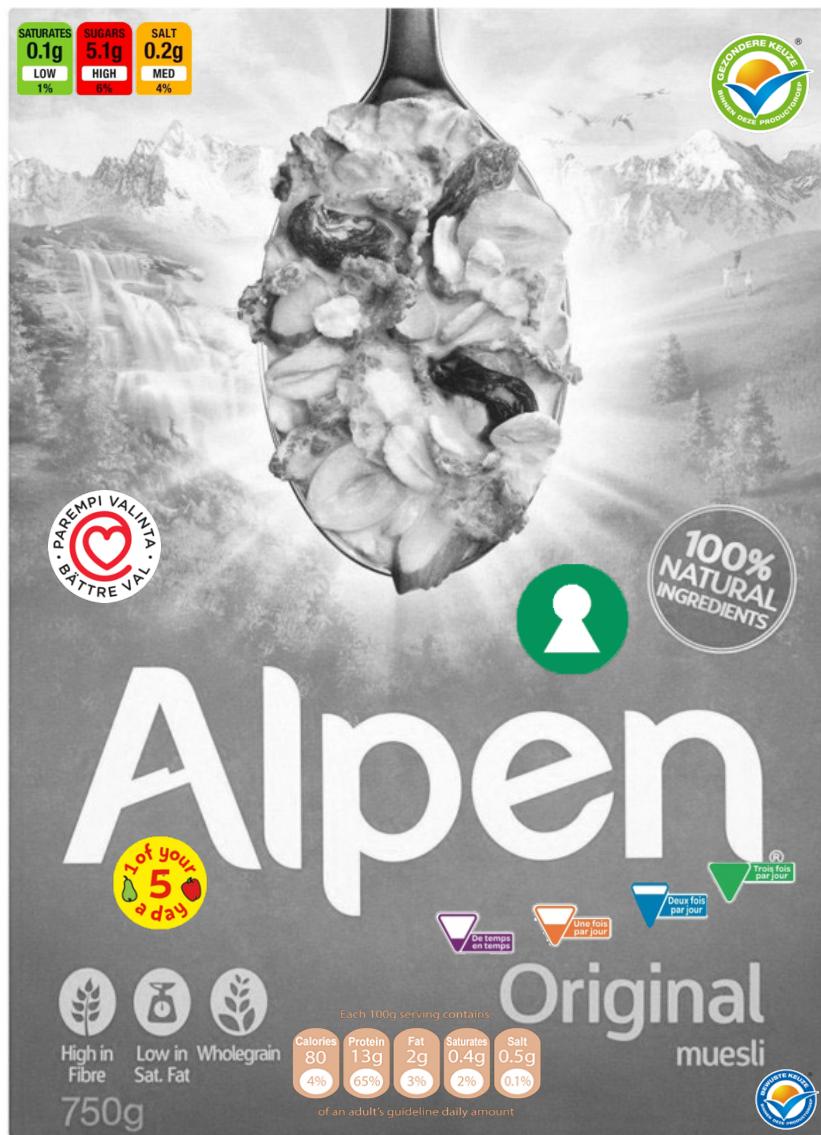


Food Labels and Symbols

How labelling of food products could improve the healthy behaviour of Dutch society

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EXECUTIVE SUMMARY

The world is changing due to the increasing prosperity and the large variety of products offered in the supermarkets. With the knowledge gained in the nutritional values of food, more and more information about healthy and unhealthy food became available. The lifestyle or healthy behaviour of people transformed over the years, and led to a growing number of obese people in the Netherlands. Consumers should be informed appropriately, to guide them in the right direction.

The research for this dissertation was framed by desk and field research to draw up recommendations and conclusions. Desk research was concerned with a literature study, based upon existing studies. Field research was carried out in the form of an online survey and four interviews, to evaluate consumer shopping behaviour in supermarkets and to outline how consumers respond to additional labelling methods.

Various parties had reasons and concerns to inform consumers about healthy food and a healthy lifestyle, in times of writing this dissertation. The Dutch government had a duty to protect the consumer. The selling of food products, in the most efficient way, was for producers and retailers of great importance. Consumers' Associations stood up for consumer rights, and health and nutrition agencies had a goal to improve the population's health. The different concerns of the various parties were communicated to consumers. The result was an overload of data to which consumers were being exposed on a daily basis, either in the form of food labelling, via the Internet, or via the news. Consumers became confused and were no longer interested in the overkill of information. Nevertheless, the interest of consumers in obtaining healthy behaviour and eating healthy food grew. Certain information on the labels of food products became mandatory with the establishment of EU food labelling regulations. Any additional forms of food labelling were allowed to be initiated by Member States to inform consumers about the healthiness of a product or its nutritional values, as long as it was adopted in national law and did not hinder the free movement of goods.

The Dutch government could learn from practices used by other Member States, to advise the population and to reduce the overload of information. Education is not enough. A consistent way of informing people via multiple channels, will move the Dutch society towards a healthy lifestyle. It requires co-operation between all parties involved, but only if it is controlled by governmental authorities.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	7
1.1 Problem statement.....	8
1.2 Objective and justifying research.....	9
1.3 Research questions.....	9
1.4 Research methods.....	9
1.4.1 <i>Desk research</i>	10
1.4.2 <i>Field research</i>	12
1.4.3 <i>Scope and limitations</i>	13
1.5 Structure of report	14
CHAPTER TWO: LITERATURE REVIEW	15
2.1 The current situation in the Netherlands regarding food labelling.....	15
2.1.1 <i>The history of food labelling</i>	15
2.1.2 <i>The establishment of European Union food labelling legislation</i>	18
2.1.3 <i>Food labelling legislation on national level in Europe</i>	22
2.2 The possibilities to initiate additional food labelling methods next to EU legislation	22
2.2.1 <i>Additional forms of expression and presentation on European level</i>	23
2.2.2 <i>Additional forms of expression and presentation on Dutch national level</i>	24
2.2.3 <i>Human right to information</i>	24
2.3 Additional methods of food labelling used in Europe and the main reasons for implementation ...	26
2.3.1 <i>Front-of-pack labelling approaches in Europe</i>	26
2.3.2 <i>Criteria-based labelling approaches</i>	28
2.3.3 <i>Fact-based labelling approaches</i>	38
2.4 How consumers are informed about additional food labelling methods and dietary patterns.....	41
2.4.1 <i>Involvement of governmental authorities</i>	42
2.4.4 <i>Involvement of official health and nutrition agencies</i>	44
2.4.3 <i>Involvement of producers within the food industry</i>	47
2.4.3 <i>Involvement of retailers within the food industry</i>	49
2.4.5 <i>Involvement of consumer associations</i>	51
CHAPTER THREE: FIELD RESEARCH	53
3.2 The shopping behaviour of Dutch consumers	54

3.3 The opinion of Dutch consumers in regard to food labelling.....	55
CHAPER FOUR: ANALYSIS	58
CHAPTER FIVE: CONCLUSION/RECOMMENDATIONS	62
5.1 From two to one symbol on short term.....	62
5.2 Introduce an additional food labelling approach and campaign on the long term	64
CHAPTER SIX: REFERENCES.....	66
CHAPTER SEVEN: APPENDICES.....	77
7.1 Memorandum Gezonde voeding, van begin tot eind.....	77
7.2 Poster SENS food labelling system France	78
7.3 Overview of front-of-pack labelling approaches in Europe.....	79
7.4 Survey – age and gender indication.....	80
7.5 Survey – gender vs. taking personal health into account when purchasing food products.....	80
7.6 Survey – statement: I would like to eat healthier in the future	80
7.7 Survey – statement: I would like to eat healthier in the future	81
7.8 Survey – dietary pattern based on the Dutch Food Wheel	82
7.9 Survey – familiarity of the Dutch Food Wheel.....	82
7.10 Survey – dietary pattern based on the Dutch RIs (ADH)	82
7.11 Survey – sources of information about healthy dietary patterns	83
7.12 Survey – statement: comparing products to find the healthiest option.....	83
7.13 Survey – statement: search for a symbol that indicates the product is healthy	83
7.14 Survey – statement: quality of product is more important than price	84
7.15 Survey – indication of specific information on the packaging is read.....	84
7.16 Survey – statement: healthy food is more expensive	84
7.17 Survey – reasons for reading food labels.....	85
7.18 Survey – reasons for not reading food labels	85
7.19 Survey – statement: additional food labelling should be controlled by producers.....	86
7.20 Survey – the familiarity of the green (Healthy Choice) checkmark symbol versus its definition	86
7.21 Survey – the familiarity of the blue (Healthy Choice) checkmark symbol versus its definition	86
7.22 Survey – the current situation with the green and blue checkmarks works confusing.....	87
7.23 Survey – familiarity of the Reference Intakes (ADH)	87
7.24 Survey – familiarity of The Keyhole symbol.....	87

7.25 Survey – defining The Keyhole symbol	88
7.26 Survey – familiarity of the Traffic Light System	88
7.27 Survey – defining the colour-coding system.....	89
7.28 Personal interview – Reuver, M.	90
7.29 Telephonic interview – Standhardt, G.	93
7.30 Personal interview – Uitslag, H.	95
7.31 Telephonic interview – Van Kleef, E.....	102

PREFACE

This dissertation was submitted as a completion of the four-year study programme European Studies at The Hague University of Applied Sciences. The research report evaluated the current situation of additional food labelling methods in the Netherlands compared to selected European countries. A recommendation was built and based upon the results of the research to increase the healthy dietary patterns of the Dutch society. It was written for educational purposes. But it was also writing in the interest of governmental authorities, health and nutrition agencies, retailers, producers, and consumer associations related to the food industry, and for any other party interested in the labelling of food products.

Foremost, I would like to express my appreciation towards my supervisor, Mr. J. Schröder, for his patience, immense knowledge, and the continuous support of this dissertation that motivated me to the end result. The assistance that was given by Mr. H. Uitslag, Mrs. M. Reuver, Mr. G. Standhardt, and Mrs. E. van Kleef in the form of interviews have been a great addition to the project for which I am very thankful. Also, I would like to express my gratitude towards my family and friends for their participation in the online survey, for their encouragement, support, and confidence in completing the final project of my studies.

One quote gave me the strength to finalise this dissertation. The quote inspired me to continue writing at all times and gave me new insights, even in times of struggle: “Discovery consists not of seeking new lands, but in seeing with new eyes,” by Marcel Proust. I am grateful for the opportunity given to gain knowledge throughout the entire process, by writing this paper.

Fenna Lammers

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CHAPTER ONE: INTRODUCTION

The Dutch consumer of 2016 was informed about the qualities of their products at the point of purchase. Over the years, a lot of knowledge was collected about the nutritional values and the ingredients of food. Consumers were able to seek information about products that had the nutritional values that served their health needs. Food labelling became an essential step to make people aware of the ingredients food contain, as well as the origin of the product and health and safety aspects. Albert indicated in his book *Innovations in food labelling* (2010), that the interest in food labels increased among consumers and also within the industry. Together with this increase, challenges for governmental authorities appeared as well. The information presented on the packaging of food products must not only be reliable but cannot be misleading in order to protect the consumer.

The variety of products in the supermarket has grown over the years and is still growing. According to an article about food and health trends presented by the Dutch Nutrition Centre, het Voedingscentrum, (Smakelijk Weten, 2012), the increasing prosperity was one of the reasons for the demand of a larger variety of products. Larger assortments in supermarkets, however, resulted in the difficulty for the consumer to make a decision. With the increasing prosperity and the ability to purchase more food products, consumers faced a completely different issue in the 21st century than consumers faced in the previous centuries. Food scarcity and malnutrition were main issues in the 20th century, while the opposite, obesity, became more and more an issue. According to Dagevos & Van Kleef (2009), Dutch consumers had the tendency to eat too much food and to eat more of unhealthy food. This brought a major input in the growing number of obese people in the Netherlands which could lead to cardiac and vascular diseases or diabetes. Consuming healthy food became a struggle for many consumers. Nevertheless, it was necessary to make consumers aware of healthy food and their options in healthy food. The idea to guide consumers in their decision-making process in the supermarket was born. Producers and retailers within the food industry found various ways of making consumers aware of healthier product options in the supermarket, explained by the Health Council of the Netherlands in advisory document to the Minister of Health, Welfare, and Sports (Gezonde voeding: logo's onder de loep, 2008). Additional voluntary food labelling methods, such as healthy choice symbols, were introduced to give this guidance in the decision-making process.

The food labelling policies in the Netherlands were, in times of writing this dissertation, according to the latest regulation on European level. Any form of additional voluntary food labelling was only adopted and implemented on national level (De nieuwe wetgeving voor etiketten, 2014). The Regulation

(EU) No 1169/2011 on food information to consumers was established to give consumers better access to clear, comprehensive and reliable food information (2014). The Netherlands was not the only country in Europe with additional voluntary food labelling methods. The United Kingdom and The Nordics also introduced methods to guide their consumers in the decision-making process (Harrison-Dunn, 2014). This dissertation researched the present status of informing consumers about ingredients and the nutritional values of the food products in several countries. Recommendations for the Dutch government were built upon the results of the research. The central research question of this dissertation was: How could Dutch authorities learn from methods used in European countries to diminish consumer confusion regarding food labelling?

1.1 Problem statement

People's lifestyle or healthy behaviour was influenced by various factors. First of all, people had the tendency to find it difficult to choose the right product due to a still growing assortment of products in the supermarkets. Secondly, the increasing prosperity led to the possibilities to purchase more products than needed. The result was that people started to eat too much food. With the possibility to purchase more food, people were exposed to a large variety of unhealthy food as well. Obesity became a serious issue that influenced people's lifestyle. Governmental authorities, supermarkets and producers found various ways to guide consumers in the decision-making process by placing mandatory and voluntary food labels on the packaging. This influenced people's lifestyle even more because the different food labels presented on the packaging of food products became confusing for many people.

A study on whether multiple formats of labelling caused confusion among consumers, indicated that consumers did find it problematic if several different labels were printed on the packaging of products (Draper et all, 2011). Van der Velde confirmed this in an article in the *Elsevier* (2015), that the different labels on current Dutch food products indeed caused confusion among consumers. According to the Dutch Consumers' Association (Polderman, 2016), were two Healthy Choice symbols in two different colours (blue and green) confusing because people did not understand the difference.

The Choices Foundation (Stichting Ik Kies Bewust) introduced the blue and green Healthy Choice symbols according the producer's ideas, not the consumer's ideas (Bram Hahn, 2016). Companies became inventive in finding new names for ingredients, and vague descriptions. This resulted in an overkill of data that made it impossible for consumers to make the right decision. The government had a duty to protect the consumers and producers of food. It was questioned what role the Dutch government played and

whether the government was able to learn from additional labelling methods to guide Dutch consumers in making the right decision.

1.2 Objective and justifying research

The objective of this dissertation was to get insight into the various methods of food labelling used in the Netherlands and other European countries, to come up with a recommendation for the Dutch authorities in which consumer confusion could be diminished.

1.3 Research questions

The research was divided into two parts. The first part was concerning the literature review and was divided into four sections based on the sub-questions of the research. The second part of this dissertation was devoted to field research, in the form of an online survey and four interviews. The results of the literature review and field research were analysed to draw up recommendations and conclusions. The recommendations and conclusions gave an answer to the central research question: How could Dutch authorities learn from methods used in European countries to diminish consumer confusion regarding food labelling? The following five sub-questions were outlined in relation to the central research question:

1. What is the current situation in the Netherlands regarding food labelling?
2. What are the possibilities to initiate an additional food labelling method next to the EU legislation?
3. Which additional methods of food labelling are used in Europe and what are the main reasons for the implementation?
4. How are consumers informed in case of additional food labelling approaches and about dietary patterns?
5. How do consumers react to additional food labelling methods?

1.4 Research methods

Two forms of research were used to answer the central research question and the five sub-questions: desk research and field research. The method of desk research was chosen, firstly to gain knowledge in the field of food labelling, and secondly to find appropriate sources of information in order to answer the four sub-questions. Field research was conducted in the form of an online survey and interviews. Direct information was retrieved from Dutch consumers to understand their shopping behaviour and healthy dietary patterns. The survey was also used to find out if people understand unfamiliar food labels or symbols without the knowledge given beforehand. The outcome and the

information retrieved from the interviews was used to answer to the fifth sub-question. A more detailed explanation of how the desk and field research was conducted, was outlined in the two paragraphs below.

1.4.1 Desk research

Desk research was the central method of research. For this method, books, online journals, articles, and existing studies have been assessed. The results of the desk research conducted were outlined in the form of literature review because the research for this dissertation was mainly based upon existing studies. With the knowledge gained throughout the desk research, the expertise was used to draw up recommendations and conclusions to answer the central research question together with the information retrieved from the field research conducted. Each sub-question of this dissertation supported the central question and the first four sub-questions were outlined in the literature review chapter.

To answer the first sub-question, extensive research was carried out to outline the history of food labelling on a global level. Several books and articles were reviewed to determine the background of food labelling. For example, Moore's (2001) research in food labelling regulation was used to retrieve information regarding the history of regulations established. *The Cambridge World History of Food* book by Kiple (2000) provided a clear vision of the history of food to understand the reasoning behind the importance of establishing food labels. Furthermore, all information about the current legislation on European and Dutch level was retrieved from the official regulations and governmental documents of European Union or Dutch governmental websites. In order to gain more knowledge in the field of European law, a telephonic interview was planned with Mr. Ger Standhardt, Manager Development & Projects at Nederlands Verpakkings Centrum (NVC) in the Netherlands. Even though the literature review chapter was devoted to the examination of existing studies, the information retrieved from the interview contributed to the full understanding of the current situation and was therefore used as a source of information.

For the second sub-question, information regarding the possibilities for European countries to initiate additional food labelling methods was mainly retrieved from regulatory documents from both European Union and official Dutch governmental websites. The book, *Innovations in Food Labelling* by Albert (2010), was used to gain knowledge about human rights to information in terms of food labelling. A relatively older study on food labelling requirements in Europe by MacMaoláin (2000), was researched to get inside on the consumer's side of food labelling. To retrieve information about the additional form of food labelling in the Netherlands, the book *Gezondheidslogo's* by Dagevos & Van Kleef (2009) was examined. The book was a relatively old source and therefore, a more recent article published by the

Dutch Consumers' Association was used to find information about the current situation of the Healthy Choice symbol. Again, in order to gain more knowledge in the field of European law and the adoption of regulations by Member States, information given by Mr. Ger Standhardt via a telephonic interview was used.

The third sub-question was mainly answered by examining a recent study by a Dutch communication and consultancy company in health and sustainability was used (Schuttelaar & Partners, 2015). The study gave inside in the various additional forms of food labelling methods used across Europe. It was researched because it provided accurate information due to the recent publishing date. A study by Van Kleef & Dagevos (2013), on the strengths and weaknesses of labelling approaches, was used to gain knowledge about front-of-pack (hereafter FoP) labels and the different approaches possible. Based upon this information, extensive research on the Internet was conducted to retrieve information about the various FoP labels and symbols. Mainly official websites of the approaches were analysed due to their credibility. A total of seven labels or symbols were researched: The Keyhole symbol, the Healthy Choice symbol, the Heart symbol, the 5 A Day logo, the SENS system, the Traffic Light System (hereafter TLS), and the Reference Intakes (hereafter RIs).

The final, fourth, sub-question was answered by researching the communication methods of various stakeholders involved: governmental authorities, health and nutrition agencies, producers within the food industry, retailers within the food industry, and consumer associations. The book *Health Communication* by Berry (2007) was examined because gaining knowledge about this form of communication was necessary to understand how stakeholders, such as governmental authorities, communicated towards the population. In order to understand how health and nutrition agencies communicated to people, a study by Stockley et all (2009) for the British Food Standards Agency (FSA) regarding consumer's awareness and the effects of FoP labelling approaches was reviewed. The *Marketing Plan Handbook* (Burk Wood, 2014) was researched because it provided the knowledge required to understand communication strategies used by producers within the food industry. Several websites of supermarket chains across Europe, such as ICA in Sweden, Albert Heijn in the Netherlands, and Sainsbury and Tesco in the UK, were researched to understand their way of communication towards consumers about additional forms of food labelling. An answer to each sub-question was outlined at the end of the section.

1.4.2 Field research

The field research for this dissertation was conducted in the form of an online survey and four interviews. The results of both the survey and the interviews were examined and outlined in the third chapter of this dissertation, with the goal to answer to the fifth sub-question: how do consumers react to the various research additional food labelling methods? An online survey was oriented on Dutch consumers and a total of 67 respondents participated. The survey was spread among the writer's friends and family. No specific target group was selected because an extensive group of people, both male and female, with an age varying from 15 years and older provided objective information and represented the overall society. The results of the survey were analysed altogether. No division of groups of people were made because a distinction between people who focus on healthy food products and people who focus less or do not focus on healthy food products was not supposed to be made. The goal of the survey was to retrieve information from all sorts of people to gain insight in their shopping behaviour in the supermarket and in their knowledge about the current Dutch Healthy Choice Symbol. The survey was also conducted to understand how personal health was linked to consumers' shopping behaviour and how the Dutch consumer reacted to unknown food labels or symbols. The survey was made with the programme Google Forms which gave the possibility to export all the results in an Excel document. The data of the survey was used to create pivot tables of which all the graphs presented in the report have been based upon. The results of the survey were outlined in the field research chapter in text and graphs. The results from the survey were compared to existing studies to discover any surprising outcomes or to determine similarities. The existing studies were also discussed in the literature review chapter of this report.

A total of four interviews were carried out of which two were face to face interviews and two were telephonic interviews. The first face to face interview was with Henry Uitslag from the Dutch Consumers' Association. The interview was requested because he suggested the TLS to be implemented in the Netherlands instead of the current Healthy Choice Symbol in an article by the Dutch Consumers' Association (Polderman, 2016). Given the fundamental suggestion, Henry Uitslag was contacted via the Dutch Consumers' Association's website to plan an interview. The main reason behind the interview was to retrieve information about their campaign against the Healthy Choice symbol, the reasoning behind the suggestion of introducing the TLS, the association's ways of working, and their communication with the Dutch consumers.

The second, face to face, interview was with Dutch dietitian Monique Reuver. The interview was planned to retrieve information from a professional dietitian with the expertise of giving advice about healthy dietary patterns based on the recommendations of the Dutch Nutrition Centre. Due to the

writer's personal experiences with dietitian Monique Reuver, the interview was requested because the dietitian explained her knowledge regarding the subject beforehand. Information about the Dutch Food Wheel (Schijf van Vijf), healthy dietary patterns, and how consumers are informed about it were also discussed. The knowledge was partly used to answer the fifth sub-question.

In order to gain knowledge in the field of European legislation regarding the labelling of food products, research led to the website of the Dutch Packing Centre (NVC). Manager of Development & Projects, Ger Standhardt, was responsible for the content of the trainings and courses on packaging, for setting up innovation projects in the packaging industry, and giving webinars about European Packaging Law. The interview questions were sent beforehand to make sure he was able to provide the exact information needed. Due to the interview, information in terms of understanding the European legislation of food labelling, the adoption of these regulations on national level, and the possibilities to initiate additional forms of food labelling besides EU regulation was retrieved. With the knowledge gained via the telephonic interview, further research into this field was conducted.

The fourth interview took place via the telephone with Ellen van Kleef, Assistant Professor at the Marketing and Consumer Behaviour Group at the University of Wageningen. Due to the desk research carried out, her name had appeared multiple times in books and journals and therefore, an interview with the professor was the highlight of this research. The main reason behind the interview was to retrieve more accurate information from her directly because most of her sources were outdated. Given the fact that her name appeared whenever healthy choice symbols in the Netherlands were discussed, her knowledge in this field was of great importance for background information about the Dutch Healthy Choice symbol. Also, her involvement in the current European project CLYMBOL was helpful for future recommendations of additional food labelling.

The answer to the final sub-question of this research was outlined in a short summary at the end of the field research chapter.

1.4.3 Scope and limitations

This dissertation focused on the additional labelling methods of food products in the Netherlands in comparison to a limited amount of countries within Europe: The United Kingdom, France, Sweden, Norway, Denmark, and Finland. The countries were selected based upon their current presence of additional food labelling methods and the information available. The research was limited to a selected number of countries. More specific, accurate and precise information was therefore retrieved to answer the sub-questions of the research and to build a recommendation for the Netherlands, based on the

knowledge gained. The research was solely focused on the Netherlands to outline a more realistic recommendation. The research was also limited due to the selected group of respondents for the survey because it was spread among the writer's friends and family. No distinction between people with a (un)healthy behaviour was made beforehand.

1.5 Structure of report

The structure of this report was set up as followed. The first chapter was devoted to the research proposal including the introduction of the report, the problem statement, the research questions, research methodology, limitations, and structure of the report. In the second chapter was the literature review outlined and four out of the five sub-questions were answered. Chapter three outlined the field research conducted in the form of an online survey and four interviews. The findings of the literature review and field research were analysed and outlined in the fourth chapter. The final, fifth, chapter was devoted to the recommendations and conclusions, based on the results and analysis of the research.

CHAPTER TWO: LITERATURE REVIEW

The literature review consisted of four parts. In the first part, the current food labelling situation in the Netherlands was examined. The second part was devoted to researching the possibilities for European countries to initiate an additional food labelling method next to the EU food standards laws. The additional methods of food labelling used in Europe, and the main reasons behind it, were researched and discussed in the third part of this chapter. The way how consumers could be informed in case of additional food labelling methods was outlined in the fourth part.

2.1 The current situation in the Netherlands regarding food labelling

The Netherlands was, in times of writing this dissertation, one of the 28 European Union (EU) Member States, and according to a study about food labelling regulations in European Union law by MacMaoláin (2000), was European law adopted by each Member State to achieve harmony. In order to understand the current Dutch situation, the history of food labelling legislation on European level was examined. Since Europe became an important player in the international world of trade, the food labelling existence on global level was researched to understand the impact of international concerns.

2.1.1 *The history of food labelling*

A study on the history of food labelling regulations concluded that labelling regulations have come from a long way. The need for labelling and regulations dated back to the medieval times (Moore, 2001). One of the earliest historically evidences of food labelling regulations dates back to 1203, when King John of England legislated a regulatory for the price of a given quantity of food. The regulation, the Assize of Bread, was systemized by the Parliament in 1266 and included set prices for diverse grades of bread. Over the years, the prices of bread and the variety of grades increased. The Parliament decided to enact a regulatory that required bakers to imprint or mark every bread made for sale in 1749. Next to the bread labelling regulations, other food products became subject to label marking regulations in England according to Moore (2001). Wines were supposed to be labelled according to a geographical area and were not allowed to be mixed with wine from different regions. "A 1311 London ordinance required of all wine that each turn be marked in front, so that the buyer may readily see the value of the wine" (Moore, 2001, p.6). England was not the only country imposing weight and price controls on bread, according to Moore (2001). The first Assize of Bread in colonial America was created in 1646 by the General Count of

Massachusetts Bay Colony (The Book of the General Laws and Liberties Concerning the Inhabitants of the Massachusetts, 1648).

Later in 1785, according to Moore (2001, p.10): "Massachusetts may have been the first legislative body in the world to enact a broad food adulteration statute applicable to all food commodities". Nevertheless, this regulatory was still missing affirmative labelling requirements and these requirements were not legislated until the 20th century. In the meantime, the industrialisation of the food production involved a number of changes in the second half of the nineteenth century, generally regarding agriculture. Due to rise of transportation, farm machinery, the development of a money economy, and educational opportunities that assured the spreading of knowledge, the amount of self-sufficient farmers decreased. Buying canned or frozen foods from a local store appeared to be less expensive than growing own foods. Next to these innovations, Kiple (2000) indicated that experimental work in chemistry made it possible to detect contamination of food. Dr. Arthur Hassall introduced the microscope and could detect several new forms of contamination (Moore, 2001). The US Parliament prohibited the adulteration of food and drinks in 1860. At the same time, similar food adulteration laws were established in Europe but lacked any form of tackling the issues.

During the industrialisation of food production, it became more difficult for consumers to rely on trust as a guide to make the purchase. The relationships people used to build with their local farmers, no longer existed. Consumers were only able to discover the quality of canned or pre-packed food after consuming it, which could lead to illness (Moore, 2001). According to Kiple (2000), due to the availability of canned and frozen foods it became more important to mark or label food products by brand name as a replacement of the personal relationships between the consumer and the farmer. Major brands in the United States discovered that brand names could also be an important factor in trade. Brand names supported the promotion of the company's reputation and consumer recognition. The interest of the government in regulating the food supply grew due to the increasing number of food labels containing incorrect claims regarding the quality, the healthiness, and the content of products. Moore (2001) indicated that the producers of food were only willing to participate in this approach, by labelling their products correctly if their competitors were obligated to label their products in the exact same way. To control such issues and to protect consumers, the national US legislation of the Pure Food and Drug Act (FDA) was born in 1906. "The first federal effort to prevent misbranding of food products," (Moore, 2001, p.19). In regard to labelling, the act prohibited any false or misleading statements on food. According to Kiple (2000), stricter regulations for labelling were introduced due to the new U.S. Food, Drug and Cosmetic Act in 1938. Before, the labels did not include any specific information. The new FDA did include

this information such as the name of the food, the address of the manufacturer or distributor, the net weight of the content of the product, and a complete list of ingredients was required. Not all products included this information yet.

In the following years, the FDA was updated regularly and several other related Acts were initiated, according to Kiple (2000). The major shift of labelling regulations in the US occurred in the beginning of the 1960s, according to Moore (2001, p.24): "Increasing scientific evidence on the effects of nutrition on long term health made apparent the importance of nutrition education as an essential aspect of public health policy". Wartella et all (2011) indicated that the absence of clear information on the packaging of food products became more and more an issue for consumers. In response to this, the White House Conference on Food, Nutrition, and Healthy presented an investigation regarding dietary insufficiencies in 1969. The government recommended to tackle the issue more actively by developing a system for identifying nutritional information about food (Kiple, 2000). The idea behind it was to make sure consumers could follow the dietary recommendations (Wartella et all, 2011). Producers were encouraged to provide reliable nutritional information because it allowed consumers to make consumption decision according to their standards (Moore, 2001).

A working draft for nutrition labelling was developed by the FDA, based on the recommendation of several consumer groups, the food industry and nutritionists. A final version was presented according to Wartella et all (2011) in 1973, and a regulatory for those nutrition labels existing on FDA-regulatory foods was created. The nutrition labels should include the following: number of calories, carbohydrate, the grams of protein, and fat. Several other aspects of nutrition labelling, such as saturated fat and Sodium, was an option that could be added by the producer. Wartella et all (2011) indicated that the average or usual serving size of the products was the basis of the nutrition label. Recommended Daily Allowance (RDA) was also one of the aspects of the 1973 labelling regulatory. The National Academy of Sciences (NAS) proposed the RDA already in 1968. One single set of standard nutrients was presented on the packaging, and the limit of each nutrient given in the RDA table was for both males and females. According to Moore (2001), the 1973 regulatory was only a voluntary nutrient labelling act, unless nutrients were added or nutritional claims were presented on the packaging. Nutritional claims were used more often by producers in response to the needs of healthy product choices for consumers (Wartella et all, 2011). "Previously, FDA policy was to classify any food product making health claims as an unapproved drug," (Moore, 2001, p. 26). The policy was reconsidered since knowledge about the connection between dietaries and health increased, and because health claims or nutritional claims were considered to be

misleading or misbranded. In response, the FDA policy was modified and those nutritional claims that met specific criteria were only allowed on food products (Wartella et all, 2011).

