

# Radboud Universiteit Nijmegen

Using language to make healthy food more attractive

Bachelor thesis

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# **Abstract**

Language is a substantial part of advertising and has been thought to influence the processing of information of consumers. Advertisements which are used in this study are food-related, and especially healthy foods. There are many factors that influence eating habits, but one of them might be the way we use language to describe food. We often describe unhealthy foods in a more appealing way than healthy foods. While the different uses of language on food menus and labels has been studied, this is not the case for advertisements. Since advertising is such a prominent topic nowadays, this study will research whether different types of language have an effect on the attitude towards healthy food advertisements. An added element to this study is the use of a bodily visual indicator, a hand, in the advertisements. It is hypothesized that this element can have a positive effect on the attitude of the participants. For six different types of healthy food, six different advertisements were made. The advertisements included a visual indicator, or not, and basic, nutritional or indulgent language. The participants were asked through an online questionnaire to answer questions about the advertisements. These questions measured their attitude using the variables desirability, persuasiveness and credibility. The results showed that the type of language did not influence desirability or persuasiveness. Also, using a bodily visual indicator did not have an effect on attitude. However, basic language was found to be significantly more credible than nutritional language. Health claims depend on how credible the claim is, therefore consumers might find nutritional language less credible than basic language. Although the results were different than hypothesized, this study contributes to research towards the effect of language use in food advertisements.

## Introduction

The influence of language on different cognitive processes and on modern life in general has been an extensively researched subject. Language has been found to have an effect on the way people think, including the perception of emotions (Barrett, Lindquist & Gendron, 2007; Lindquist, 2017). This topic elicited a well-known theory by the American language expert Edward Sapir and his pupil Benjamin Lee Whorf. The commonly named Sapir-Whorf hypothesis includes linguistic relativity (Kay & Kempton, 1984) which is the idea that language has an influence on one's thoughts.

Language relativity is the general idea that is the background of the research towards the effect of language in advertisements, which is a fairly new topic. Many studies on this subject have explored it in a bilingual context, with the main focus being the differences between advertisements in a person's first and second language. An example of these differences is the differences in memory. This topic was examined by Luna & Peracchio (2001), their study showed that advertisements messages in one's second language results in inferior memory than in one's first language. This is thought to occur because processing a message in a first language is more likely to be on a conceptual level than in a second language. Also, Hornikx, van Meurs & Hof (2013) studied the effectiveness of using a foreign language in advertising. They showed that congruency between the advertised product and the foreign language is essential for the effectiveness of the advertisement. Lastly, Hornikx, van Meurs & de Boer (2010) tested the differences in appreciation of advertisements in one's first language and second language. For Dutch consumers, English (second language) was preferred to Dutch (first language) when it was easy to understand. This shows that comprehension of a slogan plays a significant role in the preference for and appreciation of English in international advertising. These studies have shown interesting findings on the topic of the influence language in advertisements can have. However, they only show this influence on bilingual level and not the effect the use or type of language used in advertisements can have on consumers. Advertising language distances itself from other types of language is in its function, since it attempts to be perlocutionary (Searle, Kiefer & Bierwisch, 1980). This means that it has clear behavioural and/or attitudinal effects. Also, Harris, Sturm, Klassen, and Bechtold (1986) state that studies looking into persuasion in advertising with a focus on language might be very useful. Since language in advertisements has been thought to influence consumers, this study will look into the effects the type of language used can have.

Language used in advertisements can have an effect on the manner consumers process information given in advertising messages. A category of advertising that is of interest in this

study is advertisements of the food industry. Several studies have been conducted within the field of food advertising, specifically the effect this can have on children. One study by Powell, Szczypka, Chaloupka and Braunschweig (2007) has shown that 97.8% and 89.4% of food-product advertisements on television viewed by children (two to eleven years old) and adolescents (twelve to seventeen years old) were of unhealthy food options in the United States. This meant that the food shown in most food advertisements were high in fat, sugar or sodium. Halford et al. (2007) showed that exposure to food adverts produced a significant increase of total food intake in young children. These advertisements are often aimed at persuading the viewer into buying the food item presented. This might suggest that when the majority of food adverts shown on television is of unhealthy food options, children might eat more unhealthy food after viewing these advertising messages than before viewing the advertisements. This might lead to being overweight, or more extreme, obesity. This shows that advertisements for food do have an influence on eating habits. Therefore, advertisements for healthy foods should become more prevalent and effective.

