

## Participant Information Sheet – Teacher

Project title: SNaK+: A Survey of Sodium (Na+) and Potassium (K+) Intakes in New Zealand Children  
Principal Investigator: Dr Helen Eyles  
Co-investigator: Associate Professor Rachael McLean  
Project Coordinator: Dr Jeanette Rapson  
Research Assistant: Kava Fuavao

Dear Teacher,

*Kia ora, talofa lava, kia orana, malo e lelei, ni sa bula vinaka, taloha ni, and warm greetings,*

You and your classroom are invited to take part in a study of children's sodium and potassium intakes and blood pressure in New Zealand. We are interested in how much sodium (most commonly found in food as salt) and potassium (most commonly found in fruits and vegetables) children are consuming, because diets high in sodium and low in potassium lead to increases in blood pressure and risk of cardiovascular disease later in life. To help you make an informed decision about your classroom's participation in the study, we ask that you read this information sheet.

### Who is coordinating this study?

This study is coordinated by the School of Population Health at The University of Auckland and is funded by the Heart Foundation New Zealand.



### What is the aim of this study?

The main aim of this study is to measure sodium and potassium intakes in primary school children aged 8-13 years. This will be achieved through one 24-hour urine collection. The study will compare differences in sodium and potassium intake by gender, ethnicity, household income, and by level of deprivation.

### Why has my classroom been selected?

Your classroom has been selected because we think it has a diverse population of students aged 8-13 years.

## How many people will take part in the study?

We are looking to recruit approximately 300 children from 7 to 12 primary or intermediate schools across the Auckland and Dunedin region (about 33 to 42 children per school). We hope to recruit a high proportion of children from Māori whānau and Pacific families as evidence tells us that these populations are overrepresented in data concerning high blood pressure and cardiovascular disease.

## What is involved if my classroom takes part in the study?

We are seeking your permission to facilitate the recruitment of participants and collection of data. We will work with you to ensure that the research processes are relevant for your classroom and school community.

Prior to the commencement of the study, classroom teachers can view a short pre-recorded video about the purpose and methods of the study. Following this, an optional live Q&A session can be arranged (in-person or virtually), or teachers can contact the project coordinator directly to address further questions. All teachers who agree to take part in the study will be given a study pack including:

- a **short video** inviting children to participate
- age-appropriate **information brochures** (hardcopies) informing children on the purpose and methods of the study; a child assent form is included
- **free pdf lesson plans** for teachers to use as they wish – these lessons have been developed in collaboration with an experienced teacher to align with the curriculum
- **email template for parents/caregivers** including an additional information sheet and electronic consent form (hardcopies available on request) for teachers to use to invite parents/caregivers

Children will be offered an optional virtual Q&A session, providing them with the opportunity to have any concerns addressed by the researcher. Parents/caregivers will be invited to contact the researchers if they require further information about the study. Only children who provide written assent and whose parents/caregivers give written/electronic informed consent will be able to take part in the study.

Parents/caregivers who take part in the study will be sent a short online survey via email (or hardcopy if requested) to gather demographic data, child dietary habits, and information about discretionary salt use at home (salt added during cooking and at the table). Participating schools will also be asked to complete a short online questionnaire about the location of the school with respect to other food sources and whether school has a food policy. At the end of the study, teachers and parents/caregiver will be invited to complete a short questionnaire evaluating the methods and procedures of this study.

## Veggie meter pilot (optional to children and their parents/caregivers):



We will be offering to children the opportunity to take part in a small pilot study aimed at exploring the potential prevalence of adequate fruit and vegetable intake. This will be measured by new technology known as the veggie meter. The veggie meter is a non-invasive, painless and very quick method of measuring children's level of beta-carotene, a plant derived form of Vitamin A, through a fingertip reading device. Each child will be provided with a 'veggie score' reflecting fruit and vegetable intake.

The research team will visit the school on approximately two occasions to collect data.

### At Visit One:

- We will measure children's height, weight, hip/waist circumference, and blood pressure, and with children's assent and informed consent from their parents/caregivers, we will also be measuring children's fruit and vegetable intake using the veggie meter.
- Parents/caregivers may choose for their child to start the 24-hour urine collection either at school, or at home over the weekend. Children will be given a Urine Collection Kit at school and taken through a set of instructions (worksheet and videos) on how to collect their urine. Parents and teachers will receive a similar set of instructions and can also view the videos provided to children.
- Urine collected at school will be done so in a designated bathroom. At least some urine will also be collected at home. Urine collected at home will be returned by children to the school and all urine will be picked up by the research team (see visit two). Samples will be sent to a laboratory for analysis and disposed of at the end of the study.

### At Visit Two:

- We will collect the urine samples and take them back to the Auckland University laboratories. If there is missing information on the urine samples (e.g., date of collection), a study member will follow these up with the parent/child by phone or email.

For your classroom to take part in this study, you must:

- Provide written informed consent for your classroom participate.
- Be willing to facilitate the research process (i.e., facilitate the informed consent process with parents/caregiver and assent from children; be willing for researchers to undertake height, weight, hip/waist circumferences, blood pressure, and fruit and vegetable intake measurements in an private, allocated room at school).