Significant monitoring of the food industry was lacking and most of the nutritional claims were misleading. Kiple (2000) indicates that a major shift occurred after The Surgeon General's Report on nutrition and health was presented in 1988, about the important role diets play in the analysis of certain long-lasting diseases and recommended labelling guidelines. Combined with the interest of consumers in regard to nutritional information and the outcome of several cases in the misuse of nutritional claims, the FDA and the U.S. Department of Agriculture established the Nutrition Labelling and Education Act (NLEA) in 1990. According to Moore (2001), the NLEA became one of the most extended label requirement acts worldwide. The most important aspect of the NLEA was educating the public in consumption decision-making and in understanding the information presented on food labels. The NLEA was effective as of the 8th of August, 1994 and states: "The NLEA of 1990 provides FDA with specific authority to require nutrition labelling of most foods regulated by the Agency; and to require that all nutrient content claims (i.e., 'high fibre', 'low fat', etc.) and health claims be consistent with agency regulations", (Nutritional Labeling and Education Act (NLEA) Requirements, n.d.).

2.1.2 The establishment of European Union food labelling legislation

The NLEA seemed to be a revolutionary legislation, according to Moore (2001). Most of the nutrition food labelling guidelines in the rest of the world were based on the FDA. Nutrition and health information was only relevant in developing countries, such as European countries. More nutrition programmes were set up after the World Food Conference in 1974. The World Health Organisation (WHO) and Food and Agriculture Organisation (FAO) raised awareness among the importance of nutrients and also brought dietary problems linked to oils and fats to light. Seven countries established nutrition and food safety guidelines comparable to the NLEA by 1990. Nevertheless, national governments were still struggling to mandate food labelling. Relevant information about food was not available, until the movement of establishing a common European market. Kiple (2000) indicated the importance of international trade as the main reason behind the establishment of rules and guidelines to regulate food health and safety and consumer protection in 1979. These rules stimulated trade however, not the improvements of the quality and safety of products. Amendments were made to tackle the issue in 1980, and new rules were added including labelling information. "Food labels were required to display information on product characteristics, including quality, quantity, and origin of ingredients", (Kiple, 2000, p. 1624). Sufficient information regarding nutrition, and the quality of a product to guide consumers in

making the right decisions was of effect now. At that time, the European Community did not want to establish strict labelling regulations to avoid issues on national level.

During the following decades, MacMaoláin (2015) indicated that the 1979 Directive was revised several times. According to an article in regard to food labelling legislation in the EU (Przyrembel, 2004), the 1979 Directive was written in a more detailed and informative way in 2000 and 2003. Przyrembel (2004) explained that EU legislation, in terms of food labelling, was divided into mandatory and voluntary labelling. The mandatory information of the Directive 2000/13/EC, included: "the name of product, the list of ingredients, the quantity in the case of pre-packaged foods, the date of minimum durability, special storage conditions or conditions of use, the name and address of the manufacturer, the place of origin, instructions for use, and the alcohol content if this content is more than 1,2% by volume in beverages", (Przyrembel, 2004, p. 361). The 2000 Directive was extended in 2003, and ingredients of food that could cause allergic or intolerance reactions were to be listed. As mentioned before, the mandatory nutrition labelling information involved nutritional claims concerning food.

An additional directive was created in 1990, to introduce nutrition labelling for foodstuffs (Council Directive 90/496/EEG, 1990). Nutrition labelling on pre-packed foods was voluntary with the introduction of this directive and only mandatory if nutritional claims concerning food were made (Regulation (EU) No 1169/2011, 2011). Przyrembel (2004) also indicated that those claims with nutritional information were obligated if it was in the form of a presentation or advertisement. In the years that followed, it became an issue that more and more food products were labelled and/or advertised with the use of nutritional and health claims. The Regulation (EC) No 1924/2006 was introduced to protect consumers and to provide them with safe and adequately labelled information (Regulation (EC) No 1924/2006, 2006). According to a memorandum created by the Dutch government (Gezonde voeding, van begin tot eind, 2008), claims were supposed to be scientifically substantiated. A claim was allowed to be placed on the packaging, if the product met the criteria of an established nutritional profile.

A symbol, or trade mark, that could stimulate the decision-making process of a consumer in the supermarket was also laid down in the regulation. "A trade mark, brand name or fancy name appearing in the labelling, presentation or advertising of a food which may be construed as a nutrition or health claim may be used without undergoing the authorisation procedures provided for in this Regulation, provided that it is accompanied by a related nutrition or health claim in that labelling, presentation or advertising which complies with the provisions of this Regulation," (Regulation (EC) No 1924/2006, 2006, chapter 1, article 1.3). In the memorandum was explained that the Dutch government supported the placing of a symbol on the packaging of food products that could stimulate healthy food and drink habits (Gezonde

voeding, van begin tot eind, 2008). Their reason behind it was to create a possibility for consumers to select a healthier option at once. The Dutch ministry of Health, Welfare and Sports requested advice from The Health Council in the Netherlands. According to a report by the Dutch Covenant Healthy Weight (Fit for the future, 2010), The Health Council advised the ministry to focus on one symbol, with a twofold objective, that should be assessed based on a set of clear criteria. The development of this symbol was examined and outlined in section 2.3.2 of this report.

The Dutch Product board MVO explained on its website that the 90/496/EEC Directive was revised in 2008 (Commission Directive 2008/100/EC, 2008). The most important adjustments made were concerning the definition of the material constituting fibre, the list of vitamins and minerals, and the recommended daily allowances (RDAs) (Voedingswaarde-etiketteringsrichtl. 90/496/EEG, n.d.). In the Directive 2008/100/EC was stated the following: "The definition of fibre should take into account relevant work by the Codex Alimentarius and the statement related to dietary fibre, expressed on the 6 July 2007, by the European Food Safety Authority Scientific Panel on Dietetic Products, Nutrition and Allergies," (Commission Directive 2008/100/EC, 2008, 4).

The rules laid down in the 90/496/EEC Directive also took the nutrition labelling guidelines of the Codex Alimentarius into account (Council Directive 90/496/EEC, 1990). An article from *The Guardian* Website about the differences between EU and US nutrition labels (Entis, 2015), explained that both EU and US legislation was built upon international standards, established by the Codex Alimentarius. "The Codex Alimentarius or "Food Code" was established by FAO and the World Health Organisation in 1963 to develop harmonised international food standards, which protect consumer health and promote fair practices in food trade," (What is the Codex Alimentarius, n.d.). The codex was adopted in 1969, and was significantly revised and enlarged in 1985 (Albert, 2010). The codex consisted of several standards and the first one, the General Standard, was the main one. All other standards were additions to the General Standard. One of the additional guidelines was the Guidelines for Nutrition Labelling. These guidelines were adopted in 1985, and the most recent revised version was released in 2015 (Guidelines on Nutrition Labelling, 1985). The importance of the international contribution for the establishment of a comprehensive and coherent nutritional policy in the Netherlands was outlined in the memorandum *Gezonde voeding, van begin tot eind* (2008). A figure in the memorandum presented the different stakeholders that contributed to the elements of nutritional policy. The legal framework was represented by the Dutch government, the EU, and the Codex Alimentarius (WHO), (Appendices, 7.1). The legislation of foodstuffs was mainly harmonised on European level. In the Netherlands, the decisions and regulations were mainly executed by European legislation (Gezonde voeding, van begin tot eind, 2008).

If an EU Directive has been implemented in national law, the law will be effective (Legislation, n.d.). For example, the Directive 2008/100/EC has been implemented in the Warenwetbesluit Voedingswaarde-informatie Levensmiddelen, the national Dutch law (Voedingswaarde-etiketteringsrichtl. 90/496/EEG, n.d.). Manager of Knowledge Development and Projects of the Dutch Packaging Centre (NVC) Mr. G. Standhardt confirmed this during a telephone interview (Standhardt, 2016, telephonic interview). Standhardt explained during the interview that the EU created a Directive, and set specific goals for the Member States to achieve. A Directive was described by Standhardt (2016, telephonic interview) as a guideline established by the EU that must be implemented by the member states in national law. The EU did not impose anything because all Member States are involved in the process. If a directive has been established, the European Commission (EC) drafts a guidance document. This document was meant to transfer the right information to the Member States. The Member States were also allowed to issue a guidance document on national level however, the EU version was the most affordable one (Standhardt, 2016, telephonic interview).

As mentioned before, the Directive 2000/13/EC was amended in 2003. In 2007, another small amendment was issued regarding the list of food ingredients that could cause allergenic reactions. Overall, large adjustments to the 2000 Directive were not the case. The Committee of the Regions proposed a regulation on the provision of food information to consumers in 2008. According to the proposal: “the evolution of both the food market and consumers’ expectation renders its update and modernisation necessary,” (Committee of the Regions, 2008). The eventual outcome was the establishment of the Regulation (EU) No 1169/2011. The regulation brought together EU rules on general food labelling and nutrition labelling into once piece of legislation. The 2000 Directive was withdrawn as on the 13th of December 2014 (De nieuwe wetgeving voor etiketten, 2014). Standhardt (2016, telephonic interview) explained that the implementation of the regulation was on the 13th of December in 2011. A transition period of three years was necessary to make sure all food manufactures had time to adjust the labels of pre-packaged foodstuffs. The most important change was the transformation of voluntary to mandatory food labelling. The stating of saturated fat on labels became, for example, compulsory (De nieuwe wetgeving voor etiketten, 2014). Another transition period of two years was necessary to let the manufacturers implement the nutrition labelling information on the packaging. After the 13th of December 2016, the nutritional labelling of food products will become officially mandatory in all EU countries.

2.1.3 Food labelling legislation on national level in Europe

Since the establishment of the European Union, EU regulations became leading in the Member States, including the Netherlands. The Dutch Food and Consumer Product Safety Authority (Nederlandse Voedsel- en Warenautoriteit), NVWA, indicated that the Regulation (EU) No 1169/2011 was the basis for the Dutch labelling requirements (Etikettering van levensmiddelen, n.d.). The national law in the Netherlands, the Commodities Act, regulates additional legislation and penalisation in times of writing this dissertation (Warenwetbesluit informatie levensmiddelen, 2016). The Healthy Choice symbol in the Netherlands was outlined as one of the additional requirements. The Choice Foundation established an additional form of food labelling in the Netherlands. The symbol was, in times of writing this report, visible on the packaging of food products. The Healthy Choice concept was examined and outlined in section 2.2 of this report.

Food labelling legislation in the Netherlands was according to the latest Regulation (EU) No 1169/2011, which was officially adopted into Dutch national law: The Commodities Act (Warenwet). The regulation made nutritional information for prepacked processed foods mandatory.

2.2 The possibilities to initiate additional food labelling methods next to EU legislation

Food labelling laws in Europe have only been laid down in the Regulation (EU) No 1169/2011 recently. According to a research about food labelling requirements in Europe (MacMaoláin, 2000), Member States ignored the implementations dates of directives. Besides, the research demonstrated that the use of directives in regard to food labelling only led to the development of an incompetent, confusing, and fragmented system (MacMaoláin, 2000). Nevertheless, as MacMaoláin stated: "The main reason for the existence of directives and regulations is their role in the implementation and enforcement of the principles underlying the Treaty through the harmonisation of the laws of the individual Member States," (2000, p.26). The harmonisation of food labelling laws in Europe was not very successful with the implementation of directives because conflicts occurred between the national and European governmental authorities. The idea behind the harmonisation in Europe was to accomplish a common market and not a common legal system. On the one hand, the policy makers of the EU established directives and regulations to promote the free movement of goods. Any restrictions that might limit trade in Europe were eliminated. On the other hand, directives and regulations were set up in such a way that Member States had possibilities to initiate additional food labelling methods. These possibilities were examined to understand how additional food labelling methods were initiated. Besides, this section was

also devoted to the matter of whether or not different food labels misled the consumer or limited consumers to access accurate information.

2.2.1 Additional forms of expression and presentation on European level

The Member States in the EU were, according to the Regulation (EU) No 1169/2011, allowed to make use of the voluntary addition of nutritional or health claims on the packaging of food products, if it was in harmony with the Regulation (EC) No 1924/2006 on nutrition and health claims (Regulation (EU) No 1169/2011, 2011, nr. 38). In the 2011 Regulation were additional forms of expression and presentation of nutritional declaration defined as a graphical form or symbol other than the indication of the amount of grams or millimetres on the labels. The additional forms should help consumers to get a better understanding of the nutritional value of a food product. The uniformity when developing additional forms of expression and presentation was of great importance and therefore, the Member States were asked to share best practice and experience with the other Member States and the Commission. The involvement of stakeholders was stimulated to share information (Regulation (EU) No 1169/2011, 2011, nr. 45). Member States may still adopt national measures in regard to issues not particularly harmonised in the 2011 Regulation, unless it prohibits, hinders or limits the free movement of goods. Standhardt confirmed this by explaining that the Healthy Choice symbol on the packaging of Dutch food products was mainly meant for the Dutch market (Standhardt, 2016, telephonic interview). If Dutch food products were not meant for export to other Member States, the healthy choice symbol was in line with EU regulation because it did not prohibit, hinder or limit the free movement of goods. Before the implementation of the 2011 Regulation, Member States easily demanded requirements on top of the directives, according to Standhardt (2016, telephonic interview). Member States were, in times of writing this report, no longer able to make exceptions and had to follow the conditions of the mandatory labelling and nutrition labelling, as described in the previous chapter.

Any additional nutritional or health claims and symbols must be in accordance with the Regulation (EC) No 1924/2006, and the requirements outlined in Article 35 of the Regulation (EU) No 1169/2011. In Article 35 was also stated the following: "Member States may recommend to food business operators the use of one or more additional forms of expression or presentation of the nutrition declaration that they consider as best fulfilling the requirements," (Regulation (EU) No 1169/2011, 2011, Art. 35.2). Member States have been given the duty to deliver the features of the additional forms of expression or presentation to the Commission, and to monitor the additional forms.

2.2.2 Additional forms of expression and presentation on Dutch national level

In to the Dutch Commodities Act was stated that without prejudice of the Regulation (EC) No 1924/2006 on nutrition and health claims, a Healthy Choice symbol, developed by representative organisations of producers or traders, may be placed on the FoP (Warenwetbesluit informatie levensmiddelen, 2016). In times of writing this dissertation, the symbol had to meet certain conditions: the rules of the symbol had to be in line with the defined guidelines Healthy Food made by the Health Council of the Netherlands, the criteria were supposed to be based on the state of scientific knowledge at the time of application, it had to be assessed by an independent scientific commission, it had to be in the Dutch language and should have the possibility to be consulted by every consumer on the internet. The symbol had to be officially accepted by the Minister of Health, Welfare, and Sports as well (Warenwetbesluit informatie levensmiddelen, 2016).

As long as these forms of expression and presentation were not in conflict with the European proposed rules, the voluntary food labelling schemes were allowed, according to Standhardt (2016, telephonic interview). The Dutch government defined a healthy choice symbol as a symbol that makes it easier for consumers to choose food products. A healthy choice symbol enabled consumers to compare similar food products of a specific product group to determine a healthier option, based on the nutritional content of saturated fat, trans fat, added sugar, fibre or salt (Warenwetbesluit informatie levensmiddelen, 2016). Producers within the food industry were also allowed to establish their own rules for the production or the quality of a product, apart from the national law, according to the Dutch Nutrition Centre (Wet- en Regelgeving, n.d.). These rules were defined as non-statutory rules. Producers themselves, or an entire industry, may require certain rules. The Healthy Choice symbol in the Netherlands was mentioned as an example of non-statutory rules by Standhardt (telephonic interview, 2016, question 6). The voluntary labelling method was established by Unilever and FrieslandCampina in 2006. The World Health Organisation (WHO) and the Food and Agriculture Organisation of the United Nations (FAO) stimulated the establishment of the symbol. The Healthy Choice symbol was defined as an additional form of expression and presentation that meets specific criteria, set by an independent scientific commission by Dagevos & Van Kleef (2009).

2.2.3 Human right to information

Human beings have always had the right to information, according to Albert (2010) in his book about Innovations in Food Labelling. Many countries in the world have laws to make it allowed to access public information and to reveal this information. In terms of food labelling standards, the information

was, according to Albert (2010), in many cases provided by food producers instead of by governmental authorities. In the same book was also stated that the Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security adopted by the FAO in 2004, included the importance of nutrition labelling. Countries were encouraged to take action to tackle issues such as obesity, by informing citizens in the form of education and labelling regulations (Albert, 2010). Food information offered by food producers limits consumer's right to information because food producers had a different perspective in the first place when additional forms of expression and presentation were developed. "Their aims are generally to (i) contribute to efforts to promote healthier diets; (ii) introduce a new marketing tool and a new form of competitive advantage; and/or (iii) deflect the development of mandatory government standards," according to Albert (2010, p.38).

The Healthy Choice symbol in the Netherlands was, for example, developed by large companies within the food industry. Van der Ploeg (2016) indicated in an article in the Dutch newspaper *de Volkskrant* that the Healthy Choice symbols are not and cannot be independent because of the large influence Unilever and FrieslandCampina have. MacMaoláin's study on food labelling requirements in Europe (2000) explained that food companies used the additional forms of expression and presentation for nutrition declaration as a marketing tool because of the growing range of products. Companies noticed that a sale item was not enough to attract consumers because multiple similar food products were also on sale. The labelling of food products needed an extra tool to attract consumers. Expressions such as "low fat" and "contains real fruit" appealed to those consumers that were more conscious about their healthy eating habits. The majority of the consumers ignored the real content of a product, stated MacMaoláin (2000) in his study. MacMaoláin (2000) also indicated that consumers wanted governmental authorities to regulate the marketing tools companies used to mislead consumers in their eating habits. A more recent article published by the Dutch Consumers' Association, indicated that consumers in the Netherlands were not even aware of the fact that the Dutch Healthy Choice symbol was not controlled by governmental authorities, but by the food industry (Polderman, 2016).

All EU Member States have the possibility to initiate additional forms of food labelling to inform consumers about the nutritional values of foodstuffs next to the mandatory information laid down in Regulation (EU) No 1169/2011, as long as the additional methods are not in conflict with EU regulations, are understandable and officially adopted in national law.

2.3 Additional methods of food labelling used in Europe and the main reasons for implementation

Nutritional information on the packaging of food products could be displayed in various ways, as long as the mandatory information was according to the Regulation (EU) No 1169/2011. In times of writing this dissertation, the mandatory nutritional information in Europe had to be presented in a nutritional table on the back-of-pack, and had to include the energy value and six nutrients in the following order: fat, saturates, carbohydrate, sugars, protein and salt. All nutrients were to be expressed per 100 grams or 100 millimetres. Any additional nutritional information presented on the FoP was voluntary. If FoP labelling was applied, the energy value alone was presented or the energy value combined with the values of fat, saturates, salt and sugar was presented. In both cases, the information had to be displayed per 100 grams or millimetres. The energy value of a product had to be presented in both kilocalories (kcal) and kilojoules (kJ). Furthermore, information per portion or per unit was voluntary to display on the FoP, unless it met the requirements: the size of the portion or unit specified and the number of the portions or units the package contains (Nutrition labelling becomes mandatory in Europe, 2012).

According to the Dutch communication and consultancy company in health and sustainability, Schuttelaar & Partners (Over ons, n.d.), the Dutch Ministry of Health, Welfare and Sports aimed for European agreements in terms of healthier food supply. The company researched, next to Dutch initiatives, other European initiatives established with the goal to produce healthier food products (Gezonder voedsel voor Europa, n.d.). The research was mainly focused on symbols and non-statutory rules in terms of product improvements, presented on the website of the National Agreement to Improve Product Composition (EU-information, n.d.). An overview of existing FoP symbols and methods in Europe were presented in their report (Schuttelaar & Partners, 2015), and were examined for this dissertation. The different types of FoP labelling approaches across Europe were researched and outlined in the following paragraphs. An overview of the examined FoP approaches was created to summarise the key points of each approach.

2.3.1 Front-of-pack labelling approaches in Europe

A study on the weaknesses and strengths of FoP nutrition labelling from a consumer perspective (Van Kleef & Dagevos, 2013), defined FoP nutrition labels, or signposting labels, as: "simplified and visible summary information on nutritional quality". Three essential objectives of the FoP labels were outlined. First of all, the labels made it easier for consumers to understand the nutritional values of a product within a product group or between product groups. This helped consumers to make a decision according

to their diets or health standards. Secondly, it had the intention to encourage food producers to either adjust the content of their products or to develop new and healthier products. Various cases of FoP labelling required specific criteria before a producer could participate in the programme. Thirdly, the labels gave governmental authorities the opportunity to influence public health without the enforcement of various laws.

According to Van Kleef & Dagevos (2013) were labels introduced with a reason. "Signpost labelling has been initiated with the goal of improving consumers' diet and health," (Van Kleef & Dagevos, 2013). FoP labels would help consumers to evaluate the nutritional content of a product at one side because it presents an evaluative judgement. An evaluated judgement was defined as a ruling about whether or not a food product was entitled to present a particular FoP label. In case a FoP label was presented, it was evaluated as positive or negative. A positive evaluative judgement indicated, for example, whether a product was healthy. A negative evaluative judgement indicated the opposite of healthy: unhealthy. The research also indicated that a combination of positive and negative judgement was possible. These types of labels present whether a certain product is high or low in both healthy and unhealthy nutrients. Another important aspect of a FoP label was the implications for consumer understanding. According to Van Kleef & Dagevos (2013) was consumer (nutritional) knowledge required to understand the label in some cases. Van Kleef & Dagevos (2013) concluded that FoP labelling approaches could vary from each other, but could be divided into two categories: the criteria-based FoP labels and fact-based FoP labels.

The first approach, a criteria-based label, was defined as a method that categorise food products according to a set of criteria. The nutrition criteria could be determined per product group category or across product group categories. The second approach, a fact-based label, was explained as a more summarised way of presenting the nutrition information on the FoP. This type of labelling mainly presents the quantitative information, of nutritional values of a food product, in a more summarised way. Based on this knowledge, research was carried out to discover which of both criteria-based and fact-based FoP labelling approaches were used in the EU countries, in times of writing this dissertation. According to Schuttelaar & Partners (2015), FoP labels were used in 13 EU countries. Due to the limitation of this research, only a selection of those FoP labelling methods relevant was examined. The next two paragraphs were devoted to the examination of both criteria-based and fact-based labelling approaches.

The table below was created to present an overview of the selected FoP labelling approaches.

Country	FoP Label Name	Official Website	Type of approach
The Netherlands	Healthy Choice symbol	www.hetvinkje.nl	Criteria-based
Belgium	Healthy Choice symbol	www.choicesprogramme.org	Criteria-based
France	SENS system	-	Criteria-based
Czech Republic	Healthy Choice symbol	www.choicesprogramme.org	Criteria-based
Poland	Healthy Choice symbol	www.choicesprogramme.org	Criteria-based
Sweden	The Keyhole symbol	www.nyckelhalet.se	Criteria-based
Norway	The Keyhole symbol	www.nokkelhullsmerket.no	Criteria-based
Denmark	The Keyhole symbol	www.noeglehullet.dk	Criteria-based
Finland	The Heart symbol	www.sydanmerkki.fi	Criteria-based
The United Kingdom	The Traffic Light System	www.food.gov.uk	Criteria-based
The United Kingdom	The 5 A Day logo	www.gov.uk	Criteria-based
All EU countries	The Reference Intakes	www.referenceintakes.eu	Fact-based

2.3.2 Criteria-based labelling approaches

The criteria-based labelling approaches examined by Van Kleef & Dagevos (2013) were based on a set of criteria developed either per food product group or across all food product groups. Criteria-based labelling approaches presented, in most cases, a positive evaluative judgement. In case of a positive evaluative judgement, a food product was marked as a healthier product with a seal of approval. A seal of approval does not display any nutritional information about the product. Criteria-based labelling approaches with a negative evaluative judgement were not researched. A combination of both positive and negative features of a food product in one labelling approach was presented in the research by Van Kleef & Dagevos. This form of labelling displayed the nutritional information of a product by indicating whether the product was low or high in healthy or unhealthy nutrients with the use of a colour-coding system. Consumers used the information to determine how frequent a product may be consumed, by focusing on the (un) healthy nutrients. The labelling approach also enabled consumers to compare products with each other to select a healthier option. The seal of approval and the colour-coding system were recently combined. The experimental French SENS system presents how frequent a product should be consumed (Gee, 2016). Although it was still an experiment in times of writing this report, it was examined for this dissertation. The next two paragraphs were devoted to the explanation and

presentation of the criteria-based labelling approaches with criteria set per product group and across all product groups. The key points of the labels examined were outlined at the end of the paragraphs.

2.3.2.1 FoP labels with criteria set per product group

A total of four different food labels or symbols were examined and defined as criteria-based labelling approaches with criteria set per product group. The first three symbols examined were the Healthy Choice symbol, the Keyhole symbol, and the Heart symbol. According to the research by Schuttelaar & Partners (2015), the three symbols were similar approaches. Van Kleef & Dagevos (2013) confirmed this in their report and indicated that all three symbols were defined as criteria-based labelling approaches. The three approaches presented a mark or seal as approval, and the criteria were set per food product group. The three symbols presented a positive evaluate judgement because a food product carrying this label was entitled to it and presented a healthy option or healthier food product. The fourth FoP labelling approach examined was the, still, experimental SENS system from France. This system also presented a seal of approval however; positive or negative information about a certain product was indicated with one of the four symbols. The final FoP labelling approach examined was more a form of communication from the UK government towards the public. The so called '5 A Day' logo was defined as a seal of approval to encourage consumers to take their daily recommended fruit and vegetable portions (Government 5 A Day logo Licensing guidelines, 2016). Each approach was outlined separately by describing the background information, the criteria developed and what they were based upon, and the effect the approach had so far.



The Keyhole Symbol – Nordics

According to the Swedish National Food Agency, the Keyhole was defined as a food label that helps consumers to identify healthier food products within a certain product group (The Keyhole, 2015). If a food product contains the Keyhole symbol, it contains less fat, salt and sugars. A product will contain more wholegrains and dietary fibres than products without the symbol. In times of writing this dissertation, was the symbol voluntary and free of charge. The Keyhole was found on the packaging of the 25 different food product groups and also on products that are not pre-packed, such as fruits, vegetables, potatoes and fish. Several products were excluded, for example sweets, cakes, soft drinks and products with sweeteners because they were not part of a healthier and balanced diet.

The Keyhole was introduced by the authorities in Sweden, and since 2007 also managed by authorities in Norway and Denmark. From their point of view, the Keyhole was introduced with "the aim to make it easier for consumers to identify healthier alternatives within certain food groups in order to

reduce the risk of cardiovascular conditions," (Norden Council of Ministers, 2010). Another objective for the introduction of the Keyhole was to stimulate producers to innovate, develop and reformulate their products to a healthier direction (Norwegian Food Safety Authority, 2010).

The Danish, Norwegian and Swedish food authorities established joined criteria based on the already existing Swedish requirements. According to The Keyhole information booklet created by the Norden Council of Ministers (2010), who supported the Keyhole, the requirements of the symbol were dynamic and could change over the years in response to new information and conditions. The criteria were set according to the Nordic Nutritional Recommendations (NNR), which were based upon the nutritional recommendations of the Nordic governments. According to the 5th edition of the NNR (Nordic Nutrition Recommendations, 2012), food-based dietary guidelines (FBDGs) were introduced by the FAO to advise the general public in terms of outlining the recommended nutrient intake and energy of food products. The basis of the FBDGs was the NNR. The NNR was also meant to provide information regarding dietary advice, the consumption of meals, and the selection of food.

A 2015 article about the developments of the Keyhole Symbol, indicated that the progress of the symbol was considered positive (Larsen & Funch, 2015). The number of products that carried the symbol was five times more than in 2009. According to the article (Larsen & Funch, 2015), the symbol stimulated product development and encouraged the creation of healthier alternatives. The retail business and the producers of food products were the main driving force behind the need for a Keyhole symbol. The producers benefited from the symbol and the consumers as well. In times of writing this dissertation, the symbol had 90% familiarity among the target audience. Since the introduction of the symbol, the consumption of saturated fat decreased by 40%, if consumers purchased products with the Keyhole symbol. Larsen & Funch (2015) indicated that the symbol was, in times of writing this report, under development to reduce the amount of salt in products and to stimulate the consumption of whole grains.



The Healthy Choice Symbol – NL, BE, CZ, PL

According to an article in the Dutch newspaper NRC (Nagtegaal, 2016), the Healthy Choice symbol was introduced in 2012. Van Zeeland (2012) confirmed this and explained that the Dutch naming "Het Vinkje" became the successor of the previously named "Ik Kies Bewust" logo and the initiative by the Dutch supermarket Albert Heijn: the "Keuze Klavertje" logo. Het Vinkje (the Healthy Choice symbol) became a dual system with a green and blue checkmark symbol. In times of writing this dissertation, the website about the Healthy Choice symbol (Alles over het Vinkje, n.d.), indicated that a green checkmark symbol was presented on the FoP if the particular product was a healthier choice within

a product group. If a blue checkmark symbol was presented on products, consumers should not eat it too often however, it was a relatively healthier option within a product group because it would contain less sugar than another product.

The Healthy Choice symbol was mainly implemented by Unilever, Friesland Foods and Campina to stimulate producers to modify the contents of their products, to contribute to a healthier dietary pattern, and to help consumers in making healthier choices at a glance. The Healthy Choice symbol was notified in Europe, was included in the Dutch Commodities Act (Warenwet) since 2013, and is supported by the Ministry of Health, Welfare and Sports (Geschiedenis, n.d.). The symbol focused on making clear which product within a product group was healthier at a glance. Specific nutritional knowledge was not required to understand the label.

The criteria of this symbol were based upon the nutrients of food products and were established for two product categories: the basis products and the non-basis products. Within the category basis products, product groups are defined based on dietary guidelines of more than 20 countries. Examples of basis product groups are fruit and vegetables, dairy, oils and fats, poultry and meat, and carbohydrate sources. Soups, sauces, snacks and fruit juices are examples of non-basis products. According to a report in which the product criteria were described (Productcriteria Stichting Ik Kies Bewust, 2015), the criteria were evaluated by an independent scientific commission every four years. Mainly, to keep the system in line with the current health and food trends and to continuously stimulate product innovation.

The website of The Healthy Choice symbol indicated that the criteria of the symbol were aligned with the Food Choice guidelines of the Dutch Nutrition Centre in March 2011 (Geschiedenis, n.d.). The official website of the Dutch Nutrition Centre explained however, that the criteria were aligned with the old guidelines. The new guidelines for the Dutch Food Wheel (Schijf van Vijf) were introduced in March 2016 and the criteria of the Healthy Choice symbol are no longer aligned. The Dutch Nutrition Centre decided to determine whether certain foodstuffs fit in an overall health dietary pattern. The type of food and the portions that a person eats became of greater importance.

According to a research among four European countries about eight different labelling methods in 2008 (Feunekes et al, 2008), the evaluation of a symbol took less time than evaluating a detailed label. The Dutch Nutrition Centre stated that symbols on the FoP supported consumers in making healthier choices. The scientific consensus about the additional forms was that two conditions applied to succeed: as many products and stores should participate in the system and the consumers must understand the meaning of the symbol or label (Standpunt effectiviteit gezondheidsbevorderende logo's, 2016). According

to the Dutch Consumer's organisation (Consumentenbond), producers or retailers had to pay a fee to participate in the Healthy Choice programme (Polderman, 2012). A fee limited producers to participate.



The Heart symbol – FI

The Ministry of Social Affairs and Health organised a meeting together with the Finnish Heart Association to establish an Action Plain for Promoting Finnish Heart Health in 1997. Previous research showed that the age-standardised cardiovascular disease occurrence and mortality rate in Finland was relatively high compared to other European countries in 1996 and therefore, an Action Plan was required (Kinnunen, 2001). The Action Plan mainly included recommendations to increase the Finnish population's physical activity, to improve the dietary patterns of Finnish people, and to stimulate children and the younger generation to adopt a healthier lifestyle. The Action Plan also proposed the recommendation "to establish a food labelling system that would support the realisation of nutrition recommendations and heart health promotion by fat, salt and fibre content of foods", (Kinnunen, 2001, p. 335). An Export Group, existing of mainly experts in nutrition or medicine, was created and chaired by the Director of the Finnish Heart Association. A Heart Symbol was established and introduced in 2002. The main goal behind the symbol was to promote public health and inform consumers about healthier product options in a certain product group, in regard to fat and sodium.

