

Healthful Food Choice in Restaurants

*The influence of nutrition label and main course context on
consumers' food choices in restaurants*

Master Thesis Communication Studies

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Abstract

In today's western society, the number of people with overweight increases. Therefore, stimulating consumers making healthful food choices becomes of great importance. It is still little known about consumers' actual food choice in restaurants in the context of healthy eating. The purpose of the study was to investigate the influence of nutrition labels and main course context on consumers' food choice in restaurants. In a 2(nutrition label: present vs. absent) x 2(context main course: healthy vs. non-healthy) between subject design, 160 respondents had to indicate their starter and dessert choice using a menu card. Context of the main course was found to effect consumers' starter choice. Namely, a compensation effect occurred when the main course was put into a healthy or non-healthy context. In other words, when consumers perceived the main course as healthy, they selected a non-healthy starter and when consumers perceived the main course as non-healthy, they selected a healthy starter. The compensation effect was not found for dessert choice. Furthermore, nutrition information had no effect on starter and dessert choice, which could be due to the fact that Dutch consumers are not familiar with restaurants providing nutrition labels on their menu cards. Besides, this study showed that consumers hold more positive attitudes towards nutrition information on product packages in comparison to nutrition information on menu cards.

It can be concluded that a public information campaign would be helpful to introduce nutrition labels on menu cards and create positive consumers' attitudes towards these labels. In addition, a public information campaign has to make the consumers aware that following a healthy lifestyle is of great importance. Finally, also restaurants must help and stimulate consumers making healthful food choices by placing healthy dishes and providing nutrition labels on their menu cards. Finally, the portion size of the food served in restaurants must decrease.

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After two years of studying the master Communication Science at the University of Twente, my final report is finished. Namely, my master thesis. I have developed an academic view towards marketing communication and more specifically, I have learned a lot about the topics food and health. Besides the learning aspects, I made new sweet friends who I would like to thank for the great time I had in Enschede.

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Table of contents

Introduction	6
1 Theoretical framework	7
1.1 Taste expectation	7
1.2 Food choice	9
1.3 Descriptive names as extrinsic cue	10
1.4 Nutrition labels as extrinsic cue	11
1.5 A changing environment	12
1.6 Menu card context	13
1.7 Conclusion and research model	14
2 Pre-study	15
2.1 Participants	15
2.2 Stimuli	15
2.3 Measures	15
2.4 Procedure	16
2.5 Data analysis	16
2.6 Results and discussion	16
2.6.1 Starter	16
2.6.2 Main course	18
2.6.3 Dessert	19
2.6.4 Discussion	20
3 Main study	22
3.1 Participants	22
3.2 Stimulus material	22
3.3 Measures	24
3.4 Procedure	25
3.5 Data analysis	26
3.6 Results main study	26
4 Discussion	33
4.1 Discussion	33
4.2 Limitations and future research	36
4.3 Marketing implications	37
References	39
Appendix	42
APPENDIX A. Questionnaire Pre-study	42
APPENDIX B. Stimulus material Main study	45
APPENDIX C. Questionnaire Main study	46
APPENDIX D. Main study – original starter and dessert choice	50

Introduction

Food choices and food consumption are important topics regarding consumers' health. World-wide, the number of people with overweight, obesity, diabetes, and other diseases increases (Johnson, 2000; Ronteltap, Sijtsema, Dagevos, & Winter, 2012). In 2011, 36.8% of the Dutch adults had overweight and 11.4% was obese (Centraal Bureau voor de Statistiek, 2013). Due to the growing number of obesity and other related health diseases, the choice for healthy food becomes more and more important.

Many studies focused mainly on promoting healthy food choice based on nutrition information on packages and purchase decisions in supermarkets. Despite this interest, a literature gap is identified looking at the different environmental contexts. Particularly, current insight into healthy food choice in restaurants is limited. Today we acknowledge that not all consumer behavior is based on conscious awareness. For example, the study of Chandon and Wansink (2007) shows that people are biased by "health halos". When people perceive a restaurant as healthy, they order and eat more than people who perceive a restaurant as unhealthy (Chandon & Wansink, 2007). Also Meiselman, Johnson, Reeve and Crouch (2000) note that environment or context influences consumers' food choice and consumption. Since we know that many of consumers' food choices and consumption are influenced by a certain context, this study gives an insight in consumers' food choice in restaurants. It will broaden the scope of the influence of extrinsic cues on food choice, by researching the influence of nutrition labels and main course context on consumers' food choice. Additionally, this study measures consumers' actual food choice.

The results of this study are relevant for academic reasoning as well as for public health interventions and health counseling organizations at which healthy eating is an important topic. Furthermore, the results of this study could contribute to the restaurant branch, and specifically the overarching branch Koninklijke Horeca Nederland. These organizations can stimulate and help consumers to make more healthful food choices. The main focus of the study at hand is on the concepts taste expectation, descriptive names, nutrition labels, environmental cues, and context which influence consumers' food choice.

1 | Theoretical framework

The study at hand starts with a theoretical framework regarding important topics in the context of healthy food choice. The concepts, taste expectations, food choice, descriptive names, nutrition labels, environment, and context are explained. Providing the research model, based on the formulated hypotheses, is the final part of the theoretical framework.

1.1 Taste expectation

Verbeke (2006) mentioned that the perceived importance of healthy food increases. Yet, consumers are not willing to compromise on taste. It is found that healthfulness and tastiness are negatively correlated, which means that consumers perceive unhealthy food as tastier than healthy food (Raghunathan Naylor, & Hoyer, 2006). To have a thorough understanding of this process, it is necessary to know which factors affect the taste expectations of consumers. Earlier studies have examined which factors determine people's taste expectation. It is shown that consumers' taste perceptions are influenced by intrinsic cues and extrinsic cues (Veale & Quester, 2009).

Intrinsic cues

According to Veale and Quester (2009), intrinsic cues can be described as "any product attribute inherent to the product itself" (p. 134). Examples of intrinsic factors of food are flavor, smell, and texture. Besides intrinsic factors of food, consumers' also hold intrinsic factors. For example, consumers' attitudes, values, and beliefs. A fundamental assumption in human psychology is that attitudes guide, influence, direct, shape, and predict actual consumer behavior (Kraus, 1995). It is therefore of great importance that consumers hold positive attitudes towards healthy food in order to stimulate their healthy food choice.

Verbeke (2005) and Urala and Lähteenmäki (2004) studied the attitude of consumers' willingness to use functional foods. Urala and Lähteenmäki (2004) define functional foods as "a new category of products that promise consumers improvements in targeted physiological functions" (p. 793). Urala and Lähteenmäki (2004) point out that the perceived reward is the best predictor for willingness to use functional foods. Additionally, Verbeke (2005) argued that the most important factor for acceptance of functional food is believing in its health advantages. Therefore, people have to be interested in health. Roininen, Lähteenmäki,

and Tuorila (1999) found significant results that gender and age are affecting people's attitudes towards health and taste. Roininen et al. (1999) found that females hold more health and taste attitudes than men. More specifically, females have a higher level of interest towards the health and taste aspects of food in contrast to men. Another result of Roininen et al. (1999) is that younger people were less concerned with health and hold more taste attitudes than older people. Steptoe, Pollard, and Wardle (1995) support the findings of Roininen et al. (1999) by reporting that motives for food choice are influenced by sex and age, as well as education. Additional intrinsic factors influencing food choice are health, mood, weight control, and ethical concern (Steptoe et al., 1995). In contrast, Holm and Kildevang (1996) claim that taste is the only criterion for buying or not buying a particular food.

The study at hand focuses on the influence of consumers' intrinsic cues regarding health (i.e. General health interest, Health awareness, and Involvement bodyweight) and taste (i.e. Craving for sweet foods and Pleasure) on food choice. The following hypotheses are formulated:

H1: The higher the level of consumers' General Health interest, Health awareness, and Involvement body weight, the more likely they are to select a (a) healthy starter and (b) healthy dessert.

H2: The higher the level of consumers' Craving for sweet foods and Pleasure, the less likely they are to select a (a) healthy starter and (b) healthy dessert.

Extrinsic cues

An extrinsic cue can be described as a product characteristic which is not fundamental to the product itself but externally attributed to the product, or in this case, food (Veale, Quester, and Karunaratna, 2006). Extrinsic cues can influence consumers' perception of the food. Examples of extrinsic cues are descriptive names, nutrition labels, context, and environment. Positive effects were seen for the use of descriptive names in restaurants. Wansink, van Ittersum, and Painter (2005) found that descriptive names of meals in a restaurant positively influenced consumers' perception of a food product. It is also found that price, sensory appeal, convenience, and natural content influences consumers' perception of food (Steptoe et al., 1995). In some situations extrinsic cues are leading in favor of intrinsic product attributes, if consumers believe extrinsic cues to be more credible and reliable than even their own judgment (Srinivasan, Jain, & Sikand, 2004).

1.2 Food choice

When consumers' perceptions of the food are positive, food choice is likely to occur. When consumers' perceptions of the food are negative, food rejection is likely to occur (Deliza & Macfie, 1996). Both intrinsic and extrinsic factors influence consumers' food choice. A model is developed to give a clear overview of the factors influencing consumers' food choice in restaurants (see Figure 1). First, intrinsic factors related to individuals are demonstrated. Individuals' intrinsic factors include health and taste attitudes. When consumers' health attitudes are high, healthy food choice is likely to occur and when consumers' taste attitudes are high, less healthy food choice is likely to occur. Secondly, intrinsic factors related to food itself (such as ingredients and preparation method) influence consumers' expectations about the food. Although the intrinsic factors of food are part of the food choice process, this study only focuses on consumers' intrinsic factors and extrinsic factors. Extrinsic factors (such as nutrition labels, social and physical environment) are external to both food and an individual, but they have been shown to influence consumers' perception of the food. The extrinsic factors descriptive names, nutrition labels, environment, and context are further elaborated in the following Sections.

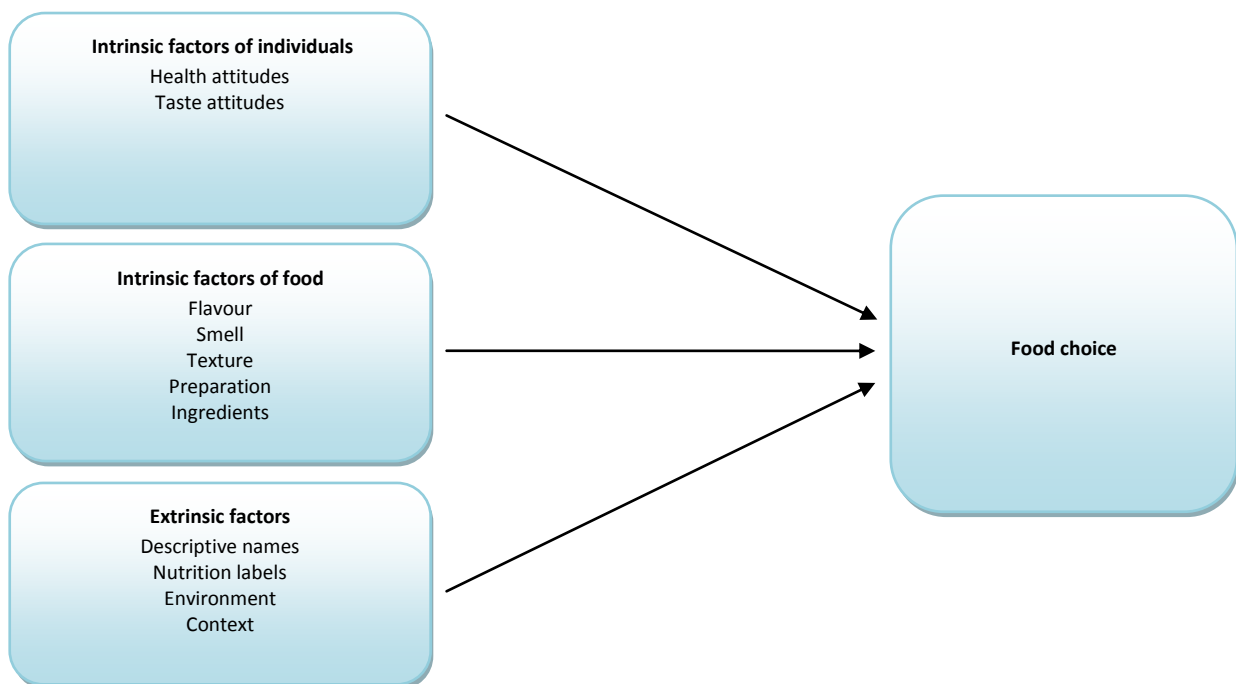


Figure 1: The model for illustrating the intrinsic and extrinsic factors on food choice in restaurants.

1.3 *Descriptive names as extrinsic cue*

Wansink (2002) describes the background of the impact of descriptive names. The use of descriptive names already started in the early 1940s in America. During World War II, meat was shipped overseas to feed the American soldiers. Margaret Mead's U.S. Committee on Food Habits investigated the possibility of serving organ meats, such as brains, liver, and kidneys instead of traditional meat. Results of that study showed that when individuals did not know what type of meat it was, they accepted the taste. Yet, when it was disclosed that the meat was organ meat, the consumers found the taste disgusting. Therefore, it was recommended to use the descriptive name of "variety meats" instead of "organ meats" because of the acceptance and associations of the meat (Wansink, 2002).

Another example of a descriptive name is "Succulent Italian Seafood Filet", whereas "Seafood Filet" is an example of a non-descriptive name (Wansink et al., 2005). In a restaurant, customers scan menus by looking for benefits they believe will satisfy their needs (Wansink, Painter, & Van Ittersum, 2001). In that case, it is found that descriptive menu names can enhance consumers' food expectations (Wansink et al., 2001).

