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Increasing Physical Activity As We Age

Strength Training With Stretch Tubes

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The goal of strength training is to grow stronger. Strength training takes place when we work the skeletal muscles of our bodies harder than they are used to. Strength training increases strength, aerobic endurance and muscle mass.

Sarcopenia is the technical term researchers have given to describe loss of muscle, strength and quality of muscle tissue. Sarcopenia is often seen in older adults. Some experts have suggested that muscle mass declines about 1 percent each year beginning at about age 30. Although there are still many questions remaining about muscle loss and aging, we know that muscle-building exercises can improve strength in most older adults while a sedentary lifestyle contributes to muscle loss. To keep from losing muscle mass, the recommendations are to do strengthening exercises for all of your major muscle groups at least twice a week; however, do not do strength-training exercises of the same muscle group on any two days in a row.

Most people think of strength training as lifting free weights (such as barbells and dumbbells). This is called isotonic strength training – contractions in which a muscle shortens against a constant load or tension resulting in movement – but there are many ways to strength train. Isometric strength training – sometimes referred to as "static" – is where the muscle develops tension but does not shorten. Attempting to pick up the chair you are sitting in or standing with each hand on opposite sides of a doorway attempting to push down the wall are examples of isometric strength training. But even with isotonic strength training, there are other options besides free weights. You can use your own body weight for resistance, such as in push-ups, or other variable-resistance fitness equipment, such as stretch bands and exercise tubes.

Resistance Bands Versus Resistance Tubes

The terms **resistance bands** and **resistance tubes** are often used interchangeably.

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They both can substitute for free weights or machines to help you build muscle strength and bone density. Both resistance bands and tubes are color-coded based on the level of resistance. However, there is not an industry standard on colors, and all companies label and color code their bands differently. Both are used in the same way, the difference is in their shape.

Resistance bands (sometimes called flat bands or stretch bands) are stretchy elastic bands that range in width from 2 to 6 inches. Resistance bands can be bought on a roll and cut to your preferred length, but you will most likely buy them precut. Precut lengths usually run from 3 to 6 feet. The level of "resistance" offered in the bands ranges from extra-light to extra-heavy. Many contain latex, so be sure to check the packaging for latex-free if you have an allergy.

Resistance bands in rolls

Resistance band precut

Exercise resistance tubing (sometimes called resistance bands, exercise bands, fit tubes, exercise tubes or other similar names) consists of elastic tubes with handles. The design is simply a long, plastic or rubber tube that is hollow inside and made of a very sturdy, yet somewhat pliable material. The tubes come in various thicknesses to increase the tension. The handles are usually in a triangular shape and can be hard plastic or padded. Although resistance tubes also come in a variety of resistance levels, the elastic properties of the tubing gives varying levels of intensity with the same tube.

Resistance tube

Why Use Resistance Tubes?

Resistance tubes offer numerous exercise options. The resistance tube can be used by itself, with a partner or with an anchor to add additional exercise options. Whether being used for adding muscle tone, muscle strength, burning fat or simply increasing flexibility, resistance tubes are a very easy way to add something different to your daily exercise routine or to start a workout routine.

There are many advantages to using resistance tubes:

- They are very effective in strength training exercises.
- They can be used almost anywhere: home, office and outdoors.
- They are portable and storable: they take up little space and are lighter than free weights.
- They are more affordable than free weights.
- They are durable.
- They are versatile.
- They are relatively safe.

There are, however, some disadvantages to using resistance bands as compared to free weights. It's almost impossible to know precisely how much weight you are lifting in contrast to free weights. As they age, resistance bands lose some of their elasticity. If the bands are rubbed against a sharp object, they may snap. There is not as much research to back their effectiveness compared to free weights.

Tips for Buying Resistance Tubes

Resistance tubes should be bought based on a few different criteria: how much resistance they give, how long they are and, of course, what sort of handles they have.

Selection Criteria for Resistance Tubes
Resistance Level
Length
Choice of Handle

Other tips for buying resistance tubes include:

- **Buy a variety of tubes**. It's best to have at least three – light, medium and heavy – since different muscle groups will require different levels of resistance.
- **Buy comfortable, easy-to-use tubes.** Some tubes you find in stores offer interchangeable handles (which means you have to take them off and on to use different tubes), and some have handles that are larger than normal or made of hard plastic.
- **Buy accessories.** One key to using tubes is having different ways to attach them. Examples of accessories include door attachments, ankle cuffs and different handles.
- **Keep it simple.** As with the accessories, there are multiple options when it comes to the tubes themselves. Examples include figure 8s, double bands and circular bands. When you first start tubing, stick with the basic long tube with handles. You may want to buy other types later for variety.

