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Towards a healthy and happy lifestyle?

An explorative study on the association between seven psychological determinants and sensibility for popular healthy food trends

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Abstract

Background and objectives

Healthy food has gained more and more attention the last couple of years. Several diet trends are rising, especially popular among young females. Hardly any research has been done on why young female consumers are fascinated by such trends. Therefore, the aim of this explorative study is 1) to investigate where the growing interest in healthy food trends under young Dutch female consumers (aged 18 to 30) comes from, first 2) by identifying what criteria those consumers use to perceive and evaluate healthy food trends (prestudy) and second 3) by identifying to what extent seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) are associated with attractiveness of healthy food trends and integration of those trends in daily life (main study).

Methods

This study composed of two parts: a qualitative prestudy and a quantitative main study. The prestudy consisted of five interviews with experts, experienced in the field of food and trends, and two consumer focus groups with 6 and 8 Dutch females, aged 18-23. The main study was an online administrated survey among 413 Dutch female consumers (aged 18 to 30), measuring attractiveness and tendency to integrate healthy food trends, even as scores on the seven psychological determinants. Moreover, various background variables as age, BMI, dieting and social media use were taken into account, just as use and perceived reliability of sources providing information on healthy food. Three regression analyses were carried out. Two with the seven psychological determinants as independent variables, combined with attractiveness and tendency to integrate as dependent variables and one with attractiveness as the independent variable and tendency to integrate as dependent variable.

Results

Results of both the prestudy and the survey showed high familiarity with healthy food trends among female consumers. The prestudy revealed that there was little consensus about trend categories, i.e. consumers and experts all used different arguments when categorizing healthy food trends. Further, most diets were seen as too extreme to actually integrate in consumers' eating pattern. Survey findings confirmed this idea. Trends were considerably perceived as more attractive than they were integrated. A multiple linear regression analysis revealed that a healthy-eater identity was the only psychological determinant declaring both attractiveness and tendency to integrate healthy food trends. Dichotomous thinking significantly predicted attractiveness of trends. Perfectionism, trait self-control, desire for control, body image concern and individualism were not related to sensibility for the healthy diets. Meanwhile, the amount of healthy food accounts and blogs followed on social media appeared to be

positively related to sensibility for healthy food trends, both attractiveness and integration. Further, attractiveness of healthy food trends appeared to significantly predict tendency to integrate trends. Prestudy findings suggested that consumers and experts had different opinions on what consumers see as reliable sources providing information on healthy food. Survey outcomes showed that female consumers often consult blogs when searching for healthy food information, but that bloggers are not seen as reliable. In contrast, doctors, dietitians and Voedingscentrum are perceived as reliable sources, whereas those, especially doctors and dietitians, are hardly consulted.

Discussion

This study revealed that female consumers seem to be interested in healthy food trends; however, integrating those diets in daily life appeared to be a step too far. Only having a healthy-eater identity was a significant predictor of both attractiveness and integration of healthy food trends. Dichotomous thinking significantly predicted attractiveness of trends and the amount of healthy food blogs or accounts on social media consumers followed was shown to significantly predict the tendency to integrate healthy food trends. In conclusion, we argue that today, identity plays a key role in food consumption: what you eat shows who you are and vice versa. In addition, healthy food blogs and accounts on social media appear to have an influence here. Official institutions could consider reacting upon the value of identity and the impact of social media in the supply of information on healthy food. However, future research is needed to further develop understanding of the extreme interest in healthy food trends and the influence of such trends on consumers' attitudes and behavior.

Key words: health, healthism, food, eating, trends, extreme diets, psychological determinants, healthy-eater identity, social media

Contents

List of tables

List of figures

1. Introduction

1.1 Rising interest in healthy food

"What are you eating for dinner tonight?" seems to have become one of the most important questions of the day. Popular websites as Foodgawker.com, Foodporn.com, Culy.nl and Pinterest.com are designed to let their visitors' mouth water by showing the most beautiful culinary pictures of daily meals. It appears that a food movement is going on, in which food is playing an increasing role in Western society: we seem to be obsessed with food. Together with this rising interest in food in general goes the consciousness about what we eat. The focus on a healthy lifestyle, even as pressure on individuals being responsible for their own body and well-being makes consumers becoming more and more aware of what and how to eat (Maurer & Sobal, 1995; Caplan, 1997; Crossley, 2004, Lupton, 1996; Lupton, 2012 as stated in Bugge, 2015). Besides, the Western diet, being swamped with new food products introduced every year, has steered consumers relying on others, such as science, journalism and marketing, to help deciding what to eat (Pollan, 2007).