Another matter related to language which contributes to unhealthy eating habits is the representation in our minds of unhealthy foods (Papies, 2013). Papies (2013) found that we represent and describe unhealthy food in terms of actually consuming it, using words relating to taste and texture (e.g. "crunchy", "tasty"), and this is often less the case for healthier or neutral food. This representation and description might be a catalyst resulting in wanting to eat the tempting food and eating it. The idea of mental representation of foods having an effect on actually eating unhealthy foods is researched in other studies as well. Muñoz-Vilches, van Trijp & Piqueras-Fiszman (2019) asked their participants to mentally imagine eating types of food and imagine the moment after eating it. These mental simulations are characterized as images or complete experiences, including real sensations and feelings. They found that the participants increased wanting unhealthy food when they simulated actually eating it instead of imagining the moment after the consumption. An example of imagining eating unhealthy food showed that the language the participant used was describing the good smell and taste the product had, while the imagination of eating the healthy food was described in a less appealing manner. An interesting conclusion by Tiggemann and Kemps (2005) adds to the idea that our mental imagery and representation of unhealthy foods play a part in actually wanting to eat that food. They researched the role of mental imagery in food cravings, it was found that the intensity of a craving was related to the imagery of the food. The types of senses that were most often involved in the food imagery were visual (39.7%), gustatory (30.65) and aromatic (15.8%). Tiggemann and Kemps (2005) concluded that cognitive techniques aimed at reducing the vividness of sensory imagery could be useful to

reduce food cravings. This could mean that training our brain to reduce the vividness of the representation of unhealthy foods could result in us actually eating less of it. Training our brain might support actually eating less unhealthy food, however, many external factors also contribute to unhealthy eating habits.

Other factors which influence our eating habits are the labelling of food and restaurant-menu descriptions. Turnwald, Jurafsky, Conner and Crum (2017) showed that the menu descriptions of the healthy food options at restaurants are often less appealing than those of the regular menu. Healthy food was often described with less appealing themes and more health-related words; "fat-free", "nutritional" and "simple". This health-focused language may add to the belief that healthy foods are not flavourful or indulgent. A recommendation they give towards improving public health is incorporating more indulgent language in menu descriptions of healthy food. Turnwald and Crum (2019) focused on labels on food and revealed that often, labels of healthy food options are focused on the health attributes rather than the tastiness. They conducted four different studies; two of these tested the selection of healthy food and the differences when adding a health-focused label (e.g. "Healthy Choice Vegetable Wrap") or a taste-focused label (e.g. "Mouth-watering Grilled Vegetable Wrap"). The first study found a 48.7% increase in people choosing vegetables with taste-focused labelling, while the second study showed an 84.1% increase. In the other two studies, they addressed whether taste-focused labelling will provide a better environment for consumers to learn healthy food preferences and also whether these tasty labels can alter the experienced taste and mindsets about healthy foods. The results showed that these tastefocused labels did provide a better environment, also, they enhanced the taste experience and helped establishing the mindset that healthy food can be enjoyable.

Adding to the idea that labels and descriptions can affect the food people choose, Jeong et al. (2019) researched several environmental factors that promote or demotivate healthy eating at restaurants. Advertisements of healthy menu options and signs that highlight unhealthy menu options were mentioned as a part of these factors. Cadario and Chandon (2019) researched which healthy eating nudges worked best; nudges are described as 'any aspect of the choice architecture that alters people's behaviour in a predictable way, without forbidding any options or significantly changing their economic incentive' (Thaler & Sunstein, 2008). Some of these nudges include descriptive and evaluative nutritional labelling and vivid hedonic descriptions. The results showed that the labelling was less effective than the descriptions, which also shows the influence that language use can have on food consumption.

