

## APPENDIX A

### INFORMED CONSENT FORM

1. You are hereby invited to participate in the research project of I.Swart - Physiology Department, Faculty of Medicine, University of Pretoria. The title of the project is:  
**The effect of MCT + CHO + L-Carnitine supplementation on the performance and metabolic responses of male marathon athletes.**
  
2. The aim of the study is to compare the effect of a seven week period of oral MCT (medium-chain triglycerols)+CHO (carbohydrates) supplementation, to a seven week period of MCT+CHO+L-Carnitine supplementation, on the performance and metabolic parameters of male marathon athletes.
  
3. The research project will be divided into two seven week periods, and participation involves the following:
  - Anthropometric evaluation before the start of project.
  - Dietary analysis before and during the project.
  - Performing a progressive maximal treadmill test during which  $VO_2$  max and peak treadmill running speed will be determined.
  - Before, and after treadmill test a venous blood sample will be collected.
  - Duration of treadmill test  $\pm 20$  minutes.
  - This set of tests will serve as baseline data (Test 1).
  
  - For the following seven weeks you will daily orally take in a MCT+CHO supplement provided to you by researcher in the correct dose (sachet).
  - You will continue with your normal diet and training programme.
  - You will daily record your training programme on provided logform.

- At the end of week six you will again perform a treadmill test, and blood samples will be collected in the same manner (Test 2).
  - At the end of week seven you will compete in a standard marathon. Before and after the race blood samples will be collected. Race times will be recorded.
  - During the marathon you will incorporate the MCT+CHO supplement in your normal hydration routine.
  
  - After the marathon a five week washout period will follow.
  
  - After the washout period the same seven week routine will be repeated, the only difference being the supplement.
  - You will then daily orally take in a MCT+CHO+L-Carnitine supplement.
  - The same test and marathon procedures will be followed.
  - The results of Test 1, 2, 3 and 4 will be compared.
4. Benefits of participation:
- You receive:
    1. Free anthropometric evaluation
    2. Free determination of  $VO_2$  max
    3. Seven week supply of MCT+CHO supplement
    4. Seven week supply of MCT+CHO+L-Carnitine supplement
    5. Free supplements during two marathons
  - Supplementation provided may possibly enhance your performance and endurance during research period.
  - You will be financially remunerated at the end of the research project.
5. Risks involved in participation:
- Oral MCT supplementation may cause nausea in some cases when given in high dosages. The dosage has however been thoroughly tested and no



adverse effects reported. No documented risks involved in any other procedure.

- 6. The results of the research will be presented in a research paper, but your identity will be kept confidential. You will be referred to as athlete no. ....
- 7. In the event of unforeseen circumstances you will be free to withdraw from the research project. In the event of withdrawal, access to results and basal values will not be compromised.
- 8. In the event of any queries during research period, the researcher can at all times be contacted at the provided telephone number.

I ..... (participant) hereby declare that I fully understand the nature of the project and that I am willing to participate. I will give my full cooperation to the researcher during the 15 week research period.

Signed: .....  
(participant)

Date:.....

Signed: .....  
(researcher)

Date:.....

Tel no:.....

Signed:

Witness:.....

Date:.....

Witness:.....

Date:.....

## LOGFORM

Name:.....

Week:.....

Day	Supplement taken	Training programme	Remarks
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

## APPENDIX C

### DAILY DIET

Name:.....

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
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Meal	Time	Food / Drink	Description	Quantity
<b>Breakfast</b>				
<b>Snack</b>				
<b>Lunch</b>				
<b>Snack</b>				
<b>Dinner</b>				
<b>Snack</b>				

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