In the Netherlands, books as "De Voedselzandloper" (The Food Hourglass) and "Super Food Recepten" (Superfood Recipes) are highly popular. Rens Kroes and other health gurus publish books and even Jamie Oliver introduced his own happy and healthy lifestyle book called "Everyday Superfood". Also healthy food and lifestyle blogs, e.g. "Ilovehealth", "Fitgirlcode" and "RensKroes", are trending. Next to websites, books and blogs, also movies, new diets and documentaries have come to rise and together show the extreme interest consumers have in healthy, good food. Especially young females seem to be triggered by those so-called healthy food trends (NVVL, 2015).

Health is shown to be one of the most important motives for food choice (Ronteltap, Sijtsema, Dagevos & De Winter, 2012). However, it is doubtful if consumers still know what healthy food is, as they interpret the concept healthy food in a considerably different way (Ronteltap et al., 2012). Goldberg and Strycker (2002) suggest that certain personality types might be more susceptible to choosing healthy food alternatives than others. It might be that certain consumers also have something specific in common, that makes them so interested in healthy food trends.

As hardly any research has been done on those popular diets, this study is explorative in nature and tries to find first psychological determinants that could declare sensibility for healthy food trends. The study's focus is on that specific group that is expected to feel most attracted to current trends. The purpose is not to find out if consumers still know what healthy food is, but to understand what criteria those young females use to perceive and evaluate healthy food trends and to develop insight in what psychological determinants declare the attractiveness of healthy food trends and the tendency to integrate those trends in daily life.

1.2 Characteristics of popular healthy food trends

The present study is directed to healthy food trends that have gained popularity the last couple of years. Those trends can be characterized as a set of strict food rules that prescribe avoidance or promotion of certain nutrients, entire product groups or preparation techniques (Bugge, 2015), with the goal to get healthier. Often role models or gurus give the right example (e.g. Rens Kroes).

The diets claim specific health benefits and promote less processing techniques and consumption of more natural foods. Following those strict rules is not particularly intended to lose weight, but the rules provide certain guidelines that form the basis for a healthy lifestyle. Gluten and refined sugar are nutrients often labeled as "to avoid", dairy is a product group that should generally not be consumed, and an example of a popular preparation technique is raw food. Moreover, the diets are often supplemented by superfoods.

Typical for healthy food trends is their outspoken character and how they often converge with scientific research. Not only how healthy food trends are positioned, but also what they claim is in conflict with more moderate statements authorities make. For example the Dutch "Voedingscentrum" (the Netherlands Nutrition Centre) that advises Dutch consumers on how to eat healthy, uses the "Schijf van Vijf" as a basis for a healthy diet (Voedingscentrum, n.d., a). This circle is divided into five parts that contain all different types of food products, under which the so-called "to avoid" grain- and dairy products. The American dietary guidelines stress the importance of nutrient-dense foods and beverages and mention whole grains and fat-free or low-fat milk and milk products as examples (Dietary Guidelines for Americans, 2010). However, popular healthy food trends seem to take over authorities' monopoly on the truth of what comprises a healthy diet (Bugge, 2015).

1.3 Determinants of sensibility for healthy food trends

Healthy food trends are very popular nowadays, but it seems unclear where the interest in those trends comes from. The role of food for consumers' well-being, even as obesity as a major problem in Western society, have resulted in a large amount of research on exploring the tension in our relationships with food and consumers' food decision making (Block, 2012). Psychological traits often have been pointed out as determinants of food choice (Eertmans, Victoir, Vansant & Van den Bergh, 2005). Additionally, some personality types seem to be more susceptible to healthy food alternatives than others are (Goldberg & Strycker, 2002; Lunn, Nowson, Worsley & Torres, 2013). Therefore, certain psychological determinants might also declare the extent to which one finds healthy food trends appealing. This study is a first attempt at investigating several psychological determinants that are expected associate with sensibility for healthy food trends.

Eating regimes relate habits to the visible aspects of the body and therefore they play a large role in the individual's identity (Giddens, 1991). This also counts for healthy food trends. Following such a trend shows being a healthy eater. The concept of identity is a widely explored factor in relation

to food consumption. Consumers holding a healthy-eater identity show more healthy eating behavior (Strachan & Brawley, 2009). Therefore, this first determinant, the extent to which one sees oneself as a healthy-eater, is expected to positively associate with sensibility for healthy food trends.

