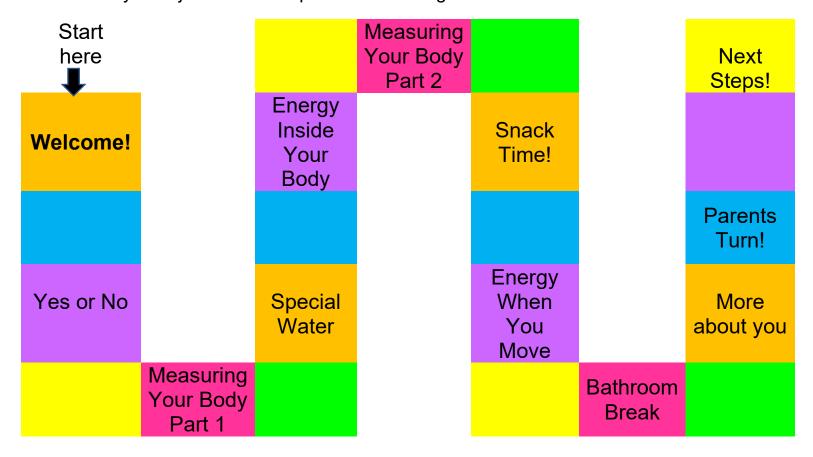
Have you ever wondered???



Have you ever wondered about the measures taken when you go to the clinic? They probably check how tall you are or how long your arms are. These measures tell us about your growth, but what if other measures might be helpful? With **YOUR HELP** and some different tools, we are going to learn about many different measures!

We want to try measures that will tell us how big you are, how active you are and how much energy you have inside of your body! We think this information is really important and will help us make other kids healthier!

We want you to join us and help us learn! Let's get started!



WELCOME!

To be a part of this study, you will come to a hospital that is closest to your house. There are four different hospitals that are helping with this study. Each hospital has a special team of people that will work with you. You may already know the people that will work with you on this study or they may be new to you.

Which location are you at?







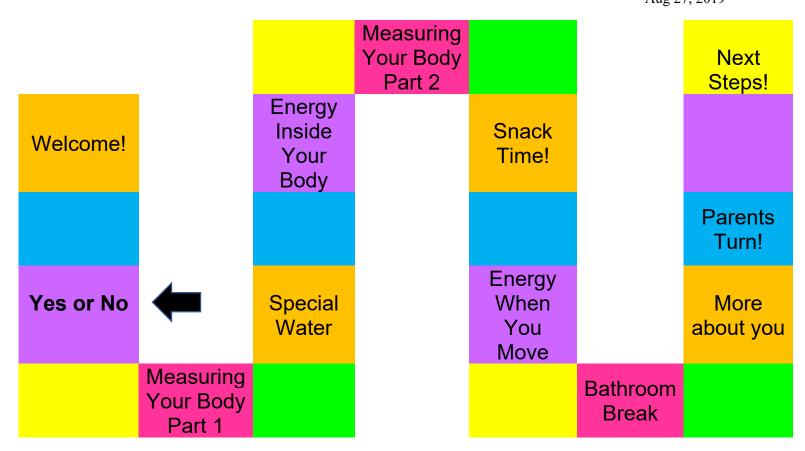
Children's Hospital of Los Angeles



Children's Hospital of Alabama



Children's Hospital of Pittsburgh

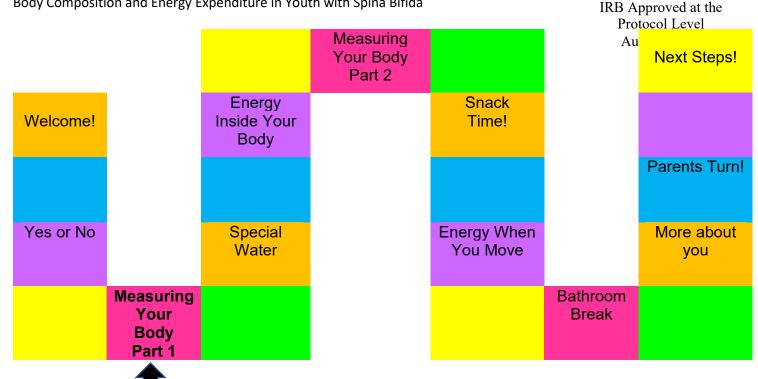


Yes or No

We want you to decide if you will be a part of our study. To do this, you and your family get to hear about the study, ask questions and then say yes or no!

