

Functional Magnetic Resonance Imaging

Functional Magnetic Resonance Imaging (fMRI) is a safe, painless way for your doctor to examine your brain. The test uses radio waves and a magnetic field to take images of how your brain responds as we ask you to do certain tasks. When you do a task, the blood rushes to that area of your brain. With the help of a computer, we are able to see how that part of your brain works. The images can help your doctor find out more about the problem you are having and also plan the course of your treatment or surgery.

What you need to know

There are some implants that can either be NOT safe for you to have an MRI or need special precautions taken for your safety.

If you have any of the following and have never had an MRI at Ohio State Wexner Medical Center, call 614-293-4333 so that you may be connected with a technologist who can review your information.

- Are or could be pregnant
- Have a heart pacemaker
- Have aneurysm clips
- An implanted pump or stimulator
- An artificial heart valve
- Breast tissue expander
- Stents anywhere in your body
- Weigh over 440 pounds
- Have any magnetic implants
- Have a blood clot filter
- Penile prosthesis
- Programmable VP or LP shunt valve
- Metal shrapnel or metal fragments inside your body or eyes

If we cannot identify the implants in your body, we may delay, reschedule, or cancel your test. Tell the radiology technologist if you have an allergy to contrast medicines.



To prepare for the test

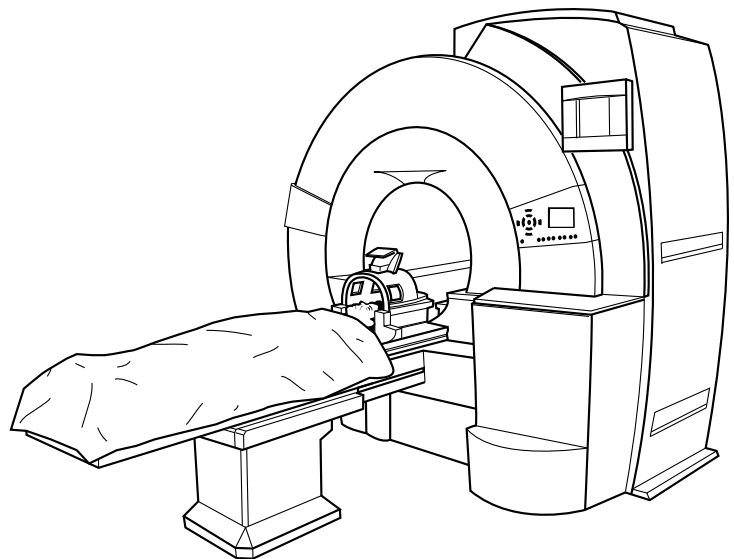
- **Arrive 30 minutes before your appointment time** unless you are asked to come earlier.
- Do not eat or drink for 4 hours before the test.
- **Bring a medicine list with you.** Tell the doctor or technologist about the prescription medicines you take, including over the counter, herbals, vitamins or supplements, and if you have any medicine allergies.
- **If you wear any kind of medicine patch**, such as nicotine or nitroglycerin patch, they will need to be removed for this test. Bring a new patch that you can put on after your test.
- If being in a closed space frightens you, talk to your doctor. Your doctor may give you some medicine to bring with you to help you relax. **If you do bring medicine to help relax, you need to have someone with you that can drive you home.**

Day of your test

- Bring your ID and insurance card. You will be asked to present these to verify your identity and insurance coverage.
- A technologist will review your medical and surgical history with you. Please bring any cards or operative reports you may have for any implants in your body.
- You will need to remove all metal items such as watch, hairpins, bra, jewelry, coins and piercings, from your body. Please leave valuable belongings at home. You will not be able to take anything into the room including your purse, wallet, or keys.
- You will be asked to change into hospital clothing. A locker is provided for your things.
- An IV may be started in your arm for IV medicine, called contrast. IV contrast is needed to give better images on certain studies only.

During your test

- An MRI is a long tube-like machine that is open on both ends. You will lie on a padded table in the middle of this machine. We will try to make you as comfortable as possible.
- The table will then move into the opening of the MRI machine. It will stop when the part of your body to be tested is in the center.
- **Please stay as still as you can during the test.**
- You will hear a sound like a drum beat as the images are taken. You will be provided with headphones or earplugs to aid in diminishing the loud noise of the machine.
- The technologist will not stay with you in the room. You will be able to hear and see the staff and they will check on you through an intercom and window. If you become uncomfortable at any time, tell the technologist. Staff will be right there to help you.



- You will be given a communication ball in your hand to squeeze if you need the technologist.
- You may be asked to hold your breath one or more times during the test for about 20 seconds at a time, and then you can breathe normally. This is only needed for certain kinds of tests.
- Do not move while the images are being taken and try to breathe at normal pace.
- When the test is done, the technologist will take you to an area where you may change into your clothes and collect your things to go home.

After your test

- Drink plenty of clear liquids such as water, apple juice, or clear soda such as Sprite, to help clear your system of the contrast medicine, unless your doctor has you on a different diet. Drink 8, 8-ounce glasses of clear liquid after the test.
- Your MRI will be read by a radiologist, a doctor that specializes in radiology, and the result will be sent to the doctor who ordered the test. Your doctor will share your test results with you.
- **If you were given sedative medicine to help your relax during the test**, an adult must be with you to take you home. It is not safe for you to drive or leave alone. You may drive home after the test if you were not given medicine to help you relax.
- If you have any problems or feel something is not right after your test, call your doctor.

Test location

You will have this test at University Hospital, 450 W. 10th Avenue, Columbus, OH 43210.

You will need to register on the 2nd floor at Doan Hall Registration when you come to the hospital.

If you have any questions, or need to cancel or reschedule your test, please call 614-293-4333.

Talk to your doctor or health care team if you have any questions about your care.

For more health information, go to wexnermedical.osu.edu/patiented or contact the Library for Health Information at 614-293-3707 or health-info@osu.edu.