

Child Assent Form

Study Title: Saskatchewan Bone Strength Development Study (BSDS)

Principal Investigator:

Dr. Saija Kontulainen,
Professor
College of Kinesiology, University of Saskatchewan
87 Campus Drive, Saskatoon SK S7N5B2 Canada
Telephone: (306) 966-1077
Fax: (306): 966-6464
Email: saija.kontulainen@usask.ca

Co-Principal Investigator:

Dr. Munier Nour
Pediatric Endocrinologist, Associate Professor
Saskatoon Health Region and College of Medicine, University of Saskatchewan
Email: munier.nour@saskatoonhealthregion.ca

Student Researchers: Yuwen Zheng (PhD Candidate, College of Kinesiology), Zahra Ghafouri (PhD Student, College of Kinesiology)

INTRODUCTION

We are inviting you to be a part of our study that looks at strength of bones and muscles of children who have or do not have type 1 diabetes. Children with type 1 diabetes have more bone fractures than children without type 1 diabetes. This study will tell us if there are differences in bones and muscles of children with and without type 1 diabetes. This information will help clinical doctors and researchers develop treatments to optimize bone strength development and reduce the risk of fractures in children.

WHAT HAPPENS IN THIS STUDY?

First, you will receive two questionnaires:

You are asked to fill out two questionnaires with your parent or guardian at home. These questionnaires ask about your health, sex, gender and physical activities. You do not need to answer any questions that you do not feel comfortable answering.

When you come to the College of Kinesiology:

1. When you arrive at the College of Kinesiology, you will get some snacks before you start the study.
2. A researcher will measure your height, weight, and the length of your left or right arm and leg.
3. Then, a researcher will take a scan of your arm and leg using two scanning machines. These machines create images of your arm and leg bones and muscles that help the researcher learn how strong your bones and muscles are. After you have been measured by these machines, a researcher will gently stick some small shiny spheres to your body and a small device (motion sensor) to your arm and right

hip. This helps our special cameras to see how you move when performing the following activities:

- a. You will be asked to squeeze a special handheld device as hard as you can for three seconds.
 - b. You will be asked to place your hands on a special platform that looks like a tile in the floor and perform a push-up from your hands and toes as fast as you can. This test will measure the strength of your arms.
 - c. You will be asked to place your hands on the same special platform and perform as many push-ups as you can from your hands and toes. This test will measure the endurance of your arms.
 - d. You will be asked to jump forward as far as you can.
 - e. You will be asked to jump as high as you can.
 - f. You will be asked to place your hands on the same special platform and to perform a donkey kick.
4. You will be asked to wear the small device (motion sensor) on your right hip for a full week. This small device can be worn under your clothes and will measure your activity.
 5. You will also get a third questionnaire to take home to fill out with your parent/guardian. This questionnaire will ask you questions about the food you eat.
 6. At the end of testing, your parent/guardian will pick you up.

When you are at summer camp:

You can have the most of the measurements listed above tested when you are at the summer camp. We will invite you to the College of Kinesiology to have your bones scanned with the bigger scanner we cannot bring over to the camp.

When you have your appointment at the Diabetes Clinic:

A blood sample will be collected at the same time as your usual clinic blood work. We will also collect your height, weight and blood glucose records from your visits to the Diabetes Clinic.

WILL YOU HAVE TO ANSWER ALL QUESTIONS AND DO EVERYTHING YOU ARE ASKED TO DO?

It is your choice whether you choose to answer our questions. It is also your choice to choose if you want to have the scans or participate in any of the study activities. If you do not want to do any part of the study, you can tell the researcher that you do not want to. You can still participate in other parts of study if you want. If you decide not to participate in any part of this study, no one will be upset or disappointed with you.

WHO WILL KNOW THAT YOU ARE IN THE STUDY?

Your name will not be on any of the information that you give us or that we collect from you. No one will know that the information from our study came from you.

We will not let anyone see your answers or any of your other information. Your teachers, parents, and classmates will not see your results. **DO YOU HAVE TO BE IN THIS STUDY?**

You can be in this study if you want to, but you do not have to. It is your choice to participate. Even if you decide to be a part of the study now, you can change your mind later. You just have to say that you do not want to be a part of the study anymore. If you decide not to be a part of the study, no one will get disappointed or upset with you.

CAN YOU BE IN THE STUDY MORE THAN ONCE?

You can come back to the University one year after the first test to be tested again if you would like. We need some of the participants to have the second test so that we can see how well your bones and muscles grow and develop.

DO YOU HAVE ANY QUESTIONS?

You can ask questions at any time. You can ask now or you can ask later. You can talk to researchers or someone else at any time during the study.

ASSENT TO HAVE MY PICTURE TAKEN

It is okay for my picture to be taken when I am being tested so that the researchers can use them to show others what kinds of tests I did. No one will be able to see my face in the pictures, so they won't know it is me.

Yes

No

ASSENT TO PARTICIPATE

I have talked with my parents/guardians about this study and I understand what I will be asked to do. I know I can stop being in this study at any time and no one will be upset or disappointed with me. I have had the chance to ask questions and all of my questions were answered in a way that I understood.

Name (Printed)

Signature

Today's Date (MM/DD/YY): ____/____/____

Witness Name (Printed)

Witness Signature

Today's Date (MM/DD/YY): ____/____/____