The effect of the Nutri-Score on consumer food choice

The moderating role of need for cognition on the relationship between the Nutri-Score and purchase intention of Dutch consumers

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Preface

This is my Master Thesis about the Nutri-Score, which investigates the moderating role of need for cognition on the relationship between the Nutri-Score and purchase intention. This research was conducted as part of the Master's degree in Business Administration with a specialization in Marketing, at Radboud University Nijmegen.

Together with another master student, I was allowed to research the Nutri-Score. We collaborated on the data collection but wrote our own thesis. It was very useful to consult with her online through the Zoom meetings that we scheduled regularly. Therefore, I would like to thank Jente Frints for the pleasant cooperation. Besides, I would like to thank my supervisor Gerrit Antonides for his guidance and feedback in writing this thesis. It has been a pleasure to learn from his expertise in the field of consumer behavior. Also, I would like to thank Herm Joosten as my second examiner. Finally, I would like to thank all respondents who completed and forwarded the survey. Without them, it would not have been possible to conduct this research.

Have fun reading my Master Thesis!

Jamie de Beijer
Nijmegen, June 2021

Abstract

This study aimed to find out how Nutri-Scores on food products affect the purchase intention of consumers in the Netherlands. In addition, need for cognition was included as a moderating variable to investigate differences between individuals high and low in need for cognition. By means of an online survey-experiment, data was collected from 405 respondents. Mixed AN(C)OVA and Paired Samples *t*-tests were conducted for testing the hypotheses.

The results showed that, given the presence of the Nutri-Score, the label has a positive effect on consumers' healthy purchase intentions, but only if customers actually see the label. However, no significant results were found regarding the moderator need for cognition. Hence, need for cognition does not influence the effect of the Nutri-Score on consumers' purchase intentions.

This study is relevant for the Netherlands in general, since it could be an impetus to introduce the Nutri-Score as a front-of-pack nutrition label on a larger scale in the Netherlands. In addition, it is one step further to implementing it as a mandatory food choice logo in the European Union. Nevertheless, further research is necessary to learn more about this topic.

Keywords: Nutri-Score, front-of-pack label, purchase intention, need for cognition, food choice

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Chapter 1: Introduction

1.1 Background information

Obesity can be seen as a global epidemic. Worldwide, it contributes to approximately 2.8 million deaths per year (World Health Organization, 2020). Also in the Netherlands, obesity is a big issue since one in two Dutch people are overweight (Rijksoverheid, n.d.). The problems of obesity become even more visible now, as the world is facing a big global pandemic: COVID-19. It has become evident that obesity is a risk factor for infected COVID-19 patients, in the sense that their disease prognoses are severe (Alberca et al., 2020; Gao et al., 2020; Kwok et al., 2020). Therefore, it is clearer than ever that obesity can have serious health-related consequences.

To tackle the obesity problem, governments all over the world try to implement preventive actions to make it easier for consumers to buy healthy food (Nishida et al., 2004). Hence, front-of-pack nutrition labels have been introduced on the packaging of food to provide easier-to-understand and more visible nutritional information (Silayoi & Speece, 2007; World Health Organization, 2018). One of these front-of-pack labels is the Nutri-Score, which provides a summary of key nutrients and aims to make comparisons across products easy and fast for consumers. People no longer have to turn packaging around to decipher nutritional tables and fine print on the back of products. With the introduction of Nutri-Scores, consumers can make healthier choices in the supermarket easier (Rijksoverheid, n.d.). In this way, the Nutri-Score can help reduce the problem of obesity in the Netherlands (De Temmerman et al., 2021).

The Nutri-Score has been developed and implemented in France. It has already proven its effectiveness there (Julia & Hercberg, 2017b). Therefore, the Netherlands started a temporary pilot project with the Nutri-Score, for example, at Albert Heijn, where customers can see the food selection logo on chilled dairy products. It is expected that the Nutri-Score will be legally permitted in the Netherlands from mid-2021 (Albert Heijn, n.d.). From then on, it will be the only recognized food choice logo for Dutch food producers, so other food choice logos are no longer allowed on Dutch packaging (Rijksoverheid, n.d.).

The calculation of the Nutri-Score is based on independent scientific research from France (Julia & Hercberg, 2017a). Positive and negative product characteristics are taken into account to calculate a score for each product. Positive product characteristics are, for example, protein, fiber, vegetables and fruit, legumes, and nuts. A product scores negative for energy content, sugars, saturated fat, and salt. Products are then assigned a letter from A to E, based on

the total score. The Nutri-Score logo on products shows a scale of five colors (from dark green to red), indicated by the letters A to E. The healthiest products score a dark green A, whereas the least healthy products will have a red E (Julia & Hercberg, 2017a).

The Nutri-Score responds to the automatic behavior of customers when shopping (Salmon et al., 2015). Customers doing their groceries often lack motivation, time, and knowledge for thoroughly processing food label information on a product's healthiness (Petty & Cacioppo, 1986; Keller et al., 1997). This lack of motivation can be explained by a low need for cognition, since individuals differ in their tendency to engage in and enjoy thinking, resulting in a distinction between individuals with a high or a low need for cognition (Cacioppo & Petty, 1982). When including need for cognition in this study, differences in purchase intention can be expected between consumers that are high versus low in need for cognition. For example, one can expect that customers low in need for cognition lack motivation to process extensive nutritional information, that is often printed on the back of the package. The Nutri-Score will be valuable for them, because of its simplicity. Consequently, these low-need-for-cognition individuals are expected to have a higher purchase intention for products with a high Nutri-Score, compared to when no Nutri-Score is present on the packaging.

1.2 Research goal

This research aims to find out how Nutri-Scores on products affect the purchase intention of consumers in the Netherlands. On top of that, the need for cognition will be included as a moderating variable to investigate differences between individuals high and low in need for cognition. This leads to the following research question:

> *"How does need for cognition influence the effect of the Nutri-Score on consumers' purchase intentions?"*

1.3 Academic relevance

This study aims to contribute to existing scientific literature. Previous studies on the effect of the Nutri-Score on purchase intentions took place in other European countries, whereas this relationship has not been investigated in the Netherlands (De Temmerman et al., 2021; Julia & Hercberg, 2017b). Due to cultural differences, several factors may vary across countries, such as: purchase intentions, healthiness perceptions, nutritional knowledge, importance of healthy food, dieting behavior, obesity rates and the prices of healthy and unhealthy food (De

Temmerman et al., 2021). Therefore, it is relevant to repeat the study in other countries in Europe to find out if the results are the same (De Temmerman et al., 2021).

Moreover, no research has been done on the effect of need for cognition on the relationship between the Nutri-Score and purchase intentions. Therefore, the moderating variable need for cognition will be added to the proposed relationship. To sum it up, this study contributes to existing literature 1) by investigating the effect of the Nutri-Score on purchase intentions in the Netherlands, and 2) by adding the moderating role of need for cognition.

1.4 Practical relevance

Besides the scientific contribution, extensive knowledge about Nutri-Scores is also relevant for practice. First of all, it is relevant for manufacturers and marketers, as they should know what happens with consumers' purchase intentions when Nutri-Scores are implemented on food packaging. Marketers can use this knowledge for adapting other selling tools, such as the layout of the shelves and the prices of the products. On top of that, if this study shows differences in purchase intentions between customers high and low in need for cognition, it might be necessary for marketers to segment the customer base with respect to this variable. Furthermore, especially for manufacturers of unhealthy products that will be labelled with a less favorable Nutri-Score, it is important to know what will happen with the purchase intention of their products.

Second, this study is of relevance to the government. As explained earlier, governments implement preventive actions to make it easier for consumers to buy healthy food (Nishida et al., 2004). By knowing how the Nutri-Score influences consumers' purchase intentions of healthy versus unhealthy food, policy makers can adapt regulations to further encourage purchasing healthy food.

Third, this research is relevant for the Dutch society. The implementation of the Nutri-Score can help consumers to make healthier food choices in the supermarket, so that the problem of obesity in the Netherlands will reduce (De Temmerman et al., 2021).

1.5 Overview

For answering the research question, the theoretical background is described in Chapter 2 in which the concepts and theories will be explained that are central to this research. In addition, hypotheses are formulated. The research method follows in the third chapter. Based on that,

quantitative research will be conducted, and the results of the empirical research will be described in Chapter 4. Finally, the fifth chapter presents the conclusion and discussion.

Chapter 2: Theoretical background

This chapter describes the relevant literature for this study. The following concepts will be discussed: front-of-pack nutrition labeling, Nutri-Score, purchase intention, promotions, nudging and need for cognition. Further, the relationships between these concepts are explained, to eventually formulate hypotheses. Chapter 2 ends with the conceptual model, for visualizing the relationships between the presented concepts.

2.1 Front-of-pack nutrition labeling

Customers should be able to distinguish between healthy and unhealthy food, in order to make healthier food choices. Therefore, food manufacturers should provide nutritional information in the form of nutrition labels on the product packaging (Feunekes et al., 2008). However, this detailed information is often placed on the back of food packaging, which is difficult to read and understand for consumers (Kivetz & Simonson, 2000). Hence, customers give only limited attention to nutritional information in making purchase decisions regarding food (Van Herpen & Van Trijp, 2011). Consumers have to take into account several nutrients simultaneously to make healthy choices, whereas it is shown that this is difficult for many of them because of low health literacy or a lack of motivation (Black & Rayner, 1992; Malloy-Weir & Cooper, 2017; Van Kleef et al., 2008). As a result of that, Black and Rayner (1992) showed that customers often simplify the task of assessing nutritional information by using only one nutrient as a measure for comparing the level of healthiness of several products. This could result in making non-optimal purchase decisions. For example, when only assessing and comparing products based on the amount of sugar, products high in another nutrient such as fat are not rejected.

To overcome this issue, front-of-pack nutrition labels have been introduced in the late 1980s as a combined effort of governments, product manufacturers, and retailers (World Health Organization, 2018). Its aim is to provide easier-to-understand and more visible nutritional information (Silayoi & Speece, 2007; World Health Organization, 2018), helping consumers to be better able to make healthy food choices (Feunekes et al., 2008). On top of that, simple front-of-pack labels reduce customers' cognitive effort and time for processing information, when comparing it to the more detailed back-of-pack labels (Scott & Worsley, 1994). Hence, front-of-pack labels can be defined as "simplified information about the most important nutritional aspects and characteristics of food" (L'Abbé et al., 2012, p. 8).

Various forms of front-of-pack labels have been put on food packaging in recent years, such as: the Health Star Rating system, Multiple Traffic Light, Nutri-Score, Reference Intakes,

Warning Symbols, Healthier Choice Tick, and Wheel of Health (Egnell et al., 2019; Feunekes et al., 2008). The Nutri-Score front-of-pack label will be explained in detail in the next section, as it is the main topic of this study.

2.2 Nutri-Score

The Nutri-Score has been developed by Serge Hercberg in France. The French government recognized it as the only official nutritional system to be used on food as of October 2017 (Mialon et al., 2018). Belgium, Spain, Germany, Switzerland, and Luxembourg already use the Nutri-Score label on its food packaging. The Netherlands has been implementing some temporary pilot projects with the Nutri-Score, for example, at Albert Heijn's chilled dairy products (Albert Heijn, n.d.). Before the Nutri-Score will be legally permitted in the Netherlands as expected in mid-2021, some adjustments should be made to align the Nutri-Score with the Dutch food guidelines (Bakker, 2019).

The Nutri-Score can be seen as a front-of-pack nutrition label, offering some advantages over other front-of-pack labels. First of all, it should help customers in comparing products easy and fast in order to make healthier purchase decisions (De Temmerman et al., 2021). Consumers can see at a glance how healthy or unhealthy a product is, without studying the back of packages. Second, the Nutri-Score requires the least amount of time to be understood by customers, also for those with a lack of nutritional knowledge (Egnell et al., 2018). It therefore appears to be the most preferred front-of-pack label (Julia et al., 2017). Finally, the Nutri-Score logo could encourage manufacturers to improve the nutritional composition of their products (De Temmerman et al., 2021). Making products healthier leads to a better Nutri-Score, which is immediately visible on the packaging (Consumentenbond, 2019).

The Nutri-Score is an extension of the Multiple Traffic Light label, that only takes into account the negative food nutrients. Therefore, the Nutri-Score label expanded the system with positive nutritional aspects, such as fruits, vegetables, proteins, and fibers. The Nutri-Score label is a scale of five colors, ranging from a dark green A to a red E. An example is shown in Figure 1, representing Nutri-Score A. The letter A is enlarged, to distinguish it from the other letters (Julia & Hercberg, 2017b).

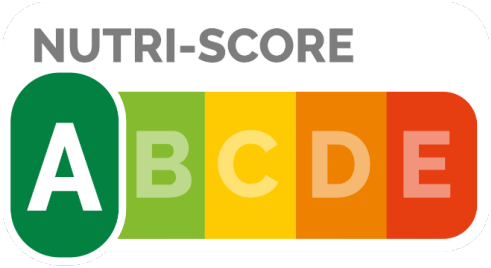

Figure 1: Nutri-Score label, showing Nutri-Score A (De Temmerman et al., 2021)

2.2.1 Computation of the Nutri-Score

The Nutri-Score computation is based on independent scientific research from France. To determine a score for each product, positive and negative product characteristics are taken into account. Positive components are the amount of protein, fibers, vegetables, fruit, legumes, and nuts. A product scores negative for the amount of energy, saturated fat, sugar, and salt (Julia & Hercberg, 2017a). The calculation is then based on the nutritional composition for 100 grams of food or 100 milliliters of beverage. Positive points are attributed to the negative product characteristics that should be limited (resulting in 0 to 10 positive points for each component), and negative points are attributed to the positive product characteristics that should be promoted (resulting in 0 to 5 negative points for each component) (Dréano-Trécant et al., 2020). Adding up all those positive and negative points results in a total score ranging from −15 (most healthy) to +40 (least healthy) (Julia & Hercberg, 2017a).

Different thresholds can be applied to assign a Nutri-Score letter and corresponding color to the total score of food and beverages. For food, the thresholds are: A below −1 point (dark green), B from 0 to 2 points (light green), C from 3 to 10 points (yellow), D from 11 to 18 points (orange), and E above 19 points (red). For beverages, the thresholds are: A for water (dark green), B up to 1 point (light green), C from 2 to 5 points (yellow), D from 6 to 9 points (orange), and E above 10 points (red) (Dréano-Trécant et al., 2020). In summary, this means that the healthiest products score a dark green A, whereas the least healthy products will have a red E. The middle category C is added to discourage dichotomous thinking in terms of healthy versus unhealthy food (Julia & Hercberg, 2017a).

2.3 Purchase intention

The Nutri-Score aims at persuading consumers to purchase healthier food products (De Temmerman et al., 2021). Hence, its goal is to increase customers' purchase intentions for healthy food. Purchase intention can be described as "an individual's conscious plan to make

an effort to purchase a brand" (Spears & Singh, 2004, p. 56); or customers' probability to purchase from a firm, regardless of their purchase history with other firms (Schlosser et al., 2006). This means that an increase in customers' purchase intention results in an increase in the probability of purchasing. Since the context of this study is food in supermarkets, purchase intention can be described as a consumers' probability of purchasing food from a supermarket, regardless of their purchase history with other supermarkets.

