

Exercise Booklet for Parkinson's Disease



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This booklet was developed by a Physiotherapist to provide information and exercise for people diagnosed with Parkinson's disease.

The purpose of these exercises is to maximise quality of movement, functional independence and general fitness.

The emphasis is on rotational movements and on keeping your posture erect during activities so that your balance is improved on moving.

What is Parkinson's disease?

- Parkinson's disease is a progressive neurological condition
- People with Parkinson's disease experience a loss of nerve cells in the part of their brains responsible for controlling voluntary movements called dopamine. Dopamine acts as a messenger between the parts of the brain and nervous system that help control and co-ordinate body movement
- If these cells die or become damaged, the amount of dopamine in the brain is reduced. As a result, part of the brain may not work as well as normal which may cause a notable change to your movement.

Symptoms of Parkinson's disease

The three main symptoms of Parkinson's disease affect physical movement:

- Tremor – shaking, which usually begins in the hand or arm and is more likely to occur when the limb is relaxed and resting

- Slowness of movement (bradykinesia) – where physical movements are much slower than normal, which can make everyday tasks difficult and can result in a distinctive slow, shuffling walk with very small steps
- Muscle stiffness (rigidity) – stiffness and tension in the muscles, which can make it difficult to move around and make facial expressions.

Treatment Options

There's currently no cure for Parkinson's disease, but treatments are available to help relieve the symptoms and maintain your quality of life.

Treating Parkinson's disease is often a "team effort" involving not only your neurologist but also a wide variety of specialists. Your health care team may include:

- Neurologists
- Occupational Therapists
- Physiotherapists
- Parkinson's Nurse
- Counsellors
- Social Workers
- Speech Therapists

Physiotherapy and Parkinson's disease

A physiotherapist is a healthcare professional who helps keep people moving and functioning as much as possible when they are affected by injury, illness or long-term conditions, such as Parkinson's disease.

How can physiotherapy help me?

Physiotherapists will assess how Parkinson's disease is affecting your movement and function. This can be done whether you are newly diagnosed, or have been diagnosed for some time. Physiotherapists may be able to give you advice, education and support. Depending on your needs your physiotherapist may focus on your walking, posture and balance.

- Improving or maintaining fitness through exercise
- Helping movement and balance
- Helping to maintain independence
- Helping to prevent or manage falls
- Improve range of movement and strength
- Maintaining or improving effective breathing
- Preventing circulation problems

Alternative Therapies

What is Tai Chi and how can it help in Parkinson's?

Combining movement, meditation and breath regulation, Tai Chi is a series of co-ordinated, rhythmical exercises performed in a slow, relaxed manner that can improve and maintain health (including the functioning of internal organs), create a sense of relaxation, improve balance and posture, and enhance the flow of energy (or Chi) in the body.

Unlike most sports or exercises, Tai Chi does not rely on strength, force or speed, which makes it possible for a range of ages and strengths. Even a small amount of practice can bring benefits in health and fitness, enabling the mind and body to relax. This in turn may improve emotional wellbeing and overall quality of life.

Physiotherapy Exercises

Perform exercises in a safe environment. When you do the exercises for the first time, you may find it helpful to hold onto something for support in case you feel unsteady.

Exercise 1



Lying on your back with your knees bent and feet on the bed.

Lift your pelvis and lower back off the bed. Hold the position for 5 seconds then lower down slowly returning to starting position.





Exercise 2

Thoracic Rotations

In sitting, cross your arms over your chest.

**Twist your upper body slowly to the left as far as you can. The twist to the right side
Hold 10 secs.**



Exercise 3

Knee Rolls

Lie on your back with your knees together and bent. Slowly roll your knees from side to side keeping your upper trunk still

Exercise 4



Sit to Stand Practice

Sit with your hands crossed over your chest. Bring your feet under your knees. Lean forward at your hips, bringing your head over your feet and stand by straightening your hips and knees. Aim to put equal weight through both legs. Slowly sit and repeat x10

Exercise 5

Basic



Step forward and backward swinging alternate arms as you step.

(Stand beside table or kitchen counter for support if needed)

Advanced



Step up and down on a step swinging alternate arms with big movements as you step. Focus on increasing the scale and amplitude of your movements

(At home you can use the bottom step on your stairs and rails for support)

Exercise 6



Stand with one foot in front of the other. Imagine you are standing and walking on a tight rope. Walk along the handrail or table for support and only hold on if you need to with your finger tips or light touch.

Exercise 7



To stretch the calf, stand in a walking position with the leg to be stretched behind you and the other leg bent in front of you. Take support from a wall or chair.

Lean your body forwards until you feel the stretching in the calf of the straight leg. Do not let your heel lift off the floor. Sustain this stretch for 30 seconds.

Exercise 8



Wall slides

To stretch your mid or thoracic spine, stand facing a wall and take a small step back. Take a step closer to the wall and at the same time slide your hands up the wall and try to get as close to the wall as you can. Hold this position for 10 -15 seconds

(Position chair behind you in case you become unsteady)

Parkinson's UK. (2015) *Parkinson's and You: A Guide For People New To The Condition* [online] <https://www.parkinsons.org.uk/publication-topic/about-parkinsons>



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

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