

A Strength, Balance, and Fitness Class for Adults 65+

Class Exercise Guide





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Acknowledgments

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Introduction

Exercise that improves strength, balance, and fitness is the single most important activity that adults can do to stay active and independent, and to reduce the chances of having a fall. Falls among older adults are the leading cause of injury hospitalization in Washington State and the U.S. Many falls in adults age 65 and older are caused by gradual physical changes in muscle strength, balance, vision, and walking ability due to aging, along with health changes related to chronic health conditions, and medication side effects and interactions.

Stay Active and Independent for Life (SAIL) is a strength, balance, and fitness class for adults 65 and older. This SAIL Class Exercise Guide was developed as a result of the Washington State Department of Health's Senior Falls Prevention Study, which was funded by the Centers for Disease Control and Prevention. It is intended for participants in the SAIL exercise classes who want to exercise at home after they have learned how to do the exercises correctly in a class. This guide includes the most important exercises in the SAIL exercise program. You can also use this guide to review your questions about exercise with your exercise instructor and/ or health care provider. A companion guide, *Stay Active & Independent for Life: An Information Guide for Adults 65+,* is available through the Washington State Department of Health, Publication 341-013.

This Exercise Guide is not intended for starting a home exercise program, without first learning the exercises in a SAIL exercise class. Resources for home exercises are listed on page 62 of this guide, as well as in the References on page 63.

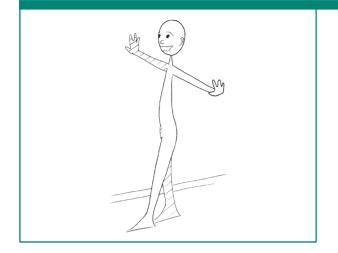
The exercises in the SAIL exercise program can help improve strength, balance, and fitness if done regularly, at least two times per week. It is important that you consult with your health care provider(s) if you have any health concerns related to exercise before starting an exercise program. You should also talk with your health care provider if you have any new health changes or concerns at any time after starting an exercise program. Please read the first two chapters carefully. Remember, this book cannot replace the advice of a health care provider who knows you personally. The authors and publishers assume no liability in connection with the exercises in this publication.

The four most important things you can do to prevent falls are:

- 1. Begin a regular exercise program.
- 2. Make your home safer.
- 3. Have your health care provider review your medicines.
- 4. Have your vision checked.

Part I. Getting Ready to Exercise

Chapter 1. Building Your Exercise Plan



Exercise Is Important for Adults 65+

As we get older, doing regular strength, balance, and flexibility exercises protects our health and independence, and helps prevent falls. Regular exercise is a great way to relieve stress, sleep better, get more energy, and grow stronger.

Making exercise a regular habit takes motivation, commitment, and effort. It's okay if you can only exercise one or two times a week at first.

Choose the Right Exercise Plan for You

Always talk to your health care provider about what kinds of exercise are best for you and about specific exercise instructions, especially if new health problems occur.

To reduce falls, healthy older adults are encouraged to do strength, balance, and flexibility exercises three times a week and aerobic activities three to five times per week. It's often easier to make exercise a habit if you have an exercise buddy or attend a class—experiment to find what works for you. If some exercises cause pain, talk to your exercise instructor and your health care provider.

If you have musculoskeletal health problems (back problems, arthritis, fibromyalgia, or injury), ask your health care provider for a physical therapy referral for evaluation and exercise instructions. Medicare covers this.

If you have a heart or lung problem, ask your health care provider for a cardiac or pulmonary rehabilitation referral to learn about exercise programs that are safe for you—many hospitals have outpatient rehabilitation programs.

You can learn how to exercise safely with most health conditions by working with your health care provider and by reading about your health conditions in expertwritten health books, magazine articles, and Internet websites.

Use our Are You Ready to Start or Return to Exercise? quiz at the end of this chapter to evaluate yourself.

Start Exercising and Stay with It

Think of exercise and physical activity as fun and healthy. Make daily physical activity a routine habit, just like meals and medications. It's the best "health insurance" for keeping yourself healthy, active, and independent. Use the Your Exercise Plan form at the end of this chapter to create the plan that's right for you.

- Think about it, talk about it with others, and then make a plan.
- Identify your best time(s) of day to exercise: morning, afternoon, or evening.
- Identify the best place(s) for you to exercise: home, neighborhood, senior center, community group, gym, etc.
- Identify the best activities for you, such as walking, swimming, biking, dancing, or exercise classes. Think about physical activities you enjoyed as a child, teenager, and young adult. How can you incorporate those activities into your life now?
- Put exercise on your schedule and make it a priority: walk the dog, dance, swim, etc.
- Find others who are interested in exercising—or are already

Common Excuses

- Fear due to health problems
- Lack of interest in exercise
- Don't know how to get started
- Feeling overwhelmed
- Don't want to exercise alone; don't know anyone to exercise with
- Limited time, money, or transportation
- No safe or convenient place to exercise

for Not Exercising

exercising—to help you stay motivated.

- Talk about exercise with your friends and family. Find ways to use exercise as a social activity with them in addition to eating out, shopping, movies, etc.
- Set personal goals for the short term (daily, weekly) and long term (monthly, seasonally, yearly).
- Start slowly, progress slowly, be consistent, and plan ahead. It takes about a month to make exercise a new habit.
- Keep a record and track your progress (make an exercise calendar, journal, etc).
- Be realistic about relapses— it's normal to get off-schedule sometimes. Identify and understand the reason (health change, stressful event, schedule conflict, travel, change in season, etc.).
- Be easy on yourself. Don't give up—make a plan to start again!

Exercise Should Not Be Painful

Exercise should not cause pain. Always listen to your body to know how long to exercise, how hard to exercise, and how many repetitions to do. If any new pain lasts more than one or two weeks, talk with your instructor and your doctor.

If you feel pain when you use weights, use less weight or stop. If you feel pain from an exercise class, talk with your instructor and your doctor. If the pain continues or increases, you may need a gentler form of regular exercise. There are many types of exercise available and it's worth it to find the one that's right for you.

Stay Strong with Weights

As we grow older, our muscles become thinner and weaker with age. The good news is that we can build and maintain muscle size and strength with strengthening exercises—exercises that use weights. There are several types of exercise weights: hand weights, strap-on ankle and wrist weights, and weight machines.

It's important to use weights regularly (at least 15 minutes, two or three times a week) for your arms, legs, and abdominal muscles to build and maintain your overall muscle strength, which helps your balance, flexibility, and walking ability, and helps prevent falls.

If you have never exercised with weights before, take the time to learn what type(s) of weights are best for you, and how to use them safely on a regular basis. You can get training from a fitness instructor, a trainer at a fitness center, or a physical therapist (with a referral from your health care provider). You can also get information from your local library or the resources listed in this chapter.

Include Balance in Your Exercise Plan

Balance is an important part of everyday activities, such as walking, getting out of a chair, getting dressed, leaning over to pick up a grandchild, or reaching up to put dishes or groceries onto shelves. Balance problems can reduce your independence in daily life activities, and lead to falls and a fear of falling. The good news is that exercise can significantly improve your balance and reduce your risk for falls.

Your balance is a system of parts that work together. The balance system involves three main parts:

- your sensory systems (vision, inner ear, and sense of touch in your skin, muscles, and joints), which provide information about your body's position and movement in your environment;
- 2. your brain's ability to process this information;
- your muscles and joints, which provide the flexibility, strength, and endurance to coordinate the movements required to safely maintain your balance.

To improve your balance, start doing balance exercises at least two or three times per week. Some of these exercises can be practiced at any time, as long as you have something sturdy (like a kitchen counter) to hold onto:

- Stand heel-to-toe. Put your heel in front of the toes of your other foot each time you take a step. Your heel and toes should touch or almost touch.
- Walk heel-to-toe. Position your feet as you did for standing heel-to-toe, but walk forward so that your heel almost touches the toes.
- Stand on one foot (while washing dishes, brushing your teeth, waiting in line at the grocery store or at the bus stop, etc.). Change feet.
- Stand up and sit down without using your hands.
- March in place, slowly lifting each knee up as high as you can.

You can also protect your balance by:

- Protecting your vision with vision exams at least every two years.
- Scheduling a hearing test at least every two years if you have any hearing loss.
- Doing regular muscle strengthening exercises at least two or three times a week with arm and leg weights, exercise classes that use weights, or weight machines at fitness centers. You can also lift weights at home.
- If you have hearing loss that can be treated with hearing aids, learn as much as you can about how to best adjust and use them. Wear hearing aids in both ears if your doctor or audiologist advises it, because this helps improve your balance.

Exercising in Group Classes

Group exercise classes are often more fun than exercising alone. They provide extra motivation from other people, more friends, and more support to keep exercising. If an exercise is difficult or painful, an instructor is available to help. You can often find group exercise classes at senior and community centers, YMCAs, parks and recreation facilities, churches, indoor malls, and community colleges.

The Five Stages of Exercise

- 1. I am not exercising now, and I don't want to start!
- 2. I am not exercising now, but I am thinking of starting soon.
- 3. I am not exercising now, but I will start this month.
- 4. I am exercising now.
- 5. I have been exercising for the past six months.

Where Are You



Are You Ready to Start or Return to Exercise?

The purpose of this quiz is to help you decide whether it's safe for you to start an exercise program, or to return to exercise after a health-related absence.

Section 1. Rate Your Health

Please answer these questions first:

1.	Has your doctor or other health care professional told you NOT to exercise, or told you that you must restrict your activity?	O Yes	O No
2.	Is PAIN preventing you from exercising?	O Yes	O No
3.	If you answered YES to question 2, please circle the number that describes your pain on a scale of 0 (no pain) to 10 (severe	pain):	

03	67-	8910
No pain	Medium pain	Severe pain

4. If you answered YES to question 2, did you rate your pain O Yes O No at 5 or higher?

If you answered YES to ANY of the questions in Section 1, you may not be ready to start or return to an exercise program. Please discuss exercise with your doctor.

If you answered NO to ALL of the questions in Section 1, please go to Section 2.

Section 2. Rate Your Abilities

Can your body do the following activities?

5.	Can you dress and bathe/shower without the help of another person?	O Yes	O No
6.	Can you prepare or obtain your own meals?	O Yes	O No
7.	Can you do your usual household chores? (such as cleaning, laundry, gardening)	O Yes	O No
8.	Can you use the telephone? (including looking up numbers, dialing, and answering)	O Yes	O No

9. Can you do your own errands and shopping? O Yes O No

If you answered YES to AT LEAST THREE of the questions in Section 2, please go to Section 3.

If you answered NO to AT LEAST THREE of the questions in Section 2 because of your health, you may not be ready to start or return to an exercise program. Please discuss exercise with your doctor.