2.4 Promotions

Promotions are marketing tools that can be used by manufacturers and retailers, aimed at increasing sales (Gedenk et al., 2006). They are used to encourage consumers to purchase a product more quickly, more frequently and/or in greater quantities than in the absence of the promotion (Hawkes, 2009, p. 333). Hence, promotions are an important aspect in explaining purchase behavior of consumers (Arce-Urriza et al., 2017). More specifically, promotions make products more attractive to consumers and positively influence their purchase intentions (Ririn et al., 2019; Büyükdağ et al., 2020). Therefore, promotions can be defined as a marketing strategy the purpose of which is to influence purchase intentions of the firm's customers (Blattberg & Neslin, 1990).

When looking at the purpose of promotions and the purpose of introducing the Nutri-Score, we see that both tools are aimed at influencing consumers' purchase intentions. In this study, the Nutri-Score is seen as a special form of promotion by making nutritional information more accessible for consumers (De Temmerman et al., 2021). As a result of that, customers are persuaded to purchase healthy products as indicated with a high Nutri-Score.

2.5 Nudging

The packaging of products plays a large role in consumer decision making (Tijssen et al., 2017). The Nutri-Score is presented as a front-of-pack label and makes use of heuristics and nudging. Heuristics are simple decision rules that people use, such as green is good and red is bad (Salmon et al., 2015). Nudging can be defined as "any aspect of the choice architecture that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" (Thaler & Sunstein, 2008, p. 6). This means that nudges are small changes in the decision environment that tap into heuristics of people, to make sure that their intuitive choice is the desired choice (Tijssen et al., 2017). With regard to governmental policies of promoting healthy food, nudging could be implemented in the form

of product labeling (Bucher et al., 2016). More specifically, the Nutri-Score can be used as a nudging strategy to alter people's behavior in purchasing healthy products instead of unhealthy products. The letters A to E and corresponding colors are used as nudges. Like a traffic light, green is better than red, which is also the case with the Nutri-Score.

2.6 Relationship between the Nutri-Score and purchase intention

Previous research already showed that front-of-pack nutrition labels in general, and the Nutri-Score in particular, influence purchase intentions of customers (Feunekes et al., 2008; Julia & Hercberg, 2017b). To illustrate, the Nutri-Score resulted in a 9.3% increase in nutritional quality of purchased products (Julia & Hercberg, 2017b). On top of that, the implementation of the Nutri-Score can be seen as promoting healthy products with the use of a nudging strategy. A recent study in France has proven that the Nutri-Score appears to be well-perceived and understood among customers, and that it leads to a higher nutritional quality of purchases (Julia & Hercberg, 2017b). Furthermore, another study compared purchase intentions for healthy (Nutri-Score A and B) and unhealthy products (Nutri-Score D and E) when the Nutri-Score was present versus not present. Belgian customers showed higher purchase intentions for healthy products when the Nutri-Score was present (De Temmerman et al., 2021). However, this was only a small effect. A similar result was found in Crosetto, Lacroix, Muller and Ruffieux (2018). Since these studies took place in European countries, the same results might be obtained in the Netherlands. It is therefore expected that Dutch consumers have a higher purchase intention for products with a high Nutri-Score, compared to when no Nutri-Score is present on the product in question. On the other hand, a low Nutri-Score can make consumers aware of the fact that a product is unhealthy (Feunekes et al., 2008). It is therefore expected that this will lead to a lower purchase intention, compared to when no Nutri-Score is present on the packaging. Finally, it is expected that customers have a higher purchase intention for a product with a high Nutri-Score, compared to a similar product with a low Nutri-Score (Crosetto et al., 2018). Hence, we hypothesize that:

H1: A high (low) Nutri-Score has a positive (negative) effect on purchase intention, compared to when no Nutri-Score is present on the same product.

H2: Purchase intention will be higher for a product with a high Nutri-Score, compared to a similar product with a low Nutri-Score.

2.7 Need for cognition

Need for cognition can be defined as "differences among individuals in their tendency to engage in and enjoy thinking" (Cacioppo & Petty, 1982, p. 116). It can be seen as a motivational concept, as it refers to people's intrinsic cognitive motivation (Fleischhauer et al., 2010). A comparison can be made between individuals high versus low in the need for cognition. A high-need-for-cognition individual enjoys thinking and problem solving, since one is more intrinsically motivated to engage in cognitive thinking and reasoning (Haugtvedt et al., 1992; Preckel, 2014). These individuals prefer situations with complex tasks and like resolving those tasks (Haugtvedt et al., 1992). On the other hand, a low-need-for-cognition individual tends to avoid highly cognitive work. These people prefer other sources to make sense of the world, such as heuristics, experts, or social comparisons (Cacioppo et al., 1996).

The concept of need for cognition can be linked to the Elaboration Likelihood Model, which is a framework for understanding the effectiveness of persuasive communications (Petty & Cacioppo, 1986). In this model, a distinction is made between the central and the peripheral route. On the one hand, individuals following the central route are motivated and able to evaluate messages. On the other hand, people in the peripheral route rely on heuristics or other cues (such as expertise of the speaker) due to a lack of motivation and ability to evaluate the message. The assumption is that need for cognition might play a role in determining which route one will follow when being confronted with a persuasive ad (Vanwesenbeeck et al., 2017). Individuals high in need for cognition are likely to change their attitude based on the central route of persuasion, whereas individuals low in need for cognition will change their attitude based on the peripheral route (Haugtvedt et al., 1992).

2.8 The moderating effect of need for cognition

Previous research showed that high-need-for-cognition individuals evaluate product attributes more thoroughly than low-need-for-cognition individuals, when making purchase decisions (Haugtvedt et al., 1992). Hence, it is expected that high-need-for-cognition individuals will evaluate nutritional information when making purchase decisions, even if there is only extensive back-of-pack nutritional information available.

On the other hand, consumers with a low need for cognition often base their purchase decisions on simple peripheral cues (Haugtvedt et al., 1992). The Nutri-Score can be seen as such a simple peripheral cue. Hence, it is expected that low-need-for-cognition individuals will pay more attention to the Nutri-Score and rely their purchase decisions on product healthiness

as indicated by the Nutri-Score. Therefore, consumers with a low need for cognition prefer products with a high Nutri-Score over products with a low Nutri-Score. Hence, it is expected that those customers show an increased purchase intention for products with a high Nutri-Score and a decreased purchase intention for products with a low Nutri-Score, when comparing it to the same products without the presence of the Nutri-Score. Further, the implementation of the Nutri-Score as a front-of-pack label has a greater impact on purchase intentions of consumers with a low need for cognition than consumers with a high need for cognition, because they already assess product healthiness based on back-of-pack nutritional information. Therefore, we propose that:

H3: Consumers with a lower need for cognition have a higher (lower) purchase intention for products provided with a high (low) Nutri-Score, as compared with purchase intention for products without Nutri-Score, than consumers with a higher need for cognition.

2.9 Conceptual model

The conceptual model in Figure 2 has been drawn up based on the central question in this research, to visualize the hypotheses. It is expected that the Nutri-Score influences purchase intention. On top of that, the moderating role of need for cognition is presented.

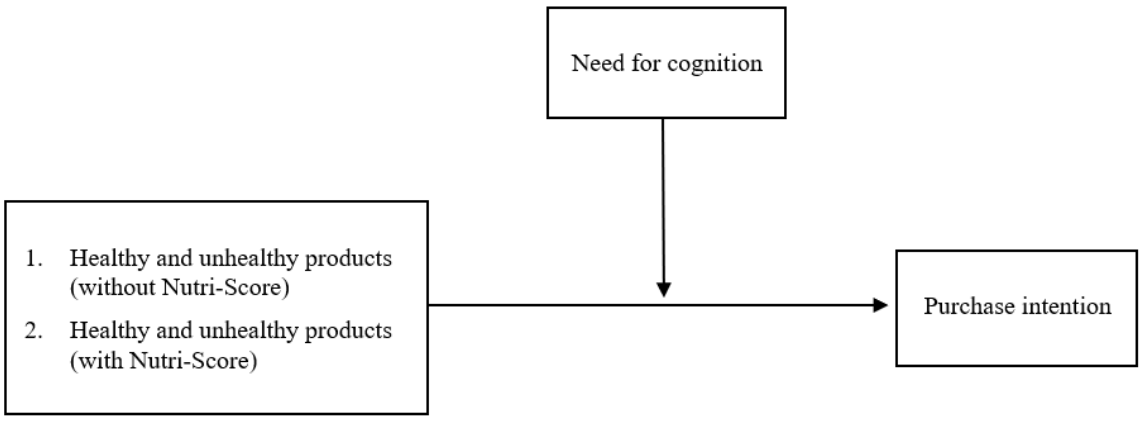

Figure 2: Conceptual model

Chapter 3: Method

This chapter explains the methodology that was used to test the aforementioned hypotheses. It starts with a description of the research design, followed by the sample, the procedure, and the measures. Finally, the data analysis method and research ethics are discussed.

3.1 Research design

The goal of this study was to find out how Nutri-Scores on products affect the purchase intentions of consumers in the Netherlands, and to investigate differences between individuals high and low in need for cognition as a moderating variable. Quantitative research has been conducted to test the hypotheses. By means of an online survey-experiment, self-administered data was collected from respondents. An advantage of the self-administered survey is that respondents can fill in the questionnaire at their own speed. On top of that, there is a lack of interference from the researcher, so that respondents may feel less fear for judgment (Burns, 2006). In addition, an online survey-experiment was a suitable option for gathering responses due to the COVID-19 social distancing measures.

This research employed a 2 (product package: with vs. without Nutri-Score; between-subjects) × 4 (snacks: healthy vs. unhealthy; within-subjects) mixed design. On top of that, need for cognition was added as a covariate. In other words, the independent variables were manipulated in the between-subjects design of the online survey-experiment to discover the effects on the dependent variable purchase intention (Mutz, 2011). To increase the reliability of the findings, four repetitions of purchase intention (based on four different snacks) were included in the design. Respondents were exposed to only one particular condition (Budiu, 2018): they saw the products either with or without the Nutri-Score label on the packaging. Therefore, differences between these groups could be analyzed (Burns, 2006). In addition, differences between customers' need for cognition were analyzed.

Further, this research was cross-sectional, because it looked at only one moment in time to collect data from the population (Sekaran & Bougie, 2016). Since a maximum of three months was available for the performance of this study, cross-sectional research was a suitable method.

3.2 Sample

The online survey-experiment was targeted at Dutch customers from 18 years old. Anyone who ever goes shopping belongs to the target group and could therefore complete the survey. For

collecting respondents, a convenience sample was used. A convenience sample falls into the category of non-probability samples, which means that not every customer has the same chance of being included in the sample (Vennix, 2016). Therefore, it is a select sample. In a convenience sample, there are no criteria that the selection of the respondents must meet. Anyone willing to complete the survey is suitable (Saunders et al., 2012). Collecting data based on a convenience sample provides convenience, as the data can be collected quickly.

The convenience sampling method consisted of online and offline data collection. The survey was distributed online via WhatsApp, Facebook, and LinkedIn, using the snowball method (Naderifar et al., 2017). Both researchers sent the link to the survey to a minimum of 25 women and 25 men as starting addresses via WhatsApp, so that approximately 100 potential participants were reached. The starting addresses consisted of people from the researchers' networks that differed as much as possible regarding their age and educational level. Further, these people were asked to forward the questionnaire to at least 2 other people and to share it via their social media channels. In this way, over 150 completed surveys were expected from the online sampling method in a relatively short period of time. This was useful given the limited time available to conduct this research. In contrast, with a convenience sample, the researcher had no control over the representativeness of the sample, which makes it more sensitive to biases (Babbie, 2015). In addition, the number of respondents strongly depends on the willingness of people to complete the survey. Hence, to increase potential respondents' willingness to complete the survey, a Bol.com gift card of 25 euros was raffled among all participants as an incentive for people to participate.

Since the researchers' networks mainly consisted of highly educated people, it was expected that most of them would score high on need for cognition. For testing the hypotheses about this covariate, it was important to also gather enough responses from people that score low on need for cognition to explore differences between these groups. Hence, some effort has been made to find such people as well. Therefore, the offline method consisted of notes with a QR code and link to the survey, that were handed out in supermarkets, in the letter boxes of people in Nijmegen and in food bank packages. More specifically, about 500 notes were distributed in certain neighborhoods in Nijmegen where most people are low educated and have a low income: Meijhorst, Hatert and Nije Veld. These are the three neighborhoods with the lowest income (CBS, 2018). In addition, about 300 notes have been distributed in the food packages at food bank Nijmegen Overbetuwe. The expected reach of those 800 notes was approximately 1,600 people (since most households consisted of 1, 2 or 3 people above 18 years

old). By applying an expected response rate of 10%, approximately 160 respondents were expected from the offline method.

The minimum recommended sample size is 20 observations per group, including preferably equal group sizes (Hair et al., 2018). In this study, the minimum sample size related to two groups. Hence, the minimum sample size for running a robust analysis is 40 (Hair et al., 2018). Since previous research found small effects of front-of-pack labels on customers' purchase intentions (Ikonen et al., 2020; De Temmerman et al., 2021), larger cell sizes per group were required to maintain acceptable levels of statistical power (Hair et al., 2018). Therefore, G*Power 3.1 have been used, as an a priori power analysis, for calculating the required sample size (Faul et al., 2009). Based on an effect size of 0.1, alpha error probability of 0.05, power of 0.95, 2 groups, and 4 measurements, the recommended sample size was set at 216. This means that each group should contain a minimum of 108 observations.

3.3 Procedure

The survey-experiment used in this study is described in Appendix A. The survey was launched together with Jente Frints, who was also researching the Nutri-Score. However, she investigated financial scarcity as a moderator, so therefore some questions and statements in the survey only belong to her research. Hence, these were not used in this study. Further, the survey was pre-tested among 10 participants for comprehensibility. Participants could write down comments for improvement of the questions, which are shown in Appendix F. These comments were taken into account before distributing the survey.

The survey started with an introduction, in which people were thanked for participating in this study. After that, the researchers were introduced, and the purpose of the study was explained. It was stated that the survey was completely anonymous and that it would take about 5 minutes to complete. By going to the next page, participants confirmed that they were 18 years or older.

After the introduction, every participant was randomly assigned to one of the two conditions: they saw the products either with or without the Nutri-Score label. Participants should imagine that they were looking for a snack at the supermarket. In each condition, the participants saw four different snacks in random order. These were two healthy snacks (with or without Nutri-Score A) and two unhealthy snacks (with or without Nutri-Score E). Participants could view the back-of-pack nutritional information by clicking on a button. On the basis of three statements, participants could indicate their purchase intention for each snack on a 5-point

Likert scale. Further, some questions were asked regarding people's nutrition, for example to check whether participants could easily assess how healthy each snack was. These questions had to be answered on a 5-point Likert scale, and were used as a manipulation check to see whether the Nutri-Score really worked as intended.

This was followed by statements regarding the moderators need for cognition and financial scarcity, that had to be answered on a 5-point Likert scale as well. The final part of the survey requested demographic information, such as gender, age, and educational level. Furthermore, respondents were asked how they ended up with the survey. They could fill out their email address to participate in a lottery to win a Bol.com gift card. After filling out the entire survey, people were thanked for their participation.

