Thanks for being here. Some tips for joining our live webinar:

• If the slides don’t advance or the sound drops, refresh or reload your screen by clicking a button like this or this near the top of your screen.

• The size of each box you see (Slides, Q&A, Resource List, Panelists) is adjustable. Resize by dragging from the bottom right corner of each.

• Type your questions in the Q&A box throughout the hour. Our team will answer as many as we can.

• Questions on another topic? We’ve covered everything from genetics to constipation in our series. Link to the full library in the Resource List.
WHAT WE’LL COVER TODAY

- What is gut bacteria and the microbiome?
- Why do we look at the gut in Parkinson’s research?
- What do we know about the possible connection between gut bacteria and Parkinson’s disease?
- Does diet play a role?
- How may we use these findings to measure and/or treat Parkinson’s?
OUR PANELISTS

Moderator:
- Dave Iverson
  - Founding Member, MJFF Patient Council

Panelists:
- Jeff Bronstein MD, PhD
  - Professor of Neurology
  - Fred Silton Family Chair in Movement Disorders
  - Director of Movement Disorders
  - David Geffen School of Medicine at UCLA

- Filip Scheperjans, MD, PhD
  - Neurologist
  - Helsinki University Hospital
WHAT IS GUT BACTERIA?

- Our intestinal tracts are home to about 100 trillion bacteria (3 lbs. worth).

- This community of microorganisms that calls us home is known as the microbiome.

- The gut microbiome plays a key role in developing and regulating our immune system.

- Gut bacteria may affect functioning of nerves in the gut, which could affect nerves of the brain.
WHY DO WE LOOK AT THE GUT IN PARKINSON’S RESEARCH?

1. The gut is an entry point for environmental exposures such as pesticides.

2. Some researchers believe changes seen in the key Parkinson’s protein alpha-synuclein first happen in the gut.

3. Constipation is reported as one of the earliest Parkinson’s symptoms.

4. Slow emptying of the stomach (gastroparesis) is a Parkinson’s symptom and impacts medication absorption/effect.
WHAT DO WE KNOW ABOUT THE GUT AND PARKINSON’S CONNECTION?

People with Parkinson’s may have less of bacteria that protect from environmental toxins and inflammation.

Gut bacteria levels may be associated with different types of Parkinson’s symptoms, such as gait/balance difficulty.

Bacteria in the gut may influence medication response.
DOES DIET PLAY A ROLE?

We don’t know yet, but a healthy diet is never a bad idea.

» Studies are capturing data on diet to make connections to Parkinson’s disease.

» We don’t know exactly which probiotics or how much would impact Parkinson’s-associated gut bacteria.
   – Probiotics: bacteria found in food and thought to provide health benefits

» A healthy diet (high fiber, low sugar and saturated fat) does alter the microbiome.

» More on how a healthy diet can help manage Parkinson’s through the link in the Resource List.
HOW COULD WE USE BACTERIA FINDINGS TO MEASURE/TREAT PD?

1. Slow progression of Parkinson’s disease and improve health

2. Screen for or track Parkinson’s disease

3. Learn about disease process from the role of bacteria linked to PD

4. Choose people for studies (such as for gait/balance trials)

5. Regulate gut bacteria to optimize medication response

Image from Everyday Health
QUESTIONS & ANSWERS

Type your questions in the Q&A box in the middle of your screen.

Check the Resource List for more information.
PARTICIPATE IN CLINICAL RESEARCH: foxtrialfinder.org

WATCH PREVIOUS WEBINARS: michaeljfox.org/webinars

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