Resistance Tubing Safety Tips

As with all forms of exercise, there is some risk of injury. Use the following tips to help keep you safe while you work out:

- Check for holes or worn spots in the tubing. Replace the tube if you see any tears.
- Do your workout on carpeting, wood floors or grass. Abrasive surfaces, such as asphalt or cement, can tear your tube.
- Wear comfortable, supportive, closed-toed athletic shoes.
- Make sure the tubing is secured underfoot or on an anchor before you begin each exercise.
- Make sure you have a secure grip on the handle before you begin an exercise.
- Maintain good posture throughout each exercise: Keep your knees slightly bent, your abdominal muscles pulled in and your chest expanded.
- Perform the exercises in a slow and controlled manner, to work against resistance both when you pull on the tube and when you return to the starting position.

Using Resistance Tubes and Bands

Before you can begin to exercise with stretch bands or resistance tubes, you first need to know how to hold them.

Hand Holds

To hold a stretch band:

1. Lay the band flat in your hand with the end toward your pinky finger.
2. Wrap the long end of the band around the back of your hand.
3. Grasp firmly.

Wrapping a resistance band

Resistance tubes differ from stretch bands in several ways – one of which is that they have handles. Be sure to hold on to the handle so it does not slip out of your hand.

Standard Hold – Grasp the handle with a firm grip. Four fingers wrap around one side, and the thumb comes across from the other. Resist the temptation to excessively squeeze the handle.

Choke Hold – In some instances, the stretch tube may be too long to properly perform the exercise. When this occurs, simply loop the tube around and lay it beside the handle. Grasp both the handle and the tube together.

Foot Holds

When performing exercises using the feet as the anchor point for the stretch tube, it is very important that the tube does not slip out from under your feet. This could cause the tube to snap up like a rubber band and possibly hit you.

The way you stand on the stretch tube will affect the tension in the tube. Typically, an exercise will call for you to step in the middle of the tube with feet hip width apart. Only standing with one foot offers the least resistance, while standing with feet further than hip width apart, a wide stance, offers more of a challenge.

One foot

Two feet

Wide stance

Sometimes an exercise with a stretch tube will ask you to place the tube around your ankle. There are accessories available, but if you have not bought an ankle cuff, you can simply thread one end of the resistance tube through the handle of the other end to make a loop. Place this loop around your ankle and pull tight.

Ankle cuff

Threading one handle through the other

Placing foot through loop

Exercise Routine

Shoulders

Overhead Press

1. Step on the tube with both feet (or one foot if needed) and knees slightly bent. Curl your palms towards your shoulders, then rotate them to the front – palms facing forward and raise your elbows to a 90 degree bend.
2. Press your arms overhead until your elbows are straight, keeping your shoulders pulled down away from your ears.
3. Lower your elbows until hands are at shoulder height. Repeat.

Front Lateral Raise

1. Step on the tube with both feet. Hold the handles with your palms facing back, thumbs rotated slightly forward. Pull your shoulders back and down.
2. Raise both arms directly in front of your shoulders with your arms straight. (May do one arm at a time.)
3. Lower arms to starting position. Repeat.

Up-Right Row

1. Step on the tube with both feet holding the handles with your palms facing your legs. Rotate your thumbs slightly forward.
2. Lean slightly forward to enable your arms to be vertical during the exercise. Raise your elbows towards the ceiling keeping your wrists in a neutral position. Pause when your elbows are slightly above shoulder height. Elbows are also above hand height.
3. Lower arms back to starting position. Repeat.

Arms

Biceps Curl

1. Step on the tube with both feet and knees slightly bent. Rotate your palms outward so that your thumbs face away from each other.
2. Pull your hands towards your shoulders, stopping when your hands are approximately a fist's distance away from your shoulders.
3. Lower your arms slowly to the starting position keeping your elbows still. Repeat.

Triceps Kickback

1. Step on the tube with one foot. Step back about 2 feet with the opposite foot. Keep your knees bent.
2. Bend forward with a neutral spine. With one arm at a time, using the arm on the same side of your body as the foot holding the tube, put your elbow at your waist. Keep your upper arm stationary as you extend your lower arm until your elbow is straight.
3. Return your elbow to a 90 degree bend. Repeat.
4. Repeat the exercise with the opposite arm holding the tube with the opposite foot.

