

Go4Life





Your Everyday Guide from the National Institute on Aging at NIH

## **Exercise & Physical Activity**



IN THIS BOOK...

	introduction	
	Why Is Physical Activity Such a Big Deal?	6
	Using This Book	8
	1	
	get ready	
	What Kinds of Exercises and Physical Activities Improve Health and Physical Ability?	es 12
	Endurance	13
	Strength Balance Flexibility	13 13 13
PA		

## 2 get set

Identifying Your Starting Point		
Setting Your Goals		
Writing a Plan to Add Exercise and Physical Activity to Your Life		
Talking With Your Doctor About Exercise and Physical Activity		
Safety First: When to Check with Your Doctor		



# 4 sample exercises

How to Improve Your Endurance	37
How Much, How Often	37
Safety	38
Progressing	39
How to Improve Your Strength About Strength Exercises How Much, How Often Safety Progressing	41 41 41 42 43
How to Improve Your Balance How Much, How Often Safety Progressing Anytime, Anywhere Balance Exercises	
How to Improve Your Flexibility	70
How Much, How Often	70
Safety	70
Progressing	70



# 5 how am I doing?

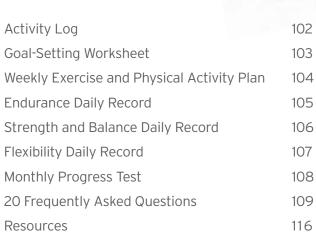


## 6 healthy eating

Tips for Healthy Eating 96
Drinking Enough Fluids 97
Eating Out 97



# 7 keep going



Strength

119



Acknowledgments



Welcome to Exercise & Physical Activity: Your Everyday Guide from the National Institute on Aging! The National Institute on Aging (NIA) is part of the National Institutes of Health, and the goal of our research is to improve the health and well-being of older adults.

Like most people, you've probably heard that physical activity, including exercise, is good for you. If you're already active, keep it up. It may even be time to push yourself a little harder, try a new activity, or find new ways to add exercise to your daily life.

Don't worry if you've never exercised, or if you stopped exercising for some reason. Let us help you get moving. By picking up this book and looking through it, you've taken an important first step toward good health.

This guide is the centerpiece of **Go4Life**®, NIA's national campaign to help you fit exercise and physical activity into your daily life. To find out more about how **Go4Life** can help you be more active, visit our website at www.nia.nih.gov/Go4Life.





## Why Is Physical Activity Such a Big Deal?

Regular exercise and physical activity are important to the physical and mental health of almost everyone, including older adults. Being physically active can help you continue to do the things you enjoy and stay independent as you age. Regular physical activity over long periods of time can produce long-term health benefits. That's why health experts say that older adults should be active every day to maintain their health.

In addition, regular exercise and physical activity can reduce the risk of developing some diseases and disabilities that develop as people grow older. In some cases, exercise is an effective treatment for many chronic conditions. For example, studies show that people with arthritis, heart disease, or diabetes benefit from regular exercise. Exercise also helps people with high blood pressure, balance problems, or difficulty walking.

One of the great things about physical activity is that there are so many ways to be active. For example, you can be active in short spurts throughout the day, or you can set aside specific times of the day on specific days of the week to exercise. Many physical activities — such as brisk walking, raking leaves, or taking the stairs whenever you can — are free or low cost and do not require special equipment. You could also check out an exercise video from the library or use the fitness center at a local senior center.

This guide shows you many types of exercise and physical activity. It also has lots of tips to help you be active in ways that suit your lifestyle, interests, health, and budget, whether you're just starting out, getting back to exercising after a break, or fit enough to run a 3-mile race. It's for everyone — people who are healthy and those who live with an ongoing health problem or disability.



#### **GO HERE FOR MORE INFO**

For many people, "real life"—things like illness, traveling, or an unexpected event — can get in the way of being active. See page 28 for tips on how to deal with breaks in your physical activity routine.

## What's the Difference Between Physical Activity and Exercise?

Both terms refer to the voluntary movements you do that burn calories. Physical activities are activities that get your body moving such as gardening, walking the dog, raking leaves, and taking the stairs instead of the elevator. Exercise is a form of physical activity that is specifically planned, structured, and repetitive such as weight training, tai chi, or an aerobics class.

Physical activity and exercise are both important and can help improve your ability to do the everyday activities you enjoy. (See Exercise and Everyday Activities Go Together on page 15.)

The bottom line? There are many ways to be active every day. Find something you enjoy doing, include it in your regular routine, and try to increase your level of activity over time.



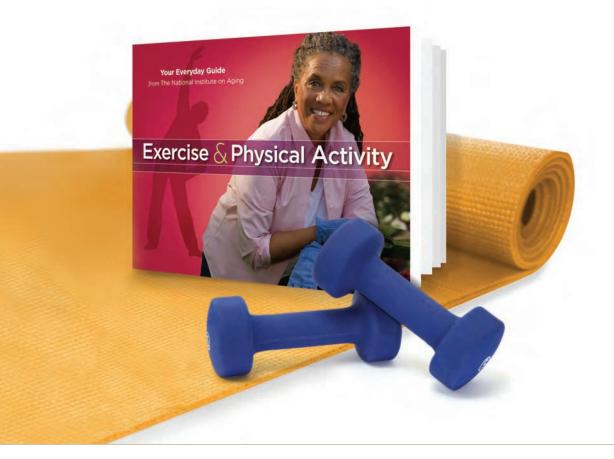
## make it a priority

Being active and exercising regularly can change your life. See how Greta has benefited from regular exercise:

"At age 67, I'm in the best physical condition of my life. Two years ago, I joined a low-impact aerobics class at a nearby senior center. The entire routine is done to music, planned and led by an instructor. My balance has improved greatly, and my osteoporosis has remained stable."

## **Using This Book**

This guide can help you take charge of an important part of your health. You may want to read through the entire book first to learn about the benefits of exercise and physical activity, and to find out how to get started, reduce your risks, and reward your progress. Then, keep it handy so you can refer to the sample exercises and use some of the charts at the back of the book to record your activities. From time to time, you may need to check the tips for getting back on track if there's a break in your routine or the tips for healthy eating. Throughout the guide, you'll find personal stories that we hope will inspire you to be more active every day.



**Chapter 1: Get Ready** talks about the "why" of exercise and physical activity. It tells you the benefits of being active and describes the different types of exercise.

**Chapter 2: Get Set** guides you on getting organized and reviewing your current activity levels, setting short- and long-term goals, and creating a realistic plan for becoming active over time.

**Chapter 3: Go!** is all about the "how." The guide offers tips to help you get started. It also has ideas to help you stick with your decision to be active every day and to get you back on track if you have to stop exercising for some reason.

**Chapter 4: Sample Exercises** gives you some specific activities and exercises, including exercises to increase your strength, improve balance, become more flexible, and increase endurance. All of the exercises have easy directions to help you do them safely.

Chapter 5: How Am I Doing? offers you some ways to test your progress and reward your success.

**Chapter 6: Healthy Eating** briefly discusses another key to good health — nutritious eating habits.

**Chapter 7: Keep Going** includes worksheets to keep track of your progress and answers to frequently asked guestions about exercise and physical activity for older adults. You'll also find a list of resources for more information. Some of the resources are especially for people with specific health problems or disabilities who want to be active. In addition, there's a form you can fill out and send us after you've been active for at least a month. We'll send you a certificate from the National Institute on Aging to recognize your commitment to improve your health.



#### GO HERE FOR MORE INFO

Visit Go4Life, our online exercise and physical activity campaign, for a sample workout, exercise videos, motivational e-cards, printable tip sheets, success stories, tracking tools, virtual coaches, and more. www.nia.nih.gov/Go4Life





**KEEP GOING WORKSHEETS** 

See pages 102-108



Today, we know a lot more about older adults and their need to exercise. Regardless of their health and physical abilities, older adults can gain a lot by staying physically active. Even if you have difficulty standing or walking, you can still exercise and benefit from it. In fact, in most cases, you have more to lose by not doing anything.

Exercise and physical activity benefit every area of your life. They can:

- Help maintain and improve your physical strength and fitness.
- Help improve your ability to do the things you want to do.
- Help improve your balance.
- Help manage and prevent diseases like diabetes, heart disease, breast and colon cancer, and osteoporosis.
- Help reduce feelings of depression, may improve mood and overall well-being, and may improve or maintain some aspects of cognitive function, such as your ability to shift quickly between tasks, plan an activity, and ignore irrelevant information.

As you've probably noticed, the key word is you. The benefits you gain from physical activity will depend on your starting point and how much effort you put into it. You'll need to match your physical activity to your own needs and abilities. For example, some people can swim a mile without thinking twice about it. For others, a slow walk to the corner and back is a big achievement. Exercise and physical activity are good for just about everybody, and there are many activities to choose from. This guide has ideas to help you be active and have fun.



#### GO HERE FOR MORE INFO

See page 20 for more on talking with your doctor about physical activity.





Having fun and socializing are major reasons active people give when asked why they exercise. Ramesh can show you how:

"I started playing tennis 38 years ago for pleasure. After moving south to get away from the cold and snow of the Midwest, I started playing year round. I play with friends every weekend, both singles and doubles. After tennis, we socialize over refreshments. That's the best part of our get-together. At age 65, I'm the oldest in the group; the youngest is 16. I love the game and hope to play forever."

## What Kinds of Exercises and Physical **Activities Improve Health and Physical Ability?**

Exercises generally fall into four main categories: endurance, strength, balance, and flexibility. Though we describe them separately, some activities fit into several categories. For example, many endurance activities also help build strength, and strength exercises can help improve balance.



#### **Endurance**

Endurance, or aerobic, activities increase your breathing and heart rate. These activities help keep you healthy, improve your fitness, and help you do the tasks you need to do every day. Endurance exercises improve the health of your heart, lungs, and circulatory system. They also delay or prevent many diseases that are common in older adults such as diabetes, colon and breast cancers, heart disease, and others. Physical activities that build endurance include:

- Brisk walking
- Yard work (mowing, raking)
- Dancing
- Jogging
- Swimming
- Biking
- Climbing stairs or hills
- Playing tennis
- Playing basketball



#### **GO HERE FOR MORE INFO**

Chapter 4, beginning on page 34, shows you how to do the exercises mentioned on this page and many others.

## Strength

Even small increases in muscle strength can make a big difference in your ability to stay independent and carry out everyday activities such as climbing stairs and carrying groceries. Some people call using weight to improve your muscle strength "strength training" or "resistance training." Strength exercises include:

- Lifting weights (see page 41)
- Using a resistance band (see page 44)

#### **Balance**

Balance exercises help prevent falls, a common problem in older adults. Many lower-body strength exercises also will improve your balance. Exercises to improve your balance include:

- Standing on one foot (see page 65)
- Heel-to-toe walk (see page 66)
- Tai Chi

## **Flexibility**

Stretching can help your body stay flexible and limber, which gives you more freedom of movement for your regular physical activity as well as for your everyday activities. To increase your flexibility, try:

- Shoulder and upper arm stretch (see page 73)
- Calf stretch (see page 88)
- Yoga



When working outdoors, be sure to use sunscreen. Also, wear sunglasses, protective clothing, and a hat with a wide brim.





## make it interesting

There are many ways to be active. For Pat, age 56, gardening keeps her moving:

"I know some people think gardening isn't really exercise, but I'm here to say, "Are they kidding?" Maybe I'm only exercising my imagination when I pore over plant catalogs to pick out seeds for the garden, but when spring comes, all that changes. Working in my garden means bending and lifting, moving and stretching, not to mention digging and hauling! Anyone who's ever had a garden knows that shoveling compost, lifting 40-pound bags of mulch, transplanting seedlings, dividing plants, and pulling weeds are serious physical activities. For avid gardeners, there's always something to do, from spring planting and weeding to fall raking and cleanup. It keeps a body moving!"

## **Exercise and Everyday Activities Go Together**

Exercise and physical activity are good for your health. In addition, improving your endurance, strength, balance, and flexibility can help you do many of your everyday activities. For example:

## **Endurance** activities will make it easier for you to:

- Push your grandchildren on the swings
- Vacuum
- Rake leaves

## **Strength** training can maintain your ability to:

- Carry a full laundry basket from the basement to the second floor
- Carry your smaller grandchildren
- · Lift bags of mulch in the garden



## Flexibility, or stretching, exercises make it possible for you to:

- Look over your shoulder to see what's behind you as you back the car out of the driveway
- Make the bed
- Bend over to tie your shoes

### Balance exercises can help you:

- Stand on tiptoe to reach something on the top shelf
- Walk up and down the stairs
- Walk on an uneven sidewalk without falling





We hope you agree that regular exercise and physical activity are important and that you're ready to take action! This chapter is all about getting organized. It offers tips for setting short- and long-term goals, choosing activities and fitting them into your daily life, and managing some of the practical things, such as getting the right shoes or working with a personal trainer.

This guide's main goal is to help you become more active, get the most from your activities, and do them safely. The key is to know your starting point and build slowly from there. Knowing your starting point will help you pick activities that are comfortable and realistic for you. Starting out this way also will help you be successful.

## **Identifying Your Starting Point**

Think about a typical weekday and weekend day. How much time do you spend sitting? How much time are you active? When you're up and moving, what kinds of activities are you doing?

To help you figure out your activity level, try filling in an activity log. For a couple of weekdays and a weekend, keep track of how much time you exercise or are physically active. Write down how much time you spend doing each activity. The Activity Log on page 102 will get you started.

You can use the last column of the Activity Log to write down some ways you think you can add activities to your daily routine. If you're not active yet, aim for a modest beginning and build from there. If you are already pretty active, then you can be more ambitious about adding to your activities.





#### GO HERE FOR MORE INFO

If you need to jog your memory, go back to Chapter 1 and look at the examples of the four types of exercise. Also, review Exercise and Everyday Activities Go Together on page 15.



There are many ways to fit exercise and physical activity into your regular routine:



Try something new: If you baby-sit for your grandchildren, how about walking to the park instead of playing video games?



Rethink your priorities: How important is an entire afternoon of TV? How about a walk after lunch instead?



Work harder at the things you already do: Rake the leaves instead of using the leaf blower.

## **Setting Your Goals**

Many people find that having a firm goal in mind motivates them to move ahead on a project. Goals are most useful when they are specific, realistic, and important to you. Consider both short- and long-term goals. Your success depends on setting goals that really matter to you. Write down your goals, put them where you can see them, and review them regularly.

In addition to seeing how physically active you are now, you can check how fit your body is. Several simple tests can help you see how fit you are right now (see page 92). The results can help you set realistic goals. They also will be useful later on to measure your progress.

Short-term goals will help you make physical activity a regular part of your daily life. For these goals, think about the things you'll need to get or do in order to be physically active. For example, you may need to buy walking shoes or fill out an Activity Log so you can figure out how to fit physical activity into your busy day. Make sure your short-term goals will really help you be active. Here are a few examples of short-term goals:

- Today, I will decide to be more active.
- Tomorrow, I will find out about exercise classes in my area.
- By the end of this week, I will talk with my friend about exercising with me a couple of times a week.
- In the next 2 weeks, I will make sure I have the shoes and comfortable clothes I need to start walking.

If you're already active, think of short-term goals to increase your level of physical activity. For example, over the next week or two, you may want to move gradually from walking to jogging, increase the amount of weight you lift, or try a new kind of physical activity. No matter what your starting point, reaching your short-term goals will make you feel good and give you confidence to progress toward your long-term goals. Use the Goal-Setting Worksheet on page 103 to help you get started.

After you write down your short-term goals, you can go on to identify your long-term goals. Focus on where you want to be in 6 months, a year, or 2 years from now. Long-term goals also should be realistic, personal, and important to you. Here are a few examples:

- By this time next year, I will swim a mile three times a week.
- Next summer, I will be able to play ball with my grandchildren.
- In 6 months, I will have my blood pressure under control by increasing my physical activity and following my doctor's advice.

Add your own long-term goals to the Goal-Setting Worksheet on page 103.



## make it routine

For Sam, "being able to do the things I enjoy doing" motivates him to exercise every day:

"I started exercising regularly way back in 1960. A friend put me in touch with a personal trainer at a nearby gym, and he showed me how to lift weights. Today, at age 83, I'm still exercising to stay fit. I get up every day and exercise for 10 to 15 minutes. I lift weights followed by stretching. In the evening, I do the same routine for about 15 minutes. I'm a drummer by profession, and I do about four gigs a month. Exercise keeps my muscles strong and lets me continue to do my drumming."



Don't forget to build rewards into your plan. For each goal you reach, treat yourself to something special — a movie, a trip to a museum, a new CD, or a picnic in the park.

Let us help you celebrate your progress! If you increase your physical activity for more than a month, call our Information Center at (800) 222-2225 and we'll send you a certificate from the National Institute on Aging to recognize your commitment.



