

## **Participant Information Sheet**

### **Study Title:**

Acute L-Carnitine Supplementation and CrossFit® Performance: A Randomized, Double-Blind, Placebo-Controlled Crossover Study

### **Invitation to Participate:**

You are invited to take part in a research study that aims to assess the effects of L-carnitine supplementation on CrossFit® performance. Before you decide, it is important to understand why this research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

### **What is the purpose of this study?**

This study aims to investigate whether taking L-carnitine, a popular supplement believed to improve exercise performance, can help improve performance in a CrossFit® workout. We are particularly interested in whether L-carnitine can affect the number of repetitions completed in a standardized CrossFit® workout and how it affects your perceived exertion and blood pressure.

### **Why have I been invited to participate?**

You have been chosen because you are a trained CrossFit® athlete with at least six months of experience. We are looking for healthy individuals who have previously completed the "Cindy" CrossFit® workout.

### **Do I have to take part?**

No, your participation is entirely voluntary. If you decide to participate, you will be asked to sign a consent form. You can withdraw from the study at any time without giving a reason and without it affecting your rights.

### **What will happen if I take part?**

If you agree to participate, you will complete two CrossFit® workout sessions, each separated by a 7-day gap (called a wash-out period). You will receive either an L-carnitine supplement or a placebo (a substance that looks like the supplement but has no active ingredients) before each session. You will not know which one you are taking, and the researchers will also be unaware during the study. Both workout sessions will involve completing as many rounds as possible of the "Cindy" workout in 20 minutes. We will measure the total number of repetitions you complete, your perceived exertion, and your blood pressure.

### **Are there any risks in taking part?**

The risks involved in this study are minimal. There may be some side effects from the L-carnitine supplement, such as gastrointestinal discomfort (nausea, stomach cramps) or difficulty sleeping, but these are expected to be rare. You will be participating in CrossFit® exercises you are already familiar with, so the physical risks are no greater than your usual workout routine. If at any point you feel uncomfortable or unwell, you can stop the exercise and withdraw from the study.

**Are there any benefits to taking part?**

There are no direct benefits to you for participating in this study. However, the findings will contribute to a better understanding of whether L-carnitine supplementation can help improve exercise performance in CrossFit® athletes.

**Will my information be kept confidential?**

Yes, all information collected during the study will be kept confidential and stored securely. Your data will be anonymized, meaning your identity will not be linked to the results. Only the researchers involved in the study will have access to the data.

**What will happen to the results of the research?**

The results will be used to understand better the effects of L-carnitine supplementation on exercise performance. They may be published in scientific journals or presented at conferences, but your personal identity will not be revealed.

**Who is conducting the research?**

This study is being conducted by researchers from National Autonomous University of Mexico, Dublin City University, University of Zurich, and other academic institutions.

**Who has reviewed the study?**

The study has been reviewed and approved by the Research Ethics Committee of the National Autonomous University of Mexico (Approval Reference: FESZ/CEI/31/23).

**What if I have any questions or concerns?**

If you have any further questions or concerns about the study, please contact the lead researcher, Azucerna Ojeda Sanchez, at [azucernaojedasan@yahoo.com.mx](mailto:azucernaojedasan@yahoo.com.mx) or +52 36011000 - Ext: 69326.

Thank you for considering taking part in this study.