

UPPER GASTROINTESTINAL (UGI) SERIES

AT CHILDREN'S HOSPITAL OF PITTSBURGH OF UPMC, we believe parents and guardians can contribute to the success of this test, and we invite you to participate. Please read the following information to learn about the test and how you can help.

Fast Facts About the Upper Gastrointestinal (UGI) Series

- The UGI is an X-ray of the upper gastrointestinal tract.
- On the day of the UGI, your child should not eat before the test.
- Your child will be awake at all times.
- The test usually takes between 15 minutes and one hour.
- Your child can resume a normal diet and activities afterward.



What Is An Upper Gastrointestinal (UGI) Series?

An upper gastrointestinal (*GAS-tro-in-TEST-in-al*) series, or UGI, is an X-ray test that shows the structure of the upper gastrointestinal tract, which is the part of the body that food passes through as it is digested. The upper gastrointestinal tract includes the esophagus, which is the tube in the neck that connects the mouth to the stomach through which food passes as it is eaten; the stomach; and, sometimes, part of the small intestine.

- X-ray pictures are taken after your child drinks a special liquid called barium (*BARE-ee-um*) that coats and outlines the upper gastrointestinal system.
- A UGI shows doctors how well the upper gastrointestinal tract is working.
- A UGI gives doctors detailed information about your child's upper gastrointestinal tract that they cannot learn from a physical examination.

Home Preparation

- On the day of the test, your child should not eat or drink anything before the test is done.
- Newborns to infants 4 weeks old should not take food or drink by mouth for 2 hours before the test.
- Young children between the ages of 1 month to 24 months should not have anything by mouth for 4 hours before the test.
- Children ages 2 years and older should not eat or drink for 8 hours before the test.

- If you have any questions regarding these requirements, please contact the Department of Pediatric Radiology.
- You may bring along a "comfort" item — such as a favorite stuffed animal or blanket— for your child to hold during the test.

The Test

The UGI series test is done at the Department of Pediatric Radiology of Children's Hospital. In the exam room will be a pediatric radiology doctor, who will be taking the X-ray pictures of your child's upper gastrointestinal system, and an X-ray technologist, who will be helping the doctor. You will see an X-ray machine, a long table, and a television screen. You might explain to your child that the X-ray machine is a large camera for taking pictures that will be shown on the screen. If your child has any questions, the doctor or X-ray technologist will be happy to answer them before the test.

Your child will be asked to remove his or her clothing and put on a hospital gown. When your child is ready, he or she will go to the fluoroscopy (*floor-OS-co-pee*) room and the test will begin.

- Your child will be awake during this test.
- Your child will be asked to lie down and drink on the table.
- In the fluoroscopy room, your child will be given a milky liquid called barium in a cup to drink through a straw. This liquid allows the doctors to see the gastrointestinal system more clearly on the X-ray pictures. Barium looks like a milkshake, but does not have a pleasant taste. The doctor or X-ray technologist can add flavoring to the barium to make it taste better if your child wants it flavored.

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- If your child is unable to drink the barium, a thin flexible tube may be placed through his or her nose to get the barium into the stomach.
- As your child drinks the barium, the doctor will move the X-ray camera over your child. The camera will come close to, but not touch, your child.
- The doctor will begin to take the X-ray pictures as the barium is swallowed and passes through the esophagus into the stomach. Your child will be asked to continue to drink the barium while the doctor takes the X-ray pictures.
- The X-ray pictures will allow the doctor to watch the progress of the barium through the gastrointestinal system.
- Your child will be asked to roll from side to side while the doctor takes X-ray pictures.
- When the milky liquid empties from the stomach and the doctor has seen enough of it pass through the small intestine to make a diagnosis, the UGI is complete.



As a parent, you may have concerns about radiation exposure. Children's Hospital takes every precaution to make sure your child is safe.

- Our goal is to do the test correctly and thoroughly, while exposing your child to the smallest amount of radiation necessary to take the X-ray.
- Advances in equipment and film have lowered the amount of radiation your child will receive.
- All of the equipment is inspected regularly.
- Parts of the body that are not being X-rayed will be protected with a lead cover or apron when possible.
- We encourage you to talk to your child and hold his or her hand.
- You may bring along a "comfort" item—such as a favorite stuffed animal or blanket—for your child to hold during the test.
- Please do not distract the medical team or interrupt the test in any way.
- We welcome your questions, but please ask them either *before* or *after* the test.

A Parent's/Guardian's Role During the Test

We welcome your help and support during this test. One parent or guardian is invited to join your child in the examination room. Other adults and children must wait in the waiting room.

- This test involves the use of radiation. Women who are pregnant or believe they may be pregnant will not be able to stay in the room for the exam. In this case, please bring another adult who can stay with your child during the test.

The X-ray technologist will show you where to stand in the examination room during the test. Please follow the instructions of the medical professionals performing the test.

- The most important role of a parent and guardian during the test is to help your child stay calm and relaxed. It is important that your child stays still when the X-ray pictures are being taken.
- The best way to help your child stay calm is for you to stay calm.

After the Test

The UGI takes about 15 minutes to 1 hour. When the doctor and X-ray technologist have taken all the X-rays they need, they will check to make sure the pictures are clear, which takes only a few minutes. Once they are satisfied with the pictures, the UGI is finished.

- Before leaving, you will be told about any follow-up care.
- After the test, your child can return to normal activities and resume a normal diet.
- Your child's bowel movements will look white for a day or two because of the barium. White bowel movements are normal.
- Your child should drink plenty of liquids to allow his or her bowel movements to return to normal.
- Your child may have some constipation. Drinking lots of liquids will help. Your child may also take a mild laxative.
- If your child's constipation continues, please contact your family doctor or PCP for advice and treatment.
- A report of your child's UGI series will be sent to the doctor who prescribed it, usually within 24 hours. If the results are urgent, the referring doctor will be contacted immediately.

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- Please contact the doctor who prescribed the test for the results.
- If you have any other questions or concerns about the UGI series, please call the Department of Pediatric Radiology and a nurse or X-ray technologist will discuss them with you.

Special Needs and Patient Preparation

If your child has any special needs or health issues you feel the doctor needs to know about, please call the Department of Pediatric Radiology at Children's Hospital of Pittsburgh *before the test* and ask to speak with a nurse. It is important to notify us *in advance* about any special needs.

Preparing your child beforehand, as well as comforting your child during the test, will help your child have a more positive experience. Sometimes it is difficult to know how to explain tests to children. If you have any questions about ways to prepare or support your child, or feel your child will have difficulty during the test, please call the Department of Pediatric Radiology at Children's Hospital of Pittsburgh and ask to speak with the child life specialist.



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To see the list of all available patient procedures descriptions, please visit www.chp.edu/procedures.