

Parkinson's Wellness Challenge

The Parkinson's Wellness Challenge is a structured 90-day program designed to support foundational physiological health in individuals living with Parkinson's disease.

The objective is to improve non-motor symptoms in individuals living with Parkinson's disease by supporting gastrointestinal and cardiovascular health through targeted lifestyle practices and nutritional support.

The program protocol includes a glycocalyx evaluation*, skin autofluorescence (SAF), which is a noninvasive measurement of advanced glycation and end products in the skin*, and a self-reported Parkinson's symptom assessment using the Pro-PD app, developed by Laurie Mischley.

Upon completion of these baseline assessments, volunteer participants will receive a curated wellness support package that includes Sugar Shift, a probiotic formulated for individuals with Parkinson's; Revasca, a nutraceutical designed to support comprehensive circulatory health; and Beam Minerals, a trace mineral electrolyte and micronutrient supplement. Volunteer participants will be asked to use these products once a day for 90 days.

Throughout the challenge, volunteer participants are encouraged to follow evidence-informed lifestyle practices, including regular physical activity and a sustained commitment to balanced, nourishing nutrition.

To learn more about the Parkinson's Wellness Challenge, please join us on **Tuesday, 27 January at 10:30 am** for a presentation by Martha Carlin, renowned citizen scientist, founder of BioCollective Research, The BioCollective, and BiotiQuest Probiotics, and unwavering advocate for the Parkinson's community (www.marthasquest.com).

*Understanding the Parkinson's Wellness Challenge assessment tools

The **GlycoCheck** uses a specialized video microscope, placed under the tongue, to analyze capillary density, blood flow, red-cell movement, and the integrity of the glycocalyx. This is a non-invasive procedure that takes approximately 15 minutes to complete.

Researchers are learning that Parkinson's affects more than dopamine and movement. It also involves inflammation, oxidative stress, and changes in the body's smallest blood vessels.

1. Inflammation and oxidative stress

People with Parkinson's often experience elevated inflammation. A damaged glycocalyx can worsen inflammatory signaling and reduce the body's ability to regulate blood flow.

2. Blood-brain barrier parallels

The glycocalyx in the body's microvessels shares functional similarities with protective barriers in the brain. Poor microvascular health may reflect broader vascular vulnerability.

3. Metabolic and cardiovascular comorbidities

Conditions like diabetes, hypertension, and vascular disease are associated with lower GlycoCheck scores. These conditions can worsen Parkinson's symptoms or progression.

Advanced glycation end products, often called AGEs, form when proteins or fats in the body become chemically altered after long-term exposure to certain sugars. These changes slowly build up over time.

High levels of AGEs have been linked to several harmful effects on the brain, including increased death of nerve cells, larger areas of damage after a stroke, and declines in thinking and memory. Some of these effects occur through AGEs' interaction with specific receptors in the body known as RAGE. Although these processes develop gradually, their cumulative impact can contribute to long-term changes in brain health.

People living with Parkinson's often experience increased inflammation and oxidative stress. Because AGEs can contribute to both, researchers are studying how reducing AGE exposure through diet, lifestyle, and metabolic health might support long-term brain resilience.

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Participant Protocol

1. Baseline Assessments

- Complete a **glycocalyx assessment** and **skin fluorescence test** administered at Parkinson's Pointe by *Pam Holloway, RN*.
- **Optional:** If blood work has been completed within the past six months, participants may submit copies of the following for review:
 - Comprehensive Metabolic Panel (CMP)
 - Complete Blood Count (CBC)
 - Lipid Panel

2. Parkinson's Self-Assessment

- Complete the **Pro-PD assessment** and share the results with the project team.
- Repeat the Pro-PD assessment at **30, 60, and 90 days**, and submit each assessment for review.

3. Wellness Support Products

- Begin using **Sugar Shift**, **Revasca**, and **Beam Minerals** according to the written instructions provided.
- Maintain consistent use throughout the 90-day challenge.

4. Daily Self-Reflection

- Complete a brief **daily self-assessment**, rating how you feel on a scale of **1 to 5**, where:
 - *1 = I feel awful*
 - *5 = I feel great*

5. Optional Care Partner Feedback

- **Optional:** Invite a care partner to share their observations regarding your well-being and daily functioning.
- Ideally, care partner feedback should be submitted at **30, 60, and 90 days**.

6. Data Sharing

- All completed assessments and optional materials should be shared with the project team at the designated time points to support program evaluation and learning.

**For questions, please contact
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