# Olfactory enhancement of Dietary behaviour in Elderly with dementia in nursing homes

Published: 22-03-2018 Last updated: 10-04-2024

To investigate the effect of odor exposure on eating behavior (appetite, intake) in nursing home residents with dementia

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

## **Summary**

### ID

NL-OMON46601

**Source** ToetsingOnline

Brief title ODE

### Condition

Other condition

#### Synonym

appetite, body weight; dementie, nutritional intake

#### **Health condition**

eetlust, voedingsiname en lichaamsgewicht; dementie

#### **Research involving**

Human

### **Sponsors and support**

Primary sponsor: Amaris Zorggroep Source(s) of monetary or material Support: Mr. Roelsefonds

### Intervention

Keyword: dementia, elderly, nutritional status, odor exposure

### **Outcome measures**

#### **Primary outcome**

We will compare outcome measures within-subject, between the two conditions

(odor, control/non-odor). Primary outcomes are self-report appetite ratings

(general, and specific, by means of pictorial and smiley scales), assessed in

total 36 times over the 12-week period); nutritional intake (assessed three

times per condition by means of 24hr recalls in combination with a food diary).

#### Secondary outcome

Secondary outcome is (change in) body weight (kg).

## **Study description**

#### **Background summary**

The World Health Organisation (WHO) has declared dementia a current public health priority. The prevalence of dementia is high and due to the aging population the numbers are increasing (Alzheimer's Disease International, 2015). Malnutrition is common among older people generally (Visser et al., 2017) and particularly common among people with dementia (Alzheimer's Disease International, 2014). In the Netherlands the prevalence of malnutrition of residents on psychogeriatric wards is higher compared with residents on somatic wards (13.2% vs 9.0%) (Huppertz, van der Putten, Halfens, Schols, & de Groot, 2017). Malnourished elderly with dementia have more health problems and a faster progress of the disease. Food choice and intake are partially guided by sensory processes. It has been shown that exposure to (food) odours could improve (specific) appetite and steer food choice and subsequent nutritional intake. Based on pilot data from our group, food odor exposure may indeed be a suitable \*tool\* to improve eating behavior in (malnourished) older people. However, the effectiveness of odour exposure has not yet been investigated in a population of elderly with dementia.

### **Study objective**

To investigate the effect of odor exposure on eating behavior (appetite, intake) in nursing home residents with dementia

### Study design

One-arm, non-randomized, non-blinded intervention study with subsequent treatment

### Intervention

Participants residing on a small scale psychogeriatric ward of two nursing homes of the same organization (Zorggroep Amaris) providing long-term care will be exposed to a 12 week odor condition. Odors will be presented three times a day (before breakfast, lunch and dinner), for ~30min each by means of vaporizers, in low detectable concentrations. The type of odors will be matched to the eating moment (e.g. bread odor for breakfast; beef odor for dinner). The 4 weeks preceding this odor condition will serve as the control, non-odor condition. During both conditions, participants perform their normal routines and eating behavior.

### Study burden and risks

The burden for each participant (and/or their caregivers) comprises 3 times a 3-day food diary (about 30 minutes/time), 36 times an appetite questionnaire (about 5 minutes/time) and 3 times assessment of body weight (which is already part of the regular routine) during the 12 weeks intervention. Furthermore, appetite ratings will be assessed 4 times (once per week) and nutritional intake once during the 4 weeks control period and body weight will be assessed once at the start of the 4 weeks control period. The risks and burden involved in participating in this study are minimal for the participants. The odors will be used in concentrations that can be found in consumer products (or lower), are non-toxic and considered safe.

## Contacts

**Public** Amaris Zorggroep Werkdroger 1 Laren 1251CM NL **Scientific** Amaris Zorggroep

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## **Trial sites**

## **Listed location countries**

Netherlands

## **Eligibility criteria**

### Age

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

### **Inclusion criteria**

\* Residing on the selected psychogeriatric ward of a nursing home

\* Informed consent given by the resident and/or by their legal representative, to participate in the study, to inform the general practitioner and inquire about their medical data

## **Exclusion criteria**

- \* Use of (par)enteral nutrition
- \* Extreme overweight (BMI >35 kg/m2)
- \* Residing at a somatic or short-stay ward
- \* Terminal or vegetative stage (i.e. life expectancy <1 month)

not being able to communicate

## Study design

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## Design

Study type: Interventional	
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	25-03-2018
Enrollment:	40
Туре:	Actual

## **Ethics review**

Approved WMO	
Date:	22-03-2018
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
 NL64189.081.18

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