



Getting Started with Exercise

Physical exercise is any bodily activity that enhances or maintains one or more aspects of physical fitness. There are several different aspects of fitness, which include cardiovascular endurance, muscular strength and endurance, and flexibility. It is important to understand that exercise can also include activities such as gardening, house cleaning, and shoveling snow. A balanced exercise program is one that includes exercises for all aspects of fitness.

Keep in mind:

- It is best to check with your doctor first before beginning a new exercise program. He or she may have specific guidelines or recommendations for you to follow.
- Everyone starts at a different level. Start slow, listen to how your body feels during exercise, and remember you are building lifestyle changes!
- Consider your past activity experiences, current abilities, and goals when getting started with exercise. Select activities that you enjoy and will help you work towards achieving your goals.
- Increasing your activity level prior to surgery will not only aid in your recovery process, it will make getting back to exercise more comfortable and enjoyable.

Before Surgery:

- Try to accumulate 30 minutes of moderate intensity aerobic activities 3-5 days per week. Aerobic activities could include walking, biking, water exercises or swimming, chair exercises, or using an elliptical.
- Aim to include 2-3 days per week of strength training. This can be done using your resistance bands, weight machines, or even your own body weight. Perform 2-3 sets of 10-15 repetitions for 8-10 different exercises that include the body's major muscle groups.
- Try to include stretching at the end each exercise session. Aim to hold each stretch for 15-30 seconds, including all of your major muscle groups.

After Surgery:

- Take it slow! Remember that not everyone heals at the same pace. Pay close attention to your body and how movement feels so that you don't overdo it. Stop any exercise that causes pain- give yourself time to heal.
- Walk and move around at a leisurely pace. Try to avoid sitting for long periods of time. Try getting up every hour or two to walk around for 5-10 minutes, as you feel able.
- Typically you'll be able to return to water exercises when your incisions have healed completely. While it varies from person to person, usually this is about 2 weeks after surgery.
- At approximately 2 weeks following surgery you'll be able to slowly start using the resistance bands again. Again, listen to how your body feels. You may just want to start with 1 set of each exercise.



Benefits of Exercise

Exercise is an essential component of a successful weight management program. Studies show that **Bariatric patients who engage in regular exercise are more likely to maintain their weight loss long-term.** By focusing on the benefits of exercise most important to you, we hope you'll find the motivation to incorporate exercise into your lifestyle. Here are just a few of the ways that regular exercise can help you:

Cardiovascular Exercise Benefits:

- Improves quality of life
- Decreases risk of cardiovascular disease
- Increased life expectancy
- Lowers blood pressure
- Increases HDL cholesterol
- Lowers total cholesterol
- Increases insulin sensitivity
- Enhances glucose uptake
- Helps lower HbA_{1C}
- Improves mood and feelings of Well-being
- Improves sleep quality
- Improves self-esteem
- Decreases risk of cancer
- Combats depression
- Releases stress
- Improves energy levels
- Assists in weight loss

Resistance Training Benefits:

- Helps prevent osteoporosis
- Increases muscle mass
- Improves resting metabolic rate
- Improves appearance
- Increases self-confidence
- Improves the ease of performing activities of daily living

Flexibility Training Benefits:

- Decreases risk of falls
- Decreases risk of low back pain
- Improves posture
- Increases feelings of wellbeing
- Decreases joint pain
- Decreases likelihood of injury

Exercise



Coping with Common Exercise Barriers

Because it is so important to start building regular physical activity into your daily life, we think it is important to address some of the common barriers that often prevent individuals from regularly engaging in exercise. These are barriers that almost everyone has to deal with at some point in their life, but by planning ahead and addressing them early, we hope to prevent them from keeping you from exercise.

1. Lack of Time

- Give yourself multiple opportunities throughout the day to exercise. Anything is better than nothing, so aim to get several shorter bouts of walking in each day, maybe before and after work and during breaks. Inconvenience yourself and add extra steps by parking further away and taking the stairs when possible.
- Make your home a fitter place. Leave a resistance band or set of dumbbells in a visible place to help remind you to pick them up and exercise. Consider swapping your desk chair for a stability ball to engage your core when paying bills.
- Exercise at your desk. Try to take a short break every 1-2 hours to stretch and do a couple of exercises with your resistance band. Try to move as much as possible during the workday; when the phone rings, take the call standing up to burn 10 percent more calories than you would chatting in a chair.
- Put it in ink. You stick to the doctor's appointments and work meetings that are on your calendar, so why not take the same approach to exercise sessions? Every Sunday night, schedule them into your weekly planner (or your PDA). To make sure your family members are on board, place the calendar in a common area so they can see it. That way, workout times become public declarations and nonnegotiable parts of your routine.

