
Exercise

A Resource Guide for ESRD Patient Activity Programs



**Created by the
Patient Leadership Committee
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Introduction and Dedication

This booklet brings together some basic information and a list of select resources on exercise and activity programs for ESRD patients. It is the inspiration of the Renal Network's Patient Leadership Committee's (PLC) Quality of Care Subcommittee.

Many thanks to the committee whose members contributed to this project: Carol Crull, Bill Davis, Sally Rice, and the late Joe Allen. The PLC's Quality of Life Subcommittee whose members included Joanne Gambria, Carol Jackson, Charlotte Szromba, and Monroe Walker produced additional information modified for use in this booklet. Many thanks to them, as well.

We dedicate this booklet to all ESRD patients who are working to regain and increase their activity level and to all the dialysis staff who guide, encourage and support them in these efforts. To all that read this brochure we offer these words of encouragement: "Use this guide with joy and have faith in your journey and ability to achieve vitality of life with dialysis."

Who Can Exercise?

You can! Even if you have never exercised before.

The question is not “Can I exercise?” but rather “What kind of exercise is right for me now?”

It’s never too late to begin. People can exercise at any age. Older adults as well as children can achieve positive results from a structured physical activity program. Whatever your age, you will discover healthful benefits when you exercise regularly.

Whether you’re on dialysis or have a transplant, it is important to check with your doctor *before* you begin any activity or exercise program.

Your doctor may have specific suggestions for you or may recommend that you meet with a physical therapist to set up a program to meet your specific activity needs.

If you are covered by Medicare, the physical therapist consultation is reimbursable (as of Jan 1999).

Benefits of Exercise

Exercise is a gift only you can give yourself. In general, it helps your body work better by:

- Increasing flexibility
- strengthening the heart and other muscles
- boosting energy
- helping to control weight

As a result your body will begin to:

- reduce fat or cholesterol levels
- better control blood pressure
- decrease risk for heart disease
- control blood sugar

Aside from the physical benefits, exercise can:

- decrease stress and depression
- increase self-esteem
- create a sense of wellbeing
- improve self-image
- promote a more positive outlook
- restore healthful sleep

As ESRD patients, exercise can help you combat some of the specific side effects of kidney failure on the body. One of the most common results of kidney failure is muscle wasting.

A second is loss of energy. Muscle wasting produces a tendency to lose strength and endurance. Low energy brings about fatigue making you far less active than you used to be. This inactivity further contributes to lost muscle mass.

Regular moderate exercise can help you to control some of these effects.

Using strength training, you can help reactivate and build up muscles anew. Aerobic exercise can help you to increase energy levels.

Exercise can help you to regain and maintain your ability to stay active and vital.

In other words, if you don't use it, you lose it.

Some of you may feel too tired to exercise. In fact many people on dialysis often feel tired. Yet all activities, from going to dialysis, working around the house, to volunteering at the local nursing home, take energy.

The longer you wait to exercise, the more tired you will feel. Regular exercise will increase energy and extend stamina.

You can use exercise to help you to gain energy, and:

- feel better
- build stamina
- become physically fit
- return to an active and healthful lifestyle

Keep in mind that it is being able to do the things you like and having the vitality to try new things that gives you a sense of truly being alive.

So, are you ready to begin? Not feeling up to the challenge? Is the very word – exercise – conjuring up visions of sweating, panting and frantic action?

Well relax, even professional athletes are abandoning extreme levels of exercise. In fact, regular moderate exercise is recognized as the most beneficial form of exercise for those wanting to maintain an active and healthful lifestyle.

The bottom line is that being active helps you to get on with your life. All you need is motivation and a can-do attitude to get you through the fatigue and other stumbling blocks.

So say, "Yes" to life. The time to start your exercise/activity program is NOW!

Motivating Yourself

Do you find that you keep starting and stopping an exercise program? Do you find it hard to stay motivated? If so, you may need an incentive or reward program to help keep you on track.

For example, you may decide that if you maintain your exercise routine for a week, you will reward yourself by going to a movie. Rewarding yourself for maintaining your routine rather than achieving goals is one way to start.