Types of descriptive names

Wansink et al. (2001) illustrate four different types of descriptive names. First, geographic labels which are labels that claim to reproduce the same flavors that are specifically found successful in geographic areas (i.e. Southwestern Tex-Mex Salad, Iowa Pork Chops, and "Real" Carolina Barbeque). Second, affective labels which trigger consumer's happy emotions regarding memories of family, tradition, and nationalism (i.e. Classic Old World Italian Pasta, Legendary Chocolate Mousse Pie, and Nana's Favorite Chicken Soup). Third, sensory labels which refer to the taste, smell, and 'mouth feel' of the food product (i.e. Hearty Wholesome Steaks, Snappy Seasonal Carrots, and Buttery Plump Pasta). Sensory labels make the food product more visible which is helping consumers to be able to picture themselves they are buying and enjoying it. Fourth, brand labels refer to a cross-promotion between a food product and a related brand with positive associations. When consumers hold positive associations towards a certain brand, they will probably see the food product as more attractive when connected to that brand (i.e. Black Angus® Beef Burgers and Jack Daniels® BBQ Ribs). Brand labels are based on the idea that "If you love the brand, you will love this menu item" (Wansink et al., 2001).

1.4 Nutrition labels as extrinsic cue

Cheftel (2005) revealed that a high number of people is interested in nutrition-facts on food labels. His study found that 22% is actively interested, 41% occasionally interested and 29% not much interested and 8% has not any interest on the nutrition facts of products. However, nutrition facts can be found on product packages but are not available on menu cards in restaurants. Restaurants are not required to provide nutrition information on their menu card. Story, Kaphingst, Robinson-O'Brien, and Glanz (2007) demonstrated that most consumers may be unaware of the fact that the food which is served in restaurants contains a high level of calories, fat, saturated fat and sodium. Furthermore, Burton, Creyer, Kees, and Huggins (2006) pointed out that consumers underestimate the actual level of calories by as much as 50%. There are restaurants which provide nutrition information of the menu items on their websites. However, internet access is required when people want to check this information so the nutrition information is not available at the point of decision making (Story et al., 2007). The study of Wansink, Van Ittersum, and Painter (2004) revealed that providing health information about food might improve the taste perception of less healthy hedonic foods (e.g. dessert) in contrast to the taste perception of more healthy utilitarian food (e.g. starter).

Contrary to earlier findings, Gravel, Doucet, Herman, Pomerleau, Bourlaud, Provencher (2012) researched the effects of nutrition claims on food perceptions, caloric estimation, and caloric intake regarding cookies. The results of this study show that the manipulations are effective in changing consumers' perceptions, but have no significant effect in changing consumers' behavior. However, several studies (Vischers, Hess, & Siegrist, 2010; Kozup, Creyer, & Burton, 2003) did find that nutrition information on product packages and menu cards positively influences consumers' consumption of healthy food. In addition, Burton et al. (2006) make clear that "the provision of easily accessible nutrition information in restaurants may provide significant public health benefits by making it easier for consumers to make more healthful food choices" (p. 1674). Therefore, it is assumed that providing nutrition information in restaurants helps consumers to make more healthful food choices. The following hypothesis is formulated:

H3: When a nutrition label is provided on a menu card, consumers are more likely to select a (a) healthy starter and (b) healthy dessert.

Familiarity

Providing nutrition information on menu cards is not required for restaurants and therefore new for consumers. Therefore, Dutch people are not familiar with this phenomenon. Besides people not being familiar with the appearance of a nutrition label on a menu card, people are not familiar with the location of it on a menu card. However, familiarity with the type of the logo and its location are important key determinants of consumers' attention to nutrition labels (Bialkova & van Trijp, 2010).

1.5 A changing environment

The environment in which food choice and food consumption takes place is an important factor in its food choice process (Meiselman et al., 2000). Story et al. (2007) distinguished three environmental contexts. First, Story et al. (2007) mention the social environment which includes interaction with family, friends, peers and others. The process of role modeling and social support plays an important role in this environment regarding influencing eating behavior. Second, the physical environment which includes the different settings where people eat (i.e. at home, school, restaurants, and work) and where food is purchased (i.e. supermarkets). The physical environment has an influence on which food is available and to what extent eating healthy food is hindered or facilitated. A change in restaurants is an increase in portion size (Hill, Wyatt, Reed, & Peters, 2003; Ledikwe, Ello-Martin, & Rolls, 2005). The increase in portion size hinders consumers' healthy eating behavior. Third, the macro-level environment that plays a more indirect role. Factors of this environment influencing eating behavior are for example, food marketing, food production and distribution systems, and economic price structures. These three environments influence consumers' food choice.

It can be concluded that changes in consumer behavior in the social environment are of great importance in today's society. Thus, not only individual behavior but also the environmental context and conditions at which people live and make choices must change in order to contribute to improving healthy lifestyle patterns and eventually reducing obesity (Story et al., 2007).

Restaurant

The current study focuses on consumers' food choice in restaurants during business dinners. Business dinners are done by businesses that want to stimulate their relationship quality with a client (Geiger & Turley, 2005). Business dinners are about socializing with clients or colleagues, and thus are pleasant and joyful events. When

people are in a restaurant, their motivation to eat food is beyond satiation. Namely, fulfilling the need for pleasure during eating. The need for pleasure is an important motivation for eating (Jackson, Cooper, Mintz, & Albino, 2003). The need for pleasure might influence the purchase intention of healthy food products in a negative way.

When looking at the three environmental contexts of Story et al. (2007), a business dinner in a restaurant is part of the social environment and physical environment. On one hand, the interaction with colleagues and friends is part of the social environment. On the other hand, the restaurant setting where food is consumed is part of the physical environment.

1.6 Menu card context

Several studies found that consumers' food choice and food consumption is context dependent. First, Wansink, Just, and Payne (2009) reported that people use benchmarks or reference points, as a subtle cue to suggest a consumption norm which is normal, appropriate, and reasonable. Yet, it increases how much a person serves and consumes on an unconscious level. In addition, presented nutrition information on a menu card serves also as a reference point during consumers' food choice process (Kozup et al., 2003). Second, Wansink et al. (2009) note that the use of large packages, plates, and bowls also set a norm for food consumption. The norm suggests that a larger amount of food and drink consumption is normal. Third, Meiselman et al. (2000) discovered that different environment settings influence people's food expectation. When comparing different environmental settings, for example eating at home and eating in a restaurant, not only the physical location changes. The population, service, degree of choice, food cost, food handling, and storage time will change. The study of Meiselman et al. (2000) shows that the food of student cafeterias is rated lower in contrary to training restaurants, because the food choice in student cafeterias is higher and the costs are lower. People believe that because they pay more money in for their food in a training restaurant, the food is therefore better than in a student cafeteria.

Up till now, researchers focused mainly on studying meals separately instead of taking the whole food choice process in a restaurant into account. Yet, the choice for a starter and dessert might depend on the choice for a certain main course. Chandon and Wansink in 2007. They found that when a fast food restaurant was perceived as healthy (Subway) people ordered and ate more in contrast to a fast food restaurant which was perceived as less healthy (McDonalds). The same event might occur when the main course is put in a

healthy context. Namely, when the main course is put in a non-healthy context the choice for a healthier starter and dessert might occur because people want to compensate the main course. Or, when the main course is put in a healthy context people want to compensate the healthy main course by choosing a non-healthy starter and non-healthy dessert. Based on the occurred compensation effect, the following hypotheses can be formulated:

H4: When the main course is perceived as healthy, consumers are likely to select a (a) non-healthy starter and (b) non-healthy dessert in order to compensate the main dish.

H5: When the main course is perceived as non-healthy, consumers are likely to select a (a) healthy starter and (b) healthy dessert in order to compensate the main dish.

1.7 Conclusion and research model

It can be concluded that consumers' food choice is influenced by intrinsic factors and extrinsic factors. This study focuses on one hand on individuals' intrinsic factors regarding taste (Craving for sweet foods and Pleasure) and health (General health interest, Health awareness, and Involvement body weight), and on the other hand the extrinsic factors nutrition label and context. A 2(nutrition label: present vs. absent) x 2(context main course: healthy vs. non-healthy) research design is used. Based on the hypotheses derived from the current literature, a research model is developed (see Figure 2).

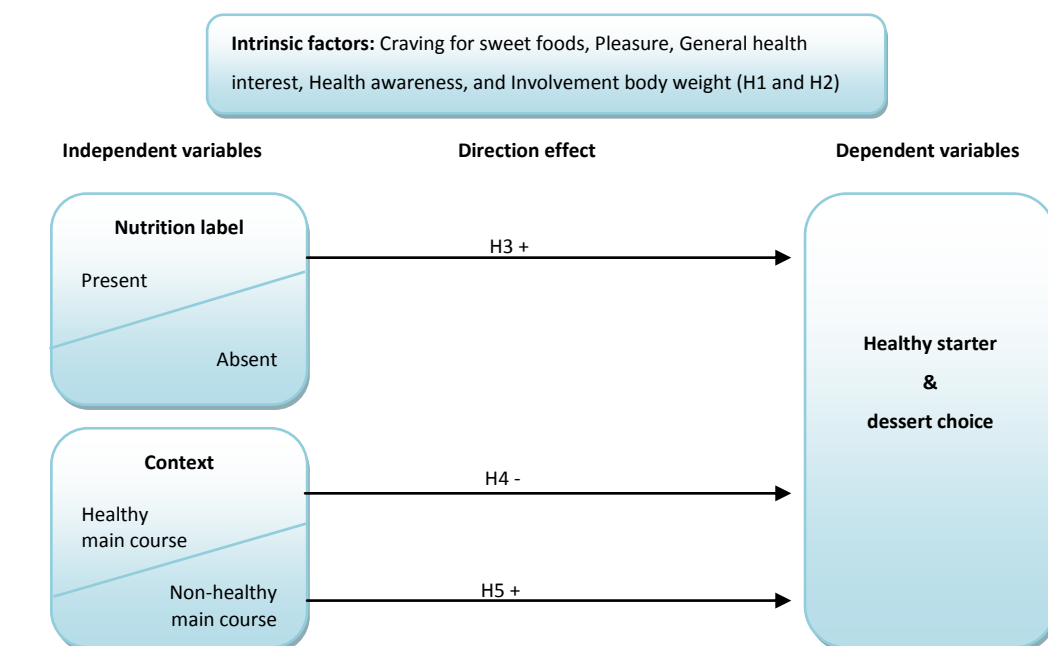


Figure 2: Hypotheses as research model

2 | Pre-study

Before starting the main study, a pre-study was carried out. A paper-based questionnaire was used to find out which dishes people consider as tasty and which dishes they consider as healthful. The findings of the pre-study served as background information to design the main research. This Chapter provides information about the participants of the pre-study. Furthermore, it elaborates on the method and questionnaire development of the pre-study research. Finally, the results of the pre-study are shown and discussed.

2.1 Participants

There were 20 Dutch adults who participated in the pre-study, 11 males (55%) and 9 females (45%). The participants were between 18 and 55 years old ($M = 36$ years, $SD = 14.64$). 11 respondents followed a Secondary Vocational Education study (MBO), 7 respondents followed a Higher Professional Education study (HBO), and 2 respondents followed a University Education study (WO).

2.2 Stimuli

The pre-study examined 10 starters, 10 main courses, and 10 desserts. Half of the starters, main courses, and desserts were healthy labeled and the other half were non-healthy labeled. The names of the dishes and their subscription were on one hand based on existing names and subscriptions of menu cards of Dutch restaurants and on the other hand were composed using the guidelines for descriptive names of Wansink et al. (2001). In the pre-study, Geographic labels (e.g. Belgium Chocolate Mousse and Louisiana Chicken breast) and Sensory labels (e.g. Crispy Schnitzel and Fresh Caesar Salad) were used. Furthermore, health cues (e.g. fresh, light and green) and taste cues (e.g. crispy, fried, and spice) were used in the subscription of the dishes.

2.3 Measures

To determine which starters, main courses, and desserts are seen as tasty and which one are seen as healthy, two questions were asked. The first question was ‘to which extent do you consider the next starters/ main courses/ desserts as tasty?’ and the second question was ‘to which extent do you consider the next starters/ main courses/ desserts as healthy?’. Each respondent answered the questionnaire about the “*expected tastiness*” and “*expected healthfulness*” of 10 starters, 10 main courses, and 10 desserts. All the questions were

measured with a 5-point Likert scale, where 1= not tasty at all, 2= not tasty, 3= neutral, 4= tasty, 5= very tasty and 1= not healthy at all, 2= not healthy, 3= neutral, 4= healthy, 5= very healthy.

2.4 Procedure

A paper-based questionnaire was conducted. Before answering the questions, all the participants were told a new restaurant opens soon and the owners want advice about composing the menu card. The questionnaire started with the question 'to which extent do you consider the next starters/ main courses/ desserts as tasty?'. The participants had to rate 10 starters, 10 main courses, and 10 desserts. After that, the question 'to which extent do you consider the next starters/ main courses/ desserts as healthy?' was asked. Now the participants had to rate the same 10 starters, 10 main courses, and 10 desserts.

The starters, main courses, and desserts were shown in a randomly sequence to the participants. Besides, the participants were forced to rate all the items in order to finish the questionnaire. Therefore, non response is minimized. Some demographic data were asked at the end of the questionnaire including gender, age, and education. The questionnaire can be found in appendix A.