2. Lack of Motivation/Energy

- Do your own thing. If there's one golden rule to keep you moving, it's this: choose a workout that you find enjoyable. It doesn't take a rocket scientist to figure out that you are more likely to stick with an activity that you enjoy. If you enjoy being social, find an exercise buddy. If you enjoy reading, read or listen to a book when exercising. If you enjoy music, create a workout CD or playlist to help keep you going.
- Think active and you'll become active. Watch the fitness/exercise channel. Wear tennis shoes around the house. Read about exercise. Put your exercise bands or ball in a visible place. If you place your exercise equipment where you'll see it, you'll be reminded to use it.
- Set goals and chart your progress. Creating an exercise log or a pedometer log can help you see how far you've come and how much your fitness has improved! Reward yourself each time you reach a goal or milestone (but not with food).

- Combat excuses before you make them. Exercise in a place that's easy to get to. Each week, schedule your workouts in your planner or calendar and keep them as you would any other appointment. These short bouts are still effective and accumulate throughout the day.

3. Fear of Injury or Pain

- Start slow and take things at your own pace. There is no rush when it comes to making a change that you intend to stick with you're the rest of your life. When you do exercise, be sure to include an adequate warm-up and cool-down period.
- Listen to how your body feels. Exercise will cause fatigue and some muscular discomfort, but it should not cause pain. If it does, back off and try a different type of exercise.
- Consult a personal trainer or exercise specialist. Be sure to let them know you are having or have had Bariatric surgery. Discuss any other physical limitations or concerns you have and then work together to create an exercise plan that you feel comfortable with.
- If you lapse, don't collapse. If you have been sedentary for years, moving energetically for 30 minutes 3-4 days a week is a major change. Not only must you get off the couch, but also must acquire a new habit that may at first make every muscle in your body grumble. Lapses are inevitable, so when you do falter, be forgiving. What do a few days or weeks matter when you're building a habit for life.



Fitness Websites:

American Council on Exercise www.acefitness.org

American College of Sports Medicine www.acsm.org

Zumba Fitness www.zumba.com

Yoga Journal www.yogajournal.com

Playmakers www.playmakers.com

Livestrong www.livestrong.com

www.collagevideo.com

www.Fitnessblender.com

Journaling Websites:

My Fitness Pal www.MyFitnessPal.com

Spark People Calorie and Exercise Tracking Website www.sparkpeople.com

Choose MyPlate (formerly the food guide pyramid) www.choosemyplate.gov/

Calorie King www.calorieking.com

Fitday www.fitday.com

Meal Planning/Recipe Websites:

Cooking Light www.cookinglight.com

Dinner Tool www.dinnertool.com

Relish www.relishrelish.com

All Recipes www.allrecipes.com

Other Websites that might interest you...

The National Weight Control Registry <http://www.nwcr.ws/>

Weight-control Information Network (WIN)
www.niddk.nih.gov/health/nutrit/win.htm

Key Roles of Exercise

1. Exercise helps you lose weight, but more importantly, it helps you keep it off.

One of the benefits of bariatric surgery is that the weight loss is almost guaranteed as part of the immediate post-op experience. Because of this, it is easy to feel as though exercise is not really important for weight loss success. Eventually your body becomes accustomed to a lower caloric intake, and your weight loss will slow or start to plateau. Not only does **exercise help you to break through plateaus, it is the biggest predictor of long-term weight loss maintenance.**

To maintain weight loss it is recommended to do 300-400 minutes per week of moderate cardiovascular exercise. This would be 60 minutes 5 days per week or 40 minutes 7 days per week.

2. Exercise helps you feel better.

One of the most overlooked benefits of exercise is the mood-boosting effects that it has on your body. Exercise has been shown to help treat and reduce feelings of depression. It has also been shown to help lower anxiety. **One of the reasons that bariatric surgery is so popular is because people want to feel healthier. Exercise is one of the best tools to help accomplish this goal.** It will help improve your endurance and energy throughout the day, while making it easier to complete daily tasks.