The Finnish Nutrition Recommendations were the basis for the criteria of the heart Symbol (Temme & Verhagen, 2014). The latest 2014 recommendations followed, as a rule, the Nordic recommendations (NNR 2012). The focus was mainly on the idea of promoting a healthy diet, including the quality, quantity and the important role nutrients play and their link to human wellbeing (Finnish Nutrition Recommendations 2014, 2014). In times of writing this report, the official Heart Symbol website presented the nine main food groups for which criteria were defined. The nine groups included: milk and dairy products, oils and fats, fish, meat, meat products, bread and cereal products, convenience foods, species and seasoning sauces, and vegetables, fruits and berries (Heart Symbol, n.d.). Within each main food group, different types of products were categorised. The criteria were set for all different categories of products within its main food group. According to the Heart Symbol website, the symbol was voluntarily presented on 1097 products, 112 companies within the food industry were using the food labelling method, and 234 restaurants were serving meals with a Heart Symbol (Key figures, n.d.). In case producers were interested in the symbol, an annual fee of 500 euros per product was required (Heart Symbol, n.d.).



SENS System - FR

A report about nutrition labelling in France (Gonzalez Vaque, n.d.), indicated that the French food market was, on a certain point, more driven by uncertainty and confusion. As a reaction, the Association Nationale des Industries Agro-alimentaires (ANIA) recommended to use a food labelling method to present the percentages of the suggested daily intake per portion already in 2007, long before the EU Regulation No. 1169/2011 was established. It was the start of the creation of multiple food labelling methods presenting nutritional information. A working group on nutrients profiles of the French Food Safety Agency (named AFSSA in France) started the development of a labelling approach in 2008, based on the SAIN, LIM system, according to an article about additional nutrition labelling schemes (Carreño et all, 2015). With the use of this system, food products could be ranked according to their nutritional value (score SAIN) and also according to their limitations (score LIM). In order to calculate the nutritional values of a certain food product, the use of an algorithm determines the final colour of the symbol presented on the packaging of a food product.

The SENS system was defined as ‘système d’étiquetage nutritionnel simplifié’, or simplified nutritional labelling system, according to Carreño et all (2015). SENS could indicate the frequency that a product may be consumed in the form of an inverted triangle (Ermenier, 2014). The triangle could be presented on the FoP in four different colours. Each colour would indicate a recommendation of frequency. If a food product contains a green triangle, consumers could consume the product three times a day and it could be seen as the basis of every meal. A blue triangle indicates the frequency of twice a day on products that may serve two out of the three meals per day. If an amber coloured triangle is presented on a food product, it should be consumed with moderation and only once a day. The final triangle, a purple one, is meant to indicate products that should only be consumed occasionally.

The method behind this food labelling system was based on the categorisation of food products into seven food groups: meat, fruit and vegetables, mixed dishes and snacks, diary, starches and grains, sweets and salted snacks, and added fats (Maillot et all, 2007). These seven groups were also used for the development of the French food-based dietary guidelines. The recommended energy intake levels for French adult men and women were evaluated to determine the percentage of contribution of each food group.

The next step in this process was the nutrient profiling of the seven food groups, explained by Maillot et all (2007). The seven food groups had in total 25 subgroups and their nutrient profiling was based on two indicators: The Nutrient Dense Score (NDS) and the nutrients to be limited (LIM). The first indicator, SAIN, summarized the favourable, or positive, aspects of a food product. According to a news article about the SAIN,LIM system, was SAIN a Nutrient Adequacy Score for Individual Foods (SAIN) and

defined as a nutrient frequency score “which estimates the mean percentage adequacy for five qualifying nutrients based on the recommended levels of intakes for the French Population,” (Darmon 2008, p.3). The second indicator, LIM, summarized the unfavourable aspects of a certain food product. LIM focused on those nutrients that should be limited, such as saturated fat, salt or added sugars (Darmon et all, 2009). A total of 613 different food products were selected to classify them, based on the SAIN, LIM system, into the four different classes. Darmon et all (2009) indicated that most foods were classified into the first or fourth class, then most products were classified in the third one and the remaining products (only 8%) were classified in the second class. Examples of food products classified in the first class were fruits and vegetables and examples of products classified in the fourth class were sweets and salted snacks or soft drinks.

The European Food Information Resource organisation (EuroFIR) hosted a scientific poster competition about nutrient profiling and health eating (EuroFIR, 2016). The winner, the French Dr. Matthieu Maillot, created a “poster on Validation of the Hierarchical Classification of Food by the SENS nutrient profiling system using nutritionally adequate diets designed with individual diet modelling,” (EuroFIR, 2016). The poster (Appendices, 7.2), represented the materials, methods and results of testing the relevance of associating each SENS category related to the frequency of consumption. The conclusion was that the SENS system was relevant to support nutritional labelling because those products consumed with a green or blue triangle, were much higher than products with an amber or purple triangle.



The 5 A Day Logo – UK

The UK government created a tool, or a form of communication towards consumers, on the FoP of certain food products in the supermarket. The first considerations of introducing the 5 A Day logo in the UK were in the late 1980s, but the logo was officially adopted by the government in 2003, according to a BBC article about the 5 A Day logo campaign (Mosley, 2013).

The licensing guidelines document of the Department of Health indicated that the logo was a way of communication to increase the consumption of vegetable and fruit products, and to highlight the health benefits of these products (5 A Day Licensing Guidelines, 2010). The most recent published licensing guidelines of the Department of Health stated: “The Government 5 A Day logo may only be used to promote fruit and vegetable products without any added fats, sugars or salt,” (Government 5 A Day logo Licensing guidelines, 2016). One of the important aspects of this logo was the daily recommendation of fruit and vegetables for consumers. At the same time, was the symbol seen as a promotional tool of the government to communicate information about healthy food products. The logo was in line with the

Eatwell Guide: the overall daily recommendation of how much people should eat from each particular food group to achieve a balanced and healthy diet (The Eatwell Guide, 2016).

The criteria of the logo were based on portion sizes. According to the guidelines (Government 5 A Day logo Licensing guidelines, 2016), was the goal of the logo to indicate whether a product is at least one portion per serving of 80 grams (the minimum amount). Exceptions were made for 100% unsweetened fruit or vegetable juices and smoothies, concentrated puree, dried fruits, and individual whole fresh fruit and vegetables. One portion of just was defined as a 150 millilitres, for example, and one whole banana was one portion. Overall, a combination of various fruits and vegetables could add up to one portion of 80 grams. According to Mosley in his article about the 5 A Day campaign (2013), the campaign was one of the most successful campaigns of the UK government in regarding to health communication. The population was aware of the logo, even though they might know the meaning of it. On the other hand, Mosley (2013) also indicated that the logo was not enough to inform consumers about health, nutrition and food.

The table below presents a summary of the four symbols discussed.

Criteria-based labelling approaches – criteria set per product group

	The Keyhole Symbol	The Healthy Choice Symbol	The Heart Symbol	The SENS System	5 A Day Logo
Nutrient profiling approach	- Seal of approval.	- Seal of approval.	- Seal of approval.	- Frequency of consumption combined with a colour-coding system.	- Indication of the number of portions per serving in a product.
Criteria developed by	- The Nordic authorities.	- An independent scientific commission.	- An export group existing of mainly experts in nutrition or medicine was chaired by the Director of the Finnish Heart Association.	- A working group on nutrients profiles of the French Food Safety Agency.	- Public Health England (executive agency of the Department of Health UK).
Criteria based on	- The Nordic Nutrition Recommendations.	- Previously aligned with the Food Choice guidelines of the Dutch Nutrition Centre (not anymore since March 2016).	- The Finnish Nutrition Recommendations.	- The SAIN,LIM system.	- The Eatwell Guide (based on the COMA & SACN).
Evaluative judgement presented	- Positive evaluative judgement.	- Positive evaluative judgement.	- Positive evaluative judgement.	- Positive and negative evaluative judgement.	- Positive evaluative judgement.

Presentation of nutritional values	- No.	- No.	- No.	- No.	- No.
Nutritional knowledge required	- No.	- No.	- No.	- No.	- No.
Consumer knowledge required	- Yes.	- Yes.	- Yes.	- Yes.	- No.
Fee for manufacturer	- Free of charge.	- Fee required.	- Annual fee required.	- Not yet defined.	- Fee required.
Mandatory or voluntary	- Voluntary	- Voluntary	- Voluntary	- Not yet defined.	- Voluntary

2.3.2.2 FoP labels with criteria set across all product groups

The FoP labelling approach with criteria set across all product groups was examined and presented in the next paragraph of this report. According to a research by Van Kleef & Dagevos (2013), the TLS was presented as an example of such an approach. The system was voluntarily adopted in the UK. The research by Van Kleef & Dagevos (2013) indicated that the TLS presented both positive and negative aspects of a food product with the use of a colour-coding system. The nutritional values of a product were calculated for each food product and given a colour. The system was examined on the background information, the criteria developed and what they are based upon, and the effects the system had so far. At the end, a summary was outlined with the key points of this system.



The Traffic Light System (TLS) – UK

According to a research by Louis van Nieuwland in the book *Gezondheidslogo's op eten* (Dagevos & Van Kleef, 2009), the UK Food Standards Agency (FSA) started the discussion to introduce a symbol or labelling method with more information presented than, for example, the Keyhole Symbol. The voluntary colour-coding system was introduced in 2006, to specify nutrients and to present this on the FoP. Based on intense scientific research, the TLS appeared to be correctly interpreted by consumers and seemed to suit the important aspects of the nutrition policy. The FSA aimed to provide clear information to consumers about the key nutrient levels of food and drink products. The TLS made it easier for consumers to understand key nutrients at a glance, but also to let consumers compare products with each other, according to the Foodwatch article (Red, amber and green for understandable information, 2013).

The Department of Health, the FSA, and devolved administrations in Scotland, Northern Ireland and Wales created an official document that was marked as a guide for the development of nutrition labels on the FoP (Department of Health et all, 2013). The document stressed the importance of nutrition labels compliant with the EU Regulation No. 1169/2011 and with the UK Health Ministers' Recommendation on the use of colour-coding as an additional form of expression. "The provision of FoP information remains voluntary, but if provided it must meet the requirements set out in the EU FIC," (Department of Health et all, 2013, p.5). The TLS could therefore only be presented on the FoP if it was in addition to the mandatory nutrition declaration, according to the EU regulations.

The Traffic Light label was developed according to several steps presented in the guidance document. The label contained: the information on energy value per 100 grams/millimetres and in a detailed portion of the product; the information on the amounts of the nutrients in grams/millimetres; the information of a portion size; the percentage of the RIs information of the key nutrients and energy value of a portion size; and finally the colour-coding per key nutrient determined on the criteria (Department of Health et all, 2013).

The criteria were based on the dietary recommendations of the Committee on Medical Aspects of Food and Nutrition (COMA) and the Scientific Advisory Committee on Nutrition (SACN), according to an article published by the Faculty of Public Health (Traffic-light food labelling, 2008). Food producers were allowed to add, besides the colour-coding, the descriptors "high", "medium", or "low" to increase the possibility consumers will understand the label. The figure on the right indicates an overview of the criteria set for the colour-coding system of food products. The red coloured nutrients indicate that it is alright to consume the product as a treat or occasionally. Foods containing amber coloured nutrients are considered an OK choice. If a product contains green coloured nutrients, the product is a healthier option, according to an information document for consumers created by the FSA (Food Standards Agency, 2007).



According to a journal about trade perspectives (Carreño et all, 2016), the colour-coding system was adopted by 98% of the major retailers such as Sainsbury's, Tesco, Asda, Waitrose, Marks and Spencer, and Morrisons. Several major food producers, and also smaller companies, adopted the colour-coding system mainly because they felt the pressure from the retailers to adopt the system. McCain Foods, Nestlé UK, MARS UK, and PepsiCo UK were brands that signed up in 2012 (Department of Health,

2013). In 2013, 80% of the pre-packed food products used a form of FoP labelling, either the RIIs or colour-coding system or a combination of both (Department of Health, 2013 January).

Studies proved the effectiveness of the method. Basu (2015) indicated that the colour-coding system in the UK increased the consumption of products marked with green nutrients and decreased the consumption of products marked with red nutrients. According to a research by the Dutch University in Wageningen was the TLS the most effective way of health related labelling methods to inform consumers (Ramaker, 2014). Erica van Herpen, university professor in Marketing and Consumer Behaviour, studied the colour-coding system in comparison to the current Dutch Healthy Choice symbol and concluded that consumers had better understanding of the TLS because no knowledge was required. Consumers were already aware of how a traffic light works and could therefore easily adopt it. The table below summarised the key points of the labelling approach.

Criteria-based labelling approaches – criteria set across all product groups

	The Traffic Light System 
Nutrient profiling approach	- Nutrient values presented combined with colour-coding system.
Criteria developed by	- The Food Standards Agency (FSA).
Criteria based on	- The dietary recommendations of the UK Committee on Medical Aspects of Food and Nutrition (COMA) and the Scientific Advisory Committee on Nutrition (SACN)
Evaluative judgement presented	- Positive and negative evaluative judgement.
Presentation of nutritional values	- Yes.
Nutritional knowledge required	- No.
Consumer knowledge required	- No.
Fee for manufacturer	- Free of charge.
Mandatory or voluntary	- Voluntary

2.3.3 Fact-based labelling approaches

The second FoP labelling approach examined was the fact-based labelling approach. Fact-based labelling was, according to the research by Van Kleef & Dagevos (2009), outlined as a type of labelling that mainly presented the quantitative information, of the nutritional values of food, in summarised way. Fact-based labelling approaches did not present evaluative judgment because it displayed factual and detailed information, of both unhealthy and healthy nutrients. One form of fact-based labelling mentioned was the Reference Intakes (RIIs) method. The method presents the recommended daily intake. The quantities

of nutrients are displayed in percentages and consumers could use the information as a guideline, not as a target. The RIs were adopted in EU legislation in 2011 (Regulation (EU) No 1169/2011, 2011). The RIs replaced the previously named Guidelines Daily Amounts labelling approach (GDA, according to the British Food and Drink Federation (Guidelines Daily Amounts, 2016). The RIs were examined and outlined in the paragraph below.



The Reference Intakes (RIs)

The previously named Guidelines Daily Amounts (GDAs) were replaced by the RIs and were already introduced in the UK since 1998. The GDAs were re-evaluated again in 2004, when obesity became a greater issue in the UK. Tackling the issue was one of the main priorities to improve the well-being of the nation (Nutrition labelling – a history, 2014). Since then, the UK supermarket chain Tesco started to notice a decrease in unhealthy food consumption and an increase in healthy food consumption.

The GDAs were introduced in the EU by the Confederation of the Food and Drink Industries (FoodDrinkEurope nowadays) in 2005, and were based on the Eurodiet recommendations. The EC subsidised the Eurodiet project and this resulted in an action plan to develop European dietary guidelines. A framework was established for food-based dietary targets on national level (Nutrition labelling – a history, 2014). The idea was to harmonise the nutrition labelling approach, including the GDA method, across the food industry in Europe (Making sense of Guideline Daily Amounts, 2007). Besides, the EC's consumer policy strategy for the years 2007 to 2013, stressed the importance of consumer's right to have clear access to consistent and factual information. Also, it was important to let consumers make informed choices in their purchasing behaviour. The EC proposed a regulation in 2008, and as mentioned before in this report (Chapter 2.1.2, p. 15), the proposal led to the Regulation (EU) No 1169/2011. With the 2011 regulation, the name of the GDAs changed to Reference Intakes. One of the reasons was to harmonise the nutritional values presented on the packaging of food across Europe and therefore only one set of RIs was created instead of the several values the GDAs had (Reference Intakes, n.d.).

The RIs values were based on the scientific opinion of labelling intake values recommended by the European Food Safety Authority (EFSA). The RIs were based on the science-based recommendations of national (e.g. The

Energy / Nutrient	Reference Intake
Energy	8400kJ (2000 kcal)
Total fat	70 grams
Saturated fat	20 grams
Carbohydrate	230 grams
Sugars	90 grams
Salt	6 grams

Netherlands and Nordics) and international (e.g. WHO and Eurodiet) authorities of nutrient intakes for the general population (Bresson et all, 2009). Six values should be presented: energy, total fat, saturated fat, carbohydrates, sugars, protein, and salt. The reference intakes for energy and selected nutrients laid down in the Regulation (EU) No 1169/2011, are presented in the table above (The reference intakes values, n.d.).

The National Health Service (NHS) website of the United Kingdom defined RIs as guidelines, not targets, based on the estimated amount of energy and nutrients that a person needs to live, according to a healthy and balanced diet every day (What are 'reference intakes' on food labels, 2014). RIs help consumers to determine how much energy they need and the nutrients represented fit into their daily diet. The RIs values presented on the packaging of a food product were based on a woman of average-size doing an average amount of physical activity.

Hieke & Newman's (2015) research on the effects of nutritional label formats indicated, that the RIs nutrient information could either be presented per 100 g/ml format or in a per portion format (e.g. 150 grams). The results of the research were clear and concluded that a nutrient information table presented per 100 g/ml led to healthier choices and had therefore a more positive effect on consumer's health. According to the NHS (What are 'reference intakes' on food labels, 2014), the reason for this was to provide clear and consistent nutritional information and to avoid that consumers with a lower energy level requirements consume too much food.

The table below summarised the key points of the RIs labelling approach.

Fact-based labelling approaches

The Reference Intakes	
	 <p>Each 100g serving contains: Calories 80 Protein 1.3g Fat 2g Sugars 0.4g Salt 0.5g of an average guideline daily amount.</p>
Nutrient profiling approach	- Summarising the energy and nutrient values of the product and the percentage of daily intake.
Criteria developed by	- Request by the European Commission, the Panel of Dietetic Products, Nutrition and Allergies for the EU Regulation, together with the recommendations of national and international authorities.
Criteria based on	- Science-based nutrient intake recommendations of national and international authorities.
Evaluative judgement presented	- N/A.
Presentation of nutritional values	- Yes.
Nutritional knowledge required	- Yes.
Consumer knowledge required	- Yes.
Fee for manufacturer	- Free of charge.

Mandatory or voluntary

- Mandatory since Regulation (EU) No 1169/2011.

An overview of all the additional forms of expression and presentation created can be found in the Appendix of this report (Appendices, 7.3), and provided the possibility to compare all methods.

Criteria-based FoP approaches, such as the Keyhole in the Nordics, the Healthy Choice symbol in the Netherlands, the Heart symbol in Finland, the TLS and 5 A Day logo in the UK, and the experimental SENS system in France, were mainly implemented to guide consumers in their decision-making process to select a healthier product option at a glance in the form of a seal of approval or colour-coding system. The RIs, a fact-based FoP approach, were mainly implemented to present energy and nutrient values in a summarised way combined with the daily intake guideline percentages.

2.4 How consumers are informed about additional food labelling methods and dietary patterns

More and more people in the Netherlands already wanted to improve their dietary pattern five years ago, according to a research by research company GfK in 2011 (Meer consumenten willen gezonder eten, 2011). A total of 41% out of 2200 consumers questioned were willing to eat healthier, however 43% of the respondents admitted to find this difficult. The need for more information, in terms of healthy dietary patterns, increased over the years. Consumers found it important that manufacturers made their products healthier and that supermarkets started to offer larger assortment of healthy products. In times of writing this report, European consumers were informed about the content and healthiness of food products in various ways. The selected additional food labelling methods examined in this dissertation provided information directly on the packaging of food products. This one way of communication towards the consumers was not enough because the information behind the methods should be available for consumers as well, just as the information about healthy dietary patterns. For this dissertation was the way how consumers were informed about the selected methods on the FoP and about healthy dietary patterns examined. Based upon the knowledge gained throughout this research, the following stakeholders were taken into account and researched. The first stakeholder, governmental authorities, were examined because most of the FoP approaches were controlled by such bodies and were also responsible for the providing of information about the approach to the consumer. The second stakeholder, official health and nutrition agencies, were researched because these bodies cooperated already closely with governmental authorities and informed consumers about healthy dietary patterns. The third stakeholder, the producer within the food industry, was examined because they were responsible for the adjusting of product contents to meet the criteria for additional food labelling

methods. The fourth stakeholder, the retail sector within the food industry, was researched because they were considered to be the main location for grocery shopping and the final place where consumers retrieved information from. The final stakeholder, consumers' associations, were examined because they stand up for consumer rights. The stakeholders involved were examined on how they provide information towards their consumers, in times of writing this dissertation.

2.4.1 Involvement of governmental authorities

In case governmental authorities were responsible for the development of the additional form of expression and presentation, the communication process towards people was set up and managed by these authorities. The Healthy Choice symbol in the Netherlands was managed by the Choices Foundation, existing of non-governmental authorities. As mentioned before, the symbol was included in the Dutch Commodities Act and supported by the Ministry of Health, Welfare and Sports (Geschiedenis, n.d.). Even though the symbol was not officially set up by governmental authorities, the Dutch government was involved. The Dutch government encouraged the food industry to reduce the amounts of salt, sugar and fat in products in order to meet the criteria of the Healthy Choice symbol (Gezonde voeding, n.d.). The government subsidised the Dutch Nutrition Centre and therefore, the independent organisation was able to provide special educational programmes for schools to educate children and also, to stimulate healthier canteens. Healthy food related policies were based on the advices of the Dutch Health Council. The Dutch National Institute for Public Health and Environment (RIVM) analysed the food and drinking pattern of the society commissioned by the government. The official website of the government indicated that communication towards citizens was mainly done via public campaigns on the radio, television, in the newspaper and on the Internet (Communicatiebeleid van de overheid, n.d.). The Dutch Nutrition Centre and its communication methods towards the people, was examined and outlined in the next paragraph.

The Keyhole symbol on the other hand, was an alternative form of expression and presentation developed by a cooperation between three Nordic governmental authorities. Consistent communication towards people was one of the main priorities of the Nordic Council of Ministers to keep the Keyhole symbol uniform, according to the guiding document about the Keyhole (Norden Council of Ministers, 2010). The Nordic Council and the Nordic Council of Ministers established a joint communication department for the day-to-day information work towards its citizens (The Communications Department, n.d.). In times of writing this report, the department wrote press releases, online news items, newsletters and were in contact with journalists and the media in the Nordics countries. The official website of the

inter-governmental co-operation also provided direct information about the Keyhole symbol (About Keyhole, n.d.), including direct links to the NNR, the Finnish Heart symbol, and the Swedish National Food Agency. The methods of communications of the Swedish National Food Agency, the Danish Veterinary and Food Administration, and the Directorate of Health & Food Safety Authority in Norway, were outlined in the next paragraph.

As mentioned in the previous section of this dissertation, the TLS in the UK was an initiative by the FSA. According to a book about health communication (Berry, 2007), the additional forms of expression and presentation were a form of health communication. Health communication was defined as: "any type of human communication whose content is concerned with health," (Berry, 2007, p. 2). The aim of the UK government to implement the TLS was mainly to inform the public. A labelling system was only beneficial, if it was easily understandable for consumers. Bennett (2010) indicated in his book about risk communication, that educating people about making the right choices in food products had not worked in the past. Therefore, the TLS and the 5 A Day logo were introduced to support the people and to communicate clear information.

A simple and clear label on the FoP of food products was not enough. In order for consumers to understand the FoP label, correct information had to be communicated via the right channels. One of the initiatives by the government was the Change4Life campaign, released in 2009 (Change4Life, 2009). This campaign was part of the plan to tackle obesity (Reducing obesity and improving diet, 2013). In times of writing this dissertation, the information regarding the Change4Life campaign could be accessed via the Internet on the NHS website (Healthy eating, n.d.). The website gave direct information about the TLS, the 5 A Day logo, and also provides tips for consumers about how to focus on eating healthier. One approach highlighted was the Sugar Smart App that enabled the scanning of products to indicate the amount of sugar in a product. All other activities and ideas to increase physical health were presented on the website and gave parents the opportunity to encourage their children to boost their activity in life. Local activities and healthy recipes were also presented on the website. Another initiative presented by the UK government to tackle obesity was announced in March 2016. The Soft Drinks Industry Levy, or sugar TAX will be off effect in April 2018, according to Arthur in her article on the Food Navigator website (Arthur, 2016). Studies have already proven the positive effects of sugar TAX or fat TAX in the countries Denmark, Norway, Hungary, and France (Chu, 2016).

The European Commission requested the re-evaluation of the, previously named GDAs, for the proposal of a new EU Regulation of the European Parliament and the Council (Bresson et all, 2009). The European FoodDrinkEurope organisation focused, among other things, on the improving of nutrition and

health. In times of writing this report, this was still a challenge for the organisation (Our Priorities, Nutrition & Health, n.d.). The organisation outlined the important role that the food and drink industry could play. The consistent and clear information presented on the packaging of food and drink products was the first step. The rolling out of the mandatory RIs was one of the committed activities of FoodDrinkEurope and its members.

The official website of the RIs (Reference Intakes, n.d.) provided direct information to consumers regarding the FoP labelling approach. Information about the label, the recommended intakes, and quiz to test people's knowledge about the RIs were presented. The website also offered direct links to several national nutrition or food and drink institutions to get a better understanding about the RIs in the local language. Since the RIs became a mandatory FoP approach, information about the approach had been communicated via guiding documents to all relevant stakeholders involved, including the retail sector, producers, and policy-makers within the food sector, by the FoodDrinkEurope organisation (Guidance on the Provision of Food Information to Consumers, 2013).

2.4.4 Involvement of official health and nutrition agencies

The communication methods used by health and nutrition agencies was examined because it was great importance to understand how they inform consumers. The communication methods used by the three Nordic agencies, the Dutch Nutrition Centre and the Finnish Heart Association were researched to outline their effectiveness. According to McGuire in her book about FoP nutrition rating systems and symbols (2012), an ongoing and frequently updated public education and communication promotion programme was the only way a FoP could reach its full potential. In this way, it kept its relevance in consumers' minds and avoided confusion. Berry (2007) indicated that FoP labels were usually read and used by a limited group of people; mainly women, younger adults, more highly educated people, and people with an interest in healthy food and diets. A successful FoP label or system reached a larger group of people. To create a widespread public health tool, effective campaigning and education was necessary.

The latest research from the EU regarding health claims and symbols, CLYMBOL, presented its findings recently (Reflections on health claims and symbols and the results of CLYMBOL, 2016). The results showed that the effect of health claims or symbols on consumer's decision-making was limited, unless public health and commercial organisations contributed to improve the situation. Stockley's et all (2009) research for the FSA on consumer's awareness and understanding of FoP labelling approaches and the effects of it, concluded that consumers expect a marketing campaign when a new type of labelling approach was introduced. Consumers also believed that celebrities could be influential and could have a

great impact on shopping behaviour and consumers' views. According to the outcome of the research, healthy dietary patterns and healthy living should be promoted by the public sector. "Respondents thought it was in the interest of the NHS to provide leaflets in GPs' surgeries and hospitals to advise consumers on healthy eating," (Stockley et all, 2009, p. 39). Effective campaigning ought to be done via television and radio, according to the respondents of the research.

The Dutch bank ING indicated that human health was one of the largest consumer trends and was more than just a hype, boosted by the marketing of certain healthy food products and retailers (Geijer, 2015). The research concluded that consumers focused more on their personal health due to the use of mobile internet, social media, and health tools (apps). It enabled them to read more transparent information online instead of on the packaging of products, or follow celebrities related to healthy food on the television or via social media.

The previously mentioned Nordic Council of Minister, was accountable for the operation of three national health and nutrition agencies in Denmark, Norway and Sweden: The Danish Veterinary and Food Administration, the Directorate of Health & Food Safety Authority in Norway, and The Swedish Food Administration. A communication strategy was set up before the introduction in Norway and Denmark by the Nordic Council of Ministers in cooperation with the national agencies in 2009, to increase the level of recognition among its people to Swedish standards of 98%. Joint press releases, a common slogan, a 30 second commercial on the television, and consumer brochures for retail trade and for information purposes of local authorities were activities undertaken to increase awareness.

In all three countries, the administrations were responsible for the communication strategies and consumer-oriented activities, including media information (press releases), newspaper inserts, advertising in newspapers and magazines, and even Facebook related activities (Norden Council of Ministers, 2010). In times of writing this dissertation, the three agencies communicated via the official Keyhole websites in the local language. The Swedish National Food Agency received a fund from the government to launch a campaign about the Keyhole in 2015. The symbol needed a make-over and social media (Facebook) was mainly used to communicate healthy dietary options to consumers and to encourage people to make the right choices. The funds were also used to encourage health professionals to highlight the healthy dietary patterns to patients more often and to stimulate producers to participate in the Keyhole symbol programme (Basu, 2015).

The Dutch Nutrition Centre claimed to cooperate with local professionals (dieticians, Area Health Authority GGD, and consultation agencies) to enhance their activities and support where necessary with effective instruments. Since consumers became more conscious of healthy and sustainable food, the

Dutch Nutrition Centre found it of great importance to focus on this together with the food industry, the government, the media, and consumers (Missie en visie, n.d.).

In times of writing this report, the website of the Dutch Nutrition Centre offered materials for schools in the Netherlands to use for educational programmes for primary schools, secondary schools, and for universities. The centre also provided materials for (health) professionals based on scientific consensus. The Dutch Nutrition Centre made use of social media campaigning to inform consumers (Twitter, Facebook and Instagram). A new concept, or the relaunch of an existing concept, was announced via national media (newspapers, television, and radio). An example was the relaunch of the Dutch Food Wheel (Schijf van Vijf) in March 2016. The Food Wheel was meant to give guidance to consumers on how much of each food product group must or could be consumed in one day. Every person could create its 'own' Food Wheel, based on gender and age (for women, the options for pregnancy and breast feeding can be included as well). The Food Wheel explained the number of portions consumed, based on the advice of the Dutch Health Council.

The Dutch Nutrition Centre also focused on the Dutch Healthy Choice symbol. The success of this approach was of great importance for the centre because the symbol stimulated producers to reduce the amounts sugar, salt and saturated fat. To accomplish this, the Dutch Nutrition Centre advised the Choices Foundation to improve the communication towards consumers and set a goal to have at least 50% of the Dutch citizens understanding the difference between the blue and green symbol (Standpunt effectiviteit gezondheidsbevorderende logo's, 2016). Benthem & de Broekert (2014) indicated that the Dutch Nutrition Centre had a clear role in terms of communicating the Healthy Choice symbol towards consumers however the communication of other public organisations was lacking. According to Benthem & de Broekert (2014), it was questioned whether the government and public organisation could play a bigger role or improve the communication of the Healthy Choice symbol to increase credibility. A completely different, but fun, initiative created by the Dutch Nutrition Centre regarding communication of healthy food towards children was the cooperation with museum CORPUS (Meer consumenten willen gezonder eten, 2011). An interactive exhibition, based on health related programmes of the Nutrition Centre, started in 2012. The exhibition gave children the opportunity to discover the consequences of unhealthy dietary patterns to a human body.