3.4 Measures

The variables in this study were mainly operationalized with existing measurement scales, that are valid and proven within the literature. The scales were translated into Dutch such that they could be used in the survey, because the target group consisted of Dutch customers. An overview of all variables and items used in this study is shown in Appendix E.

3.4.1 Nutri-Score

In this study, two scenarios were used for the independent variable to measure the effect of the presence of the Nutri-Score on purchase intention. This means that participants in scenario 1 were exposed to snacks without the Nutri-Score label, whereas participants in scenario 2 saw the same snacks with the Nutri-Score label. Snacks have been chosen, because 92% of Dutch people eat snacks on a regular basis (Multiscope, 2017). As already explained in the procedure, respondents were exposed to two healthy snacks and two unhealthy snacks. These were chosen based on a study by the Dutch Consumer Union (Mo, 2020), shown in Appendix B. In order to prevent bias, snack types have been chosen where it is not immediately clear whether they are healthy or unhealthy. Pictures of the four snacks, with and without the Nutri-Score label are shown in Appendix C. The prices of the snacks were based on the Albert Heijn website. The corresponding back-of-pack nutritional values of the snacks are shown in Appendix D.

3.4.2 Purchase intention

Purchase intention is a consumers' probability of purchasing food from a supermarket, regardless of their purchase history with other supermarkets (Schlosser et al., 2006). It was

measured on the basis of three items that could be answered on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree): “I will buy this product,” “Next time I am buying a [product category], I will choose this product,” and “I prefer this product to other [product category]” (Mai & Hoffmann, 2015).

3.4.3 Need for cognition

Need for cognition can be defined as “differences among individuals in their tendency to engage in and enjoy thinking” (Cacioppo & Petty, 1982, p. 116). The original scale for measuring need for cognition contains 34 items (Cacioppo & Petty, 1982), and was shortened to an 18-item version (Cacioppo et al., 1984). However, a recent study found support for the robustness of an even shorter need for cognition scale containing 6 items that could be answered on a 5-point Likert-scale ranging from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me): “I would prefer complex to simple problems,” “I like to have the responsibility of handling a situation that requires a lot of thinking,” “Thinking is not my idea of fun,” “I would rather do something that requires little thought than something that is sure to challenge my thinking abilities,” “I really enjoy a task that involves coming up with new solutions to problems,” and “I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought” (Lins de Holanda Coelho et al., 2020).

3.4.4 Control variables

Additional variables that could influence the purchase intention of customers were taken into account in this study (De Temmerman et al., 2021). Hence, the following variables were included as control variables: gender, age, educational level, nutritional knowledge, perceived healthiness of diet, and tastiness. Nutritional knowledge was measured on the basis of one item that could be answered on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree): “I am knowledgeable about health and nutrition issues” (Feunekes et al., 2008). Perceived healthiness of diet was measured on the basis of one item that could be answered on a 5-point Likert scale ranging from 1 (excellent) to 5 (poor): “How would you describe your overall diet?” (Feunekes et al., 2008). Tastiness was measured on the basis of one item that could be answered on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree): “This product seems tasty”.

3.4.5 Manipulation check

To check the effectiveness of the manipulation of the Nutri-Score, three items were included in the questionnaire as a manipulation check. The first item was measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree): "I could easily assess how healthy the snack was". The second item could be answered with yes or no: "I have seen the Nutri-Score label on the packaging of the snack". The third item could be answered with no or 1 to 4 products: "For how many products did you look at the back-of-pack nutritional information?"

3.5 Data analysis method

This section discusses the method used to analyze the data for testing the hypotheses. The IBM SPSS Statistics 25 program have been used for the data analysis. First of all, the preparation of the data took place, whereby incomplete and invalid respondents were removed, and the variables were renamed. Second, for testing Hypothesis 1 about the presence versus absence of the Nutri-Score, mixed ANOVA was performed (Field, 2013). In this study, four repetitions were used (within-subjects) which are the four snacks. Third, a Paired Samples *t*-test was performed to test Hypothesis 2 (Field, 2013). Fourth, the respondents' need for cognition was added as a covariate to the analysis, to explore differences in purchase intention between the two groups. Therefore, mixed ANCOVA was used to perform the analysis for testing Hypothesis 3 (Field, 2013).

3.6 Research ethics

Ethical issues were taken into account, so that the research has been conducted in a responsible manner (Sekaran & Bougie, 2016). First, the American Psychological Association (APA) guidelines were used to refer to information from other authors (Babbie, 2015).

Second, participation in the survey was completely voluntary and anonymous (Sekaran & Bougie, 2016). Therefore, the answers were reviewed carefully, and no single cases have been discussed, to protect the privacy of the respondents. If desired, participants could stop completing the survey in the meantime. This right to withdraw ensured that participants were not pressured to complete the survey (Sekaran & Bougie, 2016). Further, the data was only used for this study and would not be shared with third parties, to concern confidentiality.

Finally, the researcher was transparent and open about the research as the research purpose was explained in the introduction to the survey. In addition, the email addresses of the

researchers were indicated at the end of the survey, so that respondents could send an email if there was interest in the results of the survey.

Chapter 4: Results

In this chapter, the results of the data analysis are presented. First, a description of the sample is given, followed by the reliability analysis and manipulation checks. Subsequently, the hypotheses are tested using mixed ANOVA, Paired Samples *t*-test and mixed ANCOVA. All effects are reported as significant at $p < .05$ unless otherwise stated.

4.1 Sample description

In this study, a convenience sample was used to collect respondents. A total of 533 people opened the online survey. However, this is not the total number of valid responses. After removing the incomplete surveys and the surveys with missing values, 405 respondents were left in the sample. The control group (without Nutri-Score) consisted of 197 respondents (48.6%) and the experimental group (with Nutri-Score) consisted of 208 respondents (51.4%), which means that the minimum recommended sample size per group was sufficient to proceed to further analysis. The sample statistics are presented in Table 1. It should be noted that some respondents did not answer the last few control questions, which were not obligatory to fill in.

The sample consisted of 280 women (69.8%), 120 men (29.9%) and 1 other (0.2%). In addition, the average age of the respondents was 33 years old, with the youngest participant being 18 years old and the oldest participant being 83 years old. The age category of people between 18 and 24 years old was relatively large, since more than 50% of all respondents belonged to this category. A total of 298 respondents (74.3%) of the sample consisted of highly educated people. Only 2 people attended primary school only. Furthermore, 341 respondents (85.0%) ended up with the survey via social media and 60 respondents (15.0%) via a note with QR code and link.

Table 1: Sample statistics

	Percent
Gender	
Male	29.9
Female	69.8
Other	0.2
Age	
18-24	52.8
25-34	14.7
35-44	4.8
45-54	14.2
55-64	10.5
65+	3.0
Educational level	
Primary school	0.5
Secondary school	7.5
MBO	17.7
HBO	38.9
University	35.4
Total number of observations	405

4.2 Scale reliability

Previous studies already demonstrated the validity of the measurement scales. Hence, only reliability analyses were conducted to measure the internal consistency of the scales. Cronbach's alpha was used to measure reliability, with an alpha between 0.7 and 0.8 considered minimal values of acceptability (Field, 2013). The reliability of the scales should be assessed for all constructs containing more than two items. In this study, the variables *purchase intention* and *need for cognition* consisted of more than two items. The reliability of *purchase intention* was measured eight times, for each of the four snacks in the control and experimental conditions. The results of the reliability analyses are presented in Appendix G and summarized in Table 2.

All measurement scales of *purchase intention* for each product and by condition were above 0.9, which indicates reliable measurement scales. The measurement scale of *need for cognition* showed a reliability value of 0.786, which is acceptable. When looking at the Item-Total Statistics tables in Appendix G, Cronbach's alpha could not be increased by removing any of the items of any measurement scale. Therefore, all three items for *purchase intention* and all six items for *need for cognition* were averaged to be included in further analysis.

Table 2: Reliability of purchase intention by product and by condition, and need for cognition scales

Measurement scale	Cronbach's alpha
Purchase intention	
Rijst (without NS)	0.923
Snelle (without NS)	0.904
Hero (without NS)	0.913
Yoghurt (without NS)	0.933
Rijst (with NS)	0.929
Snelle (with NS)	0.941
Hero (with NS)	0.923
Yoghurt (with NS)	0.934
Need for cognition	0.786

4.3 Manipulation checks

Three manipulation checks were performed to see if the experimental condition had the desired effect. The results are shown in Appendix H. First of all, it was checked whether participants who were shown a Nutri-Score had actually seen it. Only 38% indicated that they have seen the Nutri-Score label, which is quite low. Nevertheless, participants in the experimental condition could better assess how healthy the snack was (M = 3.44, SD = 0.96), than those in the control condition (M = 3.25, SD = 0.96). Table 18 shows that this difference was significant ($t(403) = -1.97$, $p < .05$). Finally, participants in the experimental condition looked less often at the back-of-pack nutritional information (M = 2.59, SD = 1.59), than those in the control condition (M = 2.64, SD = 1.62). However, Table 20 shows that this difference was not significant ($t(403) = 0.30$, $p = .762$). To conclude, participants who had seen the Nutri-Score label could better assess the healthiness of the snack, but the researchers had expected that more participants in the experimental condition would have seen the Nutri-Score label on the packaging. Nevertheless, all 405 respondents remained in the sample for testing the hypotheses. Additional analyses were performed (Section 4.10) for participants in the experimental condition who had seen the Nutri-Score label.

4.4 Assumptions

Before testing the hypotheses, five assumptions were tested for running the mixed ANOVA. The results are shown in Appendix I, including descriptions of the variables used in this chapter. First of all, the dependent variable should be measured at the continuous level, which is either interval or ratio measurement level (Field, 2013). This assumption was met, since the dependent variable *purchase intention* was measured at a 5-point Likert scale, which falls under the interval measurement level.

Second, there were two independent variables: the within-subjects factor and the between-subjects factor. The within-subjects factor (or repeated-measures variable) should consist of at least two categorical groups (Field, 2013). In this study, the repeated-measures variable was called *snacks* and consisted of four different snacks: *Rijst, Snelle, Hero* and *Yoghurt.* The between-subjects factor should consist of at least two independent groups (Field, 2013). In this study, the between-subjects factor was called *Nutri-Score*, consisting of the control and experimental group. This means that the control group saw the snacks without the Nutri-Score label and the experimental group saw the snacks with the Nutri-Score label on the packaging.

The third assumption was about checking the data for outliers (Field, 2013). None of the variables had extreme outliers, so no cases were excluded for further analysis.

Fourth, the dependent variable *purchase intention* should be normally distributed for each combination of the within-subjects factor (four snacks) and between-subjects factor (with or without Nutri-Score) (Field, 2013). Therefore, normality was checked eight times based on the skewness and kurtosis of each dependent variable. The skewness and kurtosis values demonstrated that the dependent variables were not perfectly normally distributed, which means that the assumption of normality was violated. However, it was expected that this violation had little effect on the outcomes due to the robustness of mixed ANOVA and the large sample size (Field, 2013).

The fifth and last assumption concerned the sphericity, which means that the variances of the differences between the conditions should be equal (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated for the main effect of snacks, $\chi^2(5) = 28.81$, $p < .001$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .97$ for the main effect of snacks) because the estimate was greater than .75 (Field, 2013).

4.5 Mixed ANOVA

Mixed ANOVA was used for testing Hypothesis 1, which means that a between-groups measure and repeated measure, for each of the four products, were mixed (Field, 2013). Hypothesis 1 was about the Nutri-Score label, in which it was expected that a high (low) Nutri-Score had a positive (negative) effect on purchase intention, compared to when no Nutri-Score label was present on the same product. *Purchase intention* was the dependent variable in this analysis,

Nutri-Score (present versus not present) and *snacks* (*Rijst*, *Snelle*, *Hero* and *Yoghurt*) were independent variables. The results of the mixed ANOVA analysis are shown in Appendix I.

There was a significant main effect of *snacks* on *purchase intention*, $F(2.91, 1171.50) = 15.04$, $p < .05$, indicating that the four snacks differed significantly in purchase intention. However, the between-subjects variable *Nutri-Score* showed no significant effect on purchase intention, $F(1, 403) = 0.776$, $p = .379$. Furthermore, there was no significant interaction effect between *snacks* and the *Nutri-Score*, $F(2.91, 1171.50) = 2.51$, $p = .06$. Hence, Hypothesis 1 was rejected.

Nevertheless, the interaction effect would have been significant when an alpha level of .10 was used. In addition, when looking at the Estimated Marginal Means Plot of *purchase intention*, differences in purchase intention between the snacks presented with versus without the Nutri-Score label were visible. Therefore, the four snacks were studied individually, by means of an Independent Samples *t*-test, to investigate differences in purchase intention for the between-subjects variable *Nutri-Score*. *Rijst* and *Snelle* were healthy snacks with Nutri-Score A, so it was expected that the Nutri-Score had a positive effect on purchase intention, compared to when no Nutri-Score label was present on the same product. *Hero* and *Yoghurt* were unhealthy snacks with Nutri-Score E, so it was expected that the Nutri-Score had a negative effect on purchase intention, compared to when no Nutri-Score label was present on the same product.

First of all, participants who saw *Rijst_NS* had a higher purchase intention (M = 2.50, SD = 1.11) than those who saw *Rijst* (M = 2.28, SD = 1.04), as expected according to Hypothesis 1. This difference was significant ($t(403) = -2.13$, $p < .05$), and represented a small-sized effect, $d = 0.21$ (Field, 2013).

Second, participants who saw *Snelle_NS* had a higher purchase intention (M = 2.70, SD = 1.13) than those who saw *Snelle* (M = 2.63, SE = 1.00), as expected according to Hypothesis 1. However, this difference was not significant ($t(401.35) = -0.64$, $p = .532$).

Third, participants who saw *Hero_NS* had a lower purchase intention (M = 2.19, SD = 0.98) than those who saw *Hero* (M = 2.33, SD = 1.07), as expected according to Hypothesis 1. However, this difference was not significant ($t(395.30) = 1.41$, $p = .159$).

Fourth, participants who saw *Yoghurt_NS* had a higher purchase intention (M = 2.31, SD = 1.08) than those who saw *Yoghurt* (M = 2.24, SD = 1.09), which was not as expected. This difference was not significant ($t(403) = -0.72$, $p = .474$).

To conclude, the means of *purchase intention* for *Rijst* with Nutri-Score were higher than for *Rijst* without the Nutri-Score. The other differences were not significant.

4.6 Paired Samples *t*-test

For testing Hypothesis 2, a Paired Samples *t*-test was performed to compare means of healthy versus unhealthy snacks from participants in the experimental condition (Field, 2013). It was expected that purchase intention would be higher for a healthy product (with Nutri-Score A) compared to an unhealthy product (with Nutri-Score E). Therefore, the values for *PI_NS_Healthy* (computed as the mean purchase intention for *Rijst_NS* and *Snelle_NS*) and *PI_NS_Unhealthy* (computed as the mean purchase intention for *Hero_NS* and *Yoghurt_NS*) were compared. The results of the Paired Samples *t*-test are shown in Appendix J.

