



Module 12

Staying Active with Kidney Disease



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Please Note

Use of Kidney School does not replace the need to talk with your health care team about your care and your options.

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Congratulations, you've finished the quiz! Here are the correct answers so you can see how you did:

Module 12 – Kidney Quiz Answers

- | | |
|---|-----|
| c | (5) |
| b | (4) |
| a | (3) |
| b | (2) |
| c | (1) |





Did you know that half of all American adults have at least one chronic disease? As many as 26 million Americans have chronic kidney disease (CKD). So, if you or a loved one have some degree of CKD, you are not alone. And one thing many of us share—whether we have a chronic disease or not—is not having as much energy as we used to have.

Staying active with CKD means having enough energy to do the things you love. This is part of what makes life worth living! In this module, we'll give you some ideas about how to stay active.

Are you really, *really* tired? Can you barely pull together the energy to sit and read this module? Why is it that people with CKD are often so tired? Here are the four common reasons we'll cover:

- ❶ Anemia—a shortage of oxygen-carrying red blood cells
- ❷ Depression
- ❸ Poor sleep
- ❹ Lack of exercise

We'll also show you how to have more energy, and give you details on:



- Sleep problems and how to deal with them
- Why activity is vital to your life
- How to become active and stay active
- Common barriers to activity and how to overcome them

What People with CKD Say About Fatigue

"Sometimes we don't realize just how tired we are because it is insidious, and we no longer recall what normal feels like."

"Because of the exhaustion, most things seem too hard. I cook and do dishes and do laundry and am very active in my church, trying to help others...but I have no stamina left for art or music or writing or the creative things I used to do that put spark in my life." —Nancy, 63 years old

"I don't think I had any idea just how tired I was until I started dialysis and started getting some strength back. In my case, kidney failure was slow, so I just didn't see how much it was affecting me. TIRED doesn't even begin to describe it! And it's the one effect that still bothers me the most; I sure do miss my energy. But I learn to work around it and take advantage of the times when I am feeling good and to just rest and not fight it." —Robin, 47 years old



We will sum up the main points at the end of this module. You can use the Personal Plan to remind yourself of what you've read.

So, let's get started!

Fatigue and Anemia

People with kidney disease often have *anemia*—a shortage of oxygen-carrying red blood cells. Why? Because healthy kidneys make a hormone called *erythropoietin*, or EPO, that tells the bone marrow to make red blood cells.

As the kidneys fail, they make less EPO, so you have fewer red blood cells—and less oxygen. When this happens, you may feel:

- Short of breath
- Cold all the time
- Tired, tired, tired—(fatigue!)

There are many types of anemia, though the most common ones related to CKD are based on a lack of EPO and iron. If you think anemia may be a reason why you feel tired, read Module 6—*Anemia and Kidney Disease*. Module 6 will help you learn more about symptoms, tests, and treatments to help you feel your best.

Fatigue and Depression

Sometimes people with CKD lack energy because they are depressed. Depression is very common among people with all kinds of chronic diseases. Depression can make you feel as if you're walking through molasses—everything becomes much harder to do.

If you have more than one of these symptoms for longer than 2 weeks, you may be depressed. Check off any symptoms that apply to you and bring the

list to your care team. Depression *can* be treated, and you *can* feel better.

- Persistent sad, anxious, or empty feelings
- Loss of interest in doing things you used to enjoy
- Fatigue, loss of energy
- Feeling worthless, helpless, or guilty
- Significant weight loss—or gain
- Insomnia—or sleeping more than usual
- Feeling restless or irritable
- Fuzzy thinking, lack of focus, or having a hard time making a choice
- Thoughts of death or suicide
- Other symptoms I have that might be related to depression:

Fatigue and Sleep Problems

“Here is my bed: Sleep give thee all his rest!”
—Shakespeare, *A Midsummer Night's Dream*

It's hard to have energy during the day if you aren't sleeping well at night. Problems falling





asleep or staying asleep can sap your strength and leave you tired and irritable. CKD and its treatment can sometimes cause sleep problems. Five of the most common sleep problems that people with CKD have are:

- 1 Poor sleep habits
- 2 Restless legs syndrome
- 3 Sleep apnea
- 4 Pain
- 5 Itching

Poor sleep habits

Sleep problems are very common—whether we have CKD or not. Part of the issue may be how much sleep we expect to get. As we age, our bodies tend to need less sleep because we are less active, and it can be harder to sleep deeply all night.

Sometimes we can sleep better if we make some simple changes in our sleeping routine. Do any of the items below apply to you?

- I nap during the day to make up for sleep I miss at night.
- I nap during the day because I feel tired all the time.
- I nap during the day because I don't have the energy to do other things.
- I nap during daytime dialysis.
- Noises wake me up at night or make it hard to fall asleep.
- My bedroom is too warm or too cold for me to sleep.
- My bed is not comfortable.

How Can I Relax at Bedtime?

If you have ever cared for small children, you know how soothing a sleep time routine can be. Some ideas for bedtime rituals for adults are below. Which ones do you want to try?

- A light snack, so I'm not hungry
- Limiting fluids before bedtime, so I don't have to get up to urinate, if this is a problem for me
- Quiet reading
- A warm bath or shower
- Scents in my room before I go to sleep can soothe me too, like candles, oils, incense, or potpourri. (Note: Just don't leave anything burning while you sleep!)
- A lavender scented pillow or sachet (the smell of lavender can help me feel drowsy)
- Soft music
- White noise, such as nature sounds, a fan, or even an air purifier to block out noises
- Daydreaming about something relaxing—imagining a calming scene can slow my brain waves and make sleep come easier

Still can't shut off your racing mind? Keep a pad of paper by your bedside and write down everything that's bothering you. Getting it on paper can free your mind so you can let go and fall asleep. Count backwards from 100 with one number for each breath, in and out. If you like, put your breath count to a favorite song. Extra pillows can create a comfortable cocoon for sleep, too.



- ❑ Too much light in my bedroom disturbs my sleep.
- ❑ I go to bed at a different time each night and/or wake up at a different time each morning.
- ❑ I use my bedroom for lots of things: hobbies, eating, paying bills.
- ❑ I don't have a bedtime routine.

If you are having sleep problems, there may be things you can do to sleep better. Try making sure your bedroom is dark, quiet, and a good sleeping temperature. If you can't adjust your room, try earplugs, a sleep mask, or changing your sleepwear or covers to stay warmer or cooler. You can also try an eggshell foam cushion to fix a lumpy or too-hard bed and relieve pressure on your back or hips. A thin board under the mattress can fix sags.