While the differences between the language used on healthy (and less healthy) food labels and advertising messages have recently been studied, the manner in which healthy options are advertised in an adequate manner is not researched well enough to get a clear perception on which linguistic approach is most effective. Turnwald, Boles and Crum (2017) looked at which type of language is most effective when describing vegetables on a menu. They chose four types of language; basic, indulgent, healthy restrictive and healthy positive. Basic language only described the vegetable which was on the menu without adjectives. Indulgent language included expressive adjectives such as "Sweet sizzlin". Healthy restrictive language focused on the diet aspect of the food and used adjectives such as: "Reduced-sodium" and "Light". Lastly, healthy positive language included more positive adjectives, focusing on the benefits of the vegetable, such as: "Vitamin-rich" and "Nutritious". However, the differences in length of the descriptions might be too large to adequately ascribe the diversity in effectiveness to the type of language. While the indulgent descriptions were around five words long (e.g. "Rich buttery roasted sweet corn"), the basic descriptions had one or two words (e.g. "Corn"). Indulgent language was shown to be the most effective to make people choose vegetables, however, the descriptions are not comparable. This current study will be taking inspiration from the different types of language Turnwald, Boles and Crum (2017) used.

While Turnwald, Boles and Crum (2017) studied the influence of language using food labels in a cafeteria, this study will research the influence of language in advertisements. The aim of this study will be to effectively discover what language use in advertisements for healthy foods will affect the attitude of consumers. Following the 'Integrative Model of Behavioural Prediction' by Fishbein and Yzer (2003), attitude can change behaviour, which ultimately is the aim of advertising. Within this study, attitude will be measured by using three constructs; perceived desirability of the food advertised, credibility of the ad and persuasiveness. Since the advertisements shown in this research will be fictive, it is important that the consumers do find them credible, this might increase the ecological validity of the study. Previous advertising research has suffered from non-natural conditions (Derbaix, 1995), therefore it is important to make the advertisements as natural and credible as possible. Desirability has been seen to be a part of the way a person evaluates something and thus is a part of their attitude towards this 'attitude object' (Infante, 1971), for this research this is an essential part of attitude. Lastly, persuasion in advertisements is often used to shape the attitude of a consumer (Perloff, 1993), this shows the importance persuasiveness of an ad can have when measuring attitude.

What will be added in this study is the influence of a bodily visual indicator; using this may influence the attitude consumers have towards the advertisement. The idea behind the use of this cue is embodied cognition. Embodied cognition theories suggest that mental simulations of a bodily state (Eelen, 2011), such as a hand grabbing food, can create a cognitive reaction in consumers, which can make them desire the food more than without this indicator. Elder and Krishna (2012) also showed with four conducted studies that visual depictions (e.g. orienting a product towards a participant's dominant hand) facilitate the mental imitation of the actual experience (e.g. holding a product). Also, Papies (2013) states that thinking about a stimulus activates similar brain areas as when actually using it, which prepares us for effectively interacting with it. This might mean that adding a bodily visual indicator, a hand, in this study might contribute to the mental simulation of actually holding and eating the foods shown.

Accordingly, in this study, the effects of different types of language (basic, nutritional and indulgent) and the use of a visual indicator on the attitude towards healthy food advertisements will be investigated. Consequently, the main research question of this study will be:

Main question: To what extent is there an effect of different types of language (basic, nutritional and indulgent) on the attitude towards healthy foods in advertisements?

H1: Indulgent language will lead to a more positive attitude towards the healthy foods in the advertisements in comparison to basic and nutritional language.

The reasoning behind this hypothesis is the fact that results from past studies by Turnwald and Crum (2019) and Turnwald, Boles and Crum (2017) have shown that indulgent language and focusing on taste increase the desirability of the food and make people choose for healthy food more often; therefore, also increasing persuasiveness. The effect of a visual cue will also be researched, therefore will there be a second research question:

*RQ2*: To what extent is there an effect of a bodily visual indicator on the attitude towards healthy foods in advertisements?

