

# Exercises for People with Parkinson's

Having Parkinson's does not mean you should sit down and stop being active. Actually the opposite is true. Exercise, which includes being active, stretching, practicing good posture and doing specific exercises, should be a key component of your daily life.



#### WHY IS EXERCISE IMPORTANT FOR PEOPLE WITH PARKINSON'S?

Being active is one of the most important things you can do to maintain your physical and mental well-being. Exercise is essential for maintaining your quality of life. Studies clearly show that people with Parkinson's who exercise fare better in the long run than people with Parkinson's who do not exercise.

People with Parkinson's need to exercise to prevent the negative effects of inactivity. Moving, stretching and exercising regularly will also help prevent secondary effects that may develop such as:

- 1. Poor posture
- 2. Poor balance
- 3. Decreased range of movement (losing flexibility)
- 4. Decreased strength particularly in the muscles that hold you upright, resulting in a tendency to stoop forward.
- 5. Decreased endurance (being out of breath or fatigued)

This booklet provides examples of basic exercises to get you started to build your own program.

#### **CHOOSE A VARIETY OF ACTIVITIES - AND MINUTES COUNT!**

Most people will say they gain strength, flexibility and balance by being active. How can you be active? There are many ways:

Aerobic activities such as:

- Using a treadmill
- Using a stationary bike or rowing machine
- Walking
- Swimming
- Dancing

Other activities such as:

- Yoga
- Tai Chi
- Pilates
- Golf
- Gardening
- Exercises sitting or standing
- And many more...

The greatest benefit comes from doing things that YOU enjoy. Some activities will give you more benefit than others. However, consistency is more important than the specific activity you choose to do. Perhaps do more of what you are already doing. Begin with activities you can do comfortably – listen to your body! Choose the time of day that is best for you to do your exercises.

Gradually add minutes of activity to your program. Minutes count and your goal is to build up your activity level to a total of 30 to 60 minutes a day.

It is never too late to become active. Here are some specific ideas you can try to increase your activity level:

- Take a walk
  - Walk 20 steps in your normal way
  - Then take 20 long steps
  - Then 20 normal steps
  - Then swing your arms for 20 steps
  - Repeat for the duration of your walk
- Get off the bus one stop early or park the car one block away
- Use the stairs instead of the elevator
- Lift cans of soup, or any small weight, to exercise your arms (see strengthening exercises section)
- Do leg exercises while watching television.
- Join an exercise class. One of the best ways to stay
  motivated is to exercise with others. Contact your
  regional Parkinson Society for programs that may be
  available in your community.
- Play your favorite music and dance or move to the beat!

Remember, be sure to only choose activities that you are safe doing. It is always wise to check with your doctor before starting an exercise program.

A physiotherapist may be an excellent resource for creating an exercise program to suit you personally. Consider consulting one.

#### **Posture**

Some of the first noticeable changes with Parkinson's are in your posture. There is a tendency for the shoulders to slump, the chin to stick out, and the elbows and knees to bend slightly. This makes the following more difficult:

- · Breathing deeply
- Swallowing
- Speaking clearly and loudly
- Moving, balancing, and walking

The following photo illustrates common Parkinson's Posture:



You can help slow down these changes.

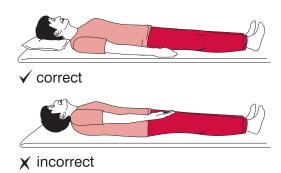
### 1. MAKE GOOD POSTURE A HABIT

You can change your posture. When trying to develop good posture, repetition is very important. These suggestions need to be practiced frequently throughout your day – do not think of them as exercises to be done once a day and then

forgotten. Try to find a cue that will remind you to do these activities frequently. For example, if you are watching TV, you could do one activity each time a show breaks for a commercial.

1) Each day (as often as you can) check your posture. Stand against a wall and be sure your lower back and shoulder BLADES are touching the wall. Try to pull the back of your head towards the wall as well. Do not TIP your head back. As you walk away try to maintain this posture. Recheck at the next available wall. Or pick a spot in your home, ie. on the way into the bathroom or kitchen. Each time you walk past it, stop and do this posture check.





2) When you wake up each morning, lie flat on your back for 5 minutes, with just enough head support to keep your head and neck from tipping back. Do not press your shoulders or head back into the bed. RELAX! Allow gravity to stretch you as straight as possible. You may do this on the floor or other firm surface if you prefer.

