

## DIET AND NUTRITION

### NON-MOTOR SYMPTOMS OF PARKINSON'S DISEASE

## EATING ISN'T EASY

Around 80% of people with PD develop swallowing difficulties (dysphagia) which can lead to various complications including malnutrition and even lung infection.<sup>1</sup>

Some patients do not even notice these issues unless a medical professional performs tests.<sup>1</sup>

## DEHYDRATION RISKS

People with PD may have a reduced sense of thirst. Along with difficulty swallowing as well as bladder-control concerns, this can lead them to drink less water which can worsen constipation, cause dizziness or lightheadedness when standing up, and even reduce the effectiveness of medication.<sup>3</sup> Early signs include dry mouth, reduced urine output, weakness, and fatigue.

## MENTAL HEALTH BARRIERS

Depression and anxiety can suppress appetite, so people eat less or skip meals even when they know nutrition matters. Apathy can make meal planning feel overwhelming, while cognitive decline can make it harder to organize shopping, remember mealtimes, or follow medication-food timing. When mood is low, cooking often becomes a burden rather than a routine, so people may rely on convenience foods that are easier to prepare but less nutritious. Social withdrawal can also reduce shared meals, which removes an important source of structure and appetite support.

## UNINTENTIONAL WEIGHT LOSS

Many people with PD experience a reduced appetite, feel full quickly, or simply lose interest in food altogether. Individuals may begin to notice subtle changes such as clothes fitting more loosely, decreased muscle mass, increased fatigue, or a steady drop in body weight. At the same time, symptoms like tremors, rigidity, and involuntary movements increase the body's energy demands, so the body uses up more energy throughout the day, even at rest. Moreover, it can contribute to increased weakness, reduced balance, a higher risk of falls, and slower recovery from illness.<sup>2</sup>

## NAUSEA AND CONSTIPATION

Many medications can cause nausea, particularly when therapy is first started or doses are adjusted.<sup>4</sup> In addition, Parkinson's can disrupt the enteric and autonomic nervous systems, slowing stomach emptying so that food remains in the stomach longer and increases the likelihood of nausea.<sup>5</sup> Changes in the gut-brain connection may also be involved, as PD-related damage to the nerves lining the digestive tract can trigger nausea independently of medication.<sup>6</sup> Similarly, symptoms of constipation is also due to slower movement of the gastro-intestinal tract.<sup>7</sup> As stool stays in the colon for longer periods of time, it becomes drier and harder to pass. Chronic constipation may further contribute to abdominal discomfort and reduced appetite, which can indirectly worsen overall nausea and weight loss risk.

Reduced sense of smell is often an early sign and later symptom of PD which significantly reduces enjoyment of food resulting in reduced appetite

## FOOD VS MEDICATION CONFLICTS

Protein-rich foods can interfere with the absorption of PD medications such as **levodopa**. This is because they both use the same transport system so when taken with high protein meals, less medication may reach the brain.<sup>9</sup> This can make symptoms such as tremor and stiffness harder to control.



These medications can make it harder to maintain regular eating habits. Nausea, reduced appetite, and dizziness may discourage meals, while fluctuations in symptom control can make it difficult to plan for eating. Hence, many PD patients suffer from a cycle where poor nutrition and poor symptom control reinforce each other.



# IMPROVING NUTRITION & SUPPORT STRATEGIES

## HYDRATION AND FIBRE

To stay hydrated, PD patients should take medications with large glasses of water unless a clinician has said otherwise. They should also drink water regularly rather than only waiting until thirsty. Limit alcohol and be cautious with lots of caffeine or very hot drinks if they seem to worsen dehydration or urinary urgency. Foods with high water content like cucumbers, melon, berries, soups, etc. should be incorporated into the diet to increase overall fluid intake and hydration.<sup>3</sup> If swallowing is uncomfortable, a straw can also be used. Normally, increasing fibre intake is often a plausible solution for constipation issues. Research shows a combination of increased dietary fibre and adequate fluid intake may be a good method for managing constipation in PD. However, this requires personalization as many patients have other conditions such as gastroparesis, which may not respond favourably to foods with high fibre content.<sup>10</sup>

