IT'S TIME TO FIRM UP. LET US HELP YOU FEEL GOOD.

AND EATING RIGHT! IT'S ALL ABOUT GETTING PHYSICAL.
<table>
<thead>
<tr>
<th>PAGES</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAP OF FACILITY</td>
</tr>
<tr>
<td>2-4</td>
<td>PROGRAM OVERVIEW</td>
</tr>
<tr>
<td>5-26</td>
<td>EXERCISES AT HOME</td>
</tr>
<tr>
<td>27-35</td>
<td>EXERCISES AT AN EXERCISE</td>
</tr>
<tr>
<td></td>
<td>FACILITY</td>
</tr>
</tbody>
</table>
INDEX OF EXERCISES

CHEST EXERCISES
• CHEST PRESS
• CHEST FLY

BACK EXERCISES
• LAT-PULL DOWN
• ROW
• BACK EXTENSION

SHOULDER EXERCISES
• SHOULDER PRESS
• LATERAL RAISES
• FRONT RAISES
• UPRIGHT ROWS

BICEP EXERCISES
• BICEP CURL

TRICEP EXERCISES
• TRICEP EXTENSIONS
• TRICEP PUSH-DOWN

FOREARM EXERCISES
• WRIST CURLS
• REVERSE CURLS

ABDOMINAL EXERCISES
• ABDOMINAL CURLS
• OBLIQUE CURLS
PROGRAM OVERVIEW

The goal of this program is to give individuals confined to a wheelchair, for whatever reason, an opportunity to strength train. The program is designed so that all exercises can be done while sitting in the chair. It gives you a variety of exercises to choose from so that you can strength train no matter what equipment you have access to. Strength training for these individuals will improve/maintain muscular strength and endurance, control of muscular movements and body weight, circulation, bone density, and self-esteem. Several different materials can be used. These include, but may not be limited to, resistance tubing, dumbbells, and Selectorized machines. Exercises are suggested for each of the major muscle groups. Exercises should be chosen according to the individual’s ability and restrictions that may occur due to the wheelchair. Some exercises may require trainer/partner assistance to ensure correct form and/or resistance is being used. Pictures of both the start position and the end position are included to better help explain the procedure.

- Consult a physician before starting an exercise program.
Special Considerations

**Elderly:** Be sure to keep the number of reps high (12-15) using a lower weight. Remember to continually breathe throughout the entire set. Blood pressure may increase if holding breath.

**Individuals with neurological or muscular disabilities:** Goals should be to maintain current levels and to better control movements and body mass.

**Paralyzed Individuals:** It will be beneficial to have a trainer/partner move the legs through the suggested lower body exercises. This will help to increase the circulation throughout the lower body.

**Injured individuals/temporary wheelchair users:** If currently on a program, it should be able to be continued with limitations. This program gives alternatives while a wheelchair is necessary.
Program Set-Up and Progression

WARM UP

- 5-8 minutes before exercise.
- This decreases the chance of injury.
- UBE (arm bike), arm circles, rower, and Nu-Step.

STRENGTH

- 2-3 times a week, with at least 1-day of rest between workouts.
- 12-15 repetitions, beginning with 12 and increasing to 15.
- 1-2 sets of each exercise, beginning with 1 and increasing to 2.
- When 2 sets of 15 repetitions becomes easy, increase the weight or resistance to make
  the exercise more challenging. (Resistance tubing comes in 4 different
  strengths/resistance: yellow, green, red, and blue).
- Work from large muscle groups to small (the order they are in the binder).

STRETCHING

- Increase flexibility (range of motion).
- Promote circulation.
- Decrease muscle soreness.
EXERCISES YOU CAN DO AT HOME
CHEST FLY

MUSCLES TARGETED
- The pectorals (chest) and triceps (back of arm) with some peripheral benefit to the anterior deltoids (front of shoulder).

SET UP
- Secure the tubing around the back of the chair. Hold onto handles of tubing. If more resistance is needed, hold part of the tubing along with the handles.

MOTION
- Start with the arms out to the side, parallel to floor.
- Next, bring hands together in front of the body (simulating hugging a tree).
- Slowly and controlled, bring arms back to the original position.

STARTING POSITION

ENDING POSITION
CHEST PRESS

MUSCLES TARGETED
- The pectorals (chest) and triceps (back of arm) with some peripheral benefit to the anterior deltoïds (front of shoulder).