Setting up a relaxing bedtime routine and going to bed at the same time each night (even on weekends) can help a lot, too. Your body gets used to a certain sleep cycle. This means napping

during the day may make it harder to sleep at night. If you must nap, set an alarm for 20 minutes, then go back to your regular bedtime.

If possible, use your bedroom only for sleeping, love-making, quiet reading, and resting. Try to avoid exercising or eating a big meal in the hour or two before bed. Both make it hard to relax and fall asleep.

If good sleep habits don't help you to sleep better, your doctor may have some other ways to help you. There are a number of sleeping medicines available, and some can be used for people with kidney disease.

If you take a sleeping pill, you may find that it makes you sleepy all day. You may need to adjust the timing of the pill with your doctor. If you work together, you can try to find a way to sleep better at night and have more energy during the day.

Restless legs syndrome

Restless legs syndrome (RLS) is a “creepy-crawly” feeling in the leg muscles that is made better by moving around. RLS is very real, and makes sleeping very uncomfortable for nearly 12 million Americans. Here is how some people with RLS describe it:

“My mother is about to go crazy. That sensation that something under her skin is crawling in her right leg is terrible. She can't sleep.”

“My symptoms were severe fatigue in and near my calf muscles, and a feeling of weakness in the muscle. So, it sort of hurts, but it's not pain so much as achiness and an irritating feeling that something's off. I would get my legs massaged on the bad RLS nights and it helped me completely. Then I would be entirely relieved and be able to sleep soundly. Now I still get RLS, but it has settled down a great deal. I am certain it is due to dialysis, because that's about the only night I have it.”

Are You on Dialysis?

People who are on dialysis may have another cause of poor sleep—not enough dialysis. A build up of toxins in the blood can cause insomnia and other sleep problems. To learn more about adequate dialysis, read Module 10—*Getting Adequate Dialysis*.





RLS symptoms tend to occur during periods of not moving. The feelings cause a strong urge to move, which helps a bit. But then it happens again, which means more and more moving.

If this happens to you when you are trying to sleep, it can wake you many times each night. It may wake up your bed partner, too. The result is poor sleep and fatigue the next day. After many days of this, you can feel like a zombie from lack of sleep.

RLS can also occur with another problem called *periodic limb movements of sleep* (PLMS). This causes leg jerking that can't be controlled. It may happen as often as every 20 seconds.

So what can be done about RLS? You can:

- Rub or massage your legs.
- Take a hot bath before bed to relax the muscles.
- Take vitamin E supplements (talk to your doctor first, before starting vitamin E or any other medication).
- Take prescription drugs. Some drugs that are used to treat RLS include Neurontin[®], Tegretol[®], Pergolide[®], and Sinemet[®].
- Ask your doctor to refer you to a neurologist (a doctor who specializes in nerve problems).
- If you are on dialysis, increase your dialysis time to try and reduce the symptoms of RLS.
- Switch to daily or nocturnal hemodialysis (HD). Getting more HD helps RLS.
- Exercise!

One of the best and cheapest ways to fight RLS and PLMS is by getting regular exercise!

Exercise increases blood flow to your legs, which helps reduce symptoms in most people.

In fact, *many* sleep problems may be helped by exercise. Later in this module we'll talk more about exercise.

Sleep apnea

If you've been told that you "snort" when you sleep, read this section carefully.

Sleep apnea causes your breathing to stop when you sleep. This happens when your throat muscles and tongue relax during sleep and block your airway.

What Does Apnea Feel Like?

"I have this condition. A week before my apnea test I got up one morning after 9 hours of 'sleep,' showered, and sat on the edge of my bed to put on my underwear. I honestly did not have the energy to do it. Lack of sleep can do that to you. I could not read a book, because after two pages I would be asleep. I also sometimes woke up gasping for air."

"At the sleep clinic they glue transmitters all over your head, legs, chest, and let you go to sleep. They will film your sleep and monitor it. A couple of hours into my test, they came in and put a machine and mask on me that forced air into me. I woke after 6 hours of sleep feeling like a million bucks for the first time in about a year! They told me I quit breathing about 60 times per hour without the machine. I now use it every night, wake up with energy and like being alive again."

—Debbie, 56 years old, diagnosed with sleep apnea at 52



When your breathing stops, your brain sends a message to “jump-start” your breathing. But to do this, it has to awaken you from sleep. The “snort” is the sign of a “jump-start.”



In severe cases, breathing can stop many times an hour—even 200 or more times a night. No wonder you’re exhausted when you crawl out of bed in the morning!

Sleep apnea causes chronic fatigue *and* raises the risk of high blood pressure, heart attacks, and other health problems. If this sounds like you

How Can I Stop Snoring—or Get My Partner to Stop?

Snoring often happens when the sleeper is on his or her back—so not sleeping in this position can reduce the noise.

One way to do this is to sew a pocket on the back of a pajama top or t-shirt. Pop a tennis ball into the pocket and secure it shut with Velcro®. The tennis ball is too bumpy to allow sleeping on the back. Velcro makes it easy to take the tennis ball out when the shirt goes in the wash.

If you snore, ask your doctor about treatment options.

or someone you love, there is hope for better, safer sleep. First, have the problem diagnosed at a sleep clinic. Your doctor can suggest one.

Many people who have sleep apnea are overweight. Often, losing weight can reduce symptoms. Other treatments include medication, surgery, or a special mask that can be worn at night to keep the airway open.

Does snoring mean you have sleep apnea? Not necessarily. Snoring, by itself, is *not* a serious medical problem, because it doesn’t stop your breathing. If there are no long pauses between breaths and no snorting, the problem is most likely just snoring and not sleep apnea. While snoring may keep *others* from sleeping, it doesn’t tend to disrupt your sleep. So, you can snore and not suffer great fatigue the next day.

Pain

Pain is the most common reason people get a poor night’s sleep. If you have pain that disrupts your sleep, talk with your doctor. Your doctor may suggest an over-the-counter medicine or prescribe something for your condition.

The pain of some conditions, such as arthritis, neuropathy (nerve pain), and others, can be helped with moderate exercise and stretching.

