Tyrosine supplementatie in ouderen

No registrations found.

Ethical review	Positive opinion
Status	Recruitment stopped
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON22035

Source
Nationaal Trial Register

Health condition

Old age, elderly, healthy

Sponsors and support

Primary sponsor: Donders Institute for Brain, Cognition and Behaviour
Source(s) of monetary or material Support: FOCOM-EFRO

Intervention

Outcome measures

Primary outcome

Performance and brain signal on response inhibition task and working memory task, performance on effort discounting task and several neuropsychological tasks.

Secondary outcome

catecholamine metabolites in urine

Study description

Study objective

We verwachten dat tyrosine response inhibitie en werkgeheugen zal beïnvloeden via de prefrontal cortex of het striatum.
We hypothesize that tyrosine will affect response inhibition and working memory by acting on either the prefrontal cortex or the striatum.

Study design

two timepoints, measurements starts 90 minutes after acute administration of tyrosine or placebo

Intervention

150 mg/kg bodyweight tyrosine mixed in banana flavoured yoghurt

Contacts

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Eligibility criteria

Inclusion criteria

In order to be eligible to participate in this study, subjects must meet all of these criteria:
- Age: 60-75 years old (similar to other studies, for review (Turner & Spreng, 2012))
- Dutch as a mothertongue
- Right-handed
- Willing to perform tasks in the MRI scanner, to come to the centre on three occasions, consuming tyrosine or a placebo and willing to fast the night before the two test sessions.

Exclusion criteria

A potential subject who meets any of the following criteria will be excluded from participation in this study :
- Clinical dementia as measured by Mini Mental State Examination score < 24)
- Severe depression or anxiety as measured by HADS score > 11
- Estimated IQ < 85 (based on Nederlandse Leestest voor Volwassenen (NLV) -score) - (History of) clinically significant psychiatric disorder - (History of) clinically significant neurological disorder, such as brain infarct, Parkinson’s Disease, chronic migraine, Diabetes Mellitus
- First degree family history of schizophrenia, bipolar disorder or major depressive disorder
- Thyroid problems and low-protein diet
- Endocrine or metabolic disorders such as hepatic or renal problemsUnder treatment for cardiac or vascular diseases and use medication for these conditions;
- abnormal blood pressure < 90/60mmHg or > 160/90 mmHg (to be determined during the intake session)
- Using medication that can interfere with tyrosine’s action; monoamine oxidase inhibitors and other antidepressants, sympathomimetic amines, and opioids
- General medical conditions, such as repetitive strain injury (RSI) or sensori-motor handicaps, blindness or colorblindness, as judged by the investigator
- (History of) abuse of drugs or alcohol - Habitual smoking, i.e. more than a pack of cigarettes per week - Participation, current or within the past twelve months, in a specific cognitive training study or previous study using the same paradigm as the current study
- Contra-indications for MRI:
o Metal objects or fragments in the body that cannot be taken out
o Active implants in the body
o Using medical plasters
o Epilepsy
o Previous head surgery
o Claustrophobia

Study design

Design

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

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	26-11-2014
Enrollment:	26
Type:	Actual

Ethics review

Positive opinion

Date:	25-11-2014
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 42026
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL4798

Register	ID
NTR-old	NTR4938
CCMO	NL49758.091.14
OMON	NL-OMON42026

Study results