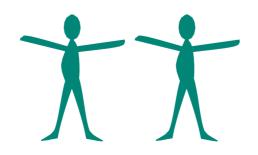
Section 3. Rate Your Strength and Walking Ability

Please answer these last questions:

10.	Can you walk without the help of another person? (It's okay to use a walker or cane.)	O Yes	O No
11.	Can you get up from a chair that doesn't have arms without the help of another person? (It's okay to use a walker or cane.)	O Yes	O No
12.	Can you drive or arrange your own transportation when needed?	O Yes	O No
13.	Can you leave your home for one hour or more for an activity other than a doctor's appointment? (This includes social activities like visiting friends, going to a movie or restaurant, or shopping.)	O Yes	O No

If you answered YES to ALL of the questions in Section 3, it is safe for you start or return to regular exercise, at your own pace.

If you answered NO to ANY of the questions in Section 3, you may not be ready to start or return to a regular exercise program yet. Please talk with your doctor about what kinds of exercise you can do to get stronger safely.



Exercise Benefits and Barriers

Knowing the benefits of exercise can help you stay motivated to continue exercising. Knowing your personal barriers to exercise can help you overcome them. This page lists some common benefits and barriers.

Benefits of Starting or Continuing to Exercise

- Increase your energy
- Feel stronger
- Feel more confident
- Improve your walking
- Improve your flexibility
- Reduce your risk of falling
- Maintain a healthy weight
- Improve your self-image
- Sleep better
- Make new friends—have fun!

My top 3 reasons for exercising:

Barriers to Starting or Returning to Exercise

- Too busy
- Don't know where to go
- Can't afford to pay
- No transportation
- Injury
- Illness
- Medical condition(s)
- Overweight
- Afraid to exercise
- No one to exercise with

My top 3 reasons for not exercising:

1.	 1.	
2.	2.	
3.	 3.	
•	•	

Your Exercise Plan

Types of Physical Activity You're Doing Now				
Activity	How Much Time (minutes)	How Often		

Based on this, do you meet the Surgeon General's recommendations to be physically active for 30 minutes a day, at least 10 minutes at a time, on at least five days of the week?

O Yes O No

Types of Exercise You Want to Do List all of the exercises you enjoy or would like to try, and are healthy enough to do.

Places Where You Can Exercise List all of the possible places where you can exercise, including your home.

TIP: Use your calendar to schedule your exercise plan, and find ways to reward yourself for reaching your goals!

People You Can Talk with to Get Motivated and Stay Motivated List any family, friends, neighbors, health care professionals, etc., who might be helpful.

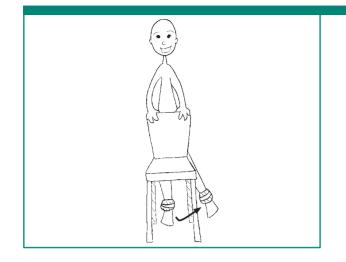
People You Could Exercise With List all of the people who might be interested in exercising with you.

Other Information You Need to Exercise List any questions you have about the physical activities you want to do (health, exercise, locations, etc.).

Places Where You Can Get the Information You Need List all of the possible places where you might be able to get this information, such as the library, Internet, health care provider, senior center, etc.

Your Exercise Goal (s)		
Daily:		
Weekly:		
Monthly:		
Your Exercise Plan		
Based on how you answered these quest	ions, what's your ex	ercise plan?
Activity	How Much Time (minutes)	How Often

Chapter 2. Understanding Your Health Issues and Exercise



Timing Is Everything

It's important to discuss exercise with your doctor, especially if you're being treated for a health condition. Exercising too soon after a health problem can cause setbacks, but waiting too long can make it harder to get back on schedule. The more you know about how and when to exercise, the easier it will be for you to stay active and independent for life.

You can help prevent falls and stay active and independent by asking your doctor for a physical therapy referral and evaluation:

- if you are having ANY trouble walking due to medications or a balance, back, hip, knee, ankle, or foot problem; or
- if you are told to start using a cane or walker.

Medicare will cover physical therapy consultations, evaluation, treatment, and walker, cane, or crutch training if ordered by a health care provider. Don't overlook the basics of staying healthy: eat well, drink lots of water, get enough sleep, try to limit and manage stress, and stay involved with people and interests you enjoy.

Returning to Exercise After a Break

If you've been away from your exercise routine for more than a week, starting exercise again as soon as possible can help you stay strong, healthy, and independent. If your absence was due to a medical condition, talking to your health care provider can help you decide how and when to safely return to exercise. You can also use our Are You Ready to Start or Return to Exercise? quiz at the end of Chapter 1 to evaluate yourself.

Resume exercising at your own pacedon't try to keep up with everyone else. It takes time to build up strength. It's okay to start with one or two times a week at first.

The longer you've been away, the more effort it takes to get back on schedule. The easiest way to get back to your exercise routine is to "just do it"! You can regain and maintain your strength if you exercise at least twice a week.

Be patient and don't give up. The worst thing that can happen after a break is never going back to exercise.

Exercising After an Illness

Illness is an energy drainer—recovering uses up a lot of energy, especially if it

involves being in a hospital or nursing facility. It can take six to eight weeks (or more) to recover from a medical illness or a flare-up of a medical condition. If your illness required medical care, it's best to talk with your doctor about when to return to exercise—coming back too soon can be unsafe.

It takes time to get back into your exercise routine—start slowly. You can build up your strength by finding ways to be more physically active at home: take walks, go shopping, clean the house, or do some easy, gentle exercises. When you're ready, you can ease into your exercise routine as you build your strength.

Exercising After a Cold or Flu

The symptoms of a cold are cough, stuffy nose, and no fever. When you get a cold, it's a good idea to put your exercise routine on hold until all of your symptoms are gone and your strength has returned. Recovering from a cold can take one to two weeks or more.

The flu is a virus and it is very contagious. The symptoms of the flu are a fever of 100° to 104°F, fatigue, muscle aches, joint pain, loss of appetite, headache, and cough. When you get the flu, it's a good idea to put your exercise routine on hold until all symptoms are gone and your strength has returned. Be patient—recovering from the flu can take up to six to eight weeks.

Exercising After an Injury

If you have an injury that requires medical care, talk to your doctor about

when to return to exercise. An injury to a muscle, bone, or joint can take six to eight weeks or longer to heal. Skin injuries can take four weeks or longer to heal.

Use your level of pain as a guide to what your body can handle and be ready to adapt. When you first return to your exercise routine, you may have to change an exercise to make it work for you, stop an exercise early, or do the exercise from a sitting position.

Exercising After Surgery

Always talk with your doctor about when to return to exercise after surgery. Recovering from surgery often takes at least six to eight weeks and returning too early can cause serious problems or setbacks.

Be patient with yourself as you build up your strength. You may have to change

Exercise Wisely

- Don't try to keep up with everyone else. It's always best to exercise at your own pace.
- Listen to your body and know your limits.
- Remember that it takes time to build and regain strength.
- It's okay to change or stop an exercise.
- Stop or reduce using weights if they cause any pain.
- When in doubt, talk to your instructor or doctor so that you can learn how to keep exercising safely.
- Commitment and a positive attitude help, too.

an exercise to make it work for you, stop an exercise early, or do the exercise from a sitting position.

Maintaining Your Eye and Ear Health

Your vision and hearing play a vital role in keeping your balance fine-tuned and preventing falls. Have your vision tested at least every two years—more often if you have eye problems.

The three most common eye conditions in older adults are cataracts, glaucoma, and macular degeneration. All of these conditions can develop slowly and gradually without symptoms until vision is impaired.

- A cataract is the thickening of the eye lens due to aging which causes gradual sight loss.
- Glaucoma is an increase in pressure inside the eye that causes gradual sight loss.
- Macular degeneration is the gradual loss of central vision.

Reduced depth perception due to bifocals, reading glasses, low lighting, and some eye conditions can cause falls. Reduced depth perception makes it difficult to accurately judge walkway changes like curbs, steps, and uneven ground, and can affect driving skills. In addition, a loss of depth perception makes it difficult to see objects in areas of shadow, low lighting, nighttime darkness, or excessive brightness.

Have your hearing checked by a licensed audiologist every two years—especially if your family or friends tell you that you have a hearing problem! If the audiologist says that you should use hearing aids, learn as much as you can about them. There are many different types and it takes at least a few weeks of regular daily use to get used to using them comfortably.

Protecting Yourself from Osteoporosis

Osteoporosis is a major cause of fractures for people age 50 and older. It's a condition in which bone mass is lost and the bones become very fragile and break easily. The symptoms of osteoporosis include fractures, loss of height (more than one inch), a change in posture, and/or back pain.

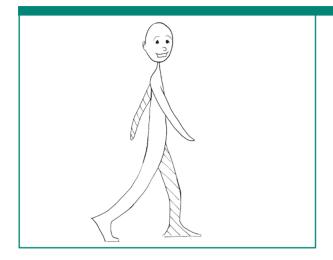
If you're at risk for osteoporosis, getting tested and treated can help you stay active and independent. You're at risk if you:

- get a fracture after age 50; or
- have a personal or family history of fractures after age 50; or
- are a white or Asian thin, smallboned, post-menopausal woman; or
- smoke or drink a lot of alcohol.

If you're concerned about whether or not you have osteoporosis, discuss this with your doctor. Osteoporosis screening is done with bone density tests. Whole-body tests like the DEXA scan are best if you are at risk for osteoporosis.

The good news is that osteoporosis can be prevented—and treated with weight-bearing, strength-training exercises and calcium with vitamin D. Treatment can also include prescription medications.

Part II. The Exercises Chapter 3. Starting Your Routine



The Importance of Regular Exercise

Any exercise routine for older adults should include the following types of exercise:

- warm-ups
- aerobics
- balance
- strength
- stretching

The U.S. Centers for Disease Control and Prevention (CDC), the Surgeon General, and the American Heart Association all recommend a minimum of 30 to 60 minutes of exercise per day.

The Stay Active & Independent for Life (SAIL) exercises are designed to meet the CDC's and Surgeon General's recommendations for physical activity and healthy aging.

The Importance of Warm-Up Exercises

Warm-up exercises are the gentle exercises that you do at the beginning of an exercise routine. Warm-up exercises prepare the muscles for more vigorous exercise and reduce the risk of injury.

Always warm up before exercising. The easiest warm-up is a five-minute walk. If you are unable to walk, or the weather is bad, try some of the exercises that your instructor teaches at the beginning of each class. If you have access to music, play some favorite tunes to help keep you going!

You can easily fill five minutes with any combination of the following warm-up exercises.