On average, participants had a higher purchase intention for healthy products presented with Nutri-Score A (M = 2.60, SD = 0.88), than for unhealthy products presented with Nutri-Score E (M = 2.25, SD = 0.83). This difference was significant, $t(207) = 4.51$, $p < .05$, and represented a small to medium sized effect, $d = 0.42$ (Field, 2013). Hence, Hypothesis 2 was supported.

Furthermore, as an additional analysis, Hypothesis 2 was also tested for participants in the control condition by comparing the purchase intention of the healthy and unhealthy snacks presented without the Nutri-Score label. Therefore, the values for *PI_Healthy* (computed as the mean purchase intention for *Rijst* and *Snelle*) and *PI_Unhealthy* (computed as the mean purchase intention for *Hero* and *Yoghurt*) were compared. On average, participants had a higher purchase intention for healthy products (M = 2.45, SD = 0.77), than for unhealthy products (M = 2.28, SD = 0.85). This difference was significant, $t(196) = 2.54$, $p < .05$, and represented a small effect, $d = 0.20$ (Field, 2013). Hence, Hypothesis 2 would also be supported for snacks without the Nutri-Score. Nevertheless, the effect was somewhat stronger for products presented with the Nutri-Score label, but not significantly so.

4.7 Mixed ANCOVA with NFC

Mixed ANCOVA was used to test Hypothesis 3 about the covariate *need for cognition* (*NFC*). It was expected that consumers with a lower NFC had a higher (lower) purchase intention for products provided with Nutri-Score A (E), as compared with purchase intention for products without Nutri-Score, than consumer with a higher NFC. Before running the mixed ANCOVA, in which *NFC* would be added as a covariate to the original mixed ANOVA analysis, two

additional assumptions should be met. The results of the mixed ANCOVA are shown in Appendix K.

First of all, the covariate must be independent of the experimental effect (Field, 2013). This was tested by running an ANOVA with *NFC* as the dependent variable and *Nutri-Score* as the independent variable, shown in Table 31. The main effect of *Nutri-Score* was not significant, $F(1, 403) = 0.52$, $p = .47$, which showed that the average level of *NFC* was roughly the same in the experimental and control group. Therefore, the first additional assumption was met.

The second assumption was called the homogeneity of regression slopes. This was tested by rerunning the ANOVA by using a customized model that included the interaction between the covariate *NFC* and independent variable *Nutri-Score* (Field, 2013), and is shown in Table 32. The interaction term *Nutri-Score * NFC* was not significant, $F(1, 401) = 0.80$, $p = .37$. Therefore, the assumption of homogeneity of regression slopes was met. This means that both additional assumptions for using *NFC* as a covariate in the analysis were met.

By running the mixed ANCOVA, the assumption of sphericity should be tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity was violated for the main effect of snacks, $\chi^2(5) = 28.09$, $p < .001$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .97$ for the main effect of snacks) because the estimate was greater than .75 (Field, 2013).

The Tests of Between-Subjects Effects showed a significant main effect for *NFC*, $F(1, 401) = 4.48$, $p < .05$, which means that given the other variables, respondents' scores on NFC had a significant effect on purchase intention for the four different snacks. However, the covariate, need for cognition, was not significantly related to the relationship between Nutri-Score and purchase intention (*snacks * Nutri-Score * NFC*), $F(2.92, 1172.51) = 0.41$, $p = .742$. Therefore, Hypothesis 3 was rejected. Nevertheless, there was a significant interaction effect between *snacks* and *NFC*, $F(2.92, 1172.51) = 2.92$, $p < .05$, indicating that customers' purchase intention for snacks differed by need for cognition. However, this effect was not influenced by the Nutri-Score label. When analyzing the Parameter Estimates, *NFC* showed a significant effect for the unhealthy snacks *Hero* ($p < .05$) and *Yoghurt* ($p < .05$), but not for the healthy snacks *Rijst* ($p = .574$) and *Snelle* ($p = .399$). The coefficient value for the covariate *NFC* was -0.255 for *Hero* and -0.321 for *Yoghurt.* This means that if *NFC* increased by one unit, the purchase intention for both *Hero* and *Yoghurt* decreased by under half a unit (Field, 2013). Therefore, it was concluded that if need for cognition increased, the purchase intention for the

unhealthy snacks *Hero* and *Yoghurt* decreased (regardless of the presence of the Nutri-Score label).

4.8 Additional mixed ANOVA with NFC

An additional mixed ANOVA analysis was performed with *NFC* as a categorical variable, in which participants were classified as having either a low or high NFC. This was done by looking at the frequency table and splitting the file around 50%, so that both groups remained almost equal. Participants who scored between 1.33 and 3.33 were classified as having a low NFC (181 respondents), and the ones who scored between 3.50 and 5.00 were classified as having a high NFC (224 respondents). The new variable *NFC_recode* was included as an additional between-subjects factor. The results of this additional mixed ANOVA analysis with NFC are shown in Appendix L.

The assumption of sphericity was tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity was violated for the main effect of snacks, $\chi^2(5) = 29.53$, $p < .001$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .97$ for the main effect of snacks) because the estimate was greater than .75 (Field, 2013).

The between-subjects factor *NFC_recode* was significant, $F(1, 401) = 3.97$, $p < .05$, indicating that there was a significant difference between the low and high NFC groups. However, the interaction term *snacks * Nutri-Score * NFC_recode* was not significant, $F(2.92, 1170.15) = 0.41$, $p = .74$. Therefore, Hypothesis 3 was still rejected after classifying participants in either the low or high NFC group.

Furthermore, it was expected that consumers with a high NFC assess product healthiness based on back-of-pack nutritional information more than consumers with a low NFC. This was analyzed by comparing the low and high NFC groups based on the back-of-pack nutritional information manipulation check. Participants in the high NFC group looked more often at the back-of-pack nutritional information (M = 2.79, SD = 1.63), than those in the low NFC group (M = 2.40, SD = 1.55). Table 42 shows that this difference was significant ($t(403) = -2.40$, $p < .05$).

4.9 Mixed ANCOVA with control variables

The control variables *tastiness, gender, age, educational level, nutritional knowledge,* and *perceived healthiness of diet* were included in the mixed ANCOVA analysis. The results are shown in Appendix M.

First of all, *Lekker_Rijst, Lekker_Snelle, Lekker_Hero* and *Lekker_Yoghurt* were added to the initial mixed ANOVA analysis to control for how tasty the snacks seemed to the respondents. The assumption of sphericity was tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated for the main effect of snacks, $\chi^2(5) = 27.32$, $p < .001$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .98$ for the main effect of snacks) because the estimate was greater than .75 (Field, 2013). The Tests of Within-Subjects Effects showed significant *p*-values ($p < .001$) for all interactions between the *snacks* and *Lekker_Rijst, Lekker_Snelle, Lekker_Hero* and *Lekker_Yoghurt.* Therefore, Parameter Estimates were analyzed to explore if the tastiness variables loaded significantly ($p < .001$) on the corresponding snack, which was the case. However, *Lekker_Rijst* also loaded significantly on *Hero* ($p < .05$). Nevertheless, there was still no significant interaction effect between *snacks* and the *Nutri-Score* after controlling for *tastiness*, $F(2.93, 1170.86) = 1.15$, $p = .328$.

Second, the control variables *gender, age, educational level, nutritional knowledge,* and *perceived healthiness of diet* were added to the mixed ANCOVA analysis. The assumption of sphericity was tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated for the main effect of snacks, $\chi^2(5) = 24.34$, $p < .001$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .99$ for the main effect of snacks) because the estimate was greater than .75 (Field, 2013). The Tests of Within-Subjects Effects showed significant *p*-values ($p < .05$) for all interactions between the *snacks* and *Lekker_Rijst, Lekker_Snelle, Lekker_Hero, Lekker_Yoghurt* and *Kennis.* Nevertheless, there was still no significant interaction effect between *snacks* and the *Nutri-Score* after controlling for *tastiness, gender, age, educational level, nutritional knowledge* and *perceived healthiness of diet*, $F(2.98, 1157.07) = 1.54$, $p = .201$.

Third, the covariate *NFC* was added to the mixed ANCOVA analysis as a continuous variable. The assumption of sphericity was tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated for the main effect of snacks, $\chi^2(5) = 22.83$, $p < .001$. Therefore, degrees of freedom should be corrected using Huynh-

Feldt estimates of sphericity (ε = 1.00 for the main effect of snacks) because the estimate was greater than .75 (Field, 2013). The Tests of Within-Subjects Effects showed significant *p*-values ($p < .05$) for all interactions between the *snacks* and *Lekker_Rijst, Lekker_Snelle, Lekker_Hero, Lekker_Yoghurt, Kennis, Opleiding_recode* and *NFC*. Nevertheless, there was still no significant interaction effect between *snacks* and the *Nutri-Score* after controlling for *tastiness, gender, age, educational level, nutritional knowledge, perceived healthiness of diet* and *NFC*, $F(3, 1158) = 0.51$, $p = .678$. Overall, including all control variables and the covariate still caused Hypotheses 1 and 3 to be rejected.

4.10 Additional analyses

It was expected that the Nutri-Score label only had an effect when respondents had actually seen it. Therefore, additional mixed AN(C)OVA analyses were performed by selecting respondents that had actually seen the Nutri-Score label. For the experimental group (N = 208) who saw the snacks with the Nutri-Score, only 79 respondents indicated that they had actually seen the label. It was remarkable that 17 people in the control group (N = 197) indicated that they had seen the Nutri-Score label, while this could not be the case. Therefore, 180 respondents were left in the control group for the additional analysis. The results of the additional mixed AN(C)OVA analyses are shown in Appendix N.

4.10.1 Additional mixed ANOVA

The assumption of sphericity was tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated for the main effect of snacks, $\chi^2(5) = 15.09$, $p < .05$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity (ε = .98 for the main effect of snacks) because the estimate was greater than .75 (Field, 2013).

There was a significant main effect of *snacks* on *purchase intention*, $F(2.94, 756.46) = 10.37$, $p < .05$, indicating that the four snacks differed significantly in purchase intention. The between-subjects variable *Nutri-Score* also showed a significant effect on purchase intention, $F(1, 257) = 4.09$, $p < .05$. Furthermore, there was a significant interaction effect between *snacks* and the *Nutri-Score*, $F(2.94, 756.46) = 5.12$, $p < .05$. This means that the Nutri-Score label on the packaging of snacks had an effect on purchase intention, compared to when no Nutri-Score label was present on the same product. Therefore, Hypothesis 1 would have been supported

when corrected for the manipulation check. Furthermore, the four snacks were assessed individually by means of an Independent Samples *t*-test.

First of all, participants who saw *Rijst_NS* had a higher purchase intention (M = 2.83, SD = 1.12) than those who saw *Rijst* (M = 2.28, SD = 1.04), as expected according to Hypothesis 1. This difference was significant ($t(257) = -3.82$, $p < .05$), and represented a medium-sized effect, $d = 0.53$ (Field, 2013). The initial analysis also showed a significant effect for *Rijst*. However, this effect was only small-sized.

Second, participants who saw *Snelle_NS* had a higher purchase intention (M = 2.81, SD = 1.16) than those who saw *Snelle* (M = 2.60, SE = 1.01), as expected according to Hypothesis 1. However, this difference was not significant ($t(257) = -1.43$, $p = .153$). The initial analysis also showed a non-significant effect for *Snelle*.

Third, participants who saw *Hero_NS* had a lower purchase intention (M = 2.18, SD = 0.96) than those who saw *Hero* (M = 2.34, SD = 1.07), as expected according to Hypothesis 1. However, this difference was not significant ($t(165.42) = 1.22$, $p = .224$). The initial analysis also showed a non-significant effect for *Hero.*

Fourth, participants who saw *Yoghurt_NS* had a higher purchase intention (M = 2.38, SD = 1.03) than those who saw *Yoghurt* (M = 2.25, SD = 1.11), which was not as expected. This difference was not significant ($t(159.66) = -0.89$, $p = .377$). The initial analysis also showed a non-significant effect for *Yoghurt*.

To conclude, the Independent Samples *t*-test showed comparable results as for the initial analysis. The only difference was that the significant effect for *Rijst* is now medium-sized, in stead of small-sized. That difference resulted in a significant interaction effect between *snacks* and the *Nutri-Score* in the mixed ANOVA. In doing so, Hypothesis 1 would have been partially accepted, but only for the healthy snack *Rijst.*

4.10.2 Additional mixed ANCOVA with NFC

The assumption of sphericity was tested again (Field, 2013). Mauchly's Test of Sphericity indicated that the assumption of sphericity had been violated for the main effect of snacks, $\chi^2(5) = 13.55$, $p < .05$. Therefore, degrees of freedom should be corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .99$ for the main effect of snacks) because the estimate was greater than .75 (Field, 2013).

The Tests of Between-Subjects Table showed a significant main effect of *NFC*, $F(1, 255) = 5.36$, $p < .05$, which tells us that given all other variables, respondents' scores on NFC

differed significantly from each other. The covariate, need for cognition, was not significantly related to the relationship between Nutri-Score and purchase intention (*snacks * Nutri-Score * NFC*), $F(2.98, 759.16) = 0.57$, $p = .635$. Therefore, Hypothesis 3 would have been rejected when corrected for the manipulation check. However, there was a significant interaction effect between *snacks* and *NFC*, $F(2.98, 759.16) = 3.45$, $p < .05$, indicating that customers' purchase intention for snacks differed by need for cognition. However, this was not influenced by the Nutri-Score label.

Chapter 5: Discussion

This chapter discusses the results of the study, in which an answer to the research question is given. Subsequently, theoretical contributions and practical implications are made based on this conclusion. The chapter ends with the limitations to the present study with suggestions for further research.

5.1 Conclusion

Obesity can be seen as a problematic global epidemic, causing serious health-related consequences (World Health Organization, 2020). To tackle the obesity problem, governments try to implement preventive actions to make it easier for consumers to buy healthy food (Nishida et al., 2004). An example of this is introducing front-of-pack nutrition labels on the packaging of food, such as the Nutri-Score (Silayoi & Speece, 2007; Rijksoverheid, n.d.). The Nutri-Score already proved its effectiveness in several European countries (e.g., Julia & Hercberg, 2017b; De Temmerman et al., 2021), whereas it was not researched in the Netherlands. Furthermore, customers often lack motivation for thoroughly processing food label information on a product's healthiness while doing groceries, that can be explained by a low need for cognition (Petty & Cacioppo, 1986; Keller et al., 1997). Hence, need for cognition could be a potential moderator.

This study investigated how the Nutri-Score affects the purchase intention of Dutch consumers. In addition, need for cognition was added as a moderating variable to investigate differences in purchase intention between individuals' levels of need for cognition. Therefore, the following research question was formulated: "*How does need for cognition influence the effect of the Nutri-Score on consumers' purchase intentions?"* To answer this question, three hypotheses were proposed that have been tested with mixed AN(C)OVA and a Paired Samples *t*-test. The results are based on an online survey-experiment among Dutch adults (N = 405). An overview of the hypotheses and results is shown in Table 3.

Hypothesis 1 was rejected, since the Nutri-Score (in general) did not have a significant effect on purchase intention, compared to when no Nutri-Score was present. However, Hypothesis 1 was actually partially supported, since Nutri-Score A on rice crackers compared to no Nutri-Score resulted in a positive effect on purchase intention. There was no difference in purchase intention for the other three snacks. Besides, Hypothesis 2 was supported, so customers showed a higher purchase intention for products with Nutri-Score A than products with Nutri-Score E. Lastly, no evidence was found to support the influence of need for cognition

on the relationship between the Nutri-Score and purchase intention. Hence, Hypothesis 3 was rejected.