SET UP
- Secure the tubing around the back of the chair. If more resistance is needed, hold part of the tubing along with the handles.
- Start with the hands shoulder width apart at armpit level, keeping the elbows parallel to the ground.

MOTION
- Press out from the body to full extension, but avoid locking out elbows at top.
- Make sure that the handles remain the same height from the ground.
- Slowly bring the handles back to the starting position making sure not to let the tubing pull the arms back.

STARTING POSITION

![Starting Position Image]

ENDING POSITION

![Ending Position Image]
CHEST FLY

MUSCLES TARGETED
- The pectorals (chest) and triceps (back of arm) with some peripheral benefit to the anterior deltoids (front of shoulder).

SET UP
- Grasp dumbbells and hold them at shoulder height, facing away from body and parallel to the floor.

MOTION
- Squeeze the elbows and hands in towards the body.
- Arms remain bent at 90-degrees.
- Slowly and controlled, bring arms back to the original position.

STARTING POSITION

ENDING POSITION
**ROW**

**MUSCLES TARGETED**
- The latissimus dorsi (back), rhomboids (upper back) and trapezius (upper back and neck), with some benefit to the biceps (front of arm).

**SET UP**
- Secure the tubing to an object (a bar or doorknob is recommended).
- Hold handles of the tubing shoulder width apart.

**MOTION**
- Keeping the elbows up and out to the side and the shoulders back, pull the handles towards the body stopping when the handles are even with the chest and squeezing the shoulder blades together.
- Next, slowly bring the hands back to the starting position making sure that the tubing is being controlled and not pulling the arms.

**STARTING POSITION**

**ENDING POSITION**
LAT PULL DOWN

MUSCLES TARGETED
- Lattissimus dorsi (back), rhomboids (upper back), trapezius (upper back and neck) and biceps (front of arm).

SET UP
- Secure the tubing over the top of the door or somewhere over head.
- Have someone bring the handles down to the level at which you can grasp them, facing the door.
- Position the hands wider than shoulder width.
- Lean the upper body slightly back so that the tubing is in direct line with the chest.

MOTION
- Slowly pull tubing down to the sternum bringing the elbows out and slightly behind the body.
- Keep the abdominals contracted throughout the movement.
- Slowly return to the starting position making sure that the band is controlled.

STARTING POSITION

ENDING POSITION
LATERAL RAISES

MUSCLES TARGETED
- The deltoid (shoulders) and the trapezius (upper back and neck).

SET UP
- Secure tubing under feet.
- Grasp handles with the arms straight and as close to the sides of the body as possible (arms may be slightly away from the side of the body due to the arms of the chair may be restricting), palms facing the sides of the body.

MOTION
- Slowly raise the arms away from the side of the body stopping when the arms are parallel to the floor.
- Slowly and controlled, return the arms to the original position.

STARTING POSITION

ENDING POSITION
UPRIGHT ROWS

MUSCLES TARGETED
- The rhomboids (upper back), rear deltoid (back of shoulder) and the trapezius (upper back and neck).

SET UP
- Secure tubing under feet and grasp handles palms facing downward and towards the body.

MOTION
- Pull arms up towards chin, while elbows go out to the side, but parallel to the floor.
- Slowly and controlled, return the arms to the original position.

STARTING POSITION

ENDING POSITION
BENT OVER REAR DELTOID RAISE

MUSCLES TARGETED
- The rear deltoid (back of shoulders) and the rhomboids (upper back).

SET UP
- Secure tubing under feet.
- Bend forward slightly, grasping handles at the side of the body.

MOTION
- Slowly and controlled, raise arms out to the side of the body, keeping arms parallel to the floor and elbows slightly bent.
- Slowly and controlled, return the arms to the original position.

STARTING POSITION

ENDING POSITION
SHOULDER PRESS

MUSCLES TARGETED
- The deltoids (shoulders) and triceps (back of the arm).

SET UP
- Grasp dumbbells and hold them at shoulder height, facing away from body and parallel to the floor.

