

# PEP NEWS

DECEMBER 2022 Barbara Marquardt, Editor, M.Ed., MCHES, WCP, RYT

DECEMBER MEETING—Wednesday, December 7, 2022 – 2:15 p.m.

**W**e welcome **Char Grossman, Director and Founder of YogaReach® LLC**, who is a compassionate, highly trained, nationally certified school psychologist and certified yoga therapist (C-IAYT). Char has invested decades teaching special education and working as a school psychologist. Her individualized and specialized instruction has aided Char in creating a state-of-the-art program to help those facing a variety of health challenges. Char also teaches at InMotion and will speak on her development of her Parkinson's Disease specific YogaReach Mindful Movement program. She will look to do a few movements with us as well.

Cleveland Heights Senior Activity Center/One Monticello Blvd., Cleveland Heights, OH 44118

Last names N through Z, please bring **individually wrapped snacks**. S.A.C. policy prohibits serving food "buffet style"; everything must be individually packaged. Thanks so much!

## From David Brandt

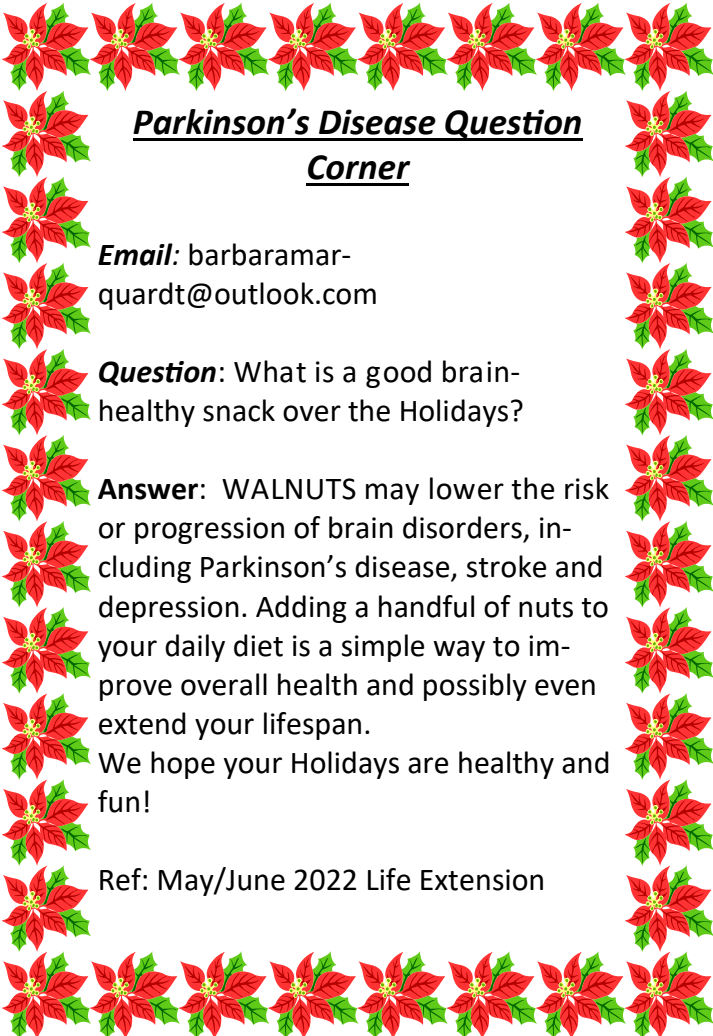
It's that time of year again to reflect and a time to say thanks. I looked at last year's column and who I thanked and found that I liked that list so much, I am going to repeat it!

Thank you:

- Those who regularly attend our monthly meetings and help make *PEP* what it is
- Barbara Marquardt and Katherine Kaminski who make the newsletter happen every month
- Ohio Parkinson Foundation Northeast Region (OPFNE) for their wonderful financial support and backing to the local support groups in the area including *PEP*
- Those who have donated to *PEP* through the year and help us continue to support you
- Healthcare workers that support those with Parkinson's i.e. doctors, nurses, physical therapists, psychologists, and more
- InMotion for having the nation's best facility for all things that can help people with Parkinson's
- My mom, Marilyn Brandt, who has donated so many years to *PEP* and was one of the best caregivers
- Michael J Fox Foundation, Parkinson's Foundation, Davis Phinney, Parkinson & Movement Disorder Alliance and other groups that raise millions of dollars and awareness for the cause
- All of the local support groups that can provide a personal touch and who struggled with doing that during the pandemic but are coming back strong
- *PEP* Board Members Shalom, Plotkin, Mazie Adams, Kathy Wendorff, and Patrick Murphy
- My personal family for their support
- And finally, to all of the caregivers who provide the daily assistance to those with Parkinson's and keep them moving forward with a rewarding life

Happy Holidays to All!!