2.5 Data analysis

The questionnaires were analyzed in SPSS, using Repeated Measures Analysis of Variance (ANOVA). Pairwise Comparisons tests were executed to further explore the measured effects. According to this method, it can be seen which dish is significantly different in taste and health perception in comparison to the other dishes. Based on the mean scores and the Pairwise Comparison tests, dishes for the main study were selected. Note that an alpha level of .05 was used for all statistical tests.

2.6 Results and discussion

2.6.1 Starter

There were no significant differences in taste between the starters ($F(9,171)= 1.54, p= .14$). Yet, ANOVA showed significant differences in healthfulness between the starters ($F(9,171)= 17.01, p <.001$). As Figure 4 shows, Oriental Fried Scampi's ($M_{\text{health}}= 2.3, SD= 0.98$) is one of the most unhealthy starters. The Pairwise Comparison test showed that Oriental Fried Scampi's is significantly different in perceived healthfulness in

comparison with Smoked Salmon ($p < .001$), Fresh Ceasar Salad ($p < .001$), Irish Beef Carpaccio ($p < .001$), Tuscan Tomato Soup ($p < .001$), and Tuna Salad ($p = .002$). Besides Oriental Fried Scampi's, Buffalo Chickenwings ($M_{\text{health}} = 2.5$, $SD = 0.83$) was also expected to be one of the most unhealthy starters. Both Oriental Fried Scampi's ($M_{\text{taste}} = 3.45$, $SD = 1.57$) and Buffalo Chickenwings ($M_{\text{taste}} = 3.6$, $SD = 1.27$) were perceived as tasty starters.

Figure 4 shows that Smoked Scottish Salmon ($M_{\text{health}} = 4.25$, $SD = 0.91$) is expected to be the most healthy starter. The Pairwise Comparison test showed that Smoked Scottish Salmon is significantly different in health perception in comparison with Buffalo Chickenwings ($p = .002$), Mozzarella Cheesefingers ($p < .001$), Shrimp Cocktail ($p = .04$), Warm Goat Cheese ($p = .02$), and Oriental Fried Scampi's ($p < .001$).

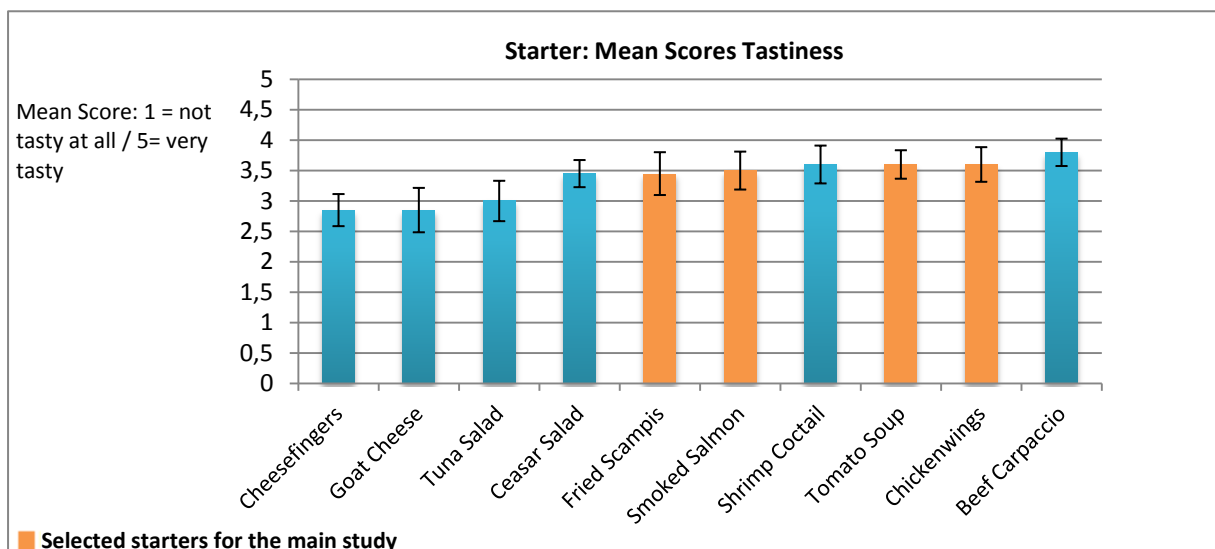


Figure 3: Mean Scores and Standard Error of Tastiness per starter

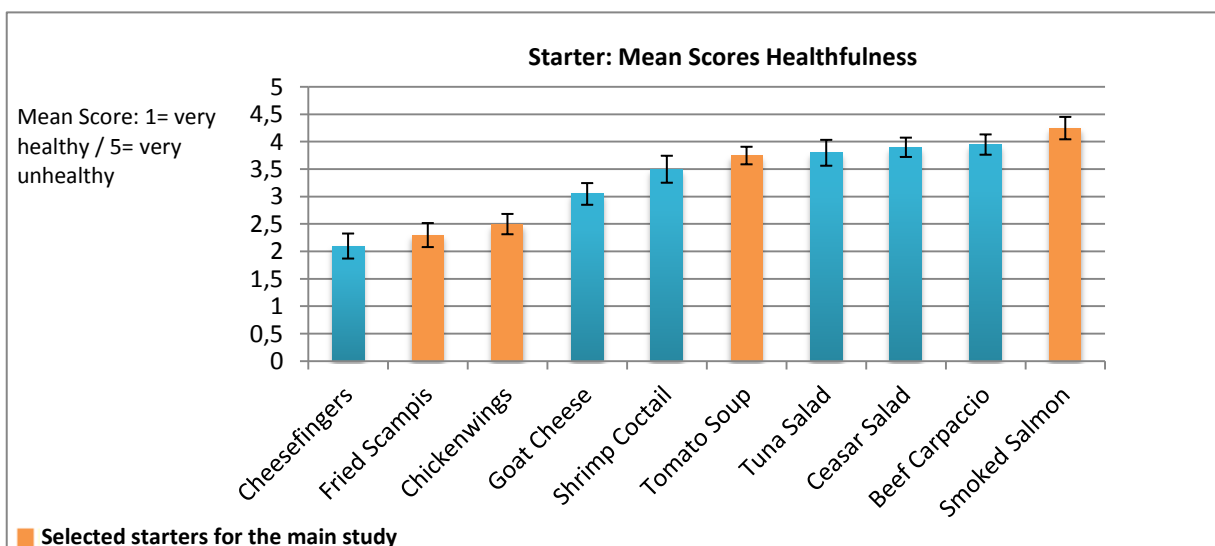


Figure 4: Mean Scores and Standard Error of Healthfulness per starter

2.6.2 Main course

ANOVA showed significant differences in taste perceptions between the main courses ($F(9,171)= 2.1$, $p= .03$).

However, when taking a closer look at the results, Pairwise Comparisons did not found significant differences in taste perceptions between the main courses. Contrasting to taste, the ANOVA showed significant differences in health perceptions between the main courses ($F(9,171)= 11.49$, $p <.001$). As Figure 5 shows, Pork Medallion ($M_{\text{taste}}= 4.0$, $SD= 0.97$) is perceived as the tastiest main course. Besides, Figure 6 shows that Pork Medallion ($M_{\text{health}}= 2.75$, $SD= 0.91$) is perceived as one of the most unhealthy main courses. The Pairwise Comparison test showed that Pork Medallion was expected to be significantly healthier than Argentinean Beef ($M_{\text{health}}= 3.75$), $SD= 0.79$, $p= .04$).

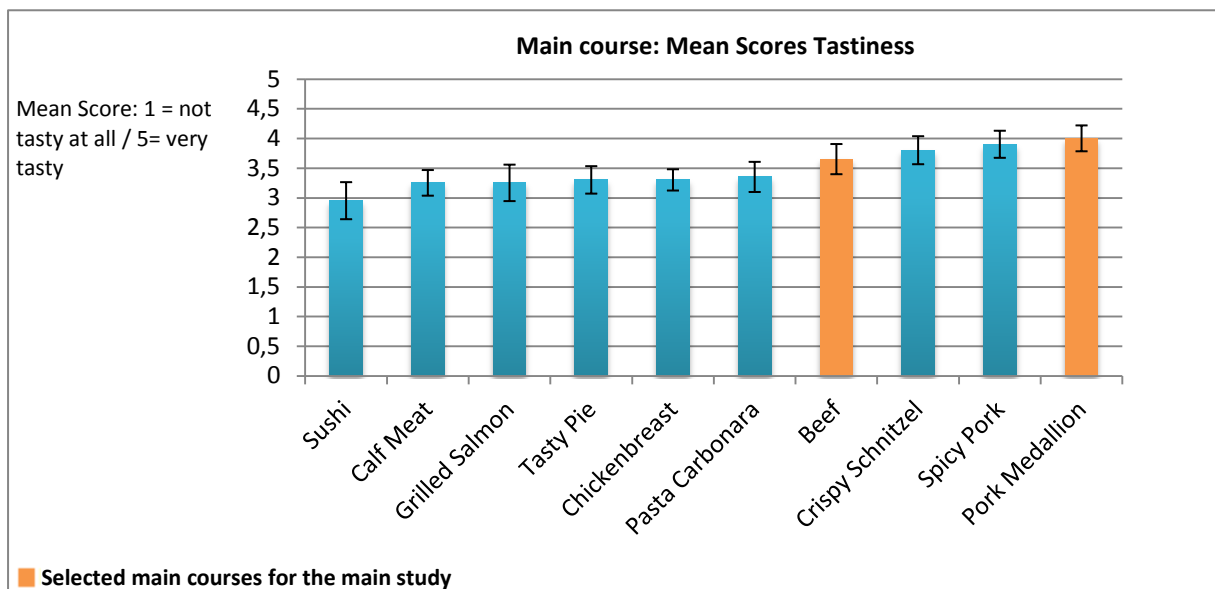


Figure 5: Mean Scores and Standard Error of Tastiness per main course

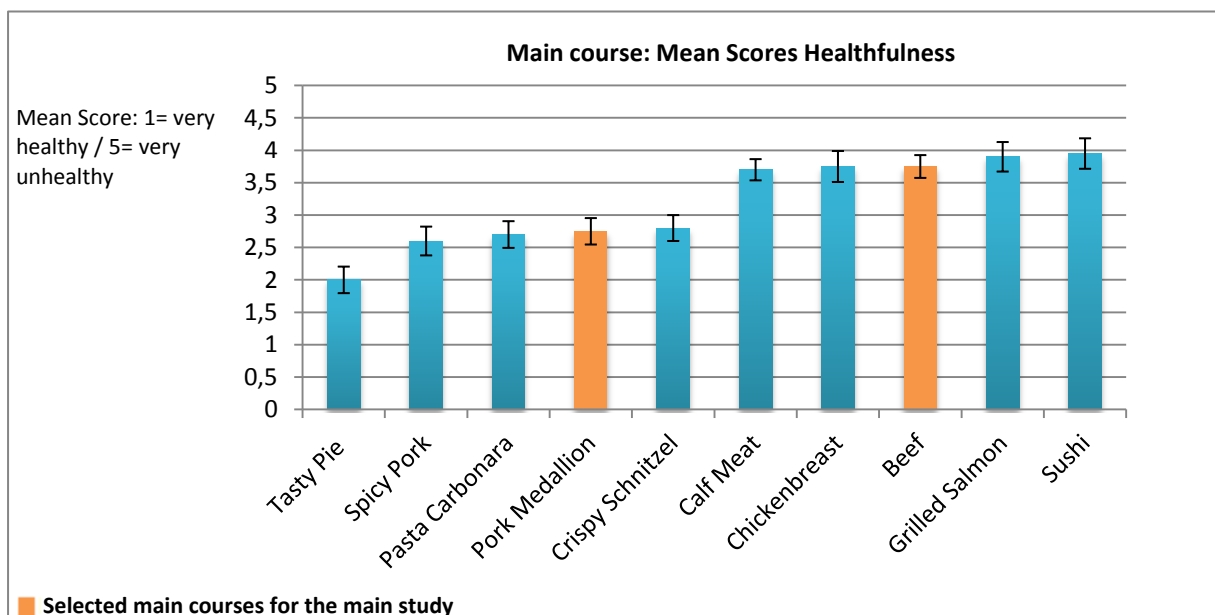


Figure 6: Mean Scores and Standard Error of Healthfulness per main course

2.6.3 Dessert

In contrary to the starters and the main courses, ANOVA showed a few significant differences in taste perceptions between the desserts ($F(9,171)= 5.34, p <.001$). However, differences in taste perceptions are not seen between the desserts participating in de main study. ANOVA also showed significant differences in health perceptions between the desserts ($F(9,171)= 34.38, p <.001$). Belgium Chocolate Mousse ($M_{\text{health}}= 1.6, SD= 0.6$) is perceived as one of the most unhealthy desserts (see Figure 8). The Pairwise Comparison test showed that Belgium Chocolate Mousse is significantly different in perceived healthfulness in comparison with Yoghurt Shake ($p <.001$), Cheese board ($p= 0.002$), Crème Brulee ($p= .04$), New Yorker Cheesecake ($p= .04$), Fresh Fruit ($p <.001$), and Red Fruit with Vanilla Ice ($p <.001$). Belgium Chocolate mousse was not significantly different perceived in taste ($p= 1.00$) and health ($p= 1.00$) in comparison with Dame Blanche. In addition, Dame Blanche ($M_{\text{taste}}= 4.2, SD= 0.83$) is seen as tasty as Belgium Chocolate mousse ($M_{\text{taste}}= 4.2, SD=1.06$).