MOTION
- Press the dumbbells up toward the ceiling until the arms are fully extended.
- Avoid locking out elbows and resting at the top.
- Next, slowly bring the hands back to the starting position making sure that the dumbbells are in control and not pulling the arms.
- Keep the lower back in contact with the back of the chair at all times.
- Avoid using too heavy a weight because the body compensates by using the chest muscles and can injury the lower back.
- Individuals with known shoulder problems should avoid this exercise.

STARTING POSITION

ENDING POSITION
LATERAL RAISES

MUSCLES TARGETED
- The deltoid (shoulder) and the trapezius (upper back and into neck).

SET UP
- Hold the dumbbells with the arms straight and as close to the sides of the body as possible (arms may be slightly away from the side of the body if the chair is restricting), palms facing the sides of the body.

MOTION
- Slowly raise the arms away from the side of the body stopping when the arms are parallel to the floor.
- Slowly and controlled, return the arms to the original position.
- To reduce restriction caused by the chair, bend the elbows at a 90-degree angle and follow the same procedure.
FRONT RAISES

MUSCLES TARGETED
- Anterior deltoid (front of shoulder).

SET UP
- Grasp dumbbells and place forearms on thighs, palms down.

MOTION
- Start with the arms straight, not locked, in front of the body.
- Raise arms up, until level with shoulders.
- Slowly and controlled, bring arms back to the original position.

STARTING POSITION

ENDING POSITION
BICEP CURL

MUSCLES TARGETED
• The bicep (front of the arm).

SET UP
• Secure tubing under feet and grasp the handles with the palms facing forward.
• Keep the elbows at the sides (arms may be slightly forward if the chair is restriction).

MOTION
• Curl the hands up towards the shoulder as far as possible.
• Slowly and controlled, lower the hands back to the starting position.

STARTING POSITION

ENDING POSITION
BICEP CURL

MUSCLES TARGETED
- The bicep (front of the arm).

SET UP
- Hold the dumbbells at the side of the body
  With the palms facing forward.
- Keep the elbows at the sides (arms may
  be slightly forward if the chair is restricting).

MOTION
- Curl the hands up towards the shoulder as far as possible.
- Slowly and controlled, lower the hands back to the starting position.

STARTING POSITION

ENDING POSITION
TRICEP EXTENSION

MUSCLES TARGETED
- The triceps (back of the arm).

SET UP
- Secure tubing around chair.
- Grasp handle with arm parallel to the floor and elbow even with the shoulder.

MOTION
- Start by bending arm in toward shoulder.
- Extend arm out to the side, without locking out the elbow.
- The elbows should not move throughout the entire exercise.
- Next, slowly bring the hand back to the starting position making sure that the tubing is being controlled and not pulling the arm.

STARTING POSITION

ENDING POSITION
TRICEP EXTENSION

MUSCLES TARGETED
- The triceps (back of the arm).

SET UP
- Hold dumbbell in hand with arm bent and overhead.
- Extend the arm above the head and hold the elbow/upper arm close to the head with the opposite hand.

MOTION
- Extend the forearm over the head only moving at the elbow, not at the shoulder and not locking out elbow.
- The elbows should not move throughout the entire exercise.
- Next, slowly bring the hand back to the starting position making sure that the dumbbell is being controlled and not pulling the arm.
- This can be done working both sides by clasping a dumbbell in both hands and extending and lowering the weight behind the head.

STARTING POSITION

ENDING POSITION
REVERSE WRIST CURLS

MUSCLES TARGETED
- Forearm extensors (top of forearms).

SET UP
- Secure tubing under feet and grasp handles.
- Place your forearms on your thighs with palms facing downward.
- Adjust the length of the tubing to alleviate any slack.

MOTION
- Slowly curl wrist upward toward your body.
- Pause and slowly return to starting position.

STARTING POSITION

ENDING POSITION
WRIST CURLS

MUSCLES TARGETED
- Forearm flexors (bottom of forearms).

SET UP
- Secure tubing under feet and grasp handles.
- Place your forearms on your thighs with palms facing upward.
- Adjust the length of the tubing to alleviate any slack.

MOTION
- Slowly curl your wrists upward toward your body.
- Pause and slowly return to starting position.