## Writing a Plan to Add Exercise and Physical Activity to Your Life

Some people find that writing an exercise and physical activity plan helps them keep their promise to be active. See if this works for you. Be sure the plan is realistic for you to do, especially as you gain experience in how to be active. You might even make a contract with a friend or family member to carry out your plan. Involving another person can help you keep your commitment.

Make your plan specific and grounded in your goals. For each exercise or activity vou choose, include:

- What kind of activity you plan to do
- Why you want to do it
- When you will do it
- Where you will do it

Start out with realistic activities based on how physically active you are now. Don't expect to go from couch potato to super athlete right away. Regularly review and update your plan and long-term goals so that you can build on your success. You can use the Weekly Exercise and Physical Activity Plan on page 104 to write down your activities.

When it comes to motivation, the first few months are crucial. If you can stick with physical activities you enjoy, it's a good sign that you will be able to make exercise and physical activity a regular part of your everyday life.

## **Talking With Your Doctor About Exercise and Physical Activity**

Most older people don't have health problems that would prevent them from doing moderate activity or the types of exercises described in this guide. In fact, there's a way for almost every older adult to exercise safely and get meaningful health benefits.

You may want to talk with your doctor, however, if you aren't used to energetic activity and you want to start a vigorous exercise program or significantly increase your physical activity. You also should talk with your doctor if you have any of the health problems mentioned on page 22. This does not mean that exercise is dangerous. Doctors rarely tell people not to exercise, but they may have certain safety tips for those who have recently had hip or back surgery, those with uncontrolled health problems, or those with chronic conditions such as diabetes. heart disease, or arthritis.

Your activity level is an important topic to discuss with your doctor as part of your ongoing preventive health care. Talk about exercise at least once a year if your health is stable, and more often if your health is getting better or worse over time so that you can adjust your exercise program. Your doctor can help you choose activities that are best for you and reduce any risks. Here are a few things you may want to discuss:

- Ask whether there are exercises or activities you should avoid. An illness or surgery may affect how you exercise. For example, if you've had hip or back surgery, you may need to modify or avoid some exercises, or if you develop blood clots in your legs, you will have to restrict your activity for a time. Your doctor can tell you how to increase your physical activity gradually as you recover.
- Talk about any unexplained symptoms, such as chest pain or pressure, pain in your joints, dizziness, or shortness of breath. Postpone exercise until the problem is diagnosed and treated. (See page 28 about getting back to regular exercise after a break.)

- Make sure your preventive care is up to date. For example, women age 65 and older should have regular tests for osteoporosis. Weight-bearing exercises — such as walking and lifting weights are especially helpful for those with osteoporosis.
- Understand how any ongoing health conditions affect exercise and physical activity. For example, people with arthritis may need to avoid some types of activity, especially when joints are swollen or inflamed. Those with diabetes may need to adjust their daily schedule, meal plan, or medications when planning their activities.
- Talk to your doctor if you think you might have an uncontrolled medical condition that might affect the type of exercise you should be doing. For example, it is important to know how to exercise safely if your blood pressure or diabetes is not under control.

#### **GO HERE FOR MORE INFO**

Use the My Go4Life tools at www.nia.nih.gov/Go4Life to set your exercise and physical goals and keep track of your progress.







Some people with diabetes may need special shoes or shoe inserts to prevent serious foot problems. Medicare may pay some of the costs. Your doctor or podiatrist can tell you how to get these special shoes.



## **Safety First: When to Check** with Your Doctor

Almost anyone, at any age, can do some type of exercise and physical activity. You can still be active even if you have a long-term condition like heart disease or diabetes. In fact, exercise and physical activity may help. But, talk with your doctor if you aren't used to energetic activity. Other reasons to check with your doctor before you exercise include:

- Any new symptom you haven't yet discussed
- Dizziness or shortness of breath
- Chest pain or pressure
- The feeling that your heart is skipping, racing, or fluttering
- Blood clots
- An infection or fever with muscle aches
- Unplanned weight loss
- Foot or ankle sores that won't heal
- Joint swelling
- A bleeding or detached retina, eye surgery, or laser treatment
- A hernia
- · Recent hip or back surgery

## **Getting the Right Shoes**

Your shoes are an important part of your physical activity routine. Remember, you're going to be wearing them a lot. Here are a few pointers to keep in mind:

- Choose shoes that are made for the type of physical activity you want to do (walking, running, dancing, bowling, tennis).
- Look for shoes with flat, non-skid soles; good heel support; enough room for your toes: and a cushioned arch that's not too high or too thick.
- Make sure your shoes fit well and provide proper support for your feet. This is especially important if you have diabetes or arthritis. Shoes should feel comfortable right from the start.
- Think of your shoes as safety equipment for your feet. Check them regularly, and replace them when they're worn out. You can tell you need new shoes when:
  - > The tread on the bottom is worn down
  - > Your feet (especially your arches) feel tired after activity
  - > Your shins, knees, or hips hurt after activity



## Finding a Personal Trainer Who's Right For You

If you're not used to exercising, you may want to work with a personal fitness trainer. One of the best ways to find a personal trainer is to get a referral from someone you know who has a great trainer. Ask your friends and family or your health care provider. You also can check with a local health club or senior center. Once you have a couple of names, here are a few questions to help you pick the right person. If you can answer YES to most of these questions, you're probably on the right track.

person. If you can answer tes to most of these questions, you're probably on the right track.	Yes	No
Education and Experience		
Does the trainer have a certification from an accredited organization? For groups that certify personal trainers, exercise specialists, and fitness instructors, see National Commission for Certifying Agencies on page 118.		
Does the trainer have education or experience in exercise science, aging, and program design?		
Does the trainer have at least 2 years of experience, including experience training people your age?		
Will the trainer be able to develop an exercise program based on your goals, abilities, and health?		
Has the trainer worked with people with your medical conditions?		
Does the trainer know how to personalize your exercises based on medications you take?		
Personality		
Did the trainer listen carefully to you and answer your questions?		
Does the trainer have a sense of humor and a personality that you like?		
Business Practices		
Has the trainer told you what to expect from the sessions?		
Are the costs of the sessions and the cancellation policy clearly stated?		
Is the trainer insured or bonded?		
Will the trainer give you a list of clients so you can check references?		



Now that you know about the many types of physical activity and you've set your goals, you're ready to **go!** This chapter has tips to help you get started, resume your activity if you've stopped, stay active, and even increase your activity level over time.

### **Three Keys to Success**

To help you get started and keep going, here are three ways to approach exercise and physical activity.

## 1. Include Physical Activity in Your Everyday Life

Physical activity needs to be a regular, permanent habit to produce benefits.

Again, the key word is **you**. Set yourself up to succeed right from the start by choosing activities that appeal to you, exercising safely, charting your progress to see your success, and making your activity routine fit your personal lifestyle. Here are a few ways to make physical activity a regular part of your daily life.

Make it a priority. Many of us lead busy lives, and it's easy to put physical activity at the bottom of the "to do" list. Remember, though, being active is one of the most important things you can do each day to maintain and improve your health. Make a point to include physical activities throughout your day. Try being active first thing in the morning before you get busy. Think of your time to exercise as a special appointment, and mark it on your calendar.

Make it easy. If it's difficult or costs too much, you probably won't be active. You are more likely to exercise if it's easy to do. Put your 2-pound weights next to your easy chair so you can do some lifting while you watch TV. Walk up and down the soccer field during your grandchild's game.





## STICKING WITH IT: **What Works**

You're more likely to stay active if you:

- Think you will benefit from your activities
- Include activities you enjoy
- Feel you can do the activities correctly
- Believe the activities are safe
- Have regular access to the activities
- Can fit the activities into your daily schedule
- Find that the activities are affordable
- Can see the benefits of regular exercise and physical activity

Walk the entire mall or every aisle of the grocery store when you go shopping. When you go out to get the mail, walk around the block. Join a gym or fitness center that's close to home. You can be active all at once, or break it up into smaller amounts throughout the day. Do more of the activities you already like and know how to do.

Make it social. Enlist a friend or family member. Many people agree that having an "exercise buddy" keeps them going. Take a yoga class with a neighbor. If you don't already have an exercise partner, find one by joining a walking club at your local mall or an exercise class at a nearby senior center. Take a walk during lunch with a co-worker.

## Make it interesting and make it fun.

Do things you enjoy and pick up the pace a bit. If you love the outdoors, try biking, fishing, jogging, or hiking. Listen to music or a book on CD while walking, gardening, or raking. Plan a hiking trip at a nearby park.

Above all, make it an active decision. Seize opportunities. Choose to be active in many places and many ways:

- When you unload the groceries, strengthen your arms by lifting the milk carton or a 1-pound can a few times before you put it away.
- When you go shopping, build your endurance by parking the car at the far end of the parking lot and walking briskly to the store. Or, get off the bus one or two stops earlier than usual.
- Instead of calling or e-mailing a colleague at work, go in person and take the stairs!
- Take a few extra trips up and down the steps at home to strengthen your legs and build endurance.
- Try to do some of your errands on foot rather than in the car.



#### GO HERE FOR MORE INFO

To learn how to do the exercises mentioned on this page, see Chapter 4 beginning on page 34.

- Multi-task the active way:
  - > While you're waiting in line, practice your balancing skills by standing on one foot for a few seconds, then the other. Gradually build up your time.
  - > While you're talking on the phone, stand up and do a few leg raises or toe stands to strengthen your legs.
  - > Take advantage of small bits of "down time" to do an exercise or two. For example, while you're waiting for the coffee to brew or for your spouse to get ready to go out, do a few wall push-ups or calf stretches.

### 2. Try All Four Types of Exercise

Most people tend to focus on one activity or type of exercise and think they're doing enough. The goal is to be creative and choose exercises from each of the four types we've talked about — endurance, strength, balance, and flexibility. Mixing it up will help you reap the benefits of each type of exercise, as well as reduce boredom and risk of injury. You can use the Weekly Exercise and Physical Activity Plan on page 104 to write down your activities.



## make it easy

Finding enjoyable ways to add exercise to your life can be the ticket to success. See how Marian made it work for her:

"I'm an active 62-year-old, but a family history of heart disease and high cholesterol convinced me that I needed more exercise. After I tried walking on a treadmill at a nearby community center, I knew I'd be happier outside. So, I got a step counter and started walking in my neighborhood. I've seen purple tulips bloom in spring and red dogwood leaves drop in the fall. I always come home with more energy for the rest of my day." (For more on step counters, see page 37.)



If you're thinking of moving to a retirement or assisted-living community, ask whether the community has a pool, exercise classes, walking trails, a golf course, or personal trainer. Does it have well-lit sidewalks so you can walk safely in the evening as well as during the day? Are there parks nearby?



If you lift weights, alternate these exercises with time on the treadmill or stationary bike. End your routine with stretching exercises.

If you focus mainly on endurance activities, be sure to add stretching, balance, or strength exercises to your routine. If you want to do strength exercises every day, alternate muscle groups, or exercise all of your muscle groups every other day. (See Weekly Exercise and Physical Activity Plan on page 104.)

## 3. Plan for Breaks in the Routine (Life Happens!)

Getting older can mean more time for trips to see children and grandchildren or vacations away from home. People retire and move to new houses or even new parts of the country. Sometimes the unexpected happens — family illness, caregiving responsibilities, or the death of a loved one. All of these events can interrupt your physical activity routines.

These breaks can make it hard or even impossible at times to stick with your regular activities. But you can start again. Here are a few ideas to help you stay active or start again if you've had to stop:

Don't be too hard on yourself. Recognize that there will be times when you won't want to exercise, or it feels too hard. You are not alone: everyone has those feelings. Just try to get back to your activities as soon as possible. The sooner you resume some sort of activity, the better you'll feel, and the easier it will be to get back into your routine.

Talk with your doctor about when you can resume your regular routine if you stopped exercising because of an illness or new symptoms.

Think about the reasons you started exercising and the goals you set for yourself. Remembering your motivations and how much you've already accomplished may help recharge your batteries and get you started again.

Ask family and friends to help you get back on track. Sometimes, you may want an exercise buddy. At other times, all you may need is a word of support.

Try something easier or an activity you haven't done recently if you don't like the activity you started. You might even want to try something you've never done before. Mastering something simple or new may give you the confidence you need to resume a regular exercise program.

Talk with your doctor or trainer. You may get the boost you need to move past the hurdle.

Start again at a comfortable level if you haven't exercised for several weeks. Then gradually build back up. With a little time, you'll be back on track.

Think creatively about other ways to exercise if you can't do your regular physical activities because of bad weather or a change in your routine. For example, if caring for a loved one is keeping you indoors, try an exercise video, jog in place, dance around your living room, or walk up and down the stairs a few extra times. Just keep moving!

Be flexible. When your grandchildren come for a visit, reschedule your exercise during their nap time, or take them with you for a walk.

Believe in yourself! Feel confident that even if your activity is interrupted, you can start again and be successful. Don't worry about the time you missed. What's important is to focus on your fitness goals and start again at whatever level is possible for you.

## Walking Safely in Rural Areas

Rural areas may have less traffic than big cities, but "a walk in the country" does require special care. Often the vehicles on rural roads travel at much higher speeds than pedestrians are used to, and drivers won't expect to see someone walking on or near the side of the road. So, remember the following safety rules, and enjoy vour walk!

- Always walk facing oncoming traffic.
- Look for a smooth, stable surface alongside the road.
- If there are guardrails, see if there's a smooth, flat surface behind the barrier where you can walk.
- If you need to walk on a paved shoulder, stay as far away from traffic as possible.
- Watch for bridges and narrow shoulders.
- Be sure drivers can see you. Wear brightly colored clothing, and if you walk during low-light hours — dusk or dawn — be sure you have reflective material on your jacket or walking shoes and carry a flashlight.
- Take along a cell phone and an ID, especially if walking alone.







## A few more tips on coping with breaks in your exercise routine

Sometimes the reason you have to stop exercising is temporary; sometimes it's permanent. There may be a change in your living arrangements or in your health, for example. Some are happy occasions; some are sad. Here are some ways to manage these breaks.

	Temporary	Permanent
A Change in Your Situation	<ul> <li>You're on vacation:</li> <li>Many hotels now have fitness centers. Check out the facilities where you'll be staying, and bring along your exercise clothing or equipment (resistance band, bathing suit, or walking shoes).</li> <li>Get out and see the sights on foot rather than just by tour bus.</li> <li>Caring for an ill spouse is taking up much of your time:</li> <li>Work out to an exercise video when your spouse is napping.</li> <li>Ask a family member or friend to come over so you can go for a walk.</li> </ul>	<ul> <li>Your usual exercise buddy moves away:</li> <li>Ask another friend to go with you on your daily walk.</li> <li>Ask other older adults in your area where they go for walks or what physical activity resources are available nearby.</li> <li>Join an exercise class at your local community center or senior center. This is a great way to meet other active people.</li> <li>You move to a new community:</li> <li>Check out the fitness centers, parks, and recreation associations in your new neighborhood. Look for activities that match your interests and abilities.</li> <li>Get involved!</li> </ul>
A Change in Your Health	<ul> <li>The flu keeps you out of action for a few weeks:</li> <li>Wait until you feel better and then start your activity again.</li> <li>Gradually build back up to your previous level of activity.</li> </ul>	<ul> <li>You are recovering from hip or back surgery:</li> <li>Talk with your doctor about specific exercises and activities you can do safely when you're feeling better.</li> <li>Start slowly and gradually build up your activities as you become stronger.</li> </ul>

## **Building Up the Benefits**

Once you start exercising and becoming more physically active, you'll begin to see results in just a few weeks — you'll feel stronger and more energetic. You'll notice that you can do things easier, faster, or for longer than before. This tells you that your body is getting used to a higher level of activity. Now is the time to build on those benefits by doing more. Keep your starting point in mind, though. For some people, switching from 1- to 2-pound weights is a big step forward. For others, building up to walking briskly or even running is a reasonable goal.

No matter what your starting point:

• Add new physical activities. Be creative! Try some new activities to keep your interest alive. Sign up for dance lessons. Talk to your friends about bowling together once a week. Join a water aerobics class. Save gas by walking to your nearby grocery store. Can you trade in any of your electric appliances for muscle-powered versions: How about your electric can opener? Your electric lawn mower? Your electric leaf blower?

- Review your goals. If you are able, do your activities **longer, farther, or harder.** If you walk 30 minutes at lunch time every day, make it 40 minutes. If you only have 30 minutes for lunch, pick up the pace so you're walking faster and farther in the same amount of time. Try using a pedometer, or step counter, to track your progress. Seeing the number of steps add up can be great motivation. If you usually swim half a mile, build up to three-quarters of a mile. Use a harder resistance band when you do strength exercises.
- Do the activities more often. Spend time in your garden more often. Head over to the gym three times a week instead of two. Walk every day.

## **GO HERE FOR MORE INFO**

Healthy eating and physical activity go hand in hand. See Chapter 6, starting on page 94, for more on this topic.