Figure 8 shows that Coupe Fresh Fruit ($M_{\text{health}}= 4.3$) is perceived as the healthiest dessert. The Pairwise Comparison test showed that Coupe Fresh Fruit is significantly different in perceived healthfulness in comparison with Dame Blanche ($p <.001$), Belgium Chocolate Mousse ($p <.001$), Cheese Board ($p= .001$), Crème Brulee ($p= .001$), Cheese Cake ($p <.001$), Double Fudge Brownie ($p <.001$), Red Fruit with Vanilla Ice ($p= .02$), and Warm Apple Crumble ($p <.001$). Coupe Fresh Fruit was not significantly different perceived in taste ($p= .26$) and health ($p= 1.00$) in comparison with Yoghurt Shake.

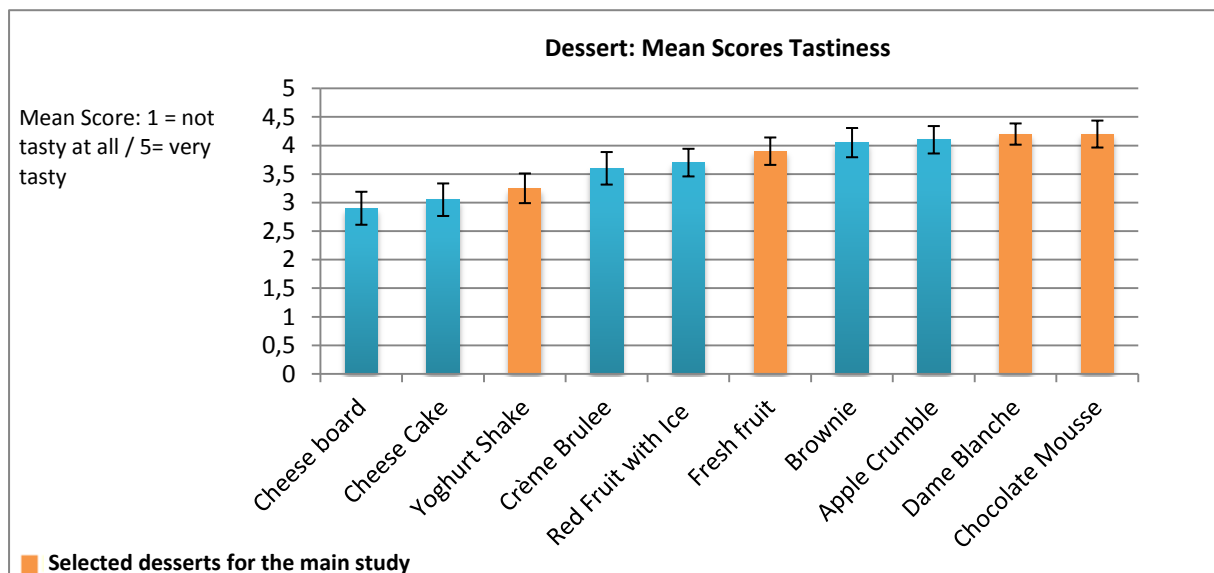


Figure 7: Mean Scores and Standard Error of Tastiness per dessert

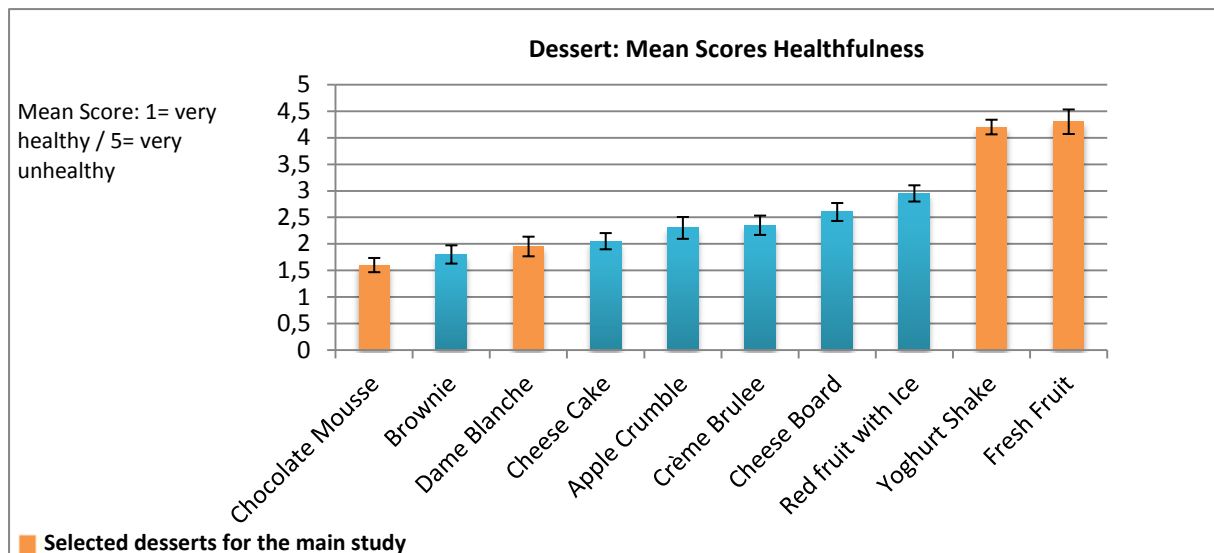


Figure 8: Mean Scores and Standard Error of Healthfulness per dessert

2.6.4 Discussion

Based on the pre-study results, four starters, two main courses, and four desserts were selected for the main study. First of all, Oriental Fried Scampi's and Buffalo Chickenwings were selected as non-healthy starters in the main study because they were perceived as one of the most tasty and unhealthy starters. Besides, both starters are not significantly different in taste and health perception. Smoked Scottish Salmon and Tuscan Tomato Soup were selected as healthy starters in the main study. Smoked Scottish Salmon is expected to be the healthiest starter and in addition, it belongs to one of the tastiest starters. Besides Smoked Scottish Salmon, Irish Beef Carpaccio is also expected to be one of the healthiest and tastiest starters. Yet, Irish Beef Carpaccio is very similar to Smoked Scottish Salmon and therefore Irish Beef Carpaccio is not selected for the main study. Instead of Irish Beef Carpaccio, Tuscan Tomato Soup is selected for the main study. Pairwise Comparisons showed that Tuscan Tomato Soup is not significantly different in taste and health perception in comparison to Smoked Scottish Salmon. Thus, Smoked Scottish Salmon and Tuscan Tomato Soup were selected as healthy starters in the main study.

Second, no significant differences in taste perceptions between the main courses were found. Based on means, Spicy Pork Skewer and Pork Medallion are expected to be one of the tastiest main courses. Both dishes are not significantly different in taste and health perception. However, Pork Medallion is chosen for the main study because based on the means the dish is expected to be tastier than the Spicy Pork Skewer. Pork

Medallion was only expected to be significantly unhealthier than Argentinean Beef. Therefore, Pork Medallion is selected as non-healthy main course in the main study and Argentinean Beef as healthy main course.

Third, Dame Blanche is expected to be as tasty as Belgium Chocolate Mousse and both are expected to be the tastiest desserts. Because both desserts do not show significant difference in taste and health, both dishes will be participating in the main study as non-healthy desserts. Coupe Fresh Fruit and Yoghurt Shake are expected to be the healthiest desserts. Both dishes are expected to be significantly healthier than Dame Blanche and Belgium Chocolate Mousse. Therefore, Coupe Fresh Fruit and Yoghurt Shake will be participating in the main study as healthy desserts.

3 / Main study

The main study focus was to give an insight in how nutrition labels and main course context helps consumers to make healthful food choices in restaurants. A 2(nutrition label: present vs. absent) x 2(context main course: healthy vs. non-healthy) between subject design was used. The dependent variables were starter and dessert choice and the moderators were intrinsic taste factors (Craving for sweet foods and Pleasure), intrinsic health factors (General health interest, Health awareness, and Involvement body weight), and Attitude towards nutrition information. This Chapter provides information about the participants of main study. Then, it elaborates on stimulus material, measures, and procedure of the main study research. Finally, the results of the main study are provided.

3.1 Participants

A convenience sample was used with customers of the Dutch supermarket Albert Heijn. There were 160 adults who participated in the main study, 58 males (36%) and 102 females (64%). The participants were between 18 and 80 years old ($M = 38.93$, $SD = 16.32$). 9 respondents finished Secondary school, 61 respondents followed a Secondary Vocational Education study (MBO), 67 respondents followed a Higher Professional Education study (HBO), and 23 respondents followed a University Education study (WO). Participants were randomly assigned to one of the four stimulus conditions. Each condition consists of 40 respondents.

3.2 Stimulus material

Based on the pre-study, Smoked Scottish Salmon and Tuscan Tomato Soup were chosen to be healthy starters. Buffalo Chickenwings and Oriental Fried Scampi's were chosen to be the non-healthy starters. Argentinean Beef is chosen as healthy main course and Pork Medallion as non-healthy main course. Finally, Yoghurt Shake and Coupe Fresh Fruit are chosen to be the healthy desserts. Belgium Chocolate Mousse and Dame Blanche were chosen to be the non-healthy desserts. The research consists of four stimulus conditions. The stimulus material for the nutrition label vs. healthy context research condition can be found in Figure 9. An overview of all stimulus material used in the main study can be found in Appendix B.

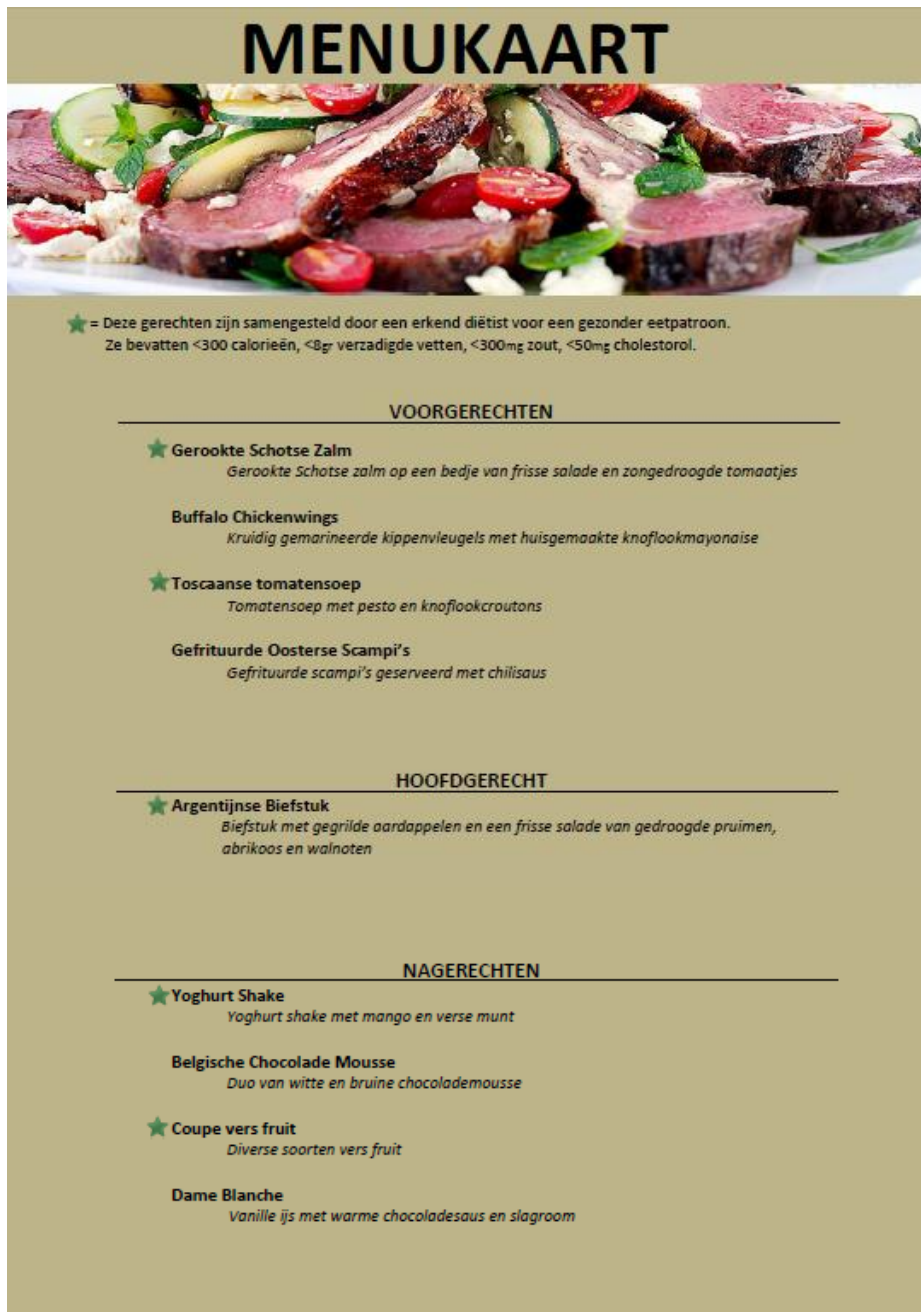


Figure 9: Stimulus Material for the nutrition label vs. healthy context research condition

The names of the dishes and their subscription were derived from the pre-study. In addition, a nutrition label was added in two of the four stimulus conditions. The nutrition label contained the following information in English: "These menu items are composed by a registered dietitian for a better eat pattern. They contain <300 calories, <8gr saturated fat, <300mg sodium, <50mg cholesterol." This nutrition label was based on a nutrition label of an English restaurant. In order to verify the success of the manipulation, a manipulation check was incorporated in the questionnaire. The manipulation check exist of the question "Did you notice the nutrition information at the top of the menu card?".