Henderson, et al. found that patients who exercised four days a week or more reported the lowest levels of psychosocial stress, however, patients who exercised one to three days a week reported lower stress levels than did the non-exercise group. **Those who engaged in physical activity four days a week or more also reported superior physical and mental health, had fewer depressive symptoms, and higher self-esteem than the non-exercisers.** Henderson, K. et al. Exercise and Weight Loss in Bariatric Surgery Patients, Obesity, 2006.

3. It helps improve your body composition and overall health.

Even though weight loss is the expected outcome following bariatric surgery, patients who don't regularly engage in strength or resistance exercises are more likely to lose a greater percentage of muscle mass. This can result in feelings of weakness and may lead to a lower resting metabolism.

In an **18-month follow-up study** published in Obesity Surgery, Barbara Metcalf and her colleagues found that **patients who exercised showed a 28% higher loss of fat mass and an 8% higher gain in lean body mass than those who did not exercise, even though no differences in weight loss were observed between the groups.**

Metcalf, B., et al. Weight Loss Composition: the Effects of Exercise Following Obesity Surgery as Measured by Bioelectrical Impedance Analysis, Obesity Surgery, 2005.

The F.I.T.T. Principle for Exercise

The F.I.T.T. Principle is a guideline to help you develop an effective exercise plan. This principle has four key parts that can be changed to help increase physical fitness, get past plateaus and prevent boredom.

F.I.T.T. stands for:

- **Frequency**- how often you exercise. This is the number of days per week or number of times per day.
- **Intensity**- how hard or how tough the exercise is for you and your body.
- **Time**- the amount of seconds, minutes or different strength exercises you do for your workout.
- **Type** – the kind of exercise, movement, or piece of equipment you use.

By using the F.I.T.T. principle you have the ability to build and customize an exercise program to fit your current abilities and future goals.

A complete exercise program should contain cardiovascular or aerobic exercises, strength exercises and flexibility exercises. In the following pages we will be outlining the F.I.T.T. principle for all three areas of exercise.



F.I.T.T. Principle for Cardiovascular Exercise

Cardiovascular or aerobic exercise refers to any activity that keeps you continually moving and elevates your heart rate.

- **Frequency:**
 - 3-5 days a week for fitness maintenance; 5-7 days per week to maintain weight loss
- **Intensity:** Three way to determine
 - Target Heart Rate Zone
 - RPE scale (Rate of Perceived Exertion)
 - Talk test
 - Ways to change intensity: increase the percent grade, the MPH, the resistance and the distance
- **Time**
 - 20-30 minutes per day minimally; 45-60 minutes ideally
 - This can be broken up into 2 or 3 smaller bouts of exercise
- **Type:**
 - Walking, swimming, jogging, biking, using an elliptical, and dancing just to name a few
 - Find an activity that you enjoy doing
 - Activities should be both weight bearing (standing) and non-weight bearing (seated or in water) depending on your physical abilities.

To determine your own Target Heart Rate Zone:

1. Find your maximal heart rate: $220 - \text{your age} = \text{maximal heart rate}$ (this is just an estimate)
 2. For low to moderate intensity (40%-60% heart rate) take your max heart rate multiply it by 40% or 0.40 to get your low end of the range then multiply your max heart rate by 60% or 0.60 to get your high end of the range.
 - Example: $220 - 31 = 189$
 $189 \times 0.40 = 75.6$
 $189 \times 0.60 = 113.4$
Range is 75 -113 bpm (beats per minute)
 3. For moderate to vigorous intensity (60%-90% heart rate) use the same equation.
 - Example: $220 - 31 = 189$
 $189 \times 0.60 = 113.4$
 $189 \times 0.90 = 170.5$
Range is 113 – 170 bpm
- It is important to note that certain medications for high blood pressure may affect your heart rate during exercise; if this the case, it is recommended that you use the RPE scale and or the “Talk Test.”

The Rate of Perceived Exertion (RPE) scale and the “Talk Test”

The RPE scale is a subjective way to measuring how you feel during an exercise session. The scale below represents certain intensity levels based on the numbers 1-10. A REP of 1 would be similar to how you feel when you are lying on the couch and not really doing any activity at all and an RPE of 10 would be like how you feel when you are at the end of a maximal exercise bout and cannot continue any longer. Typically exercising at an RPE between 4-6 is recommended.