## make it safe

For many people, even those who exercise regularly, breaks in the routine mean the end of daily exercise and its benefits. Freddi tells how she carefully got started again:

"For more than 10 years, I jogged every day to clear the cobwebs and get my blood flowing. Imagine how awful I felt when I fell down the stairs and broke my ankle. At 54, I wasn't ready to be a couch potato. After the cast came off, I had physical therapy. I worried about hurting my ankle again, but I wasn't going to let the injury keep me down. At first, I walked slowly in my neighborhood, but I didn't want to trip on uneven pavement. My physical therapist suggested I try a treadmill instead. Now, I go to the gym after work. I set the treadmill incline high, turn on my headphones, and walk. Sometimes, I listen to music or a book on CD. I miss the fresh air, but I don't think about falling, and my stamina is back. Plus, I've added strength and balance exercises to my routine. In many ways, I'm in better shape now than before the fall and that feels great!"

## **Reducing the Risks**

Many people hesitate to exercise for one reason or another. In fact, exercise and moderate physical activity, such as brisk walking, are safe for almost all older adults. Even so, avoiding injury is an important thing to keep in mind, especially if you're just starting a new activity or you haven't been active for a long time. Talk to your doctor if you have an ongoing health condition or certain other health problems (see page 33) or if you haven't seen your doctor for a while. Ask how physical activity can help you, whether you should avoid certain activities, and how to modify exercises to fit your situation.

You may feel some minor discomfort or muscle soreness when you start to exercise. This should go away as you get used to the activities. However, if you feel sick to your stomach or have strong pain, you've done too much. Go easier and then gradually build up.



## **Preventing Injury**

The health benefits of exercise far outweigh any risks of injury. However, you can take some precautions to exercise safely.

### Follow these tips to avoid injury:

- When starting an exercise program, begin slowly with low-intensity exercises.
- Wait at least 2 hours after eating a large meal before doing strenuous exercise.
- Wear appropriate shoes for your activity and comfortable, loose-fitting clothing that allows you to move freely but won't catch on other objects.
- Warm up with low-intensity exercises at the beginning of each exercise session.
- Drink water before, during, and after your exercise session.
- When exercising outdoors, pay attention to your surroundings — consider possible traffic hazards, the weather, uneven walking surfaces, and strangers.

## Stop exercising if you:

- Have pain or pressure in your chest, neck, shoulder, or arm
- Feel dizzy or sick to your stomach
- Break out in a cold sweat
- Have muscle cramps





Many different exercises can improve your health and independence. Whether you do the exercises shown in this chapter or other physical activities that accomplish the same goals, gradually work your way up to include endurance, strength, balance, and stretching exercises.

It's important to spend about 5 minutes at the beginning and end of your routine to warm up and cool down. Warming up and cooling down give your muscles a chance to get ready to work and gradually return to rest at the end. These "before-and-after" activities help prevent injury and reduce muscle soreness later. Here are a few suggestions:

• Do some light endurance activity first, such as walking for 5 minutes. If you're going to be walking briskly or running, gradually build up to that pace. At the end of your activity, gradually slow down and let your body cool down.

- Do a few exercises to work the muscles and joints you'll be using in your activity. For example, if you're going to be swimming, do a few arm exercises first to warm up your arms and shoulders.
- If you're going to include stretching exercises as part of your routine, do them afterwards.





Regular endurance exercise has helped Tom stay healthy after major heart surgery:

"At age 45 I had quadruple bypass surgery. I was shocked because I was so young. Those months after my surgery are a blur to me now. After several months of cardiac rehab, I knew my heart health was in my hands. So, now I run regularly at my neighborhood YMCA — around the track in nice weather and on the treadmill during the winter. I admit I was nervous at first to push myself. I worried I might do more harm than good. But, it's been 12 years and I feel great! This year, I will celebrate my daughter's graduation from college, continue to root for the Aggies, and maybe even teach my wife to play golf. I believe exercise has made all of that possible for me."

### **How to Improve Your Endurance**

Endurance exercises are activities — walking, jogging, swimming, raking, sweeping, dancing, playing tennis — that increase your heart rate and breathing for an extended period of time. They will make it easier for you to walk farther, faster, or uphill. They also should make everyday activities such as gardening, shopping, or playing a sport easier.

#### How Much, How Often

Refer to your starting goals, and build up your endurance gradually. If you haven't been active for a long time, it's especially important to work your way up over time. It may take a while to go from a longstanding inactive lifestyle to doing some of the activities in this section. For example, start out with 5 or 10 minutes at a time, and then build up to at least 30 minutes of moderate-intensity endurance activity. Doing less than 10 minutes at a time won't give you the desired heart and lung benefits.

Try to build up to at least 30 minutes of moderate-intensity endurance activity on most or all days of the week. Every day is best. Remember, though, that these are goals, not rules. Some people will be able to do more.

### **Counting Your Steps**



Step counters can help you keep track of your endurance activity, set goals, and measure progress. Most inactive people get fewer than 5,000 steps a day, and some very inactive people get only 2,000 steps a day.

Wear the step counter for a few days to see how you're doing. You can use the **Endurance Daily Record** on page 105 to record your steps. If you get:

- Fewer than 5,000 steps a day, gradually try to add 3,000 to 4,000 more steps a day.
- About 8,000 steps a day, you're probably meeting the recommended activity target.
- 10,000 or more steps a day, you can be confident that you're getting an adequate amount of endurance activity.
- 10,000 steps a day comfortably, try for 15,000 steps a day, which would put you in the high-activity group.





Some people are afraid to exercise after a heart attack. But regular physical activity can help reduce your chances of having another heart attack.

If you've had a heart attack, talk with your doctor to be sure you're following a safe, effective physical activity program. Ask about cardiac rehab programs, which include exercise, education, and counseling to help you return to an active life.

Making It **REAL** 

Walking 2 miles a day at the mall will help you keep up with your grandchildren during a trip to the park.

Others, however, may not be able to exercise for 30 minutes at a time. It's important to set realistic goals based on your own health and abilities.

#### Safety

Listen to your body. Is the activity making you feel unwell or too tired? Endurance activities should not make you breathe so hard that you can't talk. They should not cause dizziness, chest pain or pressure, or a feeling like heartburn.

Do a little light activity, such as easy walking, before and after your endurance activities to warm up and cool down.

As you get older, you may not feel thirsty even though your body needs fluids. Be sure to drink liquids when doing any activity that makes you sweat. By the time you notice you are thirsty, you probably are already low on fluid. This guideline is important year round, but it's especially important in hot weather. If your doctor has told you to limit your fluids, be sure to check before increasing the amount of fluid you drink while exercising. For example, people with congestive heart failure or kidney disease may need to limit fluids.

Older adults can be affected by heat and cold more than others. In extreme cases, too much heat can cause heat stroke, and very cold temperatures can lead to a dangerous drop in body temperature. If you are going to be outdoors, dress in layers so you can add or remove clothes as needed. When it's not possible to be outdoors, you may want to try indoor activities:

- If you have stairs at home, go up and down the steps a few times in a row.
- Walk at the mall or grocery store.
- Go for a swim at your local fitness or recreation center.

Whatever activity you choose, stay safe. To prevent injuries, be sure to use safety equipment. For example, wear a helmet when bicycling. When you're walking, watch out for low-hanging branches and uneven sidewalks. Walk during the day or in well-lit areas at night, and be aware of your surroundings. Ask someone to go with you. Wear the proper shoes (see page 22).

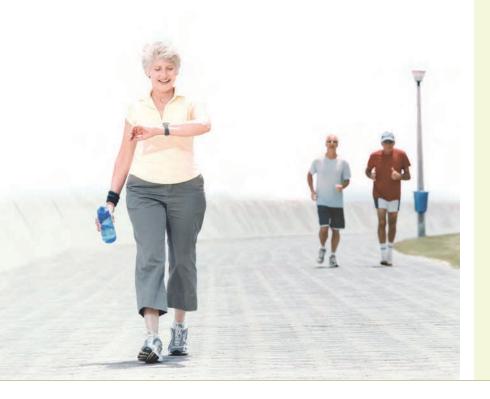


#### GO HERE FOR MORE INFO

For more about drinking enough fluids, see page 97.

### **Progressing**

When you're ready to do more, build up the amount of time you spend doing endurance activities first, then build up the difficulty of your activities. For example, gradually increase your time to 30 minutes over several days to weeks (or even months, depending on your condition) by walking longer distances. Then walk more briskly or up steeper hills. See page 13 for more examples of physical activities that build endurance. To record your activities, use the **Endurance Daily Record** on page 105.



### **Ways to Gauge Your Effort**

The amount of effort you need to do an activity will depend on your starting point, including your fitness level, how strong you are, and how active you've been. For example, walking a mile in 15 minutes will be a lot easier for someone who does it every day compared with someone who has never done it. You can use these informal guidelines to estimate how much effort you are putting into your endurance activities:

- Brisk walking is an example of moderate activity, while jogging is a vigorous activity.
- Talking is easy during moderate activity. During vigorous activity, talking is difficult.
- If you tend to sweat, you probably won't sweat during light activity (except on hot days). You will sweat during vigorous or sustained moderate activity. Remember to drink fluids even if you don't sweat.

One doctor who specializes in exercise for older adults tells her patients the following about how hard they should work during endurance activities: "If you can't talk while you're exercising, it's too difficult. If you can sing a song, it's too easy!"



## make it affordable

Exercising at home is just one way to be active. We feature it because most older people can do it, but you also might try Bonita's example:

"I'm 69 and live on my Social Security income. My kids try to spoil me, but I'd rather do things on my own as much as possible. When looking for a fitness center where I could use strength-building equipment, I bargained the owner down to a monthly fee that I could afford. I started with 1-pound weights and gradually moved on to heavier weights. I also added stretching to my routine. I've always been active, but never as much as I am now. Joining the fitness center has done me a world of good. The owner of my club holds me up as an example, and my family is so proud of me."

#### **How to Improve Your Strength**

Even very small changes in muscle strength can make a real difference in function, especially in people who have already lost a lot of muscle. An increase in muscle that you can't even see can make it easier to do everyday things like get up from a chair, climb stairs, carry groceries, open jars, and even play with your grandchildren. Lower-body strength exercises also will improve your balance.

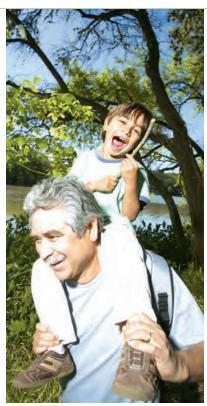
#### **About Strength Exercises**

To do most of the strength exercises in this book, you need to lift or push weights. You can use weights, resistance bands, or common objects from your home. Or, you can use the strength-training equipment at a fitness center or gym. Start with light weights and gradually increase the amount of weight you use.

#### How Much, How Often

Try to do strength exercises for all of your major muscle groups on 2 or more days per week for 30-minute sessions each, but don't exercise the same muscle group on any 2 days in a row. (Use the Weekly Exercise and Physical Activity Plan on page 104.)

- Depending on your condition, you might need to start out using 1- or 2-pound weights, or no weight at all. Your body needs to get used to strength exercises.
- Use a light weight the first week, then gradually add more weight. Starting out with weights that are too heavy can cause injuries.







A repetition, or rep, is one complete movement of an exercise, and a set is one group of reps. In this guide, a set of strength exercises is 10 to 15 repetitions. You can use the Strength and Balance Daily Record on page 106 to keep track of the number of strength exercises you do.

# Making

Want to be able to lift your carry-on bag into the overhead bin of the airplane or get in and out of the car more easily? Keep doing those strength exercises, and you'll get there.

- Gradually add more weight in order to benefit from strength exercises. You need to challenge your muscles to get the most benefit from strength exercises. (The Progressing section on page 43 will tell you how.)
- It should feel somewhere between hard and very hard for you to lift or push the weight. It shouldn't feel very, very hard. If you can't lift or push a weight 8 times in a row, it's too heavy for you. Reduce the amount of weight.
- Take 3 seconds to lift or push a weight into place, hold the position for 1 second, and take another 3 seconds to return to your starting position. Don't let the weight drop; returning it slowly is very important.
- Try to do 10 to 15 repetitions for each exercise. Think of this as a goal. If you can't do that many at first, do as many as you can. You may be able to build up to this goal over time.

#### Safety

• Talk with your doctor if you are unsure about doing a particular exercise. For example, if you've had hip or back surgery, talk about which exercises might be best for you.

- Don't hold your breath during strength exercises. Holding your breath while straining can cause changes in blood pressure. This is especially true for people with heart disease.
- Breathe regularly. Breathe in slowly through your nose and breathe out slowly through your mouth. If this is not comfortable or possible, breathe in and out through either your nose or mouth.
- Breathe out as you lift or push, and breathe in as you relax. For example, if you're doing leg lifts, breathe out as you lift your leg, and breathe in as you lower it. This may not feel natural at first, and you probably will have to think about it for a while as you do it.
- Proper form and safety go hand-in-hand. For some exercises, you may want to start alternating arms and work your way up to using both arms at the same time. If it is difficult for you to hold hand weights, try using wrist weights.
- To prevent injury, don't jerk or thrust weights into position. Use smooth, steady movements.
- Avoid "locking" your arm and leg joints in a tightly straightened position. To straighten your knees, tighten your thigh muscles. This will lift your kneecaps and protect them.

- For many of the sample exercises in this guide, you will need to use a chair. Choose a sturdy chair that is stable enough to support your weight when seated or when holding on during the exercise.
- Muscle soreness lasting a few days and slight fatigue are normal after muscle-building exercises, at least at first. After doing these exercises for a few weeks, you will probably not be sore after your workout.

#### **Progressing**

Muscle strength is progressive over time. Gradually increase the amount of weight you use to build strength. When you can do 2 sets of 10 to 15 repetitions easily, increase the amount of weight at your next session.

Here's an example of how to progress gradually: Start out with a weight that you can lift only 8 times. Keep using that weight until you become strong enough to lift it easily 10 to 15 times. When you can do 2 sets of 10 to 15 repetitions easily, add more weight so that, again, you can lift it only 8 times. Keep repeating until you reach your goal, and then maintain that level as long as you can.



Challenge yourself, but listen to your body, and use common sense when vou exercise.



If you feel sick or have pain during or after exercise, you're doing too much.



Exhaustion, sore joints, and painful muscle pulling mean you're overdoing it. None of the exercises should cause severe pain.



Over-exercising can cause injury, which may lead to quitting altogether. A steady rate of progress is the best approach.



**FOR HOUSEHOLD HANDWEIGHTS** See page 45

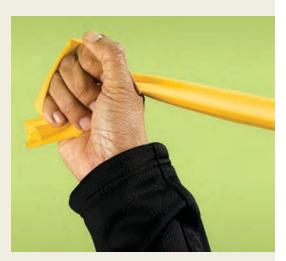


### **Working with a Resistance Band**

Resistance bands are stretchy elastic bands that come in several strengths, from light to heavy. You can use them in some strength exercises instead of weights.







**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.



If you are a beginner, try exercising without the band until you are comfortable, then add the band. Choose a light band if you are just starting to exercise, and move on to a stronger band when you can do 2 sets of 10 to 15 repetitions easily. Hold on to the band tightly (some bands have handles), or wrap it around your hand or foot to keep it from slipping and causing possible injury. Do the exercises in a slow, controlled manner, and don't let the band snap back.

### **Working with Weights**

You don't have to go out and buy weights for strength exercises. Find something you can hold on to easily. For example, you can make your own weights from unbreakable household items:

- · Fill a plastic milk jug with sand or water and tape the opening securely closed.
- Fill a sock with dried beans, and tie up the open end.
- Use common grocery items, such as bags of rice, vegetable or soup cans, or bottled water.



## **Hand Grip**

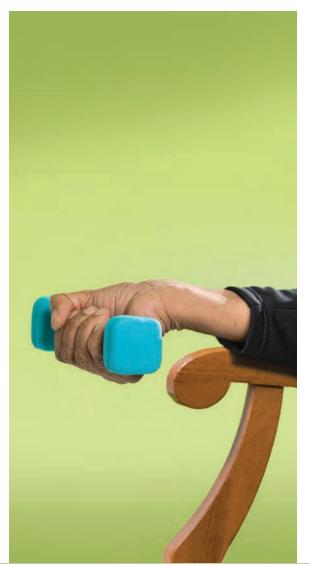
This simple exercise should help if you have trouble picking things up or holding on to them. It also will help you open things like that pickle jar more easily. You can even do this exercise while reading or watching TV.

- 1. Hold a tennis ball or other small rubber or foam ball in one hand.
- 2. Slowly squeeze the ball as hard as you can and hold it for 3-5 seconds.
- **3.** Relax the squeeze slowly.
- **4.** Repeat 10-15 times.
- **5.** Repeat 10-15 times with other hand.
- **6.** Repeat 10-15 times more with each hand.

