

What is defecography?

- **Defecography** is an x-ray imaging exam to help find any structural or functional problems in the anus, rectum, or pelvic floor. This exam uses real-time, moving images (called **fluoroscopy**) combined with a **contrast material** (a liquid that helps make some body parts more visible on x-rays) to see how different muscles and organs move when you have a bowel movement.
- The type of contrast material used during this exam is called **barium**. Barium is a white, chalky liquid. We will use the barium at different times during the exam to help our team see structures like the bowel, the anus, the rectum, and the vagina. Barium is not a radioactive substance.

Why did my provider recommend defecography?

- Your healthcare provider may recommend this exam to help figure out the cause of:
 - Anal pain
 - **Constipation** (difficulty having a bowel movement)
 - Fecal incontinence (uncontrolled bowel movements)
 - **Incomplete evacuation** (the feeling that not everything came out during a bowel movement)
- This exam can also help to diagnose a condition, such as:
 - Pelvic floor dysfunction (failure of the muscles and nerves in the pelvic floor to coordinate and move properly during a bowel movement)

 Organ prolapse (when the muscles supporting one of your organs have weakened enough to allow the organ to shift out of place or even bulge out of your pelvic floor)

How do I prepare for this exam?

- Wear comfortable, loose-fitting clothing to your exam. We will give you a gown to wear during the exam.
- If you are a person with a vagina (assigned female at birth), we will give you a small amount of barium to drink 1 hour before the start of the exam.

What happens during the exam?

- We will take you to an exam room with a private restroom, where you will change into a hospital gown. After changing, your healthcare team will help to position you on the exam table. Because of the sensitive nature of this exam, there will always be at least 2 healthcare team members in the room with you during the exam.
- We'll ask you to lie on your left side, with your knees bent up slightly toward your chest. We'll do a quick check of your anus using a gloved finger to make sure there are no concerns before we start the full exam.
- Your healthcare team will then insert barium paste into your rectum. We slowly insert the barium paste until your rectum is full. You may feel some mild bloating or cramping during this part. When your rectum is full, you will feel the natural urge to have a bowel movement, and you'll be ready for the imaging part of the exam.
 - For patients who were assigned female at birth, we will also insert a small amount of barium paste into the vagina.
- For the imaging part of the exam, the table will slowly tilt up and we will place a special toilet under you. You will sit on the toilet as you normally would. The healthcare team operating the imaging equipment will give

you special instructions. They will tell you when to squeeze, hold, relax, and push your muscles as they record images. You will have to make sure to use enough force when doing these actions so that the healthcare team can clearly see how your muscles and organs move.

How long is the exam?

The whole exam takes about 20-25 minutes and typically does not cause pain. The exam may be a little awkward, but your healthcare team will do the best they can to make sure that the exam is completed as quickly as possible and that you stay covered by your hospital gown. You can pause or stop the examination at any time if you need to.

What happens after the exam?

- After the exam, you can use the private restroom to wash up and change back into your clothing. After that, you're able to go home.
- Drink plenty of fluids to help flush the barium out of your system. You can also use a mild laxative, such as a single dose of milk of magnesia, to help clear the barium from your rectum.
- You may continue to see the white, chalky barium when you use the restroom for the next several days.

Who should I call if I have questions?

- On Monday through Friday from 8:00 AM 4:30 PM: Call the Department of Radiology at (734) 936-4500. You may also call the doctor or clinic who ordered this test for you.
- After hours, or on weekends or holidays: Call hospital paging at (734) 936-6267 and ask for the radiology resident on call.

Disclaimer: This document contains information and/or instructional materials developed by University of Michigan (U-M) Health for the typical patient with your condition. It may include links to online content that was not created by U-M Health and for which U-M Health does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition, or your treatment plan.

Author: Tresa Griffith, R.T.(R)(MR)(ARRT) Reviewers: Becca Leonard, R.T.(R)(ARRT), Jenn Piechorowski, R.T.(R)(ARRT), Cindy Patierno, R.T.(R)(ARRT), Kimberly Shampain, MD, Katherine Maturen, MD MS, Cary Pianan, PA-C Edited by: Brittany Batell, MPH MSW CHES®

Patient Education by U-M Health is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License. Last revised 04/2025