

# MY DAILY MEDICATION AND COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM)/OVER-THE-COUNTER (OTC) SUPPLEMENT STRATEGY FOR TREATING PARKINSON'S (PD), FRANK C. CHURCH, PHD (06/23/2024)

*#Please note that these views and opinions expressed here are my own. Content presented here is not meant as medical advice. Please consult with your movement disorder physician before taking any type of supplements or beginning a new exercise program. #Abbreviations used: MED = medical prescription; CAM = Complementary and Alternative Medicine; OTC = Over-the-counter.*

## ANTI-PARKINSON'S DRUGS AND SUPPLEMENTS

Therapy category <sup>#</sup>	Compound (natural product, plant-derived, pharmaceutical)	Amount taken and frequency	Suggested role in treating PD or slowing PD progression	Notable References <sup>†</sup>	Brand/Source (given in URL)/Additional Note
MED	<sup>§</sup> Carbidopa-Levodopa IR (generic for Sinemet) IR = immediate release	25 mg/100 mg tablet x 12 tablets/day (4 hour intervals, take 2.5, 2.5, 2.5, 2.5, and 2 tablets)	Levodopa is the precursor to dopamine and Carbidopa is an inhibitor to prevent breakdown of Levodopa	[1] <sup>†</sup> References are listed at the end	Teva generic brand of IR carbidopa-levodopa
MED	<sup>§</sup> Neupro (rotigotine dopamine agonist transdermal patch)	6 mg patch/day, in the morning	Replaces dopamine	[2]	Alternate left and right shoulder
OTC	CDP Choline (Citicoline) Started 01/20/2024 (blog post this summer 2024)	300 mg capsule in morning (switching to 500 mg next week)	Increases dopamine receptor synthesis, upregulates dopamine production	[3-5]	Double Woods, Amazon.com <a href="https://t.ly/zEOt2">https://t.ly/zEOt2</a>

<sup>§</sup>Related/representative blog posts are given at the end.

## ANTI-INFLAMMATORY, ANTI-OXIDATIVE, ANTI-AGING SUPPLEMENTS

Therapy category <sup>#</sup>	Compound (natural product, plant-derived, pharmaceutical)	Amount taken and frequency	Suggested role in treating PD or slowing PD progression	Notable References	Brand/Source (given in URL)/Additional Note
OTC	<sup>§‡</sup> Palmitoylethanolamine (PEA), ultra-micronized powder	~400 mg (0.5 tsp) under the tongue in the morning	Reduces neuroinflammation, supports pain relief, and neuro-regeneration	[6,7]	Elevations Terpenes from Amazon.com <a href="https://amzn.to/3zbjs4j">https://amzn.to/3zbjs4j</a>
OTC	<sup>§</sup> Palmitoylethanolamine micronized capsule (PEA) (400 mg) with Luteolin. Also use a	1 PEA (400 mg)/luteolin (15 mg) capsule in the	PEA supports pain relief, promotes healing, and possibly neuro-regenerative. Anti-	[6,7]	X Gold Health (Amazon.com) <a href="https://amzn.to/3zeHrQe">https://amzn.to/3zeHrQe</a>

