

MR Enterography

(Magnetic Resonance Imaging)

What is an MRE?

Note: Child-friendly language in **Orange**.

- An MRE is a test that uses a large magnet, radio waves, and a computer along with contrast to take detailed pictures of inside the body. It does not use radiation.
- An MRI scanner (**special, big camera**) has a tunnel with a bed that moves in and out. Some kids say it looks like a spaceship or doughnut.



Patient and MRI staff in MRI Prep Room

Why is it done?


- An MRE is used to produce 2-3 dimensional images of your child's small intestine.
- An MRE is often used to diagnose certain conditions such as inflammation, bowel obstructions, bleeding, tumors, and abscesses and plan for treatments.



MRI Scanner #3– Sunset Safari Theme

What can I do to help my child?

- Parents/caregivers are strongly encouraged to stay with their child throughout the entire procedure whenever possible. Women who may be pregnant cannot be in the scanner room during the MRE. In these cases, another trusted adult is encouraged to stay with the child during this time.



What should I expect during the procedure?

The entire test takes about 2 hours and is done in three stages. Results will be sent to your doctor in 1-2 business days.

Stage 1: Getting ready

- First, MRI staff will bring you and your child into a small private room to get ready for the exam. A nurse will ask you general questions about your child's health.
- Most kids need IV contrast (**picture medicine**) to help make their pictures more clear. If your child needs IV contrast for his or her scan, a nurse will gently place an IV (**tiny, soft straw placed into a vein using a small needle**) into his or her arm or hand.
 - * Your child may feel a little discomfort, like a small quick poke, when the IV is placed.
 - * Encourage your child to hold his or her arm very still and to take deep breaths.
- Most kids also need to drink oral contrast called Volumen (**picture medicine**). Depending on your child's weight they will need to drink between 15 oz and 45 oz.
 - * Encourage your child to continuously drink so that the doctor can get clear pictures.
- Some kids may need rectal contrast if your child's gastroenterologists request it. If your child needs rectal contrast MRI staff will gently slide a small slippery tube into your child's rectum (**bottom**) and will secure the tube using tape.
 - * This may cause your child to feel a sense of pressure.
 - * Encourage your child to take deep breaths to help him/her relax during this part.
- Next, MRI staff will ask if your child has any metal on or inside his or her body such as jewelry, watches, or pacemakers.
 - * If your child is curious, explain that the MRI scanner (**special, big camera**) uses magnets to take pictures, so metal is not allowed near it.
 - * A parent and/or trusted adult is allowed to accompany their child during the scan. This adult will also need to be screened for metal items. We have lockers you may use to store belongings and any metal items during your child's scan.

Stage 2: MRI Scanner Room

- When your child is ready, an MRI technologist (**person who helps take the pictures**) will walk him or her to the Scanner Room and help your child get in a comfortable position on the camera bed.
 - * Most kids lie on his or her stomach while in the camera.
 - * Your child will have pillows, blankets, earplugs and/or music headphones placed.
 - * Your child will have an imaging coil (**helmet**) placed over the part of the body getting the MRI pictures, which will help make the pictures even more clear.

Stage 3: Pictures

- Next, the bed will move into the tunnel. Your child's job now is to stay very still to ensure clear pictures. The technologist will leave the room to take the pictures.
 - * Talk with your child about ways to make holding still in the tunnel easier such as taking a nap, thinking of a favorite place, or pretending they are a statue.
 - * Let your child know the technologist will be able to see and hear him or her the whole time.

Tips for preparing your child for a MRE



Preschoolers (3-5 years old):

- Begin preparing your child about 1-3 days in advance.
- Talk to your child about why he or she is having pictures taken. For example, “The doctor will be special pictures of inside your body to learn about how your body works.”
- Use simple words to describe what your child may experience. For example, “The special, big camera makes loud noises that sound like someone is knocking on the door. The camera won’t touch or hurt you.”
- Let your child know that he or she needs to stay very still so that the pictures are not blurry. For example, “You will need to lie still on a bed that goes into a small tunnel, kind of like how a train goes into a tunnel.”
- Talk to your child about the importance of drinking the contrast. Think about turning drinking into a game to help make it easier.
- Help your child practice lying absolutely still on a bed or a table, pretending to be a statue or in a spaceship. Play a game of “freeze” for fun!

School Age (5–12 years old):

- Prepare your child at least several days in advance.
- Talk to your child about why the doctor wants to take special pictures of inside his or her body. For example, “So the doctor can learn more about how your body works.”
- Explain to your child what he or she will experience, in the order that it will occur, using child-friendly and/or real terms.
- Talk to your child about the importance of drinking the contrast. Offer your child choices such as “Do you want to drink it out of a straw or syringe?”
- Let your child know that he or she will need an IV (**tiny, soft straw placed into a vein using a small needle**) for the pictures. Talk about ways to make the IV easier such as taking deep breaths, watching TV, etc.
- Talk with your child ahead of time about the sounds an MRI scanner makes (**loud buzzing and knocking**). Let your child know he or she will wear earplugs or listen to music to help reduce the noise. Your child can bring a CD or iPod from home or choose from our music selection.
- Let your child know that he or she will need to stay very still so that the pictures are not blurry. Talk about ways to help make staying still easier, such as taking a nap, listening to music, etc.
- Encourage your child to ask questions.

Adolescents and Up (13 years old– and Up):

- Prepare your teen at least several days in advance.
- Talk to your teen about why the doctor wants to take special pictures of inside his or her body. For example, “So the doctor can learn information about a part of your body.”
- Explain to your teen what he or she might, see, hear and feel, in the order things will occur, using real terms.
- Talk to your child about the importance of drinking the contrast. For example, “The contrast will help make the pictures more clear so we can see how the inside of your body works.”
- Let your teen know that he or she will need an IV (**tiny, soft straw placed into a vein using a small needle**) for the pictures. Talk about ways to make the IV easier such as taking deep breaths, watching TV, etc.
- Talk with your teen ahead of time about the sounds an MRI scanner makes (**loud buzzing and knocking**). Let your teen know he or she will wear earplugs or listen to music to help reduce the noise. Your child can bring a CD or iPod from home or choose from our music selection.
- Let your teen know that he or she will need to stay very still so that the pictures are not blurry. Talk about ways to help make staying still easier—keeping eyes closed, taking a nap, listening to music, taking deep breaths, etc.
- Encourage your teen to ask questions.

My questions for the Radiology staff ...

- 1.
- 2.
- 3.
- 4.
- 5.

Child Life

Children's National Medical Center Department of Radiology is staffed with two full-time Child Life Specialists at Children's National Medical Center Main Campus, and one full-time Child Life Specialist at Children's National Imaging Montgomery County Regional Outpatient Center. Child Life Specialists are trained to address the emotional and developmental needs of children and their families during healthcare experiences, and can provide procedural preparation and support before and during your child's exam.

Phone Numbers

- If you would like to speak to a Child Life Specialist before your child's Radiology appointment at Children's National Medical Center Main Campus, please call **202-476-3338**.
- If you would like to speak to a Child Life Specialist before your child's Radiology appointment at Children's National Imaging Montgomery County Regional Outpatient Center, please call **301-765-5727**
- For more information about hospital-wide Child Life Services at Children's National Medical Center, please call **202-476-3070**.

Children's National Medical Center supports the Image Gently campaign and strives to keep radiation exposure to our patients as low as possible. For more information on this campaign, please visit www.imagegently.org

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