H2: The use of a bodily visual indicator will lead to a more positive attitude towards the healthy foods in the advertisements compared to using no visual indicator.

This could be expected because the visual cue is able to create an imagination in the mind of the participants of actually eating and holding the food shown in the advertisements. This mental imagination might make the food more desirable. Lastly, to examine whether the use of a visual indicator can affect which type of language is more effective, a third research question will be answered:

*RQ3*: Is there an interaction between the use of a bodily visual indicator and type of language in the advertisements?

H3: The use of indulgent language and a visual indicator will lead to a more positive attitude towards the healthy foods in the advertisements. This compared to basic and nutritional language in combination with a visual indicator or using no visual indicator.

This is hypothesized because both a visual cue and the use of indulgent, and thus sensory, language might activate mental simulation of the real food and eating it. Speed and Majid (2019) also predicted that flavour-related language is easier to mentally simulate than other sensory language.

This study will help advertisers of food companies to make a choice of language used in advertisements for healthy food. The general aim of these advertisements will possibly be to make healthy food more attractive to consumers. Furthermore, the results of this study will contribute to the research towards the effects of language use and visual indicators in food advertisements and advertising messages in general.

## Method

#### Materials

In this study, to test whether the language used for the healthy food advertisements and the use of a bodily visual indicator do have an effect on the attitude towards the food, several advertisements were created. These fictive ads showed six different healthy food options, in six different conditions. In total, there were thirty-six advertisements. They differentiated from each other on the basis of the used language and whether it included a visual indicator or not. The types of language used were basic, nutritional and indulgent. The choice for these types of language was derived from the study done by Turnwald, Boles and Crum (2017). They used indulgent, basic and health-oriented language, however, these were not comparable by means of length. Therefore, in this study it was made sure that all three types are comparable. All the slogans added in the advertisements were comparable length. Per

product, the only difference was the adjectives used to indicate which type of language was used. All advertisements are added in the appendix. The difference can be shown with an example. This slogan including basic language was used for the Caesar salad: "Koop nu onze nieuwe caesar salade met verse ijsbergsla, scharrelkip en salade croutons" (translation: "Now buy our new Caesar salad with fresh iceberg lettuce, free-range chicken and salad croutons."). Indulgent language included several sensory adjectives: 'Koop nu onze smakelijke caesar salade met frisse ijsbergsla, malse kip en knapperige croutons." (translation: "Now buy our tasty Caesar salad with fresh iceberg lettuce, tender chicken and crunchy croutons."). Lastly, nutritional language aimed at the nutritional values of the food: "Koop nu onze gezonde caesar salade met biologische ijsbergsla, magere kip en vezelerijke croutons." (translation: "Now buy our healthy Caesar salad with organic iceberg lettuce, lean chicken and fibre-rich croutons"). The visual indicator that was used in half of the advertisements is a hand close to the food or holding a piece of cutlery fit for the food shown.

Every advertisement included the same six questions to measure the desirability of the food, the persuasiveness of the ad and credibility of the ad. The two questions to measure desirability were: "Dit product ziet er lekker uit" (translation: "This product looks tasty") and "Ik wil dit product eten/drinken" (translation: "I want to eat/drink this product"). The two questions for persuasiveness were: "Ik heb meer zin gekregen in dit product" (translation: "I have become more interested/excited in this product") and "Ik vind deze advertentie overtuigend" (translation: "I find this advertisement convincing"). Lastly, the two questions to measure credibility were: "Deze advertentie vind ik geloofwaardig" (translation: "I find this advertisement credible") and "Dit is een realistische advertentie" (translation: "This is a realistic advertisement"). The Cronbach's alpha for each dependent variable was the average of the two questions. The internal reliability for desirability was overall good;  $\alpha = .89$  and even excellent;  $\alpha = .93$ . For persuasiveness, the internal reliability was acceptable  $\alpha = .79$ , however, it was generally good;  $\alpha = .87$ . Lastly, the internal reliability for credibility was mostly good;  $\alpha = .89$  and also excellent  $\alpha = .92$ .