The “Talk Test” is a way to measure intensity based on how well you can talk out loud while exercising. Studies have shown that the “Talk Test” is a great way to gauge the intensity of activities because oxygen is required for vocal speech and as intensity levels move higher it affects our ability to speak comfortably.

It is recommended that you use the RPE scale and the “Talk Test” together.

RATE OF PERCIEVED EXERTION (RPE) SCALE AND “TALK TEST”

	Description	“Talk Test”
1	Resting	Casual and easy conversation is possible.
2	Really easy	Casual and easy conversation is possible.
3	Light	Speech is unaffected by activity and conversation is easy.
4	Moderate	Speech is possible, but breath feels shorter than at rest.
5	Somewhat Hard	Speech is possible, but difficult at time. Not easy to carry on a long conversation.
6	Harder	Speech is possible, but conversation is uncomfortable.
7	Hard	Speech is limited to short phrases like “Yes” and “No”
8	Vigorous	Speech is limited to short phrases like “Yes” and “No”
9	Very Vigorous	Speech is very difficult and breathing is deep.
10	Maximal	Very intense activity level. May lead to exhaustion.

(RPE 4-6 = 40%-60% heart rate; RPE 6-9 = 60%-90% heart rate)

F.I.T.T. Principle for Strength Training

Strength training is a specific exercise movement that requires as much or greater force by the body against an outside force. This causes your muscles to improve size, strength, power, flexibility, stability and function. These movements are shorter in duration (10-45 seconds) but are more intense than cardiovascular exercises.

- **Frequency:**
 - 2-3 non-consecutive days per week if you are doing a full body workout (working all muscle groups on the same day.)
 - 3-4 days per week if you are doing a split workout (working different muscles on different days.)

- **Intensity:**
 - 8-12 repetitions performed for 1-2 set with emphasis on proper posture and breathing
 - When breathing you should:
 - Inhale while relaxing/ lowering the weight
 - Exhale while exerting/lifting the weight
 - Remember the basic idea of strength training is to overload your muscles so they adapt and grow. Your muscles should feel fatigued by the time you get to 12 repetitions.

- **Time:**
 - The time it takes you to finish your strength workout will depend on how many different exercises you choose to do as well as how many sets and repetitions you choose to do.
 - It is recommended you perform 8-10 exercises that train major muscle groups.
 - In the beginning start with 1 set of 8-12 repetitions for each exercise when you feel ready you can add the 2nd set.

- **Type:**
 - Weight machines, free weights, resistance bands, exercise balls and body weight exercises are some of the different strength training equipment you could use but are not limited to.
 - When putting together a strength training routine remember to work all muscle groups in opposition.
 - Example: if you work your biceps you should also work your triceps (front/back) or if you are doing a chest press you should also do a row (push/pull).
 - Pick exercises that are safe and that you can do with proper form. These exercises should challenge you to move in all directions.

F.I.T.T. Principle for Flexibility

Flexibility is the ability to move a joint smoothly through its complete range of motion. Flexibility is an important part of a healthy life. It will allow you to move and do daily activities without feeling that your movements are restricted in any way. As we age we tend to be less flexible and we need to spend more time maintaining our flexibility. You are never too old to reverse the reduced level of flexibility that comes with age. You just need to start working on it and be consistent with your flexibility portion of your exercise plan.

- **Frequency:**
 - Minimally 2-3 days per week; 5-7 days per week would be more ideal.
- **Intensity:**
 - Stretch to a point of tightness at the end of the range of motion, without inducing discomfort
 - Do not bounce while holding your stretch
- **Time:**
 - Hold each stretch for 15-30 seconds; complete 2-4 repetitions of each stretch
- **Type:**
 - All stretching should be done following a light warm-up. The stretches you choose to perform should focus on joints with reduced range of motion. There are two different types of stretching that you may choose to perform.
 - Static stretching: the ability to move slowly into a stretched position and hold. This is the most common form of stretching.
 - Example: touching your toes to stretch your hamstrings
 - Dynamic stretching: the ability to move quickly or at normal speed into a stretched position.
 - Example: performing high knees or butt kicks

Flexibility is one of the three main components of an optimal exercise plan and is believed to be important for optimum health. It will take several weeks of regular stretching to see improvements in your flexibility. All flexibility routines should include a warm-up and a cool-down.



