



ACTIVE HEATWAVE
How hot is your heatwave?



PARTICIPANT INFORMATION DOCUMENT

Title of Study: **ACTIVE HEATWAVE – How hot is your heat wave?**

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Faculty of Sport, University of Ljubljana, Slovenia

Co-Investigators: **Jason Lee, PhD, FACSM**
Human Potential Translational Research Program
Yong Loo Lin School of Medicine, Singapore

Nathan B. Morris, PhD
Human Physiology and Nutrition, University of Colorado -
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Dear potential participant:

The following study is being conducted by Drs. Nicholas Ravanelli (PhD) and Shawnda Morrison (PhD), to investigate how children and adults perceive ambient temperature changes throughout the summer. In order to decide whether or not you and your family want to be a part of this research study, you should understand what is involved and the potential risks and benefits to you and your family members, including children, for participating in the study. This information document will give you detailed information about why we are conducting this research study. Please take your time to read the material carefully before making your decision. Feel free to discuss this project with your friends, family, and anyone else who may be interested.

Why is this study being done?

Currently, the world is warming at a faster rate than in previous years. In the summer months, especially in Europe, but also globally, summers are getting hotter, and there are more heatwaves (days of extreme heat) occurring more often. Previous studies looking at the differences between adults and children have found that children respond and behave to higher temperatures differently than adults do; young children do not sweat as

much, they may not feel temperature changes in the same way, their cardiovascular system also reacts somewhat differently than adults.

What is the purpose of this study?

The purpose of ACTIVE HEATWAVE is to see if there are any differences between adults and children regarding how they perceive the ambient temperature as the summer progresses. Researchers are also interested in the impact of heat on exercising habits, and whether this might affect other daily behaviours like how much time people spend resting or sleeping.

How many participants will be in this study?

There is no limit to the number of participants; anyone interested in participating in the study are eligible to participate.

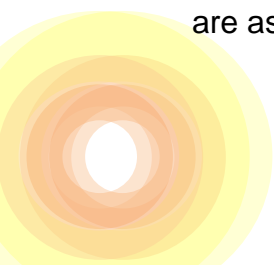
What will be my responsibilities if I take part in the study?

If you and your family volunteer to participate in this study, you all will be asked to each complete short questionnaires **June 5th** and **June 12th** and **September 4th** and **September 11th, 2022**. The preliminary questionnaire will ask you the individual's age, sex, height, and weight. The weekly questionnaire will ask you to describe the duration of moderate and/or vigorous physical activity, how much time you spent enjoying quiet, sedentary activity, your sleep habits, and your current thermal perception to heat. This questionnaire will become available to complete on the days mentioned above and remain available to complete for 48 h, and we will ask you to recall these habits for the preceding week (from Monday-Sunday). Questionnaires for any children in your household must be filled in first, then for any adults (>18 y of age) in your immediate household. Researchers will ask you to rank the hottest days of the week from what you can remember, to the least hot days (for the adults only). All questionnaires will be made available through the online platform. For children under the age of 12, please verbally ask them each question, what their answers are, and record their results yourself. For children aged 12 and over, they are allowed to read and fill in the questions by themselves if they wish.

During the summer months (June – August), if there is a weather advisory / heat warning for your region, you will receive a prompt via telecommunication to complete your “Heat Warning” survey, which is a short questionnaire asking you how hot you feel on that specific day, in addition to some questions on your physical activity behaviour, whether or not you felt thirsty that day, how you dealt with your thirst, and how you coped with the heat. Like the weekly questionnaire, this survey should be completed for the child first, and then the adults in your household. For answering these questionnaires for children, it is important to ask the children directly any questions regarding temperature perception, and their thirst and behaviour.

What are the possible risks and discomfort?

There are no known extraneous risks associated with participation in this study. Families are asked to report their normal daily routines.



What are the possible benefits for me and/or society?

The results of this study will provide new insight into any differences existing between adults and children regarding thermal perception of heat, and whether ambient temperatures affect daily movement patterns. This will give researchers more information to develop specific heat-risk models and strategies to keep both parents and children physically active, even during times of hotter weather.

Will I be paid to participate in this study?

