THE CSIR MICROBIOME MAPPING INITIATIVE



OVERVIEW OF THE PROJECT:

The CSIR Microbiome Mapping Initiative is about understanding our **gut microbiome** and how our everyday choices and environment impacts it. The microbiome refers to the community of 10-100 trillion **bacteria**, viruses, fungi and protozoa living inside your gut! This community of microorganisms is really important to several fundamental aspects of our physiology and health, and can be influenced by factors like **age, diet, antibiotic use** and more. We aim to investigate this with your help.

A number of recent scientific breakthroughs have shown us how factors like poor diet and lifestyle choices can cause an **imbalanced gut microbiome**, leading to poor health outcomes and increased risk for the onset of certain diseases. This project will involve capturing a snapshot of gut microbial diversity to characterise the baseline profile in the average South African community as represented at the CSIR.

In doing so, we hope to gain greater insights into how an individual's gut microbiome may be indicative of different **health outcomes and risks in South Africa**.

In order to do so, we require your help. By providing a **small stool sample**, you will be joining a global citizen science community where individuals across the world are making similar contributions to microbiome profiling efforts in their respective countries. We will ultimately link the gut community profiles to the anthropological information provided to us through a questionnaire about you, your diet and lifestyle. All of this information will help pioneer microbiome research in South Africa.

You will also get an exciting report about your individual gut profile and be able to see how your profile compared to other anonymised profiles in the study.

Participants will receive a detailed report about their microbiome profile after completion of the study.

SAMPLE COLLECTION:

The DNA/RNA Shield[™] Faecal Collection kit (available at CSIR Building 20 reception) provides the materials and instructions for collecting and stabilising microbial DNA from a stool sample. The kit includes the collection tube, a toilet hammock and an instruction leaflet. This link provides an online demonstration under "Product video": https://www.zymoresearch.com/collections/fecalcollection/products/dna-rna-shield-fecalcollection-tube#video









INSTRUCTIONS:



Empty your bladder before beginning the collection (**Caution:** do NOT allow water, urine, detergent or fragrance to come into contact with the toilet accessory/"faeces catcher").



Carefully peel open the toilet accessory.

Attach the adhesive surface of the accessory to the **back** of

the toilet seat.

Deposit the stool sample onto the toilet accessory. Unscrew the collection tube cap and use the spoon to collect one spoonful (~1gram/1mL) of stool.

Place the sample in the

thoroughly to create a

collection tube, tighten the

cap and shake the contents

suspension (Note: Some stool

material may be difficult to re-

is suspended, the sample is stabilised. Foaming/frothing

during shaking is normal).

suspend. As long as the material







Drop used toilet accessory into toilet. Wait ~1 minute for paper to become soft, then flush.



Place tube in the "return envelope" provided and store at room temperature until returned to collection point (CSIR Building 20 reception). Wash hands well.



YOUR SAFETY AND THAT OF YOUR INFORMATION IS OUR PRIORITY

In compliance with health and safety requirements, the kits used for the stool samples have a stabilisation buffer, which destroys potential viruses and pathogens in stool samples.

The project has been approved by the CSIR Research Ethics Committee. Since this research includes human participants and the environment, it was important for the researchers to get ethics approval prior to commencement to ensure that applicable [research] ethics codes, guidelines, quality, standards and norms are adhered to.

The accompanying privacy statement is an undertaking by the researchers to make sure that information collected during this study is processed and stored in a responsible manner. Where your information must be shared, this will be done only with your consent. This is in line with the Protection of Personal Information Act, 2013 (Act 4 of 2013).

THANK YOU FOR YOUR PARTICIPATION!

FOR MORE INFORMATION, PLEASE CONTACT:

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