Itching

For people with kidney disease or those on PD or standard in-center HD, itching is another problem that can keep you from sleeping or wake you up. Dry skin, high levels of phosphorus in the blood, or a build up of other toxins can make skin itchy. Here are some tips to relieve the itch. Check the ones you might like to try:





- ❑ Take a daily bath or shower to help wash away skin irritants.
- ❑ Avoid very hot baths that can dry out my skin.
- ❑ Use a moisturizing soap for sensitive skin.
- ❑ Add a few tablespoons of cornstarch, baking soda, or oatmeal to my bath water.
- ❑ Put on a soothing lotion right after a bath or shower. I'll avoid lotions with vitamin E, lanolin, or aloe vera, which can irritate my sensitive skin.
- ❑ Use cool, moist compresses on my itchy spots instead of scratching.
- ❑ Talk with my doctor or dietitian about using (or using more) phosphate binders to get rid of extra phosphorus.
- ❑ Wear cotton gloves while sleeping to avoid scratching at night.
- ❑ Wear cotton clothing, which is less irritating than synthetic fabrics, such as rayon or nylon.
- ❑ Watch labs more closely and try to make improvements if they are out of range.
- ❑ Get some exercise during the day to feel more tired at night.
- ❑ Talk with a dietitian about choosing lower phosphorus foods.
- ❑ Get all the dialysis the doctor prescribes, if I'm on dialysis, and try to be on time and avoid cutting treatment time.
- ❑ Think about a switch to daily or nocturnal HD. Both remove more phosphorus. Nocturnal HD removes so much that some people need to take phosphate *supplements*.
- ❑ Have a massage with oils.

Kidney Patients Talk About Exercise

"I ride my bike or walk on the trail at our local YMCA in winter—I can hardly do much outside exercise in the summer, as it is so hot, unless it is swimming or gardening while the sprinklers are going. I get wet, but it feels good! Even when I don't do actual exercising, I stay active by doing things around the house. Something as simple as watering the flowers around the deck, cleaning out our pond out back, cleaning house, chasing my cat, I just stay active. I feel better when I get up and go and stay busy. It seems to energize me. You can always find something to do that will fit your energy level."

"I try to work out with light weights and a cross-training bike 3–4 days a week, either at home or at a gym. I won't lie—working out is very difficult for me since I lost a lot of the feeling in my legs. I find it exhausting to get around with my walker or wheelchair."

"Prior to having kidney failure, I joined a gym and was walking on the treadmill three times a week. There were stairs that led up to the second story exercise room. At first, I couldn't get up those steps without severe tiredness in my legs. After 2 months, I could run, skip, and jump up the stairs with no problems. It only takes a small time commitment to get good results."



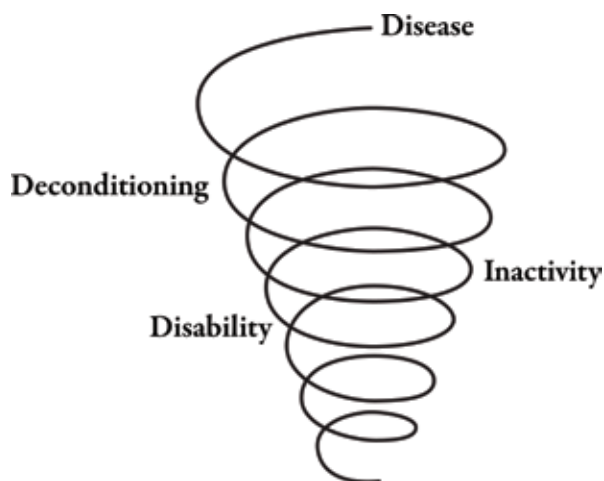
Fight Fatigue with Exercise

The best sleeping pill is exercise—really! By making activity a part of your life, your sleep will be deeper, longer, and you will feel more refreshed when you wake up.

If you're like most of us, the word "exercise" makes you think of a gym—one you join, or maybe gym class in school. Using a gym is one way to stay active, but it's not the only way.

Years ago, people stayed fit because it was a lot of work to scrub floors by hand, use a push lawn mower, cook meals from scratch, and so on. Today, with more conveniences, it's easy for *all* of us to be less active in our daily lives (and even easier if we're tired).

Even though it's easy to do less and less, if you have kidney disease, you need to stay active. Why? Because when you have kidney disease, and you're tired, you do less. And when you do less, your muscles, joints, and bones become less efficient and feel weaker. Over time, it gets harder and harder to do less and less. This is called a "cycle of deconditioning" (see graphic below, reprinted with permission from the *American Journal of Kidney Diseases*, 24(1), 1994.)



As one patient describes it:

"When I laid around after my failed transplant, I had the muscle tone of a newborn after a while. I was only able to walk to the corner of my street and back. It takes a lot of self-discipline to stick to an exercise program, but it has meant to me the difference between just surviving and vitality."

You can break this cycle by being active! This may not seem to make sense. You may be afraid you'll "use up" the energy you do have, so you save it very carefully. This is like thinking of your body as a flashlight battery—once you use up the energy, it's gone.

Instead, think of your body as a *rechargeable* battery. Exercise is the "juice" that recharges it. While exercise does require energy from you, it will give you back far more than it takes.

Regular exercise stretches and strengthens your muscles, and helps keep your heart healthy. It gives you the strength and energy to keep doing the things you like. And the more you do, the more enjoyment and control you have over your life.

When we say "exercise" or "activity," we mean *anything* that gets your body moving for about 10 minutes or more at a time. This might be using a treadmill or swimming laps. Or, it could be walking a dog, gardening, vacuuming, taking a movement class, or any number of things.

What can you gain from exercise or activity? Three major things:

- 1 Strength
- 2 Flexibility
- 3 Endurance

Be sure to always talk to your doctor before starting a new exercise plan.





Strength

Not using muscles leaves them weak and flabby. But using them can make them stronger again—even if you haven't done anything in a long time. Research has shown that even people in their 70s, 80s, and 90s can double their strength through weight training in just a few weeks.

Being stronger can mean being able to drive a car. Carry your own groceries. Walk alone instead of needing a walker or a wheelchair. Stronger muscles can mean being able to pick up a child, walk up stairs, or get to the bathroom without help. And, stronger muscles can mean less chance of falling down.

If you can do all of these things now—great! Keeping up your strength will help you keep doing them. If you can't do some of these things now, you may find that building up your strength will help you do more.

If you are very weak, or have not taken part in any activity for a long time, ask your doctor to refer you for physical therapy. Physical therapists have special training to help you become more mobile and active. Their services are paid for by Medicare in some cases, or your insurance may cover it.

