



Hi there!

Welcome to your MRI book. Reading it can help you get ready for your MRI exam.



When you see this symbol, you can help the story along! Whether tilting, searching, swiping or clapping, we invite you to actively join in.



This symbol lets you know there may be an audiobook or song available. Just scan the QR code to start listening!



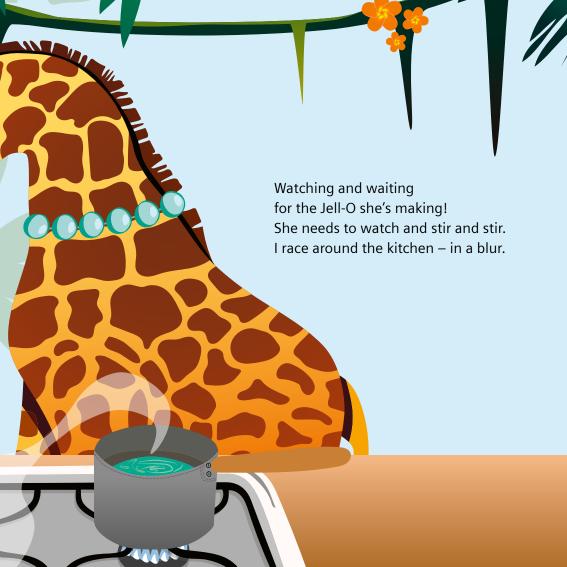
Hello! I'm Gerda, the little giraffe.

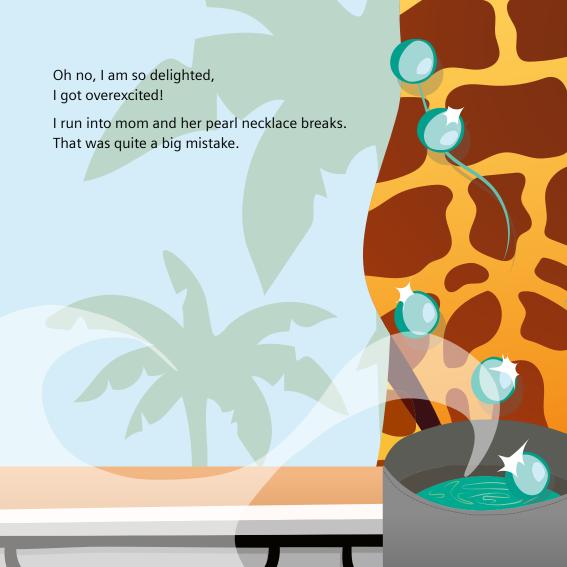
I love to zip around the jungle all day so much, that my mom likes to say: "Gerda, will you just stay in one place for dinner today?"

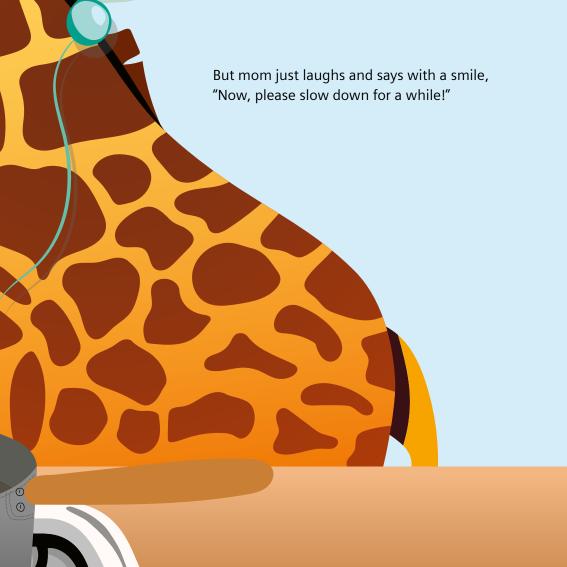
She wants me to grow big and tall so she makes my favorite food of all. The thing I like most to help me grow is very yummy, green Jell-O[®]!













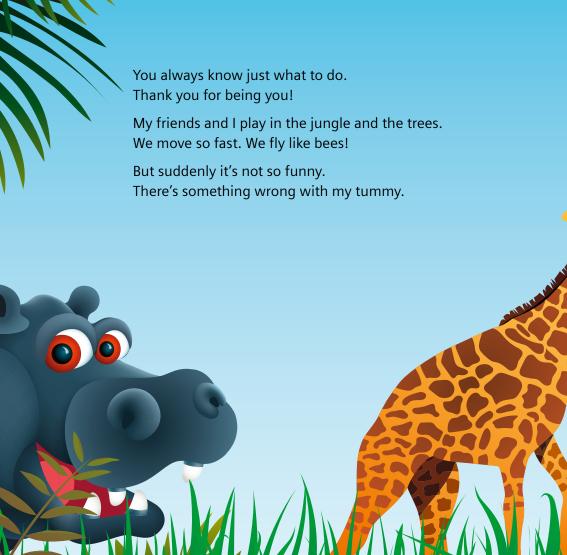




Thank you, thank you!
I always knew, that I would have a friend like you!

My mouth is so messy, such a tasty delight. It's all over my chin, on the left and the right.







