# **NUTRITION FOR PARKINSON'S**

## **Diet Choices for Neuroprotection**

Recent research has found that <u>habitual diet patterns</u> correlate with PD symptom progression over time. Specific foods have been associated with...

#### **Reduced PD progression:**<sup>1</sup> Increased PD progression:<sup>1</sup> Fresh Vegetables & Fruits **Canned Fruits & Vegetables** The "green" foods largely comprise Nuts & Seeds Soda (diet and regular) the MIND diet, which has been found Beans **Artificial Sweeteners** to benefit PwP.<sup>4</sup> These plant foods Fish (non-fried) Fried foods are rich in flavonoids, which may be Olive oil & Coconut oil Red wine Beef & Chicken protective for the brain.5 Fresh herbs and Spices Ice cream, Yogurt, & Cheese Coffee and Green tea<sup>2,3</sup> Helpful food habits:

Use wet, low heat cooking methods, especially with fats and proteins, to avoid creating damaging pro- oxidants.<sup>6</sup> Time restricted eating may help reset the immune system and mitochondria for brain health.<sup>7</sup> Try keeping 12+hrs without food between dinner and breakfast. Work with a certified nutritionist for personalized support!

## Nutrition for Levodopa

**Protein** decreases the effect of levodopa.<sup>8</sup> Sufficient protein is necessary for health as we age, so protein redistribuon is preferred to reducing protein intake.

Separate protein-rich meals and levodopa doses by ≥1 hour. One way is to save high protein foods (like meats) for dinner.

Levodopa can increase homocysteine, an amino acid in the blood associated with risk of cognive impairment, cardiovascular disease, and osteoporosis in PwP.<sup>9,10</sup>

Ask your doctor to **check your homocysteine** and B vitamin levels, and consider supplemenng **B12**, **folate**, **and B6**.<sup>8,11</sup>

*Fiber* increases the effect of levodopa, possibly by slowing absorpon to support a sustained peak.<sup>8</sup> Fiber is also excellent for constipation!

Eat ample fiber from whole plant foods and consider a fiber supplement. Speak with a nutritionist for personalized suggestions!

One small study found eang a spoonful of soybeans with levodopa can increase "on" me and decrease dyskinesia.<sup>8</sup>

Try soybeans as edamame, tofu, tempeh, or miso paste!

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## The Microbiome

The trillions of microbes in our gut support neurotransmitter production, immune system function, and gut integrity, but they are often <u>imbalanced</u> in PD.<sup>12</sup> <u>"Leaky gut"</u> and reduced beneficial microbe-derived <u>short-chain fatty</u> acids have been associated with PD severity.<sup>13,14</sup>

A diet rich in colorful plant foods is a great way to feed the microbiome. Talk with a qualified professional about sequence-based testing to identify personalized targets for balancing your microbiome.

### The Environment

#### Several environmental toxins have been associated with PD:

- **Pesticides** many have been linked with PD, and their effects may be amplified when combined.<sup>15</sup>
- Heavy metals PwP may absorb more heavy metals into the brain, making normally manageable exposures unsafe.<sup>16</sup>
- Pesticides many have been linked with PD, and their effects may be amplified when combined.<sup>15</sup>
- Solvent these "forever chemicals," found in some tap water and in drycleaning, have been strongly linked with PD.<sup>17</sup>
- Vitamin D deficiency has been associated with PD. While studies find supple- ments don't help symptoms, getting enough Vitamin D from the sun can.<sup>18</sup>

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- Avoidance is best! Choose organic, avoid high- mercury fish, filter your water, minimize dry cleaning, and check your home for lead.
- Work with a qualified health practitioner for clinical detoxification support if you suspect toxic exposures may play a role for you.
- Spend 15 minutes in the sun three times per week!

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