

## Participant Information Sheet

### ***“The influence of a caffeine mouth rinse on endurance performance following self-control exertion.”***

- **Brief Introduction:**

Recent research has demonstrated that following a task requiring mental effort, individuals persist less at a physical task (e.g., endurance cycling task). Evidence also suggests that exerting mental effort can lead to higher perceptions of pain during a physical task, and that a caffeine mouth rinse may reduce these perceptions of pain during the physical task.

- **Study Requirements:**

You will be required to attend **five** laboratory sessions in total. In the lab visits, you will be asked to perform a simulated 10 km cycling time-trial as fast as possible. Prior to each time trial, you will complete a cognitively demanding task or a cognitively simple task, and consume either a caffeine mouth rinse or placebo.

- **Location:**

Physiology laboratories at Nottingham Trent University (Clifton Campus).

- **Restrictions During Testing:**

You are required to avoid strenuous exercise in the 48 hours prior to testing and avoid all exercise on test days. Alcohol and caffeine are prohibited on test days. You are required to arrive at the laboratory 4 hours after your previous meal.

- **Testing Protocol:**

You will be required to perform a simulated **10 km** cycling time trial as fast as possible. Whilst completing the time trial you will complete the visual analog scale for pain, motivation, and task importance. This is a 10cm line, where one end represents no pain and the other end represents the worst pain. You will be asked to make a mark on the line that represents your current pain perceptions. You will also consume either a caffeine mouth rinse or placebo. You will be instructed to complete the visual analog scales and consume either a caffeine mouth rinse or placebo at intervals throughout the entire duration of the time-trial. Before you complete the cycling time-trial you will complete either a cognitive demanding task or a cognitive simple task. In the cognitive tasks, you will be presented with lists of coloured words and will be required to read aloud the colour of the print ink and ignore the text for each word presented. Each testing session will last approximately 90 minutes.

- **Potential Benefits to You:**

If you wish, a report that will summarize your performance in the time-trials in the context of the study will be provided.

- **Potential Risks to You:**

No adverse effects are anticipated from performing the cognitive task or cycling time-trial. You may experience sensations of fatigue and physical exhaustion afterwards from completing the cycling time-trial, however, this will be short-lived and will subside in a few minutes upon stopping exercise. Although it is extremely unlikely, high intensity exercise has been known to reveal unsuspected heart or circulation problems and very rarely these have had serious or fatal consequences. If at any point you decide to withdraw from the study your data will be destroyed.

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