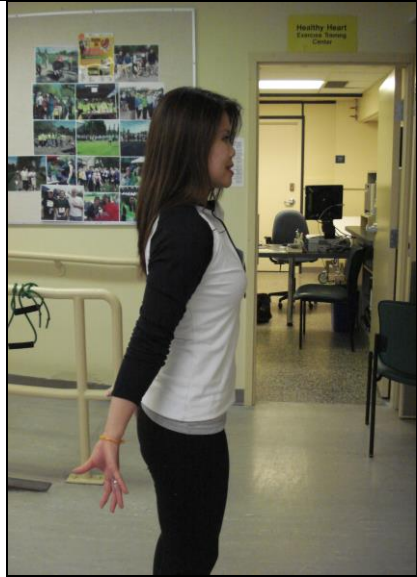


Arm Stretch

Areas stretched: Entire Length of Arm, Shoulders

Place both arms down with thumbs pointed towards ground. Depress shoulders down and back.

Hold stretch.

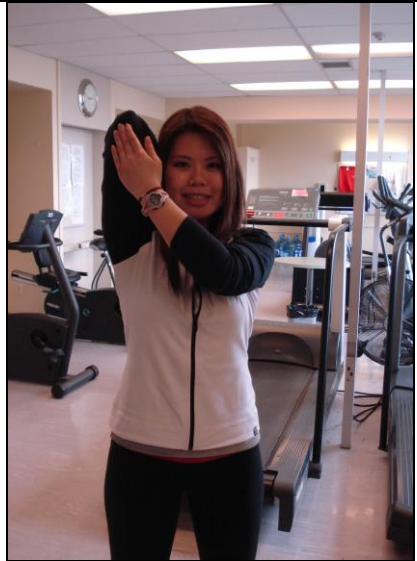


Triceps Stretch “Back Scratcher”

Areas stretched: Triceps

Raise one arm up with elbows pointed towards ceiling. Place opposite hand on elbow, push arm back until tension.

Hold stretch.



Lateral Stretch

Area stretched: Trunk

Stand with feet shoulders width apart. Raise one hand over head. Bend sideways from hip. Place opposite arm on hip for stability.

Hold stretch and repeat on opposite side.



Side Lunge

Areas stretched: Inner Thigh, Hip, Calf

Stand with feet in wide stance, toes pointed slightly outward. Place hands on your thighs. Lean to one side by bending one leg and keeping the other leg extended.

Hold stretch and repeat on opposite side.

* Ensure bent knee do not past ankle.



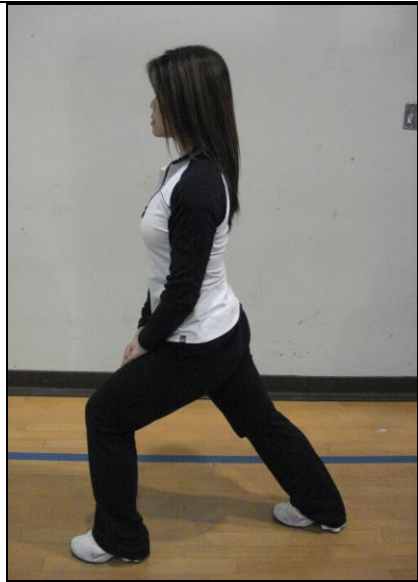
Calf Stretch

Areas stretched: Calf, Achilles Tendon

Stand with one foot in front of the other. Feet slightly staggered and toes pointed straight forward. Keep back leg straight and lean forward by bending your front leg.

Hold the stretch and repeat on opposite side.

* Ensure front knee does not past ankle.

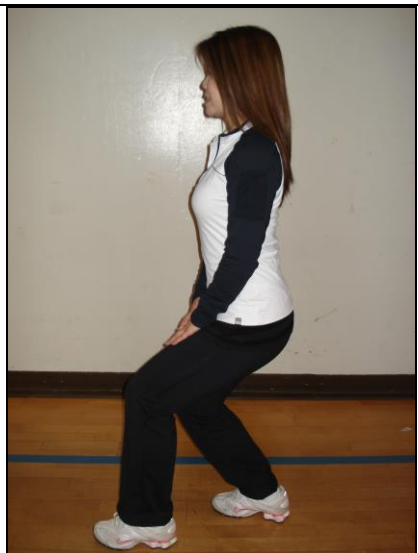


Lower Calf Stretch

Areas stretched: Lower Calf, Achilles Tendon

Stand with one foot in front of the other. (Feet half a step closer than in calf stretch). Feet slightly staggered and toes pointed straight forward. Bend back leg. Shift body weight to back heel.

