

An upper gastrointestinal series (UGI) is a radiographic (X-ray) examination of the upper gastrointestinal (GI) tract. The esophagus, stomach, and duodenum (first part of the small intestine) are made visible on X-ray film by a liquid suspension. This liquid suspension may be barium or a water-soluble contrast. This test is performed to evaluate esophageal motility, hiatal hernias, and other causes of GI symptoms.

Fluoroscopy is often used during an upper GI series. Fluoroscopy is a study of moving body structures — similar to an X-ray “movie.” A continuous X-ray beam is passed through the body part being examined, and is transmitted to a TV-like monitor so that the body part and its motion can be seen in detail. In an upper GI series, fluoroscopy allows the radiologist to see the movement of the barium through the esophagus, stomach, and duodenum as a person drinks.

How do I prepare for an upper GI series?

PRECAUTIONS: If you are pregnant or think you may be pregnant, you should notify your doctor. Notify the radiologist if you have had a recent barium X-ray or cholangiography procedure, as this may interfere with obtaining an optimal X-ray exposure of the upper GI series.

EAT/DRINK: The night **before** your exam, do not eat or drink anything after midnight until the exam is over.

What happens during an upper GI series?

Generally, an upper GI series follows this process:

- You'll be asked to remove any clothing, jewelry, or other objects that may interfere with the procedure.
- If you're asked to remove clothing, you'll be given a gown to wear.
- You will be positioned on an X-ray table that can tilt you from a horizontal to an upright position. You may be asked to change positions (for example, lying on your side, back, or stomach) at intervals during the procedure.
- The radiologist will ask you to take a swallow of a thickened contrast drink. The contrast is usually flavored, although it may not be very pleasant tasting.
- As you swallow the contrast, the radiologist will take single pictures, a series of X-rays, or a video (fluoroscopy) to observe the contrast moving through the pharynx.
- If you're having a procedure with barium, you'll be given a thinner barium drink to swallow. X-rays and/or fluoroscopy will be used to observe the barium's passage down the esophagus. You may also be asked to swallow a barium tablet, which can help to visualize certain structural problems of the esophagus.
- The radiologist may press on your abdomen during the examination to help visualize the stomach and aid in coating of the stomach wall.
- If you're having a double contrast study, you may be asked to swallow a powder, tablet, or carbonated beverage. Alternately, you may be asked to drink the barium through a perforated straw. Because the gas that's produced will expand and enhance the visualization of the inner surface of the upper GI organs, it will be important not to burp.
- Once all required X-rays have been taken and the test is complete, you will be assisted from the table.

UPPER GASTROINTESTINAL SERIES (UGI)
