



**ANNIVERSARY**

Parkinson Society British Columbia

## CELEBRATING 50 YEARS OF SERVICE IN 2019!

Since 1969, Parkinson Society British Columbia has been proud to empower people with Parkinson's across the province, through education, support services, advocacy, and fundraising. This year, join us as we celebrate the strength of our community, and the many milestones we have reached together. We hope to extend our reach wider and impact stronger than ever before – within the Parkinson's community and beyond.

Throughout the year, we will be sharing inspirational stories from the people with Parkinson's, carepartners, and advocates in our community. If you have a story to share about your life with Parkinson's, we would love to hear it! For more information, email us at [info@parkinson.bc.ca](mailto:info@parkinson.bc.ca), or call 1-800-668-3330.

## UPCOMING EVENTS

Parkinson Society British Columbia (PSBC) endeavours to make attendance at events accessible to all who may benefit. The Society may be able to subsidize attendance fees for those who require financial assistance. Please email [info@parkinson.bc.ca](mailto:info@parkinson.bc.ca) or call 1-800-668-3330 for more details.

### ASK THE EXPERT WEBINAR: GENETIC DISCOVERY TO THERAPEUTIC TARGET

Join us as neuroscientists Jordan Follett and Emil Gustavsson from the University of British Columbia present their research on genetic discoveries in Parkinson's disease for therapeutic targets.

At the laboratory of Professor Matthew Farrer, Follett and Gustavsson are investigating the role of the retromer complex, a sorting network within brain cells that may position particular proteins within cells. Their working theory is that when genes within the retromer complex are mutated, they could be misplacing specific proteins within dopamine-producing cells – the main cell type lost in Parkinson's disease – ultimately causing them to die. If they can validate this theory, it could lead to new avenues for drug discovery and early disease detection.

Date: Tuesday, March 12  
 Time: 10:00am – 11:00am  
 Location: Via webinar. *Instructions on how to access the presentation will be sent out 24 hours before the webinar's start time.*  
 Capacity: 200  
 Cost: Free  
 Registration: [www.parkinson.bc.ca/genetics-webinar](http://www.parkinson.bc.ca/genetics-webinar)

### COMMUNITY TALK: MENTAL HEALTH & PARKINSON'S

On March 27, join us in Nanaimo for a talk with the Society's own Registered Clinical Counsellor, Courtney Doherty. She will provide an understanding of mental health in Parkinson's disease, including depression and anxiety, their causes, and treatment options.

This talk is for both people with Parkinson's and their carepartners/caregivers.

Date: Wednesday, March 27  
 Time: 2:30pm – 3:30pm (registration opens at 2:00pm)  
 Location: Nanaimo Alliance Church  
 1609 Meredith Road, Nanaimo ([map](#))  
 Capacity: 100  
 Cost: Members \$5.00 | Non-members \$10.00  
 Registration: [www.parkinson.bc.ca/nanaimo-community-talk](http://www.parkinson.bc.ca/nanaimo-community-talk)

## UPCOMING EVENTS

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### ANNUAL GENERAL MEETING

We invite you to join us for our Annual General Meeting on Saturday, April 13, featuring guest speaker, Dr. Matthew Farrer. Cited as one of the most influential researchers in the field of Parkinson's disease, Dr. Farrer and his lab have played a role in the discovery of every major gene in typical late-onset Parkinson's, as well as some atypical and early-onset forms.

Light refreshments will be served.

Date: Saturday, April 13  
Time: 9:45am – 12:00pm (registration opens at 9:00am)  
Location: Library Square Conference Centre – Alice MacKay Room  
50 West Georgia Street, Vancouver ([map](#))  
Cost: Free for members. Non-members interested in attending must sign up and pay \$25 annual membership fee.  
Registration: [www.parkinson.bc.ca/agm2019](http://www.parkinson.bc.ca/agm2019)

For a listing of all upcoming education events, visit our [education events calendar](#).

