

Fitness and Exercise



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Fitness and Exercise

Exercise and PD

Some people don't exercise because they think it will be too difficult or that they don't have the time. Others simply do not understand how exercise can help them. Exercise is important for everyone. It is the basis for fitness, and it also helps fight the effects of aging and disease.

Exercise is even more important for a person with Parkinson's disease. Regular exercise can help people with PD stay more flexible (able to bend), improve posture, and make overall movement (mobility) easier. Although medication has been the most effective treatment so far, a regular exercise program should always be part of managing PD. Exercise is one of the few treatments that is free, has no side effects, and can actually be enjoyable!

Though exercise is not a cure, it can help the person with PD stay ahead of the changes that will take place. It can help the person feel more in control of the condition.

Physical and Occupational Therapy

This book provides general information and suggestions about exercise for all people living with PD. A licensed physical therapist (PT) or occupational therapist (OT) can answer specific questions or problems you or the person in your care may have.

Physical and occupational therapists can do the following:

- Come up with an exercise program to meet the special needs of the person in your care.
- Assess and treat mobility problems (ability to get around) and walking problems.
- Assess and treat joint or muscle pain that affect the person's ability to perform activities of daily living.
- Help with poor balance or frequent falling.
- Teach caregivers proper body mechanics (position) and ways of assisting someone with PD.
- Refer the person to exercise programs in the community.
- Treat difficulties with the activities of daily living (ADL) such as eating, dressing, bathing, and handwriting.
- Teach the use of adaptive equipment (helping aids).

The doctor or other health care professional should be able to refer you to a therapist in your area. It is best to see a therapist who has special training or experience with PD. Visits to a physical or occupational therapist are usually covered by medical insurance with referral by a physician.

The Basics of Exercise

Good physical fitness is made up of three types of exercise: stretching, strengthening, and aerobics. Each is important by itself, but together they can help the person in your care remain active as long as possible. This will help the person deal better with PD and the changes it may bring.

A person should always stretch before exercise. This warms the muscles, helps prevent stiffness, and improves flexibility and balance. The person should work at his



or her own pace, even if it seems very slow. Encourage the person in your care, even if the exercises seem difficult at first. Watch for signs of fatigue. Always cool down after exercise.

NOTE

Many of the suggestions in this section are geared to the person with PD. As caregiver, you can also take part in an exercise program. And you can offer support by helping the person practice and encouraging the person's efforts.

Stretching

Regular *s-t-r-e-t-c-h-i-n-g* is the first step, and it can be one of the most enjoyable. Stretching helps combat the muscle rigidity (stiffness) that comes with PD. It also helps muscles and joints stay flexible (able to bend). People who are more flexible have an easier time with everyday movement.

Stretching increases range of motion of joints and helps with good posture. It protects against muscle strains or sprains, improves circulation, and releases muscle tension.

Do's and Don'ts of Stretching

- DO stretch to the point of a gentle pull.
- DON'T stretch to the point of pain.
- DON'T bounce while stretching.
- DON'T hold the breath during a stretch. Breathe evenly in and out during each stretch.
- DON'T compare yourself to others.

Stretching can be done at any time. The person in your care can start the day by stretching before getting out of

bed. Have the person stretch throughout the day, while watching television or riding in a car.

NOTE

Choose a time for exercise when the person is well rested and PD medications are working.

Each stretch should be done 3 times. The stretch should last for 3 to 5 breath counts. (A breath count equals one full breath in and out.) If the person can't do all the stretches at one time, select a few stretches to do at different times throughout the day.

Deep Breathing

People with PD often take shallow breaths. Their lungs do not fill completely, which leads to tension and fatigue. (It can also affect the quality of speech.) Learning how to take full, deep breaths will expand the lungs, bring in more oxygen, and relax the person.

Practice breathing deeply:

1. Sit or lie down. Gently place the palms over the lower abdomen (stomach).
2. Take a full breath in through the nose (inhale), allowing the upper chest to expand. If the exercise is done correctly, the abdomen should lift.
3. Slowly breathe out (exhale) through the mouth. The exhale should last longer than the inhale.
4. Perform this exercise for 5 minutes a day, or at any time, to help feel relaxed.

Breathing Exercise

1. Stand tall with feet hip-width apart.
2. Cross arms over one another.





3. Take in a deep breath and begin lifting arms up and open.
4. Breathe out and lower hands to starting pose.
5. Perform for 5 deep breaths.

Strengthening

Strengthening is another important part of a PD exercise program. Strengthening certain muscles can help the person with PD stand up straighter. It can make certain tasks easier, such as getting up from a chair. These exercises also help to make bones stronger, so a person is less likely to get a fracture if he or she falls.

Let the person use hand-held weights if you have them. If there is access to a gym with weight machines, by all means go! However, strengthening exercises can be done in the privacy of the home. A person can build strength by using his or her own body weight as resistance. (Squats and being prone on the elbows are exercises that use a person's body weight as resistance.) The trick is to find out what kind of exercises work best for the person in your care.

Tools and Equipment

There are many tools available for building strong muscles and bones. Choose the one that best suits the person's situation and setting.