All advertisements were in Dutch to exclude the influence the use of a second language (English) in an ad, since the subjects will be Dutch-speaking natives. Also, no brand name for all six products are shown to eliminate the effect this can have on the subjects.

#### Design

The design used in this study was a 2 (with visual indicator and without) x 3 (basic, nutritional or indulgent language) within-subject design. The dependent variable, attitude, consists of three different constructs; desirability, credibility, and persuasiveness.

## **Subjects**

In total, 319 participants were included in the computing of the results. The mean age of the participants was 33.46 years. The ages ranged from 18 to 78 years. In total, 27.9% of the subjects was male (M=89), 71.5% was female (M=228) and .6% rather did not want to say (M=2). The educational level of the participants was quite high; around 42% has completed a university education or is currently studying at university (M=134). 30.4% completed or studies at a university of applied sciences (M=97). 19.7% completed or was doing secondary vocational education (M=63). Lastly, 7.5% of the subjects finished or is still in high school (M=24). In total, 12.2% of the participants was vegan or vegetarian. 32% was on a diet and watching their weight. Only 5.3% had medical dietary wishes such as diabetes, gluten intolerance and peanut allergies.

#### Procedure

The experiment was conducted by means of an online questionnaire, made with Qualtrics. At the start, the subjects were given instructions and gave their consent.

products: a fruit salad, a smoothie, a salad, a healthy sandwich, a healthy curry and a soup. All the advertisements were presented in a random order; however, each participant saw all six conditions. The choice of using six different products was implemented to exclude the influence of the personal taste of a participant. This made the results more generalizable. Every advertisement included the same six questions to measure the desirability of the food, the persuasiveness of the ad and credibility of the ad.

After these questions, the participants filled in some general questions regarding their age, their gender, and their highest level of education. Also, several questions regarding control variables were asked; how hungry the participant at the time of participation on a 7-point Likert scale. After that, the question was asked whether the participant had any special dietary restrictions such as being vegan or vegetarian, trying to lose weight, because of medical reasons (such as allergies and diabetes) or none. They could choose more than one answer and had to specify which medical reason they had. After the last questions, the subjects were debriefed.

#### Statistical treatment

The two questions per dependent variable were averaged. Three separate repeated measures Two – way ANOVA's were used to test the effect of the type of language on the attitude, the effect of the use of a visual cue and the interaction between the two independent variables;

visual cue and language used. The tests were conducted for each dependent variable separately.

# **Results**

The type of language used in the advertisements (basic, nutritional, indulgent), did not have a significant effect on the desirability of the advertisements (F(2,636)=.610, p=.544,  $\eta_p^2=.002$ ). The use of a visual indicator (present or absent) also did not have a significant effect on the desirability (F(1,318)=.302, p=.479,  $\eta_p^2=.002$ ). Additionally, the interaction effect between visual indicator and type of language in terms of desirability was not found to be significant (F(2,636)=1.137, p=.367,  $\eta_p^2=.003$ ).

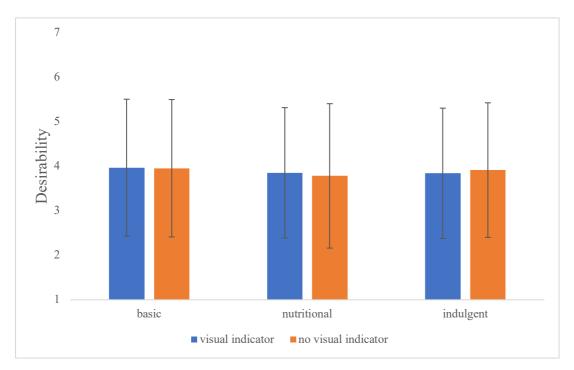


Figure 1. Means and standard deviations desirability

The type of language (basic, nutritional, indulgent) does not have a significant effect on the persuasiveness of the advertisement (F(2,636)=1.679, p=.187,  $\eta_p^2=.005$ ). Also, the use of a visual indicator does not have a significant effect on the persuasiveness (F(1,318)=.003, p=.957,  $\eta_p^2=.000$ ). Additionally, the interaction effect between visual indicator and type of language in terms of persuasiveness was not found to be significant (F(2,636)=.478, p=.620,  $\eta_p^2=.002$ ).