Nevertheless, additional analyses correcting for the manipulation check showed that the Nutri-Score does have a significant effect on purchase intention, compared to when no Nutri-Score label was present on the same product. Therefore, Hypothesis 1 would have been supported when correcting for the manipulation check. However, this was actually only significant for rice crackers and not for the other three snacks. Besides, there was no significant effect of need for cognition on this relationship whereby Hypothesis 3 was still rejected.

To conclude and answer the research question, the Nutri-Score nutrition label has a positive effect on consumers' healthy purchase intentions, but only if customers actually see the label. However, need for cognition does not influence the effect of the Nutri-Score on consumers' purchase intentions.

Table 3: Overview of the hypotheses and results

Hypothesis		Result
H1	A high (low) Nutri-Score has a positive (negative) effect on purchase intention, compared to when no Nutri-Score is present on the same product.	Partially supported
H2	Purchase intention will be higher for a product with a high Nutri-Score, compared to a similar product with a low Nutri-Score.	Supported
H3	Consumers with a lower need for cognition have a higher (lower) purchase intention for products provided with a high (low) Nutri-Score, as compared with purchase intention for products without Nutri-Score, than consumers with a higher need for cognition.	Rejected

5.2 Theoretical contributions

The results that were found in this study contribute to academic literature on the Nutri-Score, because previous findings are now extended to another European country which is the Netherlands (De Temmerman et al., 2021). Nevertheless, some findings deviate from existing literature.

Previous studies showed higher (lower) purchase intentions for healthy (unhealthy) products provided with the Nutri-Score, compared to the same products without the Nutri-Score (e.g., Julia & Hercberg, 2017b; De Temmerman et al., 2021). Initially, this effect was not found to be significant in this study. An explanation for the non-significant effect could be due to the small number of products in only one product category that were used in the survey, whereas participants in another study with significant results saw twenty products from several product categories (De Temmerman et al., 2021). Therefore, they saw the Nutri-Score on many more

products, which may have made the label more noticeable. Furthermore, another study that researched several front-of-pack labels also found a significant effect of the Nutri-Score (Crosetto et al., 2018). However, they did not show the Nutri-Score label on the packaging of the product but next to it (Crosetto et al., 2018, p. 39), making it much more noticeable and less representative to a real-life supermarket situation. Moreover, the back-of-pack manipulation check showed no significant difference of the Nutri-Score presence (versus absence) on the consultation of the back-of-pack nutritional information. A significant effect would have been expected, in which participants in the experimental condition would have looked less often at the back-of-pack nutritional information as a sign that they rely on the Nutri-Score label. Hence, this could be an additional reason for the non-significant effect of the Nutri-Score on purchase intention, because participants still looked at the back-of-pack nutritional information just as often.

However, after deleting respondents that did not see the Nutri-Score label, the additional analysis showed a significant interaction effect between the Nutri-Score and snacks. Nevertheless, further analysis only showed a significant effect for the healthy snack rice crackers. This is in line with previous research that controlled for the familiarity with the Nutri-Score, in which higher purchase intentions for healthy products provided with the Nutri-Score were found (De Temmerman et al., 2021).

Furthermore, the findings affirm previous research that the Nutri-Score results in healthier purchase decisions when the Nutri-Score is present on all products (De Temmerman et al., 2021; Crosetto et al., 2018). In addition, purchase intention was significantly higher for healthy products in the control condition, but this effect was somewhat weaker. Nevertheless, the difference in presence versus absence of the Nutri-Score was not significant so the effect of the Nutri-Score was generally small or not demonstrable.

Finally, this study showed a new perspective at researching the Nutri-Score, in which customers' need for cognition was taken into account. Additional analysis showed that high-need-for-cognition consumers looked more often at the back-of-pack nutritional information than low-need-for-cognition consumers, which was expected according to previous research (Haugtvedt et al., 1992). However, no significant results were found for the effect of need for cognition on the relationship between the Nutri-Score and purchase intention. The difficulty in proving the effect of need for cognition could be due to the fact that the influence of the Nutri-Score on purchase intention was generally low or not present. On top of that, the sample did not consist of enough low-need-for-cognition respondents.

5.3 Practical implications

This study is of practical relevance for manufacturers and marketers, the Dutch government and Dutch society. In general, this study could be an impetus to introduce the Nutri-Score on a larger scale in the Netherlands in order to tackle the obesity problem.

First of all, an obligatory Nutri-Score label on the packaging of products could encourage manufacturers to improve the nutritional composition of their products (De Temmerman et al., 2021). In doing so, manufacturers try to obtain the best possible Nutri-Score to make their product more attractive for customers. Manufacturers of unhealthy products in particular should be concerned because the purchase intention of their products can decrease due to a low Nutri-Score. Furthermore, marketers can use a high Nutri-Score as a way to promote their products and bind customers even more. For example, marketers can emphasize in their campaigns that they are concerned with the health of their customers.

Second, this study can further encourage the Dutch government to introduce the Nutri-Score and make it mandatory for all manufacturers in the European Union. It is recommended to launch a large communication campaign to reach and inform Dutch society about the Nutri-Score label, especially because this study showed that many respondents did not see the Nutri-Score label on the packaging. Consequently, customers will recognize, understand, and use the Nutri-Score while grocery shopping in order to make informed purchase decisions.

Third, consumers are often overwhelmed by the wide range of products in the supermarket (Draper et al., 2013). In addition, they are confused by the various front-of-pack nutrition labels that are present on the packaging (Feunekes et al., 2008). To date, the Nutri-Score has only been implemented in the Netherlands on a voluntary basis. As a result of that, it is difficult for consumers to make a proper comparison of products based on the Nutri-Score. This research showed that the Nutri-Score did have a positive significant effect within the experimental group, so only if the Nutri-Score is visible on all products in the supermarket. Hence, if the Nutri-Score would be mandatory, Dutch consumers can easily compare all products in the supermarket to make healthier choices.

5.4 Limitations and future research suggestions

Despite the careful design and execution of this research, there are some limitations that are discussed in this section. Moreover, these limitations provide suggestions for further research.

First of all, the sample selection is not optimal. In this study, a convenience sample was chosen to search for respondents. A disadvantage of this is that the researcher has no control

over the representativeness of the sample (Babbie, 2015). The sample in this study mainly consists of highly educated people (74.3%) and the average age is 33 years old. In addition, the gender distribution is unbalanced with significantly more female respondents (69.8%) than male respondents (29.9%), which means that the results cannot easily be generalized to the entire Dutch population. Despite the equal gender distribution of the starting addresses, it is reasonable that mainly women were willing to forward the survey and fill it in. In addition, the number of female connections on the researchers' social media channels would have had an influence on this. Despite the additional effort on sampling people in deprived areas, most of the respondents (72.8%) scored above average on need for cognition which is in line with the number of people that are highly educated. This could be an explanation for the non-significant results regarding the third hypothesis about the influence of need for cognition. For further research on the Nutri-Score, it may be better to use a random sampling method, which improves external validity.

Second, too few products in only one product category were investigated. The pre-test already showed that some respondents did not like some of the snacks at all. Therefore, the "tastiness" item was added to the survey so that respondents could indicate how tasty the snack seemed to them. Nevertheless, showing only four snacks is not representative for the variety of snacks that one can buy in the supermarket. On top of that, adding other product categories such as beverages would have made this study more representative to a real-life supermarket situation. So, further research could replicate this study by including more products in more product categories.

A third limitation is that the survey was distributed online, whereas the research object is a real-life supermarket. Therefore, it is conceivable that the results obtained from the online survey-experiment would be different in a physical situation. Respondents saw pictures of the front of the package and could click on a button to see the nutritional information on the back. Nevertheless, not all elements of the back of the product packaging were shown. In addition, respondents only saw images of the snacks, but were not able to touch the snack. For further research, it would be better to show 3D pictures of the snacks (online) or even better would be to conduct the research with real products (physical).

Fourth, the sage advice that you should not go grocery shopping when you are hungry is not taken into account. Previous research, indeed, showed that hungry grocery shoppers buy more calories (Tal & Wansink, 2013). Hence, it is interesting how respondents' feeling of

hungriness influences the effect of the Nutri-Score on purchase intention. Therefore, further research could include hungriness as an additional control variable.

The aforementioned limitations may have contributed to the non-significant results in this study. To avoid this, it is important that further research takes these limitations into account. Based on the suggestions for further research, knowledge about the Nutri-Score can be expanded.

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Appendices

Appendix A: Questionnaire

Beste meneer/mevrouw,

Hartelijk dank voor uw deelname aan dit onderzoek! Wij zijn Jente en Jamie, masterstudenten Marketing van de Radboud Universiteit Nijmegen. Het doel van dit onderzoek, voor onze Master Thesis, is om erachter te komen wat de voorkeur van consumenten is voor tussendoortjes.

Het invullen van de enquête zal ongeveer 5 minuten duren. Deelname is geheel vrijwillig en u kunt op elk moment met de enquête stoppen. Wij gebruiken de gegevens uitsluitend voor dit onderzoek, zodat uw anonimiteit gewaarborgd wordt. Er zijn geen goede of foute antwoorden. Door naar de volgende pagina te gaan, bevestigt u dat u 18 jaar of ouder bent, en dat uw gegevens voor het onderzoek gebruikt mogen worden.

Door het invullen van de vragenlijst maakt u kans op een Bol.com cadeaukaart t.w.v. €25. Aan het einde van deze vragenlijst volgt de mogelijkheid om uw e-mailadres in te vullen, zodat u mee kunt doen met de loting.

Nogmaals bedankt voor uw deelname! U helpt ons en de wetenschap een stap verder!

Jente Frints
Jamie de Beijer

Stel u voor dat u op zoek bent naar een tussendoortje in de supermarkt. U krijgt zo vier verschillende tussendoortjes te zien en kunt daarbij aangeven in hoeverre u het eens bent met de stellingen. Op de achterkant van de verpakkingen vindt u informatie over de samenstelling van de producten.

In hoeverre bent u het eens met de volgende stellingen?
Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.

1. Ik ben van plan om dit product te kopen.
2. De volgende keer dat ik een tussendoortje koop, kies ik dit product.
3. Ik geef de voorkeur aan dit product boven andere tussendoortjes.
4. Dit product lijkt mij lekker.

U heeft zojuist van vier verschillende tussendoortjes uw aankoopintentie aangegeven. Graag stellen wij u nog een aantal vragen over voeding.

1. Ik kon gemakkelijk beoordelen hoe gezond het tussendoortje is.
   Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.
2. Ik heb het Nutri-Score label gezien op de verpakking van het tussendoortje.

Antwoorden: ja; nee.

3. Bij hoeveel producten heeft u de voedingsinformatie op de achterkant van de verpakking bekeken?
   Antwoorden: niet; bij 1 product; bij 2 producten; bij 3 producten; bij 4 producten.
4. Ik heb veel kennis over de gezondheid van voeding.
   Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.
5. Hoe gezond vindt u dat u eet?
   Antwoorden: 1 = gezond; 2 = een beetje gezond; 3 = neutraal; 4 = niet zo gezond; 5 = ongezond.

Need for cognition
In hoeverre zijn de volgende stellingen kenmerkend voor u of voor wat u gelooft?
Antwoorden: 1 = helemaal niet kenmerkend voor mij; 2 = niet kenmerkend voor mij; 3 = neutraal; 4 = kenmerkend voor mij; 5 = heel kenmerkend voor mij.

1. Ik geef de voorkeur aan complexe problemen boven eenvoudige problemen.
2. Ik neem graag de verantwoordelijkheid om met een situatie om te gaan die veel denkwerk vereist.
3. Denken is niet mijn idee van plezier.
4. Ik doe liever iets dat weinig aandacht vereist dan iets dat zeker mijn denkvermogen zal uitdagen.
5. Ik geniet echt van een taak waarbij nieuwe oplossingen voor problemen moeten worden bedacht.
6. Ik heb liever een taak die intellectueel, moeilijk en belangrijk is dan een taak die enigszins belangrijk is maar niet veel aandacht vereist.

Financial scarcity
In hoeverre bent u het eens met de volgende stellingen?
Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.

1. Ik heb vaak niet genoeg geld.
2. Ik kan mijn rekeningen vaak niet op tijd betalen.
3. Ik heb vaak geen geld om dingen te betalen die ik echt nodig heb.
4. Ik ervaar dat ik weinig controle heb over mijn financiële situatie.
5. Ik denk dat ik mijn financiën goed kan beheren.
6. Als ik aan mijn financiële situatie denk voel ik mij machteloos.
7. Ik vraag me constant af of ik wel genoeg geld heb.
8. Ik vind het moeilijk om aan andere dingen te denken dan aan mijn financiële situatie.
9. Ik maak mij veel zorgen over geld.
10. Ik concentreer me alleen op wat ik op dit moment moet betalen en niet op mijn toekomstige uitgaven.
11. Ik houd rekening met toekomstige uitgaven.
12. Vanwege mijn financiële situatie leef ik van dag tot dag.

Als laatste volgen nog een aantal korte vragen.

1. Wat is uw leeftijd?
2. Wat is uw geslacht?
    - Man
    - Vrouw
    - Anders
3. Wat is uw hoogst genoten opleiding?
    - Lagere school/basisonderwijs
    - Voortgezet onderwijs
    - Mbo
    - Hbo
    - Universiteit
4. Hoe bent u bij deze enquête gekomen?
    - Social media (bijv. WhatsApp, Facebook of LinkedIn)
    - Via een briefje met QR-code en/of link
5. Indien u kans wil maken op de Bol.com waardebon t.w.v. €25, vul dan hier uw emailadres in. In verband met uw privacy, zal uw e-mailadres direct na de loting worden verwijderd.

Dit waren de vragen. Nogmaals hartelijk dank voor uw medewerking!

Indien u geïnteresseerd bent in de resultaten van het onderzoek, kunt u een mail sturen naar j.debeijer@student.ru.nl of j.frints@student.ru.nl.

Appendix B: Infographic Dutch Consumer Union
(Mo, 2020)

The circled products are chosen for the online survey-experiment.

Appendix C: Images of the snacks
(Albert Heijn, n.d.)

€1,19

€1,19

€1,29

€1,29

€0,99

€0,99

€1,79

€1,79

Appendix D: Back-of-pack nutritional information of the snacks
(Albert Heijn, n.d.)