## UPCOMING FUNDRAISING EVENTS

# Champions FOR PARKINSON'S

- Chocolate & Beer Tasting: Sunday, March 10 [[read more](#)]
- Donate a Car Canada: Ongoing [[read more](#)]
- Naturally Urban Pet Food Delivery Sales: Ongoing [[read more](#)]
- Tea Parky: In this ongoing fundraiser, 35% of proceeds from every sale on [TeaParky.com](http://TeaParky.com) will go to Parkinson Society BC. *Special: Use promo code PSBC at checkout for 10% off your purchase.*

### 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? Become a Champion for Parkinson's and plan your own independent community fundraising event! Please contact Mirela Prime at [mprime@parkinson.bc.ca](mailto:mprime@parkinson.bc.ca) or 1-800-668-3330.

Do you have any tips or tricks that you would like to share with the PD 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 with us at [info@parkinson.bc.ca](mailto:info@parkinson.bc.ca) or 1-800-668-3330.

### ABOVE AND BEYOND VOLUNTEER AWARDS

At our Annual General Meeting, the Society will recognize the volunteers who have gone above and beyond to make a difference in their community, and who demonstrate a passion to celebrate each day with joy, compassion, and understanding.

To help us highlight our top 10 volunteers across the province, we want to hear from you. Tell us about an outstanding volunteer from your community by submitting an online nomination form at [bit.ly/2V2ujaa](http://bit.ly/2V2ujaa). Nominations must be received by Friday, March 22.

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### WARM WELCOME! TRICIA WALLACE

*Clinical Counselor (available Tuesdays only)*

Parkinson Society BC is excited to welcome our new part-time Clinical Counselor, Tricia Wallace!

Tricia has practiced as a registered nurse since 1988 in hospital and community settings, attaining a Bachelor of Science in Nursing and a Master of Nursing from the University of Victoria, BC. Currently, she is completing a Master of Arts in Counselling Psychology at Yorkville University. Tricia has extensive experience working with adults of all ages in the field of mental health, including case management for those 55 and older who live with co-occurring disorders, and work as a clinical educator on a neuropsychiatric inpatient ward. As a result, Tricia has knowledge of medications and neurodegenerative disease processes that may inform work in counselling sessions. She also recognizes the importance of a strength-based, holistic approach to Parkinson's disease that includes emotional support and skill building for individuals and their families.

To learn more about Parkinson Society British Columbia's counselling services, visit <https://www.parkinson.bc.ca/counselling> or email [info@parkinson.bc.ca](mailto:info@parkinson.bc.ca).

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### NEW! SURREY SUPPORT GROUP

This group is intended for anyone affected by Parkinson's disease. Carepartners, friends, and family members are welcome.

Date: 2nd Monday of each month  
Time: 6:00pm – 7:00pm  
Location: Amenida Seniors' Community - Downstairs Activity Room  
13855 68th Ave, Surrey ([map](#))

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### SAVE THE DATE: WORLD PARKINSON CONGRESS 2019, KYOTO

The 5<sup>th</sup> World Parkinson Congress (WPC) will be held in Kyoto, Japan from June 4<sup>th</sup> – 7<sup>th</sup>, 2019. Are you interested in attending? Registration is open now. Full information on registration categories is available at [www.wpc2019.org/page/RegFees](http://www.wpc2019.org/page/RegFees).

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### STEP BY STEP

Starting Tuesday, April 11, Parkinson Society BC is bringing back the Step by Step program for a fourth consecutive year! Step by Step is a 12-week walking program aimed at incrementally improving the number of average daily steps an individual takes. The first week will determine each walker's baseline, and then each week, they will be encouraged to increase their steps based on a personal goal. While participants are encouraged to walk and track their own steps, a community group leader will organize a weekly walk allowing walkers to meet, socialize, and support one another.

**Interested in becoming a Step by Step leader in your community?** Contact Caroline Wiggins at [cwiggins@parkinson.bc.ca](mailto:cwiggins@parkinson.bc.ca), or call 1-800-668-3330 to learn more.

**Note:** Any listings above should not be considered an endorsement of the third-party event(s). As such, the Society cannot be held responsible or liable for any loss or damage suffered as a result of participation.

### DISCUSSION QUESTIONS:

1. Have you implemented dietary changes to help manage your Parkinson's?
2. How do you practice healthy eating in your everyday life?
3. Have you ever noticed certain foods affecting your symptoms?