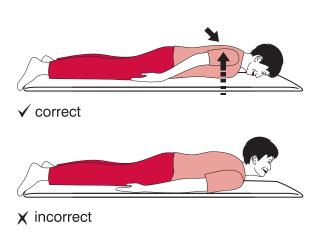
3) Every time you sit in a chair, make your shoulder blades touch the back of the chair. Hold for a few seconds. Do this three times, each time you sit down.



### **MAKE GOOD POSTURE A HABIT**

4) Sitting in a chair, relax forward and let your arms and head hang down toward the floor. Then SLOWLY roll up, starting low in your spine and letting your head come up last. Sit tall for several seconds. (If low blood pressure is a problem, skip this exercise.)

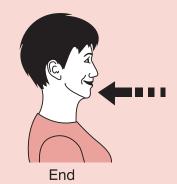




5) Lie face down on the bed or on a mat on the floor with your arms beside you. Gently pull your shoulder blades together. Keeping your head and neck in a straight line lift slightly. Hold for a few seconds. DO NOT LIFT WITH YOUR LOWER BACK.

6) Anytime you are sitting or standing, gently pull your chin straight in and straighten your neck. BE SURE NOT TO TIP YOUR HEAD BACK. Hold this position for five seconds and relax. Try not to let your head drop all the way forward again when you relax.





#### 2. BALANCE EXERCISES

Balance CAN BE IMPROVED. Try these exercises. Improving your balance will help you continue to perform daily tasks. When doing exercises to improve balance, make sure you have a stable support nearby at all times.

#### **Tandem Stance**

1a) Stand near a table or counter and rest hand on it for support to start. Place one foot directly in front of the other. Lift hand and try to hold that position for ten seconds. Put your hand on the support, only if necessary. Repeat with other foot in front. Build up to holding the position for thirty seconds.



#### **OR**

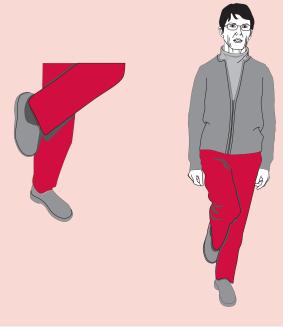
1b) If unable to do previous exercise, try this:

Take a big step forward with one foot. Stand in this position for 1 minute. Try not to hold on to anything. Repeat with other foot forward. As you get better with this exercise, try 1a).



### **Single Leg Stance**

2) Stand facing a table or counter with both hands resting on it. Lift one foot off the floor. Now try to lift one hand and WHEN READY lift the other hand off the support. Hold that position for at least ten seconds. Try with the other foot. If you need to put your hands down for balance, do so. Then start to count again. If you need to start with four or five seconds, that's okay. Increase your time gradually. Work toward holding for forty-five seconds on each side.



#### 3. FLEXIBILITY OR STRETCHING

If you are less active and allow poor posture to develop, gradually over time your muscles and joints will tighten. Flexibility or stretching activities help you to maintain good range of movement in all of your joints and muscles. They are different than strengthening exercises because you hold positions and relax, allowing your muscles to gently stretch. Not everyone needs to do all of the following stretches. Choose any that seem right for you. Choose one or two to do before the strengthening exercises in the next

section, then complete the rest of your chosen stretches after the strengthening exercises.

#### **Safety Tips for Stretching Activities**

- a. Stretch slowly without bouncing or jerking the movements.
- b. Hold the stretch in a comfortable position long enough for the muscles to relax
- c. Aim for a stretched, relaxed feeling avoid pain.
- d. Breathe naturally don't hold your breath.

1) Sit tall on the edge of your seat. Turn your shoulders to the right. Reach your right hand behind you and stretch it towards your left hip. Turn your head and body as well. Relax your muscles and hold that position for at least ten seconds. STAY TALL! Repeat the other way.

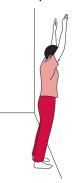


2a) If you are tall enough, stand in a doorway and rest your hands on the frame overhead. Keep your arms straight. Gently lean forward. Feel a gentle stretch in your shoulders and chest. DO NOT OVER STRETCH! Hold for at least ten seconds.

2b) Stand facing a wall with your feet about a foot from the wall. Place your hands as high up on the wall as possible. Keep your head in line with your back. Gently lean forward so that your nose touches the wall. Don't arch your back. Feel the stretch in your shoulders and chest. Hold for at least ten seconds. If this is too easy, take one step back and try from this position.



