



# 10 Ways To Boost Brain Health: Parkinson's Disease

*A Guide for Patients and Carers*



Dementech Neurosciences  
CLINICAL ACADEMIC CENTRE

Parkinson's Disease | Guide For Patients and Carers

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# What is Parkinson's Disease?



Parkinson's disease (PD) is a progressive neurological condition.

It is important to note that not everyone will experience the same symptoms, and the order in which symptoms appear and the way symptoms progress also varies from person to person.

Parkinson's is a very individual condition, with each person experiencing different symptoms.

Additionally, non-motor symptoms such as sleep disturbance, constipation and loss of sense of smell can pre-date the motor symptoms, such as tremor, slowness of movement or rigidity, by up to a decade.

Parkinson's results from the loss of cells in various parts of the brain, including a region called the substantia nigra. When dopamine production is depleted, the motor system nerves are unable to control movement and coordination. The dopamine-producing cells are lost over a period of years and the motor type symptoms such as tremor, rigidity etc will start to appear.

But many people with Parkinson's and their families say changes in thinking and memory are among the most concerning potential symptoms of the disease. These symptoms are, unfortunately, also some of the least talked about. Doctors may focus on movement problems, especially in the early years after diagnosis. And patients and families may be unsure about what they're experiencing.

It's common for people to attribute cognitive changes to ageing or to not talk about them at all, because they don't want to think about what may (or may not) lie ahead. But avoiding discussion can increase fear, misperception and misinformation — and lessen the quality of life. It also can slow much-needed research into why these changes happen and how to treat and ultimately prevent them.

By opening the conversation, you can take steps to keep your brain healthy and recognise changes if they happen.

We created this guide to help people and families who live with Parkinson's. It is intended to help you understand your experiences, start a dialogue about brain health.

The team at Dementech hope you take the information and practical tips that speak to you, wherever you are in your journey with PD.





# What is Cognition?



Cognition is a term referring to the mental processes involved in gaining knowledge and comprehension. These processes include thinking, knowing, remembering, judging and problem-solving. Put simply, it's anything we do that requires thought or memory: getting ready for work, chatting with friends or reminiscing about childhood.

Below, we share the different aspects of cognition:

## Memory

Memory is the storage of information to recall or influence current behaviour. We have different systems in our brain that stores different types of memories.

Long-term memories: these are kept for days, weeks, years or even decades, and include facts (the capital city of the UK), life experiences (where you went to school or when you got married) and skills (how to ride a bike or whistle).

Short-term memory: this holds small bits of information for short periods (such as a phone number you've just written down).

Working memory: this is information that you are actively using (storing numbers in your head while you work with them to solve a mathematical problem).

## Attention

Attention is focusing on one thing while tuning out everything else. You need to pay attention to watch a movie, drive a car or be part of a group conversation

## Executive function

Executive function is the ability to multitask, problem-solve, organise, plan and make decisions. These parts of cognition control and coordinate other brain functions and behaviour. These are called executive functions because they're likened to a business executive who runs multiple departments of a company.



# What Is Cognition?



## Language

Language is the system we use to communicate through speaking and writing. It involves naming objects (calling a tree a “tree,” for example), understanding words’ meanings, finding the words you need to speak smoothly and without pauses, and using sounds and phrases to accurately express yourself.

## Ability to imagine objects

Being able to create a mental picture of your surroundings and tell where you are to other objects enables you to give directions, judge the distance between your car and the one in front of you, and find your way home after a walk around the neighbourhood.

As we get older, this ability naturally changes because our brains change. Vocabulary and general knowledge tend to increase, but it can be harder to understand and learn new information as easily or as quickly. Using a smartphone or playing a board game, for example, may take more mental effort.

Many people have difficulty recalling new names, or they forget why they walked into a room or they misplace items often. Because Parkinson’s also can affect cognition, it can be hard to know what normal ageing is, and what is part of the Parkinson’s disease. Cognitive changes from Parkinson’s are different or more than you would expect with age.

As you age, it may be normal to leave your keys in the door, forget something at the shop or miss an appointment. But age alone doesn’t usually cause a person to forget what their keys are for or how to use them, how to get to and around their usual shopping mall.

To get a sense of what is or isn’t typical, ask friends in your age group if they have similar experiences and gauge how you’re doing with your daily activities.



# 10 Ways To Boost Brain Health



Whether you're experiencing cognitive changes or you worry about the possibility, you can take steps to keep your brain as healthy as possible.

Research has not yet proven ways to prevent or slow cognitive changes, but current evidence suggests that what's good for your body is good for your brain. Practice these brain-healthy activities:

## 1. Exercise

Any aerobic exercise (such as cycling or dancing) is beneficial for general well-being and brain health. No matter your age, fitness level or Parkinson's symptoms, you can be active.

Work with your doctor to find an exercise you enjoy, feel safe doing and will do regularly.

## 2. Be socially active

Spending time with friends and loved ones and meeting new people not only prevents the isolation that can come with Parkinson's but also gives you a chance to put your brain to work.

At social gatherings, for example, you can practice learning new names and discuss the latest events.

## 3. Eat a healthy & balanced diet

There is no specific "Parkinson's" or "brain" diet. Aim to eat a variety of whole grains, vegetables, fruits, milk and dairy products, and protein-rich foods such as meat and beans.

