Subject information for participation to sensory research.

# The tastant smell study

Human ability to detect basis tastants through orthonasal and retronasal olfaction



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#### Introduction

Dear Sir / Madam,

We ask you to participate in a scientific study.

Participation is voluntary. Your written permission is required to participate.

Before you decide whether you want to participate in this study, you will receive an explanation of what the study entails. Read this information carefully and ask the researcher for an explanation if you have any questions.

General information about participating in such a survey can be found on the website of the national government: www.rijksoverheid.nl/mensenonderzoek.

#### 1. General information

This research is carried out by the group of Sensory Science and Eating Behaviour, division of Human Nutrition and Health of Wageningen University. This study requires around 40 subjects.

## 2. Purpose and background of the study

The purpose of this study is to gain more insight into the smell perception of the 5 basic tastes and of fat, through retronasal and orthonasal olfaction.

#### 3. What participation involves

During the study you will be asked to smell solution of sucrose (sweet), NaCl (salt), citric acid (acid), MSG (umami), quinine monohydrochloride dihydrate (bitter), oleic acid (fat), linoleic acid (fat). All these stimuli are commonly used in food or household products and are non-toxic, can be found in consumer products, and/or are considered safe. concentrations will be used that are comparable to those experienced during daily life. The whole study will last for 4 weeks. If you participate, you will be invited to our facility 3 times, each visit will last for 30-45 minutes

#### Screening criteria

You can participate in the study if you:

- Are between 18 65 years old
- Are Healthy
- Have a BMI between 18.5 and 27.5 kg/m<sup>2</sup>
- Are Non-smoker
- Have a normal sense of smell (as measured by a smell function test during the first visit)
- Are not dieting currently or in the past two months.
- you are not an employee of the Department of Human Nutrition and Health.

For the smell test, you will be asked to smell 16 different odorous pens and identify the odours they emit. You can participate in the study if you have a normal functioning sense of smell.

#### Visits and measurements

For the study you need to come to the test location Helix - Wageningen Campus (Stippeneng 4, 6708 WE Wageningen) for **4 sessions** in the period 21-11-2022 to 16-12-2022. Each visit lasts for 30-45 mins. The following will then happen;

Your first visit includes a screening session. The background, aim, and protocol of this study will be introduced, followed by a smell function test as described above. After you passed the smell function test, you will be trained to use a special container designed for olfactory study. The container consists of a cannula, you need to put the tip of the cannula loosely into a nostril (approx. 1-2 cm deep) or mouth.

In you second and third visit, **you will be invited to perform several smell tests:** You will receive several sets of samples, each set consists of three samples, two of them are same and one is different, you will be asked to smell them following the present order and indicate the different one out. Each discrimination will be followed by the question what taste you would associate it with.

## 4. What will be expected of you

In order for the examination to run smoothly, it is important that you adhere to the following agreements.

- We request you for 1 hour before the testing sessions, nothing to eat and drink that contains calories or caffeine (such as coffee, black tea, cola). You may still drink water during this period.
- keep appointments for visits.

It is important that you contact the researcher:

- · before taking any other medicines.
- if you are hospitalized or treated.
- if you suddenly develop health problems.
- if you no longer wish to participate in the study.
- if your contact details change.

#### 5. Possible adverse effects

Since tastant smell study is a study where you smell fragrances that are considered safe, there is no reason to believe that it the smelling of these fragrances poses a risk. The other procedures of the investigation (tasks, measuring instruments) do not entail any risk either.

#### 6. Potential Pros and Cons

It is important that you carefully weigh the possible advantages and disadvantages before you decide to participate.

You will not benefit yourself from participating in this study. Your participation can, however, contribute to more knowledge about people's smell experience.

Disadvantages of participating in the research can be

- possible inconveniences of the measurements in the study.

Participation in the study also means:

- that you have lost extra time;
- that you have agreements that you must adhere to;

All these matters have been described above under points 3, 4 and 5.

# 7. If you do not want to participate or would like to stop participating in the study

You decide whether to participate in the study. Participation is voluntary. If you do participate, you can always change your mind and stop, even during the study. You don't have to say why you're quitting. However, you must immediately report this to the researcher.

If you wish, the data collected from you up to that point will be destroyed, unless this is not possible. If there is new information about the study that is important to you, the researcher will let you know. You will then be asked if you want to continue participating.

#### 8. End of the investigation

Your participation in the study will end if

- · all visits as described under point 4 are over
- · you choose to stop yourself
- · you become pregnant
- the end of the entire investigation has been reached
- the researcher thinks it's better for you to stop

The entire study ends when all participants are finished.

