



Children's Imaging Guide: **ULTRASOUNDS**



The **David & Judy Hess Children's Imaging Center** at Renown Children's Hospital was designed with the needs of children and their families in mind. The Children's Imaging Center provides comprehensive imaging services to our youngest patients with a team specially trained in pediatric radiology. And we are proud to participate in Image Gently — a nationwide campaign working to reduce radiation exposure to children.

What is an **ULTRASOUND**?

Ultrasound, also known as sonography, is a painless, non-invasive imaging technique that lets doctors look inside your child's body without the use of radiation. It uses high-frequency sound waves to create pictures of organs, muscles, soft tissue and blood vessels. Furthermore, because radiation isn't used, no risks are involved.

What Happens During an **ULTRASOUND**?

You'll accompany your child to the scanning room where they'll lie on the examination table — most patients won't need to remove their clothes. Instead, the technician will move your child's clothing aside where necessary.

The sonographer will apply warm gel and then place a transducer on that part of the body. A transducer is a small, microphone-like instrument. And when the sonographer moves it across the skin, it reads reflected sound waves to capture an accurate picture of what's underneath. Your child might feel slight pressure and discomfort as the technician moves it back and forth.

To get a clear image, your child should remain as still as possible. The sonographer may ask your child to lie in different positions or hold their breath for a few seconds. The scan is quick: It usually takes **20 to 40 minutes**.

AFTER the Ultrasound

You are free to leave at the completion of the ultrasound and your child can resume normal activities. The sonographer will review the images with our pediatric radiologist who will provide your doctor a written report of the diagnosis and findings. Your doctor will discuss the test results with you.

PREPARING Your Child For An Ultrasound

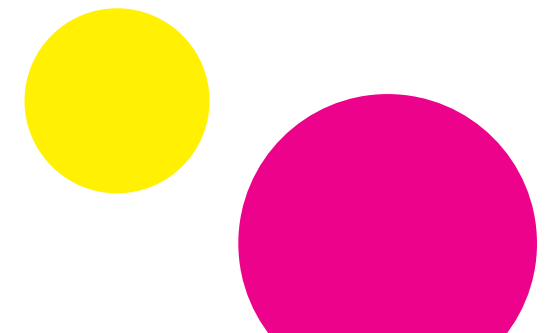
Explain in simple terms why the ultrasound is necessary to help ease any fear. Some younger children may be afraid of the ultrasound machinery. Describe how the scan will proceed, making clear that the equipment simply takes pictures of the body so doctors can see what's going on inside.

Make sure your child is aware what happens the day of the scan. Explain any eating or drinking requirements, and find out ahead of time if your child will need to remove any clothing. Emphasize the importance of relaxing during the procedure, as tense muscles can make it more difficult to get a clear picture. Remind them that you'll be there throughout the exam, and encourage them to ask the technician any questions they have during the procedure. Voicing concerns and receiving answers will often help your child relax.

What Should I Expect the **DAY OF** My Child's Ultrasound?

The day of the appointment, please arrive a few minutes early to the Institute for Heart & Vascular Health. Renown Institute for Heart is located on the ground floor of Renown Regional Medical Center. After check-in, you will be escorted to the David & Judy Hess Children's Imaging Center to await the exam.

Special preparation for an ultrasound is minimal, but some exams do have eating and drinking requirements that vary based on your child's age (see Tables 1 and 2 on the following page). Please understand, if these guidelines aren't followed, the scan may need to be delayed or rescheduled. All preparations will be discussed in detail when you schedule your child's appointment, but we've provided some basic guidelines.



Eating and Drinking REQUIREMENTS

TABLE 1: ABDOMINAL SCAN EATING AND DRINKING REQUIREMENTS BEFORE EXAM

LESS THAN 1 YEAR OLD	No feedings for 2 hours prior to the exam
1 TO 4 YEARS OLD	Nothing to eat or drink 4 hours prior to the exam
MORE THAN 5 YEARS OLD	Nothing to eat or drink 6 hours prior to the exam; the final meal should be a low-fat meal

TABLE 2: PELVIC ULTRASOUND DRINKING REQUIREMENTS BEFORE EXAM

LESS THAN 3 YEARS OLD	Encourage fluids
3 TO 6 YEARS OLD	8 to 16 ounces of water finished 30 minutes prior to the exam
7 TO 11 YEARS OLD	24 ounces of water finished 45 minutes prior to the exam
MORE THAN 12 YEARS OLD	32 ounces of water finished 45 minutes prior to the exam

If your child is scheduled for both an abdominal and pelvic ultrasound, adhere to food and drink restrictions for an abdominal scan. The abdominal exam will come first, followed by the pelvic scan, after which your child will be given a snack and a drink.



A renal pelvic ultrasound, or ultrasound of the kidneys, doesn't usually require preparation. However, if symptoms include hematuria (blood in the urine), we will want to scan your child with a full bladder. In this case, please follow the pelvic ultrasound guidelines. If your child's symptoms include hypertension, this exam requires an empty stomach and you should follow the abdominal guidelines even if they will have a pelvic ultrasound.

Your doctor will provide any special instructions when the appointment is scheduled. Please ask any questions you have at that time and when you arrive at Children's Imaging, so you'll have a clear understanding of what to expect..

If You Have QUESTIONS

If you have questions about why an ultrasound is needed, speak with your doctor. You also can talk to the technician before the procedure or contact **Children's Imaging** at **775-982-8100**.

ABOUT Image Gently Campaign

The Image Gently Campaign involves a group of healthcare organizations that want to promote safe, high-quality pediatric imaging throughout the world. The educational campaign, created by the Alliance for Radiation Safety in Pediatric Imaging, comprises more than 50 different societies, including the Society for Pediatric Radiology and the Pediatric Imaging Council of the Society of Nuclear Medicine. All combined we are a group of more than 700,000 healthcare professionals in radiology, pediatrics, medical physics and radiation protection. More information can be found at imagegently.org.

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