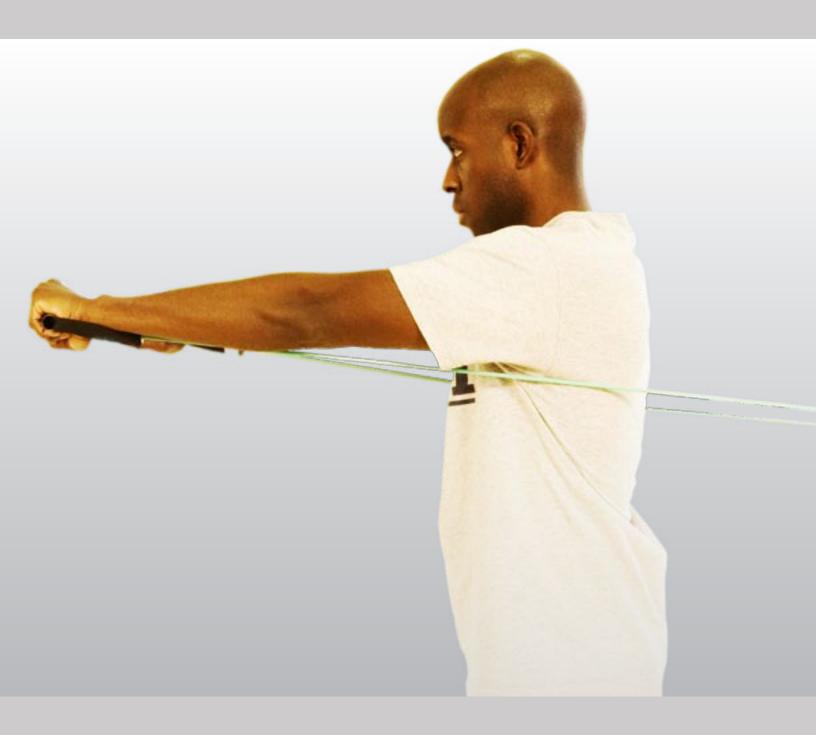
RESISTANCE TRAINING



Physical Activity Resource Center for Public Health

PARC-PH

Safety Information	1
Benefits of Resistance Training	1
Physical Activity Vocabulary	1
A set of instructions for resistance training exercises with	
resistance tubing, body weight, and free weights	6-23
Example Training Programs	24
Muscle Diagram	25
How to Make a Door Attachment	26
Acknowledgements	27

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Safety Information

Regular physical activity is fun and healthy. Being more active is very safe for most people. However, some people should check with their doctor or health care provider before they become more physically active.

If you are planning to become more physically active than you are now, you should check with your physician before you start. You may be able to do any activity that you want – as long as you start slowly and build up gradually. Or, you may need to restrict your activities to those that are safe for you. Before you begin your "active lifestyle", talk with your health care provider about the kind of activities that you wish to do and follow his/her advice.

The Benefits of Resistance Training

- Stronger muscles improve your health
- Everyday activities will be easier to perform
- Improves body composition and increases muscle mass
- Burns more calories at rest
- Improves blood sugar
- Improves balance and coordination
- Makes your bones stronger

PHYSICAL ACTIVITY **VOCABULARY**



Resistance (Strength) Training: any type of physical activity in which you use your muscles against resistance. You can use many different types of resistance training, such as resistance bands or tubes, free-weights such as dumbbells, machines, or even your own body weight. You can even do some exercises in the pool.

Range of Motion: the path your joints will move during the exercise.

Repetition: doing an exercise one time. Ten repetitions or "ten reps" means doing the same exercise ten times.

Set: the number of repetitions you do before resting. After a set of ten repetitions, you would rest before doing another set of 10 repetitions.

Safety Considerations Before you begin:

- Don't exercise without your doctor's approval, especially if you have or had an injury.
- Make sure you know what joints and muscles an exercise targets. That way you will know if you are doing the exercise properly.
- Wear comfortable clothing and athletic shoes.
- Avoid resistance training on days when you are overly tired.
- Know how to modify exercises if you are having problems with them.

