

# Parkinson's AND EXERCISE



**Parkinson** | SOCIETY  
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## Parkinson's and Exercise

Many factors influence the treatment of Parkinson's, including the integration of an exercise program. Exercise helps maximize the effect of medication thus improving quality of life.

### Exercise has many benefits including:

- Improved muscle flexibility, range of motion, coordination, balance, gait, speech and dexterity.
- Strengthens tensor muscles which help keep the back straight.
- Lessens stiffness and problems of posture.
- Lessens fatigue.
- Helps relax muscles and relieve cramps.
- Reduces stress, depression, insomnia and constipation.

Some studies suggest physical exercise may slow the progression of Parkinson's.

### Take Care!

It's recommended that you consult with your healthcare professional before engaging in an exercise program. A program can be designed that's right for you.

### Which Exercise Program is Right For You?

There are many physical activities that are beneficial to people with Parkinson's. Sometimes exercise programs need to be adapted for you. Find out about Parkinson's exercise groups from Parkinson Society Southwestern Ontario.



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## Suggested Activities

- Tai chi
- Yoga
- Singing and dancing
- Walking
- Nordic walking
- Swimming or water aerobics
- Cycling
- Boxing
- Wii Fit game console
- Stationary bicycle or treadmill

*Always keep your back straight. Another person may have to help you to avoid falls.*

## Helpful Hints to Make Physical Activity More Beneficial and Enjoyable

- Wear comfortable clothing and athletic footwear.
- Breathe deeply while exercising.
- Stop exercise if pain develops.
- Exercise when your medication is at its peak efficiency.
- Exercise regularly and make it a part of your daily routine.
- Vary your activities.

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**Consistency** is the key to a successful exercise program. One 30-minute session a day is recommended. If that's too much, exercising **three times a week** is an acceptable compromise. It's also important to take **breaks** during an exercise session to avoid overexertion. This will help avoid fatigue, as well as aches and pains.

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## **Staying Active On a Daily Basis**

- Walk.
- Plan short exercise sessions (5 to 10 minutes) throughout the day to loosen your legs, stretch and breathe deeply.
- Stretch when you get out of bed, relax all of your muscles and maintain that for 30 and 60 seconds.
- Read out loud, exaggerating syllables to exercise your pronunciation and the intonation of your voice.
- Rotate your upper body for a few minutes once you've sat down at the table for dinner.
- Use the stairs instead of the elevator.
- Get off the bus one stop early.

To fully benefit from what physical activity has to offer, it's important that you gradually increase your intensity, as well as the time you allow until you've reached 30 minutes a day. Do sweeping movements that uses your whole body.

*Do things you like and that give you quality time with friends and family! You'll enjoy yourself and exercise will become a part of your daily life!*

**It's never too late to start!**

# EXERCISE PROGRAM

## FLEXIBILITY

It's important to have good joint and muscle flexibility in order to accomplish daily tasks. At the start of exercise it's preferable to begin with movements that are not too intense and movements that help combat muscle stiffness, which is typical of people with Parkinson's. The following exercises are highly recommended.

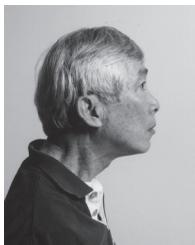
### EXERCISE 1

While sitting or standing:



1. Gently tilt your head forward and backward.

2. Tilt your head from left to right.



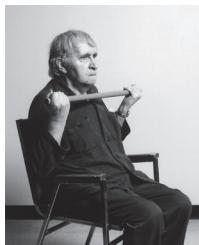
3. Move your chin forward and backward.

4. End by bending and straightening your upper body.

Repeat each exercise 10 times. Increase or decrease the frequency according to tolerance.

## EXERCISE 2

While sitting or standing:



1. Bend the arms while holding a stick.
2. Extend the arms while holding a stick.

Repeat each exercise 10 times. Increase or decrease the frequency according to tolerance.

## EXERCISE 3

While sitting:



1. Bend and extend the knees.

2. Point and flex the feet.

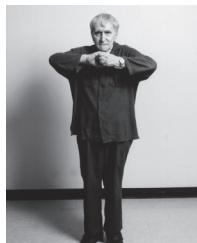
Repeat each exercise 10 times. Increase or decrease the frequency according to tolerance.

## STRETCHING

During the next stage of physical activity, it's recommended that you maintain a position that promotes stretching of the muscles required for the more intense workout to follow. The muscle relaxation that occurs after stretching is particularly beneficial for people with Parkinson's. These exercises are recommended mainly for the upper body, arms and legs.

### EXERCISE 4

While standing:



1. Let your arms fall by your side.

2. Join your hands together over your chest.



3. Raise your arms over your the head. Separate your hands and hold this position for 10 seconds.

4. Bend your upper body to the side while holding the same position.

Repeat the exercise 6-8 times. Increase or decrease the frequency according to tolerance.

## POSTURE

Our centre of gravity enables us to maintain or change position with minimal effort, without the risk of falling. A person with Parkinson's tends to stand with the upper body and head bent forward with the knees bent. This posture brings the person's centre of gravity forward and increases the risk of falling. Here is an exercise to help.

### EXERCISE 5

While standing:

1. Press your back against a wall, moving your shoulder blades backward.
2. Keep your head straight and chin tucked in.
3. Hold this position for 30 seconds.
4. Relax.



Repeat the exercise 6-8 times. Increase or decrease the frequency according to tolerance. To make the exercise easier, you can put a small foam ball behind your head, holding it in place against the wall with your head.