The official Website of the Finnish Heart Association claimed to spread several advertising campaigns via various media channels. Brochures were spread among various target groups to promote the Heart Symbol. Still, the association kept encouraging business operators in the food industry to promote their own products by using the Heart Symbol (Heart Symbol, n.d.). According to a document

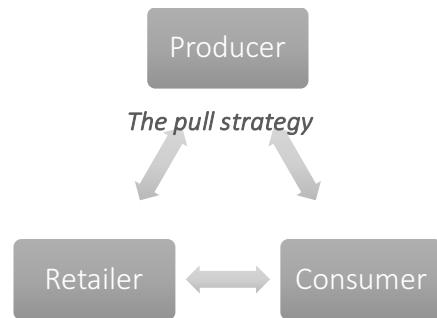
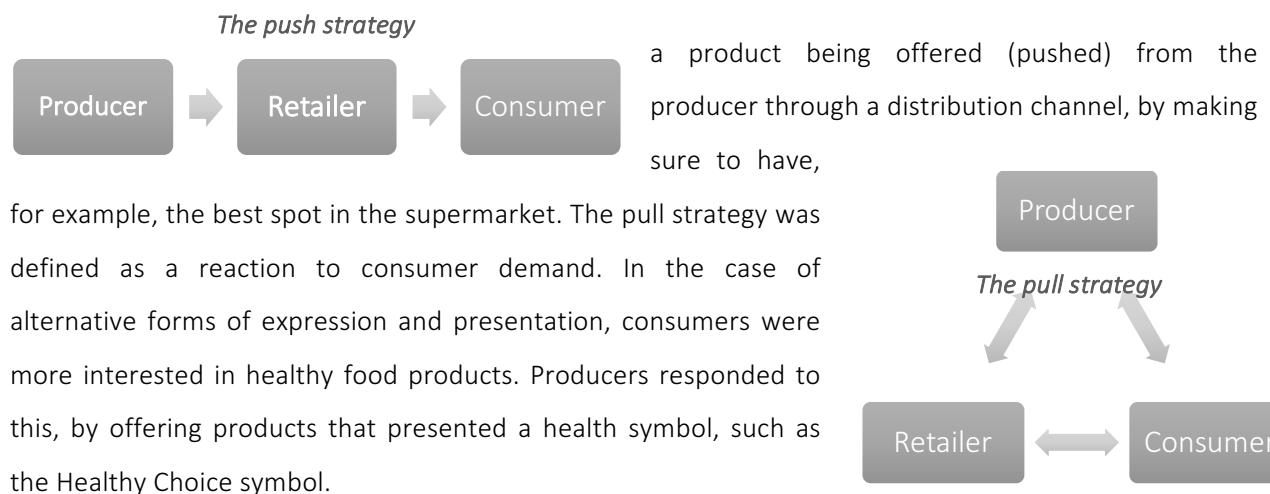
from the European Federation of the Associations of Dieticians, a project was launched to promote a healthier lunch among the Finnish population. The Heart Symbol was also used to cover meals consumed outside people's homes to help consumers make healthier choices, to increase the demand of healthier meals, and also to improve the nutritional value of meals prepared (Lahti-Koski, n.d.).

2.4.3 Involvement of producers within the food industry

In case a health related symbol, logo or any other alternative form of expression and presentation was placed on the packaging of foodstuffs, it was seen as consumer-influencing strategy. According to *The Marketing Plan Handbook* by Marian Burk Wood (2014), the engagement of consumers through marketing communications of business operators could be seen as the main focus. An organisation could influence the way consumers feel, think, and/or act towards a particular brand, according to Burk Wood (2014). Marketing communication was defined as a one-way form of communication for a long time. The use of a health symbol or logo was defined as a one-way form of communication because it communicated the positive aspects of the product directly in one-way.

The Dutch consumer's association (Consumentenbond) started a campaign against the Dutch Healthy Choice symbol in March 2016, and indicated that operators in the food industry had to pay a fee to participate in the Healthy Choice programme. Even products with a relatively large amount of sugar were, somehow, able to present either the blue or green checkmark (Voss, 2016). Henry Uitslag, who was working at the advocacy department of the Dutch Consumer's organisation in times of writing this dissertation, confirmed this in a personal interview. Uitslag (2016, personal interview) explained that the Healthy Choice symbol became more of a marketing tool for producers over the years, to promote unhealthy products as healthier (Uitslag, 2016, personal interview). As mentioned before, MacMaoláin (2000) indicated that food companies used the additional forms of expression and presentation for nutrition declaration as a marketing tool because of the growing range of products.

Nevertheless, the intention of the Healthy Choice symbol was to stimulate producers to adjust the content of their products to meet the criteria of the symbol. As mentioned at the beginning of this section, more and more consumers became interested in healthier food and in improving their dietary patterns. The supermarket was indicated as the place to retrieve information about healthier food for most of the Dutch consumers. The retail sector was outlined in the next paragraph. Producers, and the retail sector, responded to this, by pulling the consumers towards their products with the use of a marketing pull strategy. According to Burk Wood (2014), the push and pull strategies were used by organisations more often, instead of using only one of the two strategies. A push strategy was defined as



The Healthy Choice symbol was established, as mentioned in the previous section, by initiative of several large producers in the food industry, such as Unilever. Together with another large operator within the food industry, the Dutch Catering Association (Veneca), and with the support of several supermarket chains, the Choices Foundation was set up (Geschiedenis, n.d.). The Choices Foundation controlled the communication strategy of the symbol and provided direct information to consumers via the official website.

The communication plan 2014-2018 of the Healthy Choice symbol was analysed, on commission by the Dutch Ministry of Health, Welfare and Sports, to mainly evaluate whether the plan included the conditions proposed for the communication strategy (Benthem & de Broekert, 2014). Benthem & de Broekert (2014) concluded that the communication plan itself did not meet the proposed criteria. The Dutch Ministry did not have much confidence in the achievement of the formulated goals, in terms of credibility and increasing consumer knowledge regarding the symbol. Next to this communication plan, the Choice Foundation had a broader plan of action. The Foundation also focused on increasing brand recognition and communicating the differences between the green and blue checkmark. Benthem & de Broekert (2014) advised the Choices Foundation to focus more on the credibility of the symbol. They also had to increase the focus on maintaining brand recognition, by involving all relevant stakeholders such as the public institutions, governmental authorities, and other producers.

Research showed that producers not only communicate directly to consumers in the supermarket. In times of writing this report, producers also informed consumers via their official websites on the Internet. The official website of Nestlé UK, for example, provided product information including the nutritional values, the TLS and RIs of the brand Herta (Herta, n.d.). Another brand, Maggi, provided product information on its official website including the TLS and RIs and even communicated recipes with the nutritional values while using the colour-coding system and RIs information (Meal Ideas, n.d.). The

drink product, Crystal Clear, in the Netherlands highlighted the Choices Foundation on its website because several Crystal Clear products contained the blue checkmark (Ik kies bewust Crystal Clear, n.d.). Orkla Foods Sverige, a Swedish operator within the food industry explained the GDA labelling approach, nutritional values, and the Keyhole symbol on its website (Innehåll och märkning, n.d.).

2.4.3 Involvement of retailers within the food industry

According to food technologist and health consultant Ralph Moorman (Versprille, 2013), could play supermarkets an important role in people's daily lives. The research concluded that it was the retail sector's task to cooperate with stakeholders involved, in the government's battle against obesity. Moorman explained that obesity was not a consequence of individual choices because people were more driven towards overeating instead of towards exercising (Versprille, 2013).

A study on the valuation of the foodstuffs industry in the Netherlands by the FNLI, recently published its findings, and concluded that more and more consumers found it important to retrieve information about the healthiness of a product in the supermarket or via a magazine from the supermarket (Van der Wal & Bovendeert, 2016). Consumers read the information on the packaging of products and focused more on the ingredients list or nutritional information, than on health symbols or reference intakes. In times of writing this dissertation, provided the Dutch supermarket chain Albert Heijn information about the Dutch Healthy Choice symbol and highlighted the symbol in the free monthly magazine (Allerhande) and the weekly special offers folder. Consumers were able to find both at the entrance of the supermarket. The monthly magazine also provided recipes, including healthy recipes, information about food trends, and also displayed products with the Healthy Choice symbol.

The European Commission Consultation report by supermarket chain Tesco in the UK (Hutchins, n.d.), indicated that the retailer was the main contribution in regard to the UK citizen's healthy living. When the retailer introduced the RI's nutritional signposting scheme, an informative and educative off-label programme was established to guide consumers in-store and elsewhere. Tesco believed that providing information was more important than education. The same information was also provided on the Internet. Consumers were extensively informed via various sources of information such as the media. Credit-card sized guides, leaflets, consumer messages in the form of banners, labels and posters were presented in-store. Outside the store were consumers informed via television advertising and via two types of monthly company magazines with signposting recipes and information about the labelling approach. According to Stockley's et all (2009), television and radio campaigns were considered to be the most effective way to deliver information to consumers.

Ingrid Steenhuis, professor of Health Science at the Vrije Universiteit in Amsterdam, researched the influence of prices on the purchase behaviour of consumers (Versprille, 2013). One of the interesting results was that fruits and vegetables with a cheaper price influenced the purchase behaviour of lower-income groups and stimulated the purchase of these products evidently. Steenhuis (Versprille, 2013) indicated that supermarkets could change the layout and arrangements of products in the shelves by putting the focus on healthy products instead of unhealthy or decrease portion sizes. People became familiar with the current layout of the supermarket. Over 80% of the purchase decisions were made in the supermarket and therefore, were supermarkets considered to be large influencers. According to Steenhuis (Versprille, 2013), could supermarkets easily persuade both adults and younger consumers to make unplanned purchases. The fact that unhealthy snacks were located near the checkout area was considered not to be a coincidence. In times of writing this dissertation, supermarkets were responding to healthy food trends and became inventive to guide consumers towards healthy food.

Not only food labels were seen as a form of communication in-store, several other ideas were created as well. Supermarket chain Plus in the Netherlands launched a new communication strategy in-store by ranking soft drink products, based on the amount of calories. The shelves were categorised by three colours that indicated the soft drinks with the most, the in between, and the least calories (Supermarkt PLUS categoriseert frisdranken op calorieën, 2016). Retailer Albert Heijn decided to introduce the same initiative a couple of months later however, according to the article in the newspaper *Volkskrant*, it was not the only action taken by the supermarket to encourage consumers to eat healthier. The amount of sugar of all home brand products will be reduced next year (Reijn, 2016). According to their official website, the retailer already replaced unhealthy snacks for healthier options at the cash register area (58% van Nederland denkt gezond eten niet vol te houden, 2016). Supermarket chain Tesco was the first supermarket in the UK that removed chocolate and sweets from the checkout area, according to an article in *The Guardian* (Wood, 2016), and replaced it with healthier products. The same article indicated that Tesco announced to hand out free fruit to children and sold lunchbox-sized drinks for children, without added sugar.

The supermarket chain H-E-B in Texas, the United States, showed another example of making extensive use of in-store communication. The retailer decided to keep the prices of healthy products as low as possible and placed special tags on the shelves to show healthier product options by displaying the nutritional values of a product at a glance, according to the website Foodlog (Texaanse super pakt obesitas aan, 2016). The supermarket also offered an informative and educational programme to teach

people how to eat healthy, live healthy and exercise more. Dieticians were present in-store to give advice and a special book was created to inform people about a healthy dietary pattern, including recipes.

As mentioned before, the Internet became an important source of information for consumers. Since the Regulation (EU) No 1169/2011, were retailers obligated to present the mandatory food labelling information on the official websites. In times of writing this report, presented retailers more than mandatory information on their websites. For example, supermarket chain ICA in Sweden provided additional information about all the symbols and food labelling methods that consumers could find in the supermarket (Märkningar som guidar rätt, n.d.). On the website of the supermarket, recipes were presented, based on products carrying the Keyhole Symbol to give consumers the opportunity to eat according to the Keyhole healthy standards (Räkor och yoghurtsås, 2014). Supermarket chain Albert Heijn in the Netherlands gave consumers the option to only search for products that contained a Healthy Choice symbol, the green or blue checkmark, while doing online grocery shopping (Kaas, vleeswaren & delicatessen, n.d.). Supermarket chain Sainsbury's in the UK made great use of their online website. The TLS and the 5 A Day logo were both explained on the website (Labelling, n.d.). Even the recipes on the website gave the nutritional values, in combination with the traffic light colours (Recipes, n.d.).

According to a research by the Dutch bank ING (Geijer, 2015), there was still a lot of potential for retailers to increase the added value towards consumers. Retailers could focus on social media to share information and increase consumer knowledge about healthy food. If retailers offered the latest trends among healthy food it could meet consumers demand. A mobile phone app was mentioned as an effective tool for consumers to quickly analyse purchases, keep track of dietary patterns or discover healthier product options.

2.4.5 Involvement of consumer associations

The Dutch Consumers' Association (Consumentenbond) was very clear in its message against the Dutch Healthy Choice symbol, in April 2016. According to their own article in the monthly magazine was the Health Symbol a misconception (Polderman, 2016). In times of writing this dissertation, was the Dutch Consumers' Association defined as a concerning factor and the confidential voice of and for the consumers. The association was responsible for its own research results and these results were published via their own media channels. The Dutch Consumers' Association published a monthly magazine with honest and trustworthy information about products and services, critical articles, objective test information, and useful tips. Only members of the association received the magazine (Consumentengids, n.d.). Next to this, consumers were extensively informed via social media, according to Henry Uitslag

(Uitslag, personal interview). If the associations spread a message towards consumers, they were able to share this on Facebook or Twitter and react on it which could lead to discussions. Via their official website, the association communicated directly to consumers. Consumers were also able to support campaigns on the website, such as the one against the Healthy Choice symbol. The association focussed on two-way communication, instead of one-way communication methods (consumer advocacy). The association reacted to comments or discussions online and used the information for follow-up actions.

The Dutch Consumers' Association was one of the founders of BEUC, the European consumers' organisation. A collaboration of 32 European consumers' associations that lobbied for all European consumers' concerns at, for example, the European Commission and European Parliament. BEUC communicated to consumers directly via the press or communicated to its members (BEUC, n.d.). A report on informed food choices for healthier consumers by BEUC (Castres, 2015), concluded that a colour-coding system on the FoP would be a useful tool to support consumers in the identification of products containing high amounts of (saturated) fat, salt, and sugar. The report also indicated how current controls by the government failed to reduce the marketing of unhealthy food products to children. The governments were responsible to be on top of it. The report by BEUC suggested making extensive use of new marketing techniques (i.e. social media). BEUC also stated that supermarkets we supposed to be responsible. It was highly recommended to focus on in-store promotions and the product arrangement. Supermarkets were suggested to put the focus on healthy products, instead of unhealthy.

Another consumer oriented association examined was the European Foodwatch organisation. On their website was the organisation defined as an independent, non-profit organisation (Dit is foodwatch, n.d.). The organisation constantly fights for the rights of consumers for honest, safe and healthy food. To protect consumers, the organisation lobbies at the government for and exposes malpractices of the food industry. In times of writing this report, the organisation had three locations: Amsterdam, Berlin and Paris (Dit is foodwatch, n.d.). The organisation organised campaigns. With the consultation of experts, the organisation communicated the information directly to consumers via their official website, social media or via the media. Consumers were able to support campaigns by voting on the website. The more votes, the stronger Foodwatch could lobby for better legislations (Wat wij doen, n.d.).

Communication methods were used by governmental authorities, health and nutrition agencies, producers and retailers within the food industry, and consumers' associations to inform consumers about additional food labelling approaches and healthy dietary patterns, through education or inside the supermarkets. Consumers were also informed via various channels, such as campaigns, the Internet, magazines or leaflets.

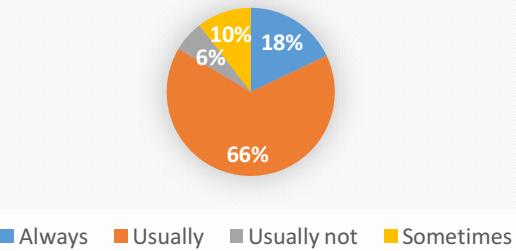
CHAPTER THREE: FIELD RESEARCH

This chapter of the report was dedicated to the field research carried out for this dissertation. Field research was done in the form of online survey and in the form of interviews. The online survey focused on consumer shopping behaviour in the supermarket and healthy dietary patterns. A total of 67 people in the Netherlands participated. The four interviews completed were with the following people: Ger Standhardt (Manager of Development & Projects at NVC), Henry Uitslag (working at the advocacy department of the Dutch Consumer's organisation), Monique de Reuver (dietician), and Ellen van Kleef (Assistant Professor at Marketing and Consumer Behaviour Group, University of Wageningen). In this chapter, an answer was given to the final sub-question: how do consumers react to additional food labelling methods? The healthy behaviour, the shopping behaviour, and the opinion of Dutch consumers about food labelling methods were examined and presented in the next three paragraphs.

3.1 The healthy behaviour of Dutch consumers

The healthy behaviour of Dutch consumers and what had influenced them to make a healthy decision when purchasing food was examined and outlined in this paragraph. The online survey focussed on a broad target group to receive as many different answers as possible. The age ranged from 15 and older. A total of 67% were female and 33% were male respondents (Appendices, 7.4). When the respondents were asked whether personal health was considered important when purchasing food, 18% responded to always find this important, 66% responded to usually find it important, and only 16% considered it to sometimes or usually not found it important (see figure on the right). No significant differences between gender were determined on this subject (Appendices, 7.5). More than half of the respondents indicated to rather eat healthier. Most of them were younger people because the results show that the older generation had a more neutral opinion about the statement (Appendices, 7.6). When the participants were asked to define the eating of healthy food, most respondents mentioned to find the consumption of vitamins/minerals by eating fruit or vegetables was important (Appendices, 7.7). A total of 55% of the respondents mentioned to always base their dietary pattern on the Dutch Food Wheel (Appendices, 7.8). All of the respondents

Do you take your personal health into account when purchasing food products?



were familiar with the Food Wheel, only one did not know the meaning of it (Appendices, 7.9). The dietary pattern of 40% of the respondents was always based on the RIs (Appendices, 7.10). If RIS were presented in a portion size format, consumers were often misled, according to Henry Uitslag from the Dutch Consumers' Association (Uitslag, 2016, personal interview). Portion sizes were often relatively small or are lower indicated by the producer, to make it look like the product contained less salt or sugar. For consumers it was relatively difficult to figure out how many grams or millimetres they should consume all day long. In most cases, people did not have the time to measure this. Uitslag (2016, personal interview) indicated to therefore strive for the introducing of the TLS in the Netherlands. According to his research, the labelling method would already present whether a person consumes a high or low amount of a specific nutrient (Uitslag, 2016, personal interview).

According to previously research conducted, the Internet was a very important place to retrieve information about a healthy dietary pattern. The results of the survey presented another important factor for consumers. A total of 78% of the respondents indicated to have knowledge about healthy dietary patterns because they were raised with it (Appendices, 7.11). The Internet was indeed the second most important source of information. Also books, magazines and newspapers were important sources. Dutch dietician Monique Reuver (2016, personal interview) confirmed this during the interview. Reuver (2016, personal interview), indicated to warn consumers to only use reliable information and look for websites that present this, based upon accurate sources. Reuver (2016, personal interview) explained that consumers should not only be reliant on food trends published by, for example, food blogs. The Dutch Nutrition Centre could communicate more actively to support consumers in their search for healthy food, according to Reuver (2016, personal interview). The information provided by the Dutch Nutrition Centre should be used more as a basis for consumers. Yet, this could only be reached if the association is more on top of it and the government increases its support. Geijer (2015) confirmed in a research report by ING that indeed the information provided towards consumers drastically changed over the years, due to the rise of the Internet and social media. According to the report, it became the consumer's task to identify correct information. Not all online information available was considered consistent with the accuracy of EU law, the retailer or producers because healthy food trends were widely spread by celebrities, top chefs, and regular people (bloggers) online or via television.

3.2 The shopping behaviour of Dutch consumers

The shopping behaviour of Dutch consumers was examined and outlined. More than half of the respondents of the survey mentioned to compare products with each other to find the healthiest option

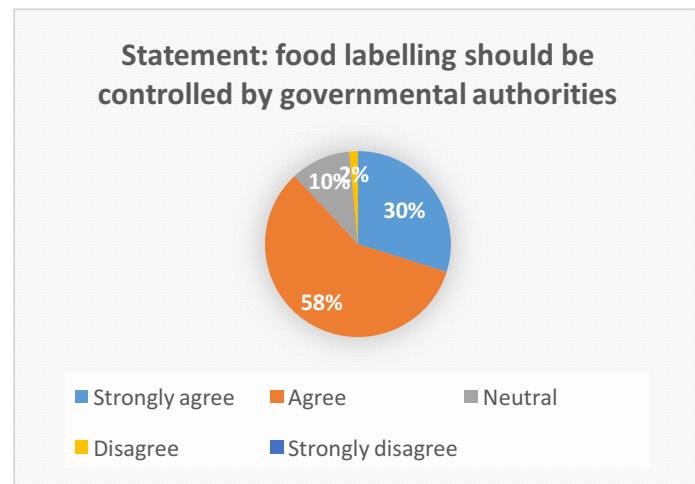
(Appendices, 7.12). Most of the respondents indicated to not search for a symbol or logo that specified whether a product was indicated as healthy (Appendices, 7.13). Ellen van Kleef indicated in a telephonic interview that the results of the European Union project CLYMBOL were recently published. The Healthy Choice symbol was researched and the outcome was the symbol had no effect because consumers did not notice the symbol (Van Kleef, 2016, telephonic interview). A total of 63% of the respondents claimed to find the quality of the product more important than the price (Appendices, 7.14). According to a recent study by FNLI, 40% of the consumers had a tendency to read the packaging of a product, but this was mainly the expiry date (van der Wal & Bovendeert, 2016). Almost 55% of the respondents of the survey indicated to indeed read the expiry date. The ingredients list was read by 36% of the respondents and 34% read the price (Appendices, 7.15). Consumers were apparently afraid that healthy food would become more expensive in the future, according to van der Wal & Bovendeert (2016). More than half of the respondents of the survey indicated to find healthy food already expensive (Appendices, 7.16).

The main reason for the respondents to read the information on the packaging was because they were interested in the ingredients and the amount of calories they consumed (Appendices, 7.17). The surprising result of the online survey was regarding the question why the respondents did not read the information on the packaging. Most of the respondents mentioned that nothing stopped them to read the information. In case the respondents did not read the information, it was mainly because of an overload of information or due to lack of time (Appendices, 7.18). According to van Kleef (2016, personal interview), lack of time was one of the reason why the Healthy Choice symbol was established because it gave consumers the possibility to see a healthier product option at a glance. The creditability of the symbol disappeared, according to Van Kleef (2016, telephonic interview), due to the campaign of the Dutch Consumers' Association against the symbol. Van Kleef (2016, telephonic interview) suggested that the government should not solely focus on the spreading of information towards consumers. The entire environment should be taken into account. Education is important on the one hand however people should also be motivated. Retailers could focus on product replacement in the supermarkets because research showed that it had a positive effect on consumer decision-making, according to van Kleef (2016, telephonic interview). Wholemeal bread could be placed at the best position, for example, or the initiative of ranking soft drinks, based on the amount of calories, was considered as an option as well.

3.3 The opinion of Dutch consumers in regard to food labelling

The selected additional food labelling approaches examined for this dissertation were mainly initiated by governmental authorities, except the Dutch Healthy Choice symbol. When the respondents of

the questionnaire were asked whether the food labelling approaches should be controlled by governmental authorities, 88% of the respondents (strongly) agreed to the matter (see figure on the below). Additional food labelling should not be controlled by producers, according to 62% of the respondents (Appendices, 7.19). In times of writing this dissertation, the Healthy Choice symbol was a voluntary symbol, according to Ger Standhardt (2016, telephonic interview). Producers were able to participate, or not. According to Standhardt (2016, telephonic interview), the Healthy Choice symbol was set up by producers, but the Dutch government officially adopted the symbol in the Dutch Commodities Act (Warenwet). As long as the Healthy Choice Foundation operated according to the rules legislated by the Dutch government, the symbol was allowed to be placed on the FoP.



Most of the respondents were able to select the correct answer when the meaning of the green checkmark of the Dutch Healthy Choice symbol was asked. Only a small group of people was unfamiliar with the symbol (Appendices, 7.20). More people were unfamiliar with the blue checkmark symbol. Also, more people selected the wrong answer when the meaning of the symbol was questioned (Appendices, 7.21). The blue and green checkmarks were confusing for Dutch consumers, according to Uitslag (2016, personal interview). The results of the survey confirmed this statement. A total of 73% of the respondents (strongly) agreed that the two symbols were confusing (Appendices, 7.22). Uitslag (2016, personal interview) explained that many people did not understand the meaning of the blue checkmark because a “conscious choice” sounded vague and consumers linked it often to sustainability (Uitslag, 2016, personal interview).

Van Kleef (2016, telephonic interview) suggested, during the interview, that only one symbol could diminish consumer confusion. One symbol, such as the Keyhole symbol, could only succeed if it was aligned with a well establish campaign to inform consumers. Van Kleef (2016, telephonic interview) also recommended to include all products in the concept, to base the criteria on scientific research, and to let the government invest in the labelling approach. Reuver (2016, personal interview) explained that the communication of food labels could only be of value for consumers, if the main nutrients (fat, sugar, salt and fibre) were clearly displayed on the FoP to make consumers aware of the content (Reuver, 2016, personal interview). In times of writing this dissertation, main nutrients were displayed on the FoP in the

form of RIs across Europe. The participants of the survey were asked whether they were familiar with this labelling method. Most of respondents, 85%, were familiar with the RIs. Only a few participants were familiar with it, except did not know the meaning (9%). Only 6% of the participants had never heard of the concept (Appendices, 7.23).

The participants of the online survey also answered questions about two other forms of additional food labelling approaches: The Keyhole symbol from the Nordics and the TLS from the UK. For 84% of the respondents was the Keyhole an unknown symbol (Appendices, 7.24). Almost half of the respondents identified the symbol correctly (Appendices, 7.25). More than half of the respondents had seen the TLS before (Appendices, 7.26), and identified the colour-coding system correctly, without any explanation beforehand (Appendices, 7.27).

Consumers had the tendency not to react to two different Healthy Choice symbols or RIs, based on a portion size format, but rather read the ingredients list and the nutrients of a product to determine its healthiness. Dutch consumers preferred to see the government establish an additional labelling method that could easily be identified, without knowledge beforehand, at glance and enabled them to compare products with each other.

CHAPTER FOUR: ANALYSIS

Analysing the current food labelling situations in European countries was important because it gave a better understanding of how the Dutch government could learn from different situations, to improve its own. The Dutch authorities had the task of creating a trustworthy food industry, instead of misleading, but sometimes they fuelled the issue instead of solving it. Issues arose when people became dissatisfied and confused. Research showed that it was not the government, but the producers within the food industry that established an additional method of food labelling next the EU legislation to inform consumers about the healthiness of a food product. The Healthy Choice symbol was officially adopted in the Dutch Commodities Act, but the authorities were not responsible for the operational side. Therefore, the additional methods of additional food labelling used by countries across Europe were analysed to outline recommendations.

Trust was the necessary tool for people to make their purchases back in the days. They could rely on the relationships they built with local farmers and used it as a guide to select food products. The industrialisation of the food industry limited consumers in using trust as a guide because cheaper products were available in stores and the variety of products grew massively. No longer knew the consumer the exact content, until food labelling regulations were initiated by governmental authorities. When the nutritional values of food became of great importance to avoid long-lasting diseases, food labelling was used to promote health benefits in the form of health claims or additional labelling methods.

Since the establishment of the Regulation (EU) No 1169/2011, food labelling became mandatory in all Member States. Additional labelling was allowed, as long as it was in line with the rules and was adopted in national law. This enabled the food industry to implement the Healthy Choice symbol in the Netherlands as long as it did not hinder trade within Europe. Research showed that the symbol was not meant for European export and was therefore allowed to be implemented. National governments encouraged the food industry to use such additional labelling methods. This was the case in the Netherlands. Except, it was not established by the government itself, unlike labelling methods in the Nordics, France and the United Kingdom. The Healthy Choice symbol was established by non-statutory rules and limited human rights to information, according to the research. Due to the growing assortment of products in the supermarkets, producers started to use the symbol as a marketing tool to attract consumers. When the Healthy Choice symbol was established, a commercial tool was accepted by the Dutch government instead of an informing tool. Most people in the Netherlands were not even aware of

the fact that the Healthy Choice symbol was controlled by producers. Research showed that people trusted the government more, in terms of regulating food labelling, and would therefore prefer the authorities to be in charge.

Two types of methods used by European countries were defined as criteria-based or fact-based additional forms of expression and presentation of nutritional declaration. Three criteria-based symbols were examined and defined as seals of approval: The Keyhole symbol used in the Nordics, the Heart symbol used in Finland, and the Healthy Choice symbol used in the Netherlands. All three symbols were voluntary approaches, in times of writing this dissertation. The Keyhole symbol was the only symbol established by governmental authorities and free of charge. A fee was required for producers to participate in the programme of the Heart symbol and the Healthy Choice symbol. Research showed that this limited the amount of producers participating. An additional approach was only successful, if as many producers and retailers as possible participated to avoid confusion among consumers. For consumers, it was difficult to identify whether a product without the symbol was unhealthy or whether the brand did not participate in the programme.

The Dutch Healthy Choice symbol was, in times of writing this report, a twofold approach. According to the research, most people were not able to differentiate the two symbols which led to confusion among the population. The British 5 A Day logo was introduced to emphasise fruit and vegetables. The symbol was seen as a form of communication because it indicated whether a product was one or more portions of fruit or vegetables. A very simple and informative tool used to promote healthy food. On the other hand, a fee was required to participate and could cause confusing consumers for the same reasons as mentioned before. The experimental French SENS system examined was created to indicate the frequency a product may be consumed on a daily or weekly basis. Four colours were used to help consumers in their decision-making. Another colour-coding system examined was the TLS, used in the UK. The TLS was created according to the colours of a traffic light. According to the research, the three colours of a traffic light did not require any consumer knowledge because people were already familiar with the concept of traffic lights. The SENS system on the other hand, did require consumer knowledge because people had to familiarise themselves with all four colours. Nutritional knowledge was also not required for the TLS. The traffic light colours gave the support consumers needed to understand the label and to define whether it was healthy or less healthy. The only fact-based approach examined in this research was the RIs approach; a mandatory labelling method used by all EU countries. This approach was, according to the research, confusing for consumers when a portion size format was presented

instead of a per 100 g/ml format. Portion sizes were usually lower indicated by producers to make it look healthier and were therefore considered misleading.

The Dutch population became more interested in healthy food and the need for healthy food information increased over the years. The stakeholders examined for this research, had a duty to communicate to the Dutch consumers intensively and to guarantee that accurate and reliable information was available. Research showed that there was still a lot of potential to improve the situation in the Netherlands in regard to health communication. As mentioned before, the governmental authorities in the Nordics and the UK were responsible for informing consumers about healthy dietary patterns and the additional food labelling approaches. Research showed that education was not enough and the co-operation between the government and health and nutrition agencies would contribute to an effective additional approach. The Nordic and UK health and nutrition agencies were subsidised by the governments. With the funds, effective campaigns were created to promote the Keyhole symbol and the TLS. The familiarity increased among the population and unhealthy food consumption decreased. This form of health communication was only effective if it was ongoing and frequently updated to keep its relevance in consumers' minds and if a larger group of people was reached.

According to the research, more stakeholders were involved in the road to success. Reacting to food trends, the push strategy used by producers led to the continuing battle between them to make products look attractive and healthier. Consumers wanted credibility and mainly searched for information about food products in the supermarket. Either they read the packaging or a magazine provided by the retailer. A healthy choice symbol was not effective and not noticed by consumers, according to the research. In times of writing this dissertation, other strategies were therefore necessary to inform consumers. Retailers had the power to influence people and according to the research, the current initiatives shown by several supermarkets were not enough. If fruit and vegetables were offered for a lower price, the purchase of those products increased. Research showed that healthy food could easily be promoted in-store by adjusting the layout, placing healthy products on the best spot, or placing special tags with healthier options. In times of writing this report, the Internet was extensively used by consumers to search for information. The stakeholders examined made use of the Internet to inform consumers. Retailers in the Sweden and the UK presented recipes according to the Keyhole symbol or TLS to help consumers to understand the healthy food they consumed and could search for the products recommended in the supermarket. Consumers were therefore informed about healthy food, with the use of an additional labelling approach via the Internet.

