



By: Baharak Moshiree MD MSc, Mackenzie Jarvis PA-C, DMS, Atrium Health, Wake Forest, Digestive Health-Morehead Medical Plaza; Marissa Lombardi, International Foundation for Gastrointestinal Disorders



International Foundation for Gastrointestinal Disorders ([www.iffgd.org](http://www.iffgd.org))

🕒 Reading time: 4 minutes © Copyright 2022 by the International Foundation for Gastrointestinal Disorders

## Definitions

**Parkinson's disease (PD)** is a movement disorder that occurs when the brain does not produce enough dopamine.

Symptoms usually develop slowly and get worse over time. Typically, PD starts on one side of the body and over time affects both sides. As symptoms continue to develop, people living with PD may have trouble walking, talking, or doing simple tasks. There is no specific test to diagnose PD. A healthcare provider carefully reviews a person’s medical history and does an exam to check balance and coordination. This will then allow the healthcare provider to give a correct diagnosis.

**Dopamine** is a chemical that is used by the nervous system to send messages between nerve cells.

**Gastrointestinal (GI) Motility** is defined as the movement of food through the body’s GI tract. The GI tract includes all digestive organs and begins with the mouth and ends with the anus. Another name used by healthcare providers is neurogastromotility. This refers to the relationship between your nervous system and GI tract, and the effect this has on GI motility.

## PD and GI Motility

Parkinson’s disease may negatively affect how muscles and nerves function at any point along the GI tract, causing changes in GI motility. These changes in GI motility can lead to other conditions including:

- **Dysphagia** – Dysphagia occurs when someone has difficulty swallowing. This can include feeling like solid or liquid foods are sticking, or not passing correctly through the esophagus. The esophagus is the muscular tube that connects the mouth and the stomach, allowing food to pass into the stomach.
- **Gastroparesis (GP)** – GP is a condition of slowed stomach emptying with no visible blockage. Symptoms often include abdominal pain, nausea, vomiting, early fullness, and losing weight without trying.
- **Small intestinal bacterial overgrowth (SIBO)** – SIBO is a disease that does not allow nutrients to be absorbed well by the body. This is caused by a high number of bacteria in the small intestine and is often the result of slowed movement through the GI tract. Symptoms of SIBO can include bloating, gas, abdominal pain, nausea,

fatigue, a burning feeling in the chest, diarrhea, and constipation.

- **Chronic constipation** – This occurs when someone has one or more of the following symptoms:
  - fewer than 3 bowel movements (BMs) a week,
  - BMs that are hard, dry, or lumpy,
  - BMs that are difficult or painful to pass, and/or
  - a feeling that not all a BM has passed.

Diseases or conditions that occur at the same time are often referred to as **comorbid conditions**.

Changes in GI motility can have a large impact on the rest of the body. PD can specifically cause food and liquids to move through the body slower than normal. This can limit the body’s ability to properly take in and absorb medications. Most medications in pill form are created with a special coating or capsule that is designed to breakdown at a specific point along the GI tract. This allows medicine to be released and used by the body at the most effective part. When movement through the GI

tract is slowed, medicine can be released from a pill before reaching the part of the body it was aimed for.

### Symptoms of GI Motility Disorders

The following symptoms are common signs of a GI motility disorder. These symptoms can occur in healthy people and those with other conditions, such as Parkinson's disease. For those living with PD, having any of these symptoms can be harmful to daily life and overall health.

- **Losing weight without trying**
- **Abdominal pain** – dull to sharp pain that occurs inside the belly, often in the stomach or intestines
- **Nausea** – a feeling of sickness and feeling the need to vomit
- **Vomiting** – bringing food back up from the stomach into the mouth
- **Bloating** – discomfort and feeling of an “inflated balloon” in the stomach
- **Diarrhea** – frequent, loose BMs
- **Incontinence** – accidentally leaking urine or BMs
- **Constipation** – having 3 or fewer BMs a week, and/or difficulty passing BMs
- **Fatigue** – feeling low energy, overly tired

### Conclusion

Any of the possible conditions and symptoms that can occur with Parkinson's disease can lead to a significant impact on daily living and a lessened quality of life for patients. Nearly all patients with PD are impacted by some degree of GI symptoms since PD can lead to symptoms in all areas of the GI tract (i.e., esophagus, stomach, small bowel, colon, and rectum). These symptoms must be evaluated and treated to ensure the best possible quality of life and overall disease management. It is important to fully discuss all symptoms with your healthcare provider.

For more information on common gastrointestinal concerns with Parkinson's disease please view the following publications available on these conditions in IFFGD's publication library:

- Parkinson's Disease and Gastroparesis (404)
- Parkinson's Disease and SIBO (403)
- Parkinson's Disease and Dysphagia (405)
- Parkinson's Disease and Constipation (402)

---

#### About IFFGD

The International Foundation for Gastrointestinal Disorders (IFFGD) is a 501(c)(3) nonprofit education and research organization. We work to promote awareness, scientific advancement, and improved care for people affected by chronic digestive conditions. Our mission is to inform, assist, and support people affected by gastrointestinal disorders. Founded in 1991, we rely on donors to carry out our mission. Visit our website at: [www.iffgd.org](http://www.iffgd.org)

#### IFFGD

537 Long Point Road, Suite 101  
Mt Pleasant, SC 29464

#### About the Publication

Opinions expressed are an author's own and not necessarily those of the International Foundation for Gastrointestinal Disorders (IFFGD). IFFGD does not guarantee or endorse any product in this publication, or any claim made by an author and disclaims all liability relating thereto. This article is in no way intended to replace the knowledge or diagnosis of your healthcare provider. We advise seeing a healthcare provider whenever a health problem arises requiring an expert's care.

For more information, or permission to reprint this article, contact IFFGD by phone at 414-964-1799 or by email at [iffgd@iffgd.org](mailto:iffgd@iffgd.org)