If you are standing, you can warm up by:

- marching in place
- stepping from side to side (steptouch)
- lifting alternate knees
- lifting foot up behind you, knee bent
- taking 4 steps forward and 4 steps back
- circling your arms
- raising arms above your head and bringing one hand down to touch the opposite knee

If you are sitting, you can warm up by:

- lifting alternate knees
- lifting alternate legs out to side
- lifting alternate feet, straightening knees
- turning your head left, then right
- shrugging your shoulders
- circling your arms (one at a time, then both together)
- raising arms above your head and touching the opposite knee

The Importance of Aerobic Exercises

Aerobic exercise increases your heart rate and breathing rate for an extended period of time. Aerobic exercise is sometimes called "cardiovascular exercise" because it makes your heart work harder.

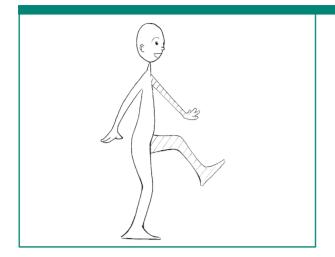
After you warm up, aim for 15 to 20 minutes of aerobics. If your warm-up was 5 minutes of walking, you could simply walk for another 15 to 20 minutes. Try swinging your arms this will help increase your heart rate.

Remember—you are aiming to increase your heart rate, so try combining leg exercises with arm exercises (e.g., lift alternate knees while lifting arms up and down, step from side to side while swinging arms, and/or march in place while circling arms).

Now that you have warmed up and have done some aerobic exercise, you are ready for the balance, strength, and stretching exercises.



Chapter 4. **Balance Exercises**



The Importance of Balance

This chapter shows you how to do important balance exercises. Maintaining good balance is vital to keeping yourself independent. Some reasons to maintain good balance:

- We need good balance for almost everything we do: walking, reaching, standing up, bending, and using stairs and step stools.
- Our balance can decline as we grow older, but we can improve and maintain good balance with balance exercises.
- Good balance decreases our risk of falling.

Many systems in your body contribute to good balance, including:

- musculoskeletal system (muscles and bones)
- central nervous system (brain and spinal cord)
- peripheral nervous system (touch/ sensation)

balance organ (located in the inner ear)

The balance exercises in this chapter are designed to give all of these systems a good workout.

Exercises 1-10

Balance Exercises—Moving

- 1. Walking with Head Turns
- 2. Stepping Over Objects
- 3 Heel-to-Toe Walk
- Turning a Circle 4.
- 5. Sit to Stand

Balance Exercises—Standing Still or Sitting

- 6a. Shifting Your Weight—Standing Version
- 6b. Shifting Your Weight-Sitting Version
- 7. Twisting Side to Side
- 8a. Heel-to-Toe Stand—Without Support
- 8b. Heel-to-Toe Stand—With Support
- 9. Reaching Forward and to Side
- 10. Standing on One Leg

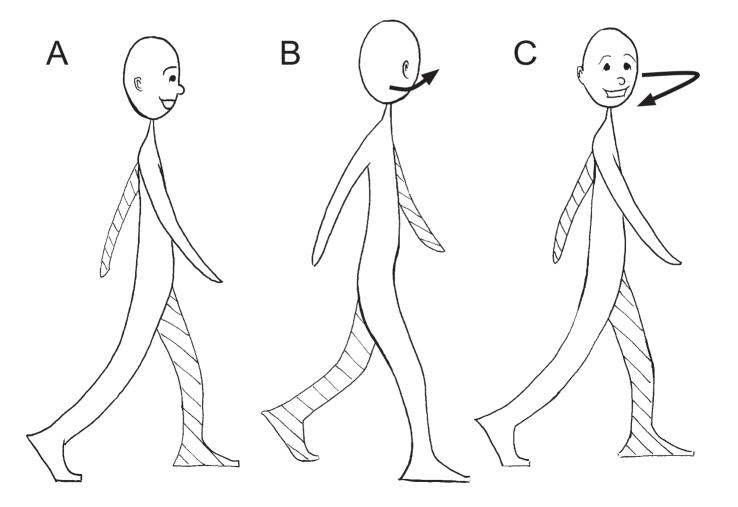


Balance Exercises—Moving

1. Walking with Head Turns

Purpose: To improve balance while walking.

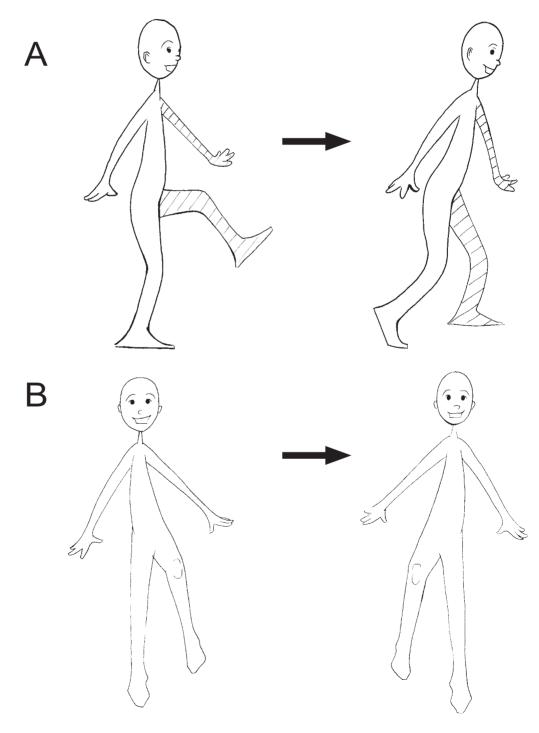
- 1. Begin walking at your normal speed (see Figure A). Make sure that there is nothing in front of you that could cause you to trip.
- 2. After three steps, turn your head and look left while continuing to walk straight ahead (see Figure B).
- 3. After three steps, turn your head and look right while continuing to walk straight ahead (see Figure C).
- 4. Repeat.



2. Stepping Over Objects

Purpose: To improve balance while walking.

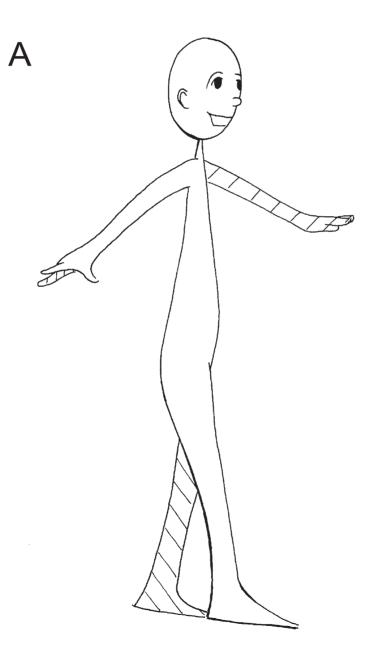
- 1. Step over an imaginary object 5 to 8 times, moving forward (see Figure A).
- 2. Repeat, moving side to side (see Figure B).



3. Heel-to-Toe Walk

Purpose: To improve balance.

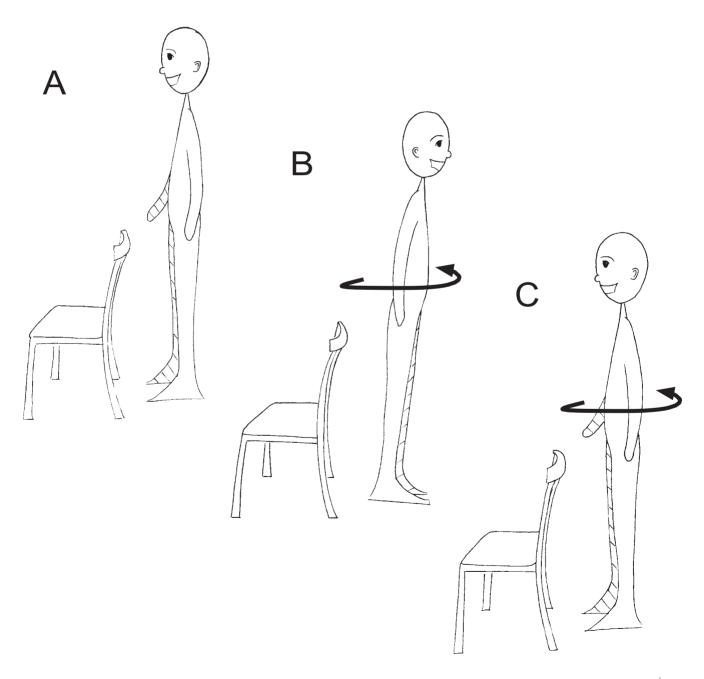
1. Walk forward by placing the heel of the front foot directly in front of the toes of the back foot (see Figure A). If this is difficult, use a wall or a table to guide you. If this is easy, you can do it with your eyes closed. Make sure that there is nothing in front of you that could cause you to trip.



4. Turning a Circle

Purpose: To improve balance when turning.

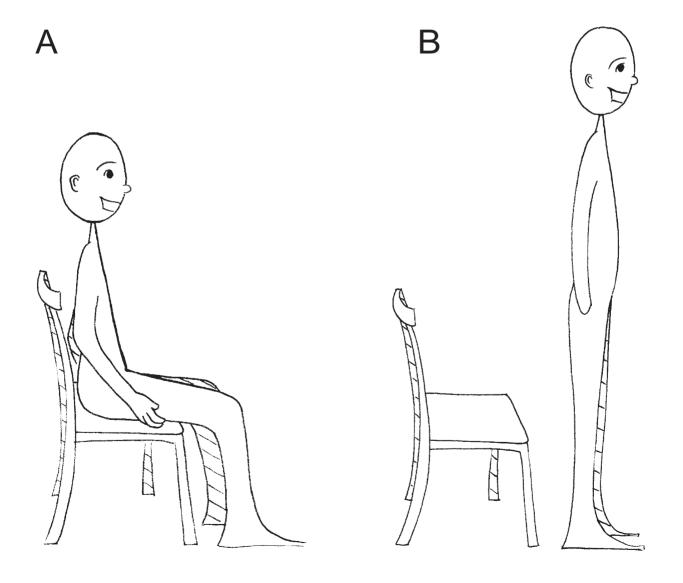
- 1. Stand behind a chair, feet shoulder width apart. Use chair for balance as needed.
- 2. Staying in one spot, turn one full circle using small steps to turn your body 360 degrees (see Figures A, B, and C).
- 3. Repeat in opposite direction.



5. Sit to Stand

Purpose: To strengthen leg muscles and improve balance.

- 1. Begin in a seated position toward the front of the chair with your feet flat on the ground (shoulder width apart) and arms at your sides (see Figure A).
- 2. Stand up (see Figure B).
- 3. Repeat 5 to 8 times. For variety, you can begin with feet slightly wider than shoulder width apart.

