

# Banding Together for Strength

Patricia A. Hageman, Director of Physical Therapy Education,  
University of Nebraska Medical Center

Linda S. Boeckner, Extension Nutrition Specialist, University of Nebraska–Lincoln

There are a variety of devices and methods that help improve strength. *Banding Together for Strength* offers the convenience of doing strengthening activities:

- in your own home,
- without the need to purchase expensive or cumbersome equipment,
- as a routine set to music,
- that are flexible so you can change (increase or decrease) your level of resistance.

## Getting Started: The Elastic Band Basics

- **You will need elastic bands.** The bands come in different colors; each color representing a different level of resistance. It is common to use one color for upper body exercises and another for the lower body. Begin with a level that provides some resistance as you repeat the exercise. For each exercise, try completing as many repetitions as you comfortably can up to 15. When starting a new exercise or a new band color you may be able to perform only a few repetitions — this is normal. Once you are able to *easily* perform 15 repetitions of an exercise, it is time to move up to the next level (or color) of resistance band.
- **Measure the elastic band to fit you.** Take one end of the elastic band and tie it into a knot with a loop on the end. Hold the knot in your outstretched arm while holding the band tight (but not stretched) to the tip of your nose (as you look forward). Tie a looped knot at the point of the band where it touches the tip of your nose. Clasp your hands around the knot or insert a hand or foot in the loop to complete each exercise.

**Optional:** *Banding Together for Strength* DVD (30 minutes, for women)

Order from Wellness for Women,  
College of Nursing  
University of Nebraska Medical Center  
986330 Nebraska Medical Center  
Omaha, NE 68198-5330

Price: \$16.05 (including tax).

Make checks payable to: UNMC  
College of Nursing

## Exercise Tips

- **Warm up and cool down!** It is important to do activities that warm up your body before performing resistive band exercises. Examples include five minutes of brisk walking or cycling, or stepping in place. The key is to use the large muscle groups of your upper and lower body. During warm up, move all the joints in your body through their range-of-motion gently, but avoid rigorous stretching. Sustained stretching is best performed slowly at the end of your activities during a five-minute cool down period.
- **Be safe!** Wait at least one hour after eating before doing resistance training. Perform warm-up activities before doing resistance training. Pay close attention to your body positioning. Using correct form is more important than increasing your level of resistance. If you have persistent pain or shortness of breath occurs, consult with your doctor.
- **To see gains in muscle strength,** perform strength training activities at least twice per week for a



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

University of Nebraska–Lincoln Extension educational programs abide with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.

© 2007, The Board of Regents of the University of Nebraska on behalf of the University of Nebraska–Lincoln Extension. All rights reserved.

minimum of 15 minutes, with a day of rest in between sessions.

A session of strength training consists of a minimum of 15 minutes of activity and completing at least 6 to 15 repetitions of each exercise. At least four exercises for upper body and four exercises for lower body strengthening should be performed during one session.

If you choose to do the exercises without the video, the routine may take less time because you will not have to wait for the instructor on the video to explain each exercise. Do not speed up the pace of the exercises; a slow, sustained pace is safe and effective for building muscle strength.

## Lower and Upper Body Exercises

Generally doing at least four exercises that challenge the major muscles of your lower body and at least four exercises for your upper body will be sufficient to increase your strength. Examples of upper and lower body resistive band exercises follow. To complete these exercises you will need a stable, armless chair.

### Lower Body Exercises

<b>1) Sit-To-Stand</b>	<ol style="list-style-type: none"> <li>1. While seated on the edge of the chair, place the knotted ends of band in each hand.</li> <li>2. Place the middle part of the band under both feet.</li> <li>3. Keeping your hands at your waist, rise from the chair to a full stand then sit back down.</li> <li>4. Repeat until you feel fatigue or until you perform 15 repetitions.</li> </ol>
<b>2) Leg Press</b>	<ol style="list-style-type: none"> <li>1. Sit slightly forward in the chair, place the knotted ends of the band in each hand.</li> <li>2. Place the middle part of the band under your right foot.</li> <li>3. With hands at your waist, start by lifting your right leg, keeping it in a bent knee position. Then extend the leg fully in front of you (stretching the band).</li> <li>4. Return to bent knee position.</li> <li>5. Repeat until you feel fatigue or until you complete 15 repetitions. Repeat activity with left leg and foot.</li> </ol>
<b>3) Side-Step</b>	<ol style="list-style-type: none"> <li>1. Stand sideways by the back of the chair for balance (if needed). Place the knotted ends of the band in each hand.</li> <li>2. Place the middle part of the band under the foot that is farthest from the chair.</li> <li>3. Continue to hold the knotted ends of the bands and place your hands at your waist, with your elbows bent and to the side.</li> <li>4. Step the banded foot and leg to the side, while leaving your hands at waist position.</li> <li>5. Step back to the start position.</li> <li>6. Repeat until you feel fatigue or until you complete 15 repetitions.</li> <li>7. Repeat using opposite leg (requires you to turn around).</li> </ol>
<b>4) Heel Rise</b>	<ol style="list-style-type: none"> <li>1. No band needed. Stand beside the chair back or a high counter, lightly touching the counter or chair back for balance.</li> <li>2. Start with feet slightly apart.</li> <li>3. Put your weight on your toes and lift your heels off the ground. Do not bend knees, lean forward, or push on chair.</li> <li>4. Go up and down on your toes until you feel fatigue or until you complete 15 repetitions.</li> <li>5. As you gain strength, try heel raises using one leg at a time (keeping opposite leg bent).</li> </ol>