Injury Prevention: Building Healthy Exercise Habits

Exercise

Warm Up

Always warm up before exercise by including 5-10 minutes of slow walking, easy cycling, or range of motion exercises. Warming up helps increase blood flow to the major muscle groups, warm-up joints, and slowly increase your heart, respiratory, and metabolic rate to prepare your body for a higher intensity activity.

Cool Down

After exercising, cool down by decreasing the intensity of your exercise and continue to move for 5-10 additional minutes. Cooling down helps your body adjust by allowing a more gradual decrease proper in heart rate and blood pressure. This helps to decrease risk of any cardiovascular abnormalities, prevents blood from pooling in your legs, and promotes removal of lactic acid to aid in decreasing muscular soreness.

Stretch - Slowly and Gently

Never bounce while stretching and always stop short of pain. Ideally slow sustained stretching should be done at the end of the workout following the cool down period. Try to hold each stretch 15-30 seconds and include all major muscle groups. Remember to breathe while stretching.

Wear Proper Attire

Try to wear loose fitting, comfortable clothing. Layer up during the fall and winter as these layers help trap heat, but can easily be removed if needed. During the summer, try to wear lightweight, breathable clothing and don't forget the sunscreen.

Pay Attention to Hydration

Stay well-hydrated by consuming at least 64 oz of water daily. Drink plenty of water before, during, and after exercise. Don't wait until you are thirsty.

Listen to Your Body

If you are tired, sick, or have had insufficient sleep, consider cutting down on the duration or intensity of your exercise. Listen to how your body feels and be aware that excessive fatigue can increase the risk of injury during exercise.

Injuries

Do not ignore pain. Pain is the body's response to injury or overuse. As you get accustomed to exercise, you will better be able to distinguish between soreness and pain. Soreness may develop one to two days after a workout and dissipate 24 to 48 hours later. Pain can occur immediately and persist with everything you do.

For treatment of minor injuries not involving the eye, follow the RICE procedure: Rest the injured area by reducing activity and immobilizing it.

Ice the affected area for 20 minute periods on, 40 minutes off, to help decrease inflammation and pain.

Compress the area by wrapping for at least 30 minutes to help prevent swelling.



Elevate the injured area above heart level. If pain or swelling worsens after 24 hours, see a physician.

Seek Medical Help For:

Any eye injury

Severe pain, disability, or numbness

An injured joint or broken bone

Minor injury which does not improve or heal within 3 weeks

Infection, pus, red streaks, swollen nodes, or fever

How Well Do Your Shoes Fit?

Shoes that fit properly help you do the things you enjoy. They provide comfort and improve performance. They can also keep your feet healthy and decrease your risk of injury. Here are tips to help you select shoes that are right for your feet:

When you shop, have your feet measured – BOTH of them.

Feet naturally widen and lengthen with use, which means foot size changes over the course of a day and a lifetime, depending on activities and age.

Remember that shoe sizes are not standard.

They vary among brands and styles, so a shoe labeled 8 ½ by one manufacturer could fit like an 8 or 9 from another maker. Seek advice from store personnel trained to know fitting techniques and shoe brands and characteristics.

Choose shoes that are appropriate for the activity and the time you perform it.

For example, if your job involves standing for long periods of time, shop for work shoes right after work. Shop for exercise shoes as close to your workout time as possible.

Stand during the fitting process and check that there is adequate space (3/8 to 1/2") between your longest toe and the end of each shoe.

The foot elongates during walking or running, so it needs extra space. Also, remember that for some people, the longest toe is the second or third toe.

Be sure the ball of your foot fits comfortably into the widest part of the shoe.

This match-up means the shoe will bend where your foot flexes, which will give you the greatest amount of comfort.

Don't purchase shoes that feel too tight, expecting them to "stretch" after you've "broken them in."

A shoe should feel comfortable at the try-on stage. Shoes are generally designed to hold a shape, not to reform themselves to your foot.

Your heel should fit comfortable in the shoe with minimal amount of slippage.

It's impossible to avoid heel slippage completely, because the foot stretches forward and backward during every step; you need enough heel room to accommodate your natural step pattern.

Remember that orthotics affect the size and fit of a shoe.

Any kind of shoe insert takes up space intended for the foot; if you wear orthotics, you'll need a roomier shoe or the orthotics won't function properly.

