

PEPNEWS

OCTOBER 2024

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

OCTOBER MEETING—Wednesday, October 2, 2024 – 2:15 p.m.

Please join us as we welcome **Fareeha Ashraf, MD Sleep Neurologist, Cleveland Louis Stokes Veterans Association Hospital** who will talk on Sleep and Parkinson's Disease which is a topic that affects most of us.

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

NOVEMBER MEETING / Wednesday, November 6, 2024 – 2:15 p.m.

We welcome **Amy Larocca, MA CCC-SLP**, from **Polaris Speech** who will talk on Parkinson's and speech therapy including, swallowing, speech, and breath support.

From David Brandt

As you are aware, there are several major Northeast Ohio Parkinson symposiums put on throughout the year. OPFNE has theirs usually in April, Cleveland Clinic usually in September, University Hospitals usually in October/November, and this year there is another put on by the Parkinson's Foundation, Great Lakes Chapter. This is good news especially for our friends in Stark County and the neighboring counties as they are holding it at the Pro Football Hall of Fame in Canton on October 19. Speakers include David Hinkle, MD, PhD, ABPN from Ohio, Health Riverside Methodist Hospital, Reversa Joseph, MS, MD, from Chalmers P Wylie VA, Ambulatory Care and Amy Larocca, MA CCC-SLP from Polaris Speech. See more details below on how to register to attend in person or virtually via Zoom.

Upcoming Events

Saturday, October 19 - Parkinson's Symposium put on by Parkinson's Foundation, Great Lakes Chapter – It will be from 11 a.m.—3 p.m. with check in starting at 10 a.m. at the Pro Football Hall of Fame, 2121 George Halas Drive NW, Canton, OH 44708. Hear about upcoming treatments, ongoing research, and resources available in your community. Attendance is free, but registration is required. Learn more and register at: Parkin-son.org/Canton or call at 440-568-0093.

Saturday, November 16 – 15th Annual University Hospital's Parkinson's Boot Camp will be held at the Holiday Inn Cleveland-S Independence. More details including registration will be available at a later date.

The Role of An Energy-Producing Enzyme In Treating Parkinson's Disease

(Excerpt from www.sciencedaily.com)

An enzyme called PGK1 has an unexpectedly critical role in the production of chemical energy in brain cells, according to a preclinical study led by researchers at Weill Cornell Medicine. The investigators found that boosting its activity may help the brain resist the energy deficits that can lead to Parkinson's disease.

The study, published Aug. 21 in *Science Advances*, presented evidence that PGK1 is a "rate-limiting" enzyme in energy production in the output-signaling branches, or axons, of the dopamine neurons that are affected in Parkinson's disease. This means that even a modest boost to PGK1 activity can have an outsized effect at restoring the neuronal energy supply in low-fuel conditions — and the researchers showed that this could prevent the axon dysfunction and degeneration normally seen in an animal model of Parkinson's disease.

To read the full article, please visit: https://www.sciencedaily.com/ releases/2024/08/240821150017.htm

PD Question Corner

Email: barbaramarquardt@outlook.com

Question: What is NINDS Disorders?

Answer: NINDS Disorders is an index of neurological conditions provided by the National Institute of Neurological Disorders and Stroke. This valuable tool offers detailed descriptions, facts on treatment and prognosis, and patient organization contact information for over 500 identified neurological disorders.

For additional information on Parkinson's Disease, please visit: https://www.ninds.nih.gov/health-information/disorders/parkinsons-disease

Ref.: https://www.ninds.nih.gov/health-information/disorders/parkinsons-disease

Dementia Mortality Tied to Olive Oil Consumption

Higher olive oil intake was associated with a lower risk of dementia-related death in a large study.

Eating at least 7 g of olive oil daily -- about a half tablespoon -- was tied to an adjusted 28% lower risk of dementia-related death (pooled hazard ratio [HR] 0.72, 95% CI 0.64-0.81) compared with never or rarely consuming olive oil (P for trend <0.001) over 28 years of follow-up, reported Anne-Julie Tessier, RD, PhD, of the Harvard T.H. Chan School of Public Health in Boston, and co-authors.

The relationship remained significant after adjusting for diet quality, including adherence to a Mediterranean diet, and after accounting for APOE4 gene status, the researchers reported in JAMA Network.

Replacing 5 g (about 1 teaspoon) of margarine and mayonnaise with the equivalent amount of olive oil daily was associated with an 8-14% lower risk of dementia mortality, they noted. Substitutions for other vegetable oils or butter were not significant.

Onset of most dementia types is gradual and progression is slow, making dementia-related mortality difficult to study, Tessier noted. "To our knowledge, this is the first study to examine diet, specifically olive oil, in relation to dementia death," she told MedPage Today.

"Typically, people who use olive oil for cooking or as a

dressing have an overall better quality of their diet, but interestingly, we found the association to be regardless of this factor," Tessier pointed out.

"Current dietary guidelines regarding fats are mainly based on evidence related to cardiovascular health," she added. "Our study contributes to supporting current dietary guidelines recommending choosing vegetable oils such as olive oil, but extends these recommendations to brain-related health."

A number of observational studies have found relationships between brain health and plant-based diets like the Mediterranean or MIND that include olive oil, though some research has suggested diet and dementia may not be related.

"As part of the Mediterranean diet, olive oil may exert anti-inflammatory and neuroprotective effects due to its high content of monounsaturated fatty acids and other compounds with antioxidant properties such as vitamin E and polyphenols," Tessier noted.