	micronized 300 mg PEA capsule+ Luteolin capsule (50 mg) ( <i>blog post on Luteolin planned for summer 2024</i> )	evening or PEA (300 mg) capsule plus 1 Luteolin (50 mg) capsule in the evening	inflammatory property of luteolin. Use of PEA and luteolin noted in PEA patents.		X Gold Health (Amazon.com) <a href="https://rb.gy/9lc42x">https://rb.gy/9lc42x</a> Double Wood (Amazon.com) <a href="https://amzn.to/3ZKuhpD">https://amzn.to/3ZKuhpD</a>
OTC	§Acetyl L-Carnitine (ALC) Take with ALA	500 mg capsule in the morning	Anti-aging, anti-oxidative	[8,9]	Double Wood Amazon, <a href="https://amzn.to/3bZ4m5W">https://amzn.to/3bZ4m5W</a>
OTC	§Alpha Lipoic Acid (ALA) Take with ALC	600 mg capsule in the morning	Anti-aging, anti-oxidative	[8,9]	Superior Labs, Amazon.com <a href="https://amzn.to/3ogJRrb">https://amzn.to/3ogJRrb</a>
CAM	§Ceylon Cinnamon	385 mg capsule in the morning	Anti-inflammatory, neuroprotective, and neurotropic factor	[10]	Pure Organic Ingredients (Amazon.com) <a href="https://amzn.to/3eZpJW">https://amzn.to/3eZpJW</a>
CAM	Sulforaphane, 20 mg of Sulforaphane ( <i>blog post planned for summer 2024</i> )	20 mg Activated and Stabilized capsule in the morning	Anti-inflammatory	[11,12]	Double Wood Amazon.com <a href="https://amzn.to/3KhKaye">https://amzn.to/3KhKaye</a>
OTC	§Taurine	500 mg capsule in the morning	Neuroprotective and supports brain/nerve health	[13,14]	NOW Supplements, Amazon.com <a href="https://amzn.to/2morcxS">https://amzn.to/2morcxS</a>
OTC	§Probiotic Complex with 20 strains of probiotic bacteria	1 capsule in the morning	Bacteria to lower the pro-inflammatory signals in GI tract and brain	[15]	NewRhythm, Amazon.com <a href="https://amzn.to/3CRno4">https://amzn.to/3CRno4</a>

‡[1] Originally, I used the ultra-micronized PEA powder in the morning (~800 mg PEA) and evening (~800 mg PEA) for a total of ~1600 mg PEA/day. [2] According to the published study, the participants took ~1200 mg PEA/day (2 sachet of 600 mg x 1, morning and evening), and after 3 months, switched to 1 sachet per day for ~600 mg PEA/day, for 12 months total. [3] On 01/01/2023, I switched to what is described above (see pages 1-2).

## VITAMINS

Therapy category <sup>#</sup>	Compound (natural product, plant-derived, pharmaceutical)	Amount taken and frequency	Suggested role in treating PD or slowing PD progression	Notable References	Brand/Source (given in URL)/Additional Note
OTC	Vitamin B <sub>1</sub> (Thiamine HCl) (200 mg/day)	100 mg capsule, morning, and night	Supports brain/nerve health	[16,17]	Swanson, Amazon.com <a href="https://amzn.to/3ku8P5f">https://amzn.to/3ku8P5f</a>
OTC	<sup>§</sup> B-Complex Thiamine (150%), Riboflavin (150%), Niacin (150%), Pyridoxine (150%), Folate (150%), Methylcobalamin (15,000%), Biotin (1,500%), Pantothenic acid (1,500%)	1 tablet per day, in the morning	Supports brain/nerve health	[18]	EZ Melts EZ Melts Dissolvable Vitamin B-Complex, Amazon.com <a href="https://rb.gy/c76r19">https://rb.gy/c76r19</a>
OTC	<sup>§</sup> Vitamin D <sub>3</sub>	5000 IU capsule, daily, in the morning	Anti-inflammatory and supports brain/nerve health	[19,20]	NOW Supplements, Amazon.com <a href="https://amzn.to/2m6Dal">https://amzn.to/2m6Dal</a>
OTC	Vitamin C	1000 mg chewable tablet, daily, in the morning	Anti-inflammatory and supports brain/nerve health	[21,22]	Carlyle Vitamin C Chewables, Amazon <a href="https://rb.gy/f8uy7c">https://rb.gy/f8uy7c</a>

## <sup>§</sup>SLEEP AIDS SUPPLEMENTS

NOTE: I am starting to adopt some suggestions on improving sleep from Professor Andrew Huberman at Stanford University. He suggests several ways to prepare for sleep, including: apigenin, magnesium threonate, and theanine ([click here](#)). Interestingly, he does not recommend using melatonin. Thus, I am reviewing the recent medical/scientific literature about melatonin (stay tuned).

