

Nutritional tips for people with Parkinson's Disease

By OSCAR Care Group Dietitian, Nilofar Dorani

Parkinson's disease

Symptoms

Causes



Risk factors



Complications



Parkinson's disease (PD) is a movement and mood disorder typically presenting with symptoms such as slowness of movement, muscle rigidity, instability, tremor, depression and anxiety. PD is chronic and progressive in nature, decreasing the quality of life for both patients with the disease and their caregivers.

PD is diagnosed when the neurones in a particular area of the brain known as the substantia nigra are damaged or lost. This phenomenon results in a reduction in dopamine, a powerful brain chemical that assists in coordinating body movements.

It is estimated that between 84,000 to 212,000 people are currently suffering from PD in Australia (that is equivalent to 1% of the population).

Diagnosis can occur at any age with the most common age being 65. However, 10% of people diagnosed with PD are under the age of 45.

There is no known cause for the development of PD, however it is believed that a combination of the following predisposing factors is likely to influence the onset:

- Genetics (heredity)
- Ageing
- Infections
- Environmental factors
- Pesticides & Toxins
- Drugs/Medications

Parkinson's Disease Symptoms

In addition to the characteristic motor symptoms of PD, other symptoms are also developed as the disease progresses including depression, trouble chewing, difficulty swallowing, constipation, dehydration, excessive salivation, decreased gastric motility (a slowing of the natural movement of food from the stomach into the intestines) and loss of olfactory senses (sense of smell and taste), impacting individual's nutritional status. In addition, the type of medications used to treat PD can cause other disturbances affecting oral intake, including nausea, loss of appetite and competing with dietary protein for absorption in small intestine (ie Levodopa).



Parkinson's Disease Treatment

As there is no absolute cure for PD, effective treatment and therapy options, including optimum nutrition, have demonstrated to assist with symptoms' management and improve quality of life.

PD is correlated with involuntary muscle movements and increased energy expenditure, leading to greater body energy and protein demand to meet the requirements. However, elderly people with PD living at home may not have the ability to access food or to look after themselves due to the lack of motivation to eat well, potentially resulting in loss of lean muscle mass and body strength otherwise known as malnutrition.

People with PD who are malnourished are at greater risk of serious illnesses, facing the prospect of weakened immune system, infections, falls, fractures, time spent in hospital, pressure ulcers, wounds and more difficult for wounds to heal. Unfortunately, it can sometimes even be life threatening.

A research study conducted in Brisbane revealed that 15% of people with PD residing at home were malnourished due to the severity of the movement symptoms, depression and old age.

The study looked at two groups of patients with PD who were either malnourished or at risk of malnutrition. The nutrition intervention trialled one group receiving standard care in the form of a high protein, high energy information sheet and the other group receiving an individualised dietetic intervention. The study established positive outcomes, resulting in both groups gaining weight. However, the intervention group gained twice as much weight compared to the group receiving standard care only. In the entire sample, an increase in protein intake was associated with improved malnutrition assessment scores and decreased depressive symptoms.

Therefore, Parkinson's is a highly variable and complicated disease, each person experiences their own unique combination of symptoms and individual progression. Yet, nutritional advice should be tailored and individualized to best suit and meet their specific needs.



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Required Nutrients

There are some important common nutrients (protein, energy, fluids, fibre, minerals) that require prioritisation in achieving daily nutritional goals and body requirements in order to eliminate the risks of malnutrition and other associated complications for people with Parkinson's disease.

High Protein

Protein keeps the muscular system healthy & strong to help maintain balance, strength, reduced falls risk and assist in preventing malnutrition. Levodopa is known to interfere with protein absorption in food and it is advisable to be administered 30–60min prior eating a meal,

Sources: Red meat, poultry, fish, tuna, cooked beans, baked beans, chickpeas, lentils, eggs, peanut butter, tofu, nuts, seeds and dairy products.

Examples: Swap toast with jam > toast with egg, peanut butter OR cheese.

Swap biscuits with tea > a tub of yoghurt, milk and muffin, milkshake OR a handful of nuts.

Boost soups and stews with Full cream, skim milk powder OR grated cheese.

High Energy

A weight loss of >5% total body weight is a predictor for illnesses. The common cause of unplanned weight loss in people with PD is due to the side effects of medications, causing nausea, loss of appetite, leading to a weakened immune system, muscle wasting, loss of vital nutrients, and risk of other diseases.

Sources: Bread, peanut butter, butter, margarine, sour cream, cream, cream of milk, desserts, ice cream, mayonnaise, salad dressing, oils, sugar, jam, jelly, honey, syrup.

Examples: Add oil, cream, margarine, OR cheese to food in cooking.

Add cheese OR dressing on salads.

Spread extra butter OR peanut butter on toast.

Serve extra custard OR ice cream with cakes.



Fibre

PD can slow the movement of the colon, causing constipation and can lead to a mass of dry, hard faeces, called bowel impaction which may require hospitalization and, in some instances, even surgery to ease the discomfort. Studies found that a high-fibre diet with plenty of plant foods enhances the absorption of Levodopa and alleviates constipation.

Sources: Vegetables, fruits, prune juice, wholegrains, cereals, legumes, seeds, nuts and fibre supplements.

Examples:

Swap white bread > wholegrain OR multigrain
Swap plain cereals > wholegrain cereals (5-star rating)

Serve fruit with desserts, yoghurt, milkshakes, OR BF cereal.

Adding extra vegetables, grains, and legumes, beans into soups.



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Dehydration & Bone Health

Dehydration

Adequate hydration assists in reducing constipation, UTI, dehydration, dry mouth, confusion, weakness, respiratory failure, kidney problems, improved balance, joint lubrication, and carrying waste out of the body).

Sources: Nourishing fluids are most recommended including milk, soy milk, milkshakes, milo, Sustagen, yoghurt, custard, ice cream and jelly.

Examples: Swap tea, coffee, juice, cordial, soda drinks > nourishing fluids, milk, Sustagen, milkshakes.

Bone health (calcium, Mg, Vit D and K)

It is important for people with PD to maintain bone health and integrity through consumption of rich sources of calcium, magnesium, vitamins D and K. Also, conducting regular PAL, weight-bearing exercises and safe exposure to sunlight will assist in maintain bone integrity and preventing fractures which lead to hospitalisation).

Source: Dairy (milk, cheese, yoghurt, calcium fortified soy/ rice milk), vegetables, salmon, nuts, safe sun exposure, supplements.



Need further information on nutrition for someone with Parkinson's Disease?

This article was written by OSCAR Care Group Dietitian, Nilofar Dorani.

Please call or email our Dietitians via our contact details below.

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