

SPECIAL NOTICE

In response to the global outbreak of COVID-19, Parkinson Society BC (PSBC) staff are working remotely until further notice. We will continue to offer programs and services in alternate formats. For the most up-to-date information, visit this web page: www.parkinson.bc.ca/coronavirus. If you have any questions, please contact us at info@parkinson.bc.ca.

UPCOMING EVENTS

- **Virtual Gardening Group** | Every 2nd and 4th Thursday, March 10 – September 22
Learn more & register: <https://bit.ly/pdgardeninggroup>
- **Move with Martial Arts: Karate Fundamentals** | Tuesdays, August 2 – September 27
Learn more & register: <https://bit.ly/movewithmartialarts>
- **September Challenger** | Thursdays, September 1 – 29
Learn more & register: <https://bit.ly/septchallenger22>
- **DOPABEATS Drumming with Doug Pickard** | Wednesdays, September 7 – October 12
Learn more & register: <https://bit.ly/dopabeats>
- **September Symposium Series**
 - **Women and Parkinson's** | Friday, September 9
Learn more & register: <https://bit.ly/septsymp-women>
 - **Sexual Wellbeing: The Male Experience** | Thursday, September 22
Learn more & register: <https://bit.ly/septsymp-malesexual>
 - **Navigating Relationship Role Changes** | Wednesday, September 28
Learn more & register: <https://bit.ly/septsymp-role>
- **Communication & Swallow Workshop, Surrey** | Saturday, September 17
Learn more & register: www.parkinson.bc.ca/comm-swallow22
- **Improv: Laughter is the Best Medicine!** | Wednesdays, September 14 – October 19
Learn more & register: www.parkinson.bc.ca/improv-laughter
- **Improv: Performance Troupe** | Wednesdays, September 14 – November 30
Learn more & register: <https://tightropetheatre.com/parkinsons-improv-troupe>
- **Move with Shelly** | Tuesdays, October 4 – 25
Learn more & register: <https://bit.ly/moveshelly22>
- **Seated Exercise Series** | Thursdays, October 6 – 27
Learn more & register: <https://bit.ly/seatedexercise22>

- **SongShine with Joani**
 - **Fall 2022 Sessions** | Thursdays, October 6 – November 10
Learn more & register: <https://bit.ly/songshine-fall22>
 - **Winter 2022 Sessions** | Thursdays, November 17 – December 15
Learn more & register: <https://bit.ly/songshine-winter22>
- **Moving Forward, Together Provincial Conference** | Saturday, October 15
Learn more & register: www.parkinson.bc.ca/mft

UPCOMING FUNDRAISING EVENTS

Champions for Parkinson's

- Donate a Car Canada: Ongoing (read more: <http://bit.ly/2ORTuJn>)

We're looking for more Champions!

Do you want to help fund research, grow support networks, and improve quality of life for those living with Parkinson's disease (PD)? Become a Champion for Parkinson's and plan your own independent community fundraising event! Contact us at events@parkinson.bc.ca or 1-800-668-3330.

TIP JAR

The Tip Jar is where we share advice from Parkinson's community members. This month, we share advice on travel and flying.

- When flying, request a wheelchair. If possible, request special service/personal service. This may allow pre-boarding at the gate. Search for accessible options when booking flights. If possible, book first or business class, which may include less walking and make it easier to get in and out of seats. You may also have fewer interactions with passengers, and a nearby washroom.

Do you have any tips or tricks that you would like to share with the Parkinson's community? These can be tips from something that works well, to eating and dressing, to getting out of bed or travelling! All tips and tricks are welcome! Please share your ideas at info@parkinson.bc.ca.

NEWS & ANNOUNCEMENTS

Parkinson SuperWalk is back this September in person!

Beginning the weekend of September 10 and 11, incredible British Columbians in more than 20 communities throughout the province will walk together to help give hope to approximately 15,000 people in BC living with Parkinson's disease.

Thanks to generous corporate supporters, we now have also secured an incredible set of prizes and incentives for our Parkinson SuperWalk fundraisers! From airline tickets to iPhones to hotel getaways to fitness trackers, there's something for everyone.