Consumers were interested in food trends. According to the research, it was very important to warn consumers about the consequences of using information from, for example, food blogs. People were not able to always trust the information if it was not based on scientific research. The Dutch Nutrition Centre was considered to be a reliable source of information. The communication methods used by the centre were limited because the centre was always depended on a contribution from the government.

Consumers' associations lobbied at governments with the task to safeguard consumer interests or expose malpractices of food industry operators, according to the research. The Dutch Consumers' Association, BEUC and the Foodwatch organisation indicated to find the TLS the most effective tool to guide consumers in their decision-making process because consumers were able to compare products easily. Research showed, that the nutritional values and the ingredients of a product were often read by consumers to understand what they consumed, but also to compare products with each other. The TLS made it possible for consumers to identify the nutritional values at a glance. Consumers were, according to the results of the survey for this research, able to identify the TLS without any information beforehand.

Even though the information on the packaging of products was read by consumers, research showed that only an effective campaign could motivate people towards a healthier behaviour. To achieve this, the entire food environment should be taken into account and the Dutch population must be informed about their healthy food options at all times. If all stakeholders decided to inform people about healthy food and healthy dietary patterns throughout the day in the supermarket, at work, at school and even at home via various (media) channels, the population would be motivated to start eating healthy at all times.

The Dutch government has an opportunity to reconsider whether to continue to fuel the current situation and let producers confuse the population, or take action and ask the UK and the Nordics to share their best practices to create a food industry that consumers could trust again.

CHAPTER FIVE: CONCLUSION/RECOMMENDATIONS

The factors that led to the confusion of consumers relate to a long history of food labelling on both global and European levels. Governments, health and nutrition agencies, producers, retailers, and consumers' associations played an important role in informing consumers regarding healthy dietary patterns, the content of food, and the nutritional values of food. The stakeholders had a goal to improve consumers' health and to tackle issues, such as obesity. Food wheels or pyramids were created to inform the recommended daily intakes. Additional food labelling methods in the form of symbols, logos or colour-coding systems, were widely introduced to support consumer decision-making in the supermarket. In times of writing this dissertation, the additional labelling method in the Netherlands, the blue and green Healthy Choice symbols, led to a more confusing situation for consumers.

To judge whether the Dutch Government should adopt another food labelling method at this moment, was with the limitations of this research not possible. What was possible, was to provide a number of recommendations, based on the examination of system used in other European countries, of which the Dutch government could learn to improve the situation. The recommendations were focused on the both short and long term goals to diminish consumer confusion in the end.

5.1 From two to one symbol on short term

Research showed, that two healthy choice symbols in two different colours were not supportive in the decision-making process of consumers. Most people in the Netherlands did not understand the difference between the two colours and the meaning of the symbol. On short term therefore, one clear symbol build upon scientific research with criteria established by the government, such as the Keyhole symbol in the Nordics, was considered more effective according to professor Van Kleef and dietician Reuver. One symbol, gave consumers the option to select a healthier option at a glance, without the examination of the entire package and did not require consumer knowledge nor nutritional knowledge.

The adjustment of the symbol would not be effective enough to tackle the issues. The familiarity of a symbol was considered to be the key to success. Creating awareness by increasing the communication towards consumers is crucial. The Dutch government could learn from the communication methods used by the Nordic authorities to inform consumers. The Swedish government, for example, provided the National Food Agency with a fund to let them launch an effective campaign to improve communication strategies. Furthermore, it is highly recommended to look at the bigger picture, involve all stakeholders and encourage them to collaborate. The Dutch Nutrition Centre was, in times of writing this report,

subsidised by the government, but their communication towards consumer was lacking. A more ongoing and active approach that is frequently updated, instead of a single campaign, is highly recommended. The Dutch government should start to working closely together with producers and retailers to spread information as well.

To reach an extensive group of people, it is advisable to make use of the Internet and social media. According to the research, the Internet was one of the most important sources of information for consumers. Another place to inform consumers about healthy food was, according to the research, the supermarket. The Dutch government should stimulate the cooperation between the various stakeholders and retailers to reach consumers in multiple ways. One Healthy Choice symbol would be the first step. The second step would be to provide information about the symbol, healthy food products, and healthy dietary patterns in magazines or folders to increase the awareness of all aspects related to health.

Research showed, that besides the focus on spreading information and educating the population, it required more to improve people's consumption behaviour. People should be motivated towards a healthy dietary pattern and the entire environment should be taken in account to accomplish this. Supermarkets could play an important role in motivating their consumers. Several Dutch supermarkets already showed initiative by promoting healthy food in-store. Soft drinks were ranked, based on the amount of calories, and unhealthy snacks were replaced by healthy snacks at the cash registers. It is highly recommended to encourage retailers to inform consumers in-store intensively. The layout of the store could be adjusted, special tags could be placed on the shelves to indicate healthier food options, and healthier options should be positioned at the best spot in the store. Supermarkets could also start to offer fruit and vegetables for free or with a good discount to stimulate consumers to purchase healthy food.

If the Dutch government would provide a larger fund to the Dutch Nutrition Centre, a cooperation between them and retailers could be established to create health tools. Research showed a tool, such as a mobile app, could be used by consumers for making grocery shopping lists. The mobile app should be used for more than shopping lists. Healthier options should be displayed if the user of the app selects a certain product. The managing authority of the new Healthy Choice symbol should be involved as well, to make sure those products with the symbol are shown in the mobile app. The app could also include work-outs to stimulate people to exercise more often.

The supermarket was considered not the only place where food was purchased and therefore the rest of the food environment should be taken in account. Work or school canteens, vending machines and restaurants should also offer healthy food. Research showed that people ate healthy because they were raised with it. The Dutch government should also focus on parents because they have the ability to raise

children according to certain health standards. The cooperation between museums could inform both adults and children. The Dutch Nutrition Centre could investigate in a research to find out whether it is possible to have multiple collaborations with museums across the country. It is recommended to involve schools in their project as well. Another option would be to let supermarkets have exclusive offers for families to visit the museums with a discount. This opportunity requires further research to determine if it is executable to establish such co-operations between stakeholders.

5.2 Introduce an additional food labelling approach and campaign on the long term

Back in the days, food products were marked because of their quality standards. In times of writing this research, products were being marked because of their nutritional content. The results of this dissertation showed that consumers still value the quality of a product. Consumers focused indeed on the content of a product, but barely noticed a seal or mark of approval that highlighted a healthier option. If the Dutch government focuses on a long term goal to diminish consumer confusion, the British governmental authorities should be requested to share their best practices with the Netherlands. Their communication methods towards the population would contribute to the goal of increasing awareness among the population. The UK government made use of communication methods that involved stakeholders such as the FSA, NHC, retailers and producers. A well-organised campaign was launched to tackle obesity and promote a healthy lifestyle.

Besides the campaign, an additional food labelling approach was considered to be an effective tool. The TLS contributed to the tackling of obesity and the promoting of a healthy lifestyle. The TLS was, according to the research, an option for providing optimal nutritional information, with the use of traffic light colours, at a glance. It enabled consumers to compare products with each other, if the approach was presented with a 100 g/ml format. According to the field research, consumers were easily able to identify the colours of the system, without any explanation beforehand.

It is highly recommended to let the governmental authorities control the TLS. Research showed that this would not limit consumer rights to information. The Healthy Choice symbol established by food producers was, according to the research, more a marketing tool or competitive advantage, and deflected any mandatory governmental standard. Consumers thought that such marketing tools were misleading and wished that governmental authorities regulated any additional form of food labelling. To accomplish the long term goal, it is advisable to conduct further research whether it is possible to let all retailers, and as many producers as possible, participate in the new approach to avoid further confusion. This is important because it would increase familiarity among the population, avoid competitive

advantages, and increase transparency towards the consumers. Consumers' trust in producers and retailers has become of great importance. The TLS would give producers of foodstuffs the opportunity to adjust the content of their products and reduce high amounts of unhealthy nutrients. Research showed, that consumers found it important to compare products with each other. Consumers could easily compare products if the TLS would be introduced in the Netherlands.

In case the Dutch government decides to introduce an additional form of food labelling, it is recommended to launch a well-organised campaign to inform consumers extensively with the use of an influencing person. The Dutch government should take the entire food environment into account, involve all stakeholders, and encourage them to collaborate with the goal to diminish consumer confusion. More importantly, the government has a duty to increase the healthy behaviour of the Dutch population and re-built that necessary tool for people: trust.

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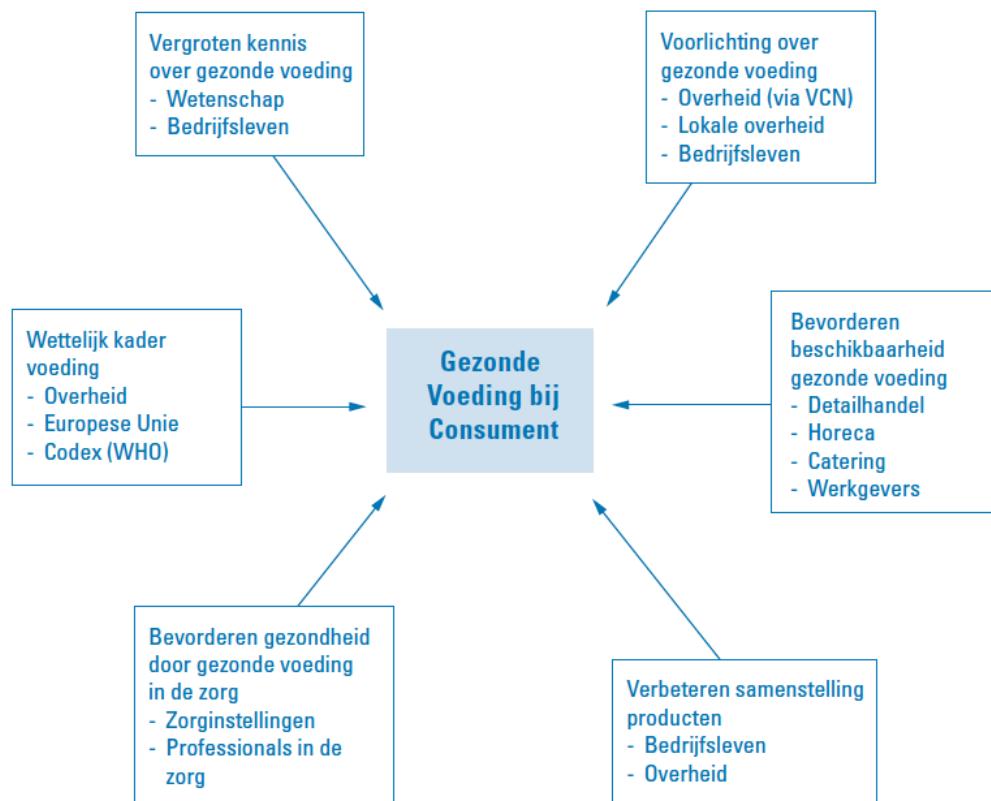
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CHAPTER SEVEN: APPENDICES

7.1 Memorandum Gezonde voeding, van begin tot eind

Figuur 4: Bijdrage van verschillende partijen aan de onderdelen van het voedingsbeleid.

Source: (Gezonde voeding, van begin tot eind, 2008, p. 22).

7.2 Poster SENS food labelling system France

NO RT **INRA** SCIENCE & IMPACT **VAB nutrition** **MS Nutrition** La solution quantitative **EuroFIR** European Food Information Resource **POSTER SENS SYSTEM N°4**

In nutritionally adequate diets, the frequency of consumption of foods from the 4 SENS* classes follows a hierarchical progression, from Class-1 (high frequency) to Class-4 (low frequency)

*Système d'Etiquetage Nutritionnel Simplifié [Simplified nutritional labelling system]

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INTRODUCTION
Dietary advices, which aimed at promoting healthy eating, must consider not only the nutritional profile of foods but also the amount consumed (portion size) and the frequency of consumption.
The SENS nutrient profiling system distributes foods into 4 classes, from the most (Class-1) to the least (Class-4) favourable profile.

OBJECTIVES
To test the relevance of associating to each SENS class a wording related to the frequency of consumption.

MATERIALS AND METHODS

Classification of foods and definition of portion-sizes
• The 1192 foods of the French food database were assigned into the 4 classes defined by the nutrient profiling system (Figure 1).
• A standard portion-size was defined for each food, based on published references (Table 1).
• The distribution of the portion-sizes of foods was assessed within each class of SENS.

Figure 1. The four SENS classes

Modelling nutritionally adequate diets (See Poster SENS system N°3)
• For each individual diet consumed by adults in the nationally representative INCA2 dietary survey (n=1719 observed diets), an optimized diet (i.e. iso-energetic, nutritionally adequate and as close as possible to the subject's observed food choices), was designed with modelling.
• All the optimized diets respected official recommendations on nutrients (protein, fats, carbohydrates, fibers, essential fatty acids, vitamins, minerals, sodium, free sugars, saturated fats, cholesterol).

RESULTS

1/ Portion size distributions in the French food database by SENS classes
A high variability of portion-sizes was observed within each SENS class. Class-1 and Class-2 foods had higher portion-sizes (median 100g) than Class-3 and Class-4 foods (median = 45g and 50g, respectively), which is consistent with their lower energy density (Figure 2).

Figure 2. Distribution of portion-sizes (g/d) of foods by SENS classes

2/ Average frequencies by SENS classes, in observed and optimized diets
In the observed diets, an average of 6 portions/day of foods from each class was consumed (6.2; 6.0; 5.6 and 6.1 portions/day in classes 1, 2, 3 and 4, respectively; P<0.05) (Figure 3).
In the optimized diets, the frequencies of consumption differed largely between the 4 SENS classes, and followed a coherent and significant progression regarding the number of portions/day:
9.3 (including six portions/d of fruit and vegetables) >> 6.5 > 5.2 >> 3.7 for the class 1, 2, 3, 4, respectively (P<5%).

Figure 3. Food frequency (portions/day) in observed and optimised diets for each SENS class

3/ Percentage of subjects complying with optimization-induced frequency increase for Classes 1 and 2 and decrease for Classes 3 and 4
The optimisation (i.e. reaching nutritional adequacy):
• increased the frequency of Class-1 foods (98.3% of subjects) and Class-2 foods (66.8%);
• decreased that of Class-3 (57.2%) and Class-4 foods (94.8%) (Figures 4a and 4b).

Figure 4a. Percentage of subjects for which the optimisation increased the frequency of Class-1 and Class-2 foods

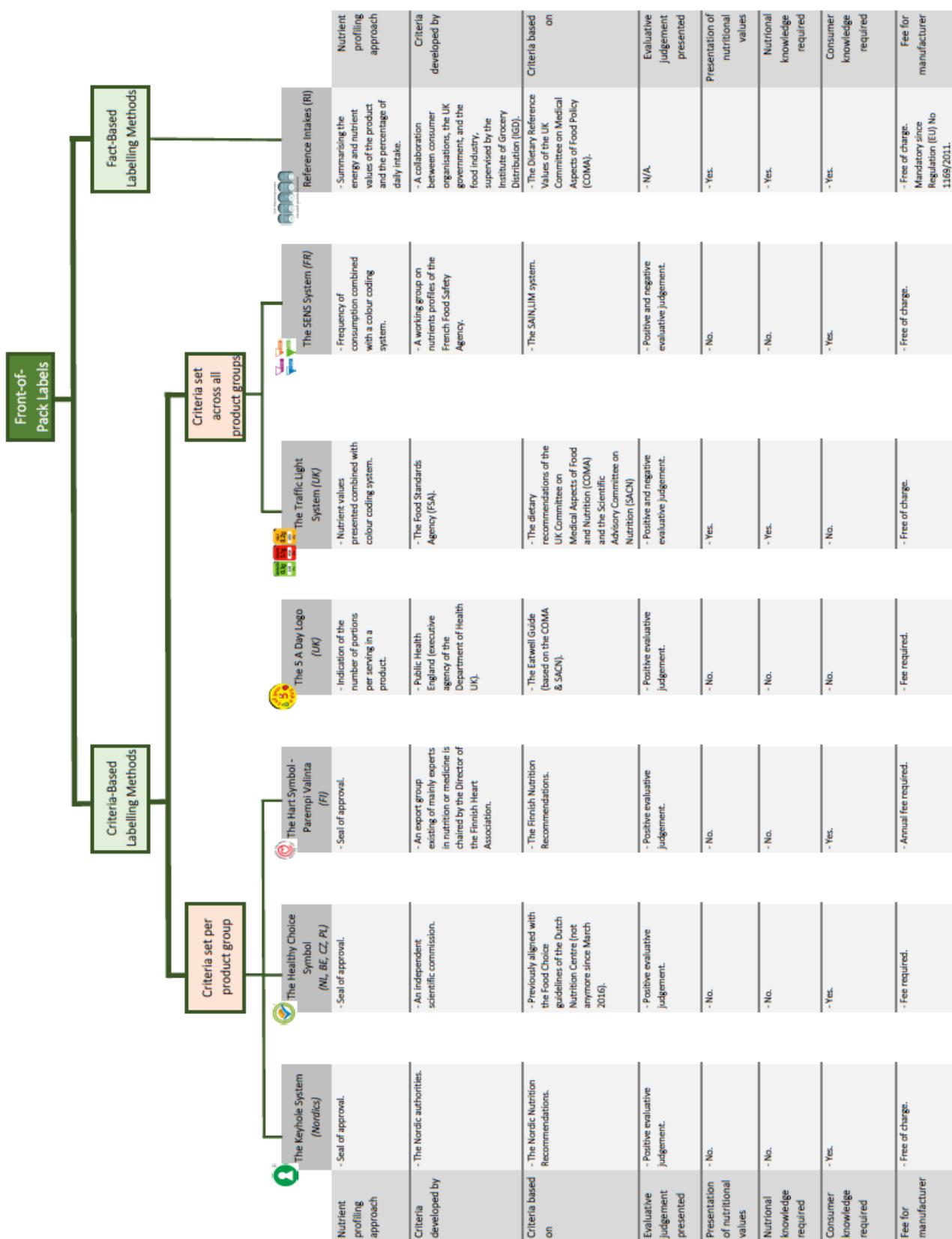
Figure 4b. Percentage of subjects for which the optimisation decreased the frequency of Class-3 and Class-4 foods

CONCLUSION
• In diets optimized to fit nutritional recommendations, the daily frequency of consumption of foods from Class-1 (and Class-2) was much higher (higher) and the frequency of consumption of foods from Class-4 (and Class-3) was much lower (lower) than in the observed diets.
• It appears relevant to accompany the simplified nutritional labelling based on the SENS nutrient profiling system with simple and consumer-friendly messages advising that Class-1 (including all kind of fruit and vegetables) and Class-2 foods should be eaten more often and that foods belonging to Class-3 and Class-4 of the SENS should be eaten less often.

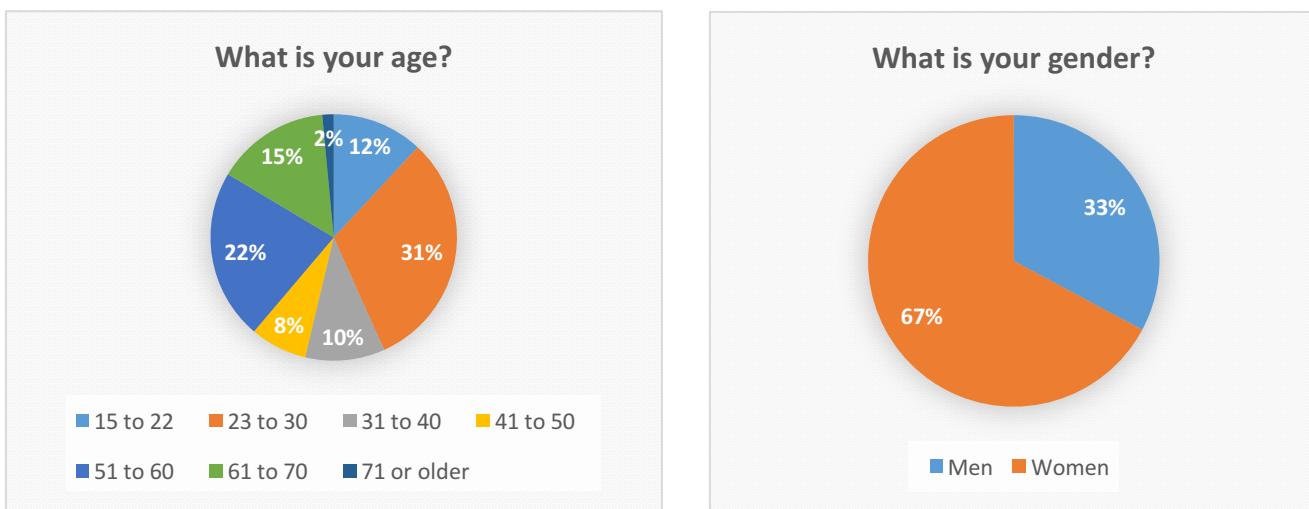
Contacts: matthieu.mailloit@ms-nutrition.com and nicole.darmon@univ-amu.fr

Source: (Mailloit et all, n.d.).

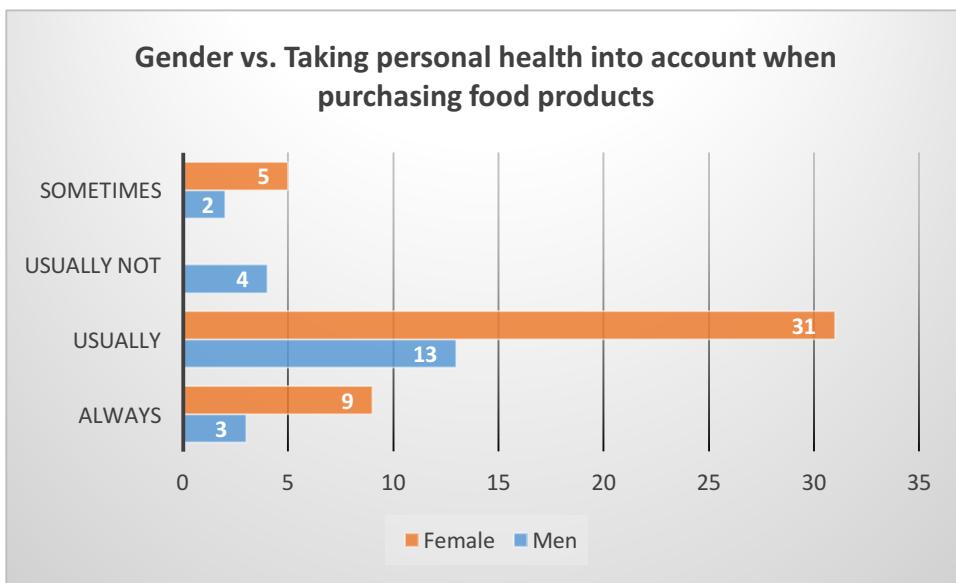
7.3 Overview of front-of-pack labelling approaches in Europe



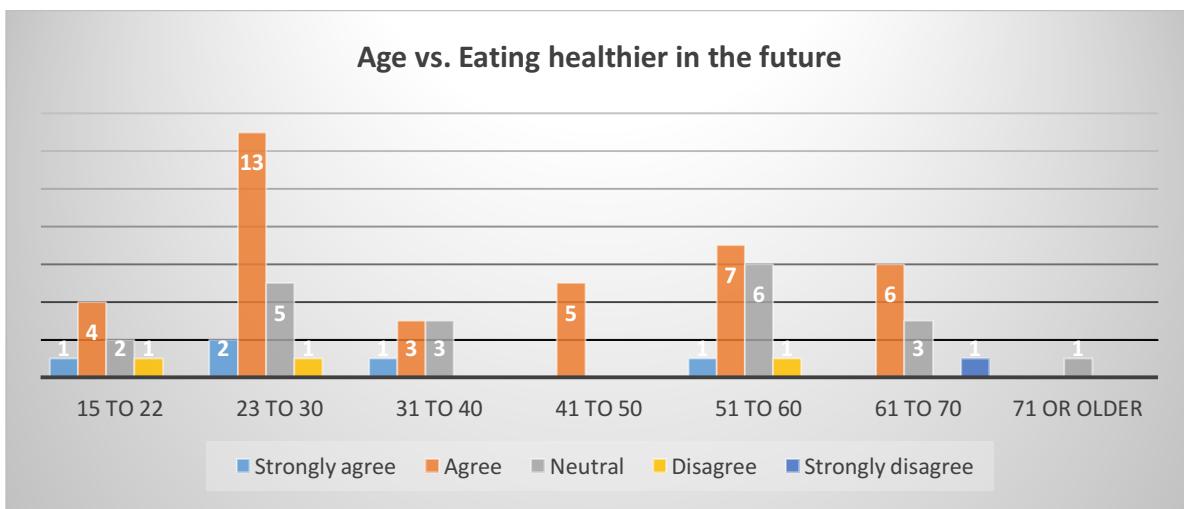
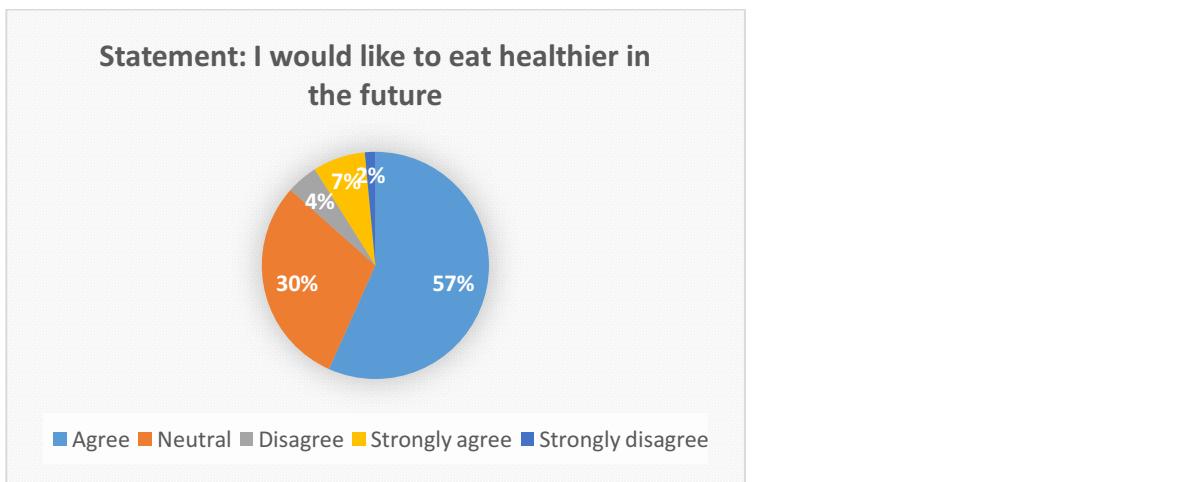
7.4 Survey – age and gender indication



7.5 Survey – gender vs. taking personal health into account when purchasing food products

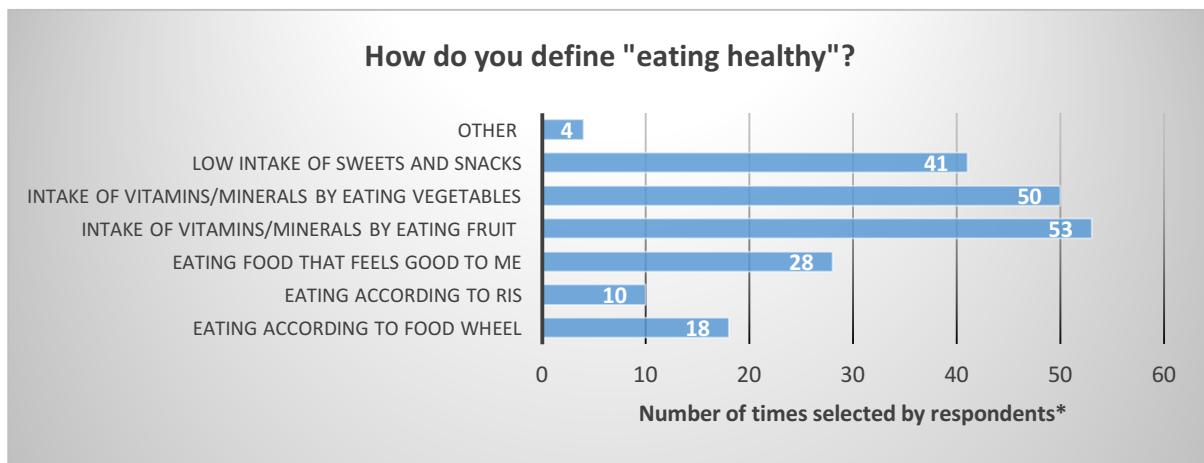


7.6 Survey – statement: I would like to eat healthier in the future



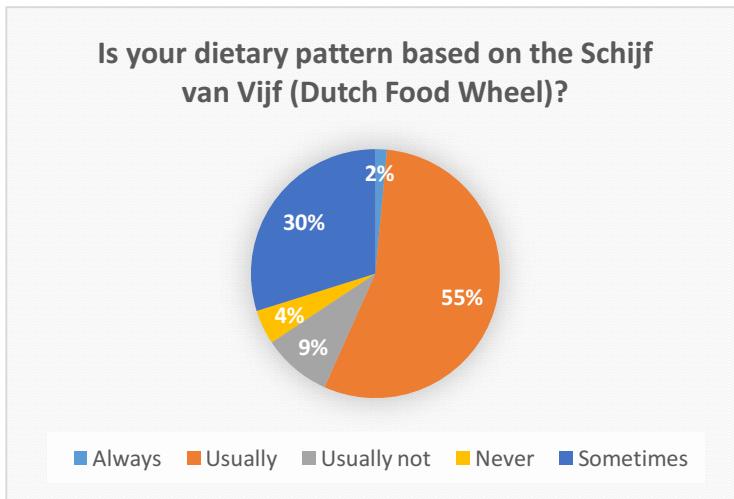
The numbers indicate the number of respondents.

7.7 Survey – statement: I would like to eat healthier in the future

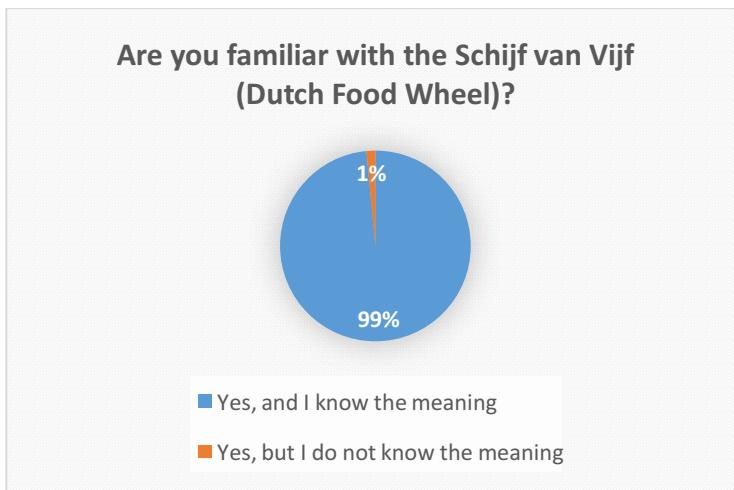


*The respondents were allowed to select multiple answers.