Therapy category <sup>#</sup>	Compound (natural product, plant-derived, pharmaceutical)	Amount taken and frequency	Suggested role in treating PD or slowing PD progression	Notable References	Brand/Source (given in URL)/Additional Note
CAM	Apigenin (50 mg capsule)	1 capsule at night*	A flavonoid that is used for enabling sleep and stress reduction	[23]	Double Wood Supplements, Amazon.com <a href="https://rb.gy/oy5lj5">https://rb.gy/oy5lj5</a>
OTC	<sup>†</sup> Magnesium L-Threonate (Magtein®)	500 mg capsule, morning, and night*	Supports brain/nerve health, and can reduce insomnia	[24,25]	Teraputics for Life, Amazon.com <a href="https://amzn.to/31S9Xt1">https://amzn.to/31S9Xt1</a>

OTC	L-Theanine (200 mg capsule) <u>not currently taking</u>	If needed, take at night* to assist sleeping	An amino acid-related substance that can promote sleeping	[26,27]	Double Wood Supplements, Amazon.com <a href="https://rb.gy/52ili3">https://rb.gy/52ili3</a>
CAM	Melatonin (5 mg tablet)	1, tablet at night (*30-60 min before sleep)	Treat insomnia, which is common in Parkinson's	[28,29]	Natrol, Amazon.com <a href="https://amzn.to/3O6vHFt">https://amzn.to/3O6vHFt</a>
OTC	Caffeine ( <u>NOT</u> a sleep aid)	100 mg capsule (do not take more than 2/day)	Counter afternoon drowsiness, sudden sleep attacks	[30,31]	Nutricost, Amazon <a href="https://rb.gy/ixr4l9">https://rb.gy/ixr4l9</a>

**NOT CURRENTLY USING THESE PRESCRIBED DRUGS AND CAM/OTC SUPPLEMENTS**

Therapy category <sup>#</sup>	Compound (natural product, plant-derived, pharmaceutical)	Amount taken and frequency	Suggested role in treating PD or slowing PD progression	Notable References	Brand/Source (given in URL)/Additional Note
MED	<sup>§</sup> Entacapone (COMT inhibitor) [after 12 weeks, constant diarrhea]	200 mg tablet, take with first 3 doses of carbidopa/levodopa	Prolongs levodopa half-life in peripheral tissue	[32]	Ajanta manufacturer
MED	<sup>§</sup> Opicapone (COMT inhibitor) [personality changes]	50 mg tablet, take 1 per day	Prolongs levodopa half-life in peripheral tissue	[33]	Ongentys (not generic)
OTC	<sup>§</sup> Niacin (Vitamin B <sub>3</sub> ), flush free [Internist concerned by potential statin interference]	250 mg capsule daily	Upregulation of M2 anti-inflammatory macrophages	[34]	NOW Supplements, <a href="https://rb.gy/l8pjci">https://rb.gy/l8pjci</a>
OTC take with GLY	<sup>§</sup> N-Acetyl-Cysteine (NAC)	600 mg capsule in morning	Building block to glutathione. Antioxidant/neuro-protective	[35]	NOW Supplements, Amazon.com <a href="https://amzn.to/2muxRpP">https://amzn.to/2muxRpP</a>
OTC take with NAC	Glycine (GLY)	500 mg capsule in morning	Building block to glutathione. Antioxidant/neuro-protective	[35]	Double Woods, <a href="https://amzn.to/3wznKjr">https://amzn.to/3wznKjr</a>
CAM	<sup>§</sup> Ashwagandha [possible immunomodulatory agent could promote a problem with PD]	500 mg capsule in morning	Reduces stress/anxiety, increase cognition	[36-39]	NutriRise, Amazon.com <a href="https://amzn.to/2lZz1YR">https://amzn.to/2lZz1YR</a>
OTC	Astaxanthin, liposomal form (24 mg) capsule	1 capsule, morning	Antioxidant, anti-inflammatory, and neuroprotective		Osasuna, Amazon.com <a href="https://amzn.to/3hf05RV">https://amzn.to/3hf05RV</a>

## ESSENTIAL SIX-SEVEN SUPPLEMENTS

Besides the prescribed drugs, If I only had 5 minutes to take the supplements before heading out for the day, what do I consider to be the essential six-seven supplements I would take each day?