Resistance Band Workout Routine: The basics

1. Warm Up:

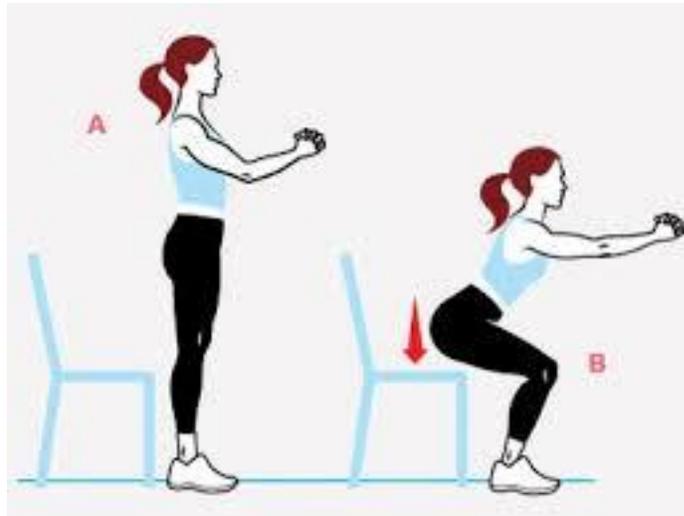
Start by getting your body warm. Stepping side to side. Twisting your torso side to side. Lifting your knees up into your chest.

*Chair Modification: Marching- moving your arms and legs up and down. Twist your torso side to side. Opposite elbow to opposite knee.

2. Chair Squats (legs):

Feet should be placed hip width apart- legs should be in line with your shoulders. Arms should be extended straight out. Weight in your heels. Keeping your back straight, lower down towards the chair without your knees going over your toes. Once you sit in the chair, stand back up. This is one repetition.

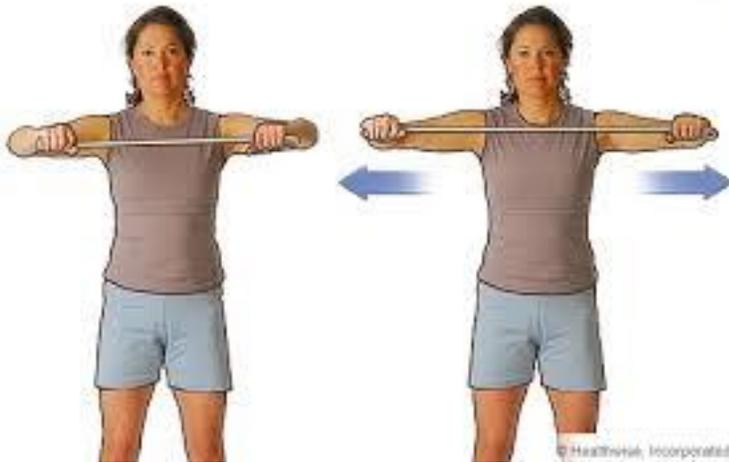
*Chair Modification: Sitting tall, engage your core and squeeze your glutes (butt muscles). Hold this for 5 seconds, release and repeat.



3. Resistance Band Chest Pull (shoulders):

Standing tall, fold your band in half. Holding onto the band, extend your arms straight in front of you. Keeping your arms straight, with a slight bend in the elbow, open your arms out (in a "v" shape). Squeeze your shoulder blades and keep your arms level with your shoulders.

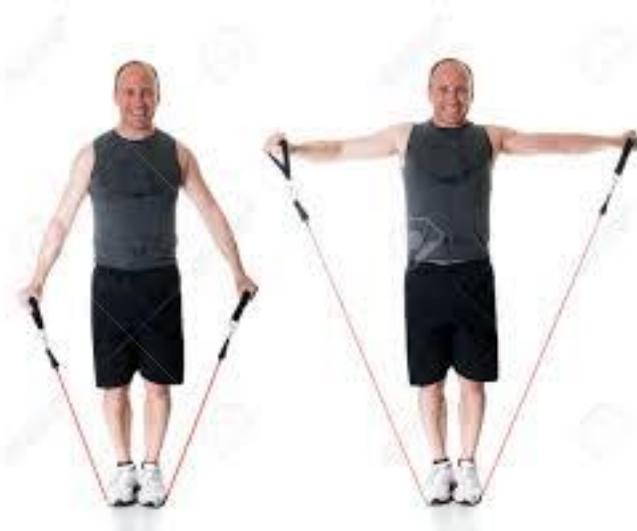
*Chair Modification: Follow the above instructions, seated tall.