No. There are no payments associated with this study.

Will there be any costs to me in this study?

No. There are no costs related to this study.

What will happen to my personal information?

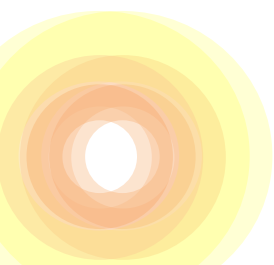
Your age, date of birth, gender, contact information (email address), and primary municipality of residence to monitor local weather, will be collected as part of this study. Your data will not be shared with anyone. Only the research team members (Dr. Ravanelli, Dr. Morrison, Dr. Lee, and Dr. Morris) will have access to your data. All personal information such as your email address will be stored behind two alphanumeric passwords in a secure database hosted at Lakehead University. All information submitted through the online platform will be associated with your randomly generated alphanumeric participant identification number. Any survey responses uploaded by the participant to the online platform will be stored in a password protected file structure and coded by their alphanumeric participant identification number in separate data tables. Due to collection and storage of data via a custom online tool, we cannot absolutely guarantee the full confidentiality and anonymity of your data. With your consent to participate, you acknowledge this. The data for this research study will be kept for a minimum of 5 years following final publication of results. By registering, you authorize this access for research purposes. If the results of the study are published, your email will not be used and no information that discloses your identity will be released or published without your specific consent.

Can participation end early?

You may withdraw at any time from the project. If you wish to withdraw during or after the study, you have 2 options:

- 1) Continue to contribute the data collected prior to withdrawal.
- 2) Request that all your information and data be withdrawn completely from the study.

You may also refuse to answer any questions you don't want to answer and still remain in the study. To withdraw from the study, you can either do so through the online platform through your unique login details, or if your login details no longer work, you can provide the participating username or email of the account you wish withdrawn by contacting Nicholas Ravanelli (nravanel@lakeheadu.ca) with your intent.



How can I receive a copy of the research results?

The results of this study will be used in the development of manuscripts intended for publication in journals. Research results will also be disseminated in the form of presentations (poster or verbal) at related conferences. You are invited to request a review of your results following the completion of the study. Results will also be communicated to the schools in which children are enrolled.

If I have any questions or problems, whom can I contact?

If you have any questions about the research now or later, please contact the Principal Investigators in your country, either:

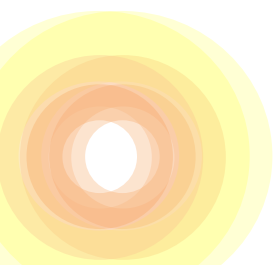
CANADA Dr. Nicholas Ravanelli at nravel@lakeheadu.ca.

SLOVENIA Dr. Shawnda Morrison at shawnda.morrison@fsp.uni-lj.si

SINGAPORE Dr. Jason Lee phsilkw@nus.edu.sg

USA Dr. Nathan Morris at nmorris6@uccs.edu

This study has been reviewed by the Lakehead University Research Ethics Board (REB). The REB is responsible for ensuring that participants are informed of the risks associated with the research, and that participants are free to decide if participation is right for them. If you have any questions about your rights as a research participant, please call Lakehead University REB at 1-807-343-8283.



CONSENT STATEMENT

FOR RESEARCH PARTICIPANT(S)

I/We agree to the following:

- ✓ We have read and understand the information contained in the Information Letter
- ✓ We agree to participate
- ✓ I have obtained consent for all participating adult members of the family
- ✓ The members of my family who understand the project and would like to participate consent to doing so
- ✓ I provide legal consent for the members of my family who don't have the capacity to consent
- ✓ Our family understands the risks and benefits to the study
- ✓ That we are all volunteers and can withdraw from the study at any time, and may choose not to answer any question
- ✓ That the data will be securely stored at data servers at Lakehead University for a minimum period of 5 years following completion of the research project
- ✓ We understand that the research findings will be made available to me upon request
- ✓ I/we will remain anonymous
- ✓ All of my questions have been answered

By consenting to participate, I have not waived any of our rights to legal recourse in the event of research-related harm.

I have read and agree to the above information and by completing the registration, I agree to participate.