Therapy category <sup>#</sup>	Compound (natural product, plant-derived, pharmaceutical)	Amount taken and frequency	Suggested role in treating PD or slowing PD progression	Notable References	Brand/Source (given in URL)/Additional Note
OTC	<sup>§</sup> Palmitoylethanolamine (PEA), ultra-micronized powder	~400 mg (0.5 tsp) under the tongue in the morning	Reduces neuroinflammation, supports pain relief, and neuro-regeneration	[6,7]	Elevations Terpenes from Amazon.com <a href="https://amzn.to/3zbjs4j">https://amzn.to/3zbjs4j</a>
OTC	<sup>§</sup> B-Complex Thiamine (150%), Riboflavin (150%), Niacin (150%), Pyridoxine (150%), Folate (150%), Methylcobalamin (15,000%), Biotin (1,500%), Pantothenic acid (1,500%)	1 tablet per day, in the morning	Supports brain/nerve health	[18]	EZ Melts EZ Melts Dissolvable Vitamin B-Complex, Amazon.com <a href="https://rb.gy/c76r19">https://rb.gy/c76r19</a>
OTC	<sup>§</sup> Vitamin D <sub>3</sub>	5000 IU capsule, daily, in the morning	Anti-inflammatory and supports brain/nerve health	[19,20]	NOW Supplements, <a href="https://amzn.to/2m6Dal">https://amzn.to/2m6Dal</a>
OTC	<sup>+</sup> Magnesium L-Threonate (Magtein®)	500 mg capsule, morning,	Supports brain/nerve health, and can reduce insomnia	[24,25]	Teraputics for Life, <a href="https://amzn.to/31S9Xt1">https://amzn.to/31S9Xt1</a>
OTC	<sup>§</sup> Taurine	500 mg capsule in the morning	Neuroprotective and supports brain/nerve health	[13,14]	NOW Supplements, <a href="https://amzn.to/2morcxS">https://amzn.to/2morcxS</a>
OTC	CDP Choline (Citicoline) Started 01/20/2024 (blog post this summer 2024)	300 mg capsule in morning (switching to 500 mg next week)	Increases dopamine receptor synthesis, upregulates dopamine production	[3-5]	Double Woods, Amazon.com <a href="https://t.ly/zEOt2">https://t.ly/zEOt2</a>
OTC	<sup>§</sup> Niacin (Vitamin B <sub>3</sub> ), flush free [but I am currently not taking]	250 mg capsule daily	Upregulation of M2 anti-inflammatory macrophages	[34]	NOW Supplements, <a href="https://rb.gy/l8pjci">https://rb.gy/l8pjci</a>

## Frank's Treatment Plan for Parkinson's as Divided up in a 7-day/4 Compartment Pill Box

Many of these capsules look alike, so having a grid carefully given to you as shown below is crucial to make sure you take the right pill at the right time. Additionally, this way, you have all of the supplements divided up properly for the entire 7-day week. Daily, the compounds are then transferred each day to small pocket-size containers (think, contact lenses cases).

(Created 24 NOV 2023 / modified 23 FEB 2024 / updated 23 JUN 2024)

MORNING COMPARTMENT (Name on storage compartment only)	<p><b>Anti-Parkinsonism tablets and Anti-aging reagents</b></p> <ul style="list-style-type: none"> <li>•12 total carbidopa/levodopa tablets [(25 mg/100 mg) take 2.5 tablets in morning and 9.5 tablets for the rest of the day/evening)]</li> <li>•Neupro (apply Complex6 mg Rotigotine transdermal patch, in the morning)</li> <li>•Taurine* (500 mg)</li> <li>•Acetyl L-Carnitine* (500 mg).</li> <li>•*CDP Choline (Citicoline)* (300 mg); *Take these supplements in the morning</li> <li>•*Sublingual palmitoylethanolamide powder (~400 mg (0.5 tsp)</li> <li>•Probiotic*</li> <li>•<math>\alpha</math>-Lipoic Acid* (600 mg)</li> </ul>
NOON (Name on storage compartment only)	<p><b>Sleeping Aids (**take 30-60 min before bed)</b></p> <ul style="list-style-type: none"> <li>•Magtein (Mg-Threonate)** (500 mg x 2 take 1 capsule in morning)</li> <li>•Apigenin (50 mg)**</li> <li>•Melatonin (5 mg)**</li> <li>•Atorvastatin (40 mg; take at bed, <u>not</u> a sleeping aid)**</li> </ul>
EVENING (Name on storage compartment only)	<p><b>Anti-inflammatory supplements</b></p> <ul style="list-style-type: none"> <li>•Palmitoylethanolamide (PEA; 400 mg, take at bed)</li> <li>•Luteolin (50 mg; take at bed)</li> <li>•Sulforaphane (10 mg; take in the morning)</li> <li>•Hydrochlorothiazide (25 mg hypertension; take in the morning)</li> </ul>
BED (Name on storage compartment only)	<p><b>Vitamins (take all in morning except one B1 at bed)</b></p> <ul style="list-style-type: none"> <li>•B<sub>1</sub> (thiamine) 100 mg tablet; 1 in the morning /1 at bed</li> <li>•B Complex (B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, Folate, B<sub>12</sub>, Biotin, Pantothenic acid)</li> <li>•Vitamin C (1000 mg chewable tablet)</li> <li>•Vitamin D<sub>3</sub> capsule (5,000 IU capsule)</li> <li>•Ceylon Cinnamon (385 mg capsule)</li> </ul>