Check your equipment:

Resistance bands or tubing

- Check the resistance band or tube for nicks, worn spots, or cuts.
- Get a good grip by wrapping the band or tube around your hand when beginning an exercise.
- If your resistance tubing has a grip, check to make sure that it is secure
- Never pull the band or tube directly toward your face.
- Never tie two (or more) pieces of band or tubing together.
- Use a tight knot to tie the band or tube to the door. Check to see that the band or tube is secure before beginning an exercise. *See page 26

Free-weights (dumbbells)

- If the free-weights have screws, make sure that they are tightened and secure.
- Check the free-weights for any rust or chipping paint.

During your workout:

- Do a general body warm-up, like walking in place, for 5-10 minutes before resistance training.
- Always use proper form. Never use momentum or improper form which will only increase the chance of injury and won't help you get stronger.
- Practice each exercise without the tubing or weight. This will help you get used to the proper way to complete the exercise (i.e. proper form).



- Do exercises on both sides of your body.
- Use slow and controlled movements. Fast and jerky movements make the exercise less effective and may result in injury.
- Do not hold your breath during the exercise.
 Always breathe out during the hardest part of the exercise.
- Allow your muscles to rest between sets.
- Stop the exercise if you feel pain.
- Work up to 3 sets of 12-15 repetitions for each exercise.
- Move to the next level of resistance when it is (or feels) easy to do 3 sets of 12-15 repetitions.

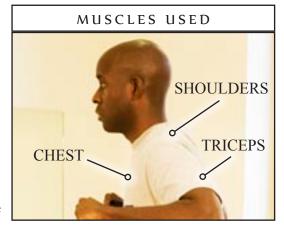
After your workout:

- Stretch to cool down after resistance training.
- Never exercise the same muscle group two days in a row. Your muscles need time to rest and recover.
- It is normal to have some muscle soreness a day or two after you do the exercises.

RESISTANCE TUBING

exercises and instructions

Anchor the tubing to a door or pole at chest height. Sit or stand 12 inches from the anchor with your back facing the anchor. Secure the tubing in your hands with palms facing down or toward each other. You can increase the resistance by moving further away from the anchor.





Important Note: This exercise may not be appropriate if you have shoulder or elbow problems or have had an injury to your chest muscles. If you experience pain while doing this exercise please **DO NOT DO IT!**

Step 1: From the starting position, extend your hands in front of you, but not completely straight. (Exhale)

Step 2: After pausing, slowly return to the starting position. (Inhale)

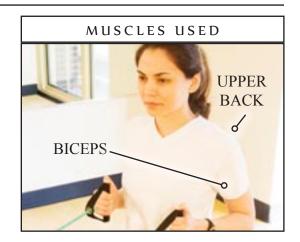




Securely anchor the tube on a door or around a stable pole at chest height. Sit up straight, facing the anchor, keeping your belly tight. Your arms should be straight out in front of you at shoulder level. You may hold the grips with the palms down or facing each other. You can adjust the difficulty of the exercise by adjusting the distance of the chair from the door/pole.

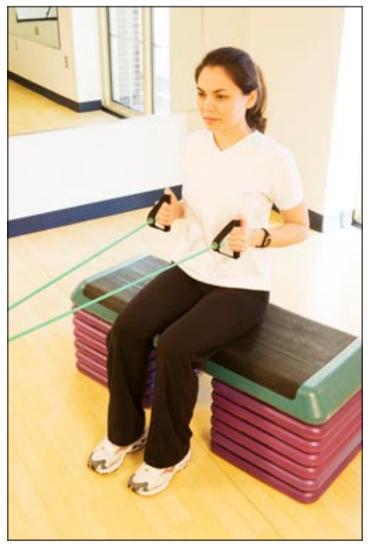


Important Note: This exercise may not be appropriate if you have neck, back, shoulder, or elbow problems. If you experience pain while doing this exercise, please DO NOT DO IT!