How do I get stronger?

Use resistance: small weights, an elastic band, or even your own body weight. You don't have to buy weights—you have some in your cupboard or drawer. Soup cans or even socks filled with dried beans can make great starter weights.

To build strength, start slowly, with very light weights, and do more as you are able. If you keep track of what you're doing in a notebook, you'll be able to see your progress. Or, you'll see the benefits of getting stronger in your daily life, as it becomes easier to lift things and to get around.



Can I Use Weights If I Have a Vascular Access?

Good question! Some doctors believe that if you have a *vascular access* (special blood vessel created for dialysis) you should limit weight lifting. Others believe that lifting weights can help create a strong access, if you start slowly and build up gradually. Check with your vascular access doctor. **Do not put weights across your access.**

Check with your doctor to see what may be best for you. Ask questions, like:

- If my weight lifting is limited when I get a new access, when can I start to lift weights safely?
- How much weight can I use to do curls with my access arm?
- Is it okay if I use both arms together to lift weights? How heavy can I go?



Following are some examples of **strength exercises** you can do:

Arm Curl (front of upper arm)



- Stand or sit up straight in a chair.
- Keep your elbows close to your sides and bend your arms at the elbows.
- Turn your palms up and make a fist with each hand.
- Slowly lift one fist (with or without weight) up to your shoulder and lower. Repeat with other arm.

What Are Endorphins?

Endorphins are chemicals your body makes during exercise that lift your mood, help control blood pressure, act as natural pain killers, and combat stress. Research has shown that even 15 minutes of moderate activity can release these chemicals.

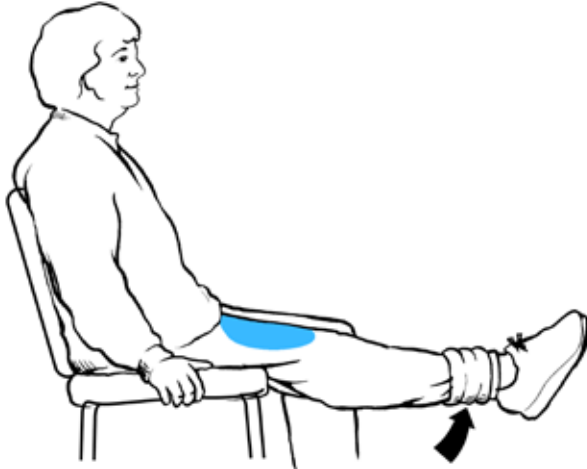
Arm Extension (back of upper arm)



- Stand or sit up straight.
- Bend one arm at the elbow and bring your elbow up close to your ear. (Your hand will go behind your shoulder.)
- Keeping your bent elbow pointing out in front of you and close to your head, straighten your arm above your head. (Imagine you're throwing a baseball.)
- Bend the elbow again and slowly lower your hand behind your shoulder. Repeat with other arm.
- Use a stretch band or small weight to add resistance.



Lower Leg Extension (thigh)



- Sit up straight with feet flat on the floor.
- Hold onto the seat of the chair to support your back.
- Lift one leg off the floor and hold it out straight. (Ankle weights can be used.) Hold.
- Bend your knee and slowly lower your foot to the floor. Repeat with other leg.

Straight Leg Extension (thigh)



- Lean back in a chair with legs raised on a footrest.
- Grasp the arms of the chair or the sides of the seat for balance.
- Slowly lift your whole leg—without bending the knee. (Ankle weights can be used.) Count to five.
- Slowly lower. Repeat with other leg.

Back Leg Swing (back of upper leg)



- Stand up straight and hold onto the back of a chair for balance. Do not lean forward.
- Keeping your back straight, lift one leg back and point the toe. (Ankle weights can be used.)
- As you lift, remember to keep your back straight—don't arch it! Hold. Slowly lower your leg. Repeat with other leg.



Heel Raise (back of lower leg)



- Stand up straight and hold onto the back of a chair for balance.
- Lift your heels and stand on the balls of your feet. Hold. Slowly lower.
- If you are able, don't use the chair and keep your hands on your hips.

Side Leg Lift (hip)



- Lie down on your side.
- Use the arm underneath you to support your head.
- Place your other arm in front of you for balance. Extend both legs.
- Slowly lift your top leg. Lead with the side of your foot. Hold. Slowly lower.
- Turn over onto your other side and repeat with the other leg.

Abdominal Curl (abdomen)



- Lie down on your back with your knees bent and your feet flat on the floor.
- Cross your hands on your chest and tuck your chin to your chest.
- Slowly roll your head and shoulders up until your shoulder blades are off the floor. Do not do a full sit-up. Hold.
- Slowly roll back down.

Here are some other ideas for ways to gain strength. Check off any that sound like they might work for you:

- Lift small homemade or store-bought weights while I watch TV.
- Follow along with a video of weight exercises.
- Ask for a Thera-Band® (stretchy plastic band that comes in different colors/strengths) to use for exercises.
- Put away canned foods on a shelf.





- ❑ Do pushups or kneebends to use my own body weight as resistance.
- ❑ Use weight machines at a gym.
- ❑ Try Pilates (a strength-building form of yoga).
- ❑ Add wrist weights while walking.
- ❑ Other:

Flexibility

Remember the Tin Man in the *Wizard of Oz*? He had to carry an oil can to keep his joints moving smoothly. If he stood still for too long, or forgot to use the oil, he would stiffen up and be unable to move at all.

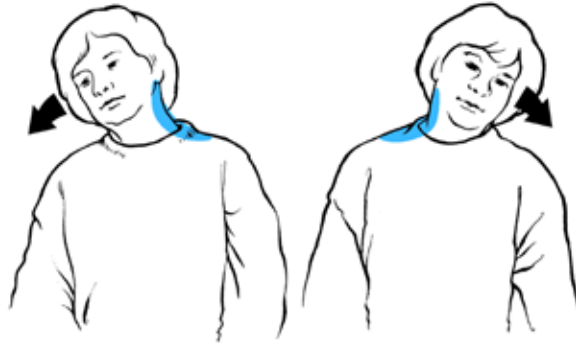
This can happen to you! Your body can quickly become used to being inactive. If you go for long periods without moving, your joints stiffen. Plus, your overall health starts to suffer.

Just think about stretching to reach something on a high shelf, kneeling in church, stepping onto a bus, or bending to tie your shoes. Even getting dressed uses many of your joints—as you well know if you’ve ever had any joint problems. Flexibility is something you need *every* day.