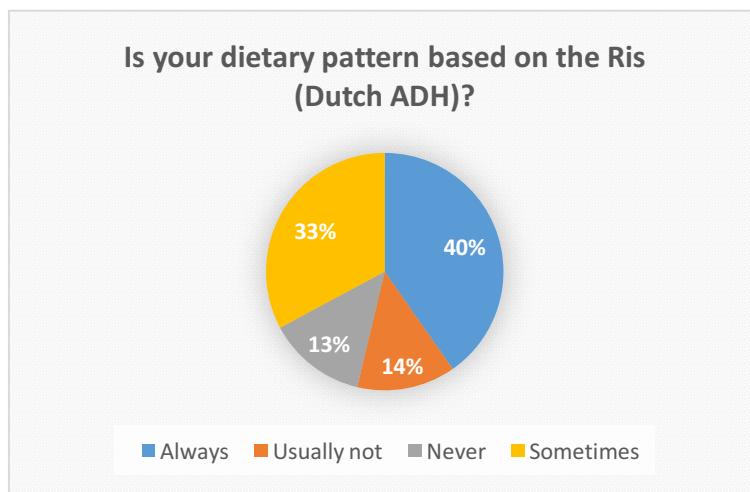
7.8 Survey – dietary pattern based on the Dutch Food Wheel



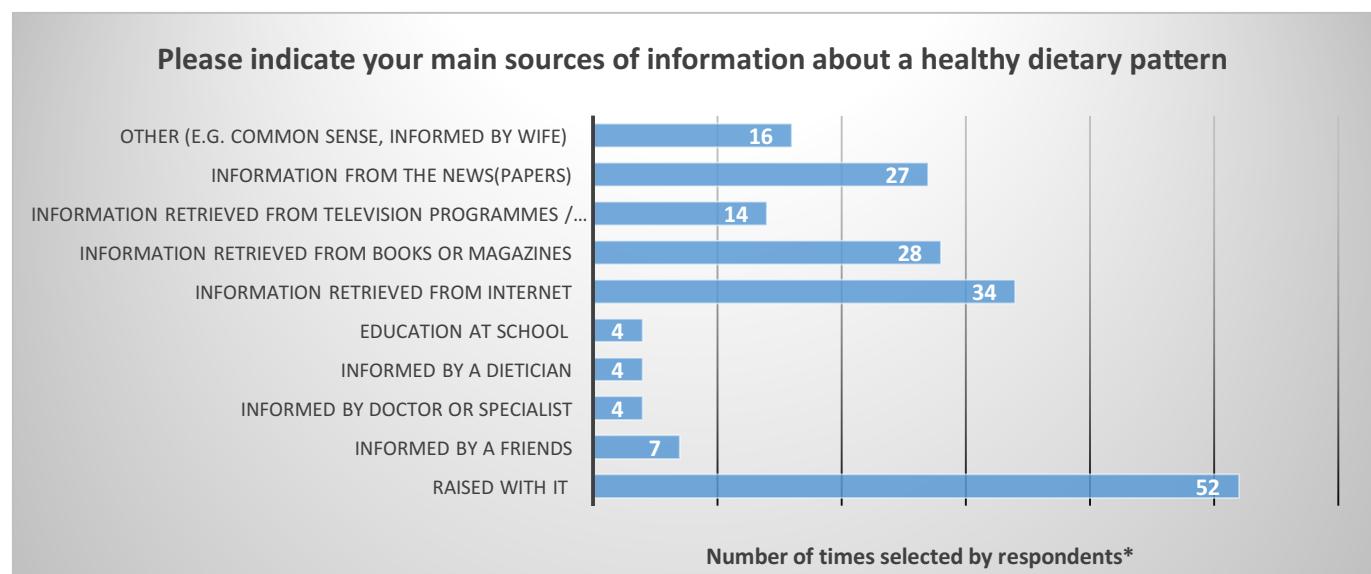
7.9 Survey – familiarity of the Dutch Food Wheel



7.10 Survey – dietary pattern based on the Dutch RIs (ADH)

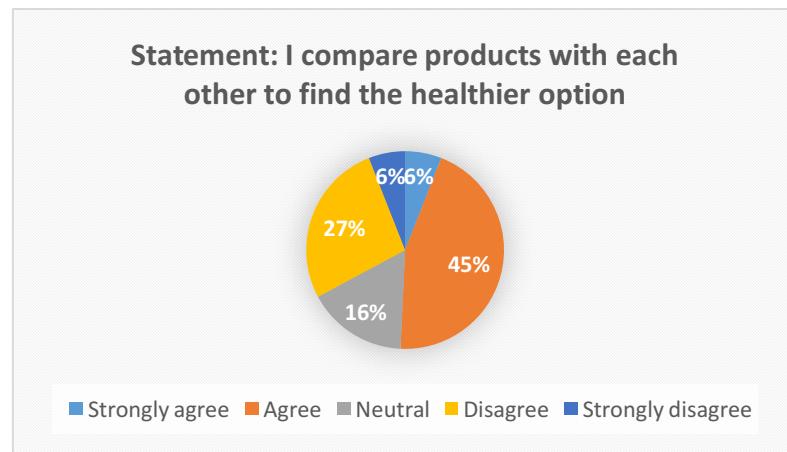


7.11 Survey – sources of information about healthy dietary patterns

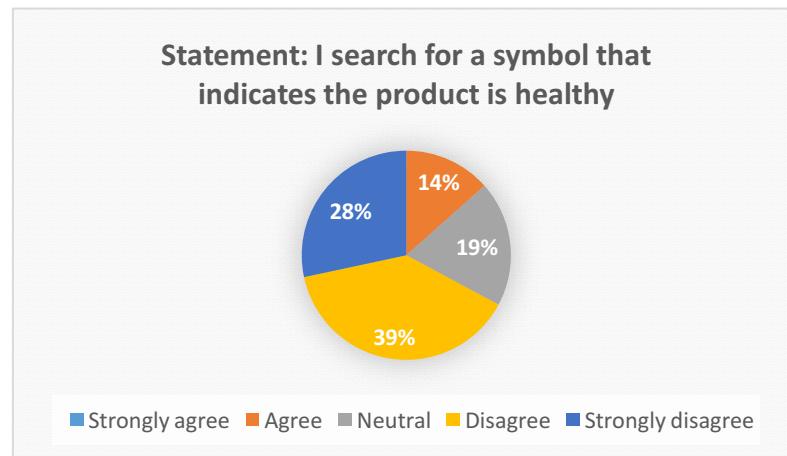


*The respondents were allowed to select multiple answers.

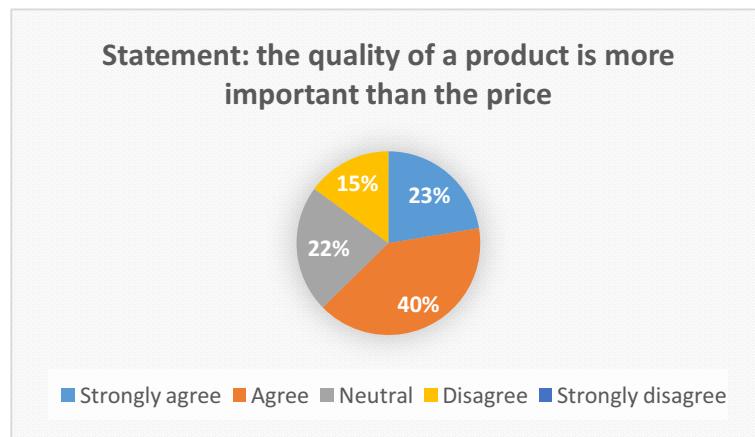
7.12 Survey – statement: comparing products to find the healthiest option



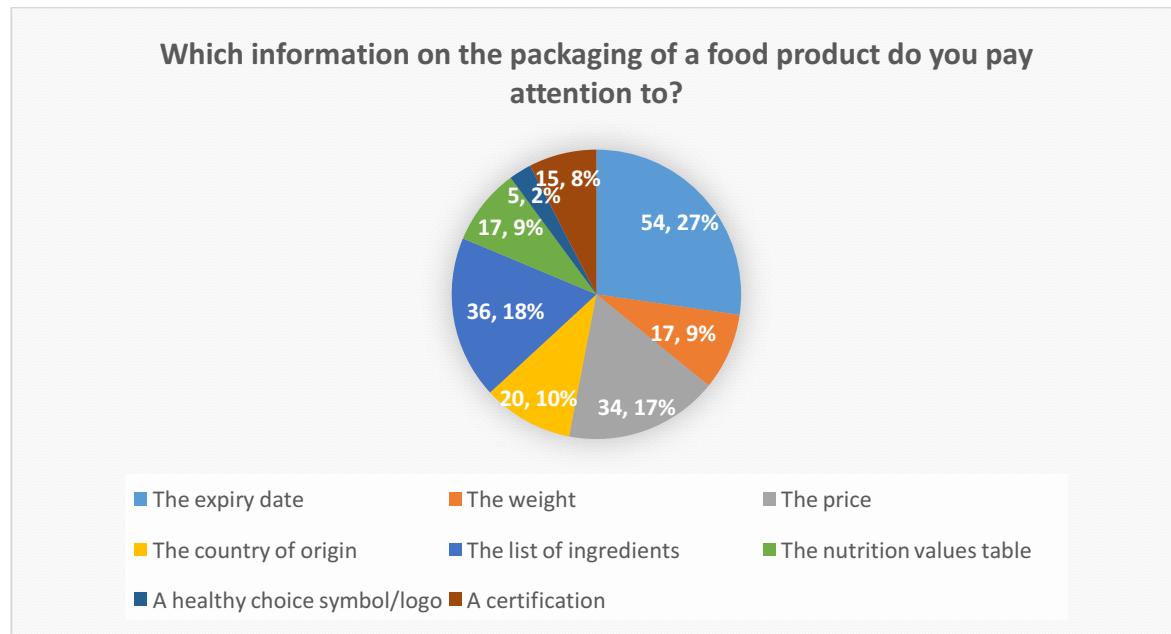
7.13 Survey – statement: search for a symbol that indicates the product is healthy



7.14 Survey – statement: quality of product is more important than price

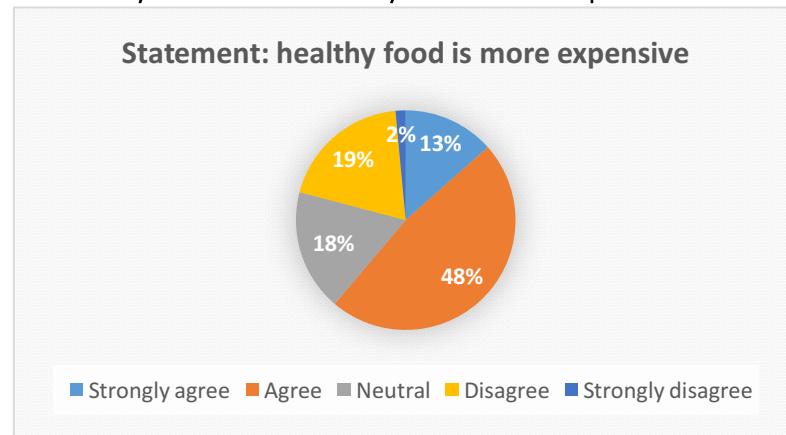


7.15 Survey – indication of specific information on the packaging is read



Please note, that the respondents were allowed to select multiple answers.

7.16 Survey – statement: healthy food is more expensive

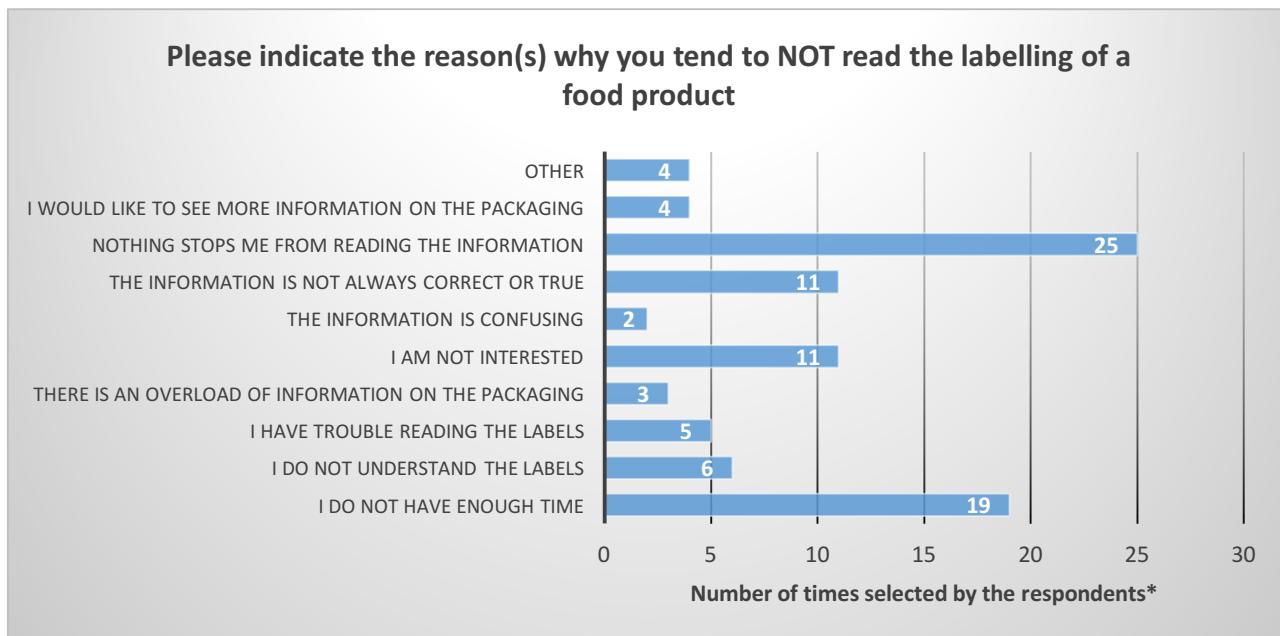


7.17 Survey – reasons for reading food labels



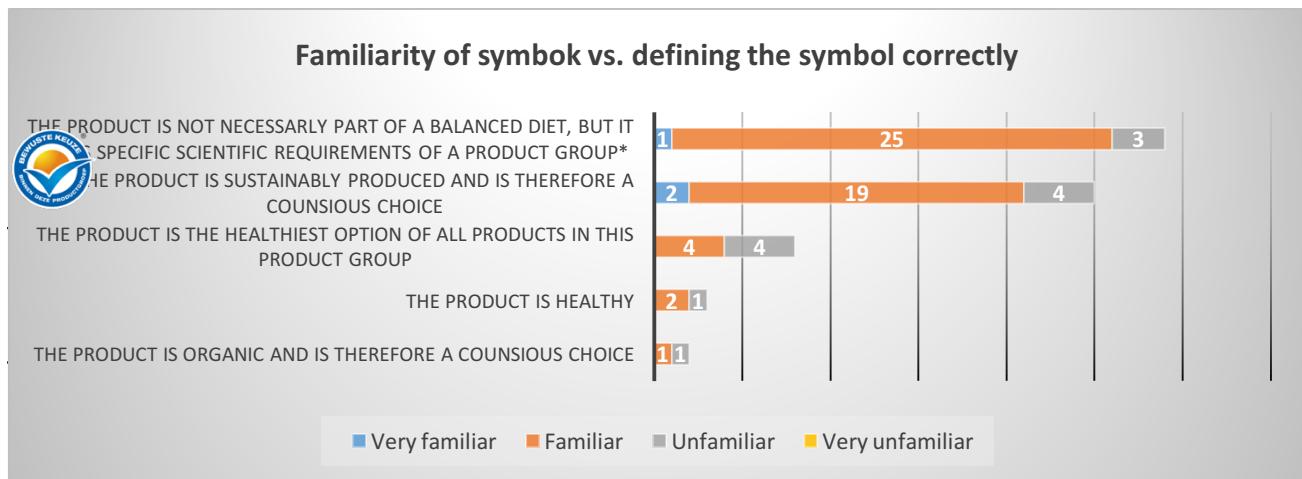
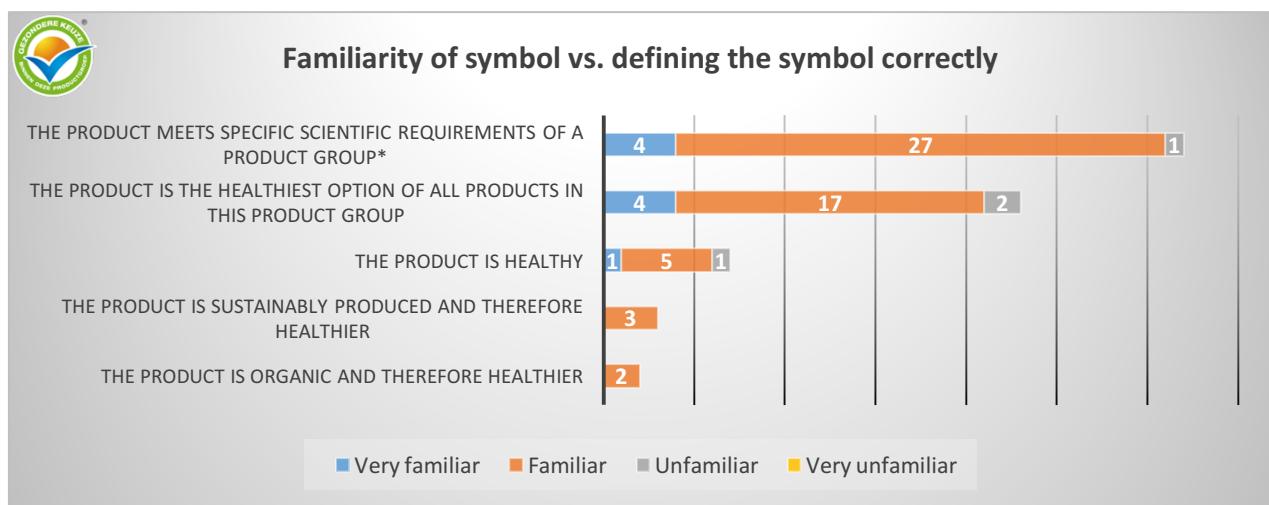
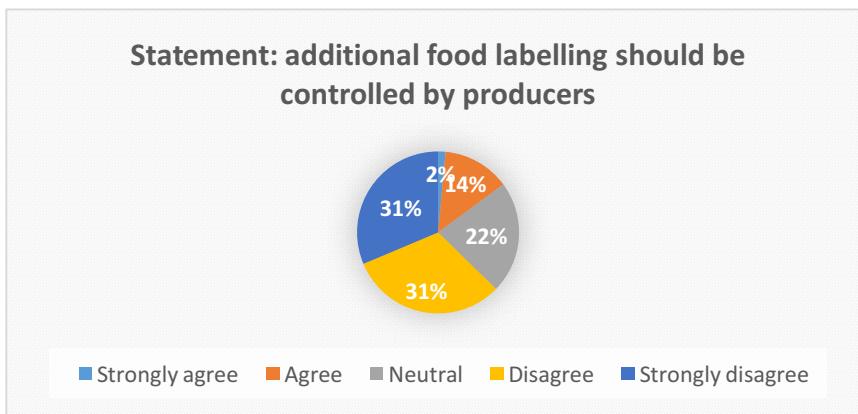
*The respondents were allowed to select multiple answers.

7.18 Survey – reasons for not reading food labels



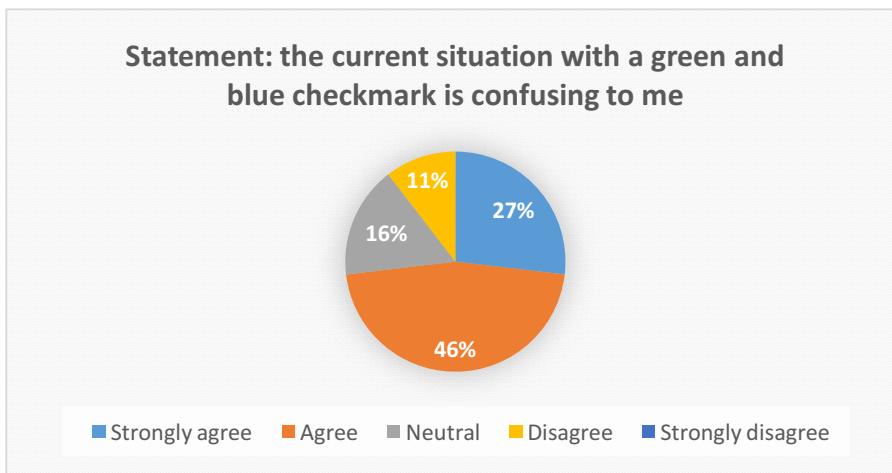
*The respondents were allowed to select multiple answers.

7.19 Survey – statement: additional food labelling should be controlled by producers

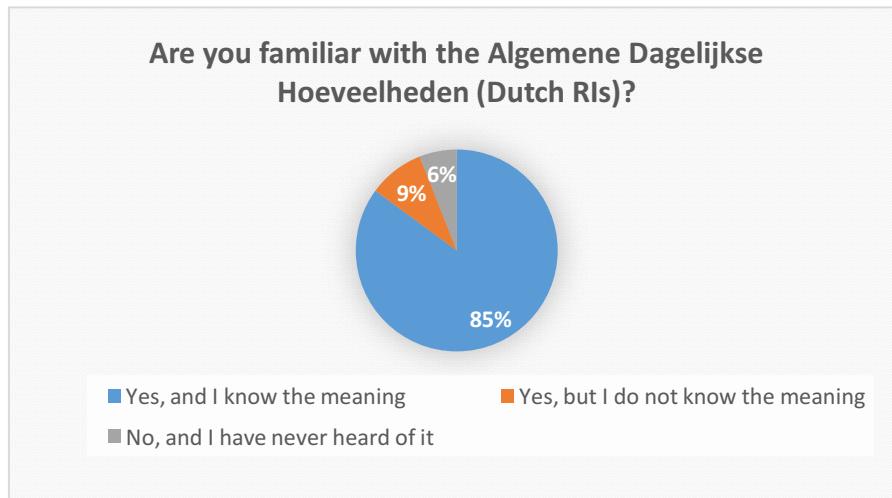


*The correct answer to the question: what is the meaning of this symbol?

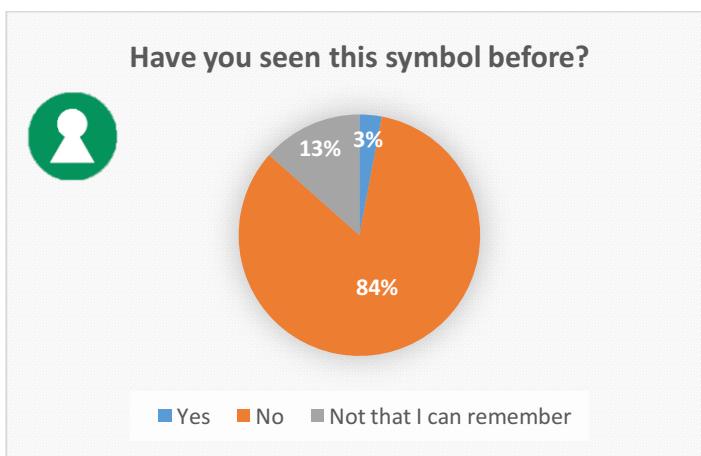
7.22 Survey – the current situation with the green and blue checkmarks works confusing



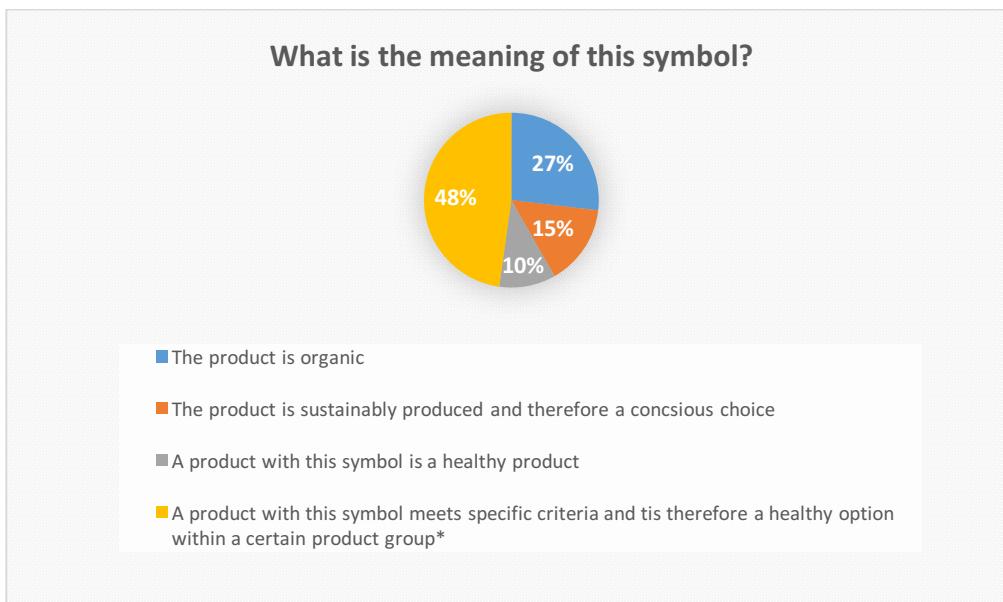
7.23 Survey – familiarity of the Reference Intakes (ADH)



7.24 Survey – familiarity of The Keyhole symbol

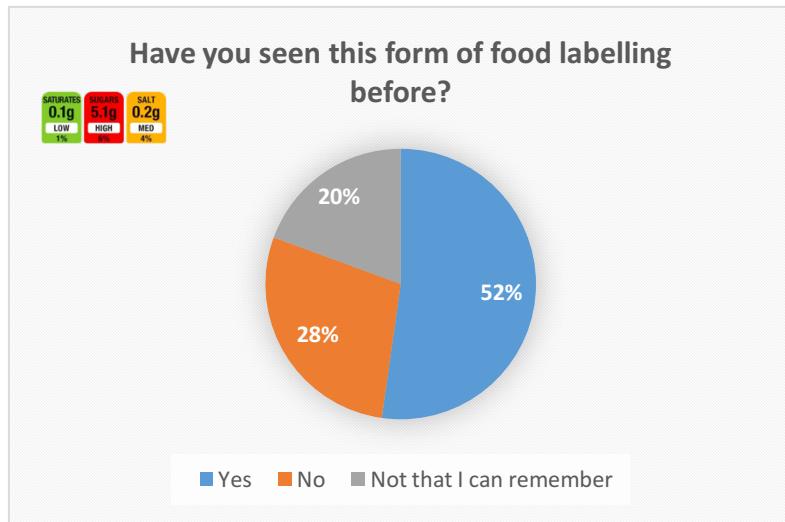


7.25 Survey – defining The Keyhole symbol



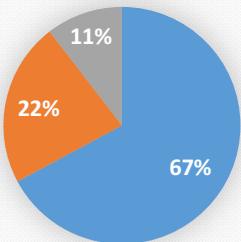
*The correct answer.

7.26 Survey – familiarity of the Traffic Light System



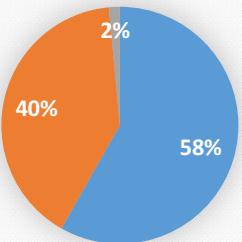
7.27 Survey – defining the colour-coding system

What is the meaning of the colour red?



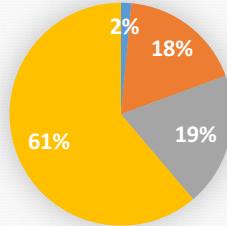
- The product contains a high amount of fat, salt or sugar and should therefore not be eaten often
- The product contains a high amount of fat, salt or sugar and could therefore be eaten occasionally
- The product should not be eaten
- The product contains a high amount of fat, salt or sugar and should therefore be taken off the market

What is the meaning of the colour orange?



- The product contains an average amount of fat, salt or sugar and is therefore an OK choice
- The product contains a high amount of fat, salt or sugar and should therefore not be eaten often
- The product should not be eaten
- The product contains a high amount of fat, salt or sugar and should therefore be taken off the market

What is the meaning of the colour green?



- The product is organic
- The product contains almost or no fat, sugar or salt
- The product contains a low amount of fat, salt or sugar and is a healthy product
- The product contains a low amount of fat, salt or sugar and is a healthy choice

7.28 Personal interview – Reuver, M.

Transcription of personal interview with Mrs. Monique Reuver, dietician, 10th of June 2016

FL: Laten we beginnen met kort voorstellen, wie u bent en wat u bent?

MR: Ik ben Monique Reuver en ik ben diëtiste en ik werk in Leidschendam. Ik heb twee speciale aandachtsgebieden, eetstoornissen en psychiatrie en ik werk nu bijna 27 jaar binnen deze vakgebieden. Ik heb hier ook de specifieke deskundigheid =, ik ben hier voor bevoegd. Dit betekent dat ik niet een allround diëtiste ben.

FL: Als het aankomt op een gezond voedingspatroon, waar haal je dan de informatie vandaan en waar baseer je dat op?

MR: Ik gebruik wel van het voedingscentrum het model, de schijf van vijf, maar met name meer om met behulp van hele praktische informatie laten zien wat zijn nou de aanbevolen hoeveelheden aan voedingsmiddelen en die worden dan natuurlijk vertaald in ‘wat heb je nodig aan alle micro- en macronutriënten’. Voor de rest, is dat een beetje de basis omdat wij bij zowel psychiatrie en eetstoornissen er nog heel veel andere factoren een rol spelen voor een gezond of een volwaardig voedingspatroon. Maar als basis gebruik ik wel de schijf van vijf en specifieke informatie haal je natuurlijk ook vanuit het voedingscentrum omdat dat natuurlijk een onafhankelijk model en bureau is.

FL: u heeft het over de schijf van vijf, wat houdt dit dan precies in voor een volwassen man of vrouw bijvoorbeeld, wat ook weer verschillend is natuurlijk.

MR: Ja dat is zeker verschillend en daarnaast wordt er onderscheid gemaakt in leeftijdscategorieën en tussen geslacht. Ook of je zwanger bent of dat je borstvoeding geeft, daar zitten verschillen in. Maar voor de rest is de maaltijdschijf puur gebaseerd op wat zijn nu aan vakken die we specifiek hebben onderverdeeld in alle benodigde voedingsstoffen. Bijvoorbeeld, het vak van de groente en fruit waar je met name de vitamine C en vezels uithaalt, het vak van het vlees, vis en kip waar je je dierlijke eiwitten uithaalt en je calcium bijvoorbeeld weer uit het vak van de zuivel. Dat kan je dus als basis een beetje interpreteren, maar het voordeel is ook dat er heel veel ruimte is voor individuele behoeften en wensen. Wil je een mediterrane invloed qua voeding of menu is dat mogelijk, maar ook als je vegetarisch wilt is dat mogelijk, dus daar is veel rekening mee gehouden met specifieke wensen en invloeden van buitenaf. Dus ook de Europese invloeden.

FL: We hebben sinds kort een nieuwe schijf van vijf, wat is dan de grote verandering geweest ten opzichte van de vorige schijf van vijf?

MR: Nou vooral dat laatste wat ik net vertelde, want hiervoor was het toch wel echt het Nederlandse voedingspatroon met de aardappelen, de vlees en groente als belangrijkste. Wat de grote verandering is... dat zijn er eigenlijk wel meerdere. De hoeveelheden brood hebben ze toch wel een beetje losgelaten omdat mensen toch wel steeds meer broodvervangers gaan gebruiken en daar zijn ook wel adviezen op naar toe gespitst. Voor de rest zijn peulvruchten en noten zijn meer naar voren gekomen om als gezondheidsproduct te zien en daarnaast hebben ze bijvoorbeeld nu ook adviezen gegeven voor thee! Drie glazen thee per dag en dat stond er voorheen helemaal niet in en koffie ook niet. Ja dat is toch wel een groot verschil...

FL: En de vruchtsappen zijn eruit gehaald toch?

MR: Ja, maar die stonden eigenlijk al niet heel direct in de schijf van vijf al. Wat ze toen wel zeiden was fruit of ongezoete dranken, maar die adviseren ze nu in principe ook niet meer i.v.m. ook wel het suiker en het effect dat het heeft op het tandglazuur.