## Upper Body Exercises

<b>1) Seated Row</b>	<ol style="list-style-type: none"> <li>1. Sit on the chair, place knotted ends of band in each hand.</li> <li>2. Place the middle part of the band under both feet, with legs bent at your knees.</li> <li>3. In a rowing motion, pull arms back, squeezing your shoulder blades together. Return to start.</li> <li>4. Repeat until you feel fatigue or until you perform 15 repetitions.</li> </ol>
<b>2) Bicep Curls</b>	<ol style="list-style-type: none"> <li>1. Sit on the chair, place the knotted ends of band in each hand.</li> <li>2. Place the middle part of the band under both feet and then stand up.</li> <li>3. With arms extended down at your sides, grip knotted ends of the band with palms facing forward.</li> <li>4. Bend your elbow up and down, pulling and releasing the tension on the elastic band as your work.</li> <li>5. Repeat until you feel fatigue or until you perform 15 repetitions.</li> </ol>
<b>3) Tricep Wave</b>	<ol style="list-style-type: none"> <li>1. While standing, place one knotted end of the band under your right foot and grab the other knotted end of the band with your left hand.</li> <li>2. Start with elbow bent and left hand facing palm away from your body, straighten your elbow and arm up and out, like a wave to a friend!</li> <li>3. Return to start.</li> <li>4. Repeat until you feel fatigue or until you perform 15 repetitions. Repeat with left foot and right hand.</li> </ol>
<b>4) Front Pull Down</b>	<ol style="list-style-type: none"> <li>1. While standing, place the knotted ends of band in each hand.</li> <li>2. Raise arms over head in a V-formation, keeping the band tight but not stretched.</li> <li>3. Keeping arms straight, lower each arm to each side while pulling band down in front of your face to shoulder level. Be careful to keep band away from your face.</li> <li>4. Return to start.</li> <li>5. Repeat until you feel fatigue or until you perform 15 repetitions.</li> </ol>

### Frequently Asked Questions about Strength Training

• **Should I expect sore muscles?**

Some mild muscle soreness is likely one to two days after your workout. This is more likely to occur when starting a new exercise, when increasing your repetitions of an exercise or when changing to a higher band resistance. Mild muscle soreness is normal.

• **What should I do to prevent or relieve muscle soreness?**

Be sure to do activities that warm up your body prior to strength training. Slow gentle stretching of your sore muscles may relieve some of the discomfort. If the soreness persists after 48 hours, try completing fewer repetitions or lowering your level of resistance for particular exercises. If the soreness after a single bout of exercise seems

persistent (greater than 72 hours) or if you experience sharp pain, contact your physician. There are many different ways or exercises to strengthen a given muscle. If a specific exercise seems to consistently irritate a joint, avoid that exercise.

• **Will the exercises make me tired?**

You might feel a bit fatigued after a strength training session. Be sure to do the warm up and cool down activities before and after each session. Most people who stay with their strengthening program report they can do more daily activities with less effort, plus they have more energy!

• **How quickly can I expect to see a difference?**

If you stay with strength training at least 15 minutes twice per week, gains in strength are noticeable as early as six weeks. Women will find tone and firmness with muscle strengthening, without adding bulk.

. **If I have arthritis, can I participate in strength training activities?**

Many studies show that strength training helps decrease the pain of moderate to severe osteoarthritis by increasing muscle strength. Persons with arthritis who strength train may gain more function and improve the clinical signs and symptoms of arthritis. Similar effects of strength training have been found among patients with rheumatoid arthritis. If you have any doubts about your health condition and strength training, consult your physician.

. **What other options and resources are available about strength training?**

If you faithfully participate in the same exercise routine over a longer period of time (greater than three months), you may find it helpful and reinvigorating to try a new exercise routine. A fitness or sporting goods store may carry different strength training exercise tapes and/or other types of resistance options (elastic tubing, cuff weights, weight training equipment). If available and

affordable, you may enjoy joining a local gym or fitness center that can offer other forms of resistance training. If you have access to Internet, you may find these additional resources helpful:

**HealthierUS.gov** is a Web site that provides credible, accurate information to help readers live a healthier life. When you arrive at the Web site, click on the “Physical Activity” button.  
*www.healthierus.gov*

**American College of Sports Medicine** has a mission to “promote and integrate scientific research, education, and practical applications of sports medicine and exercise science to maintain and enhance physical performance, fitness, health, and quality of life.” Publications prepared for the public are available. *www.acsm.org*

**Centers for Disease Control and Prevention** includes Web pages on physical activity. The Growing Stronger: Strength Training for Older Adults program contains information and instructions for strength training. *http://www.cdc.gov/nccdphp/dnpa/physical/growing\_stronger/index.htm*