How do I become more flexible?

Any activity where you stretch and move your joints can help you to be more flexible. Here are some **simple stretches** you can do at home, or any time you have a few minutes:

Neck Stretch (neck)



- Sit or stand up straight. Look straight ahead.
- Slowly lower your right ear toward your right shoulder. Bring your head back up and lower your left ear to your left shoulder. Repeat. Drop your chin to your chest and slowly roll your chin across your chest until your left ear reaches your left shoulder. Repeat.
- Lift up your chin until you are looking straight ahead. (*Do not tilt your head back!*)

Arm/Hand Stretch (hands and wrists)

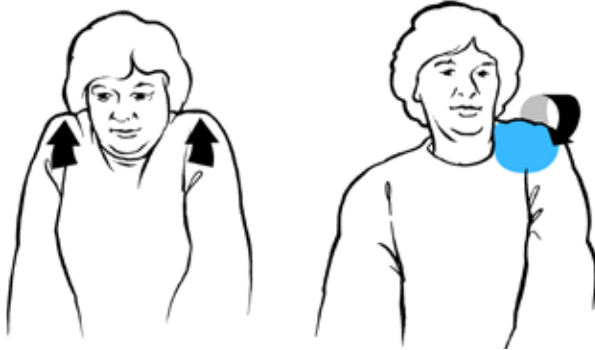




- Sit or stand up straight.
- Stretch your arms straight out in front of you at shoulder height.
- Stretch out all your fingers, then make a fist and stretch out your fingers again. Repeat.
- Keep your arms stretched out and slowly make small circles with your wrists. First clockwise, then counterclockwise.

Shoulder Shrug & Rotation

(shoulders, upper back, and chest)



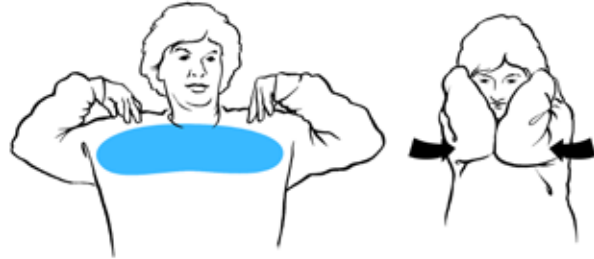
- Stand or sit up straight.
- Shrug your shoulders up to your ears. Hold. Lower and repeat.
- Make forward circles with your right shoulder. Then with your left.
- Make backward circles with your right shoulder. Then with your left.

What One Patient Says About Flexibility

“I do Tai Chi and now I am going to start doing stretching exercises. Because my knees are not so good I have trouble with a few moves, but Tai Chi is gentle and a slow fluid movement. The Tai Chi helps me with balance and lower leg strength.”

Chest & Upper Back Stretch

(shoulders, upper back, and chest)



- Stand or sit up straight.
- Put your hands on your shoulders with your elbows out to the side. Make circles with your elbows. First forward, then back.
- Stop circling and touch your elbows together in front of your chest.
- Open your elbows out again and squeeze your shoulder blades together. Feel the stretch across your chest. Repeat.



Side Stretch (sides)

- Stand or sit up straight.
- Reach your arms over your head and stretch up toward the ceiling.
- Reach over your head and lean to your right side. Feel the stretch.
- Come back up straight and reach over your head and lean left. Repeat.





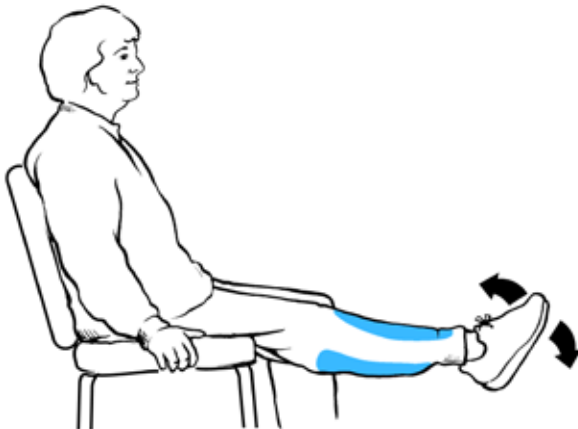
Single Knee Pull (lower back and back of thigh)



- Sit up straight.
- Bend over, grab your left knee with both hands, and pull it toward your chest.
- Tip your chin to your chest and try to touch your forehead to your knee. Go as far as you comfortably can. Hold.
- Lower your left knee and repeat the exercise with your right knee.

Leg Stretch (front and back of leg, and ankle)

- Sit up straight with your feet on the floor.



- Grasp the seat of the chair for balance.
- Slowly raise your right leg until it is straight out in front of you.
- Point your toes, then bend your ankle and slowly bring your toes back toward you. Repeat.
- Point again and slowly circle your ankle. First circle to the right a few times, then to the left.
- Bend your knee and slowly lower your foot to the floor. Repeat with your other leg.

Calf Stretch (lower leg)



- Place your hands on the back of a chair for balance and stand up straight.
- Step back with your right leg; press your right heel into the floor.
- Bend your front leg slightly and feel the stretch in your right calf.
- Bend your back knee slightly and feel the stretch in your right heel. Hold.
- Relax and repeat on the other side.



Here are some other ideas for ways to become more flexible. Check off any that sound like they might work for you:

- Swimming pool exercises
 - Tai Chi
 - Stretching along with a video
 - ROM (range of motion) dance
 - Washing windows
 - Painting a wall
 - Yoga
 - Changing the sheets on a bed
 - Dancing (any type)
 - Gardening
 - Cleaning out a closet
 - Bowling
 - Hanging laundry on a line
 - Fixing a car
 - Washing and waxing a car
 - Golf
 - Other:
-

Endurance

Endurance exercise works your heart to make it stronger. The best endurance exercise is one you do for at least a few minutes at a time without stopping.

Endurance exercise, also called aerobic exercise, gives you more energy by moving your blood faster through your body. This increase in blood flow brings more oxygen to your brain, helping you feel more alert. Exercise also sends out chemicals called *endorphins* into your blood that give you a natural “high.”

With more endurance, you can keep up or do more with your family and friends. You can go more places and do more things without getting winded. You can have enough stamina to keep working or volunteer to help others. You can have a much fuller life.