Step 1: From starting position, pull the tube toward the chest while squeezing the shoulder blades together. Keep your hands at chest height. (Exhale)

Step 2: Slowly relax your arms allowing them to stretch out to starting position. Pause at starting position before starting the next repetition. (Inhale)





Find the middle of the tube and stand on it with both feet. Move the feet farther apart to create more resistance. Hold the grips to the side of each thigh in a palms-up position. This exercise can be performed using one arm at a time or both arms at the same time. Step forward with your left foot when exercising the right side.

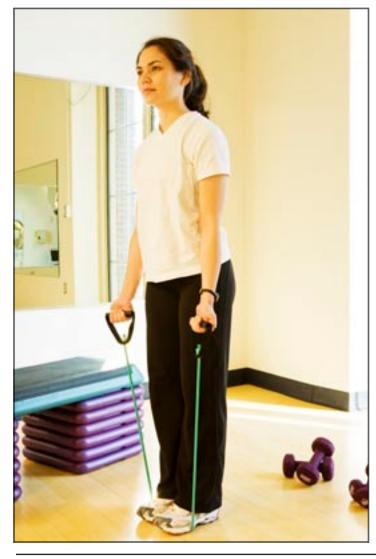


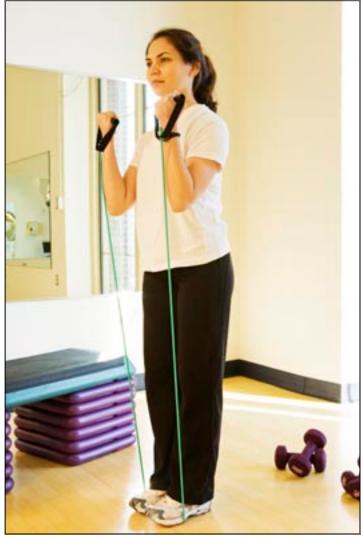


Important Note: This exercise may not be appropriate if you have shoulder, elbow, or wrist problems. If you experience pain while doing this exercise, please **DO NOT** DO IT!

Step 1: Slowly bend the elbows, bring your hands and forearms up toward the shoulders without curling the wrists. Keep your elbows tightly against your body through the exercise. (Exhale)

Step 2: Slowly lower arms back to starting position and repeat exercise. (Inhale)

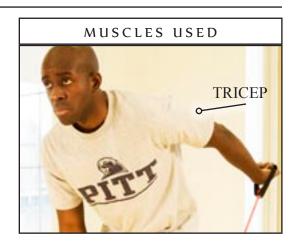




When performing the exercise on the left arm, step forward with your left foot while stepping on the middle of the tubing. Bring your left elbow up toward the ceiling to create a 90 degree angle. Make sure to keep your elbow tight to your side throughout the exercise. Step forward with your right foot when exercising the right side.



Important Note: This exercise may not be appropriate if you have shoulder, elbow, wrist, or lower back problems. If you experience pain while doing this exercise, please DO NOT DO IT!



Performing this Exercise

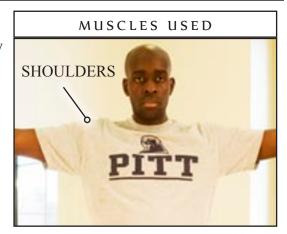
Step 1: From starting position, keep shoulder stationary and slowly straighten your arm. Movement should only come from your elbow. (Exhale)

Step 2: Slowly return to the starting position, pause, and repeat exercise. (Inhale)





Stand on the middle of the resistance tubing with feet approximately shoulder width apart. It is important that you have an equal amount of resistance tubing on each side. Grasp the tubing with palms and keep arms at your side. The exercise can be performed one at a time alternating the arms or at the same time.