You also could “pay” yourself a nickel, dime, or quarter every time you exercise - you decide the amount. Place the money in a bank to be used for “special treats.” Every time you meet a goal, you can make a withdrawal – you set the goals and determine how much they are worth.

You also could make a poster of the ways you would like to spend the money. Use pictures cut out of magazines, drawings or words to show the things you would like to buy. Next to each item place its cost. Your poster could have a picture of a video you would like to rent with a \$3.00 price tag next to it, a new CD you would like to own with a \$15.00 price tag, and a restaurant where you would like to eat with a \$20.00 price tag.

Use a variety of things on your poster that cost different amounts. This will offer you different levels of incentives at any given point and will help you to set goals towards your next reward. Then you can reward yourself as needed to stay motivated.

If you find that you need to motivate yourself on a daily basis, then set up a series of rewards around something that you like to do each day. For example, you must exercise before you “reward” yourself with watching a TV show, or you may watch a TV show only while you are exercising.

Find what works for you and vary your approach because what may seem rewarding at the beginning of your exercise/activity program may no longer work as an incentive after you’ve been at it for a while.

If you are unable to start a routine exercise program at the present time, consider an activity program. For many who have grown very inactive or sedentary, this may be the only safe place to start.

Tips For An Activity Program

The purpose of an activity program is to get you moving again and to help you gain enough strength, flexibility and energy to begin a routine exercise program. You can start an activity program at home by yourself, with friends, or join a supervised program.

To begin, do activities that incorporate some movement. For instance, you may be able to vacuum, dust, or pick up toys from the floor.

As you progress, you may be able to walk through the mall, play with your children or grandchildren, or do some gardening. Later if you wish, try to play golf, go hiking, fishing or dancing.

Whatever you decide to do, make the activity or exercise fun. Setting your activity or exercise to music is one common way to achieve this with a minimum of expense.

Listening to a book on tape while exercising works great when using a treadmill or an exercise bike. It's economical, too, since book tapes are found at most lending libraries.

Decide if you want to exercise alone or if you prefer being part of a group working together. Participating in a group or working out with several buddies may help you overcome any uneasiness you may have about attempting something new. It also can provide support and motivation.

You may want to discuss some exercise ideas with other renal folks and start your own exercise club. The main drawback of exercising with others is scheduling time to workout together. If this is difficult for you, exercising alone may be your best solution.

Finally you may wish to look for a structured activity program. Low impact or water aerobics, yoga or stretching classes are just a few of the many programs that you can choose from.

Also consider taking guitar, piano lessons or woodworking classes just for fun. The purpose of any activity program is to get you back into the swing of doing the things that you need to do and the things that you like.

So get out and explore what's available in your community. Look for:

- shopping-mall-walking clubs
- church-sponsored recreational activities
- community service programs
- colleges and universities (many allow the use of their recreational facilities for free or at a low rate)
- membership organizations or clubs
- employer-sponsored programs (some offer discounts to join exercise programs or fitness centers)
- local schools (some offer community programs)

If you are interested in regaining pre-illness (acute episode) ability, you may want to develop a physical fitness program with a physical rehabilitation professional. If you are interested in a trainer to help you get started, you can look for one at your local YMCA, fitness centers, or in the yellow pages of your phone book.

Types of Exercise

The three general types of exercise are stretching, aerobics, and strength training.

- **Stretching**
Stretching improves the flexibility of your muscles and improves your coordination. When you do not use your muscles for a long period of time, they become shortened and tight. Stretching relaxes the tightness, allowing your muscles to become flexible again.
- **Aerobics**
Aerobic exercise involves continuous activity of your large muscle groups. Walking, swimming, running, and biking are good examples. These exercises get your heart and lungs pumping.
- **Strength training**
Strength training, also called resistance exercise, builds muscles and increases their strength. Strength-training exercise like

lifting weights - done even once or twice a week - can keep you from losing muscle and strengthen your bones.

Designing A Program

When deciding on an exercise program, you should take into account:

- your present physical condition
- past medical history
- the effects of renal failure on your stamina and strength.

As a kidney patient, certain types of exercise like swimming or jumping rope may not be appropriate for you. Knowing which exercises to choose, and how often and at what level of intensity to do them will require some careful thought and planning by you and your healthcare team.