Here are some ideas of ways to get more endurance. Check any that sound like they might work for you:

- Walking (a little farther each day)
 - Hiking/nature walks
 - Playing basketball or soccer
 - Dancing (any type)
 - Singing (helps my lungs prepare for more exercise!)
 - Water exercise
 - Skating
 - Bicycling
 - Swimming
 - Climbing stairs
 - Using a treadmill
 - Playing ping pong
 - Golf
 - Tennis
 - Raking leaves
 - Vacuuming or sweeping
 - Other:
-

Regular exercise for strength, flexibility, and endurance has a lot of benefits for you! It strengthens your muscles and bones. It lowers your risk of heart disease and improves your circulation. It helps fight anemia, depression, and anxiety.





Exercise also improves your sleep, lowers your cholesterol, and helps control blood sugar and blood pressure.

The American College of Sports Medicine and the American Heart Association recommend exercise. With your doctor’s okay, they suggest 30 minutes

Barriers	Possible Solutions
I don’t have anyone to exercise with.	People are much more likely to exercise if they have a buddy. Have I asked family members, friends, co-workers, or other people with kidney disease? I could also take a class, or try an activity I can do alone.
I hate exercise.	Don’t “exercise.” Find <i>something</i> I enjoy doing that gets me moving. It might be bowling, it might be gardening, it might be building a home for <i>Habitat for Humanity</i> . I can decide!
I don’t have a convenient or safe place to exercise.	Check out my local community center, YMCA, or other exercise facility for classes or activities. I might walk in a mall or with a group.
I don’t have time.	If I can’t afford 10 minutes at a time, I am too busy! I may need to multitask. Maybe I could move, stretch, or even fidget <i>while</i> I watch TV or sit at my desk. If I am on hemodialysis, I can use chair time to gain flexibility, strength, and endurance, if my clinic has a bike or weight-lifting program. Or, I can use my break time at work (or take a break at home) and walk for 10 to 15 minutes.
I am too tired or weak.	Tell myself, “Exercise will give me energy, help me feel more alert, and build endurance so I can do more of what I want.” Start slow and work up to longer periods as I get stronger.
I am too out-of-shape, overweight, or my physical condition is too poor. I can’t do physical activity.	Regardless of my condition, there is something I can do. I will ask my doctor about physical therapy if I can’t do any activity.
I find exercise boring.	If I find exercise boring, I may dislike doing the same thing over and over. I will look for activities that offer variety. I can distract myself with music or share the activity with friends.
I’m too old.	As long as I <i>can</i> move, I am not too old to start.
I’m too ill—I can’t do any physical activity.	Talk with your care team about what you <i>can</i> do. Physical movement, even in small amounts, can be helpful. Even people who are in a wheelchair can do some exercise. Ask about a referral to physical therapy, if possible, to help get you started safely.



What One Patient Says About Endurance

“I do a lot of fast walking. It’s low-impact and non-jarring. Always have someone go walking with you if you can—that way, the time passes quickly because you’re talking and not concentrating so much on the act of walking itself. Swimming is also low-impact and beneficial. I feel better and find I have more energy if I am physically active in some way daily.”

a day of moderate aerobic exercise five days a week (or 20 minutes of vigorous exercise three days a week). They also suggest choosing 8 to 10 strength exercises and doing each one 10 to 15 times, two or three times a week.

The more active you are, the better you will feel and the more you will enjoy your life. That’s the bottom line.

Overcoming Barriers to Being More Active

“But it isn’t that easy,” you might say. “I haven’t exercised much my whole life and I’m not eager to start now.” When exercise has not been a part of your life, it is hard to get started. You might think you are too busy, out of shape, or not able.



The table on page 12-19 shows some of the most common barriers to getting active and what can be done about them. These barriers are common to many people, not just people with kidney disease. Most people with kidney disease have at least one of these barriers.

What It Takes to Make Activity a Part of Your Life

Making a lifestyle change—like being more active—is hard to do, even if you believe it will help you. There are lots of ways to approach these changes. Some work well. Others do not. Here’s how Carlos tried it.

Carlos decided to be more active. Friends told him walking was the best exercise. He bought a pair of walking shoes and set a goal to walk three miles every day. His first day out, he barely finished his walk because of fatigue.

He took the next 2 days off. On the third day he walked for about 20 minutes and decided to put his walking shoes away for good. He just didn’t enjoy it. Two months later, Carlos has still not made any changes in his activity level.

What did Carlos do wrong? Carlos meant well, but he bit off more than he could chew. He didn’t think about what kind of exercise he might like, and tried to do too much, too fast. He chose walking three miles a day because someone he knew did that. Let’s see how someone else might approach the same goal.

Shayna’s doctor told her that becoming more active would help her fatigue and help her to sleep at night. She checked out some books from the library to help her decide what to do. She wrote down a few ideas.





On her next visit, Shayna's doctor asked her if she had begun to exercise. She said she was "researching it." Three months later she is still trying to figure out what activities best fit her.

Shayna *intends* to start exercising one day, but that's as far as she's gotten. She lacks action. There is nothing wrong with reading or talking with others about activities she could start. But at some point she has to start doing them!

Often the best way to find out if an activity fits you is to try it. Carlos learned that he didn't like walking. That's fine, but he didn't replace it with something else.

To make activity part of your life, you'll need a plan. Here's what it will take:

- Making a commitment to try
- An okay from your doctor
- Small, specific goals to start
- Realistic expectations
- Action—getting started
- Measuring your progress
- Rewarding yourself for success
- Expanding your goals

Make a commitment to try

Have you ever tried something one time and then built it into your life? Usually, it takes *many* tries to turn a new behavior into a habit. If you really want the benefits of a more active life, it will take a commitment from you to make it happen. This says you will sincerely try some type of activity for at least 3 months.



Committing to at least 3 months gives you the best chance of seeing lasting change. And once change starts to happen, you will be very encouraged—and it will be easier to keep up your new habit.

Get an "okay" from your doctor

Talk with your doctor before starting any new exercise or activity plan. Take your Personal Plan at the end of this module to your doctor. Ask if the activities you've chosen seem okay for you. If so, just put them into practice. If not, ask your doctor for other ideas.

Make your goals concrete and specific

Goals need to be concrete and specific if you plan to succeed. The reason most people fail to realize their goals is because they are vague.

Here is a vague goal: I will try to walk more often.

Here is a concrete goal: I will walk for 20 minutes around the neighborhood, three times a week, with my friend Maria, right after breakfast, beginning on Monday, (month/day), 20 ____.