3.3 Measures

Attitude towards taste. Two constructs of the “Health and Taste Attitudes Questionnaire” of Roininen et al. (1999) were used to measure respondents’ attitude towards taste. The first construct was “Craving for sweet foods”. Example items are “In my opinion it is strange that some people have cravings for sweets” or “I often have cravings for chocolate”. This questionnaire included six items which were measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The items form a highly reliable scale of $\alpha = .82$. The second construct was “Pleasure” which included six items. Example items are “I do not believe that food should always be source of pleasure” or “It is important for me to eat delicious food on weekdays as well as weekends”. The items form a weak scale of $\alpha = .60$. A high mean score of both constructs indicates that the participants have a high level of craving for sweet foods and they are seeking pleasure from food.

General health interest. The factor “General health interest” of the “Health and Taste Attitudes Questionnaire” of Roininen et al. (1999) was used to measure respondents’ general health interest. Example items are “I eat what I like and I do not worry much about the healthiness of food” or “I always follow a healthy and balanced diet”. This questionnaire included eight items on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The items of the health scale form a highly reliable scale of $\alpha = .84$. The mean scores of the items were computed and analyzed. A high score indicates that the participants are health conscious.

Health Awareness. Respondent’s health awareness scale was retrieved from the master thesis of Backhaus (2013). The scale includes four items. Example items are “I eat healthy” or “I am healthier than an average person”. All items were measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). A high score indicates that the participants are aware of their health. A Cronbach’s alpha was measured of $\alpha = .00$. When deleting the item “I eat healthy”, a weak scale is formed of $\alpha = .49$.

Involvement Body Weight. The Involvement Body Weight scale of Oliva, Oliver, and Bearden (1995) was used to measure one’s body weight involvement. The questionnaire included six items on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Example items are “I never worry about my weight” or “My weight is a concern in my life”. The items form a reliable scale of $\alpha = .79$. A high score indicates that the participants are highly involved with their body weight.

Attitude towards Nutrition Facts. The Nutrition Facts Attitude scale (Burton, Garretson, & Velliquette, 1999) is composed of three items which measure a person’s general attitude about the provision of information in the nutrition facts labels. The question is “For me, providing information about nutrition through a Nutrition Fact

Label on a product is:...” The respondents had to choose each value out of two: good or bad, valuable or worthless, and important or unimportant.

Manipulation check. A manipulation check was incorporated in the questionnaire to verify the actual success of the manipulation nutrition label. Respondents were asked “Did you noticed the nutrition label at the top of the menu card?”. Respondents had to answer this question with yes or no.

Dependent measures. Respondents’ actual food choice was measured. First, the respondents had to choose one starter out of four, whereas two healthy starters and two non-healthy starters were combined and placed on the menu card. Second, respondents had to choose one dessert out of four, whereas two healthy desserts and two non-healthy desserts were combined and placed on the menu card.

The constructs Craving for sweet foods, General health interest, and Involvement body weight are highly reliable (Cronbach’s $\alpha > .70$). The reliability of the constructs Pleasure and Health Awareness was low, and therefore these two constructs were excluded in the result Section. Table 1 displays an overview of the constructs and their Cronbach’s alpha.

Table 1: Information about the constructs in the main study

Construct	Cronbach's alpha	Number of items	Source
Craving for sweet foods	.82	6	Roininen, Lähteenmäki, and Tuorila (1999)
Pleasure	.60	6	Roininen, Lähteenmäki, and Tuorila (1999)
General health interest	.84	8	Roininen, Lähteenmäki, and Tuorila (1999)
Health awareness	.00	4	Backhaus (2013)
Involvement body weight	.79	5	Oliva, Oliver and Bearden (1995)

3.4 Procedure

A paper based questionnaire was carried out and started in October 2013. In order to ensure equivalence of meaning per item, a communication expert helped, where needed, with the translation from English to Dutch. The questionnaire took largely place in the Dutch supermarket Albert Heijn. Participants were randomly assigned to one of the four stimulus conditions. Before starting the questionnaire, participants were verbally asked whether they had any food intolerances, food allergies or if they were vegetarian or vegan. If the answer was yes, than they were kindly thanked and excluded for the questionnaire.

The questionnaire started with a text in which the participants had to imagine themselves to have a business diner soon. The participants were instructed to read the text carefully. After that, the participants were shown a menu card of one of the four stimulus conditions. After seeing the menu card, the participants were asked to choose a certain starter and dessert. Then, respondents were asked to answer questions about food in general, health, and attitude towards nutrition information. At the end of the questionnaire, socio-demographic information was asked including age, gender, and education. Finally, a short debriefing about the purpose of the questionnaire was given. The questionnaire can be found in appendix C.

3.5 Data analysis

Because of the nominal dependent variables, Chi-Square tests were performed to assess differences between the four experimental groups regarding starter and dessert choice. Binary Logistic Regression is used to measure the effects of the moderators.

3.6 Results main study

The manipulation check showed that the provided nutrition label was noticed by 60 respondents, equaling to 75%, in the nutrition label condition. No differences in starter and dessert choice were seen between people who noticed the nutrition label and people who did not. Namely, 73.3% of the people who did notice the nutrition information label chose a healthy starter and 36.7% a healthy dessert, and 70% of the people who did not notice the nutrition label chose a healthy starter and 35% a healthy dessert.

Chi-Square tests were conducted to assess differences between the four experimental groups regarding actual food choices of the starters and desserts. Additionally, Binary Logistic Regression is used to investigate the effects of the intrinsic factors: Craving for sweet foods, General health interest, and Involvement bodyweight. Note that an alpha level of .05 was used for all statistical tests.

Effect nutrition label on food choice. The variable nutrition label was inserted as independent variable, and the nominal variables starter and dessert choice were inserted as dependent variables. A Chi-Square test of the frequency counts of choices between the nutrition label condition and no nutrition label condition did not reveal significant differences in starter choice ($\chi^2(1, 160) = 0.3, p = .59$). Namely, 58 of all starter choices in the

nutrition label condition, equaling to 72.5%, were healthy starters, while 61 of all starter choices in the no nutrition label condition, equaling to 76.3%, were healthy starters. Additionally, 22 of all starter choices in the nutrition label condition, equaling to 27.5%, were non-healthy starters, while 19 of all starter choices in the no nutrition label condition, equaling to 23.8%, were non-healthy starters. A clear overview of starter choice in the nutrition information stimulus condition is given in Figure 10.

A Chi-Square test did not reveal significant differences in dessert choice between the two stimulus conditions ($\chi^2(1, 160) = 0.00, p = 1.00$). Namely, 29 of all dessert choices in the nutrition label condition, equaling to 36.3%, were healthy desserts and 51 of all dessert choices in the nutrition label condition, equaling to 63.8%, were non-healthy desserts. The same numbers of choices for the healthy and non-healthy desserts were seen in the no nutrition label condition. A clear overview of dessert choice in the nutrition label stimulus condition is given in Figure 11.

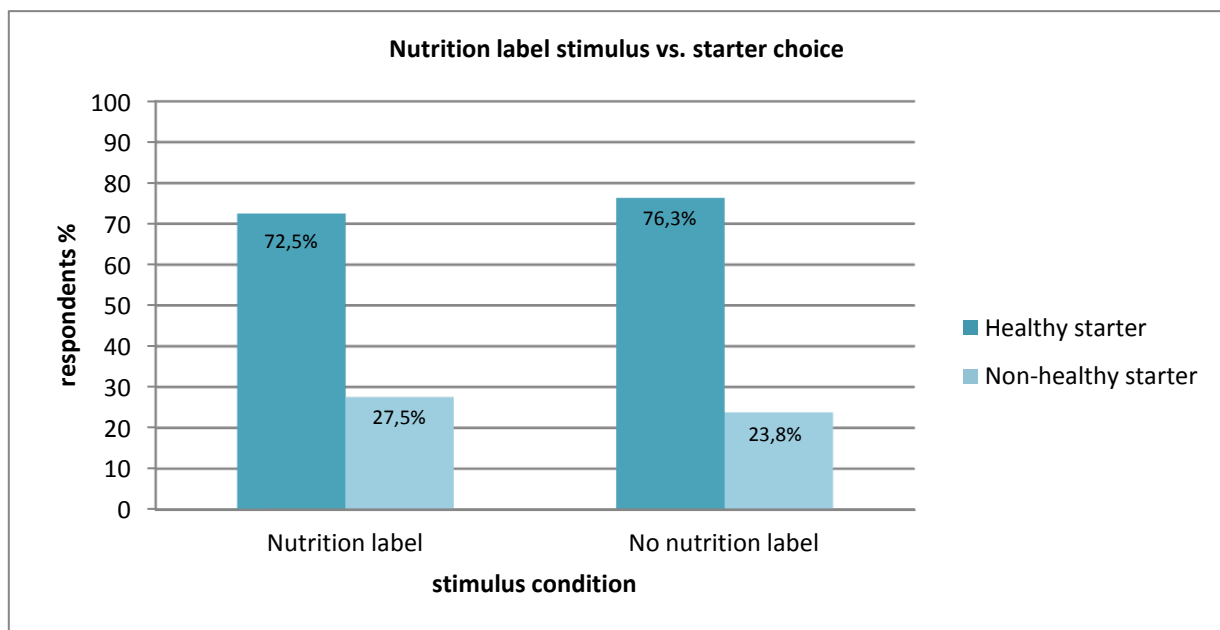


Figure 10: Percentage of starter choice influenced by nutrition label or no nutrition label stimulus

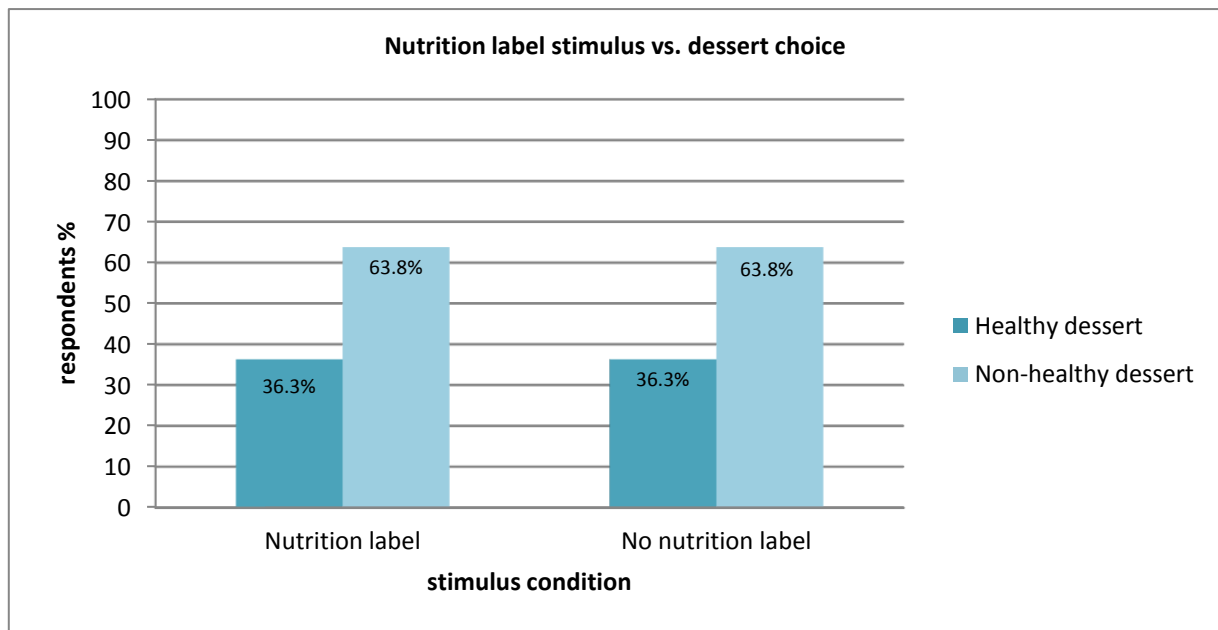


Figure 11: Percentage of dessert choice influenced by nutrition label or no nutrition label stimulus

Effect context on food choice. Now, the variable context was inserted as independent variable and the nominal variables starter and dessert are inserted as dependent variables. Differences in starter choice between the healthy context condition and non-healthy context condition can be confirmed on a marginally significant level, $\chi^2(1, 160) = 3.97, p = .05$. Namely, 67.5% of the people in the healthy condition chose a healthy starter (32.5% chose a non-healthy starter) whereas 81.3% of the people in the non-healthy condition chose a healthy starter (18.8% chose a non-healthy starter). A compensation effect occurred between the main course and starter choice. A clear overview of starter choice in the context stimulus condition is given in Figure 12.

No significant difference between the healthy context and non-healthy context was found for dessert choice ($\chi^2(1, 160) = 0.00, p = 1.00$). 29 of all dessert choices in the healthy context condition, equaling to 36.3%, were healthy desserts and 51 of all dessert choices in the healthy context condition, equaling to 63.8%, were non-healthy desserts. The same numbers of dessert choices were seen in the non-healthy condition. Therefore, no compensation effect was found between main course and dessert. A clear overview of dessert choice in the context stimulus condition is given in Figure 13.

