



**University of
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Gut Microbiome in Endurance and Power Athletes

We are a team of researchers from the University of Nottingham. We are carrying out a research study that looks at the gut microbiome of endurance athletes, power athletes, and their respective family or household members.

The gut microbiome is the collection of microorganisms in the large intestine of humans. It has essential functions for human health, such as maintaining immune function, digestion of substrates and protection against organisms which can cause diseases.

There is evidence to suggest that exercise has influence on the composition and function of bacteria living in the gut. Studies have shown that when comparing sedentary and active individuals, active individuals have a more diverse gut microbiome. Studies have also shown differences in the gut microbiome between the type of exercise that is performed, such as power and endurance, and that living environments and diet also have an effect.

This study wants to identify the microbiome of endurance athletes and their family and household members, but also the biodiversity of the microbiome before and after competing in order to determine the effect of exercise on the gut microbiome.

We are writing to you because we think you may be interested and able to help in this research. We hope to use the information from this research to find ways to improve athletic performance in the future as well as identify novel bacteria which may be useful for treating conditions such as chronic fatigue.

If you are interested in participating in our study, you will be sent a kit for you to collect a stool sample. If you are an endurance athlete, you will be asked to collect a sample before and after an endurance race. If you are a power athlete or a non-competitive family member, you will be asked to collect just one stool sample.

You will also be sent a questionnaire including questions about health, disease, diet, lifestyle, family and household structure and physical activity. If you have any questions about the research, please do not hesitate to contact a member of the research team who will be pleased to assist you. They can be contacted by email at Microbiome@UniofNottm.onmicrosoft.com.

Thank you for taking the time to read this information and for your help with our valuable research.

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