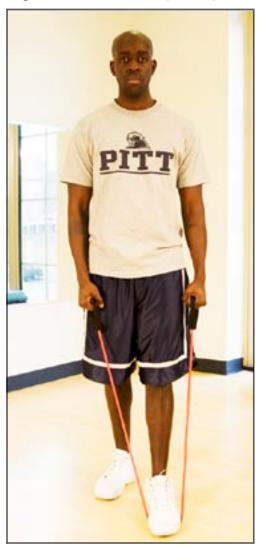


Important Note: This exercise may not be appropriate if you have shoulder, elbow, or wrist problems. If you experience pain while doing this exercise, please *DO NOT DO IT!*

Performing this Exercise

Step 1: From the starting position, slowly raise your arms out to the side until they are parallel to the floor to form a "T" shape with your body. Do not raise arms higher than shoulders. (Exhale)

Step 2: Slowly lower to starting position, pause, and repeat the exercise. (Inhale)





Sit with good posture on a chair or bench (back straight and stomach tight) with knees at 90 degrees. Keep your feet about shoulder width apart. Secure one end of the tubing to the rear leg of the chair or the bottom of a door. Secure the other end of the tubing to your ankle.



Important Note: This exercise may not be appropriate if you have knee or hip problems. Additionally, if you have <u>claudication problems or peripheral vascular disease (PVD)</u>, do not wrap or tie tubing any tubing around your leg or to your ankle. If you experience pain while doing this exercise, please *DO NOT DO IT!*



Performing this Exercise

Step 1: From the starting position, slowly lift foot off the floor, straighten your knee out in front of you.

Step 2: Slowly lower your leg back to starting position **(Inhale)**

Do not lock your knee. (Exhale)





Anchor tube securely around the leg of a chair, bottom of a door, or secure pole. You should be facing the anchor. Secure the other end of the tubing around the ankle of the exercising leg.



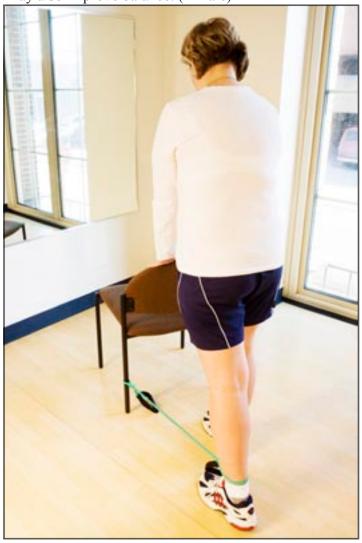


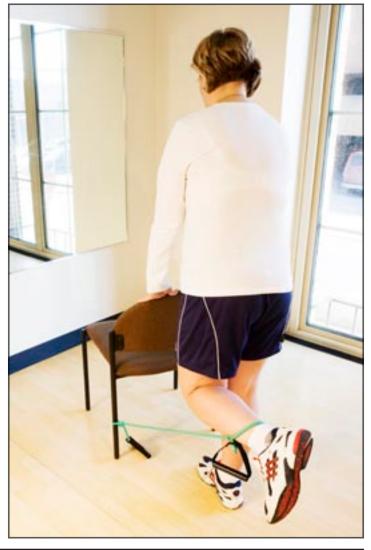
Important Note: This exercise may not be appropriate if you have knee or hamstring problems. Additionally, if you have <u>claudication</u> <u>problems or peripheral vascular disease (PVD)</u>, do not wrap or tie tubing any tubing around your leg or to your ankle. If you experience pain while doing this exercise, please *DO NOT DO IT!*

Performing this Exercise

Step 1: Keep the support knee slightly bent. From the starting position, bend the knee up toward the back of the thigh. You may hold onto a stable chair for stability. Keeping the hands on the waist as you become stronger may also improve balance. (Exhale)

Step 2: Slowly lower your leg back to starting position **(Inhale)**





CORE exercises and instructions

Lie flat on your back with your knees slightly bent and arms resting on your thighs.





Important Note: This exercise may not be appropriate if you have lower back, abdominal, or neck problems. If you experience pain while doing this exercise, please DO NOT DO IT!

Performing this Exercise

Step 1: Without moving the hips, curl upper body slightly forward and contract the abdominal muscles. Allow your hands to slowly slide up your legs as your curl forward, stopping when your hands reach your knee. In order to stabilize your neck, leave enough space between the chin and chest to fit an object the size of an orange or your fist. (Exhale)

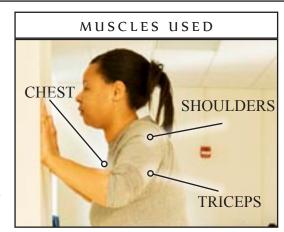
Step 2: Slowly return to starting position (**Inhale**)





Body Weight Free Weights exercises and instructions

Stand facing a wall with the feet shoulder width apart and approximately 6 to 12 inches away from the wall. Place hands on the wall at shoulder height and point fingers up.