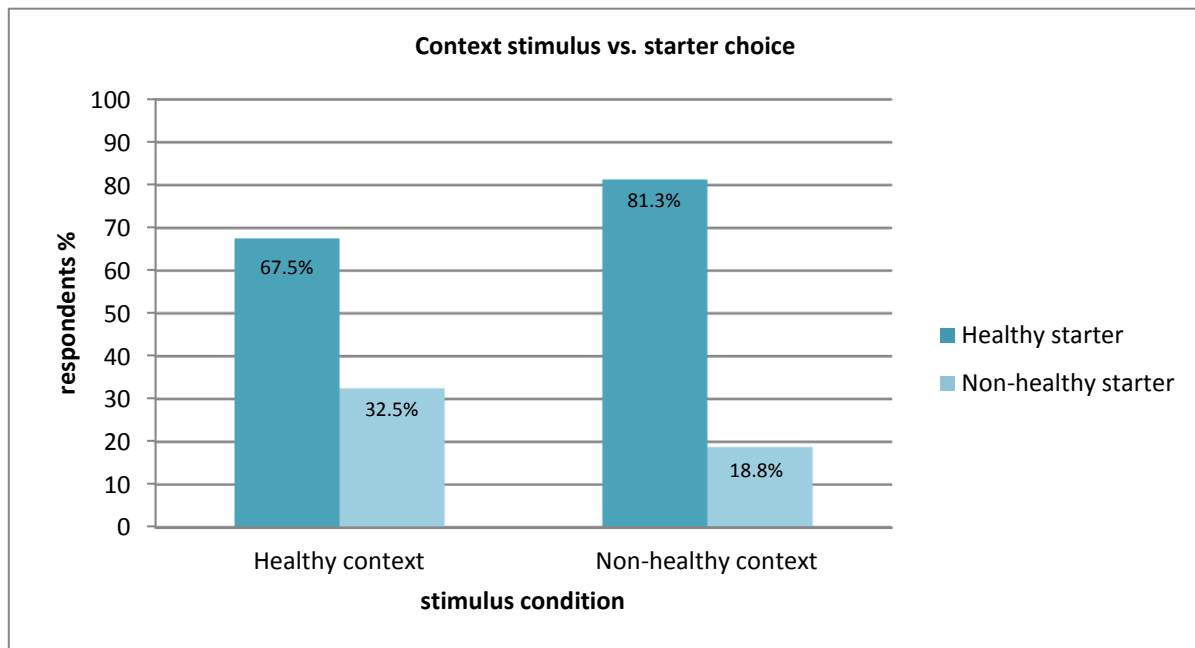


Figure 12: Percentage of starter choice influenced by healthy context or non-healthy context stimulus

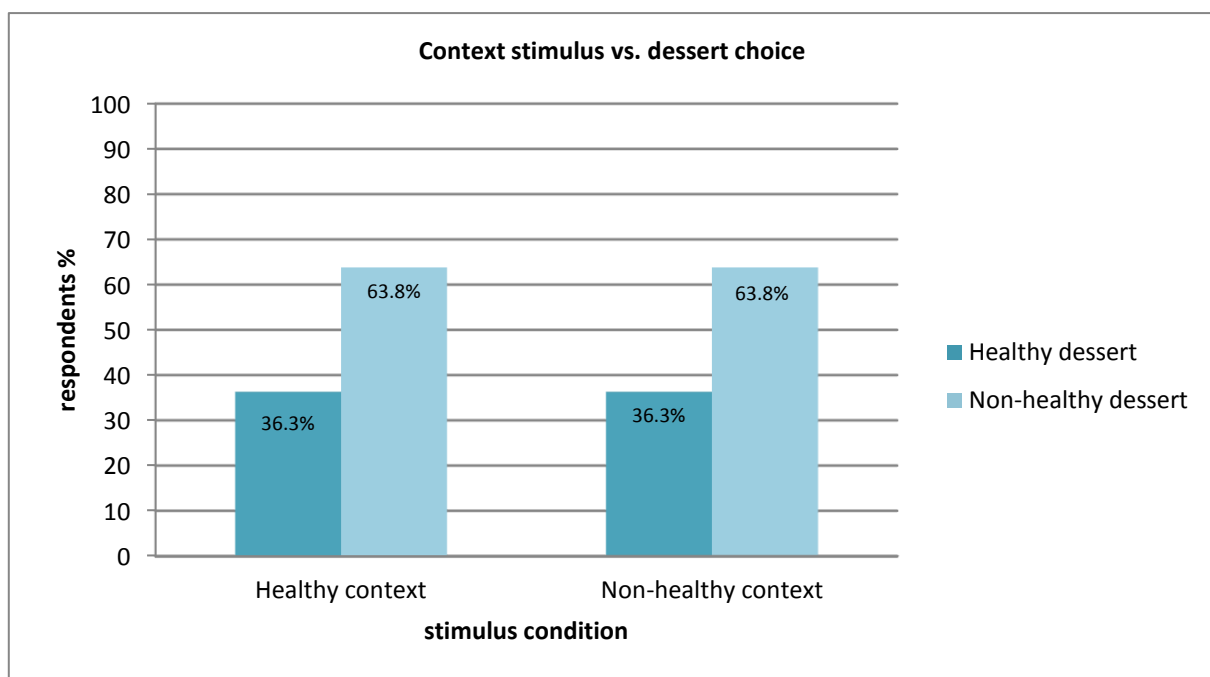


Figure 13: Percentage of dessert choice influenced by healthy context or non-healthy context stimulus

A Chi-Square test was done to see if the compensation effect also occurred between starter and dessert choice. The Chi-Square test showed that the compensation effect did not significantly occur between starter and dessert choice ($\chi^2(1, 160) = .49, p = .48$).

Effects of Craving for sweet foods as covariate. Chi-Square test showed that Craving for sweet foods significantly moderates the choice for a starter ($\chi^2(1, 160) = 4.24, p = .04$). Binary Logistic Regression found that people who hold a higher level of Craving for sweet foods make healthier starter choices than people who hold a low level of craving for sweet foods ($\beta = -.42, p = .04$). Yet, this moderator was not found to be significantly moderating the choice for a dessert ($\chi^2(1, 160) = .66, p = .42$), ($\beta = .152, p = .42$). A one-way ANOVA was conducted to look more specifically at differences between men and women. The one-way ANOVA showed that women ($M = 3.45, SD = 0.79$) crave more for sweet foods than men ($M = 2.86, SD = 0.92$), ($F(1, 158) = 18.04, p < .001$).

Effects of General health interest as covariate. It is likely that people with a high level of general health interest make more healthy food choices. Therefore, the relationship between the level of General health interest and starter and dessert choice was investigated. The results of the Chi-Square test showed significant effect of General health interest on starter choice ($\chi^2(1, 160) = 3.772, p = .05$). Having a closer look, Binary Logistic Regression showed that people who hold a high level of General health interest, make healthier starter choices ($\beta = -.48, p = .05$). For dessert, Chi-Square test ($\chi^2(1, 160) = 1.76, p = .19$) and Binary Logistic Regression ($\beta = -.31, p = .19$) showed a non-significant effect of General health interest on dessert choice. In addition, a one-way ANOVA showed that women ($M = 3.42, SD = 0.73$) hold a higher level of General health interest than men ($M = 3.10, SD = 0.68$), ($F(1, 158) = 7.47, p = .007$).

Effects of Involvement body weight as covariate. Overall, respondents are not highly involved with their body weight ($M = 3.11, SD = .86$). Looking more specifically at the Involvement body weight scale, it is found that most of the respondents do not consider their weight as a concern in their life ($M = 2.68, SD = 1.25$). In addition, most of the respondents do not seek for information about weight control ideas ($M = 2.58, SD = 1.16$). These scores indicate that most of the respondents do not have weight problems. Binary Logistic Regression was used to measure the effects of the moderator Involvement body weight. It is assumed that people, who are highly involved with their body weight, make healthier food choices than people who are low involved with their body weight. A marginally significant effect of Involvement body weight on starter choice was found ($\chi^2(1, 160) = 3.61, p = .06$). So, people who hold a high level of body weight involvement make healthier starter choices than people who hold a low level of body weight involvement ($\beta = -.40, p = .06$). Furthermore, a subtle effect of Involvement body weight on dessert choice was found ($\chi^2(1, 160) = 3.57, p = .06$). People who hold a high level

of body weight involvement make healthier dessert choices than people who hold a low level of body weight involvement ($\beta = -.37, p = .06$). One-way ANOVA showed that women ($M = 3.28, SD = 0.82$) are more involved with their body weight than men ($M = 2.81, SD = 0.85$), ($F(1,158) = 11.88, p = .001$).

An overview of all the moderators and their predictive direction is given in Table 2.

Table 2: Moderators and their predictive direction

Moderators	Starter choice		Dessert choice	
	Predictive direction β	p-value	Predictive direction β	p-value
Craving for sweet foods	.42	.04	.15	.42
General health interest	.48	.05	-.31	.19
Involvement body weight	.40	.06	-.37	.06

Attitude towards nutrition facts. Overall, Chi-Square tests showed that the respondents significantly hold more positive attitudes towards nutrition information on products in comparison with nutrition information on menu cards (see Table 3). Namely, more respondents think nutrition information on a product is good in comparison with the number of respondents who think nutrition information on a menu card is good ($\chi^2(1, 160) = 31.97, p = <.001$). Furthermore, respondents think nutrition information on a product is more important in comparison with nutrition information on a menu card ($\chi^2(1, 160) = 50.23, p = <.001$). Finally, respondents think nutrition information on a product is more valuable in comparison with nutrition information on a menu card ($\chi^2(1, 160) = 39.69, p = <.001$). An overview of respondents' attitudes towards nutrition information on products versus nutrition information on menu cards is given in Figure 14.

Table 3: Percentage of respondents regarding attitude towards nutrition information

Attitude	Nutrition information	Nutrition information	χ^2	p-value
	Product	Menu card		
Good	95.6%	86.3%	31.97	<.001
Bad	3.8%	13.1%	26.95	<.001
Important	75.6%	51.9%	50.23	<.001
Not important	23.1%	47.5%	47.86	<.001
Valuable	86.9%	65.6%	39.69	<.001
Worthless	12.5%	33.1%	39.50	<.001

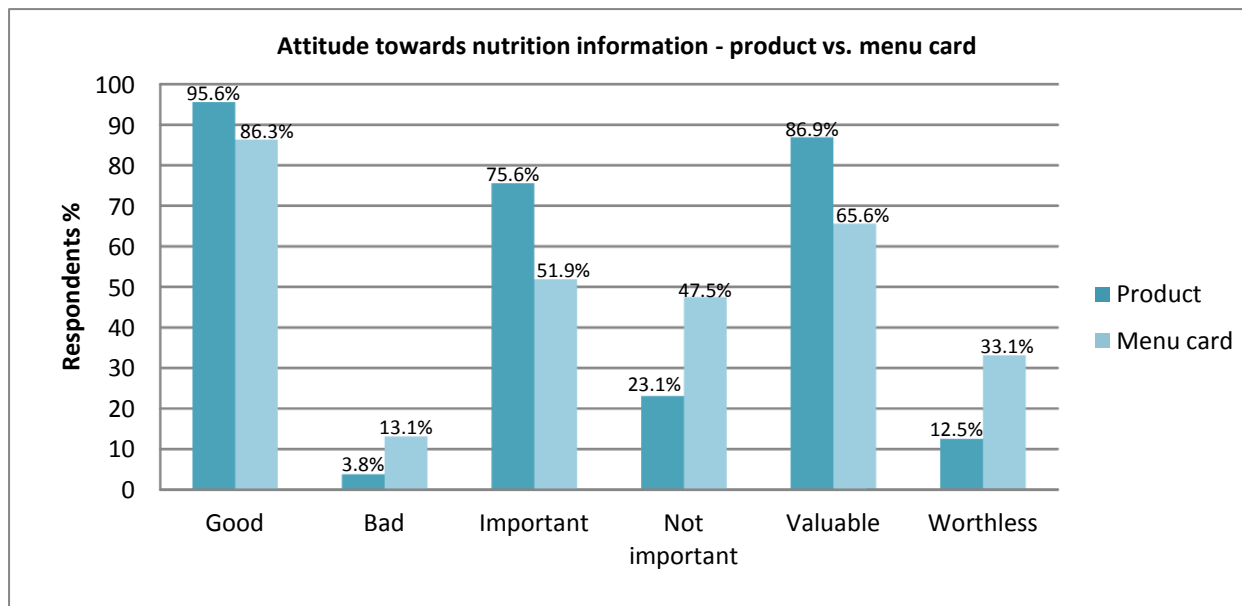


Figure 14: Percentage of respondents' attitudes towards nutrition information on products and menu cards

Demographic results. The Chi-Square test showed significant differences in sex ($\chi^2(1, 160) = 5.35, p = .02$), on starter choice. Namely, women (80%) chose more healthy starters than men (63%). No significant differences for age ($\chi^2(46, 160) = 59.70, p = .09$) and education ($\chi^2(3, 160) = 0.95, p = .81$) were found. In addition, the Chi-Square test revealed non-significant differences in sex ($\chi^2(1, 160) = 0.48, p = .49$), age ($\chi^2(46, 160) = 39.95, p = .72$), and education ($\chi^2(1, 160) = 0.40, p = .94$) on dessert choice.

4 | Discussion

The research at hand was to give an insight in how consumers make their food choices (i.e. starter choice and dessert choice) in a restaurant, manipulated by nutrition label and main course context. Additionally, the research investigated the influence of several intrinsic factors (i.e. Craving for sweet foods, General health interest, and Involvement body weight). In this Chapter, a critical look about the research at hand is given. First, the findings of the main study and whether or not the tested hypotheses will be supported are discussed. Then, the limitations of the study at hand and recommendations for future research are given. Finally, practical implications based on the findings of this study are presented.

