# **Conditioning cortisol**

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

# Summary

### ID

NL-OMON20814

Source NTR

Brief title CONCO

#### **Health condition**

This study will be conducted in healthy volunteers.

### **Sponsors and support**

Primary sponsor: Leiden University
Health, Medical, and Neuropsychology Unit
Institute of Psychology
Faculty of Social and Behavioural Sciences
Source(s) of monetary or material Support: Governement funding

### Intervention

### **Outcome measures**

#### **Primary outcome**

The main study parameter is the AUCg of endogenous cortisol during rest in the evocation phase.

#### Secondary outcome

Secondary study parameters are the AUCg of endogenous cortisol during exposure to a shortterm psychosocial stress task. Alpha-amylase and self-reported well-being during rest and during exposure to a short-term psychosocial stress task in the evocation phase are additional secondary parameters.

# **Study description**

#### **Background summary**

Background:

Preliminary evidence suggests that it might be possible to condition endogenous cortisol, with subsequent psychophysiological effects. In a pilot study with ten participants, promising indications were found for conditioned effects on endogenous cortisol levels and other psychophysiological outcomes. When more systematic research in a larger sample would support these findings, the ability to condition cortisol could offer new therapeutic possibilities.

The aim of this study is to investigate the effects of conditioning with hydrocortisone on endogenous cortisol. Effects of conditioning on endogenous cortisol in response to a shortterm psychosocial stress task and other psychophysiological outcomes will also be explored.

#### Study design:

In line with previous conditioning studies as well as the previous pilot study in ten participants with an analogous design conducted by the research group, a randomized placebo-controlled conditioning paradigm consisting of 2 phases will be applied. In the acquisition phase, consisting of 3 sessions on 3 consecutive days, an unconditioned stimulus (experimental condition: hydrocortisone pill; control condition: placebo pill) is paired with a conditioned stimulus (novel tasting beverage). In the evocation phase, also consisting of 3 sessions on 3 consecutive days a week after the acquisition phase, all participants will be administered a placebo pill paired with the same beverage as in the acquisition phase. Cortisol, alpha-amylase, and self-reported well-being will be measured at several time points during the 6 acquisition and evocation sessions. During each session, participants will also be asked to perform some cognitive tasks and during the last session participants will be exposed to a short-term psychosocial stress task.

#### Study objective

Conditioning with hydrocortisone will result in altered endogenous cortisol during rest in the evocation phase.

#### Study design

During the sessions, cortisol, alpha-amylase and self-reported well-being are measured at several time points

#### Intervention

In the experimental group, cortisol is elevated exogenously on three consecutive days by administration of 100 mg hydrocortisone. In the control group, a placebo is administered at the same time points.

### Contacts

#### Public

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# **Eligibility criteria**

### **Inclusion criteria**

healthy, female, premenopausal, 18-30 years of age

#### **Exclusion criteria**

Somatic and/or psychiatric diseases, symptoms of infection, use of medication (including oral contraceptives), recent stressful life events

# Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	20-06-2014
Enrollment:	48
Туре:	Anticipated

# **Ethics review**

Positive opinion	
Date:	18-06-2014
Application type:	First submission

# **Study registrations**

### Followed up by the following (possibly more current) registration

ID: 47397 Bron: ToetsingOnline Titel:

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

No registrations found.

# In other registers

Register	ID
NTR-new	NL4409
NTR-old	NTR4651
ССМО	NL47105.058.14
OMON	NL-OMON47397

# **Study results**