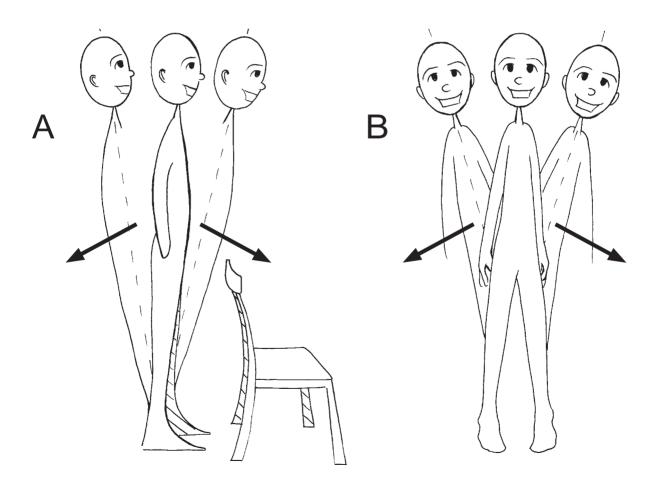


Balance Exercises—Standing Still or Sitting

6a. Shifting Your Weight—Standing Version

Purpose: To improve standing balance.

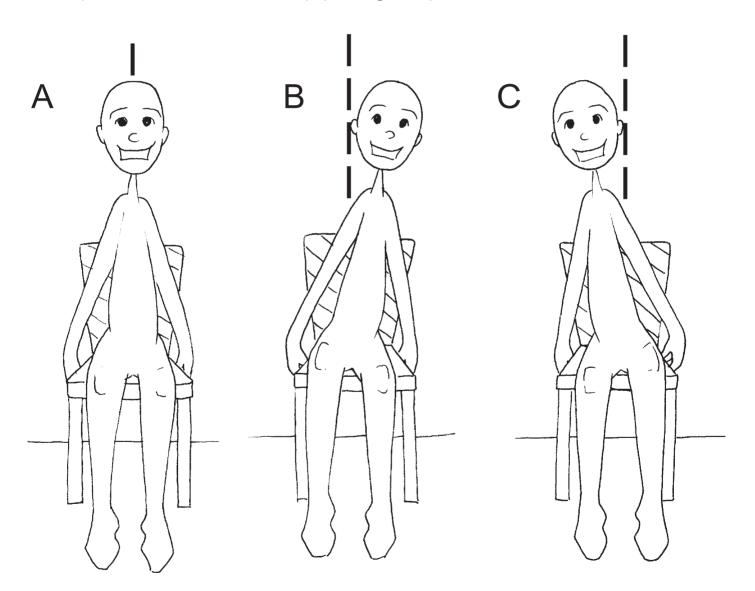
- 1. Stand behind a chair for support (if necessary) with feet shoulder width apart and your weight distributed equally on both feet. Arms should be relaxed and at your sides with your head facing forward.
- 2. Slowly shift your weight forward and backward (see Figure A). Do not move very far. Do not bend at your hips. All movement should be at your ankles.
- 3. Shift your weight from side to side (see Figure B), placing more weight first to your right side, then to your left. Do not bend at the hips.
- 4. Repeat.



6b. Shifting Your Weight—Sitting Version

Purpose: To improve standing balance.

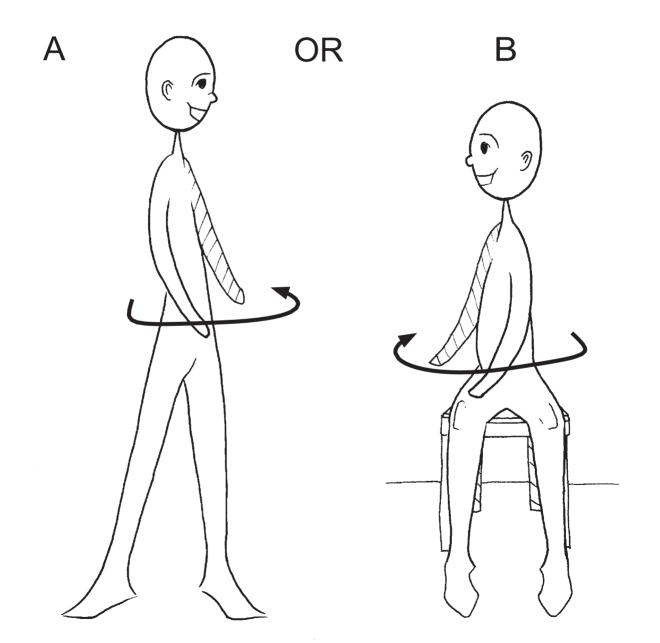
- 1. Start sitting toward the front of the chair with your feet flat on the ground (see Figure A).
- 2. Shift your weight to the side over one hip, raising the other hip off the chair (see Figure B). Hold for a count of 3.
- 3. Repeat 8 to 10 times on each hip (see Figure C).



7. Twisting Side to Side

Purpose: To improve balance.

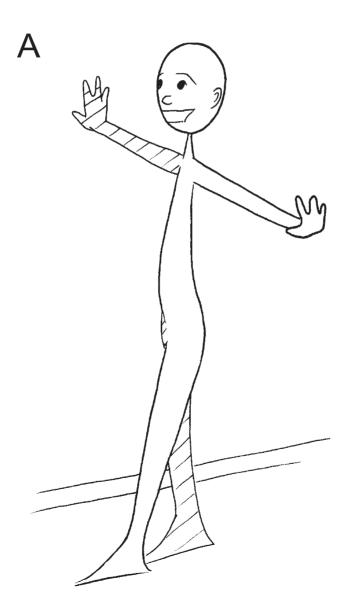
1. Sit or stand. Hold your hands in front of you at waist level. Using your arms as your guide, gently twist from side to side while keeping your feet still (see Figures A and B).



8a. Heel-to-Toe Stand—Without Support

Purpose: To improve standing balance.

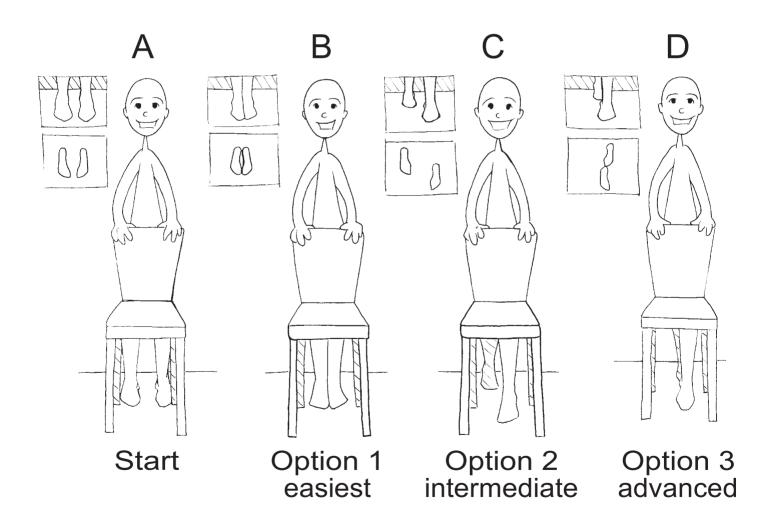
- 1. Stand near a wall for support, if needed.
- 2. Place one foot directly in front of the other. The heel of the front foot should touch the toes of the back foot.
- 3. Hold arms out to sides for balance (see Figure A).
- 4. Stay in this position for 30 seconds.



8b. Heel-to-Toe Stand—With Support

Purpose: To improve standing balance.

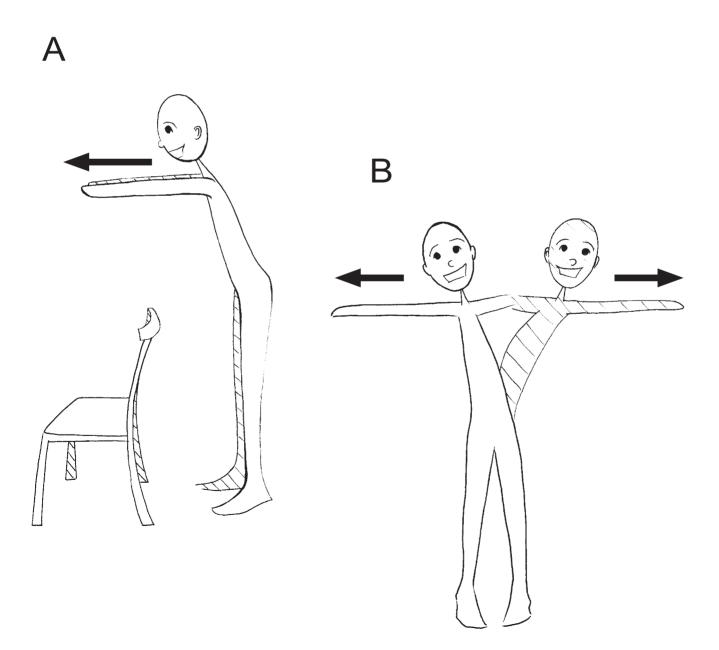
- 1. Stand behind chair with your feet shoulder width apart, use the chair for balance as needed (see Figure A).
- Place your feet in the selected position. Option 1 is easiest (see Figure A), Option 2 is intermediate (see Figure B), and Option 3 is advanced (see Figure C).
- 3. Hold this position for 10 seconds, then return to start position.
- 4. Repeat 8 to 10 times.



9. Reaching Forward and to Side

Purpose: To improve standing balance when reaching.

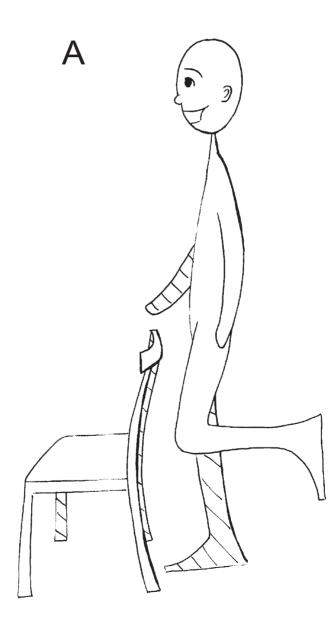
- 1. Stand behind chair, feet shoulder width apart.
- 2. Reach forward with both arms (see Figure A).
- 3. Return to upright position.
- 4. Try reaching left, then right (see Figure B).



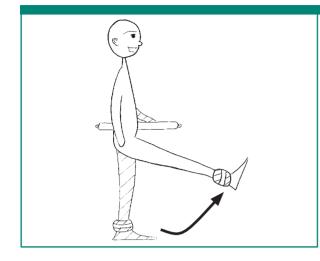
10. Standing on One Leg

Purpose: To improve standing balance.

- 1. Stand behind chair with your feet shoulder width apart.
- 2. Lift one foot up behind you (see Figure A). Do not rest the foot on your opposite leg. Use the chair for support, if needed.
- 3. Stand on one foot for 10 seconds.
- 4. Repeat on your other foot.