This January, Canada's Food Guide was updated for the first time in over 10 years. Guided by an extensive review of research findings, Health Canada now recommends limiting animal products, and focusing more on plant-based whole foods, while emphasizing water as the drink of choice. In particular, the guide has eliminated the food categories of "meat and alternatives" and "milk and alternatives", instead referring to these options as "protein-rich food", with a focus on legumes, nuts, and soy products as a primary source of protein.

We all know how important it is to eat our vegetables, but previous dietary guidelines have underestimated the critical impact of plant-based whole foods on our health. By eating more fruits and vegetables, whole grains, and plant-based proteins, and limiting animal products and highly processed foods, you can ensure that you are maximizing your fibre intake, and minimizing saturated fats. For people with Parkinson's disease (PD), a diet high in plant-based whole foods can help with symptom management, medication absorption, cognitive health, and overall well-being.

### BRAIN HEALTH

Foods rich in antioxidants are known to play a positive role in brain health. Antioxidants are substances that protect the cells in your body against free radicals, which are the toxic byproducts of pollutants and harmful chemicals. Good sources include foods such as deeply-coloured fruits and vegetables, legumes, and nuts, as well as herbs and spices like turmeric, rosemary, and cinnamon. Green tea, dark chocolate, and red wines are other sources of antioxidants that can be beneficial in moderation.

Nuts also contain antioxidants, as well as nutrients including vitamin E, fibre, protein, and healthy fats, which are critical for brain health. However, moderation is key, as most nuts are extremely caloric and nutrient-dense. It is best to portion out small handfuls, and, if swallowing is an issue, substitute whole nuts for a healthy nut butter. Make sure to watch out for highly processed nut butters containing unnecessary additives, sugars, and sodium, as these can negate the neuroprotective benefits of these foods.

### INFLAMMATION

Along with antioxidants and healthy fats, people with Parkinson's should also look to include plenty of anti-inflammatory foods in their diets, both for brain health and overall wellness. Inflammation has been found to be both a symptom of PD, as well as a trigger for disease progression (Gilbert, 2018). Inflammation is an autoimmune response to the accumulation of Lewy bodies, which are clumps of protein called alpha-synuclein, in the brains of people with PD, and can damage healthy tissue. In fact, research has shown that suppressing inflammation may be key to treating PD.

You may want to consider limiting inflammatory foods, which include meat, dairy, eggs, low-fibre foods (e.g., refined grains), heavily-processed oils, and alcohol (Barbaresko et al., 2013). There is some evidence that these foods trigger an inflammatory response in the body, which lingers for hours after consumption. Since these foods are often present in every meal, the result could be chronic inflammation, which is linked not only to PD and other neurodegenerative disorders, but also to heart disease, diabetes, and certain cancers, according to Canada's Food Guide.

One simple way to limit animal products is to choose plant-based protein foods more often. These include beans, peas, lentils, chickpeas, nuts, seeds, tofu, fortified soy beverages, and plant-based meat alternatives like tempeh or seitan. It is important to note that proteins can affect levodopa drug effectiveness in some people with PD, if the medication is taken close to, or at the same time as a high-protein meal. If you are concerned about your medication absorption, talk to your healthcare team.

When choosing animal products, the Food Guide suggests the following healthier choices:

- Canned fish with little to no added sodium
- Fresh or frozen fish and shellfish that has not been breaded, battered, or deep-fried
- Skinless poultry
- Lean cuts of meat, such as round and loin
- Meat prepared with little or no added sodium or saturated fats

- Lower-fat cheeses
- Unsweetened and lower-fat milk and yogurt
- Seasoning with herbs, lemon, or salsas, and limited oils

To introduce more anti-inflammatory foods, choose dark, leafy greens like kale, spinach, and collard greens, and choose oily fish like salmon, tuna, and mackerel, more often. Coconut oil has also been shown to contain anti-inflammatory properties, making it a great alternative to butter and other oils.

## BLOOD PRESSURE

Some people with PD may experience low blood pressure, which can be managed with the help of dietary changes. Staying well-hydrated is important for increasing low blood pressure, so look to drink 6-8 glasses of water per day, and eat fruits and vegetables such as apples, pears, tomatoes, cucumbers, and celery, which have high water content. You may also want to include more unrefined salt (e.g., sea salt) in your diet, as well as potassium-rich foods like bananas, citrus fruits, and chia seeds. Keep in mind that turmeric, although rich in antioxidants, can cause blood pressure to drop, so limit your intake if you are concerned about hypotension. It can also help to eat smaller, more frequent meals, as larger, heavier meals may cause blood pressure to drop during digestion.