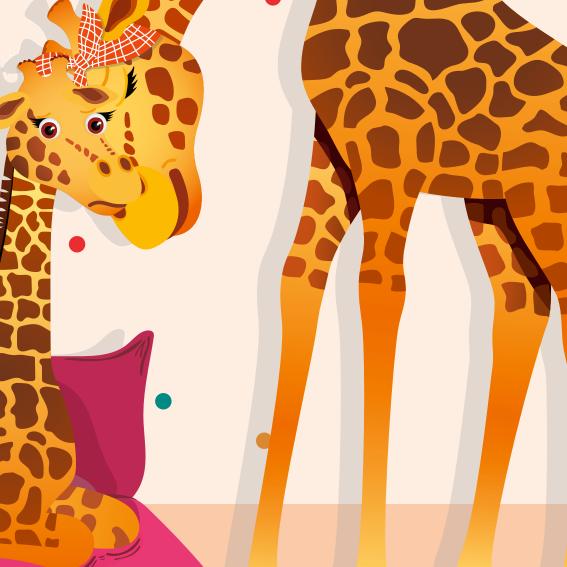


It hurts so much, it makes me cry.
I need to find mom and ask her why.



I see my mom and my tears start to fall. Did the pearls fall into the Jell-O after all?







What is that cool thing? It shines like metal, like a silver ring. This magical tube, you see, lets Dr. Grape see inside of me.

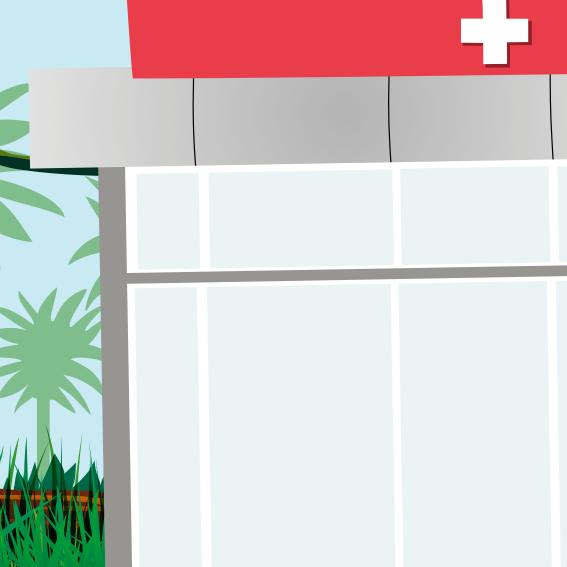
"Gerda, don't be afraid! Trust me. Soon, you'll feel better. You'll see!"











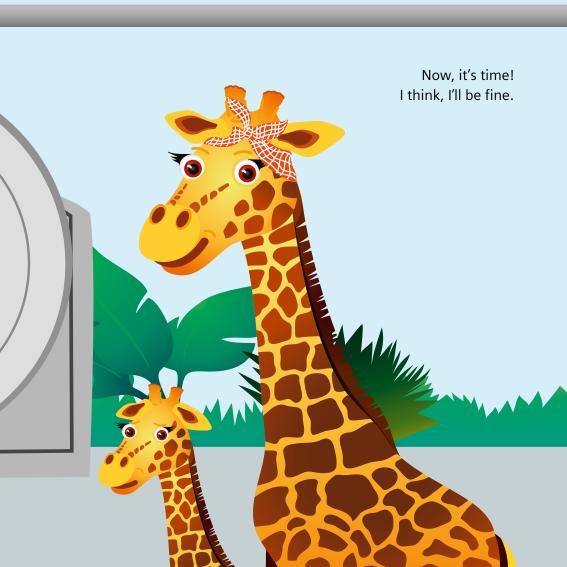










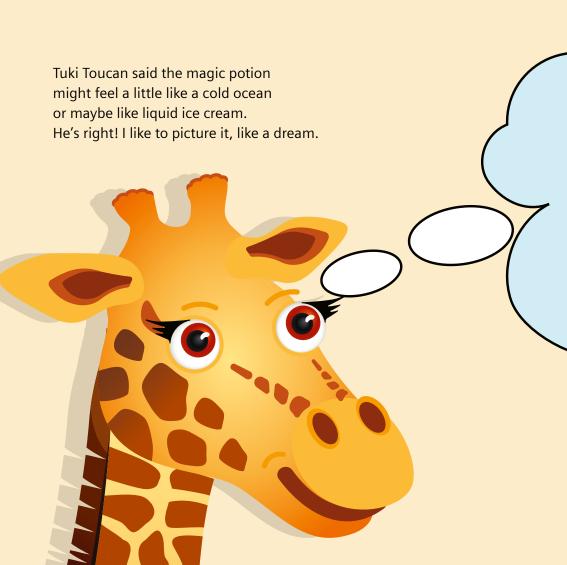


First, they give me contrast dye, a magic potion to see the organs even in motion.

Just one little pinch, but I'm not scared. Dr. Grape is in the room with me, right there. Note: In most cases, no contrast agent is necessary.









"Be brave Gerda," I say. "It's only one part of your day."