#### 9. Use and storage of your data

For this research, your personal data will be collected, used and stored. This concerns data such as your name, address, date of birth and data about your health. The collection, use and storage of your data is necessary to answer the questions asked in this research and to be able to publish the results.

We ask your permission for the use of your data.

#### Confidentiality of your data

To protect your privacy, your data will be assigned a code. Your name and other information that can directly identify you are omitted. Data can only be traced back to you with the key of the code. The key to the code remains securely stored in the local research facility. Also in reports and publications about the research, the data cannot be traced back to you.

## Access to your data for verification

Some individuals may have access to all of your data at the study site. Also to the data without code. This is necessary in order to check whether the research has been carried out properly and reliably. Persons who have access to your data for verification purposes are the research team and the Health Care Inspectorate. They keep your data secret. We ask you to give permission for this inspection.

# Retention period of your data

Your data will be kept at the study site for a period of 15 years after the results of the study are published.

#### Withdraw consent

You can always withdraw your consent to the use of your personal data. The research data collected until you withdraw your consent will then be destroyed, unless this is not possible (for example, measurements or analyzes have already been carried out).

## Learn more about your data processing rights

For general information about your rights when processing your personal data, you can consult the website of the Dutch Data Protection Authority.

If you have any questions about your rights, please contact the person responsible for the processing of your personal data. See Appendix A for contact details.

If you have any questions or complaints about the processing of your personal data, we recommend that you first contact the research location. You can also contact the Data Protection Officer of the institution (see contact details in Appendix A) or the Dutch Data Protection Authority.

## 10. Insurance for test subjects

If you participate in the study, you do not run any additional risks. Wageningen University therefore does not need to take out any additional insurance.

#### 11. Compensation for participation

For participating in this study you will receive an expense allowance (including travel costs) of 25. This is reported to the tax authorities as income.

## 12. Do you have any questions?

If you have any questions, please contact the research team.

If you have any complaints about the research, you can discuss this with the researcher. If you prefer not to do this, you can contact the complaints officer of the Department of Human Nutrition and Health, Wageningen University. All details can be found in Appendix A: Contact details.

## 13. Signing the consent form

When you have had sufficient reflection time, you will be asked to decide whether to participate in this study. If you give permission, we will ask you to confirm this in writing on the accompanying statement of consent (appendix B, also in the attachment of email). By your written consent, you indicate that you have understood the information and agree to participate in the study.

Both you and the researcher will receive a signed version of this consent form.

Thank you for your attention.

# 14. Appendices to this information

- A. Contact details
- B. Informed Consent Form

## Appendix A: contact details

Research team

MSc. Shuo Mu, Eleonora Vissers

Dr. Sanne Boesveldt, Dr. Markus Stieger

Contact:

Shuo Mu, Eleonora Vissers

Division of Human Nutrition and Health, Wageningen University

E-mail: orthofat.hnh@wur.nl

Tel: +31 06 26 142 422

Visiting address:

Helix (building 124)

Stippeneng 4

6708 WE Wageningen

Complaints:

**Eveline Waterham** 

Department of Human Nutrition and Health, Wageningen University

Stippeneng 4 (building 124, Helix), 6708 WE Wageningen

Email: eveline.waterham@wur.nl

Institution's Data Protection Officer:

Frans Pingen

Email: Privacy@wur.nl

Authority for Personal Data:

www.autoriteitpersoonsgegevens.nl/

## **Appendix B: Subject Consent Form**

# **Subject Consent Form**

#### **Tastant smell study**

- I have read the information letter. I could also ask questions. My questions have been answered satisfactorily. I had enough time to decide whether to participate.

- I know that participation is voluntary. I also know that I can decide at any time not to participate or to stop the study. I don't have to give a reason for that.
- I give permission for the collection and use of my data for answering the research question in this study
- I know that for the purpose of checking the investigation, some people may have access to all my data. These people are listed in this information letter. I consent to such access by these persons.

- I'll give	□Yes
g s	□No
	permission to contact me again after this study for a follow-up study.
- I'll give	□Yes
	□No
	permission to make my data available for reuse by the same or other researchers after this
research.	
- I want to	participate in this investigation.
Name of s	ubject:
Signature:	Date : / /
	nat I have sufficiently informed this subject about the said research.
	ion becomes known during the research that could influence the subject's consent, I will
inform him	/her in good time.
Researche	r name:
Signature:	Date: / /
	at will receive a complete information letter, together with a signed version of the

The subject will receive a complete information letter, together with a signed version of the consent form.