As you design your program, keep in mind these three things:

- **How often?**
Design a program to ease you into a regular activity/exercise program. By starting out slowly, you'll reduce your risk of injury. Begin with three days of light to moderate workouts. Continue for a week or two until you can handle easily this amount of exercise. Slowly increase your time and intensity. Work up to a daily routine, if possible.

- How hard?

The trick is to work hard enough but not too hard. The best rule is to listen to your body. Exercise to a level that you would describe as being a comfortable push. If you feel pain, you are pushing too hard.

- How long?

Many recommend 30 minutes of moderate exercise every day. Begin by setting aside a specific amount of time that's comfortable for you. Even 10 – 15 minutes of light exercise will reap you many benefits.

Also, the amount of time will vary with the exercise you chose for your workout. For example, 40 – 60 minutes of brisk walking might equal a 30-minute low-impact aerobic workout.

Design an activity or exercise program that's most in keeping with your personal goals and physical capability.

Getting Started

Remember to talk to your doctor and get approval to start an exercise program. Here are some guidelines.

- Always start with a **warm-up** and end with a **cool-down** period. This means to begin and end each exercise session with

gentle exercises, such as stretching. Your muscles and heart need these warm-ups and cool-downs as they switch from regular daily activities to a workout, and vice versa.

- Exercise a minimum of three days a week. If you exercise every day, alternate between aerobics and strength training. Your muscles respond to this alternating pattern better than if you did the same type of exercises every day.
- Start slowly. Don't overexert yourself. Gradually add more time, more effort. This allows your body to adjust to your changing activity levels.
- Keep a chart of your progress.
- Schedule your exercise program as you would any other important appointment.

Where To Begin

- For stretching:
Start with easy stretches of your arms and legs. Hold each stretch for 10 to 20 seconds. Repeat three times.
- For aerobics:
Your heart should beat faster. Your breathing should be faster too. But slow down or even stop if you begin to pant or feel nauseous.

Take the talk test. You should be able to speak comfortably as you exercise. If you are breathing too hard to talk, you are exercising too hard.

Be consistent. You lose the gains from aerobic activity fairly quickly when you stop. You may want to start with only 5 to 10 minutes of gentle walking or swimming. Gradually build up to 20 or 30 minutes, 3 or 4 times a week.

- For strength training:
Choose a weight that you can lift 8 times without becoming fatigued -- perhaps a can of soup for arms, a pair of heavier shoes for legs. Do 3 sets of 8 lifts. If not, choose a lighter weight.

Lift and relax slowly. Exhale as you lift; inhale as you relax. Don't let your knees or elbows lock in an outstretched position. Keep them slightly bent.

Start easily. Gradually increase the number of lifts until you reach 15 lifts. Then add more weight and begin again with 3 sets of 8 lifts.

- In general:
Within ten minutes after stopping aerobics or strength training, your breathing should be normal. After one hour, you should feel normal. If not, slow down the next time.

Your muscles should feel like they have done work. However, they should not be so sore that you cannot exercise the next day.

Start your regular routine with a length of time that is comfortable for you -- perhaps only five minutes of walking.

As you build up your muscles and endurance, gradually add more time, more intensity.

Remember, to be successful:

- Pick a routine and stick with it.
- Start slowly.
- Gradually add more time and more intensity.

Stop exercising if:

- If you begin to feel sick, stop exercising immediately.
- If you feel very tired, are short of breath, are dizzy, or have leg cramps, stop immediately.
- If you feel irregular or rapid heartbeats, get sick to your stomach or have chest pain, stop immediately.

Sample Home Fitness Program

This is a general guide to help you get started on your home exercise program. Feel free to change this to suit your own body's needs.

Monday-Wednesday-Friday

- Stretch for 2 to 3 minute (a warm-up).
- Then walk for 20 minutes.
- Finally stretch for 2 to 3 more minutes (a cool-down).

Tuesday-Thursday-Saturday

- Stretch for 2 to 3 minutes.
- Then lift weights for 20 minutes.
- Finally for 2 to 3 more minutes.

Sunday

- Rest

Walking

Walking is one of the most beneficial exercises for general health and longevity. In fact, walking contributes to your overall physical fitness by strengthening and toning muscles and improving flexibility and endurance. It is a safe form of exercise because walking involves little strain.