Important Note: This exercise may not be appropriate if you have shoulder, elbow, or wrist problems. If you experience pain while doing this exercise, please *DO NOT DO IT!* If pointing fingers up causes wrist discomfort, you may point the fingers in any direction to relieve wrist discomfort.

Performing this Exercise

Step 1: From the starting position, bend your elbows and bring your chest toward the wall. You should allow your elbows to bend about 90 degrees. Make sure your chest and chin do not touch the wall. Support your back by keeping belly tight and body straight without bending at the hips. (Inhale)

Step 2: After pausing, slowly return to starting position by straightening your elbows. Do not completely straighten your elbows when returning to start position. (Exhale)

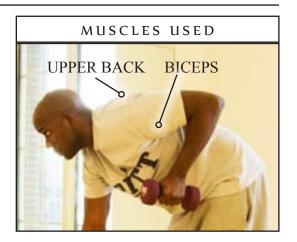




When performing the exercise on the left arm, place your right knee on a bench or chair. Place your left leg straight and slightly behind the chair or parallel to the bench. Grab the dumbbell in one hand and bend forward keeping your back level with the ground. Keep your non-working hand on the bench or chair for support. (Reverse for right arm).



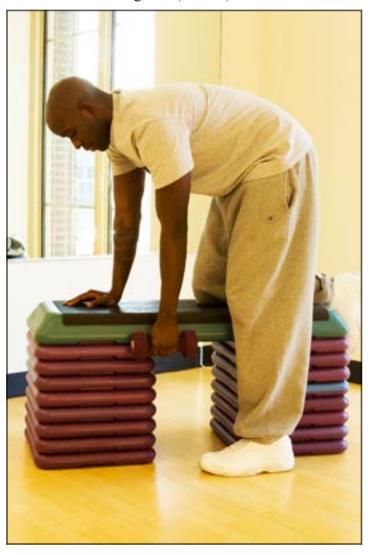
Important Note: This exercise may not be appropriate if you have neck, back, shoulder, or elbow problems. If you experience pain while doing this exercise, please *DO NOT DO IT!*



Performing this Exercise

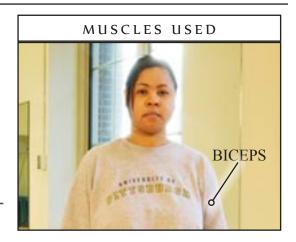
Step 1: From starting position, start with the weight down by your side keeping your palm facing your body. Slowly lift the dumbbell by your side until the elbow is bent 90 degrees. (Exhale)

Step 2: Slowly straighten your arm to the starting position. (Inhale)





Seated on a chair or standing comfortably with feet shoulder width apart and knees slightly bent, hold dumbbells by your sides with wrist in natural position.



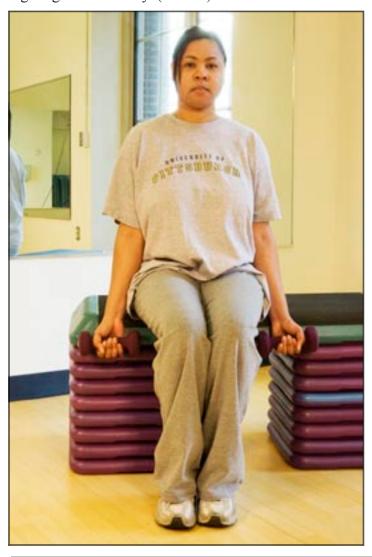


Important Note: This exercise may not be appropriate if you have shoulder, elbow, or wrist problems. If you experience pain while doing this exercise, please **DO NOT DO IT!**

Performing this Exercise

Step 1: From starting position, slowly bend the elbows, bringing the dumbbell up toward the shoulders keeping your wrists straight and elbows tight against the body. (Exhale)

Step 2: After pausing, slowly lower the dumbbells back to starting position. (Inhale)





When performing the exercise using the left arm, place your right knee on a chair or bench. Your left leg remains straight and slightly behind the chair or parallel to the bench. With the dumbbell in the left hand, bend forward slightly, keeping your back flat and stomach tight. Bring your left elbow up toward the ceiling, to create a 90 degree angle. (Reverse for right arm).