## PARKINSON'S AND THE GUT

Changes in the gastrointestinal system, like constipation, bloating, and nausea, are among the most common symptoms of PD, often preceding diagnosis by many years. This has led researchers to focus on the gut as a potential point of origin for the disease, rather than the brain (Kwon, 2018). Post-mortem observations of patients with PD have shown that Lewy bodies form not only in the brain, but in the nervous system of the gut, while rodent studies have demonstrated that these protein aggregates actually move from the gut to the brain via the vagus nerve.

Though more research is necessary, advancements in our understanding of the gut microbiome and epigenetics are promising in the field of neurodegenerative diseases. Researchers now have better tools for observing the bacteria of the gut, and the role they play in the expression of our genes. For example, fats from dairy are known to feed bacteria that produce hydrogen sulfide, which is associated with inflammatory bowel disease (i.e., ulcerative colitis and Crohn's disease)(Barbaresko et al.). Prevalence of PD among those with any type of inflammatory bowel disease is high, suggesting that our gut microbiota may be indirectly turning our genes on and off (Kwon). As a result, researchers hypothesize that by changing our diets, and subsequently our gut microbiomes, we may be able to prevent chronic diseases from developing and progressing, despite our genetic predispositions.

Healthy eating can be a crucial part of self-management for PD. Along with following the recommendations of Canada's Food Guide, here are some other changes you may wish to consider:

- Drink coffee and black teas regularly, within moderation. Caffeine has been shown to have neuroprotective properties, and in some cases, can slow disease onset and progression, improve motor symptoms, and reduce medication "off" time (Prediger, 2010).
- Limit dairy products. Post-mortem studies have found high levels of neurotoxins in the brains of patients with PD, and these chemical pollutants are often found in dairy products. Even in low doses, these toxins can accumulate over time to damage the brain (Abbott et al., 2015; Kuhl, 2015).
- Increase your fibre intake. Fibre improves constipation, and can naturally boost levodopa levels. Since proteins can affect levodopa drug effectiveness, swapping animal proteins for high-fibre plant proteins can have the potential to improve your symptoms significantly (Baroni et al., 2011).

While there is no specific diet known to treat Parkinson's disease, maintaining a healthy, nutritious diet is important for all individuals. A balanced diet can improve brain health, increase energy, optimize the absorption of medication, and promote overall well-being for people with Parkinson's. Each individual's dietary needs are different, especially while on medication, so be sure to discuss any changes to your diet with your healthcare team.

## ADDITIONAL RESOURCES

### *Canadian Nutritional Guidelines*

Canada's Food Guide | [Canada.ca/FoodGuide](https://www.canada.ca/foodguide)

Dietary Guidelines for Health Professionals and Policy Makers | [bit.ly/cndietaryguidelines](https://bit.ly/cndietaryguidelines)

Food Guide Recipes | [bit.ly/cdnrecipes](https://bit.ly/cdnrecipes)

**Parkinson Society BC Resources**

Nutrition and Parkinson's Disease | Helpsheet | [bit.ly/pdnutrition](http://bit.ly/pdnutrition)  
Levodopa, Protein, and Medication | Helpsheet | [bit.ly/pdmedicationabsorption](http://bit.ly/pdmedicationabsorption)  
Bowel Management Program | Helpsheet | [bit.ly/pdbowelmanagement](http://bit.ly/pdbowelmanagement)

**Plant-Based Nutrition Resources & Recipes**

NutritionFacts.org by Dr. Michael Gregor | [NutritionFacts.org](http://NutritionFacts.org)  
T. Colin Campbell Centre for Nutrition Studies | [nutritionstudies.org/recipes](http://nutritionstudies.org/recipes)  
Ordinary Vegan | [ordinaryvegan.net/recipes](http://ordinaryvegan.net/recipes)  
Forks Over Knives | [www.forksoverknives.com/recipes](http://www.forksoverknives.com/recipes)

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