A concrete goal tells you **what** the activity is, **when** you are doing it, **how long**, **who** might join you, and **where**. Once you know these, it's just a matter of doing it.



Being active means more than just formal exercise. What we're really trying to encourage is an active lifestyle. This can take place anywhere. Look for ways to be active *any* time. Here are some ideas:

- Try parking *further* away from the store the next time you grocery shop or go to the mall. The extra walking will be good for you.
- Take a flight of stairs instead of an elevator. When you get stronger, take two flights.
- Wash your car instead of taking it to the car wash.

The possibilities are endless. You're planning for about 30 minutes of activity a day. But you don't have to get it all at once. Spread it out during your day! Recent research has shown that you get the same benefit whether your activity is all at once or in three, 10-minute segments.



From the list below, choose one activity to make concrete goals for:

- | | | |
|---|---|---------------------------------------|
| <input type="checkbox"/> Exercise with weights | <input type="checkbox"/> Dancing (any kind) | <input type="checkbox"/> Golf |
| <input type="checkbox"/> Pilates or yoga | <input type="checkbox"/> Household chores | <input type="checkbox"/> Tennis |
| <input type="checkbox"/> Walking or hiking | <input type="checkbox"/> Gardening | <input type="checkbox"/> Biking |
| <input type="checkbox"/> Swimming or pool exercises | <input type="checkbox"/> Bowling | <input type="checkbox"/> Other: _____ |

How many times a week will you try to do this activity?	
At what times?	
For how long?	
With whom?	
When will you start?	
Where will this activity take place?	
What supplies do you need for this activity?	
What do you plan to accomplish with this activity: strength, flexibility, endurance, or something else?	



Have realistic expectations

We all want instant results. But if you have been inactive for months or years, it will take time to become more active again. Be realistic about what you expect of yourself:

- Make sure your goals make sense for you. If you set your sights too high at first, you may get discouraged and quit. What is regular or moderate exercise? You may need to start exercising for 5 minutes and slowly add more time until you get up to 30 minutes.
- Start slowly and work up slowly. Push yourself—but just a little bit. It's better to start with something that is too easy, rather than too hard. Exercise should not hurt.
- You may miss some of your activity for health or other reasons. But don't give up!
- If you don't feel well on a given day, plan to get back to your activity as soon as you can.

Respect your limits

Sometimes you should reduce your activities because you:

- Have a fever
- Have a new illness that has not been treated
- Have pain

Sometimes you may be doing an activity and begin to feel poorly. STOP right away if you feel any of these during one of your activities:

- Short of breath
- Chest pains or pressure in chest
- Irregular heartbeat
- Nausea
- Leg cramps

- Dizzy or lightheaded

- Blurry vision

Take action

The best activity plan in the world won't do you any good unless you start applying it. Don't be afraid to change your mind if you find that one activity doesn't fit you. Keep trying. Find something you enjoy. You will look forward to doing it and are more likely to stick with it. You can choose more than one activity to add variety, too.

Now it's time to make your plan. Fill in the plan, on your Personal Plan page, with the activities that you would like to make a part of your life (remember, the more specific you can be about your goal, the more likely you will follow through).

Measure your progress

Your overall goal is progress. As long as you are trying to make activity a part of your life, you are moving forward. Sometimes progress is slow and you can lose sight of how far you've come. This is why it's a good idea to keep a log.

An activity log is a way to help you see if you are on track with the goals you've set. You record the date, what you did, how long you did it, and any feelings you had (good or bad) about doing the activity. You'll find a sample log in the Personal Plan of this module.

Reward yourself for success

Success is about trying, not being perfect. Celebrate your efforts by rewarding yourself! It might be a short trip you've wanted to take, a meal out, a visit to a special person, or buying a little something you've been wanting.



Your efforts to take better care of yourself need to be rewarded. If you find this hard to do for yourself, ask those close to you to plan an event once you reach a goal. Rewards help you stay motivated.

For example, some dialysis clinics have patients ride stationary bikes during treatments. The mileage is tracked on the way to a special spot, like Hawaii. Once they reach the goal, they have a party. For example, if you ride from St. Louis to Chicago you might take a friend to a movie or subscribe to a favorite magazine.

Can you think of a reward you would like to earn in the near future? _____

Stay Active in Life

We've mainly talked about how physical activity can help you. If you don't take care of your physical health, everything else in your life suffers. But to be a completely healthy person you also need to be active in *life*.

As one patient puts it:

“Dialysis isn’t my whole life, it’s just something I have to do. I spend more time NOT in dialysis than I do being dialyzed. I worked for the first 4 years I was on. It helped me focus on other things besides my health, and got me out with people. A year ago I had to quit working because of heart problems (not related to dialysis). But I still get out of the house—I’m taking pottery lessons, and have volunteer jobs. The volunteer jobs only take up about 4 to 6 hours per week, and when I’m not feeling well, I don’t go. I’m also a gardener, and love having lots of time to spend in the backyard.” –Ruth, 55 years old

It has been shown that people with chronic illness who reach out socially are more hopeful about life. Below are some fun and rewarding ways to stay active in life. Check the ones that you would like to try to become more active in life:

- ❑ **Work.** Whether it is full time or part time, work can add purpose to your life. It makes you feel useful, provides income, and gives you contact with people. It also provides you with mental challenges and a sense of accomplishment.
- ❑ **Volunteer.** Give some of your time and energy to your local church, school, food pantry, shelter, or hospital. You always get back more than you give. Contact your local United Way for a list of the many options in your town.
- ❑ **Create.** Find something that interests you: crocheting, family history, woodcarving, crafts, bird watching, writing, community theater, a book club, and so on. Join a group of people with the same interests. Have fun!
- ❑ **Learn.** Take a class, visit a library, take a guided nature walk, or tour a museum. Stretch your mind.
- ❑ **Travel.** Go to some of those places you've wanted to see. Better yet, go with a group of friends or a tour group. Take day trips near your home, too.
- ❑ **Socialize.** Spend extra time with those who mean the most to you. Look for ways to share a meal, go shopping together, or talk on the phone. Join a support group, meet new people, and make plans to go out. On days when you're not feeling great, catch up with old friends, and call or write letters to those who live far away.