- small hand weights (available in sporting goods departments).
- wrist and ankle weights with Velcro® closures.
- elastic resistance bands such as TheraBands®.

Tip

Many common household items can also be used for strengthening exercises.

- soup cans
- plastic shampoo or milk bottles filled with water or sand
- laundry detergent bottles

Aerobics

Aerobics (also known as conditioning exercise) includes any nonstop activity that uses the entire body. Aerobic exercises work the heart and lungs as well as muscles. Aerobic activities include

- walking
- swimming
- water aerobics (aquatics)
- biking
- dancing

Some regular daily activities have an aerobic effect:

- household chores such as mopping or vacuuming
- walking the dog
- gardening and yard work

A program of regular aerobic exercise 3 or more times a week can

- strengthen the heart and lungs
- improve energy and staying power
- reduce stress
- improve mood and fight depression
- help control high blood pressure, high cholesterol, and diabetes



Aerobics may also be done from a seated position. “Arm-chair aerobics” videos can be found at many sporting-goods stores or discount and department stores. **A person should get a doctor’s approval before beginning any aerobic, or conditioning, program. This is especially important for those over 50 or those who have a history of cardiovascular (heart and blood vessel) disease.**

(See *Resources, Be Active!*)

Balance

Reasons for Poor Balance

Balance problems are one of the main symptoms of PD. Balance problems increase the risk of falling, especially when combined with other symptoms of PD. These other symptoms include

- slowness of movement (bradykinesia), which causes delayed reaction time
- stooped posture, which can cause the center of gravity to shift forward (the feeling of the feet having to “catch up” to the body)
- shuffling walk
- “freezing” in place
- falling backwards

Certain movements are likely to cause a person with PD to fall backwards.

- opening a door by pulling it toward himself or herself
- backing up to sit down in a chair
- stepping backward to move away from something

Sometimes a person with PD will take quick, short steps forward and feels unable to stop. This tends to happen when the person

- shuffles
- reaches too far ahead
- tries to fight through a “freeze”
- has dyskinesias (movements that the person cannot control)

Improving Balance

Balance exercises can help improve balance and decrease the chance of falling.

If the person in your care is having trouble with balance or is falling, ask the doctor or other health care professional to refer you to a physical therapist. The therapist can suggest exercises, equipment, and methods to improve balance and reduce falls.

Falls

Preventing Falls

With PD, a person now must think about many things that he or she was able to do easily before. These tips are intended for the person with PD to reduce falls:

1. Try not to move too quickly. Think about what you are doing.
2. When walking, the foot should land with the heel striking down first.
3. **DO NOT** pivot the body over the feet when turning. Instead, try making a “U-turn” while walking.
4. When standing in place and ready to turn, make sure the feet and the body move together.





5. Never lean too far forward. If you must lean forward
 - widen your stance and place one foot ahead of the other;
 - stand directly in front of what you are reaching for;
 - place one hand on the counter, wall, or other steady object while you reach with your other hand.
6. The moment you begin to shuffle or freeze, try to come to a complete stop. Take a breath and start again, focusing on that first step and striking down heel first.
7. Do not carry too many things while you are walking. It only makes your task more difficult.
8. Avoid walking backwards. Instead, try
 - stepping sideways
 - taking large marching steps to turn and then walking forward
 - when returning to sit, turn all the way around and make sure that the backs of both legs are touching the chair. Reach back with both arms to lower yourself slowly. NEVER reach forward for the chair first and then turn to sit.

When There Are Falls

People who fall frequently should be enrolled in an emergency signaling system. Protective equipment such as knee and elbow pads can help prevent injuries.

A physical or occupational therapist can teach you and the person in your care the best techniques for getting up from the floor after a fall.

(Check local programs in your community on fall-prevention classes)

Posture

PD can cause many changes in the body. One of the most noticeable changes is the posture. Changes in posture can include the following:

- a forward head position
- rounding of the shoulders and upper back
- a forward trunk position with increased bending of the hips and knees

Exercise and proper body positions can help limit or correct these changes. There are other reasons for poor posture, including

- sitting on the couch watching TV
- leaning over to work on the computer
- driving or riding in the car
- looking down while reading, or propping one's head against the headboard while reading.

Maintaining Good Posture

Fortunately, there are some easy ways to break these bad habits.

The following tips are helpful for anyone wishing to maintain good posture. **They are *extremely* important for persons with PD:**

Sitting

1. Avoid sitting in chairs without back support or armrests.
2. Avoid recliners. They cause rounding of the neck, shoulders, and head, and also tightness in the hips.
3. Avoid low, soft couches and chairs.





4. The height of the chair should allow for the hips and knees to be level with one another.
5. Keep the chin parallel to the floor.
6. Avoid crossing the legs.
7. Keep the head, shoulders, and hips in line with one another. Sit so that your back is fully in contact with the chair back and seat.
8. A lumbar roll along the low back will help a person sit tall (especially on long car rides, plane rides, and in the theater).
9. Computer screens and TVs should be at eye level to cut down on neck and eyestrain.
10. Use a bookstand or rest your elbows on a pillow or a table when reading. Look directly ahead at the pages. When reading in bed, the entire back should rest along the headboard.
11. **DO NOT** sit for long periods at a time. Get up and move around after about 20 or 30 minutes.