Chapter 5. Strength Exercises



The Importance of Strength Training

This chapter shows you how to do important strength exercises. Exercising with weights can bring you many healthy benefits, such as:

- building bone strength
- delaying/reversing osteoporosis
- building stronger muscles
- improving balance
- increasing energy
- burning calories
- controlling weight
- toning muscles for a trimmer body
- using full range of movement
- improving flexibility

If you know that you are going away for several weeks, consider investing in your own pair of adjustable, strap-on weights. You can buy these at most stores that sell sporting goods. You can also practice the exercises in this chapter without weights. Your own body weight will provide a workout for these important muscle groups and you will maintain range of movement in your joints.

Exercises 11-22

Strength Exercises—Upper Body

- 11. Arm Bending (Biceps)
- 12. Arm Straightening (Triceps)— Standing/Sitting Version
- 13. Arm Raises: Side
- 14. Arm Raises: Front
- 15. Overhead Press
- 16. Seated Crunches (Abdominals)

Strength Exercises—Lower Body

- 17a. Knee Bending (Hamstrings)— Standing Version
- 17b. Knee Bending (Hamstrings)— Sitting Version
- 18. Knee Straightening (Quadriceps)
- 19. Leg Lifts: Forward (Quadriceps)
- 20a. Leg Lifts: Backward—Standing Version
- 20b. Leg Lifts: Backward—Sitting Version
- 21a. Leg Lifts: Side—Standing Version
- 21b. Leg Lifts: Side—Sitting Version
- 22a. Toe Stands—Standing Version
- 22b. Toe Stands—Sitting Version

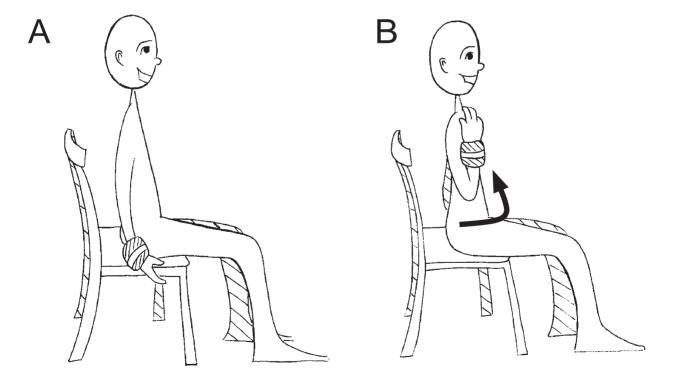
Strength Exercises—Upper Body

11. Arm Bending (Biceps)

Purpose: To strengthen the upper arm muscles that flex the elbow.

Function: Eating and personal hygiene, such as washing and brushing hair.

- 1. Sit upright toward the front of the chair with your feet flat on the floor and arms at your sides with weights around wrists. Hold your elbows toward your body (see Figure A).
- 2. With palms facing up, bend one arm at the elbow and lift the weight toward your shoulder (see Figure B).
- 3. Do not move your upper arm or shoulder during the lift. Be careful not to use back muscles to "swing" the weights up. If this occurs, reduce wrist weight.
- 4. Slowly lower the weight to the starting position.
- 5. Repeat 8 to 10 times.

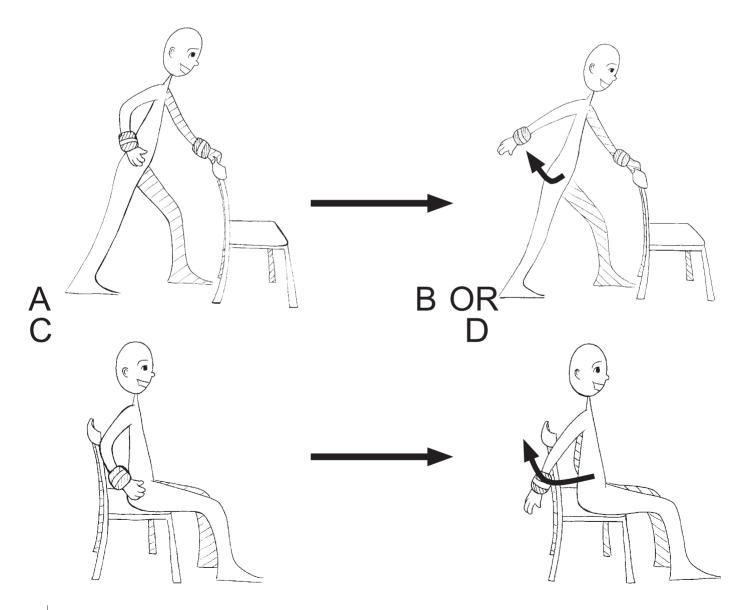


12. Arm Straightening (Triceps)—Standing/Sitting Version

Purpose: To strengthen the muscles at the back of the upper arm that extend the elbow.

Function: Getting out of a bathtub or chair.

- 1. If standing, put left foot slightly in front of right foot and bend your knees slightly (see Figure A). If sitting, use proper posture (see Figure C). Start with your right fist on right hip and tuck the right elbow behind.
- 2. Extend your arm straight back, keeping the elbow steady and in the same location and return fist to hip (see Figures B and D).
- 3. Repeat 8 to 10 times on each side.

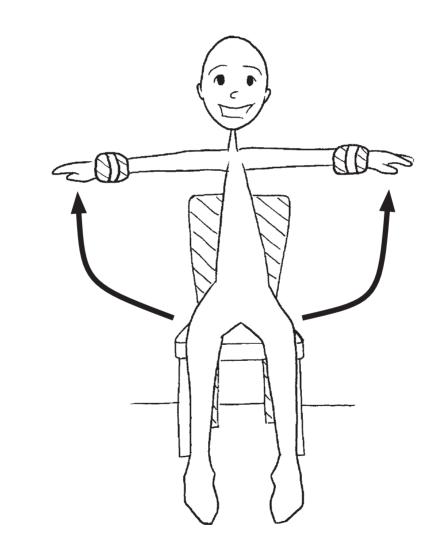


13. Arm Raises: Side

Α

Purpose: To strengthen the muscles that raise arms out to sides.

- 1. Start with arms down at your sides.
- 2. Lift both arms up and out to each side (see Figure A). Hold for 3 seconds.
- 3. Slowly lower arms back down to your sides.
- 4. Repeat 8 to 10 times.

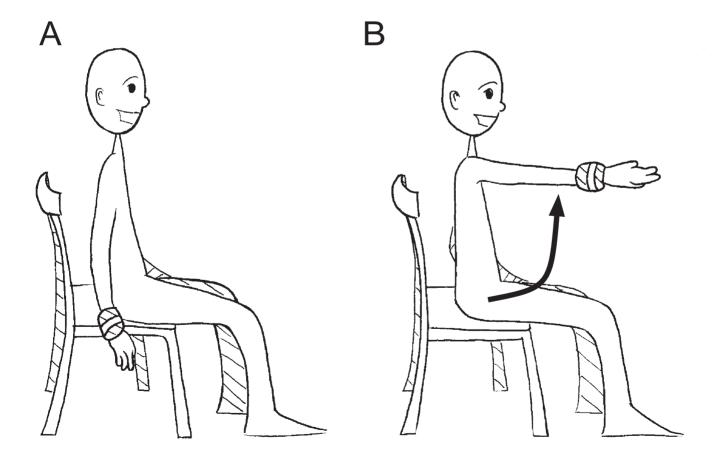


14. Arm Raises: Front

Purpose: To strengthen the muscles in the shoulders which help with lifting and hand function.

Function: Bathing, dressing, and eating

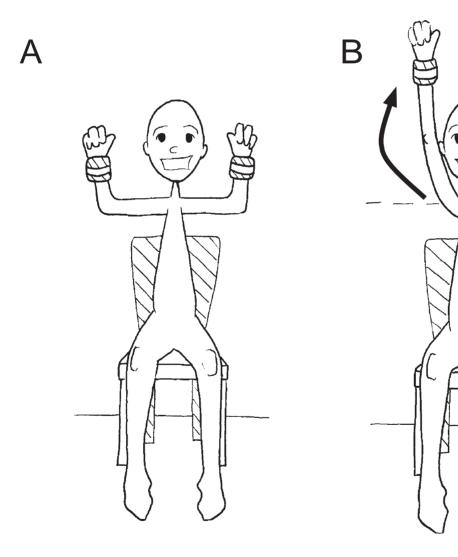
- 1. Sit upright toward the front of the chair with feet flat on the floor and arms at your sides with weights around wrists (see Figure A).
- 2. Raise one arm slowly to shoulder height (see Figure B). Keep your elbows slightly bent. Be careful not to use back muscles to "swing" the weights up. If this occurs, reduce wrist weight.
- 3. Lower the arm slowly down the same path to the starting position.
- 4. Repeat 8 to 10 times on each side.



15. Shoulder Strengthening (Overhead Press)

Purpose: To strengthen shoulder muscles needed for lifting.

- 1. Start with your elbows bent, up, and out to sides (see Figure A).
- 2. Raise hands above your head, straightening elbows (see Figure B).
- 3. Return to bent elbow position.
- 4. Repeat 8 to 10 times.

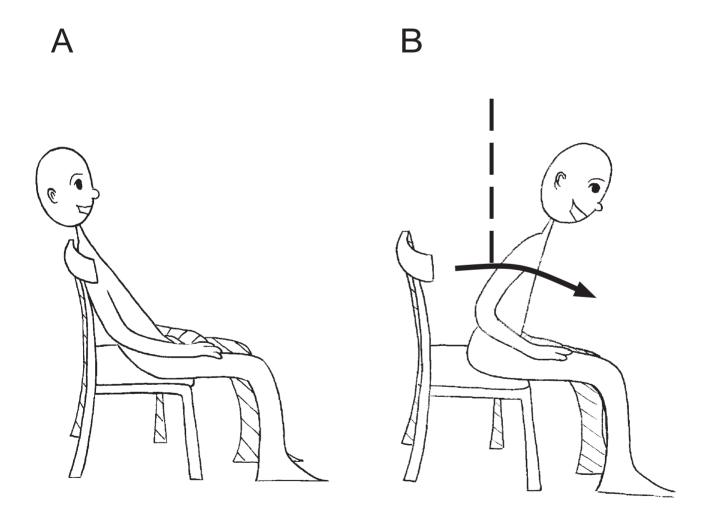




16. Seated Crunches (Abdominals)

Purpose: To increase "core strength" for all standing and walking activities.

- 1. Sit with buttocks toward front of seat.
- 2. Lean back against the chair back (see Figure A).
- 3. Without using your hands, bring your body forward (see Figure B).
- 4. Slowly lean backward and forward 10 times.