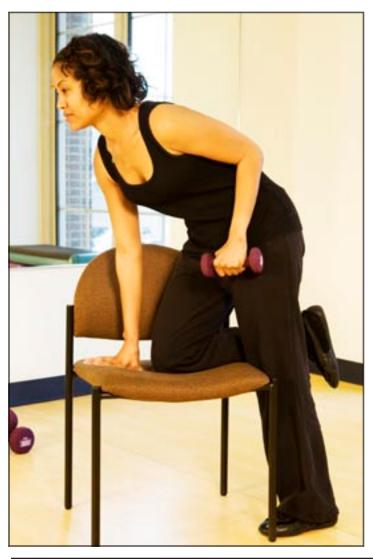
Important Note: This exercise may not be appropriate if you have shoulder, elbow, wrist, or lower back problems. If you experience pain while doing this exercise, please DO NOT DO IT!



Performing this Exercise

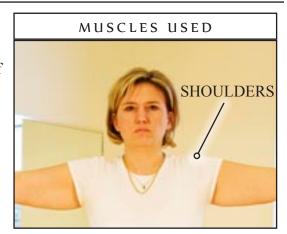
Step 1: From starting position, keep shoulder stationary and slowly straighten your arm. Movement should only come from the elbow. (Exhale)

Step 2: After pausing, slowly return to the starting position and repeat exercise. (Inhale)





Sit on a chair or stand comfortably with feet shoulder width apart and knees slightly bent. Allow dumbbells to hang down the sides of your body.



8

Important Note: This exercise may not be appropriate if you have shoulder, elbow, or wrist problems. If you experience pain while doing this exercise, please DO NOT DO IT!

Performing this Exercise

Step 1: From starting position, slowly raise your arms out to the side until they are parallel with the floor. You should form a "T" shape with your body. Do not raise arms higher than shoulders. (Exhale)

Step 2: Slowly lower your arms back to starting position.(Inhale)





Seated with good posture (back straight and stomach tight) with knees at 90 degrees.



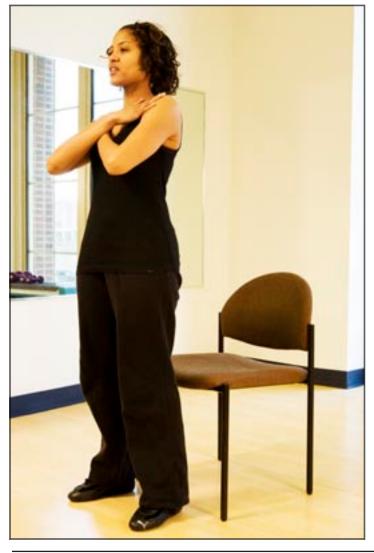


Important Note: This exercise may not be appropriate if you have lower back, knee, or hip problems. If you experience pain while doing this exercise, please *DO NOT DO IT!*

Performing this Exercise

Step 1: Keeping your hands folded across the chest, lean slightly forward and stand up. (Exhale)

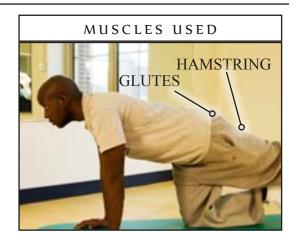
Step 2: Press your hips backward to return to chair. Do not lean too far forward when returning to the chair. Gently return to seated position. (Inhale)





PHYSICAL ACTIVITY RESOURCE CENTER FOR PUBLIC HEALTH

Kneel down on the floor placing your hands on the ground with elbows slightly bent supporting your upper body. Keep your back and stomach tight.