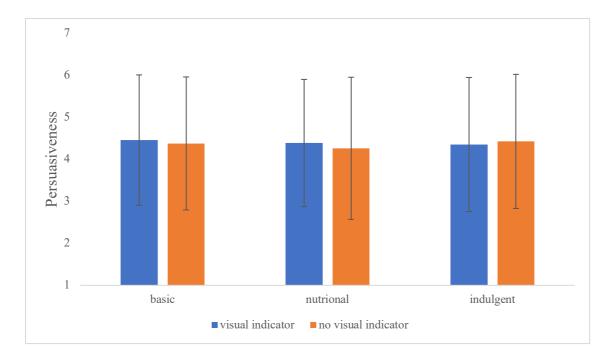


Figure 2. Means and standard deviations persuasiveness

The type of language (basic, nutritional, indulgent) had a significant effect on the credibility of the advertisement (F(2,636)=6.737, p=.001,  $\eta_p^2=.021$ ). Basic language was rated significantly more credible (M=4.36, SE=.075) than nutritional language (M=4.08, SE=.075). No significant difference was found between basic language (M=4.36, SE=.075) and indulgent language (M=4.18, SE=.074). Also, nutritional language and indulgent language did not differ significantly.

The use of a visual indicator did not have a significant effect on the credibility  $(F(1,318)=.128, p=.721, \eta_p^2=.000)$ . Additionally, the interaction effect between visual indicator and type of language in terms of credibility was not found to be significant  $(F(2,636)=.522, p=.594, \eta_p^2=.002)$ 

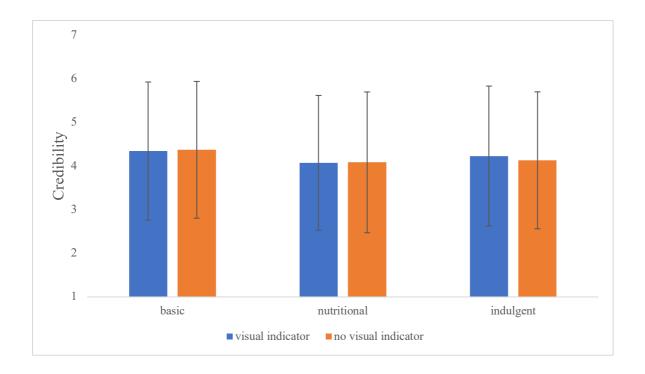


Table 3. Means and standard deviations credibility

## **Conclusion and discussion**

Past studies from Turnwald & Crum (2019) and Turnwald, Boles & Crum (2017) have shown the influence of using indulgent language when presenting healthy food in a real restaurant setting or on a restaurant menu. Based on the results of these studies, it was predicted to find differences in the participants' attitude towards the healthy food advertisements using different types of language. However, the results of this study have not shown the influence indulgent language can have on the attitude people have towards healthy food in advertisements. The first hypothesis (H1) is therefore rejected. Although it was found by Rayner, Rotello, Stewart, Keir and Duffy (2001) that viewers of an advertisement spend more time looking at the text than the picture part. The different types of language in the advertisements in this study did not influence the desirability of the food or the persuasiveness significantly. Previous studies looked at menus in a restaurant and food labelling, where people have a choice in which type of food they choose. In this study, the effect of the type of language is researched with the use of advertisements. In this setting, the participants do not have a choice in which food they read a slogan or description from. This could mean that personal preference of the food might have influenced the desirability of the food more than the slogans in the advertisements did. Also, the advertisements made for this study might have not been realistic enough, since they were not made by a professional advertising company.

Participants might not perceive the advertisements as real, and therefore the advertisements might not have been as persuasive as real advertisements are. However, there was an influence on the credibility of the advertisements. Using basic language was seen to be more credible than nutritional language. A study by Strijbos et al. (2016) showed that acceptance of health claims about food are dependent on the credibility of the claims. The advertisements with nutritional language in this study claim that the food shown is e.g. "Light" or "Full of vitamins", however, there is no evidence to back this claim up. The advertisements with basic language use more credible and believable adjectives to describe the food shown. This might be the reason the use of basic language is seen as significantly more credible than using nutritional language.