Wrist Curl

1. While sitting in a chair, step both feet on the tube with one handle in each hand. Lean forward slightly so that the backs of your forearms are resting on your thighs, palms up.
2. Curl your knuckles back towards your elbow while keeping your arm stationary on your legs.
3. Lower and repeat.

(This exercise can be performed while standing. Place both feet on tube. Bend your elbows to 90 degrees, palms up. Curl your knuckles towards your elbows without moving the rest of your arm. Lower your wrists slightly lower than your arms' height. Repeat.)

Legs

Leg Press

1. Sit upright in a chair. Wrap the tube around one foot and hold a handle in each hand. Leave the foot without the tube placed flat on the floor. Hold your arms at a 90 degree angle at your waist, palms facing each other.
2. Bring the knee of the foot with the tube up towards your chest.
3. Press your leg forward in a natural alignment while keeping the tube handles tight with your arms at your side.
4. Bring the knee back up towards your chest and repeat.
5. Repeat the exercise with the opposite leg.

Calf Raises

1. Step on the tube with both feet, making sure the tube is under the ball of your foot. Hold one handle in each hand.
2. Raise up on the balls of your feet, like you are standing on your tiptoes. Pull the tube with you to create extra resistance.
3. Lower your heels slowly to the floor. Repeat.

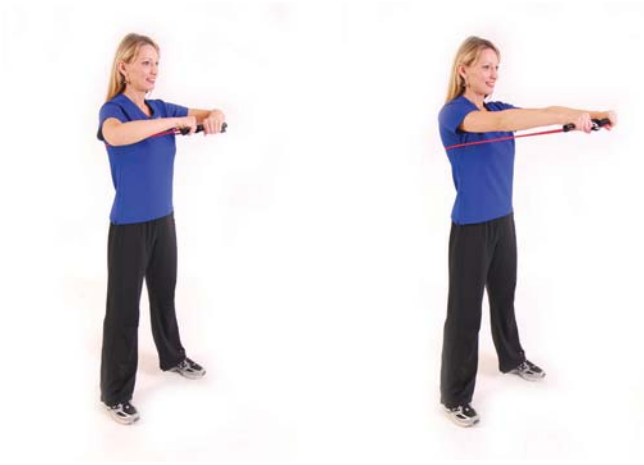
Side Hip Raise

1. Thread the handle of one end of the tube through the handle of other end to make a loop. Place your right foot through the loop and secure slightly above your ankle.
2. Step on the tube with the left foot and hold the free handle in your left hand.
3. Stand tall as you shift your weight to your left leg. Raise your right leg 6 to 8 inches off the floor, toes facing forward.
4. Resist the pull as you slowly lower the right leg back towards the floor. Repeat.
5. Change the loop from the right leg to the left leg and repeat on the opposite side.

Chest

Chest Press

1. Place the tube around your back just slightly under your armpits. Place one handle in each hand.
2. Bring your arms up to chest level with elbows bent at a 90 degree angle, parallel to the floor, with palms facing down. (You may need to "Choke Hold.")
3. Press the handles forward, palms down, until your arms are straight.
4. Bend your elbows back to a 90 degree angle while keeping the arms parallel to the floor. Repeat.



Chest Fly

1. Place the tube around your back just slightly under your armpits. Place one handle in each hand.
2. Bring your arms out to your side, parallel to the floor with palms facing forward.
3. While keeping your elbows slightly lower than your shoulders, bring your hands towards each other without bending at the elbow. Try to maintain a slightly rounded arm position as you close your arms towards each other. Pause.
4. Open your arms until your elbows are even with your shoulders. Repeat.

Back

Seated Row

1. Sit in a sturdy chair. Wrap the tube around both feet and hold the handles with your thumbs up and with slight tension in the tube. (You may need to use the "Choke Hold.") Legs are stretched out in front, resting on your heels, flex your feet.
2. Pull your shoulders back bringing the handles back as far as you can without moving your torso.
3. Return to straight arms and repeat.

Dead Lift

1. Step on the middle of the tube with both feet. Start with a fair amount of tension in the tube. (May need to "Choke Hold" the tube or widen your stance with your feet.)
2. Stand upright and tuck your hips under you.
3. Bend at the waist until you reach a table top position, body parallel to the ground.
4. Slowly raise to standing position. Repeat.

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