The researchers followed 60,582 women from the Nurses' Health Study and 31,801 men from the Health Professionals Follow-up Study from 1990 to 2018. Previous research from these cohorts showed that higher olive oil consumption was tied to lower cardiovascular disease risk and lower neurodegenerative disease mortality.

Mean baseline age was ~ 54, and participants were free of cardiovascular disease and cancer at baseline. Dementia death was ascertained from death records.

Every 4 years, participants reported olive oil intake on food frequency questionnaires. Scores on the Alternative Healthy Eating and alternative Mediterranean diet scale were used to assess overall diet quality.

Mean olive oil intake was 1.3 g/day at baseline and went up over time. During 28 years of follow-up, 4,751 dementia-related deaths occurred.

The association between dementia-related death and olive oil intake was significant for women (adjusted HR 0.67 (95% CI 0.59-0.77), but not men (HR 0.87, 95% CI 0.69-1.09). Joint analyses showed that participants with high olive oil intake had a low risk for dementia-related mortality, regardless of diet quality scores.

In a subset of about 27,000 participants who were genotyped, the overall results were similar after

Parkinson's May Begin In The Gut, Study Says, Adding To Growing Evidence

(Excerpt from JAMA Network Open)

esearchers found that people with upper gastrointestinal conditions were far more likely to develop Parkinson's disease later in life.

A <u>new study</u> adds to a growing body of evidence that Parkinson's disease, long believed to have its origins in the brain, may begin in the gut.

Gastrointestinal problems are common in patients with neurodegenerative disorders, to the point where a condition known as "institutional colon" was once thought to afflict those who lived in mental health institutions. In Parkinson's disease, the entire gastrointestinal tract is affected, causing complications such as constipation, drooling, trouble swallowing and delayed emptying of the stomach. These symptoms often appear up to two decades before motor symptoms such as rigidity or tremor.

"People have, for the longest time, described Parkinson's disease as a top-down disease — so, it starts in the brain and then percolates down to the gut, and that's why patients have issues with their gastrointestinal tract," said study author <u>Subhash Kulkarni</u>, an assistant professor at Beth Israel Deaconess Medical Center. "Another hypothesis suggests that, in many patients, it may be a bottom-up approach, where it starts in the gut and goes all the way up to the brain."

Kulkarni and his colleagues found that people with upper gastrointestinal conditions — in particular, ulcers or other types of damage to the lining of the esophagus, stomach, or upper part of the small intestine — were far more likely to develop Parkinson's disease later in life.

Mucosal Damage Is a Risk Factor For Parkinson's — The analysis involved 9,350 patients with no history of Parkinson's and who had had an upper endoscopy with biopsy between 2000 and 2005. Most were between the ages of 50 and 64 at the time of the

procedure.

Mucosal damage — an erosion, break, or sore in the mucous lining of the gastrointestinal tract — was associated with a 76 percent greater risk of developing Parkinson's disease during the follow-up period, an

average of 14.9 years for the whole cohort. Specifically, mucosal damage was defined as the presence of erosions, esophagitis, ulcer, or peptic injury on upper endoscopy or pathology reports.

Perhaps most notably, patients in the study suffered from their gastrointestinal issues long before discovering they had Parkinson's, most probably because they began experiencing motor symptoms. The average lead-time between the first detection of mucosal damage and an eventual diagnosis of Parkinson's was 14.2 years.

In future work, Kulkarni and his colleagues plan to investigate the cellular and molecular changes that occur with mucosal damage and its effects on alphasynuclein in the gut. Until then, experts recommend heightening monitoring of patients with mucosal damage and the timely treatment of conditions that may lead to mucosal damage, such as peptic ulcer disease, esophagitis and H. pylori infection.

adjusting for the presence of an APOE4 allele (adjusted HR comparing high vs low olive oil intake of 0.66, 95% CI 0.54-0.81, P for trend <0.001).

Olive oil consumption may lower dementia mortality by improving vascular health, Tessier and colleagues suggested, though incident cardiovascular disease, hypercholesterolemia, hypertension, and diabetes were not significant mediators of the relationship between olive oil and dementia-related death in study.

The study had several limitations, including the possibility of reverse causation, the researchers acknowledged. While results remained consistent after accounting for socioeconomic status and important covariates, residual confounding may have occurred. The study population was predominantly white and results may not apply to others.

In addition, some margarine and mayonnaise contained considerable levels of partially hydrogenated oils during the course of the study, which the FDA warned about in 2013 and subsequently banned.

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

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PEP NEWS

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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.

Where Can I Find More Information about Parkinson's Disease?

(Excerpt from www.ninds.nih.gov)

Information may be available from the following organizations and resources:

- American Parkinson Disease Association 800-223-2732 apda@apdaparkinson.org
- Davis Phinney Foundation 866-358-0285 contact@dpf.org
- Lewy Body Dementia Association 404-935-6444 Ibda@lbda.org
- Michael J. Fox Foundation for Parkinson's Research 800-708-7644 <u>info@michaelifox.org</u>
- Parkinson's Foundation 800-473-4636 helpline@Parkison.org

- Parkinson & Movement Disorder Alliance 800-256-0966 info@PMDAlliance.org
- Parkinson's Resource Organization 877-775-4111 <u>info@parkinsonsresource.org</u>
- Cure MAPT FTD <u>https://www.curemaptftd.org/</u>

Laughter is Medicine

Why do barbers make good drivers?

They know a lot of short cuts.



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