Our team and this book will help you to learn about all the steps of this research study; all the different things that we ask you to do and why we do each one!

After learning about the study you and your family can choose if you want to participate! You do not have to be in the study. If you decide to be in the study you can sign your name on our special papers and we will give you a copy to take home with you.



MEASURING YOUR BODY: Part 1 (Weight & Heights)

We will measure your weight and your height in many different ways.

First, we will see how much you weigh. We will have you move onto the scale and be

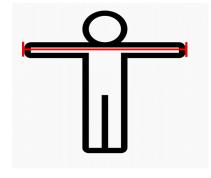
still for a few seconds. If you use a wheelchair you will go onto the scale in the wheelchair and then we will weigh the wheelchair by itself.

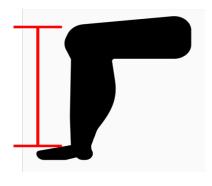




To measure your height or length, we will have you lie down on a table. We will also measure how long your arms and legs are. We might ask you to stand tall against a wall! We will take a lot of measures, but they go pretty fast.

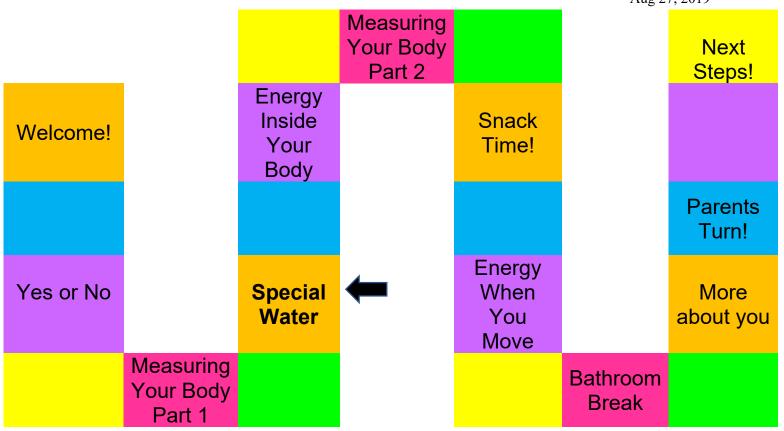






How long are your arms?

How long is your leg?



Special Water called "Doubly Labeled Water"

During the visit we are going to measure how much energy you have in many ways.

For the first one, you will drink a small cup of special water. The water that you drink will give us information about how much energy you have inside of your body over the next 7 days! How cool is that?

The water will taste like normal water. It will be given to you in a little bottle and after you drink it, we will fill it one more time.



ENERGY INSIDE YOUR BODY

This is another way for us to measure how much energy is inside of your body. The test is called a "resting metabolic rate." It is an easy test for you to do. You lie down on a bed and watch a movie! We will place a strap around your chest and a clear hood over you, but you can breathe normally and see through the hood to watch your movie!

This test will only be done if you are at the Children's Hospital of Wisconsin or Children's Hospital of Pittsburgh.



Measuring Your Body: Part 2!

Part 1

The first time we measured your body we measured how tall you are and how much you weighed. This time we are going to measure what makes up your body! The inside of your body is made up of many different things like bone, muscle, and water.

To do this we will measure what is inside of your body in 2 or 3 different ways (depending on which hospital that you are at):

- 1) Waist and hip circumference
- 2) Body Scan (BIA)
- 3) DXA picture (only Children's Hospital of Wisconsin)

These measures have some funny names. We will talk about each on the next page.