## EARLY PREVENTION

There is still no proven disease-modifying drug that can stop PD from developing or fully halting its progression. So the best strategy is to act early on lifestyle factors. In terms of diet, focusing on a balanced and nutrient-dense eating pattern can help support overall health, maintain energy levels, and manage symptoms. Diets rich in fruits, vegetables, whole grains, healthy fats, and lean proteins provide essential vitamins, minerals, and antioxidants that support brain and body function.<sup>12</sup>

## MODIFY FOOD TEXTURE

Since PD affects swallowing, changing texture can make food easier and safer to manage. However, it is important to ensure that the food texture is modified without compromising nutritional quality. Usually foods that are soft, moist and cohesive are typically ideal whereas crumbs, dry pieces, or mixed textures can be much harder to swallow.<sup>2,11</sup> For example adding sauces, gravies, or broths can help keep foods moist and easier to control in the mouth. In some cases, foods should be chopped, mashed, or pureed to reduce the risk of choking. It is recommended to work with a **speech-language pathologist** to identify the safest textures and strategies based on individual needs.<sup>13</sup>

## MEDICATION TIMING

Medications for PD, especially levodopa, have fairly short effect windows, hence the importance of dosage timing. Otherwise, the patient may suffer “off” periods of stiffness, slowness, and tremor before the next dose works.<sup>9</sup> Since food is also a factor in drug effectiveness, it is important to consult a professional to develop a personalized plan. Medication timing should also be reviewed if the patient has frequent wearing off, sudden immobility, freezing, nausea that prevents dosage, or symptoms that vary strongly with meals.



## INDEPENDENT EATING AND CAREGIVER SUPPORT

Maintaining independence at mealtimes is important for both nutrition and quality of life. Motor symptoms like tremor, stiffness, and slow movement can make eating more challenging, but small adjustments can help.<sup>1</sup> Using weighted or easy-grip utensils, non-slip mats, and plates with raised edges can improve control and reduce spills. When needed, support from caregivers or occupational therapists can help adapt tools, techniques, and eating environment to better suit individual needs.<sup>1,2</sup> Even then, such support should also focus on encouraging independence while providing practical and effective assistance.

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## REFERENCES

1. Matsushima A, Matsushima J, et al. Analysis of resources assisting in coping with swallowing difficulties for patients with Parkinson's disease: a cross-sectional study. BMC Health Serv Res. 2016;16(1). 2. American Parkinson Disease Association. Diet & nutrition in Parkinson's disease. American Parkinson Disease Association. 2026. 3. Melissa. Dehydration in Parkinson's: symptoms, risks & tips. Neurology Solutions. 2025. 4. Parkinson's Foundation. Constipation & nausea. Parkinson's Foundation. n.d. 5. Kim J, Sung H. Gastrointestinal autonomic dysfunction in patients with Parkinson's disease. J Mov Disord. 2015;8(2):76-82. 6. Hajare S, Kulkarni YA. Parkinson's disease and the gut-brain connection: unveiling pathways, mechanisms and promising therapies. Brain Res. 2025. 7. Casey S, Casey S. Managing constipation in Parkinson's. Parkinsons NSW. 2024. 8. Tosefsky KN, Zhu J, et al. The role of diet in Parkinson's disease. J Parkinsons Dis. 2024;14(S1):S21-S34. 9. Riederer P, Strobel S, et al. Levodopa treatment: impacts and mechanisms throughout Parkinson's disease progression. J Neural Transm. 2025;132(6):743-779. 10. Beke MP, Dahl WJ. Managing constipation and its risks in Parkinson's disease: is there a role for dietary fiber? Can J Diet Pract Res. 2025;87(1):1-7. 11. Raheem D, Carrascosa C, et al. Texture-modified food for dysphagic patients: a comprehensive review. Int J Environ Res Public Health. 2021;18(10):5125. 12. Chen W, Fan T, et al. Diet for the prevention and treatment of Parkinson's disease. Front Nutr. 2025;12:1587246.