## **Wrist Curl**

- 1. Rest your forearm on the arm of a sturdy chair with your hand over the edge.
- 2. Hold weight with palm facing upward.
- **3.** Slowly bend your wrist up and down.
- **4.** Repeat 10-15 times.
- **5.** Repeat with other hand 10-15 times.
- **6.** Repeat 10-15 more times with each hand.

This exercise will strengthen your wrists. It also will help ensure good form and prevent injury when you do upper body strength exercises.





This exercise will strengthen your shoulders and arms. It should make swimming and other activities such as lifting and carrying grandchildren easier.



## **Overhead Arm Raise**

- 1. You can do this exercise while standing or sitting in a sturdy, armless chair.
- 2. Keep your feet flat on the floor, shoulder-width apart.
- **3.** Hold weights at your sides at shoulder height with palms facing forward. Breathe in slowly.
- **4.** Slowly breathe out as you raise both arms up over your head keeping your elbows slightly bent.
- **5.** Hold the position for 1 second.
- **6.** Breathe in as you slowly lower your arms.
- **7.** Repeat 10-15 times.
- 8. Rest; then repeat 10-15 more times.



As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.

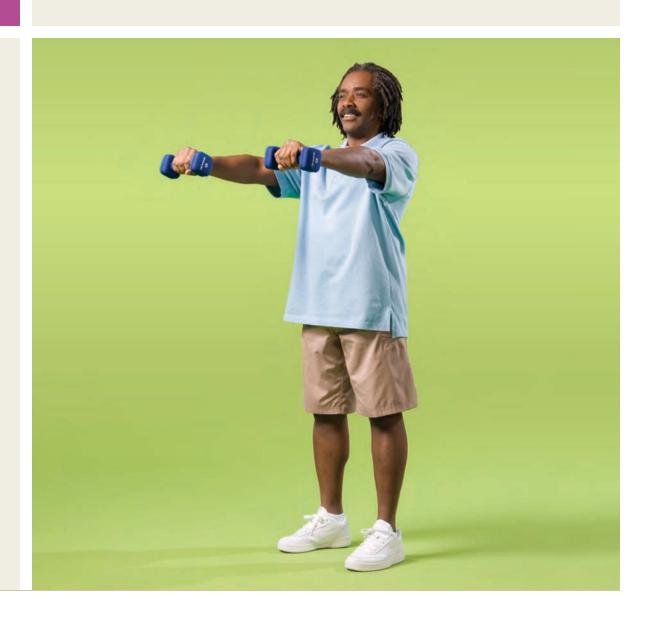
## **Front Arm Raise**

- 1. Stand with your feet shoulder-width apart.
- 2. Hold weights straight down at your sides, with palms facing backward.
- **3.** Keeping them straight, breathe out as you raise both arms in front of you to shoulder height.
- **4.** Hold the position for 1 second.
- **5.** Breathe in as you slowly lower arms.
- **6.** Repeat 10-15 times.
- **7.** Rest; then repeat 10-15 more times.



As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.

This exercise for your shoulders can help you put things up on a shelf or take them down more easily.



This exercise will strengthen your shoulders and make lifting groceries easier.



### **Side Arm Raise**

- 1. You can do this exercise while standing or sitting in a sturdy, armless chair.
- 2. Keep your feet flat on the floor, shoulder-width apart.
- **3.** Hold hand weights straight down at your sides with palms facing inward. Breathe in slowly.
- **4.** Slowly breathe out as you raise both arms to the side, shoulder height.
- **5.** Hold the position for 1 second.
- **6.** Breathe in as you slowly lower your arms.
- **7.** Repeat 10-15 times.
- 8. Rest; then repeat 10-15 more times.



As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.

## **Arm Curl**

- 1. Stand with your feet shoulder-width apart.
- 2. Hold weights straight down at your sides, palms facing forward. Breathe in slowly.
- **3.** Breathe out as you slowly bend your elbows and lift weights toward chest. Keep elbows at your sides.
- **4.** Hold the position for 1 second.
- 5. Breathe in as you slowly lower your arms.
- **6.** Repeat 10-15 times.
- **7.** Rest; then repeat 10-15 more times.



As you progress, use a heavier weight and alternate arms until you can lift the weight comfortably with both arms.

After a few weeks of doing this exercise for your upper arm muscles, lifting that gallon of milk will be much easier.





This variation of the Arm Curl uses a resistance band instead of weights. (See Working with a Resistance Band on page 44.)

## **Arm Curl** with Resistance Band

- 1. Sit in a sturdy, armless chair with your feet flat on the floor, shoulderwidth apart.
- 2. Place the center of the resistance band under both feet. Hold each end of the band with palms facing inward. Keep elbows at your sides. Breathe in slowly.
- 3. Keep wrists straight and slowly breathe out as you bend your elbows and bring your hands toward your shoulders.
- **4.** Hold the position for 1 second.
- 5. Breathe in as you slowly lower your arms.
- **6.** Repeat 10-15 times.
- **7.** Rest; then repeat 10-15 more times.



As you progress, use a heavier strength band.

## **Seated Row** with Resistance Band

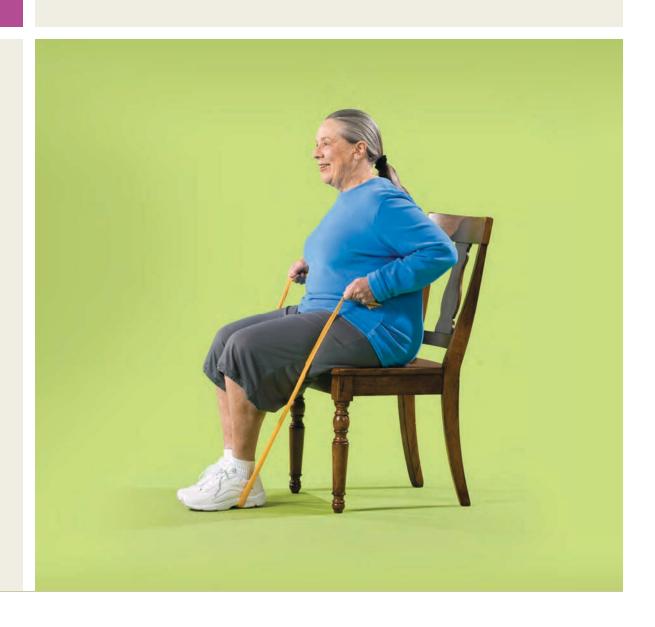
1. Sit in a sturdy, armless chair with your feet flat on the floor, shoulderwidth apart.

- 2. Place the center of the resistance band under both feet. Hold each end of the band with palms facing inward.
- 3. Relax your shoulders and extend your arms beside your legs. Breathe in slowly.
- **4.** Breathe out slowly and pull both elbows back until your hands are at your hips.
- 5. Hold position for 1 second.
- **6.** Breathe in as you slowly return your hands to the starting position.
- **7.** Repeat 10-15 times.
- **8.** Rest; then repeat 10-15 more times.

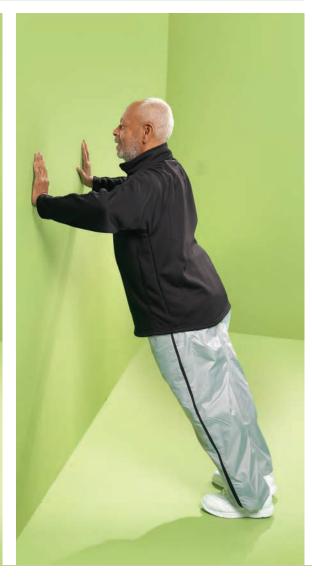


As you progress, use a heavier strength band.

This exercise to strengthen upper back, shoulder, and neck muscles should make everyday activities such as raking and vacuuming easier. (See Working with a Resistance Band on page 44.)



These push-ups will strengthen your arms, shoulders, and chest. Try this exercise during a TV commercial break.



## Wall Push-Up

- 1. Face a wall, standing a little farther than arm's length away, feet shoulderwidth apart.
- 2. Lean your body forward and put your palms flat against the wall at shoulder height and shoulder-width apart.
- 3. Slowly breathe in as you bend your elbows and lower your upper body toward the wall in a slow, controlled motion. Keep your feet flat on the floor.
- **4.** Hold the position for 1 second.
- **5.** Breathe out and slowly push yourself back until your arms are straight.
- 6. Repeat 10-15 times.
- **7.** Rest; then repeat 10-15 more times.

## **Elbow Extension**

- 1. You can do this exercise while standing or sitting in a sturdy, armless chair.
- 2. Keep your feet flat on the floor, shoulder-width apart.
- 3. Hold weight in one hand with palm facing inward. Raise that arm toward ceiling.
- 4. Support this arm below elbow with other hand. Breathe in slowly.
- 5. Slowly bend raised arm at elbow and bring weight toward shoulder.
- **6.** Hold position for 1 second.
- 7. Breathe out and slowly straighten your arm over your head. Be careful not to lock your elbow.
- 8. Repeat 10-15 times.
- **9.** Repeat 10-15 times with other arm.
- **10.** Repeat 10-15 more times with each arm.



If it's difficult for you to hold hand weights, try using wrist weights.

This exercise will strengthen your upper arms. If your shoulders aren't flexible enough to do this exercise, try the Chair Dip on page 55.





This pushing motion will strengthen your arm muscles even if you are not able to lift yourself up off the chair.



## **Chair Dip**

- 1. Sit in a sturdy chair with armrests with your feet flat on the floor, shoulder-width apart.
- 2. Lean slightly forward; keep your back and shoulders straight.
- **3.** Grasp arms of chair with your hands next to you. Breathe in slowly.
- 4. Breathe out and use your arms to push your body slowly off the chair.
- **5.** Hold position for 1 second.
- 6. Breathe in as you slowly lower yourself back down.
- **7.** Repeat 10-15 times.
- **8.** Rest; then repeat 10-15 more times.

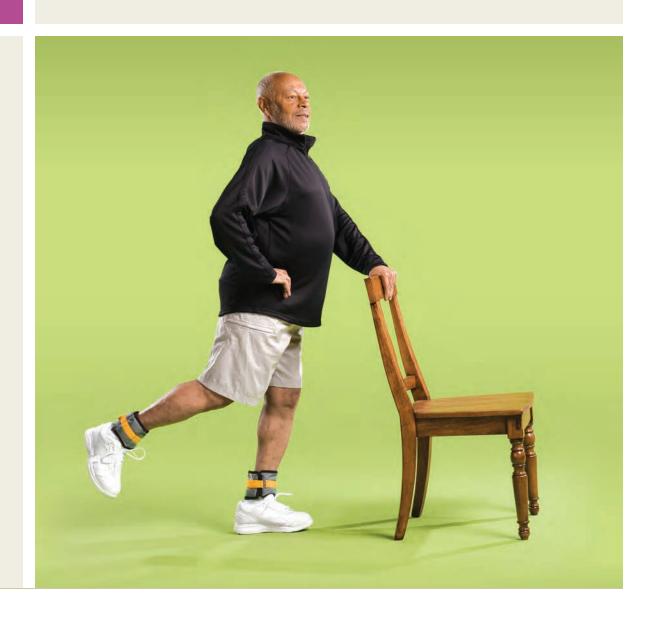
## **Back Leg Raise**

- 1. Stand behind a sturdy chair, holding on for balance. Breathe in slowly.
- 2. Breathe out and slowly lift one leg straight back without bending your knee or pointing your toes. Try not to lean forward. The leg you are standing on should be slightly bent.
- **3.** Hold position for 1 second.
- 4. Breathe in as you slowly lower your leg.
- **5.** Repeat 10-15 times.
- **6.** Repeat 10-15 times with other leg.
- **7.** Repeat 10-15 more times with each leg.

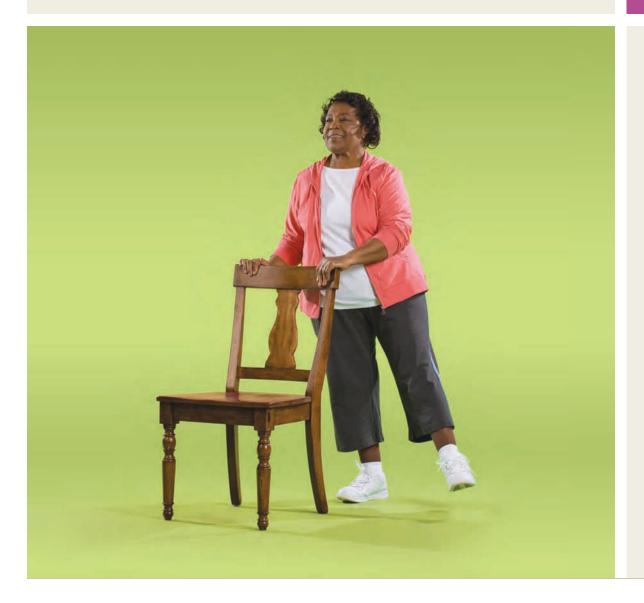


As you progress, you may want to add ankle weights.

This exercise strengthens your buttocks and lower back. For an added challenge, you can modify the exercise to improve your balance. (See Progressing to Improve Balance on page 68.)



This exercise strengthens hips, thighs, and buttocks. For an added challenge, you can modify the exercise to improve your balance. (See Progressing to Improve Balance on page 68.)



## Side Leg Raise

- 1. Stand behind a sturdy chair with feet slightly apart, holding on for balance. Breathe in slowly.
- 2. Breathe out and slowly lift one leg out to the side. Keep your back straight and your toes facing forward. The leg you are standing on should be slightly bent.
- **3.** Hold position for 1 second.
- **4.** Breathe in as you slowly lower your leg.
- **5.** Repeat 10-15 times.
- **6.** Repeat 10-15 times with other leg.
- 7. Repeat 10-15 more times with each leg.



As you progress, you may want to add ankle weights.

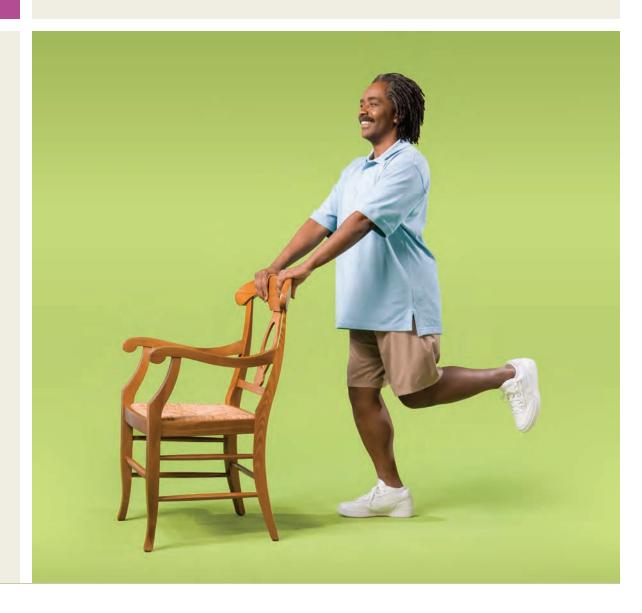
## **Knee Curl**

- 1. Stand behind a sturdy chair, holding on for balance. Lift one leg straight back without bending your knee or pointing your toes. Breathe in slowly.
- 2. Breathe out as you slowly bring your heel up toward your buttocks as far as possible. Bend only from your knee, and keep your hips still. The leg you are standing on should be slightly bent.
- **3.** Hold position for 1 second.
- 4. Breathe in as you slowly lower your foot to the floor.
- **5.** Repeat 10-15 times.
- **6.** Repeat 10-15 times with other leg.
- **7.** Repeat 10-15 more times with each leg.



As you progress, you may want to add ankle weights.

Walking and climbing stairs are easier when you do both the Knee Curl and Leg Straightening exercises. For an added challenge, you can modify the exercise to improve your balance. (See Progressing to Improve Balance on page 68.)



This exercise strengthens your thighs and may reduce symptoms of arthritis of the knee.



## Leg Straightening

- 1. Sit in a sturdy chair with your back supported by the chair. Only the balls of your feet and your toes should rest on the floor. Put a rolled bath towel at the edge of the chair under thighs for support. Breathe in slowly.
- 2. Breathe out and slowly extend one leg in front of you as straight as possible, but don't lock your knee.
- **3.** Flex foot to point toes toward the ceiling. Hold position for 1 second.
- **4.** Breathe in as you slowly lower leg back down.
- **5.** Repeat 10-15 times.
- **6.** Repeat 10-15 times with other leg.
- **7.** Repeat 10-15 more times with each leg.