Important Note: exercise may not be appropriate if you have low back, adbdominal, hip, knee, or hamstring problems. If you experience pain while doing this exercise, please *DO NOT DO IT!*

Performing this Exercise

Step 1: From the starting position lift knee slightly off the floor. Kick foot back, ..straightening your leg so that it is parallel to the floor. Do not raise your leg any higher. (Exhale)

Step 2: Lower your leg until your knee is just about to touch the floor and repeat. (Inhale) Repeat exercise with opposite leg.





Example Training Programs:

Full Body Workout

This workout allows you to do a full body workout using all 8 exercises with a day of rest in between exercises. This workout should take you about 30 – 45 minutes per day to complete.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Full Body	Rest	Full Body	Rest	Full Body	Rest	Full Body
	Muscles		Muscles		Muscles	
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Rest	Full Body	Tuesday Rest	Full Body	Thursday Rest	Friday Full Body	Saturday Rest

Full Body = All 8 exercises

Chest Press, Upright Row, Bicep Curl, Tricep Kickback, Lateral Raise, Leg Extension, Leg Curl, Abdominal Curl Up

Upper/Lower Body Workout

This workout allows you to perform upper body and lower body exercises on alternating days. This workout should take you 20-30 minutes per day to complete. Be sure to rest your muscles about every 4-5 days.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Upper Body	Lower	Upper Body	Lower	Rest	Upper Body	Lower
	Body/Core		Body/Core	Muscles		Body/Core
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Sunday Upper Body	Monday Lower	Tuesday Rest	Wednesday Upper Body	Thursday Lower	Friday Upper Body	Saturday Lower

Upper Body = Chest Press, Upright Row, Bicep Curl, Tricep Kickback, Lateral Raise Lower Body/Core = Leg Extension, Leg Curl, Abdominal Curl Up

Triple Split Training Workout

This workout allows you to minimize your workout time by breaking your workout into shorter sessions of specific exercises. This workout should take you about 10-15 minutes per day to complete.

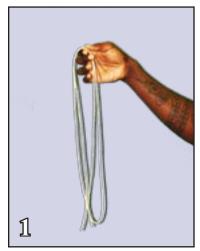
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Back & Bis	Chest& Tris	Lower	Back & Bis	Chest& Tris	Lower	Back & Bis
Shoulders		Body/Core	Shoulders		Body/Core	Shoulders
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Sunday Chest& Tris	Monday Lower	Tuesday Back & Bis	Wednesday Chest& Tris	Thursday Lower	Friday Back & Bis	Saturday Chest& Tris

Back & Bis = Upright Row, Bicep Curl, Lateral Raise

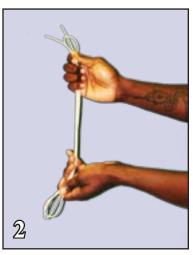
Chest & Tris = Chest Press, Tricep Kickback

Lower Body/Core = Leg Extension, Leg Curl, Abdominal Curl Up



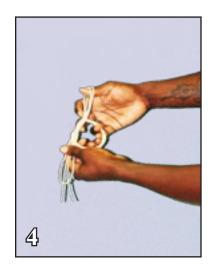


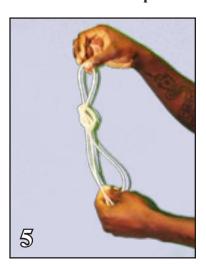
Step 1. Fold the rope in half

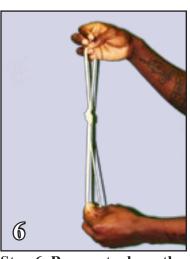


Step 2-5. With the rope doubled over, make a shoestring knot in the middle of the rope.

3







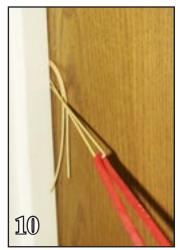
Step 6. Be sure to draw the knot tight.





Steps 7 & 8. Place the knot of the rope in the hinge of the door. Be sure that the knot is behind the hinge so when the door is shut, the rope stays firmly in place.





Steps 9 & 10. Place resistance tube through the door attachment loop to perform your exercise.

The contents of this packet were developed by the following individuals:

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