4.1 Discussion

Influence of context on food choice. The study at hand did not focus on separate food intake but it took the whole menu context in a restaurant into account. The context of the main course was found to significantly influence starter choice, which is a new result in the field of healthy food research. Therefore, the assumption that consumers compensate their starter choice based on whether the main course was perceived as healthy or non-healthy was confirmed (H4a and H5a). The compensation effect is in line with a similar study of Chandon and Wansink (2007), although the study at hand focused on biased health labels on menu cards and Chandon and Wansink researched biased health halos of restaurants (i.e. Subway vs. Mac Donalds). Although context was found to influence starter choice, the data indicated that consumers did not compensate their dessert choice (H4b and H5b). No explanation is found for this finding. Yet, based on the data, it can be explained in a way that consumers do not want to compromise their dessert because they already compensated their starter. In addition, consumers might not be willing to choose a healthy dessert because it decreases taste (Wansink et al., 2004; Raghunathan et al., 2006).

Influence of nutrition label on food choice. The provided nutrition label on a menu card had no influence on starter and dessert choice. Therefore, hypothesis 3 could not be confirmed. This finding is in contradiction with the study of Burton et al. (2006) who found that nutrition information does influence consumers' consumption of healthy food in restaurants. The finding that nutrition labels did not influence starter and dessert choice was not expected. The unexpected finding could be ascribed to the high need for pleasure during dinner (Jackson et al., 2003). Furthermore, consumers not being familiar with nutrition information on menu cards could also

explain the lack of influence of nutrition information on healthy food choice. This explanation is in line with an earlier research of Bialkova and van Trijp (2010) who found that familiarity is one of the key determinants of consumers' attention towards nutrition labels. Providing nutrition information in restaurants is a new phenomenon in the Netherlands. Because nutrition information on menu cards does not yet exist, Dutch consumers are not familiar with this concept and therefore might pay less or no attention to it. Additionally, the results of the main study showed that people hold less positive attitudes towards nutrition information on menu cards in comparison with nutrition information on product packages. This finding is discussed in more detail later on in this Section. Furthermore, people have to believe that the extrinsic cues (e.g. nutrition information) are more credible and reliable than their own judgment which is based on intrinsic cues (Srinivasan et al., 2004).

Intrinsic factors. Significant effects were found for Craving for sweet foods, General health interest, and Involvement body weight on starter choice. It was found that people who hold a high level of General health interest and Involvement body weight make healthier starter choices compared to people who hold a low level of General health interest and Involvement body weight (H1a). Whereas General health interest and Involvement body weight moderate the choice for a certain starter, only Involvement body weight showed a subtle significant effect on dessert choice. Namely, people who are highly involved with their body weight make healthier dessert choices than people who are low involved with their body weight (H1b). An unexpected finding was that people who highly crave for sweet foods, make healthier starter choices. However, it must be noted that starters are not sweet. The unexpected finding can be explained by the compensate mechanism. Namely, it might be that people choose healthier starters because they know they cannot resist sweet desserts, which results in a compensation effect. However, the compensation effect between starters and desserts was not significant. Hypotheses 2a and 2b cannot be confirmed.

The results of the main study showed, in accordance with the study of Roininen et al. (1999), that women hold more health (i.e. General Health Interest) and taste (i.e. Craving for sweet foods) attitudes than men. Contrary to earlier scientific findings, no significant differences in age and education on health and taste attitudes were found. Additionally, results of the main study showed that women are more involved with their body weight than men.

Attitude towards nutrition information. The research at hand showed that consumers hold more positive attitudes (i.e. good, important, and valuable) towards nutrition information on product packages than nutrition information on menu cards. The finding about consumers' positive attitude towards nutrition information on product packages is in line with the research of Cheftel (2005), who revealed that 63% of his respondents were actively or occasionally interested in nutrition facts on products. Although 47.5% of the consumers in this study think nutrition information on menu cards is not important and 33.1% think it is worthless, 86% think it is good that nutrition information is provided. As said earlier, Dutch consumers are not familiar with nutrition information on menu cards. Therefore, the unfamiliarity might affect the less positive attitudes towards nutrition information on menu cards.

Findings main study vs. findings pre-study. Comparing the findings of the main study with the findings of the pre-study, it showed some dissimilarity for starter choice. Namely, the tastiest and unhealthiest starters in the pre-study (i.e. Buffalo Chickenwings and Oriental Fried Scampi's) were in the main study only chosen by 25.6% of the respondents. In addition, one of the tastiest and healthiest starters (i.e. Smoked Scottish Salmon and Tuscan Tomato Soup) of the pre-study, were in the main study chosen by 74.4% of the respondents. According to dessert, the main study showed similar findings in comparison with the pre-study. Namely, the tastiest and unhealthiest desserts (i.e. Dame Blanche and Belgium Chocolate Mousse) were in the main study chosen by 63.8% of the respondents. Coupe Fresh Fruit was in the pre-study seen as the healthiest dessert and in addition, it was perceived as medium tasty. Still, 29.4% of the respondents in the main study chose Coupe Fresh Fruit as dessert. Finally, Yoghurt Shake was in the pre-study perceived as not that tasty and very healthy, and therefore only 6.9% of the respondents in the mains study chose Yoghurt Shake as a dessert. The dissimilarity of the findings might be explained by the influence of the manipulations in the main study. The original starter and dessert choices can be found in Appendix D.

4.2 *Limitations and future research*

First of all, it is crucial to keep in mind that the study at hand took place in the Netherlands and therefore the findings cannot be generalized to other cultures. For future research, it is important to include a cultural moderator to detect differences in consumers' food choices. Besides the generalization limitation, this study contains several limitations regarding the external validity. First, although a real menu card was exposed to the respondents, an imaginary context was used at which the respondents had to imagine they were sitting in a restaurant. Perhaps, using actual settings instead of imaginary contexts might lead to other results. Furthermore, it is interesting to focus on different environmental settings. For example, healthy related locations (e.g. fitness center). Jackson et al. (2003) found that the most important motivation for eating in a restaurant is pleasure. However, does that also hold for healthy orientated contexts? Research is needed to assess differences in consumers' food choice between differently primed contexts. Second, the research at hand did not ask the respondents to fill in their length and weight. As a consequence, BMI (Body Mass Index) of each respondent could not be calculated. Now, only the scale "Involvement body weight", and more specifically the item "my weight is a concern in my life", can make an indication about the number of respondents having weight problems. However, this item is not reliable because it might be that respondents with weight problems did not consider their overweight as a concern in their life. BMI, therefore, gives a more clear indication about the number of respondents having weight problems. This could be an important finding, because providing nutrition information is of great importance for consumers with health or weight problems. Focusing on people with overweight might even change the results of the study because in the study at hand, most of the respondents did not have weight problems. It must be noted that people can give social desirable answers on questions about weight. Especially people with weight problems might give social desirable answers because they might be ashamed for their overweight. Then, a subtle effect was found for Involvement body weight on starter and dessert choice. More research is needed to verify this effect. Third, the research did not ask the participants how often they go out for dinner. It is recommendable for future research to explore differences in food choice between consumers who go frequently to a restaurant (e.g. business-people) and consumers who go once in a while. Finally, the research at hand did not take "taste expectations" into account. It is known that consumers think unhealthy food is tastier. However, when real experiments are used in which participants have to taste the healthy dishes, it might positively change their perceptions of healthy food and eventually their food choice.

4.3 *Marketing implications*

The results of this study, despite its limitations, can serve as practical guidelines for public health interventions, the Dutch Government, and restaurants.

First, a public information campaign is necessary to introduce consumers with the phenomenon of nutrition information on menu cards. Questions that should be answered are “where on the menu card can consumers find nutrition information?” and “what does the nutrition label look like?”. Because consumers miss these prior knowledge and expectation, a lack of attention (Bialkova & van Trijp, 2010) towards nutrition labels on menu cards occurs. Second, consumers’ awareness about the importance of providing nutrition information on menu cards must be created. Therefore, the campaign must encourage consumers to follow a healthy lifestyle. Since it is known that consumers underestimate the level of calories in restaurant meals (Burton et al., 2006; Story et al., 2007), it is of great importance to make consumers aware that their own judgments about the healthfulness of food served in restaurant is overestimated. That way, the nutrition information on menu cards becomes more reliable than consumers’ own intrinsic cues and healthy food choice might be positively stimulated (Srinivasan et al., 2004). Third, consumers’ attitude towards nutrition information on menu cards must become more positive. Therefore, it has to be clear that the provided nutrition information helps people with health and weight problems making healthier food choices. In addition, the public information campaign has to make clear that the provided nutrition information on menu cards improve healthy lifestyle patterns. It might be also useful to adjust marketing communication complain to various target groups. It is recommendable to focus on consumers who have weight problems as well as elderly people who often deal with a high level of cholesterol, because nutrition information is very important for these people. For “healthy” people, providing nutrition information can also be important since we know that consumers underestimate the level of calories by 50% (Burton et al., 2006). However, for healthy people it is more important to make them aware of the (unhealthy) nutrition of food which is served in restaurants rather than changing their food choices.

Besides using information campaigns to increase nutrition knowledge and create positive attitudes, changes in the physical environment should be made in order to stimulate healthful food choices of consumers. The physical environment influences the availability of certain food and the extent to which eating healthy food is hindered or facilitated (Story et al., 2007). The physical environment in this case is the

restaurant. It is recommendable for restaurants to collaborate with dieticians so several healthy dishes can be added on the menu card. In addition, nutrition information about the dishes on the menu card should be provided. Adding healthful dishes and providing extra nutrition information on a menu card might lead to restaurant owners increasing the prices of the dishes. Earlier scientific research showed that higher educated people already make more healthful food choices (Roininen et al., 1999; Steptoe et al., 1995). It therefore is recommendable for restaurants to focus on wealthy and well educated consumers in order to successfully stimulate healthful food choice of their customers. Finally, the portion size of the dishes served in restaurants must decrease. The last few years, restaurants increased their portion size (Hill et al., 2003; Ledikwe et al., 2005) which negatively influences healthy eating behavior. Therefore, a decrease in portion size in restaurants might be an important change to help consumers' following a healthy lifestyle pattern.

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Appendix

APPENDIX A. Questionnaire Pre-study

Binnenkort wordt er een nieuw restaurant geopend. De eigenaren willen graag advies over de samenstelling van de menukaart. Graag ontvangen zij jouw mening over tien voorgerechten, tien hoofdgerechten en tien nagerechten.

Het invullen van deze vragenlijst duurt vijf minuten. De resultaten zullen volledig anoniem worden behandeld en worden alleen voor wetenschappelijke doeleinden gebruikt.

Alvast bedankt!

Inge Faasen

1. Geef aan in hoeverre u de volgende gerechten als **lekker** beschouwd:

(1 = helemaal niet lekker, 2= niet lekker, 3 = neutraal, 4= lekker, 5 = erg lekker)

Voorgerechten	helemaal niet lekker			erg lekker	
	1	2	3	4	5
Gerookte Schotse zalm: Gerookte zalm op een bedje van frisse salade en zongedroogde tomaatjes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buffalo Chickenwings: Kruidig gemarineerde kippenvleugels met huisgemaakte knoflookmayonaise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frisse Ceasar salade: Salade met kip, kaassnippers, ei, croutons en een frisse Ceasardressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ierse Rundercarpaccio: Dun gesneden carpaccio met cherry tomaatjes, pijnboompitjes en groene pestodressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mozzarella cheese fingers: Gepaneerde en gefrituurde mozzarellasticks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Toscaanse tomatensoep: Tomatensoep met pesto en knoflookcroutons	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verse garnalen cocktail: Hollandse garnalen met cocktailsaus en frisse komkommerreepjes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warme geitenkaas: Lauw warme geitenkaas met rucola en honing-tijm dressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gefrituurde Oosterse scampi's: Gefrituurde scampi's geserveerd met chilisaus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tonijn Salade: Frisse salade met tonijn, groene olijven, tomaat en vinaigrette dressing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Hoofdgerechten	helemaal niet lekker			erg lekker	
	1	2	3	4	5
Argentijnse Biefstuk: Biefstuk met gegrilde aardappelen en een frisse salade van gedroogde pruimen, abrikoos en walnoten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Varkenshaasmedaillon: Malse varkenshaasmedaillons met gebakken spekjes, ui en romige pepersaus. Geserveerd met gefrituurde aardappelkroketjes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sushi trio van vis: Drie soorten sushi gevuld met krab, tonijn en zalm (9 stuks). Geserveerd met een groene salade van zeewier en groene asperges	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Italiaanse pasta Carbonara: Pasta penne met spekblokjes, romige carbonara kaassaus en bovenop geraspte parmazaanse kaassnippers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Louisiana Chickenbreast: Gegrilde kipfilet met vers gestoomde groenten en witte rijst	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gegrilde Zalmfilet: Zalmfilet met pesto, rucola en gegrilde tomaatjes met courgette	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pittige varkenshaaspies: Pittige varkenshaasat� met gefrituurde uitjes en satesaus. Geserveerd met vers gebakken friet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crispy Schnitzel: Krokant gebakken kip schnitzel met romige champignonsaus en aardappelgratin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tasty Pie: Hartige taart van bladerdeeg gevuld met katenspek, ui en kaas. Geserveerd met zelf gemaakte friet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kalfslapje: Kalfslapje met een lichte sinaasappelsaus geserveerd met een frisse groene salade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Nagerechten	helemaal niet lekker					erg lekker	
	1	2	3	4	5		
Yoghurt shake: Yoghurt shake met mango en verse munt	0	0	0	0	0		
Dame Blanche: Vanille ijs met warme chocoladesaus en slagroom	0	0	0	0	0		
Belgische chocolade mousse: Duo van witte en bruine chocolademousse	0	0	0	0	0		
Kaasplankje: Plankje met Brie, Camembert, en Roquefort. Geserveerd met roggebrood en stroop	0	0	0	0	0		
Crème Brûlée: Luchtige pudding met een hazelnootkaramel suikerlaagje	0	0	0	0	0		
New Yorker cheesecake: Cheesecake met rode vruchten en toffeesaus	0	0	0	0	0		
Coupe vers fruit: Diverse soorten vers fruit	0	0	0	0	0		
Double fudge brownie: Brownie met lauwwarme chocoladesaus en slagroom	0	0	0	0	0		
Rode vruchten met vanille ijs: Rode vruchten geserveerd met een bolletje vanille ijs en slagroom	0	0	0	0	0		
Warme apple crumble: Warme en zoete Engelse appeltaart met verse slagroom	0	0	0	0	0		