Voedingswaarden

Soort	Per 100 Gram.
Energie	1.585 kJ (375 kcal)
Vet	3 g
waarvan verzadigd	0,7 g
waarvan onverzadigd	2,5 g
waarvan enkelvoudig onverzadigd	1 g
waarvan meervoudig onverzadigd	1,5 g
Koolhydraten	76 g
waarvan suikers	1,5 g
Voedingsvezel	6 g
Eiwitten	8 g
Zout	0,3 g

Dunne rijstwafels met rogge

Voedingswaarden

Soort	Per 100 Gram.
Energie	2.060 kJ (492 kcal)
Vet	25 g
waarvan verzadigd	11 g
Koolhydraten	53 g
waarvan suikers	23 g
Voedingsvezel	3,9 g
Eiwitten	12 g
Zout	0,94 g

Hero B'tween Pinda & Pindakaas

Voedingswaarden

Soort	Per 100 Gram.
Energie	2.095 kJ (500 kcal)
Vet	23 g
waarvan verzadigd	13 g
waarvan onverzadigd	9,5 g
Koolhydraten	67 g
waarvan suikers	35 g
Voedingsvezel	1,5 g
Eiwitten	5,5 g
Zout	0,2 g

Rijstwafels met yoghurt

Voedingswaarden

Soort	Per 100 Gram.
Energie	980 kJ (234 kcal)
Vet	1,2 g
waarvan verzadigd	0,2 g
Koolhydraten	53,5 g
waarvan suikers	4,9 g
waarvan polyolen	22,1 g
Voedingsvezel	17,1 g
Eiwitten	2,6 g
Zout	0,44 g

Snelle Jelle zero kruidkoek

Appendix E: Measures

Table 1: Purchase intention (Mai & Hoffmann, 2015)

1	I will buy this product.	Ik ben van plan om dit product te kopen.
2	Next time I am buying a snack, I will choose this product.	De volgende keer dat ik een tussendoortje koop, kies ik dit product.
3	I prefer this product to other snacks.	Ik geef de voorkeur aan dit product boven andere tussendoortjes.

Table 2: Need for cognition (Cacioppo et al., 1984; Lins de Holanda Coelho et al., 2020)

1	I would prefer complex to simple problems.	Ik geef de voorkeur aan complexe problemen boven eenvoudige problemen.
2	I like to have the responsibility of handling a situation that requires a lot of thinking.	Ik neem graag de verantwoordelijkheid om met een situatie om te gaan die veel denkwerk vereist.
3	Thinking is not my idea of fun. **	Denken is niet mijn idee van plezier.
4	I would rather do something that requires little thought than something that is sure to challenge my thinking abilities. **	Ik doe liever iets dat weinig aandacht vereist dan iets dat zeker mijn denkvermogen zal uitdagen.
5	I really enjoy a task that involves coming up with new solutions to problems.	Ik geniet echt van een taak waarbij nieuwe oplossingen voor problemen moeten worden bedacht.
6	I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.	Ik heb liever een taak die intellectueel, moeilijk en belangrijk is dan een taak die enigszins belangrijk is maar niet veel aandacht vereist.

** = reverse scored item

Table 3: Control variables (De Temmerman et al., 2021; Feunekes et al., 2008)

1	Gender	Geslacht *Antwoorden: man; vrouw; anders.*
2	Age	Leeftijd
3	Educational level	Opleidingsniveau *Antwoorden: lagere school / basisonderwijs; voortgezet onderwijs; mbo; hbo; universiteit.*
4	I am knowledgeable about health and nutrition issues.	Ik heb veel kennis over de gezondheid van voeding. *Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.*
5	How would you describe your overall diet?	Hoe gezond vindt u dat u eet? *Antwoorden: 1 = gezond; 2 = een beetje gezond; 3 = neutraal; 4 = niet zo gezond; 5 = ongezond.*
6	This product seems tasty.	Dit product lijkt mij lekker. *Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.*

Table 4: Manipulation check

1	I could easily assess how healthy the snack is.	Ik kon gemakkelijk beoordelen hoe gezond het tussendoortje is. *Antwoorden: 1 = helemaal niet mee eens; 2 = niet mee eens; 3 = neutraal; 4 = mee eens; 5 = helemaal mee eens.*
2	I have seen the Nutri-Score label on the packaging of the snack.	Ik heb het Nutri-Score label gezien op de verpakking van het tussendoortje. *Antwoorden: ja; nee.*
3	For how many products did you look at the back-of-pack nutritional information?	Bij hoeveel producten heeft u de voedingsinformatie op de achterkant van de verpakking bekeken? *Antwoorden: niet; bij 1 product; bij 2 producten; bij 3 producten; bij 4 producten.*

Appendix F: Pre-test of the survey

Table 5: Descriptive information about the pre-test (in Dutch)

Respondent	Leeftijd	Opleiding	Apparaat	Datum
1	60	Hbo	Tablet	11-04-2021
2	56	Mbo	Tablet	11-04-2021
3	21	Hbo	Mobiel	11-04-2021
4	23	WO	Mobiel	12-04-2021
5	23	WO	Laptop	11-04-2021
6	24	WO	Mobiel	11-04-2021
7	21	WO	Laptop	11-04-2021
8	19	Voortgezet onderwijs	Mobiel	11-04-2021
9	56	Hbo	Tablet	11-04-2021
10	53	Hbo	Mobiel	11-04-2021

Table 6: Notes of the respondents (in Dutch)

Respondent 1 • Bij de inleiding meteen vertellen van wij zijn Jamie en Jente, masterstudenten. Nu staat er alleen "wij zijn". • Je zegt in de gehele enquête 3x hartelijk dank voor uw deelname. Dat is nogal overdreven. Wellicht minder vaak benoemen of anders verwoorden.
Respondent 2 • Als je niet van rijstwafels houdt, wat moet je dan invullen? Je kunt nu niet aangeven dat je het niet lekker vindt. • De stellingen over nadenken zijn lastig om te begrijpen.
Respondent 3 • "Ik geef de voorkeur aan dit product OVER andere tussendoortjes". Moet dit niet BOVEN andere tussendoortjes zijn?
Respondent 4 • Ik vind sommige tussendoortjes niet lekker, maar dat kan ik niet aangeven. • Bij de stelling "Ik geef de voorkeur aan complexe boven eenvoudige problemen", zou je misschien "complexe problemen" ervan kunnen maken. Dan leest de zin wat makkelijker.
Respondent 5 • Ik vind 3 van de 4 producten niet lekker, maar dat heeft dus niks te maken met de verpakking. Hebben jullie daar ook rekening mee gehouden qua antwoordopties? • Bedoelen jullie met "andere tussendoortjes" die andere op de plaatjes? Of over het algemeen?
Respondent 6 • Het werkt goed. • Er is geen vraag met of ik iets lekker vind. • De knop om te switchen naar de achterkant van de verpakking werkte goed.

Respondent 7 • Ik vind sommige producten minder lekker. • Beetje veel vragen over geld.
Respondent 8 • Veel vragen over geld. • Lange zinnen bij het stuk over nadenken.
Respondent 9 • Werkte goed, wel veel vragen over financiën en eigenlijk wil ik helemaal geen tussendoortje kopen.
Respondent 10 • De vragen over “need for cognition” waarbij wordt gevraagd over een taak vind ik lastig in te vullen, het ligt voor mij aan de soort taak en mijn antwoord kan per taak dus verschillen. • Geen fan van Nutri-Score.

Appendix G: Reliability analyses

Table 7: Item-Total Statistics – Dunne rijstwafels

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Rijst_1	4.43	4.195	.855	.881
Rijst_2	4.60	4.578	.855	.881
Rijst_3	4.64	4.589	.824	.904

Table 8: Item-Total Statistics – Snelle Jelle

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Snelle_1	5.09	4.053	.805	.868
Snelle_2	5.34	4.338	.839	.841
Snelle_3	5.35	4.237	.788	.881

Table 9: Item-Total Statistics – Hero B'tween

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Hero_1	4.51	4.506	.850	.853
Hero_2	4.74	4.991	.853	.855
Hero_3	4.75	4.823	.777	.915

Table 10: Item-Total Statistics – Rijstwafels yoghurt

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Yoghurt_1	4.36	4.640	.859	.909
Yoghurt_2	4.50	4.996	.879	.892
Yoghurt_3	4.55	5.075	.855	.910

Table 11: Item-Total Statistics – Dunne rijstwafel (NS)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
NS_Rijst_1	4.86	4.961	.834	.914
NS_Rijst_2	5.07	5.213	.913	.855
NS_Rijst_3	5.10	5.009	.823	.923

Table 12: Item-Total Statistics – Snelle Jelle (NS)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
NS_Snelle_1	5.30	5.169	.884	.909
NS_Snelle_2	5.39	5.158	.898	.898
NS_Snelle_3	5.49	5.410	.851	.935

Table 13: Item-Total Statistics – Hero B'tween (NS)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
NS_Hero_1	4.34	3.799	.832	.901
NS_Hero_2	4.39	4.095	.890	.855
NS_Hero_3	4.39	4.114	.814	.912

Table 14: Item-Total Statistics – Rijstwafels yoghurt (NS)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
NS_Yoghurt_1	4.50	4.589	.850	.918
NS_Yoghurt_2	4.65	4.818	.910	.868
NS_Yoghurt_3	4.72	5.101	.837	.925

Table 15: Item-Total Statistics – Need for cognition

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
NFC_1	17.79	10.436	.524	.758
NFC_2	17.26	10.340	.637	.731
NFC_3_recode	17.30	11.066	.431	.780
NFC_4_recode	17.09	10.447	.563	.747
NFC_5	17.11	10.818	.539	.754
NFC_6	17.41	10.634	.535	.754

Appendix H: Manipulation checks

Table 16: Manipulation Nutri-Score label – Frequencies

Ik heb het Nutri-Score label gezien op de verpakking van het tussendoortje.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ja	79	38,0	38,0	38,0
	Nee	129	62,0	62,0	100,0
	Total	208	100,0	100,0	

Table 17: Manipulation healthy – Frequencies

	Nutri_Score	N	Mean	Std. Deviation	Std. Error Mean
Manu_Gezond	Geen NS	197	3,25	,962	,069
	Wel NS	208	3,44	,961	,067

Table 18: Manipulation healthy – Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Low	Up
Manu_ Gezond	Equal variances assumed	,258	,612	-1,972	403	,049	-,189	,096	-,376	-,001
	Equal variances not assumed			-1,972	401,787	,049	-,189	,096	-,376	-,001

Table 19: Manipulation BOP – Frequencies

	Nutri_Score	N	Mean	Std. Deviation	Std. Error Mean
Manu_BOP	Geen NS	197	2,64	1,615	,115
	Wel NS	208	2,59	1,591	,110

Table 20: Manipulation BOP – Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Low	Up
Manu_BOP	Equal variances assumed	,098	,754	,303	403	,762	,048	,159	-,265	,362
	Equal variances not assumed			,303	401,071	,762	,048	,159	-,265	,362

Appendix I: Mixed ANOVA

Table 21: Description of the variables used in Chapter 4

Variable	Description
RIJST	Purchase intention of rice crackers
SNELLE	Purchase intention of Snelle Jelle bar
HERO	Purchase intention of Hero B'tween bar
YOGHURT	Purchase intention of yoghurt rice crackers
PI_NS_Healthy	Purchase intention of healthy snacks (rice crackers and Snelle Jelle bar)
PI_NS_Unhealthy	Purchase intention of unhealthy snacks (Hero B'tween bar and yoghurt rice crackers)
Rijst	Purchase intention of rice crackers (without Nutri-Score)
Snelle	Purchase intention of Snelle Jelle bar (without Nutri-Score)
Hero	Purchase intention of Hero B'tween bar (without Nutri-Score)
Yoghurt	Purchase intention of yoghurt rice crackers (without Nutri-Score)
Rijst_NS	Purchase intention of rice crackers (with Nutri-Score)
Snelle_NS	Purchase intention of Snelle Jelle bar (with Nutri-Score)
Hero_NS	Purchase intention of Hero B'tween bar (with Nutri-Score)
Yoghurt_NS	Purchase intention of yoghurt rice crackers (with Nutri-Score)
NFC	Need for cognition
Kennis	Nutritional knowledge
Dieet	Perceived healthiness of diet
Leeftijd	Age
Geslacht	Gender
Opleiding	Educational level
Lekker_rijst	Tastiness of rice crackers
Lekker_snelle	Tastiness of Snelle Jelle bar
Lekker_hero	Tastiness of Hero B'tween bar
Lekker_yoghurt	Tastiness of yoghurt rice crackers

Table 22: Descriptive statistics

	N	Min.	Max.	Mean	S.D.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	S.E.	Statistic	S.E.
PI_Rijst	197	1,00	5,00	2,2775	1,03550	,460	,173	-,654	,345
PI_Hero	197	1,00	5,00	2,3316	1,06931	,416	,173	-,703	,345
PI_Yoghurt	197	1,00	5,00	2,2352	1,08925	,481	,173	-,820	,345
PI_Snelle	197	1,00	5,00	2,6294	1,00214	-,027	,173	-,988	,345
PI_NS_Rijst	208	1,00	5,00	2,5048	1,10529	,198	,169	-,962	,336
PI_NS_Yoghurt	208	1,00	5,00	2,3125	1,08178	,568	,169	-,409	,336
PI_NS_Snelle	208	1,00	5,00	2,6971	1,12867	-,075	,169	-1,164	,336
PI_NS_Hero	208	1,00	5,00	2,1875	,98163	,607	,169	-,366	,336

Table 23: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	,931	28,809	5	,000	,959	,969	,333

Table 24: Within-Subjects Factors

Measure: Purchase_intention	
Snacks	Dependent Variable
1	RIJST
2	SNELLE
3	HERO
4	YOGHURT

Table 25: Between-Subjects Factors

		Value Label	N
Nutri_Score	1	Geen NS	197
	2	Wel NS	208

Table 26: Tests of Within-Subjects Effects

Measure: Purchase_intention						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Snacks	Sphericity Assumed	42,490	3	14,163	15,039	,000
	Greenhouse-Geisser	42,490	2,877	14,770	15,039	,000
	Huynh-Feldt	42,490	2,907	14,617	15,039	,000
	Lower-bound	42,490	1,000	42,490	15,039	,000
Snacks * Nutri_Score	Sphericity Assumed	7,081	3	2,360	2,506	,058
	Greenhouse-Geisser	7,081	2,877	2,461	2,506	,060
	Huynh-Feldt	7,081	2,907	2,436	2,506	,060
	Lower-bound	7,081	1,000	7,081	2,506	,114
Error(Snacks)	Sphericity Assumed	1138,623	1209	,942		
	Greenhouse-Geisser	1138,623	1159,381	,982		
	Huynh-Feldt	1138,623	1171,498	,972		
	Lower-bound	1138,623	403,000	2,825		

Table 27: Tests of Between-Subjects Effects

Measure: Purchase_intention					
Transformed Variable: Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	2325,181	1	2325,181	5485,226	,000
Nutri_Score	,329	1	,329	,776	,379
Error	170,831	403	,424		