Gather your teammates, register online at www.parkinson.bc.ca/superwalk, and start fundraising today!

Moving Forward, Together returns in person this October!

Parkinson Society British Columbia invites you to join us for our provincial conference, Moving Forward, Together, on Saturday, October 15 at the Radisson Hotel Vancouver Airport. This full-day, in-person conference will include a wellness stream, interactive research room, and interactive exhibits, as well as two morning plenaries and eight afternoon breakout sessions.

Learn more and register at www.parkinson.bc.ca/mft.

Register now for our September Symposium Series

To assist in expanding your knowledge of PD, PSBC will be featuring talks from three experts in this series. Topics include *Women and Parkinson's*, *Sexual Wellbeing: The Male Experience*, and *Navigating Relationship Role Changes*. Register at www.parkinson.bc.ca/september-symposium.

DISCUSSION TOPIC: Optimizing brain health

Discussion Questions

1. What tools do you use to boost your brain health on a regular basis?
2. How does good cognitive health contribute to your overall wellbeing?
3. What do you wish people knew about brain health and Parkinson's disease?

September is World Alzheimer's Month, a time to raise awareness of dementia and challenge the stigma around this often-misunderstood condition. Parkinson's disease (PD) dementia is a condition that can occur after living with PD for some time. It is important to remember that while over half of people diagnosed with PD do experience a degree of cognitive decline, not all go on to develop dementia. Talking about dementia can be frightening, but there are things you can do today to boost brain health and optimize your cognition, including the following:

Exercise

It seems any time someone mentions Parkinson's disease, the topic of exercise comes up. There is a good reason for this – exercise has been proven to help many of the symptoms of PD, and the latest research is uncovering its neuroprotective benefits. New studies suggest that exercising routinely helps protect against developing Parkinson's and Alzheimer's, and for those who are already diagnosed, exercise may even slow down disease progression (Paillard, et al., 2015). One reason this may occur is because of the brain chemistry changes that take place while we exercise. Aerobic exercise helps the brain release important proteins, one of which is called brain-derived neurotrophic factor (BDNF) (Paillard, et al., 2015). BDNF is an extremely useful chemical and has been shown to help neurons survive for longer periods of time. It also helps neurons create communication connections, called synapses, which allow for improved memory and brain health. BDNF even plays a role in neural plasticity, which helps our brains continue to learn and stay adaptable over our lifetimes (Science Direct, n.d.).

In animal studies on Parkinson's disease, BDNF has been shown to promote the regeneration of neurons, as well as aiding in the continued survival of dopaminergic neurons. However, it seems how frequently you exercise determines the neuroprotective benefits: studies show that BDNF is consistently raised only through repeated moderate- to high-intensity exercise lasting several weeks (Palasz, et al., 2020). While lower-intensity exercises like stretching and yoga may be beneficial for relaxation, they do not show the same benefits for brain health (Mintzer, et al., 2019).

Probiotics

Recent scientific studies have had a keen interest in the gut-brain connection and how our microbiomes, the collection of bacteria and other microorganisms that inhabit our digestive tract, affect our brain health. In fact, our gut has been called the "second brain" because it produces the same neurotransmitters as the brain. This may be why one study found that supplementing with probiotics helped boost both mood and cognition, as probiotics may support the health of our microbiome. Another study, conducted in 2016 on people with Alzheimer's disease, found that drinking milk produced with four probiotic bacteria resulted in improved cognitive test scores, when compared to a group that drank regular milk (Harvard Health Publishing, 2019).

Probiotics come in many strains, and picking the best one may feel overwhelming. The good news is that certain strains are showing promising results for brain health, including *Bifidobacterium Longum*, which has been found in sauerkraut and pickles, and *Lactobacillus brevis* – these two strains have been proven to boost levels of brain-derived neurotrophic factor (Swart, 2019). As always, check with your doctor or healthcare provider before starting any new medication or supplement regimen.