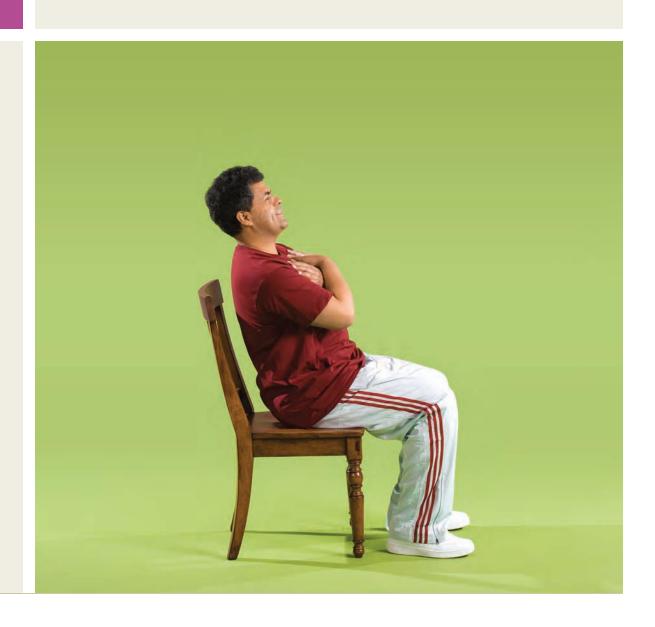


As you progress, you may want to add ankle weights.

## **Chair Stand**

- 1. Sit toward the front of a sturdy, armless chair with knees bent and feet flat on floor, shoulder-width apart.
- 2. Lean back with your hands crossed over your chest. Keep your back and shoulders straight throughout exercise. Breathe in slowly.
- **3.** Breathe out and bring your upper body forward until sitting upright.
- **4.** Extend your arms so they are parallel to the floor and slowly stand up.
- **5.** Breathe in as you slowly sit down.
- **6.** Repeat 10-15 times.
- **7.** Rest; then repeat 10-15 more times.

This exercise, which strengthens your abdomen and thighs, will make it easier to get in and out of the car. If you have knee or back problems, talk with your doctor before trying this exercise.





People with back problems should start the exercise from the sitting upright position.



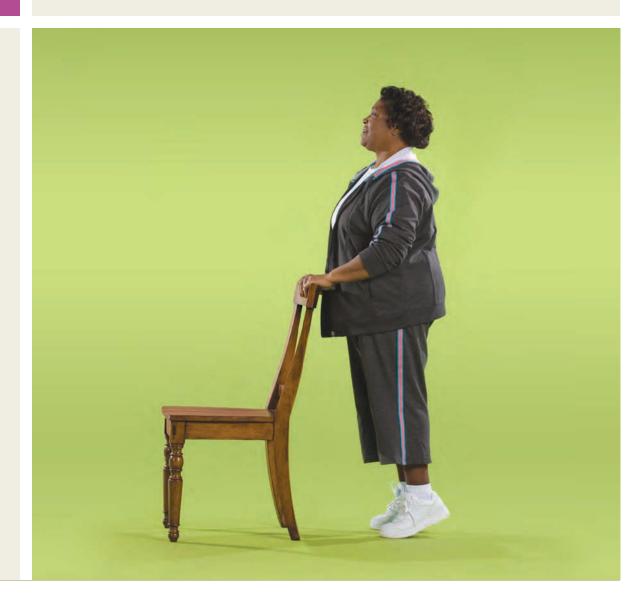


## **Toe Stand**

- 1. Stand behind a sturdy chair, feet shoulder-width apart, holding on for balance. Breathe in slowly.
- 2. Breathe out and slowly stand on tiptoes, as high as possible.
- **3.** Hold position for 1 second.
- 4. Breathe in as you slowly lower heels to the floor.
- **5.** Repeat 10-15 times.
- **6.** Rest; then repeat 10-15 more times.

As you progress, try doing the exercise standing on one leg at a time for a total of 10-15 times on each leg.

This exercise will help make walking easier by strengthening your calves and ankles. For an added challenge, you can modify the exercise to improve your balance. (See Progressing to Improve Balance on page 68.)





## make it a habit

Lian, age 68, has found that regular tai chi classes have improved her balance and flexibility:

"Early every morning, I join a group of my neighbors, and we practice tai chi for about an hour. We start out with a gentle warm-up and breathing exercises. Then our teacher shows us how to do certain poses and leads us step by step through the slow, flowing movements. We end with cooling down exercises. This exercise routine has boosted my confidence and reduced my fear of falling. It also keeps my arthritis under control."



#### **How to Improve Your Balance**

Each year, more than 2 million older Americans go to the emergency room because of fall-related injuries. A simple fall can cause a serious fracture of the arm, hand, ankle, or hip. Balance exercises can help you prevent falls and avoid the disability that may result from falling.

#### How Much, How Often

You can do the balance exercises in this section as often as you like. They overlap with the lower-body strength exercises, which also can improve your balance. Do the strength exercises 2 or more days per week, but not on any 2 days in a row.

## Safety

- Have a sturdy chair or a person nearby to hold on to if you feel unsteady.
- Talk with your doctor if you are unsure about doing a particular exercise.

### **Progressing**

These exercises can improve your balance even more if you modify them as you progress. Start by holding on to a sturdy chair for support. To challenge yourself, try holding on to the chair with only one hand; then with time, you can try holding on with only one finger, then no hands. If you are steady on your feet, try doing the exercise with your eyes closed. (See Progressing to Improve Balance on page 68.) You can use the Strength and Balance Daily Record on page 106 to keep track of your balance exercises.

#### **Anytime, Anywhere Balance Exercises**

You can do exercises to improve your balance almost anytime, anywhere, and as often as you like, as long as you have something sturdy nearby to hold on to if you become unsteady. In the beginning, using a chair or the wall for support will help you work on your balance safely.

# Making

You're walking in the neighborhood and you you. Knowing you can turn around quickly and move out of the way without losing your balance is a great feeling!

You can do this exercise while waiting for the bus or standing in line at the grocery. For an added challenge, you can modify the exercise to improve your balance. (See Progressing to Improve Balance on page 68.)

## **Stand on One Foot**

- 1. Stand on one foot behind a sturdy chair, holding on for balance.
- **2.** Hold position for up to 10 seconds.
- **3.** Repeat 10-15 times.
- 4. Repeat 10-15 times with other leg.
- **5.** Repeat 10-15 more times with each leg.

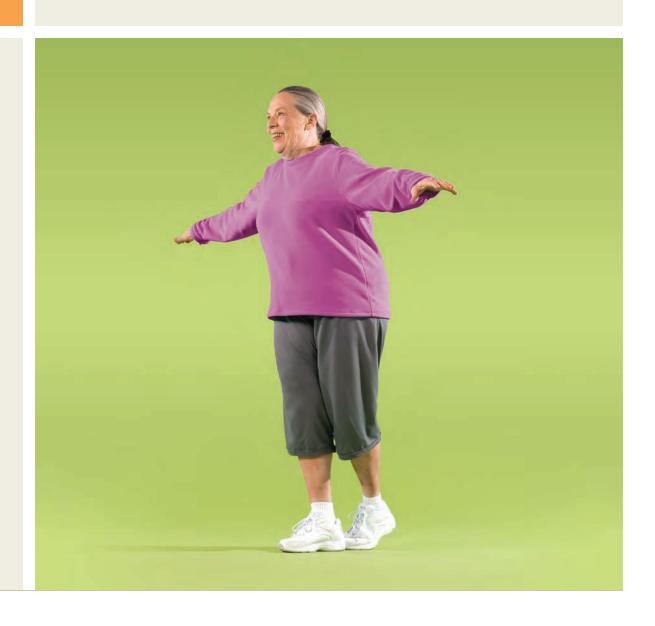
## **Heel-to-Toe Walk**

- 1. Position the heel of one foot just in front of the toes of the other foot. Your heel and toes should touch or almost touch.
- 2. Choose a spot ahead of you and focus on it to keep you steady as you walk.
- 3. Take a step. Put your heel just in front of the toes of your other foot.
- **4.** Repeat for 20 steps.



If you are unsteady on your feet, try doing this exercise near a wall so you can steady yourself if you need to.

Having good balance is important for many everyday activities, such as going up and down stairs.



Good balance helps you walk safely and avoid tripping and falling over objects in your way.



## **Balance Walk**

- 1. Raise arms to sides, shoulder height.
- 2. Choose a spot ahead of you and focus on it to keep you steady as you walk.
- **3.** Walk in a straight line with one foot in front of the other.
- 4. As you walk, lift your back leg. Pause for 1 second before stepping forward.
- 5. Repeat for 20 steps, alternating legs.



As you progress, try looking from side to side as you walk, but skip this step if you have inner ear problems.

### **Progressing to Improve Balance**

The exercises in this guide — especially those to strengthen your legs and ankles — can help improve your balance. As you progress, try adding the challenges shown below to help even more. For example, start by holding on to a sturdy chair with both hands for support. To challenge yourself further, try holding on to the chair with only one hand. As you feel steady, try using just one finger to balance you. Then, try balancing without holding on. When you are steady on your feet, try doing the exercises with your eyes closed. You can use these modifications with the following exercises:

**Back Leg Raise** (page 56) **Side Leg Raise** (page 57) (page 58) **Knee Curl Toe Stand** (page 62)









## make it happen

Grace, age 66, has found that stretching exercises have become an important addition to her new exercise routine:

"I grew up on a farm and continued farming after I married. So, I was used to hard work and plenty of physical activity. When my son and his family took over running the farm, I needed to start a new exercise routine. Now, I begin most mornings with a walk and stretches. Good thing, too! The stretching keeps me limber, and the walking gives me plenty of stamina to keep up with my seven grandchildren. Exercise helps me stay active in their lives, and that makes it all worthwhile."

# Making It REAL

How easy is it for you to turn around and look behind you before backing out of a parking space? What about bending down to tie your shoes? Flexibility exercises will help you do both more easily!



#### **How to Improve Your Flexibility**

Stretching, or flexibility, exercises are an important part of your physical activity program. They give you more freedom of movement for your physical activities and for everyday activities such as getting dressed and reaching objects on a shelf. Stretching exercises can improve your flexibility but will not improve your endurance or strength.

#### **How Much, How Often**

- Do each stretching exercise 3 to 5 times at each session.
- Slowly stretch into the desired position, as far as possible without pain, and hold the stretch for 10 to 30 seconds. Relax, breathe, then repeat, trying to stretch farther.

#### Safety

- Talk with your doctor if you are unsure about a particular exercise. For example, if you've had hip or back surgery, talk with your doctor before doing lower-body exercises.
- · Always warm up before stretching exercises. Stretch after endurance or strength exercises. If you are doing only stretching exercises, warm up with a few

- minutes of easy walking first. Stretching your muscles before they are warmed up may result in injury.
- Always remember to breathe normally while holding a stretch.
- Stretching may feel slightly uncomfortable; for example, a mild pulling feeling is normal.
- You are stretching too far if you feel sharp or stabbing pain, or joint pain — while doing the stretch or even the next day. Reduce the stretch so that it doesn't hurt.
- Never "bounce" into a stretch. Make slow, steady movements instead. Jerking into position can cause muscles to tighten, possibly causing injury.
- Avoid "locking" your joints. Straighten your arms and legs when you stretch them, but don't hold them tightly in a straight position. Your joints should always be slightly bent while stretching.

#### **Progressing**

You can progress in your stretching exercises. For example, as you become more flexible, try reaching farther, but not so far that it hurts. You can use the Flexibility Daily Record on page 107 to keep track of your flexibility exercises.

This easy stretch can help relieve tension in your neck. Try to stretch after strength training and during any activity that makes you feel stiff, such as sitting at a desk.



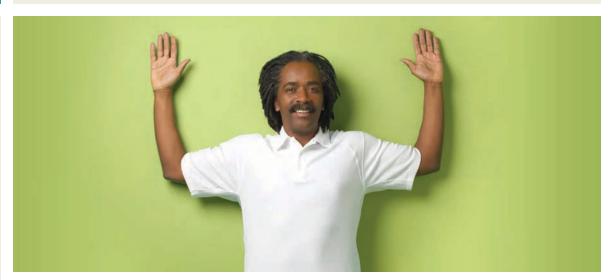
## Neck

- 1. You can do this stretch while standing or sitting in a sturdy chair.
- 2. Keep your feet flat on the floor, shoulder-width apart.
- **3.** Slowly turn your head to the right until you feel a slight stretch. Be careful not to tip or tilt your head forward or backward, but hold it in a comfortable position.
- **4.** Hold the position for 10-30 seconds.
- 5. Turn your head to the left and hold the position for 10-30 seconds.
- 6. Repeat at least 3-5 times.

# Shoulder

- 1. Stand back against a wall, feet shoulder-width apart and arms at shoulder height.
- 2. Bend your elbows so your fingertips point toward the ceiling and touch the wall behind you. Stop when you feel a stretch or slight discomfort, and stop immediately if you feel sharp pain.
- **3.** Hold position for 10-30 seconds.
- **4.** Let your arms slowly roll forward, remaining bent at the elbows, to point toward the floor and touch the wall again, if possible. Stop when you feel a stretch or slight discomfort.
- **5.** Hold position for 10-30 seconds.
- **6.** Alternate pointing above head, then toward hips.
- 7. Repeat at least 3-5 times.

This exercise to stretch your shoulder muscles will help improve your posture.





This exercise to increase flexibility in your shoulders and upper arms will help make it easier to reach for your seatbelt. If you have shoulder problems, talk with your doctor before trying this stretch.



# **Shoulder and Upper Arm**

- 1. Stand with feet shoulder-width apart.
- 2. Hold one end of a towel in your right hand.
- 3. Raise and bend your right arm to drape the towel down your back. Keep your right arm in this position and continue holding on to the towel.
- 4. Reach behind your lower back and grasp the towel with your left hand.
- 5. To stretch your right shoulder, pull the towel down with your left hand. Stop when you feel a stretch or slight discomfort in your right shoulder.
- 6. Repeat at least 3-5 times.
- **7.** Reverse positions, and repeat at least 3-5 times.

## **Upper Body**

- 1. Stand facing a wall slightly farther than arm's length from the wall, feet shoulder-width apart.
- 2. Lean your body forward and put your palms flat against the wall at shoulder height and shoulder-width apart.
- **3.** Keeping your back straight, slowly walk your hands up the wall until your arms are above your head.
- **4.** Hold your arms overhead for about 10-30 seconds.
- 5. Slowly walk your hands back down.
- **6.** Repeat at least 3-5 times.



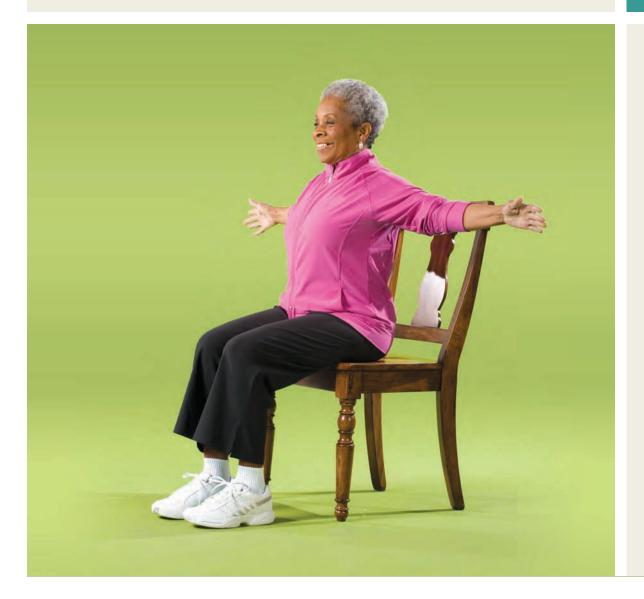
As you progress, the goal is to reach higher.

This exercise increases the flexibility of your arms, chest, and shoulders, and will help you reach items on the upper shelves of your closet or kitchen cabinet.





This exercise, which stretches the chest muscles, is also good for your posture.



### Chest

- 1. You can do this stretch while standing or sitting in a sturdy, armless chair.
- 2. Keep your feet flat on the floor, shoulder-width apart.
- **3.** Hold arms to your sides at shoulder height, with palms facing forward.
- 4. Slowly move your arms back, while squeezing your shoulder blades together. Stop when you feel a stretch or slight discomfort.
- **5.** Hold the position for 10-30 seconds.
- **6.** Repeat at least 3-5 times.

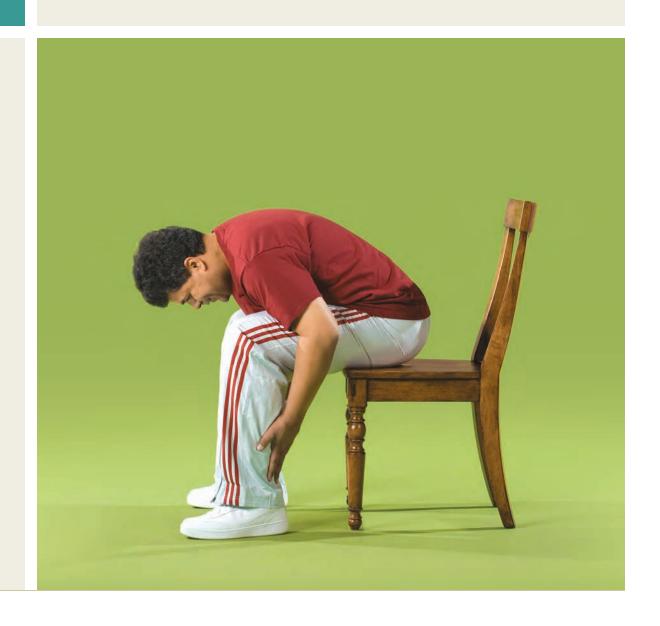
### Back 1

- 1. Sit securely toward the front of a sturdy, armless chair with your feet flat on the floor, shoulder-width apart.
- 2. Slowly bend forward from your hips. Keep your back and neck straight.
- 3. Slightly relax your neck and lower your chin. Slowly bend farther forward and slide your hands down your legs toward your shins. Stop when you feel a stretch or slight discomfort.
- 4. Hold for 10-30 seconds.
- **5.** Straighten up slowly all the way to the starting position.
- **6.** Repeat at least 3-5 times.