STARTING POSITION

ENDING POSITION
**WRIST CURLS**

**MUSCLES TARGETED**
- Forearm flexors (bottom of forearm).

**SET UP**
- Hold dumbbells in hands and place your forearm on your thigh with palm facing upward.

**MOTION**
- Slowly curl your wrists upward toward your body.
- Pause and slowly return to starting position.

**STARTING POSITION**

**ENDING POSITION**
**REVERSE WRIST CURLS**

**MUSCLES TARGETED**
- Forearm extensors (top of the forearm).

**SET UP**
- Hold dumbbells in hands and place your forearm on your thigh with palms facing downward.

**MOTION**
- Slowly curl wrist upward toward your body.
- Pause and slowly return to starting position

**STARTING POSITION**

**ENDING POSITION**
ABDOMINAL CRUNCH

MUSCLES TARGETED
- The rectus abdominus (front of Stomach).

SET UP
- Secure the tubing over the top of a door or somewhere overhead.
- Hold the handles over the shoulders.

MOTION
- Using the abdominals, not the arms, crunch the chest down to the knees.
- Keeping tension on the abdominals, sit back up stopping just before reaching the original position.

STARTING POSITION

ENDING POSITION
OBLIQUE CRUNCHES

MUSCLES TARGETED
- The external and internal obliques (sides of stomach).

SET UP
- Secure the tubing over the top of a door or somewhere overhead.
- Hold the handles over the shoulders.

MOTION
- Using the abdominals, not the arms, crunch one shoulder down to the opposite knee.
- Keeping tension on the abdominals, sit back up just before reaching original position.
- One side can be done at a time or sides can be alternated.

STARTING POSITION

ENDING POSITION
EXERCISES TO DO AT A

EXERCISE FACILITY
CHEST PRESS

MUSCLES TARGETED
- Pectorals (chest) and triceps (back of arm), with some peripheral benefit to the anterior deltoids (front of shoulders).

SET UP
- Remove the seat.
- Face away from machine.
- Handles should make a line through the lower chest area.
- Grasp handles at either of the two positions (vertical or horizontal) securely.

MOTION
- Press out from body to full extension, but avoid locking out elbows at top.
- Lower weight slowly and under control until a slight stretch is felt in the chest, repeat the movement.
- Avoid arching lower back.

STARTING POSITION

ENDING POSITION
MUSCLES TARGETED
- The lattisimus dorsi (back), rhomboids (upper back) and trapezius (upper back into the neck), with some benefit to the biceps (the front of arm).

SET UP
- Attach two handles to the cable cross and adjust the height so that the forearms remain parallel to the ground when the handles are pulled back during the exercise.
- Grasp the handles.

MOTION
- Keeping the elbows up and out to the side and the shoulders back, pull the handles towards the body stopping when the handles are even with the chest and squeezing the shoulder blades together.
- Next, slowly bring the hands back to the starting position making sure it is controlled and not pulling the arms.
- Do not lean back at the end of the motion. This brings the lower back into play and takes stress off the targeted muscles.
- Emphasize the squeeze between the shoulder blades, allowing the back muscles to do the work rather than the arms.

STARTING POSITION

ENDING POSITION
LAT PULL DOWN

MUSCLES TARGETED
- Latissimus dorsi (back), rhomboids (upper back), trapezius (upper back into the neck) and biceps (front of arm).

SET UP
- Attach the lat pull down bar to the tricep pushdown station at the Cybex Towers.
- Have someone bring the bar down to the level at which it can be grasped.
- Grasp the bar slightly wider than shoulder width apart.
- Lean the upper body slightly back so that the bar is in direct line with the chest.

MOTION
- Start with the arms extended overhead.
- Slowly pull the bar down to the sternum bringing the elbows out and slightly behind the body.
- Keep the abdominals contracted throughout the movement.
- Slowly return to the starting position making sure that the weight is controlled.

STARTING POSITION

ENDING POSITION
SHOULDER PRESS

MUSCLES TARGETED
- The deltoids (shoulders) and triceps (back of arm).

SET UP
- Remove seat.
- Handles should be the same level as your collarbones or slightly lower.
- Keep your back flat against seatback.
- Grasp the handles in either of the two positions (vertical or horizontal).

MOTION
- Press the handles up toward the ceiling until the arms are fully extended.
- Avoid locking out elbows and resting at the top.
- Lower the weight slowly and under control back to the starting position, allow the weight to come as close as possible to the stack without touching, and repeat.
- Avoid using too heavy a weight for this exercise the body compensates by using the chest muscles and putting the lower back at risk for injury.
- Individuals with known shoulder problems should avoid this exercise.

