Trial of tyrosine and its effect on working memory in healthy elderly and young people

No registrations found.

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

Summary

ID

NL-OMON23338

Source
NTR

Brief title
DoReTy

Health condition

plasma tyrosine levels, working memory performance

Sponsors and support

Primary sponsor: Wageningen University
Source(s) of monetary or material Support: EFRO (Europees Fonds voor Regionale Ontwikkeling)

Intervention

Outcome measures

Primary outcome

Tyrosine plasma concentrations at T0, T90, T120, T150, T180, T210 and T240 at doses of 100 mg/kg body weight (elderly), 150/kg body weight mg (young and elderly) and 200 mg/kg

body weight (elderly)

Secondary outcome

Performance on the n-back task measured by accuracy (total number of hits) and reaction time (ms) on all doses

Study description

Study design

T0, T90, T120, T150, T180, T210 and T240

Intervention

100, 150 and 200 mg/kg body weight of tyrosine

Contacts

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Eligibility criteria

Inclusion criteria

• Aged 18-35 years or aged 60-75 years

• Normal and stable weight (BMI 18.5-25 kg/m2 and weight 50-95 kg)

• Willing to abstain from blood donation during the study

• Willing to comply with study procedures

• Willing to accept use of all encoded data, including publication, and the confidential use and storage of all data for at least 15 years.

• Dutch-speaking

• Non-smoking

• Normal or corrected-to-normal vision

Exclusion criteria

• Thyroid problems, such as hyperthyroidism, hypothyroidism, thyroid cancer

• Using medication that can interfere with tyrosine's action; monoamine oxidase inhibitors and other antidepressants, sympathomimetic amines, and opioids

• Following a low-protein diet as prescribed by a dietician or physician

• Intestinal problems that affect nutrient absorption (such as coeliac disease)

• Parkinson's Disease

• Depression

• Use of tyrosine supplements

• Being allergic or having a dislike to the product carrier (banana-flavored yoghurt)

• Bad venous access, as judged by the research nurse

• Personnel of Wageningen UR, Division of Human Nutrition, their partner and their first and second degree relatives

• Current participation in other scientific research

• Mini Mental State Examination (MMSE) score < 24 (to exclude cognitive impaired participants, only for elderly participants)

• 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, chronic migraine, major depression

• Under treatment for cardiac or vascular diseases and use of medication for these conditions

• General medical conditions, such as repetitive strain injury (RSI) or sensori-motor handicaps, as judged by the investigator

• Alcohol consumption of more than 14 (women) or 21 (men) units per week

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	09-10-2014
Enrollment:	34
Type:	Actual

Ethics review

Positive opinion

Date:	09-10-2014
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 41127
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL4417
NTR-old	NTR4846
CCMO	NL49893.081.14
OMON	NL-OMON41127

Study results