Figure 1: Estimated Marginal Means of Purchase_intention

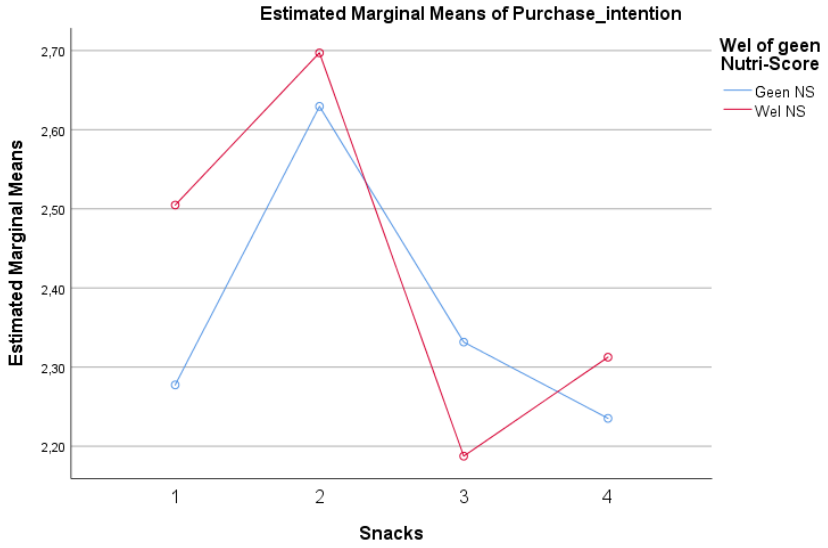

Table 28: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Low	Up
RIJST	Equal variances assumed	2,212	,138	-2,133	403	,034	-,22731	,10657	-,43681	-,01782
	Equal variances not assumed			-2,137	402,953	,033	-,22731	,10638	-,43644	-,01819
SNELLE	Equal variances assumed	4,007	,046	-,637	403	,525	-,06767	,10628	-,27660	,14125
	Equal variances not assumed			-,639	401,345	,523	-,06767	,10594	-,27593	,14058
HERO	Equal variances assumed	4,440	,036	1,414	403	,158	,14414	,10192	-,05623	,34451
	Equal variances not assumed			1,411	395,297	,159	,14414	,10216	-,05671	,34499

YOGHURT	Equal variances assumed	,392	,532	-,716	403	,474	-,07731	,10791	-,28944	,13483
	Equal variances not assumed			-,716	401,489	,474	-,07731	,10793	-,28948	,13487

Appendix J: Paired Samples *t*-test

Table 29: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PI_NS_Healthy	2,6010	208	,87609	,06075
	PI_NS_Unhealthy	2,2500	208	,83229	,05771
Pair 2	PI_Healthy	2,4535	197	,76706	,05465
	PI_Unhealthy	2,2834	197	,84794	,06041

Table 30: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PI_NS_Healthy - PI_NS_Unhealthy	,35096	1,12322	,07788	,19742	,50450	4,506	207	,000
Pair 2	PI_Healthy - PI_Unhealthy	,17005	,93828	,06685	,03821	,30189	2,544	196	,012

Appendix K: Mixed ANCOVA with NFC

Table 31: Tests of Between-Subjects Effects

Dependent Variable: NFC					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	,210[a]	1	,210	,515	,474
Intercept	4857,257	1	4857,257	11904,362	,000
Nutri_Score	,210	1	,210	,515	,474
Error	164,433	403	,408		
Total	5027,222	405			
Corrected Total	164,643	404			

Table 32: Tests of Between-Subjects Effects

Measure: Purchase_intention					
Transformed Variable: Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	101,600	1	101,600	241,662	,000
NFC	1,885	1	1,885	4,484	,035
Nutri_Score	,464	1	,464	1,104	,294
Nutri_Score * NFC	,334	1	,334	,795	,373
Error	168,589	401	,420		

Table 33: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snack	,932	28,094	5	,000	,960	,975	,333

Table 34: Tests of Within-Subjects Effects

Measure: Purchase_intention							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Snacks	Sphericity Assumed	5,346	3	1,782	1,898	,128	,005
	Greenhouse-Geisser	5,346	2,879	1,857	1,898	,131	,005
	Huynh-Feldt	5,346	2,924	1,828	1,898	,130	,005
	Lower-bound	5,346	1,000	5,346	1,898	,169	,005
Snacks * Nutri_Score	Sphericity Assumed	,751	3	,250	,267	,849	,001
	Greenhouse-Geisser	,751	2,879	,261	,267	,842	,001
	Huynh-Feldt	,751	2,924	,257	,267	,844	,001
	Lower-bound	,751	1,000	,751	,267	,606	,001
Snacks * NFC	Sphericity Assumed	8,227	3	2,742	2,922	,033	,007
	Greenhouse-Geisser	8,227	2,879	2,857	2,922	,035	,007
	Huynh-Feldt	8,227	2,924	2,814	2,922	,034	,007
	Lower-bound	8,227	1,000	8,227	2,922	,088	,007
Snacks * Nutri_Score * NFC	Sphericity Assumed	1,148	3	,383	,408	,748	,001
	Greenhouse-Geisser	1,148	2,879	,399	,408	,739	,001
	Huynh-Feldt	1,148	2,924	,393	,408	,742	,001
	Lower-bound	1,148	1,000	1,148	,408	,524	,001
Error(Snacks)	Sphericity Assumed	1129,172	1203	,939			
	Greenhouse-Geisser	1129,172	1154,577	,978			
	Huynh-Feldt	1129,172	1172,513	,963			
	Lower-bound	1129,172	401,000	2,816			

Table 35: Parameter Estimates

Dependent Variable	Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
RIJST	Intercept	2,274	,417	5,454	,000	1,454	3,094
	[Nutri_Score=1]	-,061	,590	-,104	,917	-1,222	1,099
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	NFC	,066	,118	,562	,574	-,165	,297
	[Nutri_Score=1] * NFC	-,047	,168	-,283	,778	-,377	,282
	[Nutri_Score=2] * NFC	0[a]	.	.	.	.	.
SNELLE	Intercept	3,042	,416	7,320	,000	2,225	3,859
	[Nutri_Score=1]	-,461	,588	-,783	,434	-1,617	,696
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	NFC	-,099	,117	-,844	,399	-,330	,132
	[Nutri_Score=1] * NFC	,113	,167	,676	,499	-,215	,441
	[Nutri_Score=2] * NFC	0[a]	.	.	.	.	.
HERO	Intercept	3,078	,396	7,778	,000	2,300	3,856
	[Nutri_Score=1]	-,269	,560	-,480	,631	-1,370	,832
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	NFC	-,255	,112	-2,287	,023	-,475	-,036
	[Nutri_Score=1] * NFC	,117	,159	,734	,464	-,196	,429
	[Nutri_Score=2] * NFC	0[a]	.	.	.	.	.
YOGHURT	Intercept	3,430	,418	8,210	,000	2,609	4,252
	[Nutri_Score=1]	-,706	,591	-1,194	,233	-1,869	,456
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	NFC	-,321	,118	-2,719	,007	-,552	-,089
	[Nutri_Score=1] * NFC	,179	,168	1,063	,288	-,152	,509
	[Nutri_Score=2] * NFC	0[a]	.	.	.	.	.

Appendix L: Additional mixed ANOVA with NFC

Table 36: Between-Subjects Factors

		Value Label	N
Nutri_Score	1	Geen NS	197
	2	Wel NS	208
NFC_recode	1,00	Low	181
	2,00	High	224

Table 37: Descriptive Statistics

	Nutri_Score	NFC_recode	Mean	Std. Deviation	N
RIJST	Geen NS	Low	2,3047	1,10079	93
		High	2,2532	,97818	104
		Total	2,2775	1,03550	197
	Wel NS	Low	2,5038	1,04190	88
		High	2,5056	1,15388	120
		Total	2,5048	1,10529	208
	Total	Low	2,4015	1,07423	181
		High	2,3884	1,08090	224
		Total	2,3942	1,07661	405
SNELLE	Geen NS	Low	2,6667	,95806	93
		High	2,5962	1,04347	104
		Total	2,6294	1,00214	197
	Wel NS	Low	2,7424	1,13880	88
		High	2,6639	1,12480	120
		Total	2,6971	1,12867	208
	Total	Low	2,7035	1,04757	181
		High	2,6324	1,08591	224
		Total	2,6642	1,06821	405
HERO	Geen NS	Low	2,3262	1,05177	93
		High	2,3365	1,08981	104
		Total	2,3316	1,06931	197
	Wel NS	Low	2,3030	1,04269	88
		High	2,1028	,92964	120
		Total	2,1875	,98163	208
	Total	Low	2,3149	1,04452	181
		High	2,2113	1,01164	224
		Total	2,2576	1,02648	405
YOGHURT	Geen NS	Low	2,4194	1,16398	93
		High	2,0705	,99478	104
		Total	2,2352	1,08925	197
	Wel NS	Low	2,4848	1,06002	88

		High	2,1861	1,08448	120
		Total	2,3125	1,08178	208
	Total	Low	2,4512	1,11205	181
		High	2,1324	1,04308	224
		Total	2,2749	1,08477	405

Table 38: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	,929	29,533	5	,000	,958	,973	,333

Table 39: Tests of Within-Subjects Effects

Measure: Purchase_intention						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Snacks	Sphericity Assumed	40,394	3	13,465	14,307	,000
	Greenhouse-Geisser	40,394	2,873	14,058	14,307	,000
	Huynh-Feldt	40,394	2,918	13,843	14,307	,000
	Lower-bound	40,394	1,000	40,394	14,307	,000
Snacks * Nutri_Score	Sphericity Assumed	6,385	3	2,128	2,262	,080
	Greenhouse-Geisser	6,385	2,873	2,222	2,262	,082
	Huynh-Feldt	6,385	2,918	2,188	2,262	,081
	Lower-bound	6,385	1,000	6,385	2,262	,133
Snacks * NFC_recode	Sphericity Assumed	5,283	3	1,761	1,871	,133
	Greenhouse-Geisser	5,283	2,873	1,839	1,871	,135
	Huynh-Feldt	5,283	2,918	1,811	1,871	,134
	Lower-bound	5,283	1,000	5,283	1,871	,172
Snacks * Nutri_Score * NFC_recode	Sphericity Assumed	1,159	3	,386	,411	,745
	Greenhouse-Geisser	1,159	2,873	,403	,411	,737
	Huynh-Feldt	1,159	2,918	,397	,411	,740
	Lower-bound	1,159	1,000	1,159	,411	,522
Error(Snacks)	Sphericity Assumed	1132,198	1203	,941		
	Greenhouse-Geisser	1132,198	1152,267	,983		
	Huynh-Feldt	1132,198	1170,146	,968		
	Lower-bound	1132,198	401,000	2,823		

Table 40: Tests of Between-Subjects Effects

Measure: Purchase_intention					
Transformed Variable: Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	2308,135	1	2308,135	5472,526	,000
Nutri_Score	,420	1	,420	,997	,319
NFC_recode	1,675	1	1,675	3,971	,047
Nutri_Score * NFC_recode	,021	1	,021	,049	,825
Error	169,129	401	,422		

Table 41: Group Statistics

	NFC_recode	N	Mean	Std. Deviation	Std. Error Mean
Manu_BOP	Low	181	2,40	1,548	,115
	High	224	2,79	1,626	,109

Table 42: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Lower	Upper
Manu_BOP	Equal variances assumed	1,708	,192	-2,403	403	,017	-,382	,159	-,695	-,070
	Equal variances not assumed			-2,416	392,301	,016	-,382	,158	-,694	-,071

Appendix M: Mixed ANCOVA with control variables

Table 43: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	,934	27,322	5	,000	,958	,978	,333

Table 44: Tests of Within-Subjects Effects

Measure: Purchase_intention						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Snacks	Sphericity Assumed	1,641	3	,547	1,235	,296
	Greenhouse-Geisser	1,641	2,875	,571	1,235	,296
	Huynh-Feldt	1,641	2,934	,559	1,235	,296
	Lower-bound	1,641	1,000	1,641	1,235	,267
Snacks * Nutri_Score	Sphericity Assumed	1,525	3	,508	1,148	,329
	Greenhouse-Geisser	1,525	2,875	,531	1,148	,328
	Huynh-Feldt	1,525	2,934	,520	1,148	,328
	Lower-bound	1,525	1,000	1,525	1,148	,285
Snacks * Lekker_Rijst	Sphericity Assumed	184,232	3	61,411	138,664	,000
	Greenhouse-Geisser	184,232	2,875	64,078	138,664	,000
	Huynh-Feldt	184,232	2,934	62,782	138,664	,000
	Lower-bound	184,232	1,000	184,232	138,664	,000
Snacks * Lekker_Hero	Sphericity Assumed	147,609	3	49,203	111,099	,000
	Greenhouse-Geisser	147,609	2,875	51,340	111,099	,000
	Huynh-Feldt	147,609	2,934	50,301	111,099	,000
	Lower-bound	147,609	1,000	147,609	111,099	,000
Snacks * Lekker_Yoghurt	Sphericity Assumed	162,633	3	54,211	122,408	,000
	Greenhouse-Geisser	162,633	2,875	56,566	122,408	,000
	Huynh-Feldt	162,633	2,934	55,421	122,408	,000
	Lower-bound	162,633	1,000	162,633	122,408	,000
Snacks * Lekker_Snelle	Sphericity Assumed	143,018	3	47,673	107,644	,000
	Greenhouse-Geisser	143,018	2,875	49,743	107,644	,000
	Huynh-Feldt	143,018	2,934	48,737	107,644	,000
	Lower-bound	143,018	1,000	143,018	107,644	,000
Error(Snacks)	Sphericity Assumed	530,119	1197	,443		
	Greenhouse-Geisser	530,119	1147,172	,462		
	Huynh-Feldt	530,119	1170,859	,453		
	Lower-bound	530,119	399,000	1,329		

Table 45: Parameter Estimates

Dependent Variable	Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
RIJST	Intercept	,457	,171	2,671	,008	,121	,793
	[Nutri_Score=1]	-,108	,072	-1,493	,136	-,250	,034
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	Lekker_Rijst	,669	,033	20,395	,000	,605	,734
	Lekker_Hero	,003	,028	,123	,902	-,052	,059
	Lekker_Yoghurt	-,003	,030	-,092	,926	-,062	,056
	Lekker_Snelle	,014	,035	,418	,676	-,054	,083
SNELLE	Intercept	,445	,191	2,328	,020	,069	,821
	[Nutri_Score=1]	-,049	,081	-,609	,543	-,208	,110
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	Lekker_Rijst	,006	,037	,154	,878	-,066	,078
	Lekker_Hero	-,018	,032	-,566	,572	-,080	,044
	Lekker_Yoghurt	-,021	,034	-,634	,527	-,088	,045
	Lekker_Snelle	,672	,039	17,343	,000	,596	,748
HERO	Intercept	,684	,175	3,898	,000	,339	1,028
	[Nutri_Score=1]	,059	,074	,795	,427	-,087	,204
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	Lekker_Rijst	-,077	,034	-2,279	,023	-,143	-,011
	Lekker_Hero	,528	,029	18,187	,000	,471	,585
	Lekker_Yoghurt	,038	,031	1,222	,222	-,023	,099
	Lekker_Snelle	,010	,036	,279	,780	-,060	,080
YOGHURT	Intercept	,734	,178	4,126	,000	,384	1,083
	[Nutri_Score=1]	-,067	,075	-,897	,370	-,215	,080
	[Nutri_Score=2]	0[a]	.	.	.	.	.
	Lekker_Rijst	-,043	,034	-1,271	,205	-,110	,024
	Lekker_Hero	-,044	,029	-1,508	,132	-,102	,013
	Lekker_Yoghurt	,616	,031	19,651	,000	,554	,678
	Lekker_Snelle	,008	,036	,227	,821	-,063	,079

Table 46: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	,939	24,344	5	,000	,961	,994	,333

