

## CT: Virtual Colonoscopy

### *How to prepare and what to expect*

*This handout explains how a virtual colonoscopy CT works, how to prepare for it, how it is done, what to expect, and how to get your results.*

If you have questions about your exam, call the number checked here:

- UWMC CT Technologists:** 206.598.2046
- NWH CT Technologists:** 206.668.2061
- Eastside Clinic Imaging Services:** 206.598.6766

### What is a virtual colonoscopy?

A *virtual colonoscopy* is a *computed tomography* (CT) exam of the colon. It uses a special X-ray machine to take detailed pictures.

CT can show many types of tissue in the same image. Your doctor will be able to see pictures of your liver, spleen, pancreas, kidneys, lower *gastrointestinal* (digestive) tract, colon, and rectum.

### How does it work?

During the exam, you will lie on a table inside a CT machine. Many X-ray beams will be passed through your abdomen at different angles. The X-ray tube will take pictures as it revolves around you. The pictures show cross-section images (*slices*) of the area. Your doctor will view the pictures on a computer.



*During your exam, you will lie on a table inside a CT machine.*

### How do I prepare?

You will need to do a bowel prep before your exam. **At least 2 days before your appointment**, buy these items at your pharmacy:

- 2 Bisacodyl tablets (5 mg each)
- Either:
  - 2 bottles of GoLYTELY (you will need a prescription); or
  - 2 bottles of magnesium citrate (296 mL each)



A CT image of the colon

### Clear Liquids

Clear liquids include:

- Gatorade, Powerade, and other sports drinks with electrolytes
- Water, tea, or coffee (no cream or milk)
- Crystal Light, Vitaminwater
- Bouillon or broth (beef, chicken, or vegetable)
- Jell-O, popsicles (no fruit or cream added)
- Apple, white grape, or white cranberry juice (no orange, tomato, prune, or grapefruit juice)
- Soda such as 7-Up, Sprite, ginger ale, cola
- Lemonade (with no pulp), iced tea
- Clear liquid protein drinks such as Ensure Clear or Resource Breeze

The CT schedulers will also send you by mail:

- 1 bottle of Readi-CAT barium sulfate (450 mL)
- 1 bottle of 350 mgI/mL Omnipaque (iohexal) (50 mL)

### How to Store the Bottles

- You may either refrigerate the GoLYTELY, magnesium citrate, and barium sulfate, or drink them at room temperature.
- Do **not** refrigerate the Omnipaque. Do **not** place it in direct sunlight.

### About Omnipaque

Omnipaque is a type of *contrast* (X-ray dye) that helps highlight fluid in your colon. The bottle says it is “for injection,” but it is OK to drink it. **Drink the Omnipaque the night before your exam** (see Step 4 on page 3). The contrast will be in your colon by the next morning.

### If You Have Diabetes

Call your diabetes care provider. Ask how to change your diabetes medicine doses before the virtual colonoscopy.

Test your blood sugar more often the day before your exam. Also check your blood sugar the morning of your test. Make sure your blood sugar stays above 70. If your blood sugar gets too high or too low and you can't bring it back to normal, call your primary doctor or diabetes care provider.

### If You Take Blood Thinners or Anti-Platelet Medicines

Keep taking these prescription medicines **unless your doctor tells you to stop**. Some of these medicines are Coumadin (warfarin), Plavix (clopidogrel), Effient (Prasugrel), and Pradaxa (Dabigatran).

### 3 Days Before

- Avoid eating foods that digest slowly. These include corn, popcorn, nuts, potato skins, fruits with skin or seeds, and raw vegetables.
- Take all of your prescribed medicines as usual.

### 1 Day Before: Bowel Prep Day

You will need a clean bowel for this exam. The day before your exam, start a **clear liquid diet** (see box at left) and do a **full bowel prep** (see page 3).

#### Starting at 12 a.m. (midnight) the day before your test:

- Do **not** eat any solid foods. It is OK to chew gum and suck on mints or hard candy.
- **Have only clear liquids** for breakfast, lunch, dinner, and snacks. (See list of clear liquids on page 3.) Avoid red or purple liquids such as red Jell-O, cranberry juice, or purple sports drinks.
- **Drink plenty of fluids.** Unless your doctor says to restrict fluids, drink as many clear liquids as you like until 12 a.m. on the day of your test.

**Follow the bowel prep schedule below.** If you take other medicines, take them **at least 1 hour before or at least 1 hour after** taking the magnesium citrate.

## Bowel Prep

You **must** do this bowel prep on the day before your test.