We need your donations to continue bringing you the *PEP* News and for other expenses. A special thanks to those who contribute at the monthly meetings. To send a donation, please make your checks payable to Parkinson Education Program and mail to 2785 Edgehill Rd., Cleveland Heights, OH 44106



## Parkinson's Disease Question Corner

**Email:** barbaramar-quardt@outlook.com

**Question:** What is a good brain-healthy snack over the Holidays?

**Answer:** WALNUTS may lower the risk or progression of brain disorders, including Parkinson's disease, stroke and depression. Adding a handful of nuts to your daily diet is a simple way to improve overall health and possibly even extend your lifespan.

We hope your Holidays are healthy and fun!

Ref: May/June 2022 Life Extension

## **Could Climbing Help Dopamine Medication May Help with Sleep, Depression and Pain**

*(Excerpt From Parkinson Foundation)*

**I**n Parkinson's disease (PD), non-movement symptoms can include depression, anxiety, sleep disturbances, pain, fatigue, cognitive dysfunction, apathy (lack of feeling or emotion) and even impulse control. These symptoms are common for people with Parkinson's — and often go under-reported and under-treated. According to the Parkinson's Outcomes Project, these symptoms have a greater negative impact on quality of life than movement symptoms. There remains considerable unmet needs when it comes to the management of these non-movement symptoms.

Monoamine Oxidase Type B (MAO-B) inhibitors are a type of medication that can mildly improve some PD movement symptoms. Though there have been an

increasing number of studies reporting the potential benefits of these drugs for non-movement symptoms, results have yet to be reviewed and summarized in any systematic way.

Parkinson's Foundation National Medical Advisor Michael S. Okun, MD, co-authored the study titled "Effects of MAO-B inhibitors on non-motor symptoms and quality of life in Parkinson's disease: A systematic review" (Tsuboi et al., 2022). The primary objective of this study was to provide an up-to-date, systematic review of the quality of life and non-movement symptom findings drawn from available studies of three commercially available MAO-B inhibitors: selegiline, rasagiline and safinamide.

After a meticulous review, this study ultimately analyzed a combined 60 studies out of 1,850 — all 60 met strict high standard research requirements, such as being peer-reviewed.

This systematic review found that MAO-B inhibitors may potentially improve depressive symptoms, sleep disturbances and pain. However, MAO-B inhibitors have not been associated with improvements in quality of life, cognition and olfactory dysfunctions. Of note, rasagiline and safinamide had more evidence supporting improvement in non-movement symptoms when compared with selegiline, however this may have been biased by when the drugs were introduced to the market.

Also of importance, this study showed a lack of evidence of the effects of MAO-B inhibitors on non-movement symptoms and quality of life in general, and on fatigue, autonomic dysfunctions, apathy, and impulse control disorders in particular.

These vast knowledge gaps concerning the efficacy of MAO-B inhibitors on non-movement symptoms for people living with PD is a genuine call to action for researchers. For example, comparing the efficacy of MAO-B inhibitors with other medication options, such as dopamine agonists, is clearly warranted. This information is vital for clinicians to be able to make good decisions in the care of PD.

**DISCLAIMER:** The material contained in this newsletter is intended to inform. PEP makes no recommendations or endorsements in the care and treatment of Parkinson's disease. Always consult your own physician before making any changes. No one involved with the newsletter receives financial benefit from any programs/products listed.

## Apocynin: A Wonderful And Powerful Polyphenol

(Excerpt from [www.mitozen.com](http://www.mitozen.com))

**T**reatment with Apocynin or Picrorhiza Kurroa Decreases Clinical and Pathological Features of Parkinsonism.

### Abstract

This study evaluates the therapeutic efficacy of the NADPH oxidase inhibitor apocynin, isolated as principal bioactive component from the medicinal plant Picrorhiza kurroa, in a marmoset MPTP model of Parkinson's disease (PD). The methoxy-substituted catechol apocynin has a similar structure as homovanillic acid (HVA), a metabolite of dopamine (DA). Apocynin acquires its selective inhibitory capacity of the reactive oxygen species generating NADPH oxidase via metabolic activation by myeloperoxidase (MPO). As MPO is upregulated in activated brain microglia cells of PD patients and in MPTP animal models, the conditions for metabolic activation of apocynin and inhibition of microglia NADPH oxidase are in place. Marmoset monkeys received oral apocynin (100 mg/kg; p.o.) (n = 5) or Gum Arabica (controls; n = 5) three times daily until the end of the study, starting 1 week before PD induction with MPTP (1 mg/kg s.c. for 8 days). Parkinsonian symptoms, motor function, home-cage activity and body weight were monitored to assess the disease development and severity. Post-mortem numbers of the tyrosine hydroxylase expressing DA neurons in the substantia nigra were counted. During the MPTP injections, apocynin limited the body weight loss and relieved parkinsonian symptoms compared to controls (Linear regression,  $P < 0.05$ ) indicating a reduction of disease progression. During the last test week, apocynin also improved the hand-eye coordination performance compared with vehicle treatment (resp.  $39.3 \pm 4.5\%$  and  $17.7 \pm 6.7\%$ ;  $P = 0.048$ ) and improved the home cage activity with 32 % ( $P = 0.029$ ), indicating anti-Parkinson efficacy. Apocynin also increased the number of surviving DA neurons in MPTP-treated marmosets with 8.5 % ( $P = 0.059$ ), indicating a tendency towards a neuroprotective efficacy. In conclusion, compensation for the loss of DA and its metabolite HVA by apocynin mitigates the PD progression and limits the parkinsonian signs and motor-function deterioration.