As you progress, bend as far forward as you can and eventually touch your heels.

This exercise is for your back muscles. If you've had hip or back surgery, talk with your doctor before trying this stretch.



This exercise will help you do activities that require you to twist or turn to look behind you, such as backing out of a parking space or swinging a golf club. If you've had hip or back surgery, talk with your doctor before trying this stretch.



### Back 2

- 1. Sit up toward the front of a sturdy chair with armrests. Stay as straight as possible. Keep your feet flat on the floor, shoulder-width apart.
- 2. Slowly twist to the left from your waist without moving your hips. Turn your head to the left. Lift your left hand and hold on to the left arm of the chair. Place your right hand on the outside of your left thigh. Twist farther, if possible.
- **3.** Hold the position for 10-30 seconds.
- 4. Slowly return to face forward.
- 5. Repeat on the right side.
- **6.** Repeat at least 3-5 more times.



As you progress, try lifting your left arm and resting it comfortably on the back of the chair. Hold on to the left armrest with your right arm. Repeat on right side.

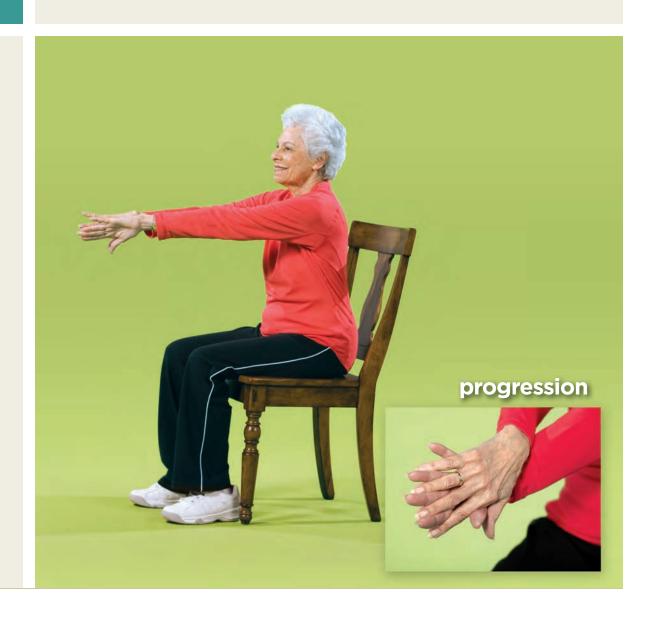
# **Upper Back**

- 1. Sit in a sturdy, armless chair with your feet flat on the floor, shoulder-width apart.
- 2. Hold arms in front of you at shoulder height with palms facing outward.
- **3.** Relax your shoulders, keep your upper body still, and reach forward with your hands. Stop when you feel a stretch or slight discomfort.
- **4.** Hold position for 10-30 seconds.
- 5. Sit back up.
- **6.** Repeat at least 3-5 times.



As you progress, cross your arms and interlace fingers.

This exercise is good for your shoulders and upper-back muscles.



This exercise stretches your ankle muscles. You can stretch both ankles at once or one at a time.

# Ankle

- 1. Sit securely toward the edge of a sturdy, armless chair.
- 2. Stretch your legs out in front of you.
- **3.** With your heels on the floor, bend your ankles to point toes toward you.
- **4.** Hold the position for 10-30 seconds.
- 5. Bend ankles to point toes away from you and hold for 10-30 seconds.
- 6. Repeat at least 3-5 times.

### **About Floor Exercises**

#### To Get Down on the Floor:

- 1. Stand facing the seat of a sturdy chair.
- 2. Put your hands on the seat, and lower yourself down on one knee.
- **3.** Bring the other knee down.
- 4. Put your left hand on the floor. Leaning on your hand, slowly bring your left hip to the floor. Put your right hand on the floor next to your left hand to steady yourself, if needed.
- 5. You should now be sitting with your weight on your left hip.
- 6. Straighten your legs.
- 7. Bend your left elbow until your weight is resting on it. Using your right hand as needed for support, straighten your left arm. You should now be lying on your left side.
- 8. Roll onto your back.



You don't have to use your left side. You can use your right side, if you prefer.





If you have trouble getting down on or up from the floor by yourself, try using the buddy system. Find someone who will be able to help you. Knowing how to use a chair to get down on the floor and get back up again also may be helpful. If you've had hip or back surgery, talk with your doctor before using the following method.



#### To Get Up from the Floor:

- 1. Roll onto your left side.
- 2. Place your right hand on the floor at about the level of your ribs and use it to push your shoulders off the floor. Use your left hand to help lift you up, as needed.
- **3.** You should now be sitting with your weight on your left hip.
- 4. Roll forward, onto your knees, leaning on your hands for support.
- 5. Reach up and lean your hands on the seat of a sturdy chair.
- 6. Lift one of your knees so that one leg is bent, foot flat on the floor.
- 7. Leaning your hands on the seat of the chair for support, rise from this position.

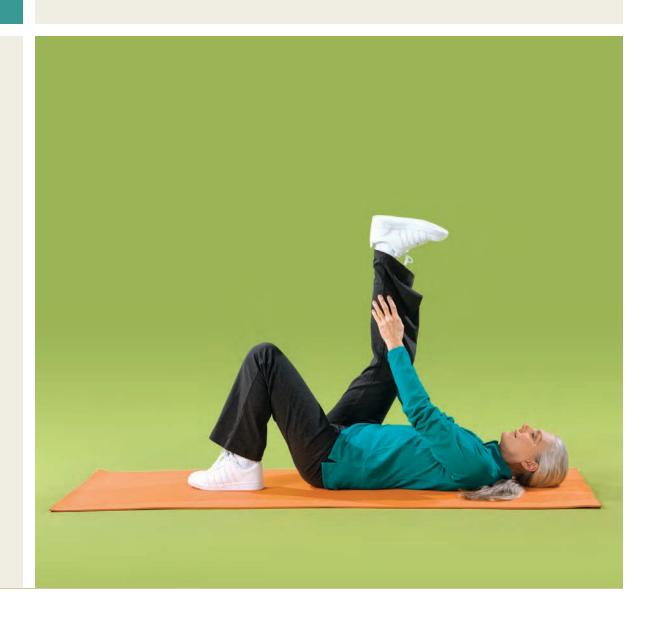


You don't have to use your left side. You can use your right side, if you prefer.

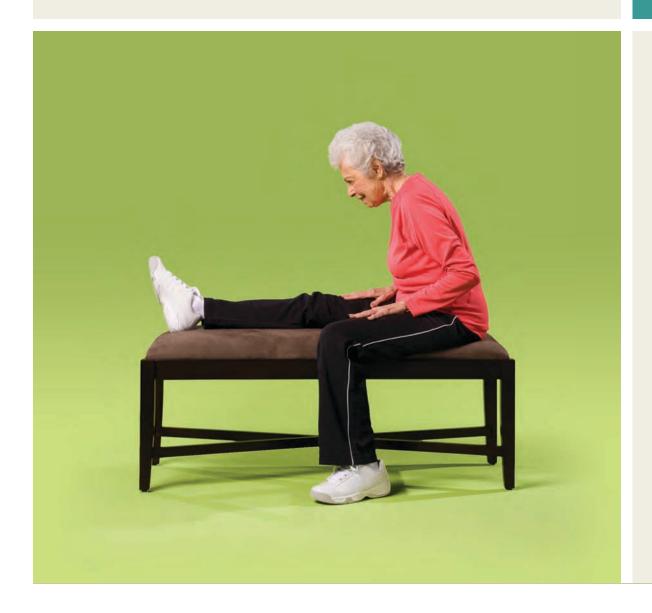
### **Back of Leg** Floor

- 1. Lie on your back with left knee bent and left foot flat on the floor.
- 2. Raise right leg, keeping knee slightly bent.
- **3.** Reach up and grasp right leg with both hands. Keep head and shoulders flat on the floor.
- 4. Gently pull right leg toward your body until you feel a stretch in the back of your leg.
- **5.** Hold position for 10-30 seconds.
- **6.** Repeat at least 3-5 times.
- **7.** Repeat at least 3-5 times with left leg.

This exercise stretches the muscles in the back of your legs. If you've had hip or back surgery, talk with your doctor before trying this stretch. (See About Floor Exercises on page 80.)



Here's another exercise that stretches the muscles in the back of your legs. If you've had hip or back surgery, talk with your doctor before trying this stretch.



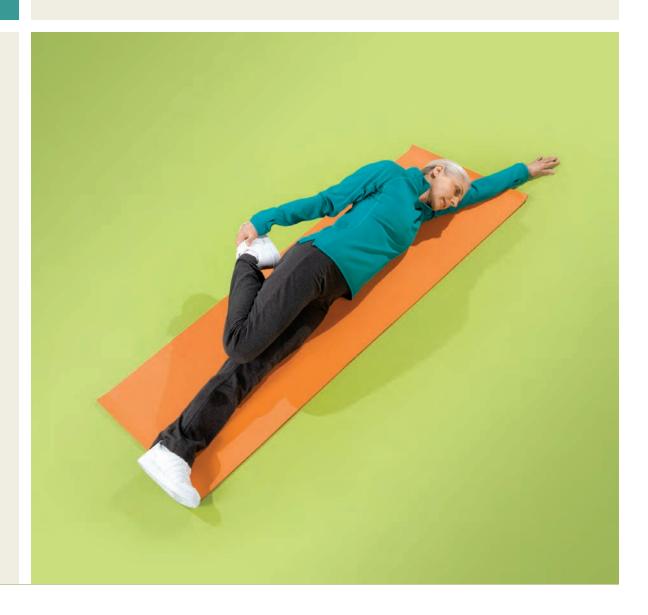
## **Back of Leg**

- 1. Sit sideways on a bench or other hard surface, such as two chairs placed together.
- 2. Keeping back straight, stretch one leg out on the bench, toes pointing up.
- **3.** Keep other foot flat on the floor.
- **4.** If you feel a stretch at this point, hold position for 10-30 seconds.
- 5. If you don't feel a stretch, lean forward from hips (not waist) until you feel stretching in the leg on the bench.
- **6.** Hold position for 10-30 seconds.
- 7. Repeat at least 3-5 times.
- 8. Repeat at least 3-5 times with your other leg.

### Thigh Floor

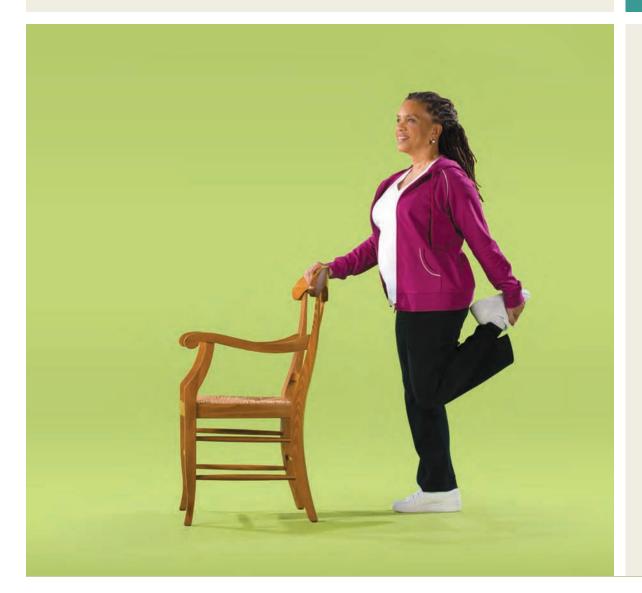
- 1. Lie on your side with legs straight and knees together.
- 2. Rest your head on your arm.
- 3. Bend top knee and reach back and grab the top of your foot. If you can't reach your foot, loop a resistance band, belt, or towel over your foot and hold both ends.
- 4. Gently pull your leg until you feel a stretch in your thigh.
- **5.** Hold position for 10-30 seconds.
- **6.** Repeat at least 3-5 times.
- 7. Repeat at least 3-5 times with your other leg.

This exercise stretches your thigh muscles. If you've had hip or back surgery, talk with your doctor before trying this stretch. If you have trouble getting down on the floor or back up again, try the Thigh **Standing** stretch. (See **About Floor Exercises** on page 80.)



#### Here's another exercise that stretches your thigh muscles.

If you've had hip or back surgery, talk with your doctor before trying this stretch.



## Thigh **Standing**

- 1. Stand behind a sturdy chair with your feet shoulder-width apart and your knees straight, but not locked.
- 2. Hold on to the chair for balance with your right hand.
- 3. Bend your left leg back and grab your foot in your left hand. Keep your knee pointed to the floor. If you can't grab your ankle, loop a resistance band, belt, or towel around your foot and hold both ends.
- 4. Gently pull your leg until you feel a stretch in your thigh.
- **5.** Hold position for 10-30 seconds.
- 6. Repeat at least 3-5 times.
- 7. Repeat at least 3-5 times with your right leg.

# Hip

- 1. Lie on your back with your legs together, knees bent, and feet flat on the floor. Try to keep both shoulders on the floor throughout the stretch.
- 2. Slowly lower one knee as far as you comfortably can. Keep your feet close together and try not to move the other leg.
- **3.** Hold position for 10-30 seconds.
- 4. Bring knee back up slowly.
- 5. Repeat at least 3-5 times.
- 6. Repeat at least 3-5 times with your other leg.

This exercise will stretch your hip and inner thigh muscles. If you've had hip or back surgery, talk with your doctor before trying this stretch. (See About Floor Exercises on page 80.)





This exercise stretches the muscles of your lower back. If you've had hip or back surgery, talk with your doctor before trying this stretch. (See About Floor Exercises on page 80.)





### **Lower Back**

- 1. Lie on your back with your legs together, knees bent, and feet flat on the floor. Try to keep both arms and shoulders flat on the floor throughout the stretch.
- 2. Keeping knees bent and together, slowly lower both legs to one side as far as you comfortably can.
- **3.** Hold position for 10-30 seconds.
- **4.** Bring legs back up slowly and repeat toward other side.
- **5.** Continue alternating sides for at least 3-5 times on each side.

### Calf

- 1. Stand facing a wall slightly farther than arm's length from the wall, feet shoulder-width apart.
- 2. Put your palms flat against the wall at shoulder height and shoulder-width apart.
- 3. Step forward with right leg and bend right knee. Keeping both feet flat on the floor, bend left knee slightly until you feel a stretch in your left calf muscle. It shouldn't feel uncomfortable. If you don't feel a stretch, bend your right knee until you do.
- 4. Hold position for 10-30 seconds, and then return to starting position.
- **5.** Repeat with left leg.
- **6.** Continue alternating legs for at least 3-5 times on each leg.

Because many people have tight calf muscles, it's important to stretch them.





This is a good over-all stretch that's fun to do with a partner. It stretches your shoulders, arms, back, and legs. If you've had hip or back surgery, talk with your doctor before trying this stretch. (See Working with a Resistance Band on page 44 and About Floor Exercises on page 80.)





# **Buddy Stretch**

- 1. Sit on the floor facing your buddy and place your feet against your partner's feet.
- 2. Both of you should grab one end of a resistance band or towel. Depending on each person's flexibility, you may need to loop two bands or towels together.
- 3. Slowly pull the band or towel so that your buddy bends forward and you lean backward.
- **4.** Hold position for 10-30 seconds.
- **5.** Slowly return to starting position.
- 6. Now it's your buddy's turn to pull the band or towel so that you bend forward and your buddy leans backward. Hold for 10-30 seconds, and then return to starting position.
- 7. Repeat at least 3-5 times.



As you progress, try holding the band so that your hands are closer to your buddy's, or try using a heavier strength band. Some people may be able to do the stretch by reaching out and holding hands during the stretch.



If you've been exercising regularly, you'll soon be able to tell when it's time to move ahead in your activities. For example, when you can lift a weight easily more than 10 times, it's time to add more weight in your strength exercises. And when your endurance activity no longer feels challenging, it's time to exercise a little longer, or make it a little more difficult, such as by walking up steeper hills.

The simple tests shown in this chapter will show you just how far you've come. You might want to test yourself every month or so. Write down your scores each time so you can see your improvement the next time you test yourself. You can record your scores on the Monthly Progress Test on page 108.