<p><b>Step 1</b> <b>Do this step in the morning, any time before 11 a.m.</b></p>	<p>Take the 2 Bisacodyl tablets with 1 full glass (8 ounces) of clear liquids. Do <b>not</b> chew or crush the tablets. This medicine will gently move your bowels. This helps the laxative you will take in Step 2 work better. You can take these tablets and still do normal activities because they rarely cause diarrhea. Your bowels will move 6 to 8 hours after you take the tablets.</p>
<p><b>Step 2</b> <b>Begin this step anytime between 2 p.m. and 6 p.m.</b></p> <p>This is a laxative. Be aware that the later you drink it, the later you may be awake having bowel movements.</p>	<ul style="list-style-type: none"> <li>• Drink 1 bottle of magnesium citrate or GoLYTELY. You should begin to have bowel movements. Be near a restroom, since you will need to visit the toilet often.</li> <li>• Write down the time you drink this laxative so that you know when to do Step 3.</li> <li>• Then drink at least 4 to 6 cups of clear liquids, <b>before</b> you do Step 3.</li> </ul>

**Wait at least 2 to 3 hours after you drink the first bottle of magnesium citrate or GoLYTELY before going on to Step 3.**

<p><b>Step 3</b> <b>Do this step between 4 p.m. and 9 p.m.</b></p>	<ul style="list-style-type: none"> <li>• Drink <b>half</b> of the bottle of Read-CAT barium sulfate (450 mL). You may discard the rest of the bottle.</li> <li>• Drink the 2nd bottle of magnesium citrate or GoLYTELY. This is a laxative, so you will keep having bowel movements.</li> <li>• Write down the time you drink this laxative so that you know when to do Step 4.</li> <li>• Drink at least 4 to 6 cups of clear liquids before going to Step 4.</li> </ul>
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**Step 4 can begin 2 to 3 hours after you drink the 2nd bottle of magnesium citrate or GoLYTELY.**

<p><b>Step 4</b> <b>Do this step between 6 p.m. and 11 p.m.</b></p> <ul style="list-style-type: none"> <li>• To open the Omnipaque bottle, <b>twist the entire top</b> to remove it (do <b>not</b> use the pull-tab).</li> <li>• Remove the black rubber stopper before you drink.</li> </ul>	<p>Drink the full bottle of Omnipaque (iohexol). You may:</p> <ul style="list-style-type: none"> <li>• Mix it in 8 ounces of clear juice, water, or soda.</li> <li>• Or, drink the Omnipaque and then drink 8 ounces of clear juice, water, or soda.</li> </ul>
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After Step 4, you are done with your bowel prep. You may keep drinking clear liquids until midnight.

## **Exam Day**

- Do **not** eat or drink anything after midnight the day of your exam.
- Take your usual medicines as prescribed, with **only** small sips of water.
- We need to know if you have not had a bowel movement or did not finish all 4 steps of the bowel prep. Call CT Services at 206.598.2047. Ask if the exam can still be done, or if we need to reschedule it for a later date.

## **If You Have Diabetes**

- Adjust your insulin or oral diabetes pills as your diabetes care provider advised.
- Test your blood glucose level more often since you are not able to eat. It is better to maintain your blood glucose than to have the exam. If your blood glucose level is low (less than 70 mg/dl) or you have symptoms of low blood sugar, drink a clear liquid that has sugar in it or take glucose tablets. Then, call 206.598.2047 to reschedule your exam.

## **How is the exam done?**

- The CT technologist will help you get into position on the table. Pillows will be used to help you stay in the right position during the exam.
- The technologist will insert a small tube into your rectum. This tube allows us to place *carbon dioxide* (CO<sub>2</sub>) gas into your bowel. The gas expands your bowel, which helps us get a clearer scan of the inside of your colon. It is normal to have a feeling of fullness from the CO<sub>2</sub> gas, but you should have very little discomfort.
- The technologist will then leave the room. You will be alone in the room while the scans are being done, but the technologist can see, hear, and speak with you through an intercom at all times.
- You will need to hold still while the table moves into the center of the scanner and when the scans are being done. The technologist will also ask you to hold your breath for a few seconds. Holding still during the scan results in the best CT pictures.
- A virtual colonoscopy usually takes 30 to 45 minutes. When the exam is over, we may ask you to wait while we check the images for quality. A few more scans may be done, if needed.

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

- CT scanning does not cause any pain. You may feel some discomfort from needing to hold still during the scans.
- The carbon dioxide may cause a little discomfort for a short time.

- Because CT uses X-rays, you may not have a family member or friend in the CT room during the exam.
- For young patients, a parent may be able to stay in the room with their child to help reduce fear and provide comfort. The parent will need to wear a lead apron to limit exposure to the radiation used in the scan.

## What happens after the exam?

- Return to your normal activities and diet. Your body will quickly absorb the carbon dioxide. You will have little discomfort after the exam.
- **If you have diabetes:** You may eat again and take your regular medicines. Check your blood sugar at this time. If your blood glucose level is low (less than 70 mg/dl) or you have symptoms of low blood sugar, please take glucose tablets or drink a clear liquid that has sugar in it.
- You may drive yourself home after the exam. You will not receive any medicine that will make you sleepy.

## Who interprets the results and how do I get them?

A radiologist skilled in CT scanning will review and interpret your CT images. The radiologist will not talk with you about the results. The radiologist will send a detailed report to your primary care provider or referring doctor. Your doctor will give you the results.

### Questions?

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

- UWMC CT Technologists:  
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Services: 206.598.6766