2. Geef aan in hoeverre u de volgende gerechten als **gezond** beschouwd:

(1 = zeer ongezond, 2 = ongezond, 3 = neutraal, 4 = gezond, 5 = zeer gezond)

Voorgerechten	zeer ongezond			zeer gezond	
	1	2	3	4	5
Tonijn Salade: Frisse salade met tonijn, groene olijven, tomaat en vinaigrette dressing	0	0	0	0	0
Gerookte Schotse zalm: Gerookte zalm op een bedje van frisse salade en zongedroogde tomaatjes	0	0	0	0	0
Toscaanse tomatensoep: Tomatensoep met pesto en knoflookcroutons	0	0	0	0	0
Warme geitenkaas: Lauwwarme geitenkaas met rucola en honing-tijm dressing	0	0	0	0	0
Verse garnalen cocktail: Hollandse garnalen met cocktailsaus en frisse komkommerreepjes	0	0	0	0	0
Buffalo Chickenwings: Kruidig gemarineerde kippenvleugels met huisgemaakte knoflookmayonaise	0	0	0	0	0
Frisse Caesar salade: Salade met kip, kaassnippers, ei, croutons en een frisse Ceasardressing	0	0	0	0	0
Mozzarella cheesefingers: Gepaneerde en gefrituurde mozzarellasticks	0	0	0	0	0
Ierse Rundercarpaccio: Dun gesneden carpaccio met cherry tomaatjes, pijnboompitjes en groene pestodressing	0	0	0	0	0
Gefrituurde Oosterse scampi's: Gefrituurde scampi's geserveerd met chilisaus	0	0	0	0	0

Hoofdgerechten	zeer ongezond			zeer gezond	
	1	2	3	4	5
Pittige varkenshaasspies: Pittige varkenshaassaté met gefrituurde uitjes en satesaus. Geserveerd met vers gebakken friet	0	0	0	0	0
Gegrilde Zalmfilet: Zalmfilet met pesto, rucola en gegrilde tomaatjes met courgette	0	0	0	0	0
Crispy Schnitzel: Krokant gebakken kip schnitzel met romige champignonsaus en aardappelgratin	0	0	0	0	0
Tasty Pie: Hartige taart van bladerdeeg gevuld met katenspek, ui en kaas. Geserveerd met zelf gemaakte friet	0	0	0	0	0
Kalfslapje: Kalfslapje met een lichte sinaasappelsaus geserveerd met een frisse groene salade	0	0	0	0	0
Sushi trio van vis: Drie soorten sushi gevuld met krab, tonijn en zalm (9 stuks). Geserveerd met een groene salade van zeewier en groene asperges	0	0	0	0	0
Varkenshaasmedaillon: Malse varkenshaasmedaillons met gebakken spekjes, ui en romige pepersaus. Geserveerd met gefrituurde aardappelkroketjes	0	0	0	0	0
Italiaanse pasta Carbonara: Pasta penne met spekblokjes, romige carbonara kaassaus en bovenop geraspte parmazaanse kaassnippers	0	0	0	0	0
Argentijnse Biefstuk: Biefstuk met gegrilde aardappelen en een frisse salade van gedroogde pruimen, abrikoos en walnoten	0	0	0	0	0
Louisiana Chickenbreast: Gegrilde kipfilet met vers gestoomde groenten en witte rijst	0	0	0	0	0

Nagerechten	zeer ongezond			zeer gezond	
	1	2	3	4	5
Coupe vers fruit: Diverse soorten vers fruit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Warme apple crumble: Warme en zoete Engelse appeltaart met verse slagroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Double fudge brownie: Brownie met lauwwarme chocoladesaus en slagroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rode vruchten met vanille ijs: Rode vruchten geserveerd met een bolletje vanille ijs en slagroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dame Blanche: Vanille ijs met warme chocoladesaus en slagroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Belgische chocolade mousse: Duo van witte en bruine chocalademousse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creme Brulee: Luchtige pudding met een hazelnootkaramel suikerlaagje	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Yoghurt shake: Yoghurt shake met mango en verse munt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kaasplankje: Plankje met Brie, Camembert, en Roquefort. Geserveerd met roggebrood en stroop	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New Yorker cheesecake: Cheesecake met rode vruchten en toffeesaus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Algemene informatie

Wat is uw geslacht?

- ☐ Vrouw
☐ Man

Wat is uw leeftijd?

Welk type onderwijs heeft u afgerond of volgt u momenteel?

- ☐ Voorgezet Onderwijs
☐ Middelbaar Beroepsonderwijs (MBO)
☐ Hoger Beroepsonderwijs (HBO)
☐ Wetenschappelijk Onderwijs (WO)

MENUKAART



★ = Deze gerechten zijn samengesteld door een erkend diëtist voor een gezonder eetpatroon.
Ze bevatten <300 calorieën, <8g verzadigde vetten, <300mg zout, <50mg cholesterol.

VOORGERECHTEN

- ★ **Gerookte Schotse Zalm**
Gerookte Schotse zalm op een bedje van frisse salade en zongedroogde tomaatjes
- Buffalo Chickenwings**
Kruidig gemarineerde kippenvleugels met huisgemaakte knoflookmayonaise
- ★ **Toscaanse tomatensoep**
Tomatensoep met pesto en knoflookcroutons
- Gefrituurde Oosterse Scampi's**
Gefrituurde scampi's geserveerd met chilisaus

HOOFDGERECHT

- ★ **Argentijnse Biefstuk**
Biefstuk met gegrilde aardappelen en een frisse salade van gedroogde pruimen, abrikoos en walnoten

NAGERECHTEN

- ★ **Yoghurt Shake**
Yoghurt shake met mango en verse munt
- Belgische Chocolade Mousse**
Duo van witte en bruine chocolademousse
- ★ **Coupe vers fruit**
Diverse soorten vers fruit
- Dame Blanche**
Vanille ijs met warme chocoladesaus en slagroom

MENUKAART



★ = Deze gerechten zijn samengesteld door een erkend diëtist voor een gezonder eetpatroon.
Ze bevatten <300 calorieën, <8g verzadigde vetten, <300mg zout, <50mg cholesterol.

VOORGERECHTEN

- ★ **Gerookte Schotse Zalm**
Gerookte Schotse zalm op een bedje van frisse salade en zongedroogde tomaatjes
- Buffalo Chickenwings**
Kruidig gemarineerde kippenvleugels met huisgemaakte knoflookmayonaise
- ★ **Toscaanse tomatensoep**
Tomatensoep met pesto en knoflookcroutons
- Gefrituurde Oosterse Scampi's**
Gefrituurde scampi's geserveerd met chilisaus

HOOFDGERECHT

- Varkenshaasmedallion**
*Malse varkenshaasmedallion met gebakken spekjes, ui en romige papersaus.
Geserveerd met gefrituurde aardappelkroketjes*

NAGERECHTEN

- ★ **Yoghurt Shake**
Yoghurt shake met mango en verse munt
- Belgische Chocolade Mousse**
Duo van witte en bruine chocolademousse
- ★ **Coupe vers fruit**
Diverse soorten vers fruit
- Dame Blanche**
Vanille ijs met warme chocoladesaus en slagroom

MENUKAART



VOORGERECHTEN

- Buffalo Chickenwings**
Kruidig gemarineerde kippenvleugels met huisgemaakte knoflookmayonaise
- Toscaanse tomatensoep**
Tomatensoep met pesto en knoflookcroutons
- Gefrituurde Oosterse Scampi's**
Gefrituurde scampi's geserveerd met chilisaus
- Gerookte Schotse Zalm**
Gerookte Schotse zalm op een bedje van frisse salade en zongedroogde tomaatjes

HOOFDGERECHT

- Argentijnse Biefstuk**
Biefstuk met gegrilde aardappelen en een frisse salade van gedroogde pruimen, abrikoos en walnoten

NAGERECHTEN

- Belgische Chocolade Mousse**
Duo van witte en bruine chocolademousse
- Coupe vers fruit**
Diverse soorten vers fruit
- Dame Blanche**
Vanille ijs met warme chocoladesaus en slagroom
- Yoghurt Shake**
Yoghurt shake met mango en verse munt

MENUKAART



VOORGERECHTEN

- Gerookte Schotse Zalm**
Gerookte Schotse zalm op een bedje van frisse salade en zongedroogde tomaatjes
- Buffalo Chickenwings**
Kruidig gemarineerde kippenvleugels met huisgemaakte knoflookmayonaise
- Toscaanse tomatensoep**
Tomatensoep met pesto en knoflookcroutons
- Gefrituurde Oosterse Scampi's**
Gefrituurde scampi's geserveerd met chilisaus

HOOFDGERECHT

- Varkenshaasmedallion**
*Malse varkenshaasmedallion met gebakken spekjes, ui en romige papersaus.
Geserveerd met gefrituurde aardappelkroketjes.*

NAGERECHTEN

- Yoghurt Shake**
Yoghurt shake met mango en verse munt
- Belgische Chocolade Mousse**
Duo van witte en bruine chocolademousse
- Coupe vers fruit**
Diverse soorten vers fruit
- Dame Blanche**
Vanille ijs met warme chocoladesaus en slagroom

Stelt u zich voor:

U heeft een etentje met collega's gepland staan. Uw baas heeft gereserveerd bij een restaurant. Omdat jullie met een grote groep zijn, is het hoofdgerecht vooraf bepaald door de baas en vervolgens voor iedereen vastgesteld. U ziet op de menukaart welk hoofdgerecht dat is. De keuken wil nu graag van u weten wat u als voorgerecht en nagerecht wilt.

Welk voorgerecht zou u kiezen:

- a. Gerookte Schotse Zalm
- b. Buffalo Chickenwings
- c. Toscaanse Tomatensoep
- d. Gefrituurde Oosterse Scampi's

Welk nagerecht zou u kiezen:

- a. Dame Blanche
- b. Coupe vers Fruit
- c. Belgische Chocolate Mousse
- d. Yoghurt Shake

1. In hoeverre bent u het eens met de volgende stellingen?

	volledig mee oneens			volledig mee eens	
Ik vind niet dat eten altijd een bron van plezier moet zijn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het maakt mij niet uit hoe het eten eruit ziet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Als ik eet, wil ik genieten van de smaak van het eten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is voor mij belangrijk om zowel door de weeks als in het weekend lekker te eten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lekker eten is een essentieel onderdeel van mijn weekend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik eet alles op, zelfs als ik de smaak van het eten niet lekker vind	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. In hoeverre bent u het eens met de volgende stellingen?

	volledig mee oneens			volledig mee eens	
Ik vind het raar dat sommige mensen naar chocolade verlangen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het raar dat sommige mensen naar snoep verlangen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vind het raar dat sommige mensen naar ijs verlangen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik verlang vaak naar snoep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik verlang vaak naar chocolade	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik verlang vaak naar ijs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Beschouwt u uzelf als een gezond persoon?

	volledig mee oneens			volledig mee eens		
Ik ben gezond	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik eet gezond	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben gezonder dan een doorsnee persoon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik hecht geen speciale waarde aan gezond eten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. In hoeverre bent u het eens met de volgende stellingen?

	volledig mee oneens			volledig mee eens		
De gezondheid van eten heeft weinig impact op mijn voedingskeuze	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik ben erg kieskeurig wat betreft de gezondheid van het eten dat ik eet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik eet wat ik lekker vind en geef er weinig om of het eten gezond is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is voor mij belangrijk dat mijn dieet weinig vet bevat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik volg altijd een gezond en gebalanceerd dieet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het is voor mij belangrijk dat mijn dagelijks eten veel vitamine en mineralen bevat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Het maakt mij niet uit of snacks ongezond zijn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik vermijd geen eten, zelfs niet als het mijn cholesterol verhoogt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Ik hoeverre bent u het eens met de volgende stellingen?

	volledig mee oneens			volledig mee eens		
Ik maak me nooit druk over mijn gewicht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mijn gewicht is een zorg in mijn leven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk nooit aan mijn gewicht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anderen lijken zich meer zorgen te maken over hun gewicht dan ik over mijn gewicht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik zoek altijd naar informatie om mijn gewicht onder controle te krijgen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Het verschaffen van informatie over voeding door een voedingswaarde etiket op een bepaald product is voor mij:

Slecht	of	Goed
Waardevol	of	Zinloos
Niet belangrijk	of	Belangrijk

7. Het verschaffen van informatie over voeding door een voedingswaarde etiket op een menukaart is voor mij:

Slecht	of	Goed
Waardevol	of	Zinloos
Niet belangrijk	of	Belangrijk

8. Heeft u de voedingsinformatie onderaan de menukaart opgemerkt?

- ☐ Ja
- ☐ Nee

Achtergrondinformatie

Wat is uw geslacht?

- ☐ Man
- ☐ Vrouw

Wat is uw leeftijd?

Wat is uw hoogst genoten opleiding? (deze hoeft niet afgerond te zijn)

- ☐ Voorgezet onderwijs
- ☐ Middelbaar Beroepsonderwijs (MBO)
- ☐ Hoger Beroepsonderwijs (HBO)
- ☐ Wetenschappelijk Onderwijs (WO)

APPENDIX D. Main study – original starter and dessert choice

