

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 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 nuclear medicine exam that uses a radioactive material to detect and treat disease.. It is a form of radiology, because radiation is used to take pictures of your body.

How does the scan work?

First, you will eat a small meal in the Nuclear Medicine department. The food you eat will contain a radioactive material that emits *gamma rays*.

A *gamma camera* will take 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. These pictures will show doctors how your stomach empties.



A gamma camera

How do I prepare?

- *Women:* Tell your provider if you are pregnant.
- If you are allergic to eggs or wheat, tell the scheduler when you set up your appointment.
- You will need to *fast* (not eat or drink anything) for 6 hours before the scan.

- If you smoke, do **not** smoke the morning of the test and during the hours of the scan.
- *Women:* If you are still menstruating, it is best to have your scan done in the first 10 days of your menstrual cycle.

Medicines and Drugs

Do Not Take

- Do **not** take any laxatives the day before or at any time during the test.
- For at least 2 days before your test, do **not** take these drugs unless your doctor tells you otherwise:
 - ***Prokinetic agents that speed up the motility of your GI tract*** such as domperidone (Motilium), erythromycin, metoclopramide (Reglan), and tegaserod (Zelnorm)
 - ***Anticholinergic antispasmodic agents that slow down the motility of your GI tract*** such as Bentyl, Donnatal, Hyosyne, Levsin, and Robinul
 - ***Opiate analgesics (pain medicines)*** such as codeine, demerol, Fentanyl patch, methadone, morphine, Oxycontin, Percocet (oxycodone), Tylenol Percodan, #3, Tylox, Vicodin (hydrocodone), and Ultram (tramadol)
 - **Marijuana**

Call the Nuclear Medicine department at 206.598.4240 if you have any questions about how certain drugs will affect this test.

OK to Take

It is OK to take these medicines on the day of your test:

- Relaxants (*benzodiazepines*) such as Ativan, Valium, Librium, Xanax, and others
- Anti-nausea medicines (*phenothiazines*) such as Thorazine, Compazine, Phenergan, and others
- All other prescribed medicines

If you take medicines on the day of your test, take them:

- With small sips of water
- At least 2 hours before your test begins

On Scan Day

If You Have Diabetes

- Your fasting blood glucose should be less than 200 mg/dL on the day of your test. A technologist will check your blood glucose before your test starts.
- Please bring your insulin or other diabetes medicines with you. You may need to take it with your gastric emptying meal.

If You Are a Woman of Childbearing Age

Before the tracer is injected:

- Tell the technologist if there is **any** chance you may be pregnant.
- We will ask if you are breastfeeding.
- We will again confirm that there is no chance you are pregnant.

What to Expect

- If you have severe nausea on the day of your test, we may give you medicine to reduce your nausea.
- We will give you 2 small sandwiches to eat. One will be filled with jam. The other will be filled with 4 cooked egg whites that have been injected with a small dose of radioactive material.
- We will ask you to eat both sandwiches and drink water within 10 minutes. The egg will taste like a regular egg.
- After you eat, we will ask you to lie flat on your back while the gamma camera takes 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 people. The technologist will help make you comfortable.

How long will the scan take?

From start to finish, this scan takes about 4 hours. There are 4 parts to the test:

- **First half hour:** Eat the sandwiches, take pictures (pictures take 5 minutes)

- **1 hour after eating:** Take pictures (5 minutes)
- **2 hours after eating:** Take pictures (5 minutes)
- **4 hours after eating:** Take pictures (5 minutes)

After eating the sandwiches:

- 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.

What happens to the radiation?

Drink plenty of water for 24 hours after your scans to help your body get rid of the radiation. Most of it will leave your body in your urine or stool. The rest will go away over time.

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 provider about the results. Your provider will talk with you about the results.

You may also read your results on your MyChart page. If you need copies of your images on disc, call 206.598.6206.

You and your provider will decide the next step, such as treatment for a problem, as needed.

Questions?

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

- UWMC Nuclear Medicine/Imaging Services: 206.598.6200
- Harborview Imaging Services: 206.774.3105
- UWMC - Northwest Imaging Services: 206.598.4240