

Triggers of behavioral and physiological reactions to odors, part 5

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The main objective is to gain insight in unconscious, physiological responses to common household odors with a large range of pleasantness.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON42256

Source

ToetsingOnline

Brief title

Odorful

Condition

- Other condition

Synonym

physiological responses; facial expressions

Health condition

sensoriek en eetgedrag

Research involving

Human

Sponsors and support

Primary sponsor: Wageningen Universiteit

Source(s) of monetary or material Support: HAK industries,HAK industries (geen invloed

op huidige studie, resultaten of publicaties), Wageningen Universiteit (opdrachtgever/verrichter van het onderzoek; werkgever). De 3e geldstroom sponsor (HAK industries) heeft geen invloed op de inhoud of details van de studie

Intervention

Keyword: behavior, odor, physiology, valence

Outcome measures

Primary outcome

Behavioral parameters include analysis of facial expressions, emotional responses and explicit liking ratings. Physiological parameters include heart rate frequency, finger temperature, and galvanic skin response.

Secondary outcome

possible correlations between the outcome measurements

Study description

Background summary

Emotional reactions are important drivers in food choice and food intake, and objective measurements of these reactions is therefore important. Previous research using physiological and behavioral measurements has demonstrated different emotional reactions of human subjects towards food aromas with certain qualitative (pleasant/unpleasant aroma) and quantitative (concentration) properties. Although the results are promising, the use of stimuli limits the systematic variation of the hedonic properties of the stimuli. To gain further insight in the emotional reactions to food, the proposed study will use odor stimuli with a larger range of pleasantness

Study objective

The main objective is to gain insight in unconscious, physiological responses to common household odors with a large range of pleasantness.

Study design

In the study, a group of adults will be exposed to 8 odors presented via an

olfactometer. Each odor will be presented 4 times, randomized. Physiological responses, facial expressions, emotional responses and liking ratings will be assessed

Intervention

exposure to odors

Study burden and risks

Subjects will participate in one experimental session that lasts in total 60 minutes, of which 30-45 minutes measuring. Subjects will be connected to an olfactometer via a small tube that is placed loosely in one of the subjects* nostrils. Facial expressions will be recorded via a webcam. Subjects will be provided with sensors fitted to a finger and palm of their non-dominant hand. Experiences so far indicate that the sensors themselves are unlikely to cause discomfort. The risk associated with participation is negligible and the burden can be considered as minimal.

Contacts

Public

Wageningen Universiteit

Bomenweg 2
Wageningen 6703 HD
NL

Scientific

Wageningen Universiteit

Bomenweg 2
Wageningen 6703 HD
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

healthy

BMI between 18.5-25kg/m²

age between 18-35

female

normal sense of smell

Exclusion criteria

Pregnancy

breastfeeding

smoking

history of heart problems

using medication (except paracetamol or oral contraceptives)

having the flu or current allergic symptoms

Study design

Design

Study type: Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 08-06-2015

Enrollment: 28

Type:

Actual

Ethics review

Approved WMO

Date:

28-02-2015

Application type:

First submission

Review commission:

METC Wageningen Universiteit (Wageningen)

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

ID

CCMO

NL52249.081.15