Gastroparesis

Basic Information
- Gastroparesis is a disorder in which food moves through the stomach more slowly than normal. This condition often results in severe, chronic nausea and vomiting, bloating, fullness, early satiety or abdominal pain that available drugs may not adequately control. Often, patients require some form of tube feeding to ensure adequate nutrition.
- Gastroparesis can be managed, but the disease cannot be cured.
- Type 1 diabetes is a major cause of the disorder. But, sometimes there is no known cause of gastroparesis.
- Complications of gastroparesis include malnutrition; food hardening into solid masses causing nausea, vomiting and stomach obstruction; and worsening diabetes by making blood glucose more difficult to control.

Key Statistics
- Gastroparesis affects more than 1.5 million Americans, with approximately 100,000 suffering from a severe form of the disorder. Standard medical therapy fails to relieve symptoms in approximately 30,000 of these patients.
- At least 20 percent of people with type 1 diabetes develop gastroparesis.
- Gastroparesis also occurs in people with type 2 diabetes, although less often.

Impact on Quality of Life
- Mealtimes must be carefully timed and portions controlled, which may make dining out difficult, if not impossible.
- Patients experiencing nausea and vomiting may not know when these episodes will occur.
- Feeding tubes or intravenous feedings can be restrictive which limits patient activity.
Diagnosing Gastroparesis

The diagnosis of gastroparesis is confirmed through the following test:

- **Radioisotope gastric-emptying scan:** The patient eats food containing a radioisotope, which is a slightly radioactive substance (not dangerous) that shows up on the scan. After eating, the patient lies under a machine that detects the radioisotope and shows an image of food in the stomach and leaving the stomach. If more than half the food remains after two hours, gastroparesis is diagnosed.

To rule out causes of gastroparesis other than diabetes, a physician may do an upper endoscopy or an ultrasound. An upper endoscopy guides a long, thin flexible tube called an endoscope down the esophagus and into the stomach to look at the lining of the stomach to check for any abnormalities. An ultrasound uses soundwaves to outline and define the shape of the gallbladder and pancreas to rule out gallbladder disease or pancreatitis.

Treatment Options

- Treatment options for both diabetic and non-diabetic patients include oral medications, changes in eating habits and, in severe cases, feeding tubes and intravenous feeding. Treating gastroparesis in diabetic patients may assist in controlling blood glucose levels and allow for changes in insulin type and timing of injections.

- An innovative treatment option from Medtronic is Enterra™ Therapy that has been approved by the FDA as a humanitarian use device. Enterra uses mild electrical pulses for gastric stimulation to help control the nausea and vomiting associated with gastroparesis (see Enterra fact sheet).