OR

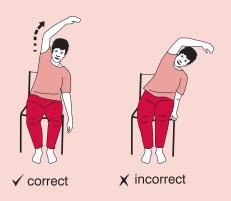


3) Stand in a doorway. Bend your right arm. Rest your hand and forearm on the doorframe beside you. Gently turn your whole body to the left. Feel a stretch in your right shoulder and right chest. DO NOT OVER STRETCH! Relax the muscles in that shoulder. Hold for at least ten seconds. Repeat the other way.





### **FLEXIBILITY OR STRETCHING**



4) Sit tall in a chair. With your right arm curved over your head, slowly reach for the opposite wall. Do not tip your body. DO NOT BEND FORWARD. Feel a stretch in your right side muscles. Hold for at least ten seconds. Repeat the other way.

5) Lie on your back on a firm surface. Allow one leg to hang over the side. Press your back flat on the firm surface. Relax your leg that is hanging over, from the knee down. Feel a gentle stretch in the front of your hip. Allow your hip muscles to relax. Hold for at least ten seconds. Repeat with your other leg hanging over the side.





6a) Stand facing a wall (or hold a chair back for support). Rest hands on wall for balance. Place your left foot a comfortable distance behind your right foot. Keep your left leg straight, and keep the heel flat on the floor. GENTLY bend your right knee leaning towards the wall. Feel a stretch in your left heel and calf. Hold for at least ten seconds. Repeat with the other leg.

**OR** 

6b) Sit on the edge of a chair. Move right foot back under the chair so that your heel is slightly off the floor. Place your hands on your right knee and press down until your heel touches the floor. Allow your calf muscles to relax. Feel a stretch in your heel and calf. Hold for at least ten seconds. Repeat with left foot.



### 4. STRENGTHENING EXERCISES

Strengthening exercises challenge your muscles to remain healthy and strong. They require you to use your muscles repeatedly in a specific, controlled way. They can include activities such as golf or gardening or specific exercises. When you do regular activity and exercise you are:

- able to maintain and improve muscle strength
- able to improve balance and posture
- less likely to fall
- able to get around more safely
- able to carry out more daily activities.

If you do not have access to an exercise facility or a physiotherapist, here are some exercises that are particularly useful for people with Parkinson's. Adjust these exercises to suit your needs. If balance is a problem, stand behind

a sturdy chair that will not tip easily and use the chair back for support. You may enjoy doing these exercises to music. As you gain confidence in doing these exercises, use the chair back less for support. If you can eventually do these exercises without the support of the chair, you will be developing your balance even more.

All of the following exercises may not be right for you. Choose the ones you feel safe doing.

Some people like to do all of their exercises at one time while others prefer doing their exercises for short periods at different times during the day. Either way is correct.

# DO EACH EXERCISE TEN TIMES IF YOU CAN. DO EACH EXERCISE SLOWLY AND IN A CONTROLLED WAY.

1) Sit or stand tall. Keep elbows at ninety degrees. Pull shoulder blades together in back. Then push your hands apart or out to the sides while keeping your elbows close to your body.

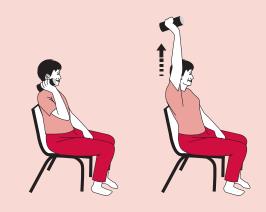


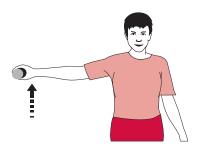


2) Sit in a chair. Slowly straighten out one leg, hold and lower. Repeat with other leg. To increase your strength, add a small weight around your ankle.

## STRENGTHENING EXERCISES

3) Sit or stand tall. Hold a can of soup or any small weight in each hand. Push one hand towards the ceiling and lower. Repeat with other hand. Try to push as high as possible with each hand.

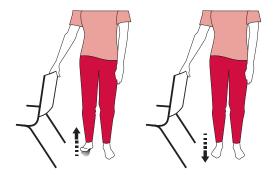




4) Stand with back against a wall. Hold a can of soup or other small weight in each hand. Palm turned down. Keeping your elbow against the wall, lift one arm no higher than shoulder level. Repeat with other arm.

5) Stand behind a chair. If necessary, rest your hands on the back for support. Go up on your toes and come down flat.





6) Stand or sit. Pull up the toes of one foot and replace. Repeat with other foot. You can do this one foot at a time or alternating feet.