So if you are looking for the one thing to do to maintain mobility and attain wellness, walking would be most recommended.

Do you know how to walk? Sure you do but when walking for fitness, it is important to use correct technique.

- Keep your back straight and head erect.
- Relax your arms at your sides,

with slightly elbows bent, swing them slightly as you stride to add momentum to your walk.

- Keep your abdomen firm but not so tight you can't breath.
- Keep your knees and toes pointed forward.
- Your heel should make contact with the ground before the toes of your other foot leaves the ground. Push off with your back foot.
- Roll your foot from heel to toe; avoid rocking to the inside or outside of the foot.
- Breathe fully as you walk (try the talk test).

Remember to:

- Start slowly and work up to your target pace for your walk.
- Rest (or lessen your pace) when you're tired or can't breathe fully.
- Slow down as you finish your walk.

Also remember to:

- Wear loose fitting clothing preferably made of natural fibers that allow the skin to breathe. Wear clothing in layers and use the proper accessories (visor, caps, and mittens).
- Wear absorbent socks. If you need to, carry extras to stay dry.
- Wear a comfortable, well-cushioned shoe with heavy, flexible soles that support your

feet and absorb shock. Make sure your shoes allow your foot to breathe (uppers made of mesh or leather).

Walking is a perfect way to begin an activity program. How you walk, how often you walk and how far you walk are questions that you must consider in planning your activity or exercise program.

For those of you who have been very inactive, walking even 10 – 15 minutes may be a challenge. Find and keep a pace that is comfortable for you. Start slowly and build your body's stamina. Work week after week to increase your pace and time.

Types Of Walking

There are generally three types of walking, these are:

- leisure walking (22:00-minute-per-mile pace)
- fast walking (an aerobic pace of 18:00-minute-per-mile pace)
- race walking (12:00-minute-per-mile pace)

Leisure walking helps to maintain mobility and flexibility; fast walking will give you an aerobic workout that benefits your heart and lungs; race walking will further condition and strengthen your body.

Walking For Fitness

As with any regular activity or exercise program, it is important to stretch and warm up for three to five minutes. These may include slow hamstring stretches, Achilles tendon stretches and side bends.

Remember to cool down after your session.

Your walking program should be regular and increase steadily from your current pace to your desired speed.

Also your time, distance, speed and the number of days you exercise will vary according to the level of fitness you want to maintain and the number and types of exercises that you undertake.

Keep in mind that walking for fitness requires that you walk at a target rate to provide a proper cardiovascular workout. This may take some time.

If walking is your only exercise, choose the type of walking you can comfortably do. Then decide how often and for how long you would have to exercise to reach a basic fitness level. For example:

- Leisure walking covering 2.0 miles about six times a week
- Aerobic walking covering 2.0 miles about four times a week

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- Race walking covering 2.0 miles about three times a week

If you combine walking and other exercise like cycling, then you might do the following:

- Leisure walking for three days and cycling (5.0 miles in 40:00 minutes) for three days
- Aerobic walking for two days and cycling (5.0 mile in 34:00 minutes) for two days
- Race walking for two days and cycling (5.0 miles in 22:00 minutes) for two days.

Walking on a treadmill or using a stationary bike gives you more control over speed and resistance. Both can be used effectively to achieve your goals. It's all a matter of choice and preference.

Check with your local YMCA for a walking club or look for walking and hiking clubs in your local phone book. Contact the American Heart Association or the American Association of Retired Persons (AARP) for guidelines on how to start your own club.

Buying Equipment

Most people can exercise effectively without any fancy equipment but if you choose to buy equipment here are some thoughts for your consideration.

Consult your physical therapist or health care team for any limitations regarding exercise equipment.

Some ESRD patients have difficulty using a stationary bicycle or rowing equipment. Some equipment has been especially adapted for use by ESRD patients while on dialysis. So consider the possibilities.

Whatever you buy make sure that it fits your body and supports you in a safe, comfortable and secure manner. Buy something that is simple to use but has all the features you want.

Make sure to shop around. The following are some helpful hints.

