Thermal load of the 7 hill run

Published: 14-01-2008 Last updated: 10-05-2024

The primary goal is to examine the influence of weather condition on thermal load of an endurance run. Secondary we want to investigate the influence of fluid- and nutritional intake and clothing on thermal load of an endurance run.

| Ethical review | Approved WMO |
|-----------------------|-----------------------------|
| Status | Pending |
| Health condition type | Body temperature conditions |
| Study type | Observational non invasive |

Summary

ID

NL-OMON31846

Source ToetsingOnline

Brief title Thermal load of the 7 hill run

Condition

• Body temperature conditions

Synonym hyperthermia, overheating

Research involving Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Sint Radboud Source(s) of monetary or material Support: Ministerie van OC&W,atletiekunie

Intervention

Keyword: endurance running, hyperthermia, hypothermia, thermoregulation

Outcome measures

Primary outcome

weather condition

heart frequency

core temperature

Secondary outcome

nutrition and fluid intake

clothing

questionaire

Study description

Background summary

Last year in the marathon of Rotterdam and the dam-tot-dam-loop respectively 20 an 33 participant ended in the hospital, mainly because of hyperthermia. The marathon of Rotterdam was therefore cancelled before the end of the race. After literature research it is found that till now there is little known on the effect of external factors (like temperature, clothing and fluidintake) on the thermoregulation in endurance running. This information is crucial in prevention of overheating in indurance runs.

Study objective

The primary goal is to examine the influence of weather condition on thermal load of an endurance run. Secondary we want to investigate the influence of fluid- and nutritional intake and clothing on thermal load of an endurance run.

Study design

observational study

Study burden and risks

The research wil take place during the 7heuvelenloop. Before the run the body

2 - Thermal load of the 7 hill run 13-05-2025

core temperature and body weight will be measured. The participant also hands in a nutritional diary. After the run body core temperature and body weight are measured again. Is is also asked what the participant drank or eat during the game. The measurements are done by the start/finisch. This and the measurement of heart frequency are no big load, discomfort or risk for the participant. It will only take them a bit of there time.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

- 18 years and older

- not having an exclusioncriteria

Exclusion criteria

- bodyweight less than 80 pounds

- obstructive disease of the gastro-intestinal tract, including diverticulitis and inflammatory bowel disease

-previous gastrointestinal surgery, except cholecystectomy and appendectomy

- MRI during the period that the CorTemptm sensor is within the body

-subject having a cardiac pacemaker or other implanted electromedical device.

Study design

Design

| Study type: Observational non invasive | | |
|--|-------------------------|--|
| Masking: | Open (masking not used) | |
| Control: | Uncontrolled | |
| Primary purpose: | Prevention | |

Recruitment

| NL | |
|---------------------------|-------------|
| Recruitment status: | Pending |
| Start date (anticipated): | 01-11-2007 |
| Enrollment: | 100 |
| Туре: | Anticipated |

Ethics review

| Approved WMO | |
|--------------------|--------------------------------------|
| Application type: | First submission |
| Review commission: | CMO regio Arnhem-Nijmegen (Nijmegen) |

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register CCMO ID NL20426.091.07