Hold stretch and repeat on opposite side.



Quadriceps Stretch

Area stretched: Thigh

Stand with one foot in front of the other with feet slightly staggered and toes pointed straight forward. Bend back leg. Tilt pelvic bone forward.

Hold stretch and repeat on opposite side.



Hamstring Stretch

Areas stretched: Back of Thigh

Sit tall with neutral spine. Legs extended. Heels planted to ground. Toes pointed up. Lean slightly forward until comfortable tension is felt.

Hold stretch.



Outer Thigh

Areas Stretched: Outer Thigh

Sit tall with neutral spine. One leg on top of other forming 90°. Lean slightly forward until comfortable tension is felt.

Hold stretch and repeat on opposite side.

*Option: With same position, pull knee towards chest.



FLOOR EXERCISES

Curl Up

Muscles targeted: Center Abdominals (Specifically Rectus Abdominus)

Lie on back with knees bent and feet flat on the floor. Lift shoulders off floor. Lower shoulders back to floor and repeat.



Lateral/Side Curl Up

Muscle targeted: Side Abdominals (Specifically Obliques)

Lie on your back with your knees bent and feet flat on the floor. Lift your shoulders off the floor and reach for your heels. Go back to the starting position and repeat on the opposite side.



Alternating Arm/Leg Raises

Muscles targeted: Back, Buttocks, Back of Thighs, Shoulders

Lie face down with arms and legs extended. Maintain pelvic bone in contact with floor. Raise one arm and opposite leg as high as comfortable. Return to starting position. Alternate with opposite side.



Back Bridge

Muscles targeted: Buttocks, Back of Thighs, Trunk

Lie on back with knees bent. Feet flat on floor with arms to the side. Keep weight on shoulders. Lift hips until body is in a straight line. Hold stretch. Lower hips and repeat.



Double Knee-to-Chest
Areas stretched: Back of Thighs, Hip, Buttocks

Lie flat on back with your hands or arms wrapped around knees. Legs relaxed. Hold stretch.



Supine Trunk Rotation
Area stretched: Trunk

Lie flat on back with both knees bent towards one direction. Twist and face opposite direction. Extend your arms straight out. Hold stretch and repeat on opposite side.



Head Tilt

Area stretched: Side of Neck

Sit tall with neutral spine. Arms hang down from sides. Depress shoulders down. Look straight forward and tilt head to one side. Hold stretch and repeat on opposite side.



Head Drop

Area stretched: Back of neck

Sit tall with neutral spine. Depress shoulders down. Push head back and look down. Hold the stretch.



RATING OF PERCEIVED EXERTION BORG CR10 SCALE

0	Nothing at all	Completely relaxed with no effort.	
.5	Extremely light	Little or no effort.	
1	Very light	Able to talk, sing, whistle.	
2	Light	<i>“Target Range during aerobic exercise = (2 to 5)”</i>	
3	Moderate		Able to talk.
3.5			
4	Somewhat Heavy		
5	Heavy		Effort to talk.
6		Unable to talk.	
7	Very Heavy		
8			
9			
10	Extremely Heavy	Hardest work with maximum effort.	

S.M.A.R.T. Goal Setting

When setting a goal, consider the following:

S = Specific → “Is my goal specific?”

M = Measurable → “Can I measure it?”

A = Acceptable → “Will I feel good about it?”

R = Realistic → “Am I able to do this?”

T = Timely → “When is my deadline?”

GOAL:

NOTES:



REFERENCES

1. American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription. 8th ed. Baltimore, (MD): Lippincott Williams & Wilkins; 2010. pp. 8-10, 173, 212-15 and 226.

ACKNOWLEDGEMENTS

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The contents of this booklet was compiled and referenced by Monika Tsia.