- Try out different kinds of equipment. It has to fit your needs and be something that you enjoy doing.
- Wear workout clothes and athletic shoes when you shop so that you can test the equipment. Don't buy before you try.
- Buy from a reputable dealer preferably one that specializes in exercise equipment. Make sure that they set it up for you and that they are able to service the equipment properly.

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- Ordering equipment by mail may be a good buy but can become a problem if you decide to return the merchandise or are injured because the equipment was not properly set up.
 - Make sure that you ask about warranties, upgrades, service and returns.
 - Make sure to ask for tips on how to get started. Many dealers will have staff to show you how to use the equipment properly. Try a trainer (folks at a local YMCA/YWCA or neighborhood gym will often help at little or no cost).
 - Beware of specialty products sold through standard commercials, home shopping programs and infomercials. Follow the simple rule, “If it sounds too good to be true, it probably is.”

Dialysis Facility Support

To support patient efforts, unit staff can implement simple strategies to monitor individual participation and progress.

You can ask or encourage the facility staff to help track patient activity or exercise programs. For example, including a question about activity/exercise on the “run sheet” can provide staff with the opportunity to:

- track an individual’s current activity level
- encourage activity
- indicate directly its importance to successful treatment

When measuring a patient’s level of activity, ask staff to allow for a variety of ways to measure results. For example, an added sense of wellbeing, a decrease in depression, and an increase in social contact are positive and useful indications of a successful program. It’s important not to rely strictly on activity gains.

Also some dialysis facilities maintain exercise equipment which patients can use while dialyzing. Some sponsor exercise programs. Check with your facility staff to see what is available.

Ask facility staff to establish a broad program of rewards including some for participation, gains according to capacity, and for modest levels of progress. This approach will allow for variation in measuring individual progress and expectations.

Resources

An Exercise Program for the Person with Chronic Renal Disease

NKF of Eastern Missouri
3117 South Bend Blvd.
St. Louis, MO 63143
(314) 647- 9585

Chair Dancing

Available through mail order from:
Jodie Stolove
(800) 551-4FUN

Easy Going Aerobics

NKF of Northern California
553 Pilgrim Drive, Suite C
Foster City, CA 94404

Exercise for the Dialysis Patient

Life Options Rehabilitation
Resource Center
Medical Education Institute, Inc.
603 Science Drive
Madison, WI 53711-1060
(800) 468-7777
(Booklets and videos for both professionals and patients)

Keeping Fit – An Exercise Handbook for Kidney Dialysis Patients

National Kidney Foundation of the National Capital Area, Inc.
5335 Wisconsin Ave., NW, Suite 830
Washington, DC 20015
(202) 244-7900

Pep Up Your Life

American Association of Retired Persons (AARP)
601 East St., NW
Washington, DC 20049
(202) 434-2277

Simplecize

Northwest Kidney Centers
700 Broadway
Seattle, WA 98122
(206) 292-2771
(Wall chart of instructions with exercise resistance band.)

Stadtlanders Stars for Life Fitness Video for Transplant Patients

Stadtlanders Drug Co., Inc.
600 Penn Center Blvd.
Pittsburgh, PA 15235
(412) 824-2487, ext. 3224

Articles

Painter P. *The Importance of Exercise Training in Rehabilitation of Patients with End-Stage Renal Disease.* American Journal of Kidney Diseases. 1994; 24(1-1): s2-s9

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Boone J. *Exercise and the hemodialysis patient*. Dialysis & Transplantation. 1997; 16(5): 243-5,249.

Oberley E. *Exercise energizes ESRD patients*. NKF – Family Focus. 5(3).

Brochures

Fitness After Kidney Failure. National Kidney Foundation, Inc., 30 East 33rd Street, New York, NY 10016, (800) 622-9010. Brochure #05-02CP.

Exercise Life. Send self-addressed, stamped business-size envelope to: ACSM Public Information Department, PO Box 1440, Indianapolis, IN 46206.

Walking for Fun and Fitness. Marion County Health Dept., 3838 N. Rural Street, Indianapolis, IN 46025. Published by Channing L. Bete Co., (800) 628-7733. Booklet #12765E-7-92.

Internet Websites

www.healthyideas.com

www.mayohealth.org

www.mylifepath.com/topic/fitness

www.thriveonline.com/fitness



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