Glutathione is a powerful antioxidant and works to selective inhibitory capacity of the reactive oxygen species generating NADPH oxidase via metabolic activation by myeloperoxidase (MPO) as well. As MPO is upregulated in activated brain microglia cells of PD patients where the conditions for metabolic activation of oxidation leading to microglia NADPH oxidase, Glutathione also acts to inhibit this microglia activation as well. There has been some fare success in our office with PD patients to combine Glutathione or GlutaMax with Picrorhiza. Breathe from MitoZen offers Apocynin! Please contact us for more information.

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## How Does Parkinson's Disease Progress in "Brain-First" Versus "Body-First" Subtypes?

(Excerpt from [parkinsonslife.eu](http://parkinsonslife.eu))

**R**esearchers in South Korea have found that people with "body-first" Parkinson's may experience faster symptom progression than those with "brain-first" Parkinson's. According to the researchers, in "body-first" or body-involvement Parkinson's, cells throughout the body are impacted early in the condition's course, whereas in "brain-first" or brain-predominant subtypes of the condition, the impact is primarily limited to cells in the brain.

As part of their study, the team examined data from 132 people with the condition. An imaging technique was used to differentiate the cohort into brain- versus body-first categories, and symptoms were measured based on the Unified Parkinson's Disease Rating Scale.

The results suggested that symptoms such as sleep problems and attention difficulties were more severe in the body-first group. Reflecting on the findings, the researchers concluded that "the body-involvement subtype is [a] more aggressive phenotype than the brain-predominant subtype".



**PEP NEWS**

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Cleveland Heights, OH 44106

**Address Service Requested**

We try to keep our roster current. If you no longer wish to receive this bulletin or would like to receive it via email instead, notify Katherine.A.Kaminski@gmail.com or call 216-513-8990.

**Could Risk Factors for Parkinson’s Disease Be “Largely Man-Made”?**

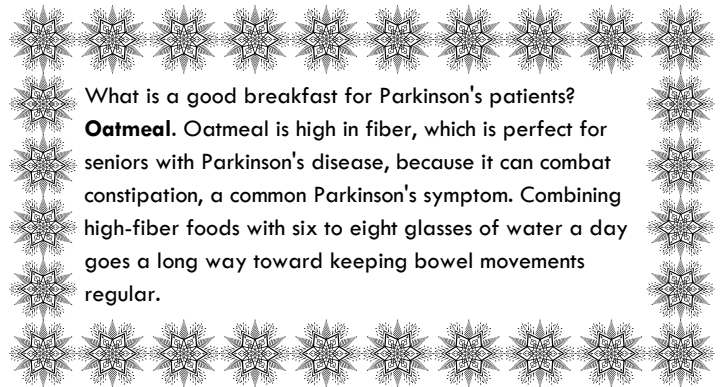
*(Excerpt from parkinsonslife.eu)*

**N**ew research has highlighted evidence of a potential link between Parkinson’s risk and exposure to toxic environmental factors – including air pollutants and human-made materials. The research was presented at the 147th Annual Meeting of the American Neurological Association in Chicago, US, as part of a symposium on neurological disorders.

The evidence included a study that highlighted that exposure to toxic pollutants may activate genes associated with the condition and that current environmental policies fail to consider the potential long-term effects of neurotoxic chemicals.

“The world’s fastest-growing brain disease is largely man-made,” said neurologist Dr. Ray Dorsey, one of the symposium speakers, in a press release. “The principal causes are toxic exposures to chemicals synthesized in the labs of chemical companies.”

Calling for greater awareness surrounding the issue, he said: “If we educate the communities we’re supposed to serve, we can have them be mobilized and change the course of all these diseases.”



What is a good breakfast for Parkinson's patients?  
**Oatmeal.** Oatmeal is high in fiber, which is perfect for seniors with Parkinson's disease, because it can combat constipation, a common Parkinson's symptom. Combining high-fiber foods with six to eight glasses of water a day goes a long way toward keeping bowel movements regular.

**TO REACH US AT PEP 440-742-0153** dbrandtpep@gmail.com—  
Facebook – Parkinson  
Education Program of Greater Cleveland