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§Related Blog Posts (please search the "Journey with Parkinson's" blog site for additional posts, [click here](#)).

•Carbidopa/Levodopa:

Parkinson's: Two Half-Doses May Work Better Than One Whole Tablet of Levodopa/Carbidopa ([Click here](#));

A Graph of Your Daily Level of Exogenous Levodopa ([click here](#));

Science Tuesday: Sublingual Carbidopa/Levodopa ([click here](#));

Treating Parkinson's with Carbidopa/Levodopa ([click here](#));

The Highs, Middles, and Lows of a Day With Parkinson's ([click here](#));

An Overview of Dopamine ([click here](#));

•Dopamine Agonist:

Treating Parkinson's with a Dopamine Agonist: The Ropinirole Taper ([click here](#))

•Palmitoylethanolamine

Role of Palmitoylethanolamide to Control Neuroinflammation and Potential Therapy for Parkinson's ([click here](#))

Update on Palmitoylethanolamide (PEA) for the Treatment of Parkinson's ([click here](#))

•N-Acetyl-Carnitine/α-Lipoic Acid:

Potential Anti-Aging and Neuroprotection Strategy for Parkinson's ([click here](#))

•Ceylon Cinnamon:

Science Sunday: Cinnamon's Neuroprotective Potential in Parkinson's ([click here](#))

•Taurine:

Neuroprotection with Taurine in a Parkinson's Model System ([click here](#))

•Probiotics:

Brief Report: Benefit of Probiotic Supplements in Parkinson's ([click here](#))

•Sleep Aids:

Science Sunday: The Benefit of Taking Naps and Using Non-Sleep Deep Rest to Improve the Quality-of-Life in Parkinson's ([click here](#))

•**Magnesium Threonate (Magtein®):**

Importance of Magnesium in the Brain and Magnesium Threonate is Neuroprotective in a Mouse Model of Parkinson's ([click here](#))

•**N-Acetyl-L-Cysteine:**

The Yack on NAC (N-Acetyl-Cysteine) and Parkinson's ([click here](#))

•**Ashwagandha:**

Science Sunday: Ashwagandha and Parkinson's ([click here](#))

Immunomodulating Activity of an Extract from Ashwagandha: Implications for Treatment of Parkinson's ([click here](#))

•**B Vitamins and Vitamin D<sub>3</sub>:**

Parkinson's: Signs and Symptoms of Either a B Vitamin Deficiency or Overload ([click here](#))

Beta-Hydroxy-Beta-Methylbutyrate (HMB) and Vitamin D to Potentially Improve Muscular Function in Parkinson's ([click here](#))

Revisiting the Role of B Vitamins to Reduce Homocysteine Levels Generated from Levodopa Therapy of Parkinson's ([click here](#))

B Vitamins (Folate, B6, B12) Reduce Homocysteine Levels Produced by Carbidopa/Levodopa Therapy ([click here](#))

•**Entacapone (COMT inhibitor):**

COMT Inhibitors in Parkinson's: Tell Me More, Tell Me More ([click here](#))

Addendum to COMT Inhibitors in Parkinson's ([click here](#))

Brief Report: Comparison of the COMT Inhibitor Opicapone to Entacapone in Parkinson's ([click here](#))

•**Opicapone (COMT inhibitor):**

Brief Report: Comparison of the COMT Inhibitor Opicapone to Entacapone in Parkinson's ([click here](#))

•**Niacin (Vitamin B<sub>3</sub>):**

Brief Report: Low-Dose Niacin Improves Motor Function in Parkinson's ([Click here](#))

Addendum: Low-Dose Niacin Improves Motor Function in Parkinson's ([Click here](#))