#### STRENGTHENING EXERCISES

7) Stand tall with feet apart. Rest hands on a chair back for support if necessary. Slowly do small knee bends. Concentrate on squeezing the muscles in your buttocks when you straighten.





8) Stand tall. Hold the back of a chair for support if necessary. Keep your right leg straight. Lift your right leg back as far as you comfortably can. Repeat with other leg.

9) Stand tall with feet wide apart. Hold the back of a chair for support if necessary. Lean on one bent knee and then the other. When you feel steady, try this without holding on.



- 10) Exercises for the facial muscle groups can help to retain muscle integrity and the range of motion in the face and mouth helping the range of facial expressions. Begin with a gentle rubbing of the face, like putting on cream. Repeat each of the following exercises a couple of times:
- Sour Lemon tighten your facial muscles as if sucking on a lemon, then relax
- Eyebrow raising/frowning lift your eyebrows to look surprised. Frown, creasing your forehead towards your eyes.
- Yawning yawn dramatically
- Smiling try smiling with your lips open, and then try again with your lips closed.

#### 5. ENDURANCE EXERCISE



March (around the room or outside). Ten steps.

March with long steps. Ten steps.

March. Ten steps.

March and swing arms. Ten steps.

Note: This can be done while sitting, just march in your seat with no long steps. It is more fun with music.

To build endurance GRADUALLY increase the time that you are walking.

# THE MORE ACTIVE YOU ARE, THE BETTER YOU FEEL!!!

More active people prolong their independence whether or not they have Parkinson's. Even if you have not been very active, once you get started your body will adjust. Just try something ... a little bit every day will make a difference. When planning your exercise program, it is best to choose a variety of activities to do on different days. For example, you might do exercises on one day, go for a walk the next and go swimming or do tai chi the next. Your schedule should suit your personal circumstances. Choosing a variety of activities is not only better for your overall health and fitness; it is also less likely to lead to boredom with your exercise program.

# Physical Activity and Parkinson's Disease





Association canadienne de physiothérapie



## Chart Your Progress

Make physical activity part of your daily routine to manage your Parkinson's symptoms. Fatigue and lack of motivation are two symptoms that can make it challenging to stay active. The following chart can help you track your progress.

Month	Note activity and duration for each day.
DAY	
1	17
2	18
3	19
4	20
5	21
6	22
	23
8	24
9	25
10	26
11	27
12	28
13	29
	30
15	31
16	

Take that first step by calling **1-800-565-3000** today to get answers to questions you may have.

Receive helpful information and learn about community resources available to you. Email **info@parkinson.ca** to get started.

Visit **www.parkinson.ca** to learn about living well with Parkinson's.

#### Tips

- Take your Parkinson medications on time for maximum mobility.
- Take 3-5 minutes to warm up at the beginning and cool down as you finish.
- Exercise in a way that is safe for you (e.g., when doing balance exercises you may need a stable support nearby).
- Concentrate on doing the exercises correctly.
- Start with shorter periods of exercise and gradually increase. Greater intensity equals greater benefits.
- Monitor fatigue both during and after activities. At the end, you should feel tired, but not exhausted.
- Drink water to stay hydrated.
- Join a group or find an "exercise buddy".

Canadian Physical Activity Guidelines recommend that adults (18-64 years and 65 years and older) do at least 150 minutes of moderate-to vigorous aerobic activity per week; and muscle and bone strengthening activities at least twice per week. www.csep.ca/guidelines.

#### References:

neurology. 2011;82:1232-8.

- 1. Canadian Society for Exercise Physiology. Canadian Physical Activity Guidelines, Glossary of terms. www.csep.ca/guidelines.
- 2. Parkinson's Disease: Fitness Counts. National Parkinson Foundation. Accessed from: www.parkinson.org.
- 3. Exercises for People with Parkinson's. Parkinson Society Canada. www.parkinson.ca.
- 4. Goodwin VA, et al. The Effectiveness of Exercise Interventions for People with Parkinson's Disease: a systematic review and meta-analysis. Movement Disorders. 2008;23(5):631-640. 5. Goodwin VA, Richards SH, Henley W et al. An exercise intervention to prevent falls in people with Parkinson's disease: a pragmatic randomized controlled trial. Journal of Neurology, Neurosurgery, and Psychiatry with practical

This resource was developed with input from physiotherapists at Canadian Movement Disorder Clinics and reviewed by the Canadian Physiotherapy Association.

To obtain blank charts, visit www.parkinson.ca