

Gastric Emptying Scan

How to prepare

This handout explains how to prepare for a gastric emptying scan, how it works, how it is done, what you may feel during the scan, and how you will get your results.

What is a gastric emptying scan?

A *gastric emptying scan* (GES) is a nuclear medicine exam that uses a radioactive material that you will eat in a meal. You will eat this meal in the Radiology department before your scan. The radioactive material allows doctors to see how your stomach empties.

This scan is used to help diagnose conditions called *motility disorders*. These are conditions that change the way the stomach contracts and moves food into your intestines. A GES is a form of radiology, because radiation is used to take pictures of your body.

How does the scan work?

A *gamma camera* takes pictures as the radioactive food moves through your stomach. The camera detects the gamma rays emitted from the food. A computer then produces pictures and measurements of your stomach.



A gamma camera will take pictures as the radioactive food moves through your stomach.

How should I prepare for the scan?

- You will need to fast for 6 hours before the scan.
- If you smoke, do not smoke the morning of the test and during the hours of the scan.
- If you are a woman and you are still menstruating, it is best to have your scan done in the first 10 days of your menstrual cycle.

- **Do not** take these drugs for at least 2 days before your test, unless your doctor tells you otherwise:
 - **Drugs called prokinetic agents that speed up the motility of your GI tract.** Some of these are metoclopramide (Reglan), erythromycin, tegaserod (Zelnorm), and domperidone (Motilium).
 - **Drugs called anticholinergic antispasmodic agents that slow down the motility of your GI tract.** Some of these are Bentyl, Donnatal, Levsin, Robinul, and Hyosyne.
 - **Pain medicines called opiate analgesics.** Some of these are codeine, demerol, Percocet (Oxycodone), Tylenol #3, Tylox, Oxycontin, Percodan, Fentanyl patch, morphine, Methadone, Vicodin (Hydrocodone), and Ultram (Tramadol).
 - **Marijuana.**
- Do **not** take any laxatives the day before or any time during the test.

Note: It is OK to take relaxants (called *benzodiazepines*) such as Ativan, Valium, Librium, Xanax, and others. It is also OK to take anti-nausea medicines (called *phenothiazines*) such as Thorazine, Compazine, Phenergan, and others. These drugs do not affect gastric emptying.

- Please call the Nuclear Medicine department at 206-598-4240 if you have any questions about how certain drugs will affect this test.
- You may take all other medicines the day of your test with small sips of water. Take these at least 2 hours before your test begins.
- If you have severe nausea on the day of your test, we may give you medicine to reduce your nausea.

If You Have Diabetes

On the day of the test:

- Your fasting blood glucose should be less than 275 mg/dL. A technologist will check your blood glucose before your test starts.
- Please bring your insulin or other diabetes medicine with you. You may need to take it with your gastric emptying meal.

How is the scan done?

- You will be given 2 small sandwiches, one filled with jam and one filled with 4 cooked egg whites that have been injected with a small dose of radioactive material. You will be asked to eat the sandwiches and drink water within 10 minutes. The egg will taste just like a regular egg. If you are allergic to eggs or wheat, please tell the person you schedule your appointment with. A different meal will be used.

- After eating, you will be asked to lie flat on your back while the gamma camera take a picture of your stomach. You must lie still when the camera is taking pictures. If you move, the pictures will be blurry and may have to be taken again.

What will I feel during the scan?

- Lying still on the exam table may be hard for some patients. The technologist will help make you comfortable.

How long will the scan take?

- From start to finish, your gastric emptying scan will take about 4 hours. There are 4 parts to the test:
 - *First half hour:* Eat meal, then take pictures with gamma camera (pictures take 5 minutes)
 - *1 hour after meal:* Take pictures (5 minutes)
 - *2 hours after meal:* Take pictures (5 minutes)
 - *4 hours after meal:* Take pictures (5 minutes)
- After eating the meal:
 - You may leave the Nuclear Medicine department between the times you have the pictures taken.
 - **Do not eat or exercise** until after the last set of pictures has been taken.

Who interprets the results and how do I get them?

When the test is over, the nuclear medicine doctor will review your images, write up a report, and talk with your doctor about the results. Your doctor will talk with you about the results and your treatment options.

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

UWMC Nuclear
Medicine/Imaging
Services: 206-598-6200

Harborview Imaging
Services: 206-774-3105