

SmartPill Motility Test

SmartPill is an ingestible capsule that measures pressure, pH and temperature as it travels through the gastrointestinal (GI) tract to assess GI motility. The SmartPill motility monitoring test can be performed at a clinic or physician's office to evaluate motility disorders like gastroparesis (a condition in which the contents of the stomach empty too slowly) and chronic constipation.

SmartPill also minimizes patient down-time by allowing patients to resume most normal daily activities while data are being collected by the capsule. SmartPill eliminates radiation exposure and is the only motility test that provides a complete transit profile of the GI tract.

Indications

- The SmartPill motility monitoring system measures whole gut and regional gut (stomach, small bowel and colon) transit times. Measurements of gastrointestinal tract transit times are used for evaluating motility disorders
- Gastric transit time (or gastric emptying time, GET) is indicated for the evaluation of patients with suspected gastroparesis. Delayed gastric emptying is suggested in such disorders as idiopathic and diabetic gastroparesis and functional non-ulcer dyspepsia
- Colonic transit time (CTT) is indicated for the evaluation of colonic transit in patients with chronic constipation and used to aid in differentiating slow and normal transit constipation. Combined small and large bowel transit time (SLBTT) is used as a surrogate measure of colonic transit in patients with chronic constipation when colonic transit time alone cannot be determined
- The system measures pH, pressure and temperature throughout the entire GI tract. Pressure contraction data from the antrum and duodenum can be used to calculate motility indices
- Not for use in pediatric patients (children under the age of 18 years)

Contraindications

- A history of gastric bezoars
- Swallowing disorders
- Suspected or known strictures, fistulas or physiological/mechanical GI obstruction
- History of gastrointestinal surgery within the past three months
- Severe dysphagia to food or pills
- Crohn's disease or diverticulitis
- Cardiac pacemakers or other implanted electromedical devices

Day 1

Because SmartPill measures the amount of time it takes food in your stomach to empty, when you arrive at your physician's office, you will be provided with a SmartBar® meal to eat prior to swallowing the SmartPill capsule.

After swallowing the SmartPill capsule, you will be given the SmartPill recorder that records data that will be wirelessly transmitted from the SmartPill capsule. This recorder should remain within two feet of you during the entire test and can be worn on a belt clip or lanyard for optimal mobility.

Once you leave your physician's office, you will be able to resume most of your normal activities, but should avoid excessive exercise.

Day 1-5

Throughout the test, the recorder should be worn at all times except during bathing and sleeping. The recorder should be kept within two feet of you to ensure that all data are being transmitted and collected from the SmartPill capsule.

Day 3-5

Once the SmartPill has passed with a regular bowel movement, you will return to your physician's office and the data will be downloaded from the recorder.

Interpretation and Consultation

Once the data have been downloaded, your physician will analyze and interpret your results. Your physician will discuss the test results with you.