Table 47: Tests of Within-Subjects Effects

Measure: Purchase_intention							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Snacks	Sphericity Assumed	2,673	3	,891	2,032	,108	,005
	Greenhouse-Geisser	2,673	2,883	,927	2,032	,110	,005
	Huynh-Feldt	2,673	2,982	,896	2,032	,108	,005
	Lower-bound	2,673	1,000	2,673	2,032	,155	,005
Snacks * Lekker_rijst	Sphericity Assumed	158,989	3	52,996	120,848	,000	,237
	Greenhouse-Geisser	158,989	2,883	55,140	120,848	,000	,237
	Huynh-Feldt	158,989	2,982	53,314	120,848	,000	,237
	Lower-bound	158,989	1,000	158,989	120,848	,000	,237
Snacks * Lekker_hero	Sphericity Assumed	146,603	3	48,868	111,433	,000	,223
	Greenhouse-Geisser	146,603	2,883	50,844	111,433	,000	,223
	Huynh-Feldt	146,603	2,982	49,160	111,433	,000	,223
	Lower-bound	146,603	1,000	146,603	111,433	,000	,223
Snacks * Lekker_yoghurt	Sphericity Assumed	147,157	3	49,052	111,854	,000	,224
	Greenhouse-Geisser	147,157	2,883	51,036	111,854	,000	,224
	Huynh-Feldt	147,157	2,982	49,346	111,854	,000	,224
	Lower-bound	147,157	1,000	147,157	111,854	,000	,224
Snacks * Lekker_snelle	Sphericity Assumed	144,107	3	48,036	109,536	,000	,220
	Greenhouse-Geisser	144,107	2,883	49,978	109,536	,000	,220
	Huynh-Feldt	144,107	2,982	48,323	109,536	,000	,220
	Lower-bound	144,107	1,000	144,107	109,536	,000	,220
Snacks * Kennis	Sphericity Assumed	4,333	3	1,444	3,294	,020	,008
	Greenhouse-Geisser	4,333	2,883	1,503	3,294	,021	,008
	Huynh-Feldt	4,333	2,982	1,453	3,294	,020	,008
	Lower-bound	4,333	1,000	4,333	3,294	,070	,008

Snacks * Dieet	Sphericity Assumed	1,177	3	,392	,894	,443	,002
	Greenhouse-Geisser	1,177	2,883	,408	,894	,440	,002
	Huynh-Feldt	1,177	2,982	,395	,894	,443	,002
	Lower-bound	1,177	1,000	1,177	,894	,345	,002
Snacks * Leeftijd	Sphericity Assumed	,692	3	,231	,526	,665	,001
	Greenhouse-Geisser	,692	2,883	,240	,526	,657	,001
	Huynh-Feldt	,692	2,982	,232	,526	,663	,001
	Lower-bound	,692	1,000	,692	,526	,469	,001
Snacks * Opleiding_recode	Sphericity Assumed	3,167	3	1,056	2,407	,066	,006
	Greenhouse-Geisser	3,167	2,883	1,098	2,407	,068	,006
	Huynh-Feldt	3,167	2,982	1,062	2,407	,066	,006
	Lower-bound	3,167	1,000	3,167	2,407	,122	,006
Snacks * Geslacht_recode	Sphericity Assumed	2,693	3	,898	2,047	,106	,005
	Greenhouse-Geisser	2,693	2,883	,934	2,047	,108	,005
	Huynh-Feldt	2,693	2,982	,903	2,047	,106	,005
	Lower-bound	2,693	1,000	2,693	2,047	,153	,005
Snacks * Nutri_Score	Sphericity Assumed	2,032	3	,677	1,545	,201	,004
	Greenhouse-Geisser	2,032	2,883	,705	1,545	,203	,004
	Huynh-Feldt	2,032	2,982	,682	1,545	,201	,004
	Lower-bound	2,032	1,000	2,032	1,545	,215	,004
Error(Snacks)	Sphericity Assumed	510,457	1164	,439			
	Greenhouse-Geisser	510,457	1118,758	,456			
	Huynh-Feldt	510,457	1157,074	,441			
	Lower-bound	510,457	388,000	1,316			

Table 48: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	,942	22,831	5	,000	,963	1,000	,333

Table 49: Tests of Within-Subjects Effects

Measure: Purchase_intention							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Snacks	Sphericity Assumed	4,409	3	1,470	3,366	,018	,009
	Greenhouse-Geisser	4,409	2,890	1,526	3,366	,019	,009
	Huynh-Feldt	4,409	3,000	1,470	3,366	,018	,009
	Lower-bound	4,409	1,000	4,409	3,366	,067	,009
Snacks * Nutri_Score	Sphericity Assumed	,662	3	,221	,506	,678	,001
	Greenhouse-Geisser	,662	2,890	,229	,506	,671	,001
	Huynh-Feldt	,662	3,000	,221	,506	,678	,001
	Lower-bound	,662	1,000	,662	,506	,477	,001
Snacks * Lekker_rijst	Sphericity Assumed	157,119	3	52,373	119,954	,000	,237
	Greenhouse-Geisser	157,119	2,890	54,366	119,954	,000	,237
	Huynh-Feldt	157,119	3,000	52,373	119,954	,000	,237
	Lower-bound	157,119	1,000	157,119	119,954	,000	,237
Snacks * Lekker_hero	Sphericity Assumed	145,612	3	48,537	111,169	,000	,224
	Greenhouse-Geisser	145,612	2,890	50,385	111,169	,000	,224
	Huynh-Feldt	145,612	3,000	48,537	111,169	,000	,224
	Lower-bound	145,612	1,000	145,612	111,169	,000	,224
Snacks * Lekker_yoghurt	Sphericity Assumed	143,228	3	47,743	109,349	,000	,221
	Greenhouse-Geisser	143,228	2,890	49,560	109,349	,000	,221
	Huynh-Feldt	143,228	3,000	47,743	109,349	,000	,221
	Lower-bound	143,228	1,000	143,228	109,349	,000	,221

Snacks * Lekker_snelle	Sphericity Assumed	146,106	3	48,702	111,547	,000	,224
	Greenhouse-Geisser	146,106	2,890	50,556	111,547	,000	,224
	Huynh-Feldt	146,106	3,000	48,702	111,547	,000	,224
	Lower-bound	146,106	1,000	146,106	111,547	,000	,224
Snacks * Kennis	Sphericity Assumed	3,471	3	1,157	2,650	,048	,007
	Greenhouse-Geisser	3,471	2,890	1,201	2,650	,050	,007
	Huynh-Feldt	3,471	3,000	1,157	2,650	,048	,007
	Lower-bound	3,471	1,000	3,471	2,650	,104	,007
Snacks * Dieet	Sphericity Assumed	,893	3	,298	,681	,563	,002
	Greenhouse-Geisser	,893	2,890	,309	,681	,558	,002
	Huynh-Feldt	,893	3,000	,298	,681	,563	,002
	Lower-bound	,893	1,000	,893	,681	,410	,002
Snacks * Leeftijd	Sphericity Assumed	,584	3	,195	,445	,721	,001
	Greenhouse-Geisser	,584	2,890	,202	,445	,713	,001
	Huynh-Feldt	,584	3,000	,195	,445	,721	,001
	Lower-bound	,584	1,000	,584	,445	,505	,001
Snacks * Opleiding_recode	Sphericity Assumed	3,803	3	1,268	2,903	,034	,007
	Greenhouse-Geisser	3,803	2,890	1,316	2,903	,036	,007
	Huynh-Feldt	3,803	3,000	1,268	2,903	,034	,007
	Lower-bound	3,803	1,000	3,803	2,903	,089	,007
Snacks * Geslacht_recode	Sphericity Assumed	2,447	3	,816	1,869	,133	,005
	Greenhouse-Geisser	2,447	2,890	,847	1,869	,135	,005
	Huynh-Feldt	2,447	3,000	,816	1,869	,133	,005
	Lower-bound	2,447	1,000	2,447	1,869	,172	,005
Snacks * NFC	Sphericity Assumed	4,091	3	1,364	3,123	,025	,008
	Greenhouse-Geisser	4,091	2,890	1,415	3,123	,027	,008
	Huynh-Feldt	4,091	3,000	1,364	3,123	,025	,008
	Lower-bound	4,091	1,000	4,091	3,123	,078	,008

Snacks * Nutri_Score * NFC	Sphericity Assumed	,718	3	,239	,548	,649	,001
	Greenhouse-Geisser	,718	2,890	,248	,548	,643	,001
	Huynh-Feldt	,718	3,000	,239	,548	,649	,001
	Lower-bound	,718	1,000	,718	,548	,459	,001
Error(Snacks)	Sphericity Assumed	505,591	1158	,437			
	Greenhouse-Geisser	505,591	1115,542	,453			
	Huynh-Feldt	505,591	1158,000	,437			
	Lower-bound	505,591	386,000	1,310			

Appendix N: Additional mixed ANOVA

Table 50: Between-Subjects Factors

		Value Label	N
Nutri_Score	1	Geen NS	180
	2	Wel NS	79

Table 51: Mauchly's Test of Sphericity

Measure: Purchase_intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	.943	15.089	5	.010	.965	.981	.333

Table 52: Descriptive Statistics

	Nutri_Score	Mean	Std. Deviation	N
RIJST	Geen NS	2,2815	1,04274	180
	Wel NS	2,8312	1,11819	79
	Total	2,4492	1,09394	259
SNELLE	Geen NS	2,6019	1,00594	180
	Wel NS	2,8059	1,15791	79
	Total	2,6641	1,05654	259
HERO	Geen NS	2,3407	1,06927	180
	Wel NS	2,1772	,95607	79
	Total	2,2909	1,03696	259
YOGHURT	Geen NS	2,2500	1,10519	180
	Wel NS	2,3755	1,02583	79
	Total	2,2883	1,08117	259

Table 53: Tests of Within-Subjects Effects

Measure: Purchase_intention						
Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Snacks	Sphericity Assumed	28.733	3	9.578	10.366	.000
	Greenhouse-Geisser	28.733	2.896	9.923	10.366	.000
	Huynh-Feldt	28.733	2.943	9.762	10.366	.000
	Lower-bound	28.733	1.000	28.733	10.366	.001
Snacks * Nutri_Score	Sphericity Assumed	14.179	3	4.726	5.116	.002
	Greenhouse-Geisser	14.179	2.896	4.897	5.116	.002
	Huynh-Feldt	14.179	2.943	4.817	5.116	.002
	Lower-bound	14.179	1.000	14.179	5.116	.025
Error(snacks)	Sphericity Assumed	712.339	771	.924		

	Greenhouse-Geisser	712.339	744.146	.957		
	Huynh-Feldt	712.339	756.460	.942		
	Lower-bound	712.339	257.000	2.772		

Table 54: Tests of Between-Subjects Effects

Measure: Purchase_intention					
Transformed Variable: Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	1326.848	1	1326.848	3084.562	.000
Nutri_Score	1.758	1	1.758	4.087	.044
Error	110.551	257	.430		

Figure 2: Estimated Marginal Means of Purchase_intention

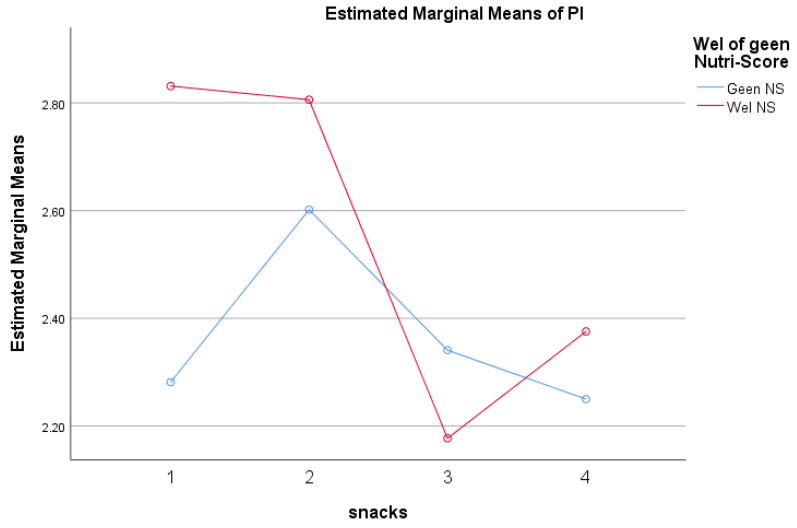

Table 55: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Dif.	Std. Error Dif.	95% Confidence Interval of the Difference	
									Low	Up
RIJST	Equal variances assumed	1.842	.176	-3.820	257	.000	-.54974	.14389	-.83310	-.26638
	Equal variances not assumed			-3.718	140.013	.000	-.54974	.14788	-.84210	-.25738

SNELLE	Equal variances assumed	2.733	.100	-1.434	257	.153	-.20406	.14230	-.48427	.07616
	Equal variances not assumed			-1.358	131.925	.177	-.20406	.15031	-.50139	.09328
HERO	Equal variances assumed	4.059	.045	1.169	257	.243	.16353	.13985	-.11187	.43892
	Equal variances not assumed			1.221	165.423	.224	.16353	.13387	-.10080	.42785
YOGHURT	Equal variances assumed	2.531	.113	-.860	257	.391	-.12553	.14599	-.41301	.16196
	Equal variances not assumed			-.885	159.657	.377	-.12553	.14180	-.40557	.15451

Table 56: Mauchly's Test of Sphericity

Measure: Purchase intention							
Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Snacks	,948	13,551	5	,019	,968	,992	,333

Table 57: Tests of Within-Subjects Effects

Measure: Purchase intention							
Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Snacks	Sphericity Assumed	5,520	3	1,840	2,004	,112	,008
	Greenhouse-Geisser	5,520	2,905	1,900	2,004	,114	,008
	Huynh-Feldt	5,520	2,977	1,854	2,004	,113	,008
	Lower-bound	5,520	1,000	5,520	2,004	,158	,008
Snacks * Nutri_Score	Sphericity Assumed	,309	3	,103	,112	,953	,000

	Greenhouse-Geisser	,309	2,905	,106	,112	,949	,000
	Huynh-Feldt	,309	2,977	,104	,112	,952	,000
	Lower-bound	,309	1,000	,309	,112	,738	,000
Snacks * NFC	Sphericity Assumed	9,516	3	3,172	3,454	,016	,013
	Greenhouse-Geisser	9,516	2,905	3,275	3,454	,017	,013
	Huynh-Feldt	9,516	2,977	3,196	3,454	,016	,013
	Lower-bound	9,516	1,000	9,516	3,454	,064	,013
Snacks * Nutri_Score * NFC	Sphericity Assumed	1,563	3	,521	,567	,637	,002
	Greenhouse-Geisser	1,563	2,905	,538	,567	,631	,002
	Huynh-Feldt	1,563	2,977	,525	,567	,635	,002
	Lower-bound	1,563	1,000	1,563	,567	,452	,002
Error(Snacks)	Sphericity Assumed	702,543	765	,918			
	Greenhouse-Geisser	702,543	740,889	,948			
	Huynh-Feldt	702,543	759,160	,925			
	Lower-bound	702,543	255,000	2,755			

Table 58: Tests of Between-Subjects Effects

Measure: Purchase_intention					
Transformed Variable: Average					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	73,238	1	73,238	172,489	,000
Nutri_Score	,509	1	,509	1,199	,274
NFC	2,274	1	2,274	5,356	,021
Nutri_Score * NFC	,196	1	,196	,461	,498
Error	108,272	255	,425		