IRB Approved at the Protocol Level

1) Waist & hip circumference

We will have you lie down on a table or stand up for this measure. We will then use a tape measure and put it around your stomach and hips to measure them.



2) Body Scan (BIA)

You get to sit and our special machine will scan your body! This test is really easy.

First we will put clips (that look a little like alligators mouths) or rings (that look like bracelets) on your ankles and fingers. Then you sit REALLY still in the chair for 90 seconds. Can you count to 90?

You can see how fast the scan is going by watching the picture on the screen.



The alligator clips go on your fingers

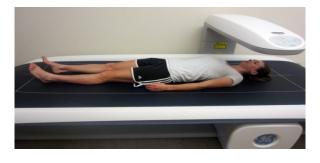


You get a bracelet around your ankle

3) DXA picture *this is only done at Children's Hospital of Wisconsin*

Now we'll get to take a trip to a different part of the hospital. You will be in a room with a big bed that has a little shelf above it. This bed-looking machine is called a DXA, it will help us take a picture of the inside of your body.

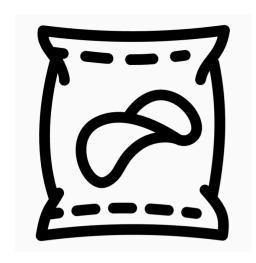
For the DXA, you will lie down and be still for a few minutes. Someone will be in the room with you as the shelf moves above your body. There may be some noises while the DXA is taking pictures of you!

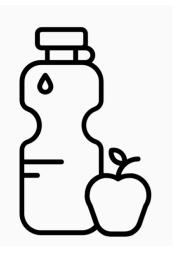


SNACK TIME!

You are doing so great!

You probably didn't get any breakfast this morning, so we will take a quick break from the study, so you can get a snack!







ENERGY WHEN YOU MOVE

Next, we want to see how much energy you have when you move around. Before we start we will give you a bracelet to wear and a strap for your chest.

The bracelet around your wrist will give us information about how fast you are moving.

The chest strap will tell us how hard your heart is working when you are moving.

This test has 4 parts to it:

- 1) You get to sit down. While sitting down you can watch tv or read a book.
- 2) You get to go out into the hallway and walk or roll at a slower than normal pace. You can pretend to move as slow as a turtle or sloth!
- 3) You get to keep moving but now at your normal pace.
- 4) You get to keep moving but at a faster than normal pace. You can pretend that you are a fast cheetah or rabbit!

During each step we will ask you how hard you are working or how out of breath you are and when you are moving in the hallways we will follow along and track how far you go!











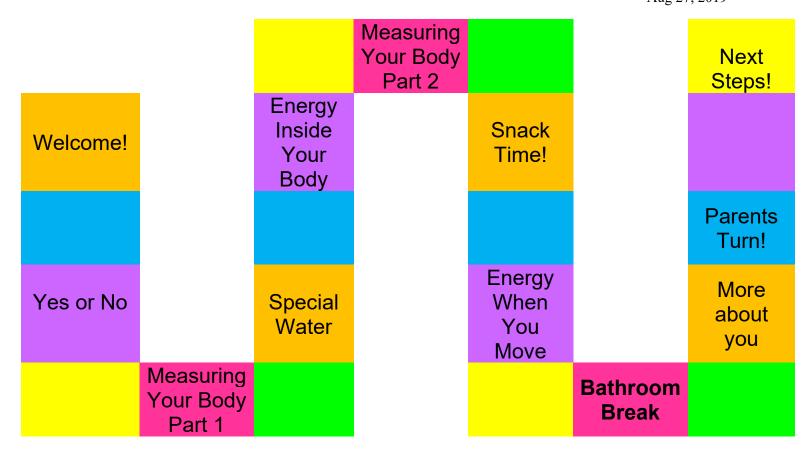
<u>.</u>

Sit

Move Slow

Move at Normal Pace

Move Fast





BATHROOM BREAKS

There will be 5 different times this morning that we will ask you to use the bathroom and we will collect your pee. Remember the special water that you drank? By measuring your pee we can start seeing the energy you have inside of your body. Crazy, huh?