FL: Er is eigenlijk dus een beetje gekeken naar de trends ook wel spelen in Nederland en die hebben ze eigenlijk toegestaan.

MR: Ja, maar de belangrijkste aanpassing blijft natuurlijk wel de onderzoeken van de Gezondheidsraad wat ze als basis nemen dat alles moet wel een gezondheidseffect hebben of juist gezondheidsrisico's verminderen. Daarom hebben ze ook bijvoorbeeld gezegd niet meer dan 500gram vlees in de week en

dan het liefst zo min mogelijk bewerkt vlees ook zuinig zijn met rood vlees. Zo hebben ze dat allemaal wat meer onderverdeeld.

FL: Dat is ook wel een stukje omrent duurzaamheid, als het advies van minder vlees wordt gegeven.

MR: Ja!

FL: De aanbevolen dagelijkse hoeveelheden, worden die dan ook aangegeven bij de schijf van vijf?

MR: niet in de schijf zelf, maar in de verdere vertalingen en achtergrondinformatie wel. Maar het blijft wel heel belangrijk om daarnaar te kijken als je voedingspatroon wat afwijkend is. Mijn ervaring is dat niet iedereen precies die hoeveelheden allemaal gebruikt op een dag, en dat je dan een deskundige mee laat kijken om te zeggen: 'jij houdt helemaal niet van zuivel, hoe kunnen we dan toch zorgen dat je voldoende calcium binnen krijgt'.

FL: Zijn daar ook veranderingen in gekomen nu met de nieuwe schijf van vijf, de ADH?

MR: Nee, die zijn ook veranderd. Groente is bijvoorbeeld van 200 naar 250 gram gegaan, er is nu een aanbeveling van 25 gram noten wat er daarvoor nog niet in zat en een aanbeveling voor twee keer vis per week is dat één keer vis per week en dan vooral vette vissoorten. Dus je ziet, daarin zijn ook wel weer hoeveelheden aangepast.

FL: Dus eigenlijk is er een nieuwe schijf van vijf gekomen vanwege de trends die er nu lopen in Nederland omdat die andere verouderd was.

MR: Ja, maar wat ik net ook zei... op basis van de onderzoeken zoals die er liggen van de Gezondheidsraad... wat heeft nou een gezondheidseffect en wat juist nou net niet. Wat moet je nou juist vermijden en wat moet je nou juist nu meer eten.

FL: Wat is dan, in uw opinie, belangrijke informatie die consumenten moeten weten. Dus wat moet er nou eigenlijk gecommuniceerd worden naar de consument wat is belangrijk is over zo'n gezond voedingspatroon. In het algemeen, los van etiketten. Wat is dan het allerbelangrijkste wat een consument moet weten?

MR: Over een gezond voedingspatroon? Ik denk waar de consument de informatie kan vinden en hoe de consument zijn eigen voedingspatroon kan optimaliseren. Niet dat je in allerlei gezondheidstrends meegaat omdat je niet zo goed weet of je wel of niet gezond eet en daar onzeker over bent. En dat je denkt, nou ik lees altijd dat je geen koolhydraten mag eten of dat gluten slecht zijn en dat je dus eigenlijk goede neutrale informatie een weg in slaat die misschien voor jou helemaal niet zo een goed voedingspatroon is. Ik denk dat dat vooral belangrijk is, dat jij weet waar kan ik de informatie vinden en dat die voor jou wel helder moet zijn.

FL: Ja, want hoe kan de consument deze informatie vinden?

MR: Nou ik denk dat iedereen tegenwoordig zijn informatie op internet zoekt, alleen je moet kijken naar wat betrouwbare bronnen zijn. Daar moet je dus eerst een klein beetje naar kijken: is de informatie die ik vind betrouwbaar en kan ik daar iets mee?

FL: Ja, hoe weet je dat?

MR: Nou, ik heb daar zelfs een hele workshop over gehad. Hoe je kan kijken naar artikelen, sites en webshops, hoe je kan zien of iets betrouwbaar is of dat het juist alleen uit een soort eigen verhaal van mensen is. Iedereen kan natuurlijk wat op internet zetten en wat kan je daar dan van waarheid op aannemen.

FL: Dat is eigenlijk best wel lastig...

MR: Ja, want weet je bijvoorbeeld dat het Voedingscentrum een onafhankelijk instituut is... dat weet eigenlijk iedereen wel. Ik denk dat als je dat als basis gebruikt dan kun je daarvan uit weer verder gaan zoeken.

FL: Denk je dat de consumenten dan op dit moment voldoende wordt geïnformeerd daarover?

MR: Wat bedoel je, voldoende daarover?

FL: Dat het duidelijk genoeg nu naar de consument... naar buiten wordt gebracht via de media, of iets in die richting, dat zo'n website als het Voedingscentrum een goede guideline is.

MR: Ja, dat denk ik op zich wel. Ze hebben natuurlijk bij de lancering in maart... nee dat is al eerder geweest, hebben ze natuurlijk heel veel reclame aan gegeven maar dat is nu, ja, dat hoor je nu veel minder en ik vind eigenlijk dat er in heel veel programma's op televisie dat een Voedingscentrum wel een wat meer prominentere rol in mag vervullen.

FL: Ja, zodat het duidelijk wordt dat de informatie daar gevonden kan worden i.p.v. dat mensen het allemaal van blogs of wat dan ook gaan halen. Duidelijk. En als je dan nu kijkt naar de verpakkingen van de Nederlandse voedselproducten, daar vind je niet echt een schijf van vijf. Dat is niet te vinden erop. Wat is dan wel belangrijk, in uw opinie, op een verpakking wat er nu staat wat handig is voor de consument om dus zo'n gezond voedingspatroon te volgen zoiets als de Schijf van Vijf of de ADH. Wat is dan het belangrijkste wat er nu op een verpakking staat?

MR: Ik weet niet of je direct een link kan leggen naar de schijf van vijf omdat wat in principe belangrijk is dat je eerst kijkt naar welke voedingsmiddelen heb je nu nodig en daar is het voor belangrijk dat je... neem maar iets als bijvoorbeeld wat ze nu proloneren: veel meer volkoren producten. Dus als jij de keuze hebt tussen macaroni of volkorenmacaroni moet dus op de verpakking staan of iets volkoren is of dat er vezels in zitten. Dat is belangrijk. Ook zout is een nutriënt wat belangrijk is dat duidelijk naar voren komt, maar eigenlijk is dat met alle macronutriënten is dat ook belangrijk. Hoeveel vet zit erin, hoeveel koolhydraten erin. In principe moet het zo zijn dat het, voor mij, duidelijk leesbaar is en ook dat een etiket wat... ja... wat meer beeldvorming, wat ze bijvoorbeeld meer in Zweden doen. Daar hebben ze heel duidelijk etiketten in een bepaald plaatje dat helder is of het nou gezond is of niet en wat er eigenlijk in zit. Dat mis ik nog weleens met producten hier in Nederland. Dat je denkt, en dat hoeven natuurlijk geen Nederlandse producten te zijn, maar de fabrikant is natuurlijk degene die het etiket erop zet en niet de winkelier.

FL: maar, die moeten dit wel aan de hand van een aantal regels en richtlijnen zijn opgesteld. Dat zijn Europese richtlijnen, dus in principe hebben de EU landen dezelfde etikettering op hun verpakkingen. Maar daarnaast zijn ze nog wel vrij om een stukje eigen input vanuit het land er dan op te zetten. En wij hebben dan GDA's op de voorkant van de verpakking vaak dus daar staan nutriënten per portie aangegeven en het VK hebben ze dan weer gedaan dat die een kleurensysteem hebben, dus dan geeft het aan dat als er veel zout in zit het een rood vakje krijgt en als er gemiddeld zout in zit is het oranje en als er weinig zout in zit is het groen.

MR: Maar hebben ze dat dan alleen voor zout gedaan? Of hebben ze dat dan ook voor alle nutriënten gedaan?

FL: Voor alle nutriënten. Voor verzadigd en onverzadigd vet, voor suiker, calorieën en zout. De hoofd nutriënten in ieder geval. En op die manier worden die dus duidelijk aangegeven of er dan veel van of niet in zit.

MR: Dat lijkt mij dus heel duidelijk, omdat je vaak keuzes maakt op basis van die nutriënten.

FL: Ja, want je hebt op verpakkingen dus op de voorkant iets en als je het omdraait staat het nogmaals per 100 gram en dan heb je nog een lijst met ingrediënten. Is dat denk je voldoende, dat deze informatie in principe oké moet zijn voor een consument

MR: Ja dat denk ik wel, want als je er nog meer op gaat zetten... ik vind nu soms al zoveel.

FL: Wat is dan al teveel?

MR: Nou met name al die extra stoffen toegevoegd onder de ingrediënten declaratie of waardes. Dat je denkt, wauw, al die e-nummers en stoffen. Het moet er wel in zitten maar...

FL: Wat dat nou precies allemaal betekent...

MR: Ja ik denk dat dat voor veel mensen wel ingewikkeld is.

FL: Ja. We hebben daarnaast hier in Nederland het Vinkje. Het groene en het blauwe vinkje. Kent u die?

MR: Ja.

FL: Denk je dat dit een goed systeem is voor consumenten om een gezondere keuze te maken in producten?

MR: Ja dat vind ik wel heel lastig. Als eerste blik misschien wel maar dat het toch wel heel goed is dat je er verder in kijkt. Wat er precies in zit.

FL: Ja, want het verschil tussen het Vinkje en dat systeem wat ze in het VK hebben met de kleuren, het Vinkje is per productgroep. Dus er wordt per productgroep gekeken naar wat is een gezondere keuze, dat betekent dat er dus ook producten met een Vinkje zijn voor de productgroep vetten, zoals mayonaise. Terwijl bij het systeem in het VK is geen onderscheid gemaakt, dat is dus voor alle productgroepen hetzelfde.

MR: Maar dat is ook meer voor nutriënten toch? Op basis van nutriënten en de andere per productgroep. Maar dan zullen ze wel gekeken hebben bij het Vinkje naar vet, zout en het totaal plaatje.

FL: Ja klopt, er zijn criteria opgesteld voor of je nou wel of niet zo'n Vinkje op je verpakking kan krijgen. En als je dan dus voldoet aan die criteria dan zit er wel minder zout, vet of suiker in zit en dan kan je dus zo'n groen Vinkje krijgen. Dat is wat we hier in Nederland hebben en waar let u zelf op als je opzoekt bent naar een gezonder product of gezondere keuze?

MR: Ervanuit gaan dat ik opzoek ben naar een gezondere keuze natuurlijk... Nou mijn policy is eigenlijk dat ik heel veel gebruik maak van gezonde en natuurlijke producten waarbij natuurlijk ook voedingsmiddelen verpakt zijn maar dan nog zo min mogelijk bewerkt. Dus het werken met pakjes en dat soort dingen, dat doe ik niet zoveel. En ik ben wel van het brood, beleg en boter. Maar daar weet ik natuurlijk beroepsmatig van wat gezond is. Maar mijn keuze gaat ook heel vaak uit naar wat ik lekker vind en dan maak ik de keus om wat minder te nemen maar dan wel wat ik lekker vind en wat goed binnen mijn voedingspatroon past. Ik gebruikt bijvoorbeeld wel 30+ kaas...

FL: Ah ja, dus dan pak je wel de gezondere variant van kaas. Dat wordt ook geadviseerd toch, door het Voedingscentrum?

MR: Ja!

FL: Om alles even kort samen te vatten. Als een consument, los van de verpakkingen, een gezond voedingspatroon zou willen volgen dan is het het beste om een kijkje te nemen op de website van het Voedingscentrum...

MR: Ja, die is ook verdeeld per leeftijdscategorie en geslacht, zo kan je kijken wat de aanbevolen hoeveelheden voedingsmiddelen je nodig hebt.

FL: Echter zou dat dus nog wat beter gecommuniceerd kunnen worden naar de Nederlandse consument. Dat werd eigenlijk alleen gecommuniceerd met de herlancering van de nieuwe Schijf van Vijf, maar dat het nu alweer een beetje afzwakt en als mensen het dus puur van de verpakkingen willen hebben dan zou het dus het belangrijkste zijn om te kijken naar de nutriënten van hoeveel zout, vet of suikers erin zitten. Dat is eigenlijk de conclusie nu.

MR: Ja, dat is het wel ja.

FL: Nou dan weet ik genoeg. Dank u wel voor uw tijd.

7.29 Telephonic interview – Standhardt, G.

Transcription of telephonic interview with Mr. Ger Standhardt, Manager Development & Projects at NVC, April 8th, 2016.

FL: In een document over de wetswijzing omtrent voedseletiketten van December 2014 staat dat "Elk land kan hiervoor zijn eigen regels vaststellen". Hoe dit in Nederland opgevat gaat worden is dus nog niet bekend. (artikel 44). Ondanks het feit dat een Verordening direct geldt voor alle Europese lidstaten, houden de verschillende landen de mogelijkheid om aanvullende eigen regels op te stellen. Dit kan ertoe leiden dat er verschillen zullen blijven tussen de nationale regelgevingen.

GS: Het overbrengen van informatie in algemeen. Verschillende organisaties zetten zich om een zogenaamde guidance uitbrengen op nationaal niveau. Meest betaalbare is die van de EU zelf. Belangrijkste andere is de FoodDrinkEurope. De EU doet zijn best om wetgeving te schrijven, zeker als je 28 lidstaten hebben die allemaal verschillend denken. Dan hebben we het niet eens over een hele uitgebreide wetgeving. Dan nog, bestaan er altijd onduidelijkheden in hoe die geïnterpreteerd moeten worden. De Europese Commissie komt uiteindelijk ook altijd met een guidance document – richtsnoer. Eigenlijk legt Europa ons niets op, want eigenlijk wordt het door iedereen goed gekeurd. Door elk land. Er is geen sprake van iets opleggen. We beslissen er uiteindelijk met z'n allen over.

Wetgeving is verplicht. De Europese wetgeving omtrent etikettering waren eerst richtlijnen voor alle lidstaten. Vanaf 2011 is dit een verordening geworden. Dit houdt in, dat vanaf dat moment alle EU-landen moeten hanteren volgend die wet. Geldig economische ruimte. Noorwegen, IJsland ook. Dezelfde food informatie naar de consumenten toe. Nadruk ligt op ingrediënten declaraties en allergenen, vooral het niet misleiden van producten. De grootste verandering was de grote van het lettertype op de verpakkingen, deze is nu Europees vastgelegd. Verpakking moet ook zo klein mogelijk zijn. Dit blijft een lastige kwestie. Het is beter voor de consument als er minder talen opstaan, en alleen die taal van het land waarin de consument woont om verwarringen te voorkomen.

FL: Hoe zit het dan met de vrijwillige keurmerken? Deze zijn ook aan regels gebonden?

GS: Het Vinkje is een vrijwillig schema om aan meedoelen, producenten mogen zelf kiezen om mee te doen. Maar om de wildgroei te beperken, zijn er aan regels gebonden die de Nederlandse overheid heeft opgezet. Je ontvangt van mij een link met daarin meer informatie hierover.

In NL – goedkeuring van de regering om dat keurmerk te gebruiken. Criteria zijn net aangepast, jaartje uitstel. We laten volgend jaar meer weten. Ook hier stuur ik je een link met informatie over.

Van land tot land verschillend. Er is een vereniging die overkoepelend werkt. Healthy Choice Foundation. Nederlandse overheid vindt het voldoende wat er op dit moment op de etiketten van voedsel moet staan. Als de consument het etiket leest althans, dan zullen ze voldoende geïnformeerd worden over het product. Er is veel kritiek op vinkje veel geweest, vinkje staat bijvoorbeeld op ketchup omdat er geen vet in zit. Nee dit klopt, maar er zit wel suiker in. Dit is behoorlijk scheef.

Door de overheid goed gekeurd keurmerk. Zolang ze zich aan de regels houden dan zit het goed, dat zegt de overheid.

FL: Als de nationale landen met een eigen initiatief komen, moeten ze dit dan alsnog bij de Europese Commissie laten checken voordat het door gevoerd mag worden?

GS: Vinkje alleen voor Nederlandse markt die niet voor buitenlandse markt bedoeld zijn.

Parallelimport/export. Je export het toch wel naar België? Het moet geen probleem zijn. Het is in principe alleen voor Nederland bedoelt (het vinkje), dus hoeft niet via EU-wetgeving. Want is er niet voor bedoelt.

FL: Wat zijn de grootste verschillende tussen de Nederlandse en EU-wetgeving?

GS: Er zijn niet echt grote verschillen. In 2011 is de nieuwe wetgeving/verordening gepubliceerd, dit gaat na 30 dagen van kracht. Er is een overgangstermijn van drie jaar om die aanpassingen aan te maken voor producenten. Het moet vanaf 13 december 2014 allemaal in orde zijn. Dan komt er nog een laatste overgangstermijn om ook de voedingswaarden vermelding aan te passen. Deze moet vanaf 13 december 2016 helemaal in orde zijn.

FL: Welke wetgeving is leidend? Is de EU-wetgeving een minimumwetgeving en mogen de landen daarnaast zelf het aanvullende eisen stellen?

GS: Er bestaan verschillende vormen van wetgeving – je hebt richtlijnen en verordeningen. Een richtlijn stelt doelen voor de lidstaten om te behalen. Dan zegt de EU eigenlijk, maak er maar wetgeving van in jouw land. Een verordening (regulation) heeft een meer algemene strekking en is verbindend in al haar onderdelen en is toepasselijk voor elke lidstaat. Dit betekent dat het rechtstreeks recht schept dat in alle EU landen dezelfde kracht heeft als het nationale recht, zonder dat overheden in de lidstaten daar iets voor hoeven te doen.

Vroeger was de wetgeving omtrent voedsel etiketten een richtlijn – toen was het dus eigenlijk makkelijker voor de nationale landen om eisen erboven stellen.

Nu hebben we een verordening, die rechtstreeks geldt. Landen mogen hier geen uitzonderingen op maken. Althans, dat is het doel van de verordening. Je ziet echter toch dat een land denkt dat er wel een uitzondering mogelijk is. Dit is niet het geval in Nederland.

Ik zal je een voorbeeld geven van een andere wetgeving. De wetgeving omtrent voedselcontact materialen – dit zijn kunststof voorwerpen die bedoeld zijn om voedsel mee te bereiden zoals een snijplank, maar ook een zakje waar voedsel in zit. Daar is een wetgeving voor en houdt in dat er een positieve lijst is opgesteld met de materialen die wel gebruikt mogen worden om deze voedselcontact producten te maken. Echter, is er hier in Nederland een aanvullende lijst. Want Nederland vindt dat er een toevoeging is, ondanks dat de EU zegt: dit is de verordening en hou je er maar aan. Dit maakt het daarom heel lastig om grenzen te stellen, want je wilt als nationaal land ook geen handelsbarrière maken. Een ander voorbeeld is Frankrijk die recent een verbod heeft gelegd op een bepaald stofje. Omdat er dus wel uitzonderingen of aanvullingen door de landen zelf worden gemaakt, pakt de Europese Commissie dit wel aan. Want het is niet de bedoeling. De EC is nu een plan aan het opzetten om Frankrijk hiermee aan te pakken.

FL: Op de website van het voedingscentrum las ik een stuk over bovenwettelijke regels. Wat inhoudt dat producenten zelf regels maken voor de productie of kwaliteit van een product. Weet u hier iets van? Hoe is dat binnen de Nederlandse wetgeving mogelijk?

GS: Het Vinkje is hier een voorbeeld ervan. Het is een vrijwillig iets, het is extra omdat je aan een extra aantal eisen voldoet. Andere voorbeeld zijn bepaalde hygiëneregels en wetgeving in de voedselbranche. Dat bepaalde bedrijven eisen stellen dat een partij rekening houdt met hun hygiëneregels zodat de producten aan een bepaalde kwaliteit voldoen. Houden ze zich hier niet aan, dan kan een bedrijf er niet mee in zee gaan bijvoorbeeld.

FL: Ik weet voldoende, dank voor uw tijd en het beantwoorden van mijn vragen.

GS: Zeer graag gedaan. Succes met je scriptie.

7.30 Personal interview – Uitslag, H.

Transcription of personal interview with Mr. Henry Uitslag, working at the advocacy department of the Dutch Consumer's organisation, May 3rd, 2016.

FL: Ik studeerde European Studies en het doel was om een scriptie onderwerp uit te zoeken dat natuurlijk gerelateerd is aan Europa en ik heb specialisatie in Export Marketing gedaan, maar eigenlijk door het schrijven van een hoop essays kwam ik erachter dat mijn interesse heel ergens anders lag en dat was voornamelijk wat met voedsel te maken had. En toen las ik vorig jaar heel veel artikelen over

voedselfraudeschandalen en dergelijk. Toen dacht ik, dit is interessant. Toen kwam ik op de website van de Voedselwaakhond terecht en daar las ik toen de artikelen over het stoplichtsysteem.

HU: Dan bedoel je dus Foodwatch met de Voedselwaakhond

FL: Ja

HU: de voedsel en warenautoriteit is natuurlijk de echte voedselwaakhond.

FL: nee, oke, Foodwatch. Die organisatie. Die hadden een stuk geschreven over het stoplichtensysteem waardoor ik zo iets had van, dit komt me bekend voor. Want ik heb voor mijn uitwisseling van mijn studie in Schotland gezeten. Toen dacht ik opeens, hee dat waren dus die kleurtjes. Dat is bij nooit helemaal gaan dagen wat dat nou precies inhield, als buitenstaander van de UK krijg je daar natuurlijk heel weinig informatie over. Dus toen ik dat las, kwam de link daarnaar toe en vroeg ik me af waarom wij dat niet in Nederland hebben. Zo ben ik dat gaan uitzoeken en zo is het scriptie onderwerp geboren. Hoe kan het dat wij in Nederland het vinkje hebben, in de UK het stoplichtensysteem hebben, in Zweden hebben ze de Keyhole en in Frankrijk hebben ze een kleurtjes systeem. Zo zag ik op een gegeven moment door de bomen het bos niet meer. Hoe kan het dat we in de EU zitten en dat we alles geharmoniseerd moeten hebben, maar dat toch iedereen iets anders heeft op zijn verpakkingen. Dat was een beetje mijn struggle. Dus vandaar dat ik daar mijn scriptie schrijf over hoe kan de Nederlandse overheid dan weer leren van de overige Europese landen en dan uiteindelijk voor het beste resultaat kiezen. Dus iets invoeren hier in Nederland om ervoor te zorgen dat de consument heel gemakkelijk een gezond product kan kiezen zonder al te veel verwarring. Ik ben nu vooral bezig om met verschillende stakeholders te zitten om zoveel mogelijk informatie eruit te krijgen.

HU: Leuk! Heel actueel ook. De minister heeft zojuist ook aangekondigd dat ze het 1 en ander op een rijtje wil zetten en van andere landen wil leren. Dat kun je wel opzoeken op tweedekamer.nl. Er is een debat geweest op 31 maart, het AO-preventie heet dat. Als je zoekt op AO-preventie, 31 maart 2016, dan kun je lezen hoe dat debat is gegaan. En dat Schippers ook letterlijk heeft gezegd. Wellicht interessant om daar ook contact mee te zoeken voor een interview.

FL: mijn reden om de consumentenbond te contacten was ook omdat ik het artikel had gelezen van vorige maand in de consumentengids. Toen zag ik uw naam erbij staan en dacht: die moet ik hebben.

HU: Nou dat klopt. Want ik ben al heel lang bezig met die verkeerslichten. Wij noemen het verkeerslichten omdat dat wat vriendelijker klinkt dan stoplichten. Kijk in het VK heb je het traffic light system, dat klinkt vrij neutraler. Stoplicht klinkt, of zoals de bedrijven dat zien, het wordt geframed als stoplicht, stop dat mag je niet eten. Terwijl als je een levensmiddel van de markt haalt, dan mag het ook echt niet gegeten worden. Dat is niet aan de orde, want het gaat over gezondheid en niet over veiligheid.

FL: Wat is uw rol precies binnen de consumentenbond?

HU: Ik ben werkzaam op de afdeling belangenbehartiging. Dat wil zeggen, de meeste mensen kennen de consumentenbond van de consumentengids en van de testen die we doen (wasmachines test, etc.), maar we hebben ook... we zijn opgericht om de rechten van consumenten, de belangen van consumenten te behartigen en voor de rechten van mensen. De afdeling belangenbehartiging is echt een aparte tak waarin we werken binnen de consumentenbond. Mijn afdeling precies gaat om het behartigen van de belangen. Dat houdt in, we lobbyen in Brussel, Den Haag (tweede kamer), ook acties en campagnes voeren om dingen voor het voetlicht te brengen die wij willen bereiken voor consumenten. 1 daarvan, ik zit specifiek op het stuk voeding, en 1 van de dingen die ik doe gaat over etikettering van levensmiddelen. Omdat dit natuurlijk heel moeilijk is voor consumenten om te kiezen op basis van alle informatie die op het etiket/verpakking staan, ook misleidende informatie die vaak op de voorkant van de verpakking staan. Ik zeg misleidende informatie, maar bedrijven zullen dat anders interpreteren, maar wij zien dat vaak dingen uit de context zijn gehaald of dat vaak positieve aspecten van voedingsmiddelen staan vaak groot op de voorkant afgebeeld en als je als consument echt goed wilt weten wat erin zit, dan moet je heel erg goed opletten op de achterkant van de verpakking of de zijkant. En dat is 1 van de redenen waarom wij altijd voorstander zijn geweest van een front-of-packaging label, zoals dat heet. Daar zijn we sinds een

jaar of 10 mee bezig. Zodat je als consument in de supermarkt in 1 oogopslag kan zien wat er precies in zit, de nutriënten.

FL: Dat is toch dat langwerpige kleine tabelletje. Die is vaak per portie aan gegeven toch?

HU: Ja, daar waren wij niet zo van gecharmeerd. Omdat je dan met die percentages nogal ingewikkeld is voor de consumenten en ook dat die porties vaak een beetje aan de kleine kant zijn, of laag worden ingeschat door de fabrikant. Waardoor het lijkt alsof er minder zout, suiker of vet in zit dan dat je daadwerkelijk binnen krijgt. Als je bijvoorbeeld ontbijtgranen neemt dan is er 30 gram aangegeven. Ik neem echt geen 30 gram ontbijtgranen, dat is voor mij veel te weinig. Dus ik neem het dubbele, minimaal. Dus als ik denk, oh per portie is dat zoveel gram suiker, dan krijg je dus een verkeerde inschatting. Dan kun je dus nog steeds niet in 1 oogopslag zien. Het is nog teveel nadenken op sommige momenten

FL: ik vind het zelf, als consument, ook heel moeilijk in te schatten wat dan bijvoorbeeld 30 gram is. Want niemand gaat dat denk ik voor alles wegen.

HU: je gaat ook niet de hele dag bijnouden. Nu heb ik dit binnen gekregen en dit gegeten. Dan moet je de hele dag een Excel sheet bijnouden.

FL: dus jullie zijn geen voorstander van een per portie tabel. Hebben jullie dan liever dat het per 100 gram wordt aangegeven of juist wat anders?

HU: nou dat is heel ingewikkeld. Wat je eigenlijk wilt, is dat mensen direct een inschatting kunnen maken van hoe gezond is dit eigenlijk en dat vinden wij zo goed aan het verkeerslichtensysteem. Dat je eigenlijk, dat heeft ook nog steeds zijn nadelen, maar als je twee rood en 1 groen hebt, dan zie je wel gelijk dat daar bijvoorbeeld veel vet of suiker in zit. Als je dat wilt vergelijken met een product wat ernaast staat in het schap, dan kun je gelijk zien dat die bijvoorbeeld drie groen heeft en 1 rood heeft. Dan weet je dus dat je beter die kunt kiezen. De criteria van dit systeem, wat ze in het V.K. hebben, is inderdaad per 100 gram. Het is niet zo dat er dan op het pak staat per 100 gram. Het is niet zo dat er dan op staat: als je hier 100 gram van eet dan krijg je dit binnen. Hoe leg ik dit uit... Het maakt gewoon een inschatting van, als het rood is... zit er dus veel per 100 gram in. De samenstelling is dus ongezonder als er veel rood op staat. Snap je wat ik bedoel? De percentages zijn dus per 100 gram

FL: Ja. Het betekent niet, dat als er twee keer rood op staat dat je dat product nooit mag eten. Het is meer dat er wordt geadviseerd om daar iets minder van te eten?

HU: Ja en wat ik heb begrepen, uit onderzoek wat men in het V.K. heeft gedaan onder consumenten, is dat ze het niet zien als "dit mag ik nooit eten". Men wordt er wat bewuster van dat ze nu iets hebben gegeten wat niet zo gezond is, dan eet ik later op de dag weer wat gezonder product. Het heeft veel met bewustwording te maken.

Om terug te komen op je vraag, wat doe ik binnen de Consumentenbond. Belangen van de consumenten. Dat doen we door acties en campagnes te organiseren, maar ook door te lobbyen. We hebben ook een lobby kantoor in Brussel. BEUC, dat is een Franse afkorting die staat voor de European Consumers Organisation. Dat is een samenwerking van alle Europese consumentenbonden samen, van de verschillende landen.

FL: Hoeveel consumenten vertegenwoordigt de Consumentenbond hier in Nederland?

HU: We hebben ongeveer 500.000 betalende leden, die de verschillende bladen ontvangen. Dat is eigenlijk onze meest duidelijke achterban en laat ik het daar maar bij houden. Want de afdeling marketing heeft nog allemaal andere doelgroepen, maar hoe dat precies zit kan ik helemaal niet uitleggen

FL: om nu even het artikelen van het verbannen van het Vinkje als voorbeeld te nemen. Hoe kunnen consumenten dan daarop reageren? Als ze dat gelezen hebben?

HU: We hebben een campagne pagina, webpagina over dit onderwerp. Consumenten kunnen daarop aanklikken: ik steun de campagne. Toevallig heb ik gister nog gekeken dat waren er op dat moment een dikke 18.000. Dat is op zich best wel veel, want we hebben veel van dat soort pagina's. Meestal of soms blijven campagnes hangen op 2.000, maar dit was binnen een korte tijd al heel veel. Maar dat is heel

makkelijk, want je drukt op een knop en dat is het dan. Wat we ook doen, is via social media de boodschap verspreiden. Dan kunnen mensen dat via Facebook en Twitter weer verspreiden en op die manier van roering veroorzaken. We hebben op dit moment al gemerkt dat heel veel mensen dit echt wel steunen. Vrijwel geen consument gehoord die zei: ik gebruik het altijd en ik vind het zo'n handig systeem dat Vinkje. Dat hebben we niet teruggekregen.

FL: Kunnen mensen dan ook via de mail reageren of hun mening over kwijt?

HU: We hebben een community, een soort forum, op de website waar mensen kunnen reageren. En mensen gaan natuurlijk de discussie aan via Twitter en Facebook. Misschien kun je ook even op onze account kijken wat voor een discussies er zijn geweest. Geeft wel een goed beeld over hoe het publiek erin staan. Op onze community zijn ook een aantal topics geopend en daar komt dan een stelling op te staan waar mensen over kunnen discussiëren. Er was ook een poll waar mensen op kunnen reageren, over het feit dat bedrijven moeten betalen om het Vinkje op de verpakking te laten zetten. Wat mensen daarvan vinden. En we hebben ook nog een quiz.

FL: Ja, die heb ik ook gedaan!

HU: Ah leuk. Ja, zo kunnen mensen dus hun reactie geven. Flink scala aan verschillende dingen.

FL: Jullie krijgen dat dan allemaal binnen. Wat doen jullie dan zelf met die reacties?