Once you choose an activity, try to make a specific and concrete goal:

How often will I try to do this? _____

At what times? _____

For how long? _____

With whom? _____

When will I start? _____

Where will this take place? _____

What supplies do I need? _____

“I started volunteering at the local school 5 years after I started hemo, which was 30 years ago. I worked all school day, twice a week (sometimes thrice if I felt really good!) I began by checking papers and answering kids’ questions. I even got to ride the school bus to and from school. I started out helping one teacher, but at the end I was helping almost everyone. I helped the kids on the computers, and went on field trips with them. One teacher and I taught about 200 sixth graders how to play cribbage! I even spent the afternoons one year manning the library.” –Lee, 46 years old

Staying active with kidney disease is your choice. No one can do it for you. We hope you will start to think about the ideas you’ve read. Make a commitment to try to practice staying both physically and socially active for at least the next 3 months. You have a lot to look forward to and you will feel better and be more in control of your life. If you change your mind, you can always go through this module again and make *new* goals and a new plan for action.



Personal Plan for _____

Staying Active with Kidney Disease

Four reasons why people with kidney disease may lack energy are:

- ❶ Anemia—a shortage of oxygen-carrying red blood cells
- ❷ Depression
- ❸ Poor sleep
- ❹ Lack of exercise

I can talk to my doctor about sleeping better if trying the following things doesn't help me:

Regular Activity: the Benefits

- Allows me to do the things I enjoy
- Strengthens my muscles
- Keep my joints flexible
- Strengthens my bones
- Lowers my risk of heart disease
- Improves my circulation
- Fights anemia by making more red blood cells
- Combats depression
- Improves my sleep
- Lowers my cholesterol
- Lowers my blood pressure
- Lowers and helps control my blood sugar if I have diabetes

Barriers to Activity

These are my main barriers to regular exercise and ways I can overcome them: _____

Making Activity Part of My Lifestyle

I will think about making a commitment to be more active in physical and social activities to improve my health and the quality of my life.

I would like to make _____ a regular part of my life. I will try to do this activity _____ times a week at _____ am/pm, for _____ minutes/hours. I plan to do this activity with _____. I will start on _____. This activity will take place at or in _____. The supplies I will need for this activity are _____

I will reward myself for my efforts and accomplishments with:

I will respect my limits and go easy on activity if I:

- Have a fever
- Have a new illness that has not been treated
- Have pain

I will stop my activity right away if I have:

- Shortness of breath
- Chest pains or pressure in chest
- Irregular heartbeat
- Nausea
- Leg cramps
- Dizziness or lightheadedness
- Blurred vision





Take the Kidney Quiz!

You'll see how much you're learning if you take our quick kidney quiz. It's just 9 questions. How about it? (*Answers are on page 12-2.*)

- 1. Anemia can cause a lack of energy in people with kidney disease because:**
 - a) The blood cells are tired, and so are you
 - b) There is a shortage of oxygen to the body
 - c) The blood flows more slowly
 - d) Anemia causes insomnia and snoring
- 2. Another reason why people with kidney disease may lack energy is:**
 - a) Depression
 - b) Respiration
 - c) Compliance
 - d) Phosphorus
- 3. You may sleep better at night if you:**
 - a) Have a large meal right before bed
 - b) Use your bedroom for many tasks
 - c) Wake up at a different time each morning
 - d) Nap less than 20 minutes a day
- 4. A “snorting” sound during sleep may mean a problem with:**
 - a) Pain that prevents sleep
 - b) Sleep apnea
 - c) Harmless snoring
 - d) Itching
- 5. Restless legs syndrome is:**
 - a) A way to describe athletes who are very active
 - b) Leaving home and looking for greener pastures
 - c) A treatable “creepy-crawly” feeling relieved by moving the legs
 - d) A condition faced by dancers who overuse their legs
- 6. The benefits of regular activity include all of the following EXCEPT:**
 - a) Stronger bones
 - b) Better circulation
 - c) Greater intelligence
 - d) Improved strength
- 7. Which of these can help you gain muscle strength?**
 - a) Stretching
 - b) Lifting weights
 - c) Doing paperwork
 - d) Watching television
- 8. Which of these can help your joints to be more flexible?**
 - a) Stretching
 - b) Lifting weights
 - c) Doing paperwork
 - d) Watching television
- 9. Each day, how much time should you aim to spend doing physical activity?**
 - a) 10 minutes
 - b) 30 minutes
 - c) 60 minutes
 - d) 90 minutes





Additional Resources

You might be interested in ordering the Life Options Exercise DVD from www.lifeoptions.org. In addition to the free Life Options materials you can find at www.lifeoptions.org, the resources below may help you learn more about the topics in this module of Kidney School.

PLEASE NOTE: Life Options does not endorse these materials. Rather, we believe you are the best person to choose what will meet your needs from these or other resources you find. Please check with your local library, bookstore, or the internet to find these items.

Books:

- 1 ***Help, I Need Dialysis!*** by Dori Schatell, MS, and Dr. John Agar
(Medical Education Institute, 2012, http://www.lifeoptions.org/help_book, ISBN-13: 978-1937886004)
Easy to read, fully referenced book covers the lifestyle impact of each type of dialysis—including information on how to stay active with work.
- 2 ***The Healing Power of Exercise: Your Guide to Preventing and Treating Diabetes, Depression, Heart Disease, High Blood Pressure, Arthritis, and More***, by Drs. Linn Goldberg and Diane L. Elliot (Wiley, April 2002, ISBN-13: 978-0471250784)
Written by two of the top researchers and clinicians in the field of exercise therapy, this guide features real-life stories that show the many benefits of exercise for conditions such as osteoporosis, back pain, diabetes, high blood pressure, cholesterol, heart disease, stroke, high anxiety, depression, and more.
- 3 ***Restless Legs Syndrome: Coping with Your Sleepless Nights***, by Mark J. Buchfuhrer, Wayne A. Hening, and Clete A. Cushida (Demos Medical Publishing, December 2006, ISBN-13: 978-1932603576)
This book describes Restless Legs Syndrome and Periodic Limb Movement Disorder, and covers drug and non-drug treatments.
- 4 ***Staying Strong: A Senior's Guide to a More Active and Independent Life***, by Lorie A. Schleck (Ed.) (Fairview Press, December 2000, ISBN-13: 978-1577490975)
This “user friendly” book features simple, at-home exercises that will help to build muscle strength, increase bone density, improve balance, and more. Designed for seniors seeking to remain active, the programs include balance and strength training, as well as exercising in a swimming pool, sitting on a chair, or lying in bed.

Organization:

- 1 For more information about RLS, visit the Restless Legs Syndrome Foundation, Inc. at www.rls.org.