Inside, there's a lot of noise.
I picture all the apes, playing with their toys.



They knock, drill, and hammer along while I listen to the magic song.











Hurray! The pictures are done.

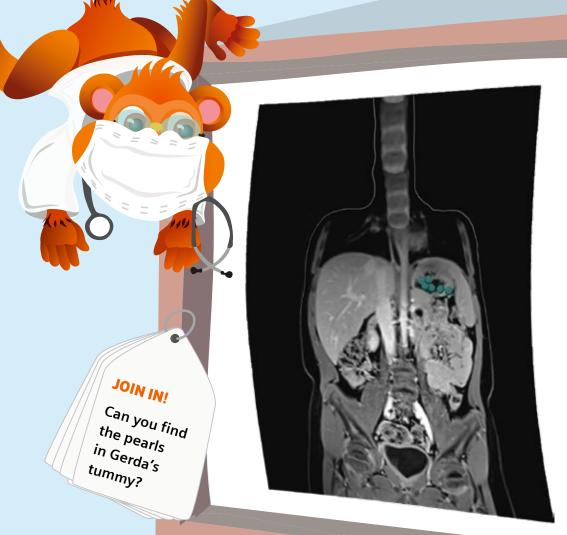
I can get out of the tube and have some fun.

I see the pictures, which are so clear! They make so many details appear.

We're looking inside my tummy and we can see mom's pearls – not so yummy!







Dr. Grape says I'm so brave. He gives me a medal I can save.











For parents

An explanation of your child's MRI examination

The purpose of this book is to help children and their parents better understand how MRIs work and get ready for their exams.

What is an MRI?

Magnetic resonance imaging (MRI) is often used to see internal organs. Unlike other imaging exams, MRIs use a magnetic field and radio waves. As a result, there is no radiation exposure. The MRI scanner itself is a large tube that is open at both ends.

Once the patient lies down on the table, they are moved into the tube.

They don't feel the magnetic field or the radio waves. There are no moving parts around the patient.

What the patient will experience is some noises that are loud but harmless.

To protect the patient's ears, they will receive headphones or earplugs in advance. In some instances, patients can listen to music, an audiobook, or a video.

How does an MRI work?

To explain how an MRI works, we first have to look at the smallest parts of the body. The hydrogen atoms in the human body are made of a nucleus and a shell.

The magnetic field from the MRI causes the nuclei of these atoms to arrange themselves like little magnets. Then, the radio waves from the MRI steer the nuclei out of their positions. When the radio waves are shut off, the nuclei jump back to their original positions. This creates a measurable signal.

With a computer, these signals are converted into numbers that can be seen as shades of gray on the MRI images. Disease tissue is a different shade of gray than healthy tissue. This is how radiologists identify the affected areas.

What is a contrast agent and when is it used?

A contrast agent is a substance used to increase the contrast of structures or fluids within the body during medical imaging. Sometimes, physicians need to use contrast agent to get better clinical information. It allows doctors to see areas that are at risk, diseased or inflamed. The patient will be given the contrast agent through an intravenous (IV) line via a cannula inserted in the hand or arm. If contrast agent is used, your child may feel warm or cold as the agent enters their body through the IV line.

How long does an MRI take?

It depends on the part of the body that is being examined. Most exams take between five to 60 minutes. To create good images, it's important that the child lie still and move as little as possible. If it's difficult for the child to remain still, they may be given a sedative.

Reminders for your MRI exam

Before your exam

Remember to communicate any concerns to your physician or technologist before you make the appointment.



Be sure your referring physician is aware of any metal in your child's body (e.g., implants, cardiac pacemaker, stents, fixed braces).



On the exam day

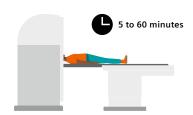
Remove all metal objects (such as piercings, jewelry, glasses, hearing aids, underwire bras).



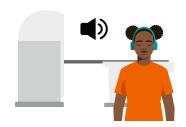
2 Make sure your child understands they need to remain as still as possible.



The exam will likely take between five to 60 minutes. Contrast exams may take longer. If a contrast agent is used, the patient will get an IV line. During the exam, the area near the IV may feel warm or cold as the agent runs in.



Patients are given hearing protection due to the machine's loud knocking noises. For some patients the tunnel may feel confining. Often people feel better if they close their eyes during the exam.



The most important points, in brief

An MRI examination is a safe and effective method to identify of illnesses and changes in the body, so the best possible treatment can be provided.





Scan the QR code & start listening!

Tips for a positive experience

- 1. Wear comfortable clothing. Children should wear clothes without metal buttons, zippers, or decorations that contain metal.
- 2. Bring a favorite stuffed animal (without metal parts).
- **3.** Ask if audio books or music you bring with you can be played during the exam.
- **4.** Be sure to follow instructions regarding eating and drinking before the exam.
- **5.** Parents, be confident and relaxed. Your attitude will rub off on your child.
- 6. Praise your child after the exam.













MRI scanning has not been established as safe for imaging fetuses and infants less than two years of age. The responsible physician must evaluate the benefits of the MR examination compared to those of other imaging procedures.



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