## Where will the study take place and how long will the study take?

The study will take place in part, at school and at home. Children will have their body measurements taken at school and their parent/caregiver can choose whether urine is collected on a weekday (school day) or at home over the weekend. We will work with you to arrange a suitable private area for measurements to be taken, and urine samples to be returned. Additionally, we will arrange suitable times to:

- Brief teachers about the project, which includes a pre-recorded video (6 minutes + optional live Q&A session (approximately 10 minutes).
- Brief children about the project, which requires teachers to share our information brochures, pre-recorded video + optional live Q&A session (approximately 15 minutes in total of class time).
- Collect body measurements, blood pressure and veggie meter score (if agreed) from children (approximately 15 minutes per child).

### **What if I do not want my classroom to take part?**

Your classrooms participation in this study is voluntary and whether your classroom and children take part is your choice. If you do not want your classroom to take part, you don't have to give a reason, and it will not affect any current or future relationship you or your school/classroom may have with the University of Auckland. If you do want to take part now, but change your mind later, you can pull out of the study at any time.

### **Will there be any costs involved?**

Taking part in the study will not cost your school or participating families any money. We appreciate taking part in this study may cause some inconvenience and will take some class time. We will work with your school to ensure that this is minimal. A koha will be provided to your school (\$500 sport equipment voucher), and participating children will be given a \$20 movie voucher for taking part. Participating classrooms will be offered free lessons on child wellbeing/hauora with a focus on heart health, which teachers can use as they wish. With support of an experienced teacher advisor, we have aligned the lessons with the school curriculum and encourage teachers to use the study and data collection as part of student learning. If needed, a researcher will be available to facilitate one of these lessons and/or provide equipment for the activities. Classrooms that take part in the Heart Healthy Celebration Lesson will be given an additional \$60 Koha towards food and ingredients. We aim to make these lessons fun, interactive, relevant to the school curriculum and informative for all children, not just those taking part in the study.

### **What are the risks and benefits of this study?**

#### *Possible benefits:*

Your classrooms participation in this study will help us gather valuable information about how much sodium and potassium children in New Zealand are consuming. This information is currently missing. Participating in the study will provide children the opportunity to learn about their health and wellbeing and sodium and potassium in food. Children will also be contributing to the development of effective public health policies and interventions aimed at reducing sodium intake and increasing potassium intake for children in New Zealand.

#### *Possible risks:*

We do not anticipate any risks to be associated with this study. However, taking part will involve a small amount of classroom time, thus we will work with you to tailor our procedures to best suit your classroom's needs and ensure children are supported appropriately. Some children may find it challenging to collect their urine samples, so we can also explain the procedure using simple language. We will also work with your school nurse/councillor to mitigate any risk, such as embarrassment or cultural concerns etc. that children may face during the study. There will be no body shaming (the act of saying something negative about

anybody's body). All participants will be treated with respect and dignity, and with cultural sensitivity.

### **Will information be kept confidential?**

The study files and all information provided by children and parents/caregivers will remain strictly confidential. No material that could personally identify participants will be used in any reports on this study. Information from schools, principals, teachers and parents will be kept securely at the School of Population Health, The University of Auckland and destroyed after six years according to national research guidelines. Children's data will be stored for 10 years after the youngest child has reached 16 years of age. All computer records will be password protected and all future use of the information collected will be strictly controlled in accordance with the Privacy Act, 2020.

During the study, Ethic Committee representatives, study personnel, members of the research team and possible representatives of the study funder may check study records. This will only be done to check the accuracy of the information collected for the study and the information will remain confidential.

### **What will happen to children's urine samples?**

Each child's collected urine will be measured and prepared into a minimum of two 1.5mL aliquots. One aliquot will be used for the current study and another will be stored at the University of Auckland Clinics as a backup. All remaining urine from these first two samples will be disposed of appropriately at the end of the study (flushing into toilet).

#### *Urine for additional research (optional to children and parents/caregivers):*

If parents/caregivers and children provide informed consent/assent, two additional 1.5mL aliquots of urine will be prepared and stored for use in future research measuring iodine and fluoride. It is intended that this future research will be undertaken in 2023. A Governance group consisting of study investigators, study advisors and independent Māori and Pacific ethics advisors will manage storage and access to the additional urine samples. If urine for future research is not analysed before the end of 2023, additional informed consent and assent will be sought from parents/caregivers and children prior to analysing these samples.

### **When will the results be available?**

This study will take 12 months (including study planning, recruitment, data collection and data analysis), and the results will be available towards the middle of 2023. You can indicate on the consent form if you wish to receive a summary of the main findings once the study is completed.

### **What are my legal rights?**

Participation in this study is entirely voluntary. You do not have to take part. If you choose not to take part in this study, you will not be affected in any way. You and your school may withdraw from the study at any time, without giving reason. Your withdrawal from the study will not affect your school's ability to take part in other research opportunities with the University of Auckland. Should you choose to withdraw from the study, please contact the

research team. Any data collected from your school will be withdrawn and will not be analysed.

### What if I have any questions about the study?

You are encouraged to ask questions at any time during the study. If you have any questions, please contact:

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You can also contact the health and disability ethics committee (HDEC) that approved this study on:

Phone: 0800 4 ETHICS  
Email: [hdecs@moh.govt.nz](mailto:hdecs@moh.govt.nz)

Approved by the ethics was obtained from The Central Health and Disability Ethics Committee, for three years from the 5<sup>th</sup> August 2020. Reference number: 20/CEN/85