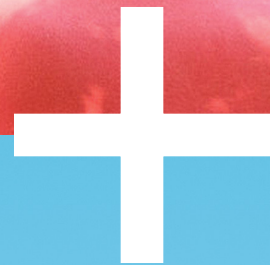


DETECT
EARLY
AND
EASILY



SmartPill™ Motility Testing System
Evaluate the entire GI tract with a single test

Medtronic
Further, Together

EVALUATE UNEXPLAINED GI SYMPTOMS WITH ONE TEST

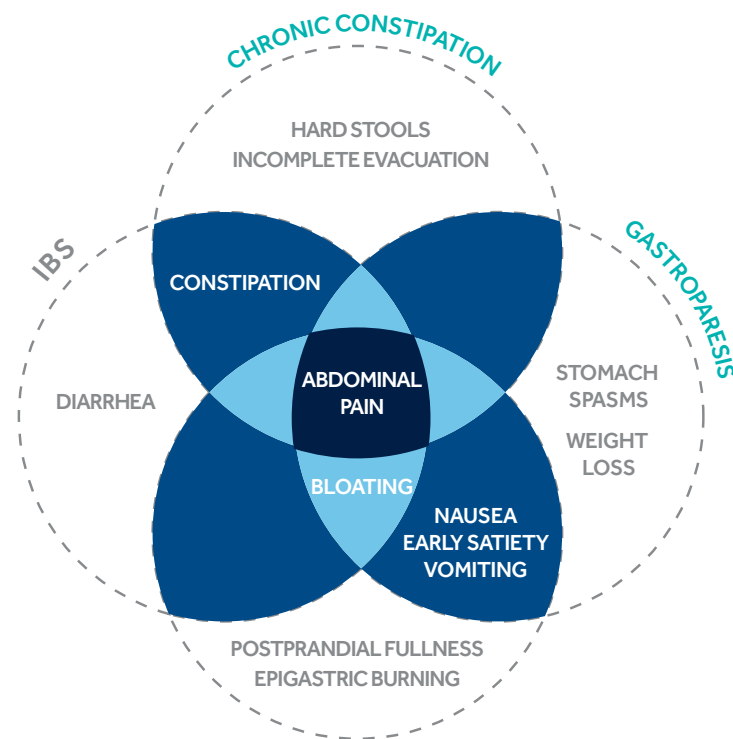
Over 30 million people in the US suffer from gastrointestinal (GI) functional disorders such as fecal incontinence, gastroparesis and chronic constipation.¹⁻⁴ This can pose diagnostic challenges.

- Often, patients presenting with functional GI symptoms have evidence of diffuse GI motility disorders⁵
- Upper and lower GI symptoms frequently overlap
- Signs of gastroparesis and chronic constipation are often confused with symptoms from conditions such as IBS and functional dyspepsia

For this reason, **localizing transit abnormalities to a specific GI region is important in the diagnostic evaluation** and should be done early in the process to guide appropriate therapy.⁶

The SmartPill™ motility testing system can help.

The system features an ingestible SmartPill™ motility capsule that measures pressure, pH, transit time and temperature as it passes through the entire GI tract. While the SmartPill™ motility testing system is not indicated for the diagnosis of IBS or functional dyspepsia, it can help rule out other conditions.



Benefits your patients:

- Improves comfort vs. existing diagnostic tests
- No radiation exposure
- Minimizes patient down-time
- Can improve patient symptoms by providing direction for therapy⁷⁻⁹





Benefits your practice:

- The only motility test that provides a **complete transit profile of the GI tract**
- Sensor-based capsule eliminates the need for multiple tests
- **Localizes abnormalities to specific regions of the GI tract** in the presence of overlapping motility symptoms⁶
- Standardizes the motility testing process with benchmarked results

The SmartPill™ motility testing system uses MotiliGI™ software to display and analyze the data, providing **test results in both graphical and report formats**. This system **provides valuable diagnostic information** including:

- Gastric emptying time
- Small bowel transit time
- Colonic transit time
- Whole gut transit time
- Pressure patterns from the antrum and duodenum

Results are used for the evaluation of gastroparesis and chronic constipation.