MORE ABOUT YOU

Now we are going to ask you to fill out 2 surveys. One is going to ask you about what kind of foods you eat. The other survey is going to ask you about the what kind of activities you do – do you play sports? Do you like to swim?

Your parents may help you fill out the surveys.



PARENTS TURN!

You have done a lot of work today! Now it's your family's turn to do some work. They will fill out a few papers that ask questions about your family, about you and about your life!

You can sit back and relax!



Next Steps!

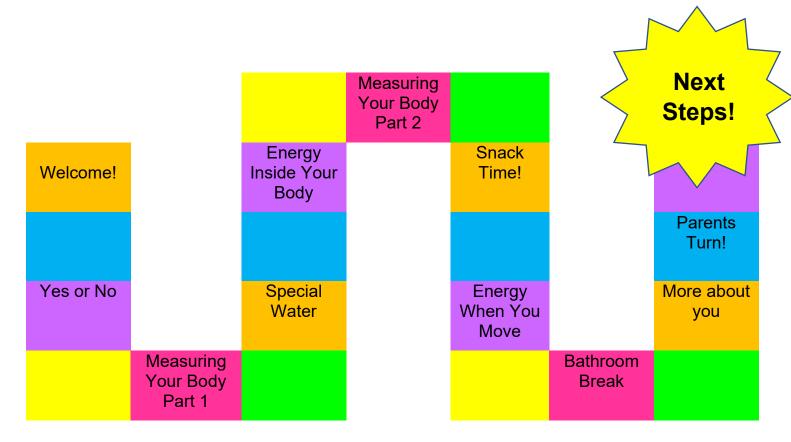
When your parents are done with their part you are done for today! How have you liked the study? Did you learn anything new about yourself?

As a special thank you for your help today and for your family getting you here, your family will get a gift card and can go to the cafeteria for lunch!

You will be done with your hospital visit but we will still need your help.

- 1) We will ask you to wear your special bracelet home.
- 2) Seven days from now we will ask you to collect your pee 2 times. Don't worry, we will explain everything and give you supplies so you don't have to come back to the hospital.
- 3) When you are done, you need to mail the bracelet and pee back to us.
- 4) When we receive the bracelet and pee we will send you a second gift card to thank you and then you are completely done.

Wow – you and your family have done really great work. Call us anytime with questions and thank you for being a part of our study!



Parents, for your information:

Prior to coming in for your appointment, please be aware that

- Appointments will be scheduled for the morning.
- Please make sure your child is fasting when coming in. <u>They can have water</u>, but no other food or liquid past 9pm of the evening before the appointment. If your appointment is scheduled later, we will modify the time accordingly.
- Medications should be taken as normal.
- If your child (the participant) has been sick within the last week, please reschedule the appointment, as this can impact some of our measures.
- There is usually about 60-90 minutes of down time towards the end of the study. We will have some books or games but you may want to bring something from home to do when you are in between measures.

Call with any questions! Please reach out to the site lead closest to you:

Children's Hospital of Alabama Contact: Betsy Hopson

betsy.hopson@childrensal.org Phone: 205-638-5281

Children's Hospital of Los Angeles Contact: Kathryn Smith

KaSmith@chla.usc.edu Phone: 323-361-8301

Children's Hospital of Pittsburgh Contact: Theresa Crytzer or Stacy Eckstein

<u>crytzertm@upmc.edu</u> Phone: Research Lab 412-822-3700

Stacy Eckstein 412-822-3671

Children's Hospital of Wisconsin Contact: Michele Polfuss

mpolfuss@uwm.edu Phone: 920-470-2150