4. Resistance Band Lateral Raise (shoulders):

Standing tall, step either one or two feet onto the band (one foot= easier; two feet = harder- can make harder by spreading your feet wider). The handles should be on both sides of your body. Extend your arms straight out to the side- be sure to keep your core tight.

*Chair Modification: Follow the above, seated tall.



5. Resistance Band Bicep Curl (biceps):

Standing tall, either step one or two feet onto the band. The handles should be on both sides of your body. Elbows are tucked tight into your sides. Bending at the elbow, curl your forearm up towards your arm pit.

*Chair Modification: Follow the above, seated tall.



6. Resistance Band Tricep Extension

Option 1: Standing tall, step one or two feet onto the band. The handles will be on both sides of your body. Bend forward at the waist. Grab the “tubing” part of the band. Tuck your elbows tight into your sides and extend your arms back. You should feel this on the backside (or tricep) part of your arm.

Option 1: Tricep extension using your door attachment

*Chair modification: Follow the above- seated tall.



7. Resistance Band Side Steps

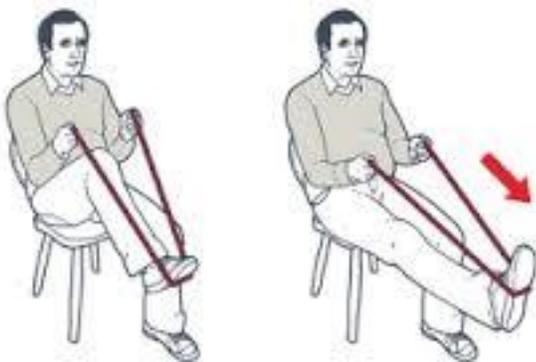
Stepping both feet onto the band, bend your knees slightly. Laterally step with your right foot for 5-10 steps and then repeat with your left side.

*Chair modification: Follow the above- seated tall.



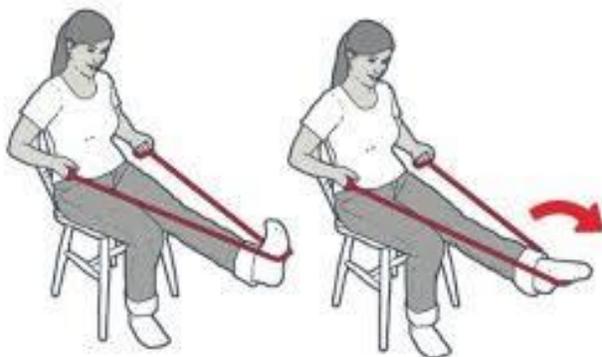
8. Resistance Band Leg Press

Seated tall, wrap the resistance band around one foot. Holding onto both handles with an appropriate level of tension, bring your knee towards your chest and then press back out.



9. Resistance Band Calf Extension

Seated tall, wrap the resistance band around one foot. Holding onto both handles with an appropriate level of tension, extend your leg straight out with a slight bend in your knee. Flex your foot forward and then back.



10. Door Attachment:

a. Row:

Standing tall, bend at your knees slightly. Grab both handles and keep your elbows tucked tight into your sides. Extend your arms, keeping a slight bend in your elbow. Pull both arms back keeping your elbows tight into your sides and pinching your shoulder blades together.

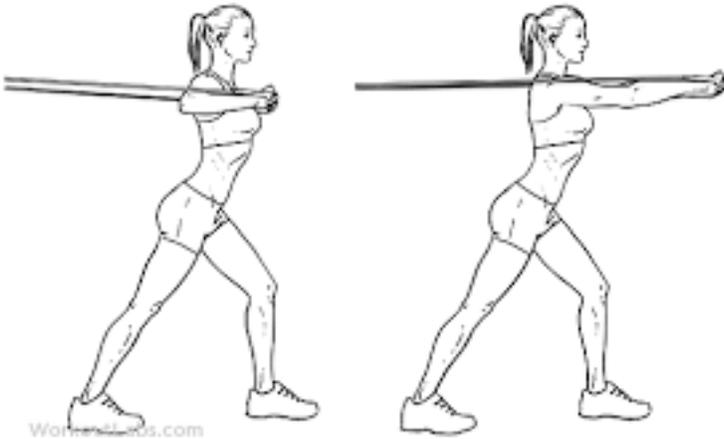
*Chair modification: Follow the above, seated tall and close to the edge of your seat to provide room to row.



b. Chest Press

Stand facing away from the door with both handles on your sides. Elbows should be elevated and at a 90 degree angle. Press forward and then bring your arms back-mimicking a “push up” motion.