Standing and Walking

1. Keep chin parallel to the floor.
2. **DO NOT** look straight down while walking.
3. Keep a broad base of support by keeping feet at shoulder width.
4. Keep the tummy in, shoulders rolled back, and head and chest up.

Lying Down

1. Avoid using too many pillows, or too thin a pillow, under the head.
2. The best postures for sleeping are lying on the back with a soft pillow under the knees; or lying on the side with a soft pillow between the knees.

Other Hints for Good Posture

1. Perform frequent neck and shoulder stretches to relieve muscle tension.
2. Maintain eye contact during conversation. This holds the head erect.
3. Avoid sleeping in a chair. Lie down to nap with the head and neck supported.
4. Practice these techniques every day.
5. Place written reminders on the bathroom mirror, computer screen, dashboard, and television. “Stand tall. Shoulders back. Sit straight. Chin up.”
6. See a physical or occupational therapist for specific posture exercises.

Complementary Therapies

Aquatic Exercises

Water therapy is a time-tested form of healing. It is also a safe exercise for people with PD people because there is no danger of falling. Floating in the water allows for easy movement and little strain on joints and muscles. Look to see if your community has a heated pool that offers an exercise program. (See *Resources, Aquatic Exercise for PD.*)

Massage Therapy

Massage therapy increases circulation (blood flow), reduces muscle tension, and helps a person relax. It can be very useful to the person with PD who experiences problems with rigidity (stiffness). Massage should be part of an overall exercise program that includes regular movement and exercise.





Select a massage therapist who is certified by the American Massage Therapy Association. Talk to the therapist about methods. The person with PD should provide feedback during the massage in the event of any discomfort. Self-massage and massage provided by the caregiver are also possible. Using items such as wooden rollers or hand-held electric massagers will allow you or the person in your care to apply gentle pressure to tight areas of the body. These items can be purchased at most drug or department stores. Massage services are often not covered by health insurance.

Tai Chi

Tai chi is a slow, flowing form of ancient Chinese exercise. It aids in flexibility, balance, and relaxation. Many people with Parkinson's disease have been helped by doing tai chi. Several forms of tai chi can be done by anyone regardless of age or physical condition. Classes are often offered at fitness centers, senior centers, and community recreation centers. Speak with the instructor to learn if the type of tai chi he or she teaches is best for the person in your care. Tai chi programs are also available on videotape at a variety of retail stores.

Yoga

Yoga is a form of exercise that can be very helpful for persons with PD. It increases flexibility, relaxation, and awareness of breathing and posture. Yoga also can reduce stress. Yoga is self-paced, which means that people can do the poses in their own way and hold the pose for as long as they are comfortable. Yoga can even be done in a chair. It is important to contact the instructor prior to beginning a class. Generally, a beginner class or a class for those with special needs is a good place to start for those with PD.

Pet Therapy

“Lap” pets, such as dogs and cats, can provide great joy in the lives of their human friends. Having animals in the home improves the mental and emotional health of their owners. It also provides movement and exercise. According to research, pets can

- lower blood pressure and heart rate
- improve mobility and flexibility (through stroking, grooming, and walking the pet)
- satisfy the human need for touch and caring for another

Creative Expression

Creative expression can provide movement and physical activity. Painting on an easel with large, strong strokes stretches the arms and shoulders. “Conducting” the music of a favorite symphony or opera has shown to have a strengthening and aerobic benefit. Singing alone or in a choral group promotes the deep breathing needed for louder speech. Encourage the person in your care to seek creative outlets that fit their talents and abilities.

Exercises and the Daily Routine

A good exercise plan can help a person cope better with Parkinson’s. The person’s condition will probably not improve if he or she spends too much time being inactive and may get worse.

Persons with advanced Parkinson symptoms may not be able to follow some exercise programs due to changes in their physical or thinking abilities. It may be better to fit exercises and stretching into the daily routine:

- Find a simple activity that the person with PD enjoys, such as walking, gardening, housekeeping, or swim-





ming. As caregiver, you can try to make some of these activities part of the daily routine.

- Sitting and reaching in different directions can stretch the arms and trunk.
- Household chores such as folding laundry, dusting, wiping dishes, or helping with food preparation provide gentle exercise.
- Simple games like balloon volleyball, playing catch with a large, soft ball or blowing soap bubbles are an enjoyable way to get exercise.
- Music creates movement such as marching or dancing. If balance is a problem, try chair dancing. “Conducting” to the beat of up-tempo music provides upper body exercise and good emotional therapy!
- Perform a few extra arm and leg motions during dressing tasks.

A physical therapist can suggest exercises and stretches that will suit the person with PD. Therapists can also provide ways to correct or lessen walking problems.

RESOURCES

The following booklets are available from the American Parkinson’s Disease Association by calling (800) 223-2732.

Be Active! A Suggested Exercise Program for People with Parkinson’s Disease

Aquatic Exercise for PD