Gastrointestinal motility (moe TILL i tee) is the movement of the food we eat through the whole digestive tract (Picture 1). The length of the digestive tract is about 30 feet from the mouth to the rectum. Digestion occurs when the nerves and muscles in the digestive tract work together to move the food along.

**Purpose of this test**

The colon (also called the large intestines or bowel) stores and removes waste material by muscle contraction. The colonic manometry (koe LON ik mah NOM eh tree) test records the pressure waves that happen when the large intestines contract.

Pressures in the large intestines and the strength and coordination of muscle contractions are measured before and after eating. Colonic motility will also be measured after medicines are given that stimulate the colon. These measurements give detailed information on how well the large intestines are working.

**Home preparation**

Your child’s intestines must be cleaned out completely before the test can be done.

1. On (day) __________ (date) ____________, give your child clear liquids starting with breakfast.

   Clear liquids are those you can see through that have no pulp or food bits in them. They include water, white grape juice, Pedialyte®, apple juice, Gatorade®, Kool-Aid®, flavored gelatin, popsicles and broth with no noodles.

**Appointment**

Child's Name: ____________________
Arrival Date: ____________________
Arrival Time: ____________________

- Check in at the Admitting Department in the main lobby of the hospital.
- Check in at the Crossroads Registration.

**Picture 1** The digestive tract runs from the mouth to the rectum. The colon is also called the large bowel or large intestines.
Home preparation, continued

2. Your child **should not** take aspirin, ibuprofen (Motrin® and Advil®) or naproxyn (Aleve®) **one week before the procedure and for 3 days after the procedure**. Your child may take acetaminophen (Tylenol®).

3. On (day)____________ (date)____________, give your child the following:
   - Dulcolax® (bisacodyl) 5mg tablet(s), _______ tablets at ___AM and ____PM.
   - Dulcolax® (bisacodyl) suppository, ____ suppository at ____AM and ____PM.
   - Miralax® (polyethylene glycol 3350). Mix _______ gm (which is ______ capfuls filled to dosage line inside cap) in ________ ounces of Gatorade®, Kool-Aid®, or any other clear liquid.
   - Other: __________________________________________________________

Hospital preparation

The first day of the test

On the day of admission (day) _______________ (date) ______________________ your child may **NOT** have anything to eat or drink after _________________.

- A nasogastric tube (NG-tube) will be placed. This tube will be used to give a cleansing solution to finish cleaning out the bowels. This solution will be given until stools are clear and liquid.
- If your child has a G-tube or GJ-tube, it will be used to give the cleansing solution.
- Any female who is menstruating or is 12 years of age or older will get a urine pregnancy test at the hospital on the day of the test.
- Please tell your doctor if your child has had problems with anesthesia in the past. Also tell the doctor if your child has a heart condition, apnea or other breathing problems. This will help the doctor decide which type of anesthesia medicine is best for your child.
- Other: __________________________________________________________
- An IV (intravenous catheter) will be started.
- Your child’s test is scheduled for______________ (date) at ____________ (time).
How the test is done

The test will be done according to your child’s needs. You will be asked to sign a consent form before the procedure.

☐ Your child will be taken to the Operating Room for a motility catheter to be put in place by colonoscopy. This is done after the child falls asleep with general anesthesia.

☐ Your child will be taken to Interventional Radiology (IR) for a motility catheter to be put in place by the radiologist.

☐ Your child will be taken to the GI Procedure Room for a motility catheter to be put in place by colonoscopy. This is done after the child falls asleep with general anesthesia.

- **A PARENT OR LEGAL GUARDIAN MUST BE PRESENT** to give consent for the test and for the sedation or anesthesia. If a parent or legal guardian cannot come, please give a phone number where he or she can be reached at the time of the test.

- A nurse will connect your child to monitors to check heart rate, breathing, oxygen levels and blood pressure. The nurse and the anesthesia doctor will monitor your child during the test.

- Once your child is asleep under anesthesia, a long, flexible motility catheter will be placed into the colon through the rectum, cecostomy or stoma. X-ray pictures will be taken to help the radiologist put the motility catheter in the right place. The motility catheter has holes or sensors spaced evenly apart. This is to measure the pressure in different areas of the colon.

- You may stay with your child until the motility catheter placement begins. Then you may wait in the IR, GI or the Surgery waiting room. Your child will go to the PACU (Post Anesthesia Care Unit) when the procedure is finished until he is fully awake. Then your child will go to the GI motility room unless other directions have been given.

- The motility catheter is connected to a computer. Water is slowly pushed through each hole in the catheter. The computer records the pressures against the water as it tries to flow out of the catheter. Other types of catheters that do not have water passing through them may also be used to measure pressure.

- During the testing, we will try to make the intestines contract. Your child may be given medicines through the motility catheter. After this, the recordings continue for another hour.

- From start to finish, the measurement of pressures usually takes 4 to 8 hours. Please bring any toys, hand-held video games or DVD movies your child enjoys to help pass the time.
Risks and possible complications

- Perforation (hole in the colon) can occur. This is very rare unless the colon is very diseased and thin. Perforations usually need surgery to repair the hole.

- Infections can occur. This is rare unless your child has a heart problem or problems with the immune system. In these cases, antibiotics are usually given.

- This test requires a certain amount of cooperation from the child. If it is too hard for your child to cooperate, we may have to stop the test.

If you have any questions, be sure to ask your doctor.