

What Benefits Can Dietary Management Provide Patients With Parkinson Disease?

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Researchers find that monitoring dietary intake in patients with Parkinson disease (PD) could detect possible micronutrient insufficiencies that may exacerbate adverse effects such as constipation. Expanding knowledge on correct medication intake among patients with PD was also cited.

In managing a complex disorder such as [Parkinson disease](#) (PD), diet can play a significant role. Researchers of a study published in *Frontiers in Nutrition* explain that those with PD are at an increased risk of malnutrition, various gastro-intestinal and sensory deficits, and food-drug interactions.

Moreover, these food-drug interactions are of notable concern as the timing and amount of dietary protein intake can affect the efficacy of antiparkinsonian medications such as levodopa.

“Amino acids and levodopa are absorbed via the large-neutral amino acid transporter, both at the level of the small intestine and of the blood-brain barrier,” expanded researchers. “To avoid competition and the resulting lower bioavailability of levodopa, it is recommended to take the medication 30 min prior or 1 hour after the meal.”

While these dietary factors are known, although not fully understood at a clinical level, baseline information about the usual dietary intake of patients with PD (PwP) is lacking, noted researchers. They conducted an observational cross-sectional study to investigate this trend, as well as medication use and knowledge of possible food-drug interactions among PwP from Belgium.

Participants (n = 74; 70% men) provided a dietary record of 2 non-consecutive days and completed a self-administered questionnaire on medication use and knowledge of food-drug interactions.

When examining both the [macro](#) and [micro](#) nutrient intake of the study participants, a similar dietary pattern was observed compared with the general Belgian population. Study results indicated that PwP had a high dietary fiber intake of 26.2 ± 7.7 g/day, which researchers note is in line with the recommended intake. While promising, an inadequate intake of micronutrients vitamin D, thiamin, zinc, and iron (76.5%) were also represented among PwP.

Moreover, in assessing knowledge of food-drug interaction between dietary proteins and levodopa, the majority of PwP claimed to be aware. This pales in comparison to the only 18.2% of patients who took all doses of levodopa out of meals, signaling a gap in knowledge.

“Our results show that monitoring of dietary intake in PD patients is of importance to detect possible micronutrient insufficiencies,” said the study authors. “Patients should receive professional guidance in optimizing their diet to accommodate for different complaints inherent to PD, including constipation.”

Researchers concluded that greater education on the importance of correct medication intake is warranted among PwP.

Baert F, Matthys C, Mellaerts R, et al. Dietary intake of Parkinson disease patients. *Front Nutr*. Published online July 21, 2020. doi:[10.3389/fnut.2020.00105](https://doi.org/10.3389/fnut.2020.00105)