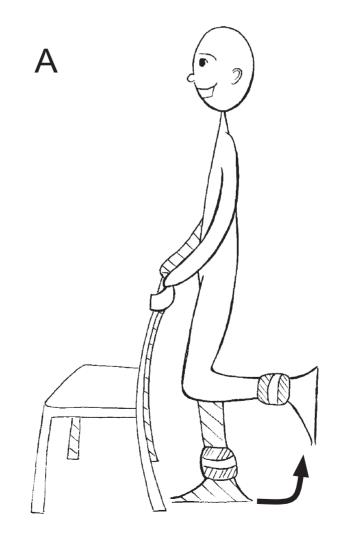


Strength Exercises—Lower Body

17a. Knee Bending (Hamstrings)—Standing Version

Purpose: To strengthen the muscles in the back of the thigh. Function: Walking

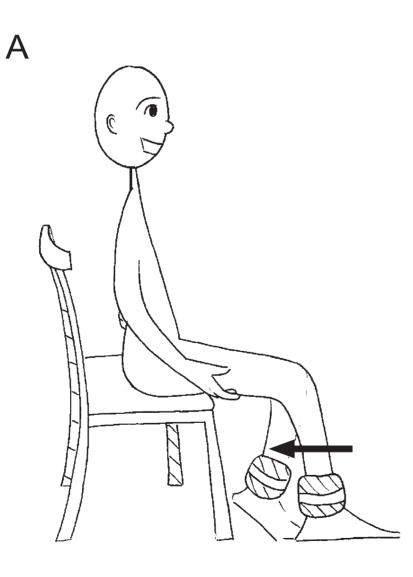
- 1. With ankle weights in place, stand upright while using the back of a chair for balance. Place your feet shoulder width apart and your knees side by side.
- 2. Step back with one foot and point the toes.
- 3. Without moving the thigh at all, raise the heel of that foot toward your buttocks (see Figure A).
- 4. Lower your toe slowly to the starting position without touching the floor.
- 5. Repeat 8 to 10 times on each side.



17b. Knee Bending (Hamstrings)—Sitting Version

Purpose: To strengthen the muscles in the back of the thigh. Function: Walking

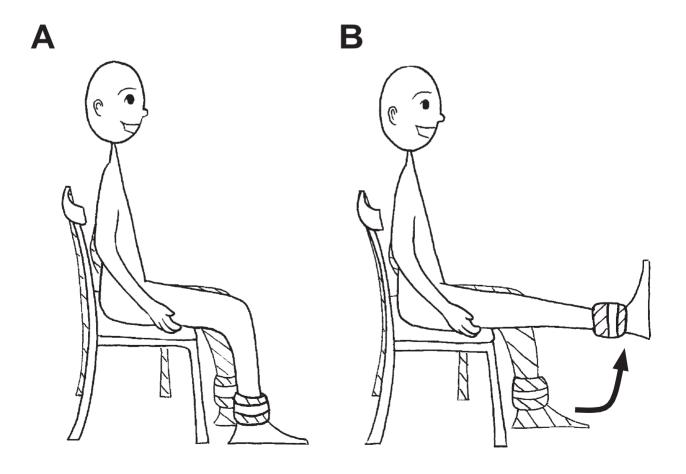
- 1. Start sitting toward the front of chair with feet flat on the ground.
- 2. Slide foot behind you, then return to starting position (see Figure A).
- 3. Repeat 8 to 10 times.



18. Knee Straightening (Quadriceps)

Purpose: To strengthen the muscles that lift and support the knee. Function: Getting out of a chair.

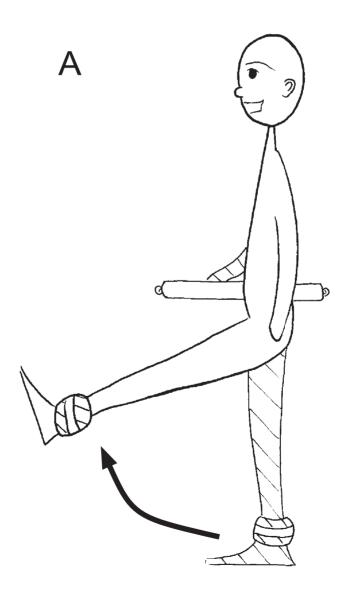
- 1. Sit upright, slightly forward in the chair, but with thighs supported (a rolled towel may be used beneath thighs for additional support). Do not lean against the back of the chair. Feet should be flat on the floor with weights around the ankles (see Figure A).
- 2. Lift foot until your leg is almost straight (see Figure B).
- 3. Lower your foot slowly to the starting position without letting it touch the floor.
- 4. Repeat 8 to 10 times on each side.



19. Leg Lifts: Forward (Quadriceps)

Purpose: To strengthen the muscles at the front of the thigh.

- 1. Stand with one hand on chair, feet shoulder width apart.
- 2. Keeping knee straight, lift leg up in front of you (see Figure A).
- 3. Slowly lower your leg back down to the starting position.
- 4. Repeat with your other leg.
- 5. Then repeat 8 to 10 times on each leg.

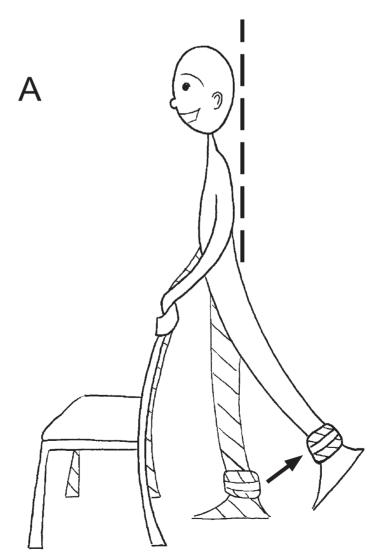


20a. Leg Lifts: Backward—Standing Version

Purpose: To strengthen the muscles in the buttocks and lower back.

Function: Getting in and out of a chair, going up and down stairs.

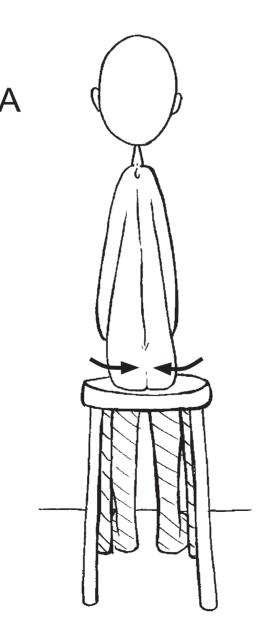
- 1. Stand, holding onto the back of the chair and step back so you are leaning slightly forward (not more than 30 degrees), with ankle weights in place and knees soft.
- 2. Lift one leg straight out behind you without bending your knee or moving your upper body (see Figure A). Tighten the buttock at the top of the lift. Avoid lifting your leg too high.
- 3. Lower your leg slowly to the starting position without touching the floor.
- 4. Repeat 8 to 10 times on each side.



20b. Leg Lifts: Backward—Sitting Version

Purpose: To strengthen the muscles in the buttocks and lower back. Function: Getting in and out of a chair, going up and down stairs

- 1. Sit with feet flat on the ground. (Sitting toward the front of the chair will enable you to work on balance. Sitting toward the back of the chair will give you more support.)
- 2. Squeeze your buttocks together (see Figure A). Hold for 3 counts.
- 3. Repeat 8 to 10 times.

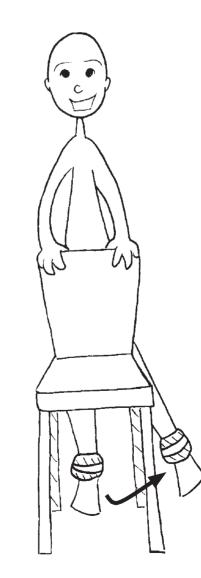


21a. Leg Lifts: Side—Standing Version

Purpose: To strengthen the muscles at the side of the hips and thighs that pull your legs out to the side.

Function: Walking

- 1. Stand upright holding onto the back of a chair with weights around the ankles.
- 2. Keep your body upright with your knees soft. Move one leg straight out to the side, making sure that your toes are always facing forward (see Figure A). Avoid leaning to the side and/or lifting your leg too high.
- 3. Lower your leg slowly to the starting position without touching the floor, while maintaining some tension in the leg.
- 4. Repeat 8 to 10 times on each side.

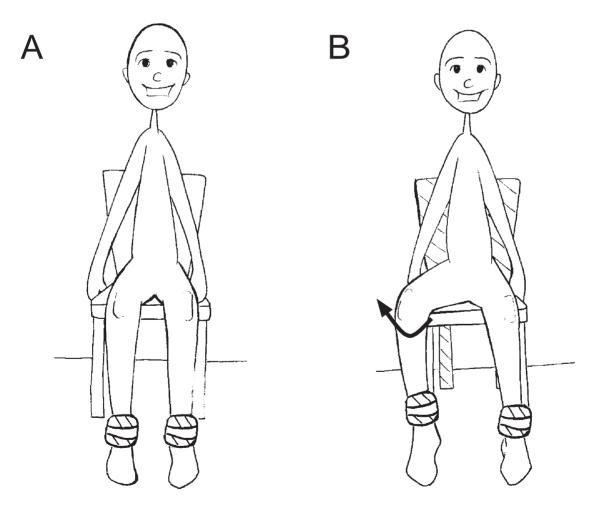


21b. Leg Lifts: Side—Sitting Version

Purpose: To strengthen the muscles at the side of the hips and thighs that pull your legs out to the side.

Function: Walking

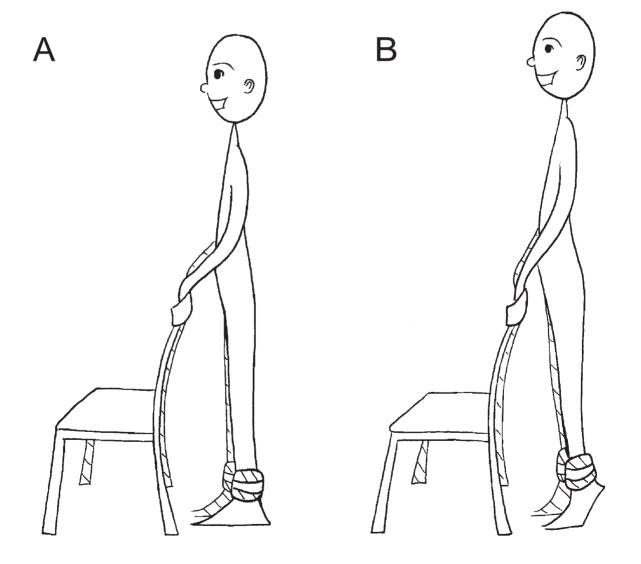
- 1. Start sitting toward the front of chair with your feet flat on the ground **(see Figure A)**.
- 2. Lift leg to side as far as comfortable (see Figure B). Hold for 3 counts.
- 3. Repeat 8 to 10 times on each leg.