STARTING POSITION

ENDING POSITION
UPRIGHT ROWS

MUSCLES TARGETED
- The rhomboids (upper back), rear deltoid (back of shoulders) and the trapezius (upper back into the neck).

SET UP
- Attach the bar to the low pulley on the cable cross over of the Cybex Towers.
- Grasp the bar with palms facing downward and in front of the body.

MOTION
- Pull arms up towards chin, while elbows go out to the side, but parallel to the floor.
- Slowly and controlled, return the arms to the original position.

STARTING POSITION

ENDING POSITION
**BICEP CURL**

**MUSCLES TARGETED**
- The bicep (front of the arm).

**SET UP**
- Face the cable cross over machine.
- Grasp the bar with palms facing upward and about shoulder width apart.
- Place forearms on top of thighs.

**MOTION**
- Curl the hands up towards the shoulder as far as possible.
- Slowly and controlled, lower the hands back to the starting position.

**STARTING POSITION**

**ENDING POSITION**
TRICEP PUSH DOWN

MUSCLES TARGETED
- The triceps (back of arm).

SET UP
- Sitting up straight, facing the machine, and keeping the shoulders back, grasp the bar at the inside.

MOTION
- Pull the bar down and position the elbows at the side, the elbows do NOT move throughout the entire exercise.
- Press the hands and forearm down towards the floor.
- Raise the bar back up slowly and controlled.
- Do not allow the weight to pull the arms up.
- Raise the fists/forearm to the bottom of the sternum, keeping elbows in.

STARTING POSITION

ENDING POSITION
BACK EXTENSION

MUSCLES TARGETED
- The spinal erector muscles of the lower back, which when properly strengthened, can prevent injury.

SET UP
- Start with the upper body forward trying to get the chest as close to the knees as possible.

MOTION
- Next, sit up.
- Return to the starting position.
- If weight is being used, clasp the plate or dumbbell close to the body and repeat the same procedure.
- A fuller range of motion may be able to be obtained if the individual can sit at the edge of the chair instead of against the back.

STARTING POSITION

ENDING POSITION
LIFESTYLE STATIC STRETCHES

For Warming Up and Cooling Down. Hold static stretches on both sides for 10-15 seconds for a gentle stretch. For improvement of flexibility (developmental stretches), hold for 30-45 seconds. Perform 1-2 sets. DO NOT BOUNCE while stretching and NEVER lock a joint. Be sure to breathe. ARROWS indicate location of stretch.

Gently look over shoulder until a mild stretch is felt in side of neck. Repeat on other side.

Gently lower head to chest, relaxing shoulders, until a mild stretch is felt in neck.

Reach behind head and gently pull elbow back with opposite hand until a stretch is felt in back of the upper arm.

- or - Grasp towel in each hand behind back and gently pull down.

Interlock fingers behind the back. Gently pull the shoulders back until stretch is felt in chest.

Gently pull arm with opposite hand until a mild stretch is felt in shoulder and upper back.

Pull heel toward buttock until a stretch is felt in front of thigh.

- or - Wrap towel around ankle and gently pull heel toward butt until a mild stretch is felt in front of thigh.

Gently press hands and feet toward opposite walls for an overall stretch. Do not arch back.
Keeping back leg straight but not locked. Place foot on floor with foot facing forward. Lean into the wall until a stretch is felt in the calf muscles.

Keeping back leg slightly bent, with heel on floor and foot facing forward. Lean into the wall until a stretch is felt in the tendon of calf muscles.

Keeping hips forward gently turn to the rear until a mild stretch is felt in the side and back.

Place foot on stool. Slowly lean forward reaching down shin until stretch is felt in back of thigh.

- or - Wrap towel around toes and gently pull chest toward legs (do not lock knee) until stretch is felt behind the thigh.

Keep the abs contracted and slowly roll down until a mild stretch is felt in the lower back and buttocks.

Cross leg over thigh and place elbow over outside of knee. Gently stretch outer thigh by pulling bent knee across body.

Pull one knee into chest until a comfortable stretch is felt in the lower back and buttocks. Repeat with opposite knee.

Place heels together. Holding onto feet press chest toward feet until a mild stretch is felt in groin and inner thigh.