Upper GI Exam
How to prepare for your procedure

What is upper gastrointestinal (GI) tract radiography?
Upper gastrointestinal (GI) tract radiography is an X-ray exam of the esophagus, stomach, and first part of the small intestine. For the organs to show up on film, the upper GI tract must be coated or filled with a contrast material called barium, an element that appears bright white on the pictures.

The exam is called upper GI radiography when the esophagus, stomach, and duodenum are studied, or a barium swallow when only the pharynx and esophagus are studied. Some patients are asked to swallow baking-soda crystals to create gas and further improve the pictures. This procedure is called air-contrast or double-contrast upper GI.

How does the exam work?
First, the radiologist watches the flow of barium into the upper GI tract through a fluoroscope, a device that projects pictures in a movie-like sequence onto a screen. Still pictures are then taken.

How should I prepare for the exam?
- Your doctor will give you detailed orders on how to prepare for your upper GI exam.
- The quality of the pictures can be poor if the stomach is not empty. You will likely be asked not to eat or drink anything (including medicine, especially antacids) after midnight on the morning of the exam.
- You should not chew gum or smoke after midnight. These actions can cause stomach secretions, which also may affect the pictures.
Before the exam begins, you need to remove all jewelry and put on a gown.

**How is the exam done?**

Upper GI exams are often scheduled in the morning to reduce your time of fasting.

1. A radiology technologist will place you on a table next to the X-ray camera.
2. You may be asked to swallow baking-soda crystals (sometimes called *fizzies*), which will create gas in your stomach.
3. You will then be asked to drink a cup of liquid barium, which looks like a light-colored milkshake.
4. The radiologist will note the passage of barium into your esophagus and stomach.
5. Once the upper GI tract is coated with the barium, still pictures are taken.
6. The exam is usually done within 20 minutes.

**What will I feel during the exam?**

- The liquid barium has a chalky taste, although it can be masked by added flavors, such as strawberry, cherry, or vanilla.
- If you receive gas-producing crystals (*fizzies*), you may feel the need to burp. The radiologist or technologist will tell you to hold the gas in because it makes the pictures of the stomach more detailed.
- First you will be standing up, then lying down, as the radiologist takes pictures of your esophagus and stomach.
- You will need to hold your breath to prevent blurring of the still images.
- You will be asked to move into different positions while standing, and while lying on the exam table.
- As the exam continues, you may be asked to drink more barium.
- During this exam, you may hear the noises of the X-ray camera moving into place.
- Once the exam is complete, you will be asked to wait. The radiologist will review the pictures for quality.
Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns. Clinic staff are also available to help.

- If the X-rays are clear, you can dress and leave the exam room. Repeat imaging will be done as needed.
- After the exam, you can resume a normal diet and take your medicine unless told otherwise by your doctor.
- You should drink an extra 4 to 8 glasses of water.
- The barium may color stools gray or white for 48 to 72 hours after the exam. Sometimes the barium can make it hard for you to move your bowels. This is usually treated with an over-the-counter laxative.

Who interprets the results and how do I get them?

Most patients have an upper GI because their primary care doctor (referring doctor) has ordered it. A radiologist, trained to interpret upper GI exams, will review the pictures and send a report to your primary care doctor, who will give you your test results. The radiologist will not discuss the results with you. Based on the findings, you and your primary care doctor will decide the next step, such as treatment for a problem, as needed.