A unique way to assess motility:

- The SmartPill™ motility testing system collects and analyzes data from within the entire GI tract
- The SmartPill™ meal bar standardizes the procedure¹⁰
- The SmartPill™ motility capsule is an ingestible capsule that measures pressure, pH and temperature
- User downloads patient data from the recorder within minutes
- Test Analysis Wizard in MotiliGI™ software guides user through the data analysis

SmartPill™ motility test summary

	Physician-Confirmed (hr:min)	Computed (hr:min)
Gastric Emptying Time <small>≥4 hours suggests delayed gastric emptying</small>	3:13	3:14
Small Bowel Transit Time <small>Normal range 2.5 to 6 hours</small>	5:01	5:02
Colonic Transit Time <small>≥59 hours indicates delayed chronic transit</small>	70:53	70:54
Small/Large Bowel Transit Time <small>≥65 hours indicates delayed SLBTT</small>	75:55	75:56
Whole Gut Transit Time <small>Normal <73 hours</small>	79:08	79:11

Example of easy-to-interpret MotiliGI™ software summary report showing delayed colonic transit time.

FURTHER, TOGETHER

Medtronic is proud to partner with physicians, hospitals and institutions in the GI community who share our focus of advancing GI care and improving patients' lives.

For more information, please contact your Medtronic Sales Representative.



Caution: Federal law restricts this device to sale by or on the order of a licensed healthcare practitioner. Rx only.

Risk Information: Before administering the SmartPill™ motility capsule, rule out physiological/mechanical GI obstruction as a cause of patient symptoms. Do not perform a Magnetic Resonance Imaging (MRI) until capsule passage is confirmed by physician review of the MotiliGI™ graph or an x-ray of the kidneys, ureter and bladder [KUB]. If the SmartPill™ motility capsule is in the body during an MRI test, there is a risk of damage to the GI tract. Significant data dropout can occur in severely obese patients (>40 BMI). The risks of the SmartPill™ motility capsule include capsule retention and aspiration. Please refer to the product user manual or medtronic.com/gi for detailed information.

References: 1. Halder SL, Locke GR 3rd, Schleck CD, Zinsmeister AR, Melton LJ 3rd, Talley NJ. Natural history of functional gastrointestinal disorders: a 12-year longitudinal population-based study. *Gastroenterology*. 2007 Sep;133(3):799-807. Epub 2007 Jun 20. 2. Whitehead W, Borrud L, Goode P, Meikle S, Mueller E, Tuteja A, et al. Fecal Incontinence in U.S. Adults: Epidemiology and Risk Factors. *Gastroenterology*. 2009 August;137(2):512-517.e2. doi:10.1053/j.gastro.2009.04.054. 3. Jung H, Choung RS, Locke III GR, Schleck CD, Zinsmeister AR, Szarka LA, et al. The incidence, prevalence, and outcomes of patients with Gastroparesis in Olmstead County, Minnesota from 1996-2006. *Gastroenterology*. 2009;136:1225-33. 4. United States Census Bureau [Internet]. Washington, DC. 2014 [cited 2016 Jan 8]. Available from: <http://www.census.gov/quickfacts/table/PST045215/005>. 5. Bonapace ES, Maurer AH, Davidoff S, Krevsky B, Fisher RS, Parkman HP. Whole gut transit scintigraphy in the clinical evaluation of patients with upper and lower gastrointestinal symptoms. *Am J Gastroenterol*. 2000;95:2838-47. 6. Lin HC, Prather C, Fisher RS, Meyer JH, Summers RW, Pimentel M, et al. Measurement of gastrointestinal transit. *Dig Dis Sci*. 2005;50(6):989-1004. 7. Camilleri M, Thorne NK, Ringel Y, Hasler WL, Kuo B, Esfandyari T, et al. Wireless pH-motility capsule for colonic transit: prospective comparison with radiopaque markers in chronic constipation. *Neurogastroenterol Motil*. 2010;22(8):874-82. 8. Sarosiek I, Selover KH, Katz LA, Semler JR, Wilding GE, Lackner JM, et al. The assessment of regional gut transit times in healthy controls and patients with gastroparesis using wireless motility technology. *Aliment Pharmacol Ther*. 2010 Jan 15;31(2):313-22. Epub 2009 Oct 8. 9. Rao SS, Mysore K, Attaluri A, Valesin J. Diagnostic utility of wireless motility capsule in gastrointestinal dysmotility. *J Clin Gastroenterol*. 2011;45(8):684-90. 10. Rao SS, Camilleri M, Hasler WL, Maurer AH, Parkman HP, Saad R, et al. Evaluation of gastrointestinal transit in clinical practice: position paper of the American and European neurogastroenterology and motility societies. *Neurogastroenterol Motil*. 2011;23(1):8-23.

US160345 © 2016 Medtronic. All rights reserved. Medtronic, Medtronic logo and Further, Together are trademarks of Medtronic. All other brands are trademarks of a Medtronic company.

Medtronic