22a. Toe Stands—Standing Version

Purpose: To strengthen the muscles in the ankle and back of the calf. Function: Walking, going up and down stairs

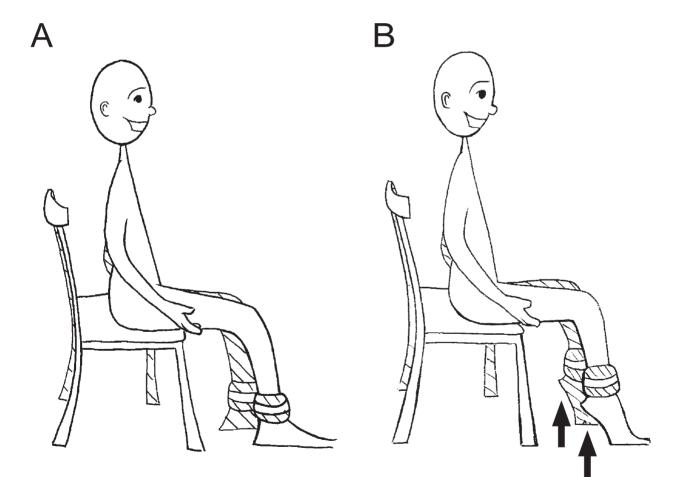
- 1. Stand upright while holding onto the back of a chair with ankle weights in place and feet parallel (see Figure A).
- 2. Raise your body up on your toes without letting go of the chair (see Figure B).
- 3. Lower your body to the starting position. For variety, this exercise may be performed with toes turned slightly outward.



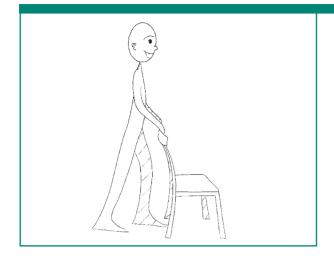
22b. Toe Stands—Sitting Version

Purpose: To strengthen the muscles in the ankle and back of the calf. Function: Walking, going up and down stairs

- 1. Start sitting toward the front of chair with feet flat on the ground (see Figure A).
- 2. Raise your heels off the floor, pressing down into floor with the balls of your feet (see Figure B). Hold for 3 counts.
- 3. Repeat 8 to 10 times.



Chapter 6. Stretching Exercises



The Importance of Stretching

This chapter shows you how to do important stretching exercises. Maintaining good flexibility is an important part of remaining independent—think of all the jobs and activities that require you to reach or stretch!

Stretching exercises increase your range of movement in your joints, and can help to reduce chronic pain in your joints and muscles.

It is important to stretch your muscles and joints at the end of your exercise routine. Exercise increases the blood flow to the muscles-that's why we get hot and perspire when we exercise. This heat relaxes the muscles, making it easier to stretch after exercising.

Exercises 23-33

Stretching Exercises—Upper Body

- 23. Neck Stretch
- 24. Arm Circles
- 25. Scratch Between Shoulder Blades
- 26. Clasp Hands in Front
- 27. Clasp Hands Behind Head
- 28. Wrist Stretch (Praying Position)
- 29. Hand Stretch

Stretching Exercises—Lower Body

- 30a. Quadriceps Stretch—Without Support
- 30b. Quadriceps Stretch—With Support
- 31. Hamstring Stretch
- 32. Inner Thigh Stretch
- 33a. Calf Stretch—Standing Version
- 33b. Calf Stretch—Sitting Version



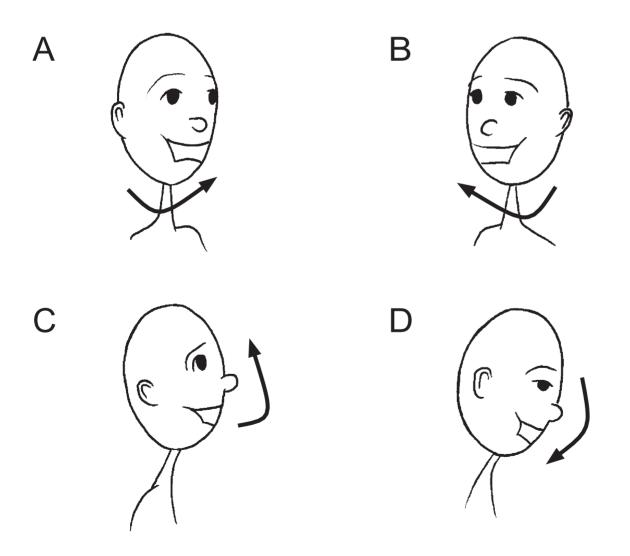
Stretching Exercises—Upper Body

23. Neck Stretch

Purpose: To improve flexibility of the neck.

- 1. Sit upright in a chair. Keep your body still as you move through the exercise.
- 2. Slowly move your chin over to one shoulder and then to the other as if nodding "no" (see Figures A and B). Repeat several times.
- 3. Slowly lift your chin up slightly and back toward your chest as if nodding "yes" (see Figures C and D). Repeat several times.

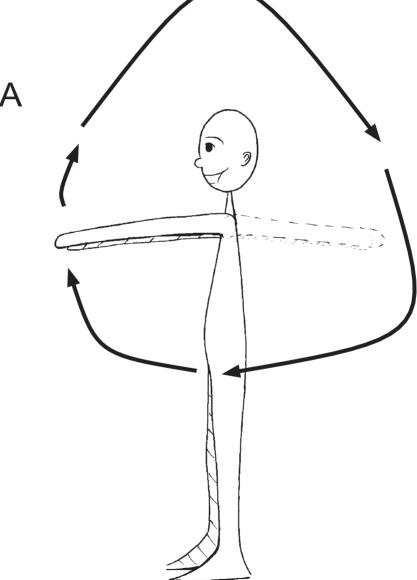
NOTE: Do this exercise slowly and gently. Do not strain your neck.



24. Arm Circles

Purpose: To improve flexibility in shoulders.

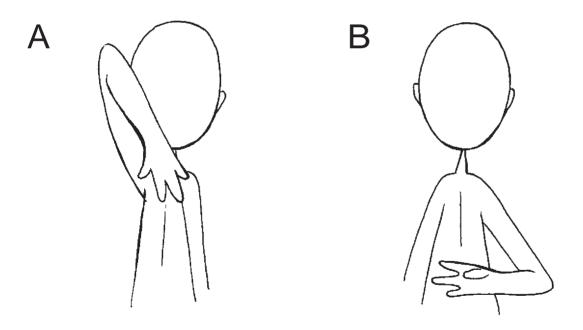
- 1. Start with arms down by your sides.
- 2. In one flowing motion with your elbows straight, lift your arms up in front of you, rotate above your head, and then bring them down behind you **(see Figure A)**.
- 3. Return your arms to the starting position.
- 4. Repeat 4 to 5 times forward, then backward.



25. Scratch Between Shoulder Blades

Purpose: To improve flexibility of shoulders.

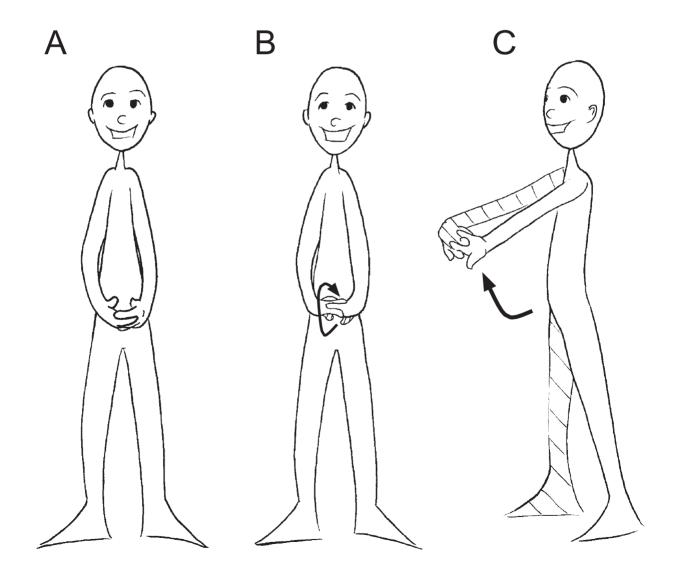
- 1. Lift arm up above your head
- 2. Bend arm backward to try to scratch between your shoulder blades (see Figure A). Hold for 20 to 30 seconds.
- 3. Return arm to your side.
- 4. Reach arm down behind your back.
- 5. Bend arm upward toward your shoulder blades (see Figure B). Hold for 20 to 30 seconds.
- 6. Return arm to your side.
- 7. Repeat 3 times on each side.



26. Clasp Hands in Front

Purpose: To stretch muscles in upper back.

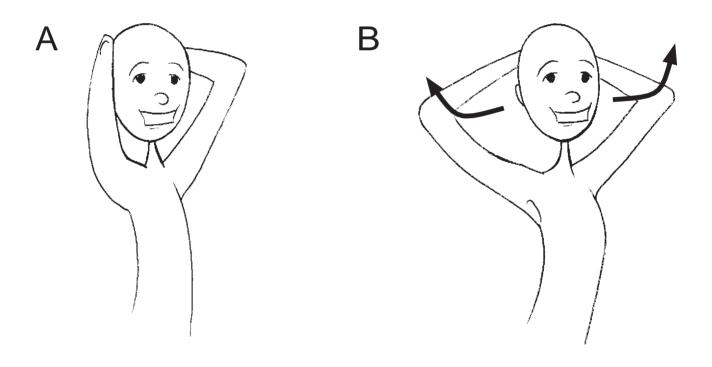
- 1. Start with arms hanging down in front of you, fingers clasped (see Figure A).
- 2. Rotate hands toward you, so palms are now facing toward floor (see Figure B).
- 3. Keeping elbows straight, lift hands up in front of you (see Figure C).
- 4. Try to stretch the space between your shoulder blades. Hold for 20 to 30 seconds.
- 5. Slowly return to starting position.



27. Clasp Hands Behind Head

Purpose: To improve posture by stretching the muscles in your chest.

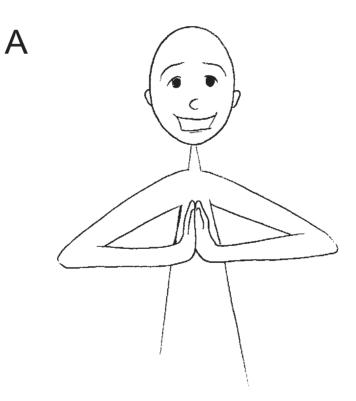
- 1. Sit or stand. Link your hands behind your head with your elbows close to your forehead (see Figure A).
- 2. Keeping your hands in the same place, draw your elbows backward until they are in a straight line with your ears (see Figure B). Hold for 20 to 30 seconds.
- 3. Repeat.



28. Wrist Stretch (Praying Position)

Purpose: To improve flexibility of wrists.

