



General data	
PPP number	AF-17107 (19NH01 Sweet tooth)
Title	Sweet tooth: Nature or nurture.
Theme	TKI A&F D2: The consumer, sustainable and healthy food, in a green living environment
Executing research organisation(s)	Wageningen University and Research, TIFN
Project leader research (name + email address)	Kees de Graaf, kees.degraaf@wur.nl
Coordinator (on behalf of private parties)	Rob Beudeker, beudeker@tifn.nl
Contact person of government	Wijnie van Eck, wijnie.vaneck@tki-agrifood.nl
Total project budget (k€)	1.62 Meuro
Project website address	https://isense-study.nl/
Starting date	01-06-2019
Final date	31-05-2023

Approval coordinator/consortium	
The annual report has to be discussed with the coordinator/consortium. The TKI(s) like to be informed regarding potential comments on the annual report.	
The annual report is by the coordinator on behalf of the consortium	<input type="checkbox"/> approved <input type="checkbox"/> not approved
Potential comments regarding the final report	

Description content/aim PPP	
Description of problem	<p>An important narrative in the societal discourse about the food environment is the idea that sweetness in foods promotes energy intake and obesity. The narrative “less sweetness exposure --> lower sweetness preference --> lower sugar intake --> lower body weight” is simple, attractive and powerful. However, good data that support this reasoning is currently lacking.</p> <p>This study is aimed to fill this gap in the scientific literature by investigating the effect of a low, regular or high sweetness diet on changes in sweetness preferences, energy intake, glucose metabolism and body weight. This is done in a well powered semi-controlled long term (6 months) nutrition intervention study with follow-up, where subjects are provided with foods that comprise more than 50 % of their energy requirements. The trial is named “I-sense”</p>
Goals of the project	To assess the effect of 6 months regular, low and high dietary sweetness exposure on sweetness preferences, food intake, glucose homeostasis and body weight in healthy adults.

	<p>More specifically, the objectives are:</p> <ol style="list-style-type: none"> 1. To assess the effect of 6 months regular, low and high dietary sweetness exposure on preferred sweetness intensity in a series of familiar and unfamiliar foods. 2. To assess the effect of 6 months regular, low and high dietary sweetness exposure on sweetness perception, food choice and intake during a test meal, dietary taste patterns, taste preferences and food cravings. 3. To assess the effect of 6 months regular, low and high dietary sweetness exposure on glucose homeostasis, body weight and body composition. 4. To assess the effects on the aforementioned outcomes after 4 months of follow up.
--	--

Results	
Expected results 2020	<ul style="list-style-type: none"> -Approval of Study protocol by METC -Start of Recruitment by end Q1 -Start of data collection by start Q3 -By end of year enrolment of 30 Subjects
Achieved results 2020	<ul style="list-style-type: none"> -Approval of Study protocol by METC in Jan 2020 after five rounds of questions -Start Recruitment by beginning Q4; Delay due COVID -Start data collection by Q4 2020 -By end of year enrolment of 15 Subjects
Expected results 2021	<ul style="list-style-type: none"> -Further enrolment of 140 subject -Finish data collection of 15 subject -Produce papers on <ul style="list-style-type: none"> -food frequency questionnaire to measure sweet taste exposure -set-up and methodology of i-sense trial -development and testing of primary outcome measures, i.e. sweetness preferences of (un-)familiar sweet foods

Delivered products in 2020 (give titles and/or description of products, or a link to the products on the project website, or other public websites).
<u>Scientific articles:</u> -
<u>External reports:</u>
<u>Professional articles in journals:</u>
<u>Lectures/posters during workshops, conferences and symposia:</u> Eva M. Cad, Paulien Brandsen, Claudia Tang, Monica Mars, Katherine Appleton, Kees de Graaf How sweet is too sweet? Measuring sweetness preferences in familiar and unfamiliar foods amongst Dutch consumers; Poster for Eurosense2020 Appleton KM. Sweet taste exposure, preferences and intakes. Annual Meeting of the American Society for Nutrition, July 2020, online (940 attendees)
<u>TV/radio/social media/newspaper:</u>

<u>Others (techniques, machines, methods, etc.):</u>
--