Diet

A wide variety of diets have risen and fallen in popularity over the last several decades, but some may be better for brain health than others. The MIND diet, developed by university researchers, has been suggested to have neuroprotective effects. This diet emphasizes regular consumption of fruits and vegetables, including leafy green vegetables at least six times a week. It suggests eating plenty of nuts and berries, as well as consuming beans at least every other day. The MIND diet also strictly limits fatty foods, like butter, cheese, and deep-fried foods (Mintzer, et al., 2019).

What we eat matters for our brains – unprocessed plant-based foods and healthy animal fats, like fish, show neuroprotective benefits and may result in improved cognition. Perhaps the most popular of all dietary fats for brain health are omega-3 fatty acids. Hundreds of studies have looked at their benefits for everything from eczema to mood disorders. More recently, science has shown that these fatty acids have the potential to improve our brain health. While the most common source of omega-3s is fish, they are found in plenty of plant-based foods, such as olives, canola, flaxseed, soybeans, and butternut squash (Mintzer, et al., 2019).

Social connectedness

Humans are a social species. Healthy, nurturing relationships with loved ones improve our mood, make us feel safe and supported, and prevent loneliness and isolation. However, did you know that our social ties are important for our cognition, too? Studies have shown that older adults who experience loneliness are at higher risk of cognitive decline. One reason for this may be because feelings of isolation lead to increased levels of the stress hormone cortisol, which has been shown to decrease cognitive performance, and can even reduce the size of your hippocampus, the region of the brain responsible for learning and memory. When older adults

were taught how to use Facebook in one study, their memory test scores improved by 25%, suggesting that even digital forms of connectedness are helpful. Social ties do not need to be limited to other humans – animals can be sources of positive and meaningful bonds, with one study on Alzheimer’s patients showing less verbal aggression and anxiety when the person was near an animal (Mintzer, et al., 2019).

There are many ways to boost your social connectedness. Parkinson Society BC offers several activity-based, social events throughout the year. These events, many of which are virtual, allow you to meet others with similar experiences to your own, while having a great time or learning a new skill. For our latest event offerings, please see our website at www.parkinson.bc.ca/events.

Additional Resources

Dementia | Helpsheet | <http://bit.ly/pddementia>

Dementia and Reactive Behaviours | Helpsheet | <http://bit.ly/pddreactivebehaviour>

Dementia and Communication Challenges | Helpsheet |
<http://bit.ly/pddcommunicationchallenges>

Cognitive Health | Helpsheet | <http://bit.ly/pdcognitivehealth>

Sources

Harvard Health Publishing (8 June, 2019). *Probiotics may help boost mood and cognitive function*. Retrieved from <https://www.health.harvard.edu/mind-and-mood/probiotics-may-help-boost-mood-and-cognitive-function#:~:text=Probiotics%20can%20do%20more%20than,called%20the%20gut%20brain%20axis>

Mintzer J., Donovan K.A., Kindy A.Z., Lock S.L., Chura L.R., & Barracca N. (2019). Lifestyle choices and brain health. *Frontiers in Medicine*, 6, 204. doi: 10.3389/fmed.2019.00204

Paillard, T. Rolland, Y., & de Souto Barreto, P. (2015). Protective effects of physical exercise in Alzheimer's disease and Parkinson's disease: A narrative review. *Journal of Clinical Neurology*, 11(3), 212-219. <https://doi.org/10.3988/jcn.2015.11.3.212>

Palasz E., Wysocka A., Gasiorowska A., Chalimoniuk M., Niewiadomski W., & Niewiadomska G. (2020). BDNF as a promising therapeutic agent in Parkinson's Disease. *International Journal of Molecular Science*, 21(3), 1170. doi: 10.3390/ijms21031170

Science Direct. (n.d.). *Brain-Derived Neurotrophic Factor*. Retrieved from

<https://www.sciencedirect.com/topics/neuroscience/brain-derived-neurotrophic-factor>

Swart, T. (17 September, 2019). *What You Need To Know About Your Brain And Probiotics*.

Retrieved from <https://www.forbes.com/sites/taraswart/2019/09/17/what-you-need-to-know-about-your-brain-and-probiotics/?sh=5e08faac46cd>