*Chair modification: Follow the above, seated tall.



11. Stretch

Youtube is a great resource for exercise routines that you can do in the comfort of your own home. There are also great resources online that will help guide you in designing a safe and effective exercise routine that you can do at the gym, outside or in your home. Below are some of those resources, including links to Youtube videos.

Recommended YouTube Workouts:

Level 1: Beginner

Level 2: Intermediate

Level 3: Advanced

1. **YouTube SparkPeople:** 50+ workout videos that are typically 20 minutes or less.

<https://www.youtube.com/watch?v=wGT833ogMTw>

Level 1

Resistance Band total body workout that can be done in a chair; 20 minutes.

<https://www.youtube.com/watch?v=9KjPueieLyE>

Level 2

Resistance Band total body workout done standing; 8 minutes

<https://www.youtube.com/watch?v=3YBnm2ZJNCM>

Level 2: must be able to get down on the floor

Lower body, mat workout; 6 minutes

2. **Billy Blanks Tae Bo**

<https://www.youtube.com/watch?v=rY8vZ4Z4B44>

Level 3

Resistance Band tae bo inspired class; total body- slightly more cardio based; 30 minutes

3. **Advanced Resistance Band Exercises**

<https://www.youtube.com/watch?v=aI5X8gggLLQ>

Level 3



Resistance Band total body exercises that require balance; 7 minutes

4. Foot injury? Try this Intermediate Workout

https://www.youtube.com/watch?v=1zyq_vFCxiY

Level 2

A combination of chair and mat exercises for the person that has a foot injury, or an inability to bear weight; 30 minutes

5. Advanced Chair Cardio Workout with a Foot Injury

<https://www.youtube.com/watch?v=WOW54mLxMLs>

Level 3

All exercises done in a chair and can be modified by altering your speed; 20 minutes

6. Arm, Wrist or Hand Injury? Try this Intermediate Workout

<https://www.youtube.com/watch?v=yQwArUb1tW4>

Level 3

All exercises done standing or on a mat. Include lower body and core exercises along with some upper body muscle activation; 18 minutes

Additional YouTube Channels

- 1. POPSUGAR Fitness:** This Youtube station features a wide variety of workouts- from 30 minute routines, to routines for beginners, yoga, no equipment cardio and ab workouts.
- 2. Fitness Blender:** Youtube channel that has over 500 free workouts that are categorized by length, difficulty, training type, muscles used, calories burned and much more.
- 3. Live Sonima:** Includes yoga poses, guided meditation, gentle strength-training and mobility workouts, as well as complete yoga classes.
- 4. POP Pilates:** Many pilates videos of different lengths and difficulty levels.
- 5. LiveExercise:** At-home workouts, low impact workouts for people with limited mobility, exercises for kids, and more.
- 6. BeFiT:** Full-length workouts, featuring popular fitness trainers such as Jillian Michaels, Denise Austin, Jane Fonda, Tara Stiles, Scott Herman, Bryan Tanaka, and more.



Fitness Apps

- 1. 7 Minute Workout:** Offers workouts that take up very little time and require no workout equipment. It's nicely designed, offers plenty of workouts and also has a good tracking system with badges and awards when you meet your goal.
- 2. Sworkit: Workouts & Plans:** Allows you to customize and play personalizes video workouts that fit into your life. Select whether you want to build strength, do yoga, practice cardio, stretch, pilates, or build a custom routine, as well as a duration of your workout, and Sworkit builds you a routine of randomized exercises that fit your exercise goals.
- 3. Workout Trainer:** Offers users thousands of free workouts complete with timed step-by-step audio and video instructions to help you get into shape. In addition to the built-in workouts, users can access the app's library to build their own custom routines and share them online, as well as try out routines shared by the community.
- 4. Keelo:** Focuses on High Intensity Interval Training (HIIT) for short, incredibly intense workouts that won't burn up your time but will burn up calories. Exercises range from bodyweight-only to basic gym weights and equipment, and are scalable for beginners and experts. Regardless of which specific workout you've got scheduled, it'll only take 7 minutes to 20 minutes. Video instructions keep things clear and simple.