HU: We houden natuurlijk in de gaten, hoe valt het? Dat evalueren we en gebruiken we eventueel weer voor vervolgacties. En het geeft ook voor ons een beeld wat vinden mensen nou echt belangrijk, wat vinden mensen wel en niet goed aan dat concept. Waar we voorheen heel veel namens de consument belangen behartigen, hebben we de mensen nu veel meer betrokken bij van: wat gebeurd er nu. Die reacties gebruik je dus om te zien hoe het valt of vinden mensen juist het tegenovergestelde. Mocht het nou zo zijn dat heel veel mensen hebben gezegd dat ze niet van het Vinkje af willen. We hadden natuurlijk van tevoren al een consumentenonderzoek gedaan, dat is sowieso belangrijk voor ons dat we niet zomaar een standpunt aannemen wat tegen onze eigen achterban in gaat. Maar op die manier gebruiken we dat. Maar het is niet dat we op die manier precies al die stappen doen en wat we precies met de resultaten doen. Maar we gebruiken alle signalen van consumenten in onze vervolg stappen.

FL: Ja, daar hadden we het net ook al even over. Wat zijn dan precies de reacties van mensen op dit moment en er is wel een duidelijk verschil tussen voor- en tegenstanders.

HU: Ja, maar we hadden natuurlijk niet op de website staan: ben je voor of tegen het Vinkje? Die vergelijking kunnen we niet maken. Het is echt wel zo dat we achter dit standpunt staan. Wat we wel nog nader willen onderzoeken, is hoe vaak consumenten daadwerkelijk dat verkeerslichtensysteem echt wel kunnen begrijpen en wel willen toepassen, of wel belangrijk vinden. Daar hebben we in het verleden wel al onderzoek naar gedaan, dit kan ik je wel even nasturen. Dit was in 2007. Maar wat ons betreft, staat de optie open voor een ander iets. In de V.S. en Australië is weer een ander systeem en in Frankrijk ook, je refereerde daar net al aan. Daar is nu ook een experiment gaande. Maar waar ik zelf heel erg beducht voor ben, is dat heel veel van dat soort systeem uitgaan van dat je per productgroep een inschaling krijgt. Dan krijg je dus voor de ongezonde productgroepen ook een onderscheid van een gezondere en bewuste keuze. Dat is precies wat bij het Vinkje juist niet goed is gegaan. Die productgroepen zijn ook niet altijd eenduidig. Het lijkt heel logisch dat je binnen de kazen wilt kiezen wat dan de gezonde is, maar als je dan broodbeleg heel breed neemt... voor de consument is dat misschien een logische productgroep. Als je en de kaas, de hagelstag en de kipfilet neemt. Dat is het goede aan het Verkeerslichtensysteem, dat het ook over de productgroepen heen bruikbaar is omdat de lat altijd even hoog ligt voor de kleuren.

FL: Klopt, want ik had een boekje gelezen uit 2009 over logo's en dan voornamelijk de supporters van het Vinkje. Het was vanuit de Universiteit van Wageningen opgezet. Daar stond toen ook al de vergelijking met het Verkeerslichtensysteem in. Daar stond in dat het Vinkje beter is omdat het per productgroep is en het Verkeerslichtensysteem heeft dit uitgesloten.

HU: Dat is juist waarom het zo controversieel is binnen de voedingswereld, het is opgebouwd op basis van productgroepen en de schijf van vijf ook. En dat klopt, als je er onderwijs in krijgt als consument. Het

klopt ook als je met een diëtist gaat kijken als je gaat kijken wat kan ik allemaal eten, die legt dat dan allemaal uit. Maar als je het uit zijn verband haalt en het in de supermarkt op producten zet met die productgroepen terwijl er niet bij staat wat dan productengroepen zijn, dan snappen consumenten dat niet meer. Dat is volgens mij waar het zo controversieel is en waarom mensen denken dat het allemaal doorgestoken kaart is en dat de industrie erachter zit. Maar ik denk dat het komt omdat het is gebaseerd op het voorlichtingsmodel zoals we dat hebben en dan we willen een logo voor gezondere producten binnen een productgroep. Maar die productgroepen, die moet je dan opzoeken op internet als consument? Maar dat ga je niet doen. Daarnaast wil je ook weten, kan ik nu beter brood eten of juist ontbijtgranen. En dat vergelijk je niet.

FL: Nee, want er is een Vinkje voor de categorie brood en een Vinkje voor categorie ontbijtgranen?

HU: Ja, terwijl er in ontbijtgranen soms wel 30% suiker zit. En dat kan dat nog een Vinkje krijgen. Want ja, ontbijtgranen zijn nou eenmaal suikerrijk en dan gaan we net wat minder suiker toevoegen en dan geven we die ontbijtgranen een Vinkje terwijl in brood nooit zoveel suiker in zit. Terwijl bij het Verkeerslichtensysteem zie je gelijk rood of oranje voor suiker bij de ontbijtgranen.

FL: Ja en dan zou bij brood bijvoorbeeld het zout gehalte rood of oranje zijn?

HU: Ja, en vet en suiker zal dan eerder groen zijn. Dus dan zie je dus dat dan een gezondere keuze is.

FL: Mijn volgende vraag is dan ook, wat zijn dan de belangrijke argumenten tegen het Vinkje, met standpunt vanuit de Consumentenbond, te melden?

HU: Het eerste is, dat we een onderzoek hebben gedaan onder consumenten en het blijkt dat consumenten het echt niet begrijpen. Het onderscheidt tussen blauw en groen. Niemand die het weet en de bewuste keuze is vaag. Mensen denken aan milieubewust of duurzaamheid. Daar associëren ze het mee. Heel logisch volgens mij. Maar het is opgezet met de beste bedoelingen, denk ik, je hebt de basis voedingsmiddelen en de niet-basis voedingsmiddelen. We noemen die basis voedingsmiddelen dan de gezondere keuze. Maar die andere willen we dan niet echt associëren met gezond want dan kan het misschien misleiding zijn, dus dan noemen we het maar bewust. Dat is met de beste bedoelingen, maar je raakt daar helemaal de consument mee kwijt. En het feit dat het wat eigenlijk niet gezond is voor de consument, zet je toch een bewuste keuze op en je associeert het allemaal met gezondheid. Maar we hebben zelfs voorbeelden gevonden met groene vinkjes, de basis voedingsmiddelen, op chocomeel. Dan kan er nog steeds heel veel suiker in zitten. Maar de nieuwe schijf van vijf is net gepubliceerd, dus waarschijnlijk gaat aan de hand daarvan het groene vinkje ervan af. Dat komt wel goed. Maar wat nog steeds, wat moet je met dat blauwe Vinkje? Er staan nog steeds allemaal gezondheidsboodschappen op ongezonde levensmiddelen ook als is het een "minder gezonde" keuze binnen die productgroep. Het is nog steeds daarmee voor de consument nog steeds een levensmiddel en het is daarmee meer een marketingtool geworden van bedrijven om ongezonde levensmiddelen te promoten als gezond. En dat willen we juist niet. Die spagaat zit heel erg in dat systeem. Daarnaast is het natuurlijk een probleem dat niet alle bedrijven meedoelen, maar dat kunnen we die stichting, de Ik Kies Bewust Stichting, niet aanrekenen. Zij doen hun best om zoveel mogelijk bedrijven erbij te betrekken. Echter, als consument, als jij voor het schap staat.... De claim van de stichting is dat je in 1 oogopslag kan zien wat een gezondere keuze is, maar dat is niet zo omdat zoveel bedrijven niet meedoelen. Dat is nog steeds een probleem voor consumenten. Dat heb je natuurlijk ook bij het Verkeerslichtensysteem wat ook niet op alle bedrijven is toegepast, al hoewel nu op 2/3 van de producten in het V.K. het systeem staat. Maar, dan als het er niet op staat dan hebben ze het nog niet toegepast. Terwijl, bij het Vinkje kan het zo zijn dat het er niet op staat omdat het wellicht niet aan de eisen voldoet of omdat het merk niet meedoet aan het systeem. Dat weet je als consument dan niet! Snap je het?

FL: Ja dat begrijp ik. Want een etiket staat er altijd op, ongeacht of het met kleurtjes is of niet. Terwijl een Vinkje weet je niet of het erop mag.

HU: Juist, dat maakt het lastig voor de consument.

FL: In het artikel van de Consumentengids staat ook iets over de Gezondheidsraad. Heeft de Consumentenbond de Gezondheidsraad betrokken bij het onderzoek naar het Vinkje? Hebben jullie daar contact mee?

HU: Nee, want zij zullen daar ook niet met ons over willen doen. De Gezondheidsraad geeft gevraagd en ongevraagd advies aan de minister en niet aan andere partijen. Dat gaat puur over het beleid van het ministerie, dus niet over de Consumentenbond. De Gezondheidsraad heeft wel in 2010 een rapport gepubliceerd: Logo's onder de loep. Ken je die?

FL: Ja die heb ik gedeeltelijk gelezen. De afgelopen dagen zat ik in een Nota te lezen, de Nota gezonde voeding, van begin tot eind die was in 2009/2010 gepubliceerd. Daarin stond een verwijzing naar het advies wat gegeven zou worden door de Gezondheidsraad. Het advies zelf heb ik uiteindelijk ergens anders gevonden. Maar het kwam erop neer, dat voorheen hadden we zelfs nog een Klavertje vanuit de Albert Heijn opgezet. Toen luidde het advies van de Gezondheidsraad dat het één logo moest worden maar dan met een dual karakter. Daarmee is dan dus denk ik het Vinkje ontstaan omdat dat dan 1 logo is, maar het duale karakter is dan het blauwe en groene Vinkje.

HU: Ja, en het interessante daaraan is dat het Gezondheidsraad had gezegd: je moet voor de voorkeursproducten een logo hebben en iets voor de middenwegproducten. En dat hebben ze eigenlijk anders gedaan door te zeggen: we doen de basisproducten en de niet-basisproducten. Dat is net anders! Het idee van de Gezondheidsraad was, dat je dan voorkeursproducten hebt die altijd goed zijn. En de middenweg producten zouden dan een logo krijgen wat uitstraalt naar de consument dat het een mindere keuze is. Maar dat wilde het bedrijfsleven niet! Het lijkt als of het advies goed is opgevolgd, maar dat is in de werkelijkheid dus niet zo. En er is een document, dit zou ik je even moeten nasturen, over dat er een standpunt is neergezet met de vraag of het advies van de Gezondheidsraad goed is opgevolgd ja of nee. En daarin hebben we heel duidelijk beschreven welk gedeelte is opgevolgd en welke wat minder.

FL: En de Gezondheidsraad heeft nog nooit iets gezegd over het Verkeerslichtensysteem?

HU: Ja, dat wordt ook in het rapport meegenomen. Ze hadden onderzocht en ze hadden geconcludeerd dat er weinig bekend is onder de consumenten over de Vinkjes en de destijds Klavertjes logo of ze deze wel goed begrepen. Maar ze concluderen wel in dat rapport dat het Verkeerslichtensysteem wel goed door consumenten wordt begrepen. En ze concluderen ook dat het andere systeem met de percentages, de GDAs (wat nu percentage referentie inhoud heet), dat het aannemelijk is dat consumenten dat niet goed begrijpen.

FL: Het vinkje is een vrijwillig keurmerk, opgezet door producenten en de producenten betalen hier ook voor om het logo op de verpakking te krijgen. Betekent dit dat de overheid zich er helemaal niet mee bemoeit?

HU: Ja in die zin, destijds had de Consumentenbond (toen werkten ik er nog niet) een actie opgezet omtrent het Verkeerslichtensysteem. Half jaar later, heeft minister Hoogervorst gezegd: nou bedrijfsleven, kom maar met iets. En het bedrijfsleven heeft toen bij elkaar gezet met de vraag wat ze eraan zouden gaan doen. De Albert Heijn kwam toen met het Klavertje en dat was, zoals ik het heb begrepen, tegen het zere been van de levensmiddelenindustrie, want ja de Albert Heijn is een supermarkt. Maar de levensmiddelenindustrie wilde eigenlijk gezamenlijk met iets komen. Dat was door het initiatief van het Klavertje mislukt. Toen hebben Unilever en Campina en Melkunie het Ik Kies Bewust logo geïntroduceerd en daar konden andere bedrijven zich voor aanmelden.

Ministerie VWS heeft toen wel op een gegeven moment gezegd, wacht even de criteria moeten wel onafhankelijk worden opgezet. Het moet niet zo zijn dat het bedrijfsleven dit op gaat zetten. Toen is er dus een onafhankelijke wetenschappelijke commissie op gezet want het kon niet zo zijn dat de deskundige binnen Unilever die criteria een beetje gingen bepalen. Toen is die commissie opgezet omdat het ministerie dat wilde. En, het ministerie heeft toen een Warenwetregeling gemaakt over waar een voedselkeuzelogos aan moet voldoen. Eén van de aspecten daarin is dat het logo begrijpelijk moet zijn voor de consument. Heb je deze al gelezen?

FL: Nee, volgens mij niet. Althans, ik heb zoveel gelezen... Ik durf het niet zeker te zeggen.

HU: Die zou ik eventueel wel kunnen nasturen.

FL: Wat ik me nu afvraag, is dat het Vinkje ongeveer in dezelfde periode is opgezet als die toenertijd grote lobby tegen de invoering van het Verkeerslichtensysteem in Europa. Een lobby vanuit het bedrijfsleven van miljoenen Euro's. En is toen het Vinkje geboren als tegenhanger van: maar kijk, nu hebben wij dit? Is dat samengegaan of niet?

HU: Ik ga dat niet met zekerheid zeggen, het was wel allemaal ongeveer in diezelfde periode. Het is denk ik geen toeval dat de consumentenbond en andere consumentenorganisaties in Europa roep op tot het Verkeerslichtensysteem en er gaan allemaal initiatieven ontstaan waaronder de GDAs. Dat was ook een reactie op consumentenorganisaties, want die willen iets en dan gaat het bedrijfsleven opeens wel wat doen. Je kunt het nooit helemaal bewijzen dat het echt zo is, maar het kan geen toeval zijn nee.

FL: Nederland hanteert etiketteringsregels volgens de VERORDENING (EU) Nr. 1169/2011. Denkt u dat het verwarring schept om daarnaast nog alternatieve logo's op verpakkingen te hebben?

HU: Voor consumenten die zullen zich niet zoveel aan zo'n wet gelegen laten liggen. Ik denk dat het voor het bedrijfsleven wel heel verwarrend is dat er nu van alles mogelijk is binnen die verordening, maar het is best wel onduidelijk waar ligt welke verantwoordelijkheid. Kijk, het V.K. heeft toen ervoor gezorgd in overleg met Europa dat het Verkeerslichtensysteem wel gevoerd kan blijven worden op vrijwillige basis, en er is ruimte gegeven aan lidstaten om zelf iets te ontwikkelen. En er is ook ruimte gegeven binnen die verordening om aan het bedrijfsleven om dingen te kunnen ontwikkelen. Wat destijds duidelijk werd in het hele besluitvorming proces in Europa. Dat zit behoorlijk ingewikkeld in elkaar, dat moet je weten als je European Studies studeert, het Europese Parlement heeft zijn zegje en dat bestaat uit 700 man, alle lidstaten hebben hun zegje. Het is natuurlijk een Poolse landdag dat iedereen zo zijn wensen heeft. Dus dat daar eigenlijk nog een compromis uit komt, is eigenlijk al heel knap. Maar toen was de tijd nog niet rijp voor een systeem voor front-of-pack labelling in heel Europa. Dat lag nog zo gevoelig. De Italianen zijn er faliekant op tegen, het Verkeerslichtensysteem. Nog wat andere landen willen ook niks. In Scandinavië hebben ze het Keyhole systeem al en dat zit al zo ingebed in de voedingsvoorlichting, dat wilde ze ook niet loslaten. Dat er in Europa niet is uitgekomen is eigenlijk niet zo vreemd. Dus toen is er gezegd, we geven ruimte. Want we willen eigenlijk gelijke regels, maar er is ook de wens voor die systemen. We kunnen niet alles harmoniseren, dus dan geven we de lidstaten de ruimte om vrijwillig iets op te zetten. Het V.K. kan het bedrijfsleven niet verplichten om het Verkeerslichtensysteem op de verpakkingen te zetten. Hetzelfde geldt voor andere landen. Wat toen is afgesproken is dat de Europese Commissie in 2017 een rapport gaat publiceren of gaat opstellen over de ervaringen van al die verschillende systemen in de landen. Dan kijken in hoeverre gaat er alsnog toegewerkt worden naar een systeem of gaat het nooit meer wat worden.

FL: Dat is dus nog bezig, dat hele proces.

HU: In principe is de Europese Commissie verplicht om dat in 2017 te gaan doen. Maar de ervaring leert, de politieke situatie in Europa is nu ook zo dat het een beetje een terugtrekkende beweging is. Europa moet zich nog alleen maar hoofdlijnen bezighouden, dus het is de vraag of er iets in 2017 gaat komen. Maar destijds is dat besloten om het uit te stellen.

FL: Ik ga even een paar vragen eruit kiezen want ik zie dat we krap in tijd komen te zitten. Hebben jullie op dit moment een plan van aanpak om met het Verkeerslichtensysteem om het op de Nederlandse producten te krijgen?

HU: Dat is lastig, want we zouden het in principe wel willen. Maar we zien dat het ook bepaalde voor-en nadelen kan hebben. Daarnaast is het ook wel zo dat er tot nu toe weinig draagvlak is bij andere organisaties. Dus in hoeverre dat gaat gebeuren, weet ik niet. Het debat in de Tweede Kamer leek op zich wel een opening te bieden, omdat de minister echt wel heeft gezegd dat ze wil leren van andere landen. Aan de andere kant heeft ze ook gezegd, dat het Verkeerslichtensysteem gaat het niet echt worden want ja dat ligt te gevoelig in Europa. Italië wil dat niet. Maar goed, zij gaan natuurlijk over wat er op onze

etiketten komen te staan. Maar het ligt wel heel gevoelig, dus als Nederland dat ook gaat doen dan denk ik niet dat ze grote vrienden blijven met Italië op dat vlak. Dat maakt het lastig. Ook, in principe, het denken vanuit voedingsvoorlichting gaat gewoon heel erg uit van de traditionele voedingsvoorlichting. Terwijl dit systeem wordt gezien als een alternatief, zo doen wij ook een alternatief voor het Vinkje, maar eigenlijk is het iets anders. Het is een interpretatie van de voedingswaarde tabel. En dat je daarmee makkelijker overweg kunt, maar het is niet zozeer gebaseerd op de traditionele voedingsvoorlichting die weer met die productgroepen te maken heeft. Dat soort bewustwording binnen de voedingsvoorlichting voor elkaar moeten krijgen. Dat het iets is wat anders is dan de voedingsvoorlichting, maar dat het kan helpen om consumenten de indruk te geven wat er nou in een product zit. De Gezondheidsraad heeft ook nieuwe richtlijnen en die focussen veel minder op nutriënten, minder op verzadigd vet en zout, ze focussen meer op wat voor voedingsmiddelen je neemt. Dus als je dan wel zo'n systeem op de verpakking zet wat gaat over verzadigd vet en zout, terwijl je eigenlijk zegt dat consumenten zich er niet mee bezig moeten houden dan wordt het een beetje ingewikkeld. Ik vraag me af in hoeverre het haalbaar is. Echter, wij van de Consumentenbond vinden het wel een behulpzaam systeem en dat blijkt ook uit ervaring in Engeland.

FL: Wat zijn daar de reacties van?

HU: Daar wordt redelijk wat onderzoek naar gedaan. Daar zou je eigenlijk even bij de Britse organisaties moeten kijken. Ik zou dat zelf ook wel wat meer willen achterhalen. Want er wordt wel veel onderzoek gedaan. Maar, dat zou ik wel aanraden om die op te zoeken. De supermarkten zelf houden ook bij wat ervaringen zijn.

FL: Waar let u zelf eigenlijk op als u door de supermarkt bent? Omdat u er zo mee bezig bent.

HU: Dat is een goede! Ik ben zelf heel erg gaan letten op zout. Dat is ook een ander campagne onderwerp wat ik al jaren doe. En in die zin zou ik het heel erg prettig vinden als er een Verkeerslichtensysteem is omdat je dan gelijk kan zien of er veel zout in zit of niet. Nu moet je alle verpakkingen omdraaien en lezen wat er precies in zit. Als ik een nieuw product koop, want ja ik doe het niet altijd, maar bij een nieuw product kijk ik wel altijd even op het etiket. Dat deed ik voorheen niet. En verzadigd vet let ik ook wel op. Zoveel mogelijk volkoren, groente en fruit. Maar toch bij voorverpakte producten let ik op de nutriënten.

FL: Er waren nog wel wat vragen die ik wilden stellen, maar helaas lukt dat nu niet meer. Is het mogelijk dat ik de belangrijkste eruit pak en deze even naar u mail? Mocht u zelf nog iets te bedenken wat vermeldingswaardig is, laat het dan vooral weten! Dan ronden we het voor nu af. Ontzettend bedankt voor uw tijd.

HU: Geen dank.

7.31 Telephonic interview – Van Kleef, E.

Transcription of telephonic interview with Mrs. Ellen van Kleef, Assistant Professor at Marketing and Consumer Behaviour Group, University of Wageningen, May 10th, 2016.

FL: Goedemiddag, allereerst wil ik u bedanken voor de mogelijkheid tot een interview. Ik zal me even kort voorstellen. Mijn naam is Fenna Lammers, ik ben nog net 25 jaar en studeerde European Studies. Mijn interesse in gezond voedsel is een aantal jaren geleden ontstaan en door middel van het lezen van artikelen voor schoolopdrachten kreeg ik steeds meer inzicht in hoe de Nederlandse overheid en de EU omgaat met problemen zoals voedselfraude, voedselmisleiding en claims. Door het regelmatig lezen van artikelen op de website van de Voedselwaakhond kwam ik op het onderwerp voedsel etikettering. Hoe kan de Nederlandse overheid leren van Europese landen om de verwarring van consumenten te verminderen omtrent voedsel etikettering om gemakkelijker een keuze van een gezond product te maken? Dit interview geeft mij de kans om meer informatie te winnen over o.a. de Consumentenbond in het algemeen, over reacties van consumenten, over het artikel omtrent het verbannen van het vinkje en over het verkeerslicht systeem wat u adviseerde in hetzelfde artikel uit de Consumentengids.

Mag ik u vragen om u voor te stellen? Wat is precies uw werk?

EvK: Werkzaam als *Assistant Professor at Marketing and Consumer Behaviour Group* op de Universiteit van Wageningen.

Mijn werk draait veel om behulpzaam zijn in gezonder eten voor consumenten. Op interventies of minder ongezond eten kan worden overgeslagen, die test ik uit in de praktijk.

Op dit moment hou ik mij bezig met een project van de EU – genaamd Cymbol. Dit project gaat over wat doen gezondheidslogo's of dergelijke nou wel of niet. We kunnen nu al resultaten zien waaruit blijkt dat het weinig aandacht trekt onder de consument. Het doet nog veel te weinig op dit moment. We gaan ervanuit dat de consument gemotiveerd is om de keuze te maken, maar dat is nog niet het geval op dit moment.

FL: Met wat voor onderzoeken bent u op dit moment bezig?

EvK: Ik ben op dit moment, zoals ik net zei, met het Europees project Cymbol bezig. Daar is ook een stakeholder van Vinkje bij betrokken. Voor dit project hebben we een studie gedaan in Spanje met producten met vinkje of zonder vinkje. De vraag was of het effect heeft. De uitkomst was eigenlijk heel duidelijk: het had NUL effect, mensen zien niet.

Cymbol is een groot wetenschappelijk project. We kijken bijvoorbeeld ook naar de effecten van aankoop. Maar ook de consumptie effecten als er ergens een claim op te staan. We onderzoeken dan of mensen denken: Oh er staat een claim op, dan is het vast gezond, laat ik nog wat extra nemen. Maar dan gaan mensen juist weer te veel eten en krijg je overconsumptie, wat we ook weer niet willen.

FL: Hoe was u betrokken geraakt bij het initiatief van de Stichting Ik Kies Bewust?

EvK: Via de Universiteit van Wageningen. Vanuit de Universiteit kwam het initiatief om het boekje *Gezondheidslogo's op eten* te schrijven en daar hebben ze mij voor gevraagd om aan mee te werken. Dus ik ben niet betrokken geweest bij het opzetten van het Vinkje of in samenwerking gegaan met de Stichting Ik Kies Bewust. Ik heb me puur beziggehouden met het analyseren van de gezondheidslogo's, waaronder dus het Vinkje.

FL: Wat is het doel van het Vinkje?

EvK: Het Vinkje is opgezet met het idee om o.a. de producten te stimuleren om de productsamenstelling te verbeteren zodat het product in aanmerking komt voor een logo. Op die manier kan ervoor gezorgd worden dan de consument makkelijker een keuze kan maken om een gezond product te kiezen uit een bepaalde productgroep.

FL: Wat zijn de grootste voordelen van het Vinkje?

EvK: Het voordeel van het Vinkje is, dat je het oordeel voor de consument al geeft. Het is met de intentie van in 1 oogopslag zien wat een gezonder product is opgezet, waardoor de consument niet meer de hele voedingswaarde tabel hoeft te analyseren. Dit is al gedaan.

FL: Wat zijn de nadelen van het Vinkje?

EvK: Het Vinkje is eigenlijk maar een klein logo, echter waren er wel hoge verwachtingen. Omdat het Vinkje ook nog eens verschillende systemen heeft, snapt geen consument het. Het heeft twee kleuren, dat is onbegrijpelijk. Zoals ik het zie, is het Vinkje wellicht een te voedingskundige boodschap, vooral het blauwe Vinkje dan. De consumenten in de supermarkt zijn druk, andere dingen zijn belangrijker.

Daarnaast vraagt de consument zich ook af hoe geloofwaardig het is. Maar kijk, je kunt ook compleet de andere kant op slaan zoals de Consumentenbond deed in hun campagne tegen het Vinkje. Als jij met een bord patat met mayonaise en ketchup naar de consument stapt en vraagt of het ongezond is, ja dan is dat vrij makkelijk om "ja" op te zeggen.

Daarnaast denkt de Consument redelijk zwart wit. Een product is of supergezond of juist superongezond. Superfoods vs. Junkfood.

Echter, de waarheid zit er tussenin. Je kan best alles eten. Vinkje zit binnen die categorie, kunnen we wel uitleggen, maar worden ze dan nu opgepakt?

Als het er niet op staat, geen idee of het komt wel of niet gezond of mee doen. Overheid zegt zoekt het maar uit, het is de markt. Het is met goede intentie opgezet vanuit bedrijfsleven, ze moeten ervoor betalen, ongeveer een ton per jaar. Echter, dat is niet de barrière, niet het probleem. Er zit een commissie achter. Je wilt bedrijven mee krijgen.

FL: Wie bepaalt de criteria van het Vinkje?

EvK: De onafhankelijke wetenschappelijke commissie. Die kijken naar wat is groen, wat is blauw. Op welke producten mogen dan een groen Vinkje en op welke producten mogen dan een blauw Vinkje. Hierbij is wel gebruik gemaakt van voedingskundige kennis. Dat is ook dynamisch, wat is goed wat is slecht. Er wordt continue wel gekeken naar of de criteria moeten worden aangescherpt. Daarnaast moeten er beslissing genomen worden bij hoeveel calorieën een product bijvoorbeeld ongezond is. Dat probeerde de overheid wel te stimuleren en stond hierachter.

FL: In hoeverre is de overheid erbij betrokken?

EvK: De overheid probeerde die voedingskundige kennis wel te stimuleren en ook dat het vanuit de markt komt, en daarom was het voedingscentrum ook wel er bij betrokken omdat het gesubsidieerd wordt vanuit de overheid. Echter, wil het Voedingscentrum er niet echt geld in steken.

FL: Leidt het Vinkje tot het gezonder eten van consumenten? In het boek Gezondheidslogo's op eten staat aangegeven dat het moeilijk is aan te tonen, dat was toen. Hoe is dat nu?

EvK: Ellen Vyth heeft een aantal meer recente artikelen geschreven. Ze omschrijft de studie die gedaan is om te kijken of de samenstelling van producten inderdaad veranderd om de criteria te halen voor het Ik Kies Bewust logo. Het idee erachter is dat producenten dan langzaam bewust worden van de samenstelling van hun producten. Er zijn artikelen die dit aantonen, ook bijvoorbeeld over zout in groente. Het moet langzaam worden afgebouwd, omdat zout natuurlijk de smaak van het product maakt. Bijvoorbeeld ook met zout in brood. Maar, als mensen kunnen kiezen, kunnen ze gaan voor het vinkje. Je zou het wel op populatieniveau kunnen zien wellicht. Echt, is de geloofwaardigheid wel weg nu zeker met de campagne van de Consumentenbond.

FL: Hoe kijkt u tegen het Vinkje aan nu, anno 2016? Hoe ziet u de toekomst van het Vinkje?

EvK: Het systeem met blauw en groen kun je wel vergeten. Dat is niet meer te proberen om het uit te leggen aan de consument. Laat de overheid er maar eens in gaan investeren.

FL: Bent u bekend met andere gezondheidslogo's en andere manieren van de consument informeren over de keuze van een gezonder product? Zoals de Keyhole in Zweden en Traffic Light System in het V.K.

EvK: Als ik eerlijk ben, zit ook daar een negatieve vorm van informatie aan d.m.v. de rode kleur. Er is nu een studie opgezet. Die gaat over hoe de consument al die kleuren kan of moet opmerken? De oplossing ervoor, ik weet dat eigenlijk ook niet zo goed.

FL: Wat is uw mening over deze logo's of manieren van informeren naar de consument?

EvK: Als je de criteria haalt kan je het erop zetten, net zoals de Keyhole. Maar dan moet er wel een goede campagne opgezet worden. Moet je geen producten uitsluiten en zo dichtmogelijk bij wetenschappelijk bewijs zitten. Verkeerslicht houdt ook problemen. Bij het stoplicht, moet je nog steeds verder kijken. Je moet dan eigenlijk nog steeds naar de nutrimenten waardes kijken van het product. Voor consumenten die juist op bepaalde voedingswaarde willen letten is het beter.

Zoals je hoort, zijn er bij alle systemen wel voordelen en nadelen. En hoe je het samenvat hoe meer je gezeur krijgt. Er is bijvoorbeeld ook een systeem met drie sterren. En in Frankrijk is er een kleuren systeem met nog meer kleuren, dat maakt het allee maar nog complexer in mijn opinie.

FL: Gisteren las ik een artikel op nu.nl over de supermarkt Plus. Zij hebben bedacht om frisdranken op zo'n manier in het schap te plaatsen dat ze op volgorde staan van minste calorieën naar meeste calorieën. Hoe kijkt u hier tegenaan? Vind u dit een manier van de consumenten helpen in het kiezen van een gezondere keuze?

EvK: Ja, dit artikel las ik ook en ik vond het een grappig initiatief. Vooral omdat dit bij frisdranken juist heel goed te doen is, want je hoeft er alleen maar voor naar de suikergehaltes te kijken. Met andere

producten is dat wel lastiger. We hebben het zelf ook geprobeerd tijdens onderzoeken, door bijvoorbeeld volkorenbrood dichtbij te leggen. Ik denk dat dit wel handig is, om het op schap niveau te doen en desnoods daar ook met kleuren te werken.

FL: Heeft u verder nog advies of idee wat de Nederlandse overheid op dit moment kan doen om de consument te helpen in de keuze van een gezond product of om verwarring te voorkomen?

EvK: Richt je niet alleen op die informatie route. Mensen eten ongezond, we gaan het uitleggen. Daar ga je het niet mee reden. Je moet kijken naar de hele omgeving: wat is normaal, sociale normen, educatie, kantines en automaten gezonder maken. Ene kant kennis, maar ook de motivatie speelt een rol en zeker al van kinds af aan. Mensen moeten de grenzen kennen en niet te extreem eten.