## COORDINATION

To counter the slowness and frequent bradykinesia associated with Parkinson's, try exercises that require using the arms and legs at the same time in a series of alternating or opposed movements. Gradually increase in speed. These exercises require a great deal of concentration.

## EXERCISE 6

While sitting:

1. Simultaneously lift your left arm to the side and raise your right knee.
2. Relax.
3. Simultaneously lift your right arm to the side and raise your left knee.
4. Alternate these two movements.



Repeat the exercise 10-12 times. Increase or decrease the frequency according to tolerance.

## EXERCISE 7

While sitting:

1. Place your hands on your thighs, one palm up and one palm down.
2. Alternately switch the position of your hands.
3. Gradually increase the speed.



Repeat the exercise 10-12 times. Increase or decrease the frequency according to tolerance.

## MANUAL DEXTERITY

To maintain dexterity and grip strength, try wrist and finger movement exercises.

### EXERCISE 8

While sitting or standing:

1. Touch each finger in turn to the thumb.
2. Alternate the left and right hands, or do both hands at the same time.



Repeat the exercise 10 times. Increase or decrease the frequency according to tolerance.

### EXERCISE 9

While sitting or standing:

1. Make a tight fist.
2. Open the hand and extend it completely.
3. Alternate the left and right hands, or do both hands at the same time.



Repeat the exercise 10 times. Increase or decrease the frequency according to tolerance.

## FACIAL GYMNASTICS AND PHONATION

People with Parkinson's should do facial exercises to improve their facial expressions. To help maintain clear speech, phonation (opening and closing of the vocal cords) exercises are recommended. It's possible to turn daily activities into opportunities for exercise. Read aloud or make faces in the mirror.

### EXERCISE 10

While sitting or standing, using a mirror:



1. Make an exaggerated smile showing your teeth.



2. Pretend to drink from a straw (breath in).



3. Blow out the cheeks, simultaneously or alternately.



4. Frown.

5. Stretch your tongue up and down and from side to side.

Repeat the exercise 10 times.

## EXERCISE 11

While sitting or standing:

1. Make the sound “eee” (as in feet).
2. Make the sound “ooo” (as in boot).
3. Alternate the two sounds.

Repeat the exercise 10 times.

## WALKING

Walking is excellent exercise and is always encouraged. Ideally, a 30-minute walk every day is suggested. But shorter periods, according to ability, are also recommended. Regular walks are preferable to occasional long walks.

## EXERCISE 12

While standing:

1. Walk in place, lifting the knees as high as possible.
2. Swing arms back and forth in an exaggerated manner. Keep your head straight, looking far ahead.
3. Accompany this exercise with orders spoken aloud, such as in a military march: Say “1, 2”, “right, left” to improve rhythm.



Do this exercise for 2 or 3 minutes or longer, according to tolerance.

## IMPROVE BALANCE

Balance is dependent on many physical components: posture, muscle strength, mobility, vision, proprioception (the concept of knowing where your body is in space and the ability to safely manoeuvre around your environment) and the vestibular system (sense of balance and spatial orientation for coordinated movement with balance). Several of these components are affected by Parkinson's and decrease the ability to react appropriately when losing balance. When exercising to improve balance, make sure to have a supportive object (e.g., a kitchen chair) nearby at all times.

### EXERCISE 13

While standing:

1. With feet slightly apart, shift your weight from one hip to the other.

Repeat the exercise 15 to 20 times.  
Increase or decrease the frequency  
as tolerated.



### EXERCISE 14

While standing, use a chair for support:

1. Swing one leg back and forth.
2. Repeat with the other leg.

Repeat the exercise 10 times for each leg.



## STRENGTHENING

Adding weight or resistance to increase physical strength must be done with caution. Remember that the goal is to promote greater range of movement and to improve joint flexibility, since this will decrease as Parkinson's progresses. Repeating exercises helps maintain strength. These exercises are very beneficial for the extensor muscles of the arms and legs.

### EXERCISE 15

While sitting, with 1- to 3-kg weights on the wrists:

1. Extend, then bend the left arm.
2. Repeat the exercise with the right arm.

Repeat the exercise 10 times for each arm.



### EXERCISE 16

While sitting with 1- to 2-kg weights on the ankles:

1. Extend, then bend the left leg.
2. Repeat the exercise with the right leg.

Repeat the exercise 10 times for each leg.



## BREATHING

Maintaining breathing capacity is vital. Learning to breathe, which means breathing in and out deeply, is important for good oxygenation of the body to strengthen the rib cage area.

### EXERCISE 17

While sitting or lying:

1. Breathe in deeply through the nose, inflating the abdomen, then breathe out deeply through the mouth, pulling in the abdomen. Put one hand on your abdomen to monitor abdominal movement.

Repeat the exercise 10 times.

## AEROBIC

It's good to include activities that are more demanding on your cardiovascular system, especially in the early stage of Parkinson's. Exercises that produce a heart rate of 50-70% of its maximum are recommended (e.g., cycling, stationary bicycle, dance, various sports and swimming preferably with an exercise buddy). Aerobic exercises counter the effects of stress while promoting good general physical condition.

Examples: Cycling, stationary bicycle, dance, various sports, swimming (with supervision in case of freezing of the feet or an off-period).

## RELAXATION

Exercise stimulates relaxation of muscle tension caused by rigidity. Several methods are available. You should learn those that appear the easiest and most comfortable for you. Learning to manage stress carries with it a sense of well-being and lasting benefits. While lying down or sitting comfortably, close your eyes and try to relax by listening to soft music or imagining a pleasant place or moment.

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*It's best to consult your doctor before beginning any exercise program. Make sure to choose exercises that you feel safe doing.*

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