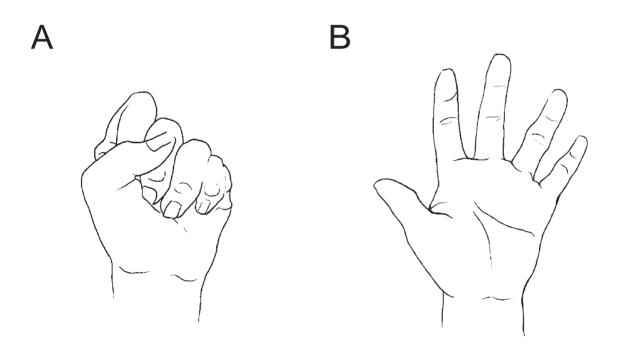
- 1. Place palms together and lift arms out in front of you.
- 2. Bend elbows to bring hands up and closer to your chest.
- 3. Rotate hands so that your fingers are pointing upward (see Figure A). Hold for 20 to 30 seconds.



29. Hand Stretch

Purpose: To improve flexibility of hands.

- 1. Sit upright in a chair with your arms stretched out.
- 2. Make fists with your hands (see Figure A) and then fling them open, stretching your fingers wide (see Figure B).
- 3. Repeat 3 to 4 times.

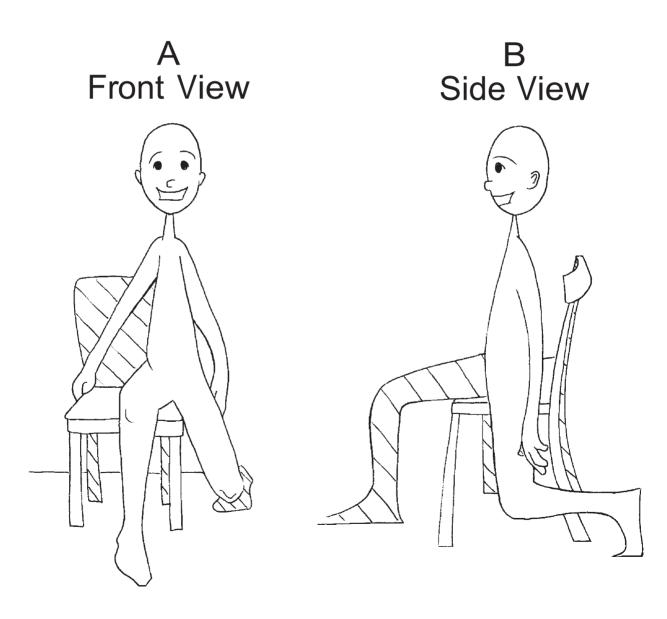


Stretching Exercises—Lower Body

30a. Front of Thigh Stretch (Quadriceps)—Without Support

Purpose: To improve flexibility of thigh muscles.

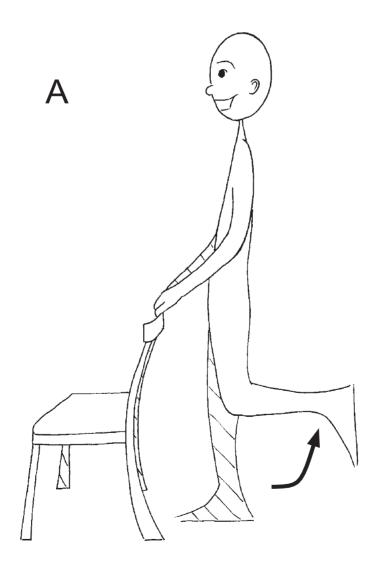
- 1. Sit on the left side of a chair with your right buttock on the chair. Hold on to right side of chair with your right hand for balance (see Figure A).
- 2. Extend your left foot behind you with toes tucked under (see Figure B). Knee should be bent to 90 degrees. For a deeper stretch, extend foot further behind you. Hold for 20 to 30 seconds.
- 3. Repeat with your other leg.



30b. Front of Thigh Stretch (Quadriceps)—With Support

Purpose: To improve flexibility of thigh muscles.

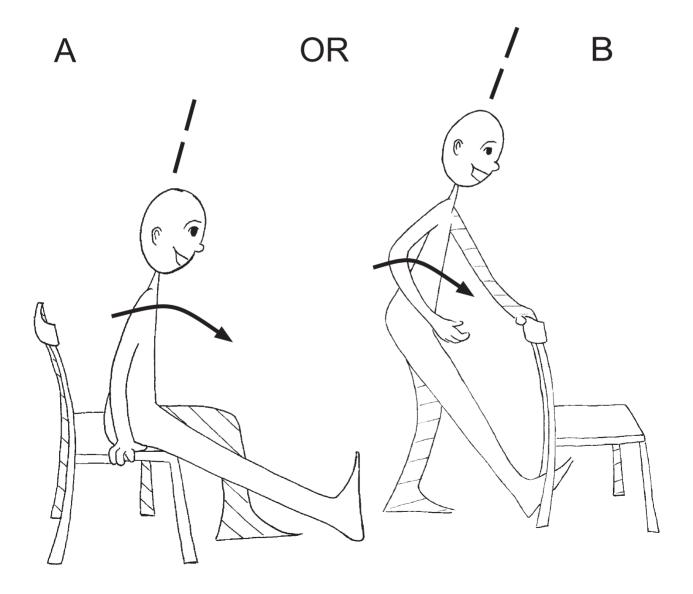
- 1. Stand behind chair, feet shoulder distance apart, using chair for balance as needed.
- 2. Bend one leg, keeping hips forward (see Figure A). The stretch is in the front of the thigh. Hold for 20 to 30 seconds.
- 3. Repeat with your other leg.



31. Back of Thigh Stretch (Hamstrings)

Purpose: To improve flexibility of thigh muscles.

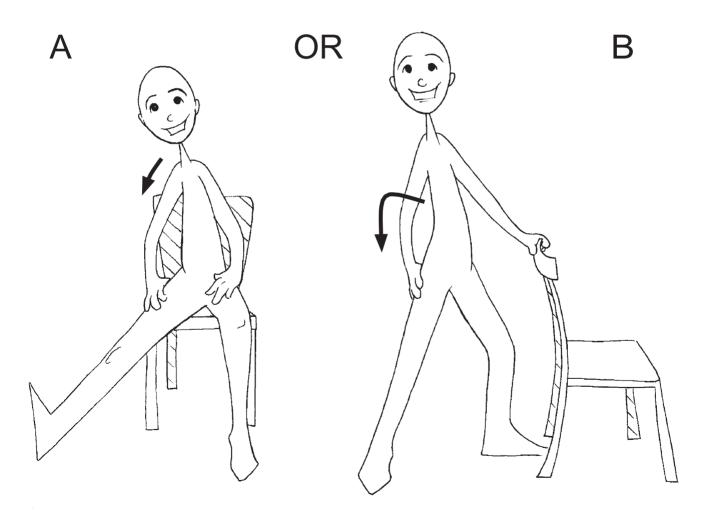
- 1. Sit toward the front of the chair (see Figure A). You can hold on to the sides of the chair for balance. Or, stand behind a chair and use it for support (see Figure B).
- 2. Extend your right leg in front of you. With a straight back, lean forward until you feel a slight stretch in your right hamstring. Hold for 20 to 30 seconds.
- 3. Repeat with your other leg.



32. Inner Thigh Stretch

Purpose: To improve hip flexibility.

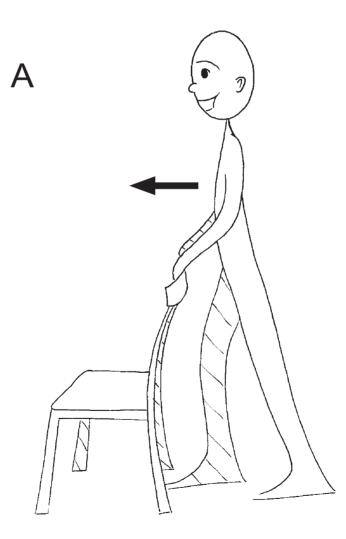
- Sit upright in a chair with your right leg out to the side, toes up (see Figure A). Or, stand with your legs shoulder width apart with your left knee slightly bent and your left foot pointed sideways. Your right leg should be straight with your right foot forward. Use a chair for support (see Figure B).
- 2. Lean slightly toward your right leg until you feel a slight stretch. Hold for 20 to 30 seconds.
- 3. Repeat with your other leg.



33a. Calf Stretch—Standing Version

Purpose: To improve flexibility of the calf muscles.

- 1. Use a chair for balance and stand upright.
- 2. Step back with the right foot, keeping foot flat.
- 3. Keep the right knee straight, the left knee slightly bent.
- 4. Slowly lean forward until you feel a slight stretch in the right calf (see Figure A). Make sure your knee is behind your right toe. Hold for 20 to 30 seconds.
- 5. Repeat with your other leg.



33b. Calf Stretch—Sitting Version

Purpose: To improve flexibility of the calf muscles.

- 1. Start sitting toward front of chair with your feet flat on the floor.
- 2. Straighten one leg, heel on the floor.
- 3. Flex foot, pulling toes toward body (see Figure A). Hold for 20 to 30 seconds.
- 4. Repeat with your other leg.

Α

Well done!

You have now completed the most important warm-up, aerobic, balance, strengthening, and stretching exercises. Try to do these whenever you miss a class. These exercises are best done three times per week, on alternate days. Your muscles need to rest for a day after doing strengthening exercises.



Resources

Exercising at home can be very convenient. No travel is required, and the schedule is up to you. Here are some additional resources to help you exercise safely on your own:

 Exercise: A Guide from the National Institute on Aging (free) 120-page exercise guide with exercise diagrams

To order: Call 800-222-2225 or download from www.nia.nih.gov.

Video of the NIA Exercise Guide: Call 800-222-2225 for cost and availability.

 AARP's Physical Activities Workbook (first copy free, extra copies \$1 each)

To order: Call 888-687-2277 (888-OUR-AARP).

 AARP's Step Up to Better Health Walking program guide with progress log forms and a step counter (pedometer) Program free; pedometer \$9

To order: Call 800-861-0168 or visit http://aarp.com/walking.

 Sit and Be Fit video series (prices vary by title) Videotapes for general chair and stretching/toning exercises, and for exercising with health conditions such as arthritis, COPD, stroke, multiple sclerosis, osteoporosis, and Parkinson's

To order: call 509-448-9438 for a catalog or visit www.sitandbefit.org.

 Exercise and Your Arthritis (free brochure, \$20 annual membership)
 24-page brochure from the Arthritis Foundation

To order: call 800-568-4045 or visit www.arthritis.org.

You can borrow exercise tapes from the library to figure out which one is right for you.

Another free option is the excellent television show *Sit and Be Fit*. Perfect for exercising at home—in a chair or on the couch—this 30-minute program airs on many PBS television stations Monday through Friday mornings.

For general exercise and health information, you can also contact AARP (888-687-2277 or www.aarp.org) or the Arthritis Foundation (800-568-4045 or www.arthritis.org).

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