You might want to do these tests for a couple of reasons. For one, most people make rapid progress soon after they start to exercise, and it's encouraging to see your scores improve after just a month. For another, these tests are a good way to let you know if you are continuing to progress and you need to update your goals. For example, you may want to walk farther or lift heavier weights. But remember, it is normal for your improvement to slow down at times.

Also remember that each person is different. Some will be able to progress with time; for others, reaching a certain level of activity and staying there is right for their age and ability level.

If you're not ready to do these tests, don't worry, just keep working on your current exercises and activities until you are. Whether you are testing yourself or actually exercising, your pace should never make you feel dizzy, light-headed, or sick to your stomach, and you shouldn't feel pain.

And one last tip: Whether or not you do these tests, don't forget to congratulate yourself for your efforts. Tell your family and friends about your achievements. You've made a lot of progress, and you're ready for more!



#### **Test Yourself**

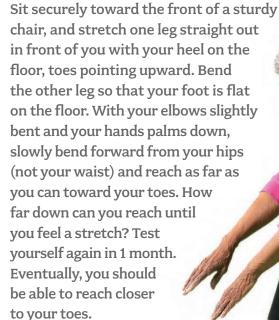
**Endurance.** Pick a fixed course — the distance from your house to the corner, once around the track at your local high school, or from one end of the mall to the other — whatever is convenient. See how long it takes to walk that distance. Do this test every month or so. As your endurance improves, it should take less time.

**Upper-body Strength.** Count the number of arm curls (see page 50) you can safely do in 2 minutes. If you are just starting to exercise, you may have to stop and rest before the 2 minutes are up. That's okay; it still gives you a great starting point to measure your progress. Repeat the test 1 month later. The number of arm curls you can do should increase.

Lower-body Strength. Count the number of chair stands (see page 60) you can safely do in 2 minutes. You may have to stop and rest before the 2 minutes are up if you are just starting to exercise. That's okay; you will be able to measure your progress from this starting point. Repeat the test 1 month later. The number of chair stands you can do should increase.

Balance. Time yourself as you stand on one foot, without support, for as long as possible. Stand near something sturdy to hold on to, in case you lose your balance. Record your score. Repeat the test while standing on the other foot. Test yourself again in 1 month. The amount of time you can stand on one foot should increase.

Flexibility. If you've had hip or back surgery, talk with your doctor before you do this test.





#### **GO HERE FOR MORE INFO**

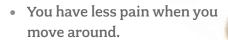
Test yourself and then track your progress using the My Go4Life tools at www.nia.nih.gov/Go4Life.

### **Other Ways to Measure Progress**

As you become more active, you'll probably notice other signs that you're getting more fit:

- You have more energy.
- Your overall mood and outlook on life have improved.
- It's easier to do your usual daily activities.
- · Climbing a couple of flights of stairs is easier.
- It's easier to get in and out of the car.
- · You can get down on the floor and play a game with your grandchildren, and get back up again more easily when the game is over.

• You're sleeping better at night.



• Symptoms of an ongoing health condition may improve.



### make it social

Marty's "exercise buddies" keep him going:

"Every morning I head out to the mall — not to shop, but to join my mall-walkers group. At 75, I'm one of the youngest members. When I retired, my wife Harriet insisted that we walk every morning. Some of us move at a steady clip through the mall, while others take a slower pace. We count our laps and keep a daily record of our progress — pushing ourselves to go a little faster, a little farther.

When Harriet died unexpectedly, it was quite a blow, but the walkers were my lifeline. They kept me moving when all I wanted to do was sit. At first, I walked because it was something to do each morning. But now, I realize that I like how it feels to be moving. Measuring how fast I can walk gives me goals, something to work toward. I walk and feel stronger every day. I often think of Harriet and silently thank her for insisting that we walk together."





Following a healthy eating plan and being physically active are keys to a healthy lifestyle. But just what does "healthy eating" mean?

The answer is found in the *Dietary Guidelines* for Americans from the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (the National Institute on Aging is part of this Department). According to the Guidelines, a healthy diet:

- Emphasizes vegetables, fruits, whole grains, and fat-free or low-fat milk and milk products
- Includes lean meats, poultry, fish, beans, eggs, and nuts

- Is low in saturated fats, trans fats, cholesterol, salt, and added sugars
- Balances the calories from foods and beverages with calories burned through physical activities to maintain a healthy weight

ChooseMyPlate.gov, a website developed by the USDA, offers personalized eating plans, tools to help you plan and assess your food choices, and advice to help you make smart choices from every food group and get the most nutrition out of your calories.



#### **GO HERE FOR MORE INFO**

What's On Your Plate? Smart Food Choices for Healthy Aging, the National Institute on Aging's guide to healthy eating for older adults, describes what you need to know about food groups, serving sizes, food labels, and more. Find it at www.nia.nih.gov/health.





### **Tips for Healthy Eating**

Here are some recommendations for healthy eating:

- Eat a variety of fruits and vegetables. Eating fruits and vegetables of different colors gives your body a wide range of valuable nutrients, including fiber, folate, potassium, and vitamins A and C. Some examples are green spinach, orange sweet potatoes, black beans, yellow corn, purple plums, blueberries, red watermelon, and white onions. Have them with meals or for a snack. Leave skins on your fruits and vegetables, if possible. For example, eat the skin when you have a baked potato, and snack on unpeeled apples, pears, and peaches. Don't forget to rinse fruits and vegetables before eating.
- Eat a diet rich in foods that contain fiber such as dry beans, fruits, vegetables, and whole-grain foods. Breakfast is a good time to enjoy foods with fiber. For example, try unsweetened, whole wheat or bran cereals, and add fruit such as berries and bananas.
- Season your foods with lemon juice, herbs, or spices, instead of butter and salt.

- Look for foods that are low in cholesterol and fat, especially saturated fat (mostly in foods that come from animals) and trans fats (found in many cakes, cookies, crackers, icings, margarines, and microwave popcorn). Saturated fats and trans fats can increase blood cholesterol levels.
- Choose and prepare foods with little salt.
- Choose lean cuts of meat and poultry. Trim away extra fat and remove the skin from chicken and turkey before cooking. Broil, roast, bake, steam, microwave, or boil foods instead of frying.
- Reaching and maintaining a healthy weight are important for your overall health and well-being. The secret is to balance your "energy in" and "energy out" over the long run. "Energy in" is the calories from foods and beverages you have each day, and "energy out" is the calories you burn for basic body functions and during physical activity. Your weight will stay the same when the calories you eat and drink equal the calories you burn. On the other hand, you will gain weight when the calories you eat and drink are greater than those you burn. Physical activity can help you reach and keep a healthier weight.

 Watch your portion size. Controlling portion size helps limit calorie intake, especially when eating foods that are high in calories.

### **Drinking Enough Fluids**

It's important to drink enough liquids to keep your body working properly. This is particularly true for older adults because they often don't feel thirsty even if their bodies need fluids. Drinking enough fluids every day is essential for those who exercise regularly, eat large amounts of protein, use laxatives, or live in areas with high temperatures. Check with your doctor, however, if you've been told to limit how much you drink.

Drink plenty of liquids such as water and other drinks without added sugar. Fat-free or low-fat milk, 100% juice, coffee, and tea also are good sources of fluids, as are foods with high moisture content such as fruits, vegetables, and low-sodium broth-based soups. Those who choose to drink alcoholic beverages should do so sensibly and in moderation, which means up to one drink per day for women and up to two drinks per day for men.

### **Eating Out**

Eating out is enjoyable, but restaurants often serve large meals, which can be high in calories, fat, and salt. Here are a few tips to help make your meal both delicious and nutritious:

- Order foods such as salads with lean meats, low-fat or fat-free cheeses, and other toppings. Choose low-fat or fat-free salad dressing, and ask for the dressing on the side to control how much you use.
- Choose foods that are baked, broiled, braised, grilled, steamed, sautéed, or boiled instead of fried. With these cooking methods, little or no fat is added to the food.



#### **GO HERE FOR MORE INFO**

To learn more about portion sizes and have some fun at the same time, take the Portion Distortion Quiz from the National Heart, Lung, and Blood Institute. For details, see the listing on page 118 of the **Resources** section.





Do you have a urinary control problem? If the answer is yes, don't stop drinking liquids. Talk with your doctor about treatment.



Beware of diets that make big promises about losing weight, regaining youth, or achieving high energy.



If it sounds too quick, too easy, or too good to be true, it probably is.



To maintain and improve your health, follow the **Dietary Guidelines** and be physically active every day.



- Hold the "special sauces." Ask the kitchen not to top your dish with butter or whipped cream.
- Choose foods with a tomato-based or red sauce instead of a cream-based or white sauce. Cream-based and white sauces usually are made with butter, milk, and cream, and are high in calories and saturated fat. Tomato-based sauces usually contain more vitamins, less fat, and fewer calories.
- Use portion control: Skip the "super sizes," ask for "small," or share a portion.
- Ask for food to be prepared without added salt, and don't add salt at the table.
- Drink water, fat-free or low-fat milk, or other drinks without added sugars.
- Instead of french fries, try a small baked potato, side salad with low-fat or fat-free dressing, or fruit.
- Order an item from the menu instead of heading for the "all-you-can-eat" buffet.

### What Are Dietary Supplements?

Dietary supplements are substances you might use to add nutrients to your diet or to lower your risk of health problems such as osteoporosis or arthritis. Dietary supplements come in the form of pills, capsules, powders, gel tabs, extracts, or liquids. They might contain fiber, vitamins, minerals, amino acids, herbs or other plants, or enzymes. Sometimes, the ingredients in dietary supplements are added to foods, including drinks. You do not need a prescription to buy most dietary supplements.

Some ads for dietary supplements seem to promise that they will make you feel better, keep you from getting sick, or even help you live longer. Sometimes, there is little, if any, good scientific research to support these claims.



### **Are Dietary Supplements Safe?**

Although certain dietary supplements may help some people, sometimes supplements can be harmful. For example:

- Taking a combination of supplements, using supplements together with prescription or over-the-counter medications, or using them in place of medicines prescribed by your doctor could lead to harmful, even life-threatening side effects. Be alert to any warnings about these products.
- Some supplements can have unwanted or harmful effects before, during, or after surgery. For example, vitamin E and the herbal supplement ginkgo biloba can each thin the blood and increase the potential for bleeding. It's important to let your doctor know about the vitamins, minerals, herbals, and any other supplements you are taking, especially before surgery.

### Do I Need a Supplement?

Eating healthy foods is the best way to get the nutrients you need. For example, fruits and vegetables provide a variety of important nutrients, including fiber, folate, potassium, and vitamins A and C.

People who eat the recommended amount of a nutrient in food and who do not have problems absorbing that nutrient will not gain any additional health benefit by taking the nutrient as a supplement. For example, people who eat enough fruits and vegetables don't need extra vitamin C.

Certain dietary supplements, however, can help some older adults with specific nutrient needs that cannot be met by their daily diet. For example, some older adults may not get enough calcium, vitamin D, or vitamin B12. Supplements containing these nutrients help them stay healthy.

The best way to find out if you need to take a supplement is to talk with your doctor or a registered dietitian. Together, you can review your diet, prescription medicines, and health needs, and decide whether a supplement is right for you.







Physical activity is a great way to have fun, be with friends and family, enjoy the outdoors, improve your fitness for your favorite sport, and maintain your independence. Older adults also gain substantial health benefits from regular physical activity, and these benefits last even into old age. The best way to be physically active is to make it a lifelong habit. Once you get started, keep going.

Often, people decide to become more active and follow a healthy eating plan because they want to control their weight. For many people, these healthy habits do result in weight loss, but that's only part of the big picture. Healthy eating and physical activity help you become physically fit and stay healthy.

Think about other lifestyle changes you can make, too. For example, smoking leads to a variety of serious diseases and can keep you from being active. So does drinking too much alcohol. Together, habits like physical activity, a healthful diet, drinking in moderation, and not smoking will help you achieve the main goal: the best of health.

On the following pages, you will find a number of worksheets you can use to help you meet your exercise and physical activity goals. Choose and use the ones that work for you.



Use the worksheets on the next few pages of this Guide to set your exercise and physical activity goals and keep track of your progress. Make copies of the blank worksheets so you can update them as you progress.



# **Activity Log**

For a couple of weekdays and a weekend, write down how much time you are physically active (for example, walking, gardening, playing a sport, dancing, lifting weights). The goal is to find ways to increase your activity.

	Activity	Number of Minutes	Ways to Increase Activity
_			
la y			
Weekday 1			
W			
	Total Minutes		
7			
ay			
Weekday 2			
We			
	Total Minutes		
ри			
Weekend			
<b>&gt;</b>			
	Total Minutes		



# **Goal-Setting Worksheet**

Your success depends on setting goals that really matter to you. Write down your goals, put them where you can see them, and renew them regularly.

Short-term Goals	
Write down at least two of your own pers make physical activity a regular part of yo	onal short-term goals. What will you do over the next week or two that will help you our life?
1.	
2.	
3.	

### **Long-term Goals**

Write down at least two long-term goals. Focus on where you want to be in 6 months, a year, or 2 years from now. Remember, setting goals will help you make physical activity part of your everyday life, monitor your progress, and celebrate your success.

	setting goals will help you make physical activity part of your everyday life, monitor your progress, and celebrate your success.
1	
2	
3	



# Weekly Exercise and Physical Activity Plan

Use this form to make your own exercise and physical activity plan — one you think you really can manage. Update your plan as you progress. Aim for moderate-intensity endurance activities on most or all days of the week. Try to do strength exercises for all of your major muscle groups on 2 or more days a week, but don't exercise the same muscle group 2 days in a row. For example, do upper-body strength exercises on Monday, Wednesday, and Friday and lower-body strength exercises on Tuesday, Thursday, and Saturday. Or, you can do strength exercises of all of your muscle groups every other day. Don't forget to include balance and flexibility exercises.

Week of	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Endurance							
Upper-Body Strength							
Lower-Body Strength							
Balance							
Flexibility							



# **Endurance Daily Record**

You can use these forms to record your endurance activities. Try to build up to at least 30 minutes of moderate-intensity endurance activity on most or all days of the week. Every day is best.

Week of	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Endurance Activity							
How Long Did You Do It?							

Week of	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Number of Steps							



# **Strength Daily Record**

You can use this form to keep track of the strength exercises you do each day. **Try to do strength exercises for all of your major muscle groups on 2 or more days a week for 30-minute sessions each, but don't exercise the same muscle group on any 2 days in a row.** Record the number of repetitions and the amount of weight you use.

		Sun	day	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday	
Week of		Lbs.	Reps	Lbs.	Reps	Lbs.	Reps	Lbs.	Reps	Lbs.	Reps	Lbs.	Reps	Lbs.	Reps
	Hand Grip						,		,						
	Wrist Curl														
	Overhead Arm Raise														
Upper-Body	Front Arm Raise														
Ä	Side Arm Raise														
Jer	Arm Curl														
JQ	Seated Row														
	Wall Push-Up														
	Elbow Extension														
	Chair Dip														
	Book Lon Boico														
>	Back Leg Raise														
Po	Side Leg Raise														
Å	Knee Curl														
Ver	Leg Straightening														
Lower-Body	Chair Stand														
	Toe Stand														



# Flexibility Daily Record

You can use this form to keep track of your flexibility exercises. Record the number of repetitions you do.

Week of		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
-Body	Neck								
	Shoulder								
	Shoulder/Upper Arm								
	Upper Body								
Jec	Chest								
Upper	Back 1								
	Back 2								
	Upper Back								

Lower-Body	Ankle				
	Back of Leg				
	Thigh				
	Hip				
	Lower Back				
	Calf				
	Buddy Stretch				



# **Monthly Progress Test**

Take the tests on page 92 monthly, record your scores, and watch your progress.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Endurance — Pick a fixed course, such as the distance from your house to the corner, and see how long it takes you to walk that far.												
Upper-Body Strength — Count the number of arm curls you can safely do in 2 minutes.												
Lower-Body Strength — Count the number of chair stands you can safely do in 2 minutes.												
Balance — Time yourself as you stand on one foot, without support, for as long as possible. Repeat with the other foot.												
Flexibility — Note how far you can reach until you feel a stretch.												



Frequently Asked Questions



## **Question:**

I'm not particularly active, and I haven't exercised in years. Is it safe for me to start now?

### **Answer:**

If you haven't been active for a long time, it's important to start out at a low level of effort and work your way up slowly. Beginning slowly will help you become more fit without straining your body. For example, you may want to start with walking, biking, or swimming at a comfortable pace and then gradually do more, or start strengthening exercises with 1- or 2-pound weights and gradually add heavier weights. You may want to talk with your doctor if you decide to start a vigorous exercise program or significantly increase your physical activity.



## **Question:**

I have a medical condition (such as arthritis, high blood pressure, diabetes, heart disease). Is it safe for me to exercise?