Limit sugary, processed foods.



# 10 Ways To Boost Brain Health



## 4. Train Your Brain

Your brain is a bit like your muscles; it needs regular exercise to stay in the best shape.

Play “brain games” online or on your smartphone or tablet, do a daily crossword challenge, learn a new dance (this is great exercise too) or start a hobby that challenges you in a new way.

## 5. Reduce Stress

Everyone experiences stress in different ways and to different degrees. Common stressors may involve work, family or balancing the two.

Stress can worsen Parkinson’s symptoms and cause thinking and memory changes. Identify your stressors and find ways to relieve them. You can meditate, practise mindfulness, go for daily walks, or spend time gardening or relaxing in the outdoors.

## 6. Sleep Well

Research has found that we store memories and rejuvenate our bodies during sleep. Not getting enough rest can make it harder to manage Parkinson’s and think clearly. Most of us have experienced the grogginess and slowness that follows a poor night’s sleep.

Make sure you get enough sleep each night. Start to keep a regular schedule for going to bed and getting up, creating a routine to relax before bedtime (taking a bath or reading a book), limit daytime naps and electronic screen time before bed, and watch how much and what you drink close to bedtime.

If you have trouble sleeping ask your doctor about the ways to improve your rest and if medications or other therapies might help.





# Boosting Brain Health



## 7. Take Care of Other Medical Conditions

Diabetes, high blood pressure and high cholesterol can damage your brain's blood vessels and lead to thinking and memory problems.

If you live with one of these diseases, work with our consultants to control it with diet, exercise and medication.

## 9. Monitor Your Mood and Motivation

Depression, anxiety and apathy (lack of motivation) can cause or contribute to cognitive changes.

Medication, talk therapy and exercise can ease depression and anxiety. Keep a daily schedule and work toward specific goals to help with apathy.

If your mood or motivation is low, talk to our consultant or a loved one. And watch for times when depression, anxiety or apathy might increase, such as right after you're diagnosed, during hospitalisation or around the holidays seasons.

## 8. Avoid Alcohol

Too much alcohol can cause cognitive changes as well as walking and balance problems. Stick to the limit recommended by Drink Aware.

## 10. Avoid Cigarettes

Cigarette smoking is associated with Alzheimer's, stroke and other diseases that cause thinking and memory problems.

If you smoke, make a plan with your doctor to stop. Nicotine patches, gum or lozenges as well as prescription medications may help.





# How To Track Cognitive Changes



It's common for many people with Parkinson's and their families to ask what signs and symptoms are concerning, and what to look out for.

We've all had moments where we lose or misplace our keys, but when should you and your loved ones be worried, and what should you track?.

Using the list below, consider the activities you do regularly and whether there has been a major change in many or most of them:

## **Paying attention**

Do you have trouble participating in or following the flow of group conversations? Is it harder to read books or watch movies because of difficulty following storylines or plots?

## **Making decisions and solving problems**

Is it nearly impossible to make decisions, such as what to do with a free afternoon? Do you make poor decisions, such as spending large amounts of money you don't have?

Do you have difficulty solving problems, such as what to do about dinner when there is no food in the house?

## **Remembering**

Do you forget important appointments or social engagements? Do you regularly forget who called and why? Do you lose track of the season or time of year? Do you often need reminders of how to do things that were previously second nature, such as how to use your phone/tablet, or use the computer?

## **Taking medication**

Are you able to describe which medications you take for what and when? Do you need help from your spouse or care partner to take the right medications at the right time?

## **Behaviour**

Have you or others noticed changes in your manner? What about your personality or mood? Are you more outspoken or withdrawn than you used to be?

## **Working**

Do you have trouble focusing or need more time than usual to complete tasks? Is it hard to switch between tasks? Do you have difficulty multitasking, or juggling several things at once? Are you disorganised? Is it hard to follow instructions?

**Even if you answered yes to several of these questions, you don't necessarily have a significant problem.**

**if you or your loved ones notice differences in how you think, remember, act or do regular daily activities, speak to one of our consultants.**

**Together, we can evaluate what's happening and figure out the best path forward**



# About Dementech



Dementech Neurosciences was created in late August 2016. The inspiration for the creation of the clinic came after the father of one of our co-founder's condition deteriorated rapidly from Parkinson's disease. This happened after he had been to some of the world's best "one man band" neurologists, who failed to bring positive changes in his condition. What followed was the realisation that he was not alone, as many others in similar situations failed to get the help they needed.

We felt the need to create a private centre, offering a holistic and multidisciplinary approach through some of the world's best and most advanced technologies/diagnostic methods in order to make significant changes in the lives of people with neurological disorders. Whilst many of the neurological disorders we specialise in are incurable, medication and other forms of treatment can slow down their progress and significantly improve the quality of life for the patient.

We have brought together world-renowned specialists in their respective fields to create and deliver the most advanced services to our patients. In addition to our specialists being known in their fields, they are involved in clinical trials and academic research, which allows them to be the first to know about new innovative diagnostic technologies and treatments. Our neurologists and psychologists regularly introduce such new discoveries to Dementech as a matter of priority.

Dementech, finding solutions through change.