It was also hypothesized that the use of a bodily visual cue would add to a more positive attitude towards the healthy food in the advertisements. This hypothesis (H2) is rejected based on the results. The visual indicator added in half of the advertisements shown to the respondents of this study, did not affect the attitude of the participants. For the participants, the added element of a hand in the advertisement did not create a cognitive reaction which could have made them desire the food more than without the added element. Papies (2013) assumed that attractive, but unhealthy, foods such as chips were more likely than neutral, but healthy, foods to activate a cognitive reaction which will simulate actually eating it and making the food more desirable. Papies (2013) assumed this because eating unhealthy foods typically leads to more rewarding experiences. Since the advertisements in this study were for healthy foods, the added visual indicator might have not elicited such a cognitive reaction. Future studies might use this outcome of the present study and look into the effects of a visual indicator in advertisements for unhealthy foods.

Another hypothesis presented was regarding the interaction between the use of a visual indicator and the type of language used in the advertisements. It was expected that the participants would have a more positive attitude towards the healthy foods when indulgent language was used in combination with a visual indicator. However, this interaction was not found. The third hypothesis (H3) is therefore rejected. It was hypothesized that adding both indulgent (sensory) language and a visual bodily indicator would activate a mental simulation of the real food and eating it. This might have happened since embodied cognition theories suggest that a simulation, or a visual depiction of a bodily state facilitates the mental imitation of the actual experience. However, the addition of a bodily visual indicator did not influence the attitude of the participants in this study. Also, Speed & Majid (2019) predicted that flavour-related language is easier to mentally simulate than other sensory language. While the advertisements with indulgent language included flavour-related adjectives, they also

included other adjectives which were related to the mouth-feel of the food or were exaggerating how good the food is. Since the advertisements also included other sensory language, this might have influenced the outcome of the third hypothesis. Other studies might look at the effect only flavour-related language can have on the attitude of consumers.

While past studies showed the effectiveness of using indulgent language, this study has shown that it might not be applicable for healthy food advertisements. Advertisements are used for different purposes than food labelling and restaurant menus are. While advertisements are used to influence buying behaviour more than physical behaviour, food labels and menus influence physical behaviour more. Future studies might investigate the effect of different types of language in healthy food advertisements on purchase intention, buying behaviour, rather than the attitude consumers have towards the healthy food.

Although using a questionnaire is an effective way to measure attitude, it might not be a realistic setting to look at advertisements and answer questions about them. In real life, people do not see advertisements in a questionnaire and answer questions about it directly after. For future studies, the setting should be more like a real-life situation. One technique which can be used for this is one which the website YouTube already uses: Brand Lift surveys. This is a short survey which people will see before looking at YouTube videos. These questions are about an advertisement the viewer has seen on YouTube beforehand. The survey measures variables such as brand awareness and purchase intention (Think with Google, 2018). Using this technique, the attitude participants have towards the food shown and the advertisements might be more genuine. Also, the participants knew beforehand that the aim of this study was to study the effects of advertising on the attitude of people. Respondents were expected to be influenced by the advertisements. This could have been excluded or mentioned in different words to not influence the way in which the participants responded to the questions.

Overall, this study did not show that indulgent language is more effective than basic or nutritional language in making the consumer have a more positive attitude towards the healthy foods in the advertisements. It also did not show the effect of the use of a visual indicator on the attitude of the participants. However, the results do show that using nutritional language in healthy food advertisements might decrease the credibility of the advertisement. Advertising is an influential medium at this moment in time, future studies should focus more on how companies can make healthy food more attractive for consumers. Hopefully, this can influence the way in which consumers look at healthy food options in a positive manner.

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# **Appendix**

Order of the advertisements: 1. Basic – Nutritional, 2. Indulgent – Basic (visual indicator), 3. Nutritional (visual indicator) – Indulgent (visual indicator).