### **Answer:**

Exercise is safe for almost everyone. In fact, studies show that people with arthritis, high blood pressure, diabetes, or heart disease benefit from regular exercise and physical activity. In some cases, exercise actually can improve some of these conditions. You may want to talk with your doctor about how your health condition might affect your ability to be active. (See page 20 for more information.)



Isn't it better for older adults to "take it easy" and save their strength?

### **Answer:**

Regular physical activity is very important to the health and abilities of older people. In fact, studies show that "taking it easy" is risky. For the most part, when older people lose their ability to do things on their own, it doesn't happen just because they've aged. It's usually because they're not active. According to the U.S. Surgeon General's Report on Physical Activity and Health, inactive people are nearly twice as likely to develop heart disease as those who are more active. Lack of physical activity also can lead to more visits to the doctor, more hospitalizations, and more use of medicines for a variety of illnesses.



## **Question:**

How much physical activity do I need?

### **Answer:**

The goal is to achieve at least 30 minutes of moderate-intensity endurance activity on most or all days of the week. Every day is best, but doing anything is better than doing nothing at all. Try to do all four types of exercises endurance, balance, flexibility, and strength. Try to do strength exercises for all of your major muscle groups on 2 or more days a week for 30-minute sessions each, but don't do strength exercises of the same muscle group 2 days in a row.



## **Question:**

How hard should I exercise?

#### Answer:

We can't tell you exactly how many pounds to lift or how steep a hill you should climb to reach a moderate or vigorous level of exercise because what's easy for one person might be difficult for another. You should match your activity to your own needs and abilities. Start from where you are and build up from there. Listen to your body. During moderate activity, for instance, you can sense that you are pushing yourself but that you aren't near your limit. As you become more fit, gradually make your activities more difficult. Generally, the more vigorous the activity and the more time you spend doing it, the more health benefits you will receive.



How long do I need to be active before I see results?

### **Answer:**

Once you start being physically active, you'll begin to see results in just a few weeks. You may feel stronger and more energetic than before. You may notice that you can do things more easily, faster, or for longer than before. As you become more fit, you may need to make your activities more challenging to see additional results.



## **Question:**

Do I get enough physical activity in my regular day-to-day activities?

### **Answer:**

One way to find out is to check your Activity Log (see page 102). Did you list physical activities that get your body moving, such as yard work, walking the dog, raking leaves, or climbing stairs? How about weight training or an aerobics class? There are many ways to be active every day. The key is to do all four of the major types of exercises regularly and increase your level of effort over time.



### **Question:**

I'm healthy now. Why do I need to be active?

### **Answer:**

Research shows that exercise and physical activity can maintain and even improve your health. For example, exercise and physical activity can help you manage and even prevent diseases such as heart disease, diabetes, and osteoporosis.



I find it hard to make myself be active. What can I do?

### Answer:

You're more likely to keep going if you choose activities you enjoy, if you can fit them into your schedule, if you believe you'll benefit from them, and if you feel you can do them safely and correctly. Making a contract with a friend or family member also may help you keep your commitment. Setting small, realistic goals, checking your progress, and rewarding yourself when you reach your goal also can help. If you can stick with an exercise routine or physical activity for at least 6 months, it's a good sign that you're on your way to making physical activity a regular habit.



## **Question:**

How do I find time to be active?

### Answer:

There are a number of ways to fit exercise and physical activity into your schedule. For example, exercise first thing in the morning before your day gets too busy, or combine physical activity with a task that's already part of your day, such as walking the dog or doing household chores. If you don't have 30 minutes in your daily routine to be active, look for three 10-minute periods.



## **Question:**

What kind of equipment do I need? I can't afford exercise equipment.

### **Answer:**

For many activities, you don't need any equipment or special clothing. All you need for brisk walking, for example, is a pair of comfortable, non-skid shoes. For strength training, you can make your own weights from unbreakable household items (see page 45). Many communities offer free or low-cost programs for seniors. Check with your local parks and recreation department or senior center about the facilities and programs in your area. In addition, some local fitness centers may offer senior discounts.



What if I have an injury or health problem that keeps me from exercising for a while? How do I know if it's safe for me to start again?

### **Answer:**

If you miss a few days or weeks of exercise because of an injury or illness, don't be discouraged. Once you recover, you can start again and be successful. Talk with your doctor about when you can resume your regular routine. When you start again, begin at about half the effort you were putting in when you stopped, then gradually build back up. With a little time, you'll be back at the same, or a better, fitness level.



## **Question:**

I get tired easily. What is the best physical activity for me?

### **Answer:**

Once you become active, you're likely to have more energy than before. As you do more, you also may notice that you can do things more easily, faster, and for longer than before. Regular, moderate physical activity can help reduce fatigue and even help you manage stress.



### **Question:**

I've been exercising for some time now. Why am I not seeing any more real improvements?

### **Answer:**

As your body gets used to a level of exercise, you'll need to vary your exercise or do more in order to see additional progress. If you are able, do your activities longer, farther, or harder. Do the activities more often, or add new physical activities to your routine.



I'm 81 years old. Should I be exercising, and will it make a difference at my age?

### Answer:

Yes, staying active is important throughout life. Regular exercise and physical activity help you stay strong and fit enough to keep doing the things you enjoy. No matter what your age, you can find activities that meet your fitness level and needs.



### **Question:**

What kinds of shoes are best for walking or other types of physical activity?

### **Answer:**

Look for sensible shoes that support your feet. Make sure they have flat, non-skid soles and are comfortable. Avoid shoes with thick, heavy soles. If tying laces is difficult, look for shoes with Velcro® fasteners. When you buy shoes, try on several pairs so that you're sure to get a pair that fits well. (See page 22 for more on getting the right shoes.)



## **Question:**

Do I need to do other exercises in addition to my usual walking routine?

### **Answer:**

Most people tend to focus on one type of exercise or activity and think they're doing enough. Try to do all four types — endurance, strength, flexibility, and balance — because each one has different benefits. Doing one kind also can improve your ability to do the others. In addition, variety helps reduce boredom and risk of injury.



Is it better to join an exercise class or group, or exercise on my own?

### **Answer:**

There are many ways to be active. The key is to find activities you truly enjoy. If you prefer individual activities, try swimming, gardening, or walking. Dancing or playing tennis may be for you if you enjoy two-person activities. If group activities appeal to you, try a sport such as basketball or join an exercise class. Some people find that going to a gym regularly or working with a fitness trainer helps them stay motivated.



### **Question:**

If I'm overweight or obese, what kinds of physical activity can I do?

### **Answer:**

You can do all kinds of physical activities, including the four types of exercise shown in this guide. Try walking, water exercises, dancing, or weight lifting. Anything that gets you moving — even for only a few minutes a day in the beginning — is a healthy start. Very large people may face special challenges. For example, you may not be able to bend or move easily, or you may feel self-conscious. Facing these challenges is hard — but it can be done. Feel good about what you can do, and pat yourself on the back for trying. It should get easier.



## **Question:**

I don't do any kind of physical activity, but I watch my diet and I'm not overweight. Isn't that enough?

### **Answer:**

Eating a nutritious diet and maintaining a healthy weight are only part of a healthy lifestyle. Regular physical activity is important to the physical and mental health of almost everyone, including older adults. Being physically active can help you stay strong and fit enough to keep doing the things you enjoy and to stay independent as you get older. Together, healthy habits such as physical activity, a balanced diet, and not smoking will help you achieve the best of health.

## Resources

## **National Institute on Aging**

For more information about exercise and physical activity, visit NIHSeniorHealth, the senior-friendly website from the National Institute on Aging and the National Library of Medicine. You can read exercise stories featuring older adults and the diverse activities they enjoy. The website is easy

to use. You can make the text bigger and the contrast better. Visit



National Institute on **Aging Information Center** P.O. Box 8057 Gaithersburg, MD 20898-8057

800-222-225 (toll free) 800-222-4225 (TTY/toll free) www.nia.nih.gov www.nia.nih.gov/Go4Life

Many groups have information about physical activity and exercise for older adults. The following list of resources will help you get started.

## **Administration on Aging**

Washington, DC 20201 202-619-0724 www.aoa.gov

## **American Academy of Family Physicians**

P.O. Box 11210 Shawnee Mission, KS 66207-1210 800-274-2237 (toll free) www.familydoctor.org Exercise & Seniors



# American Academy of Orthopaedic Surgeons

9400 West Higgins Road Rosemont, IL 60018-4262 847-823-7186 www.aaos.org Seniors and Exercise Exercise for Persons 60 Years and Older

# American College of Sports Medicine

401 West Michigan Street Indianapolis, IN 46202-3233 317-637-9200 www.acsm.org

### American Council on Exercise

4851 Paramount Drive San Diego, CA 92123 888-825-3636 (toll free) www.acefitness.org

# American Physical Therapy Association

1111 North Fairfax Street Alexandria, VA 22314-1488 800-999-2782 (toll free) www.apta.org

# **American Podiatric Medical Association**

9312 Old Georgetown Road Bethesda, MD 20814-1621 301-581-9200 www.apma.org

## **Centers for Disease Control and Prevention**

1600 Clifton Road
Atlanta, GA 30329-4027
800-232-4636 (toll free)
www.cdc.gov
Growing Stronger: Strength
Training for Older Adults!
How to Avoid Portion Size
Pitfalls to Help Manage
Your Weight
Mall Walking: A Program
Resource Guide

# Centers for Medicare & Medicaid Services

7500 Security Boulevard Baltimore, MD 21244-1850 800-MEDICARE (toll free) www.medicare.gov

## Department of Agriculture Food and Nutrition Information Center National Agricultural Library

10301 Baltimore Avenue Room 108 Beltsville, MD 20705-2351 301-504-5414 www.nal.usda.gov/fnic www.ChooseMyPlate.gov Dietary Guidelines for Americans

## Department of Transportation Federal Highway Administration Office of Safety

1200 New Jersey Avenue SE Washington, DC 20590 202-366-8568 http://safety.fhwa.dot.gov/ ped\_bike Pedestrian and Bicycle Safety

# **Environmental Protection Agency**

1200 Pennsylvania Avenue NW Washington, DC 20460 202-564-6620 www.epa.gov/research/aging Building Healthy Communities for Active Aging

### **Federal Trade Commission**

600 Pennsylvania Avenue NW Washington, DC 20580 877-382-4357 (toll free) www.ftc.gov Avoiding the Muscle Hustle: Tips for Buying Exercise Equipment

## Food and Drug Administration Center for Food Safety and Applied Nutrition

10903 New Hampshire Avenue Silver Spring, MD 20993 888-463-6332 (toll free) www.fda.gov/AboutFDA/ CentersOffices/OfficeofFoods/ CFSAN/

# Institute for Credentialing Excellence

2025 M Street NW, Suite 800 Washington, DC 20036 202-367-1165 www.credentialingexcellence. org/p/cm/ld/fid=86

# International Council on Active Aging

3307 Trutch Street Vancouver, BC V6L-2T3 Canada 866-335-9777 (toll free) www.icaa.cc

### **National Cancer Institute**

9609 Medical Center Drive Bethesda, MD 20892-9760 1-800-4-CANCER (toll free) www.cancer.gov Physical Activity and Cancer Fact Sheet

## **National Center for Complementary and Integrative Health**

P.O. Box 7923 Gaithersburg, MD 20898 888-644-6226 (toll free) www.nccih.nih.gov Tai Chi for Health Purposes

### **National Council on Aging**

251 18th Street South, Suite 500 Arlington, VA 22202 800-677-1116 (toll free) www.ncoa.org

## National Heart, Lung, and Blood Institute **Health Information Center**

P.O. Box 30105 Bethesda, MD 20824-0105 301-592-8573 www.nhlbi.nih.gov **Portion Distortion Ouiz** Your Guide to Physical Activity and Your Heart

## **National Institute of Arthritis and Musculoskeletal** and Skin Diseases

1 AMS Circle Bethesda, MD 20892-3675 877-226-4267 (toll free) www.niams.nih.gov Exercise for Your Bone Health Living with Arthritis

## **National Institute of Diabetes and Digestive** and Kidnev Diseases **National Diabetes Information Clearinghouse**

1 Information Way Bethesda, MD 20892-3560 800-860-8747 (toll free) www.diabetes.niddk.nih.gov What I Need to Know About Physical Activity and Diabetes

## **National Library of Medicine MedlinePlus**

8600 Rockville Pike Bethesda, MD 20894 www.medlineplus.gov Search "Health Topics" for exercise and fitness information.

## Office of Dietary **Supplements National Institutes of Health**

6100 Executive Boulevard Room 3B01, MSC 7517 Bethesda, MD 20892-7517 301-435-2920 www.ods.od.nih.gov Dietary Supplement Fact Sheets

## Office of Disease Prevention and Health Promotion

1101 Wootton Parkway Suite LL100 Rockville, MD 20852 240-453-8280 www.health.gov Physical Activity Guidelines for Americans Be Active Your Way: A Guide for Adults

## **President's Council on Fitness, Sports & Nutrition**

Department W Tower Building, Suite 560 1101 Wootton Parkway Rockville, MD 20852 240-276-9567 www.fitness.gov

## **Weight-Control Information Network**

1 WIN Way Bethesda, MD 20892-3665 877-946-4627 (toll free) www.win.niddk.nih.gov Active At Any Size Young at Heart: Tips for Older Adults Fit and Fabulous as You Mature Walking...A Step in the Right Direction

#### **YMCA**

101 North Wacker Drive Chicago, IL 60606 800-872-9622 (toll free) www.vmca.net

#### **YWCA USA**

2025 M Street NW, Suite 550 Washington, DC 20036 202-467-0801 www.vwca.org

# **Acknowledgments**

The National Institute on Aging brought together some of the Nation's best-informed experts on the topic of exercise for older adults to discuss the writing of this book. Each of these experts is a major force in research devoted to improving the health and independence of older adults, and their work is reflected throughout this guide. We are grateful to them and to other leaders in the field for sharing their expertise.

## **Panel Co-chairpersons**

Chhanda Dutta, PhD, Chief Clinical Gerontology Branch, Division of Geriatrics and Clinical Gerontology, National Institute on Aging

Jack Guralnik, MD, PhD, Professor Epidemiology and Public Health, University of Maryland School of Medicine

### **Panel Members**

Steven N. Blair, PED, Professor Department of Exercise Science, Arnold School of Public Health, University of South Carolina

David Buchner, MD, PhD, Professor Department of Kinesiology and Community Health, College of Applied Health Sciences, University of Illinois at Urbana-Champaign

Wojtek Chodzko-Zajko, PhD, Head Department of Kinesiology and Community Health, College of Applied Health Sciences, University of Illinois at Urbana-Champaign

Abby C. King, PhD, Professor Health Research & Policy and Medicine, Stanford University School of Medicine

Colin Milner, Chief Executive Officer International Council on Active Aging

Marcia Ory, PhD, MPH, Professor Social and Behavioral Health and Director, Active for Life National Program Office, School of Rural Public Health, Texas A & M University

Marco Pahor, MD, Director Institute on Aging, University of Florida Health Science Center

Thomas Prohaska, PhD, Dean College of Health and Human Services, George Mason University

James Whitehead, Executive Vice President, American College of **Sports Medicine** 

Donald A. Williamson, PhD, John S. McIlhenny Endowed Professor Pennington Biomedical Research Center

#### Special thanks

The following members of the American College of Sports Medicine reviewed the sample exercises in the guide:

Grace DeSimone, Director, Fitness Programming, Plus One Health Management

Michael E. Rogers, PhD, CSCS, FACSM Research Director, Center for Physical Activity and Aging, Wichita State University

Walter R. Thompson, PhD, FACSM Professor, Department of Kinesiology and Health, Georgia State University

Thanks also go to Jane Hirshberg and Susanne C. Larsen from the Liz Lerman Dance Exchange for their help recruiting the participants for the photoshoot for the sample exercises.

#### **Participants** Kelly-Marie Berry

Ruth Cohen Ioaquin Corrillo Ralph Glenmore **Doris Kennedy** Nora Lopez **Bodil Meleney** Quincy Northrup Paul Ramos Peg Schaefer Andy Torres Bea Wattenberg

#### **Personal Trainer**

Michele Ryon

#### Writer

Anne Brown Rodgers

#### **Editor**

Karen M. Pocinki, MA NIA Office of Communications and Public Liaison

#### **Health Communications** Consultant

Marcia Pruzan

### Design

Levine & Associates

#### **Photography**

Doug Sanford, Photogroup



The National Institute on Aging's online exercise and physical activity campaign, Go4Life®, was designed to help adults 50 and older incorporate more exercise and physical activity into their daily lives. On the *Go4Life* website you can:

- Find a sample exercise routine called Workout to Go
- Watch exercise videos
- Submit your own exercise success stories
- Print educational tip sheets
- Send motivational e-cards
- Listen to or download an audiobook version of this Guide
- Use *My Go4Life* to make an exercise plan and track your progress over time

For more information visit www.nia.nih.gov/Go4Life.