The strict and extreme way of thinking that characterizes the healthy food trends (e.g. deleting gluten or dairy from the diet because it is bad for health) is in line with dichotomous thinking, which means thinking in binary oppositions such as "good and bad" (Oshio, 2009). Therefore, a more dichotomous thinker could be more sensible for such extreme healthy food trends.

Nowadays, more and more promising healthy products and services are being launched and there seems to be a relationship with higher demands on perfection (Bugge, 2015). Strictly following healthy food trends requires a high level of perfectionism as well. One should eat as healthy as possible and eating a "to avoid" product is seen as failure. Therefore, we expect that perfectionism can also declare sensibility for healthy food trends.

Restriction of particular nutrients, product groups or preparation techniques characterizes current healthy food trends. Being able to follow those strict eating rules requires self-control. Showing your capability to do so is a way to demonstrate the control you have over body, mind and emotions (Bugge, 2015). Therefore, trait self-control is the fourth determinant that might be related to sensibility for healthy food trends.

Not only is the ability to control your eating pattern needed to implement healthy food trends in daily routine, also the urge to control in general plays a role here. The strict rules that characterize healthy food trends could be helpful to exert this control. Especially in current society, full of unhealthy temptations that are available anytime and anywhere (Winson, 2004), strict rules can guide consumers by controlling their eating pattern. This desire for control is a determinant that differs per person. Someone with a high desire for control could be more sensible for healthy food trends than someone scoring low on this construct, because in the first case one is more attracted to controlling one's life, which can be done by following strict rules that characterize the diets. Thus, it is expected that desire for control positively relates to sensibility for healthy food trends.

Getting a healthy body and lifestyle is a common goal of following healthy food trends. Furthermore, many trends promise specific health benefits and claim prevention from diseases. Often particular role models or fanatic supporters of those diets promote the trends, especially via social networking sites. Body image concern is a factor that might develop maladaptive eating (Cooley and Toray, 2001). Although healthy food trends do not directly concern maladaptive eating, the extremeness of the trends, even as the characteristic of comparing your body with that from others, show some parallels with healthy eating disorder orthorexia. Therefore, there could be a positive association between the extent to which one is concerned about one's body image and being sensible for healthy food trends.

Finally, following healthy food trends is quite individualistic behavior. It strongly focuses on your own body and your healthy lifestyle. In Western society, health is also increasingly becoming

one's own responsibility (Svensson & Hallberg, 2011). Taking care of your body is something you should do yourself. This links to the seventh factor: individualism. It is therefore expected that an individualistic person is more sensible for healthy food trends than someone who is more collectivist in nature.

1.4 The present study

Interest in healthy food trends is rising nowadays, but is yet unexplored where sensibility for those trends comes from. Why do certain people feel more attracted to current healthy food trends, as eating gluten-free, not consuming dairy or being vegan, than others? A large amount of research has been done on determinants of food choice decisions. Classical factors as sensory appeal, health, convenience and price are shown to be important motives underlying food selection (Steptoe, Pollard & Wardle, 1995). Likewise, it is demonstrated that personality traits predict the adoption of healthy dietary recommendations (Goldberg & Strycker, 2002; Lunn et al., 2013). However, as the healthy food trends focused on in this study are relatively new and unexplored, this research also tries to connect with modern variables as the influence of social networking sites and role models. Moreover, psychological determinants that could declare the appealing character of those trends have not received much attention yet. One study explored the popularity of healthy food trends in Norway (Bugge, 2015), focussing on the shift towards other sources than government and institutions providing information on healthy food. Bugge (2015) particularly targeted Norwegian consumers and popular diets in that specific country.

The study presented here is explorative in nature. As little is known about healthy food trends, the possibility to build on previous scientific research is hardly there. However, this study is a first attempt at seeking where sensibility for healthy food trends originates from, focusing on a particular group of interested Dutch young females (18-29). The purpose of this study therefore is 1) to investigate where the growing interest in healthy food trends under young Dutch female consumers (aged 18 to 30) comes from, first 2) by identifying what criteria those consumers use to perceive and evaluate healthy food trends (qualitative prestudy) and second 3) by identifying to what extent seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) are associated with the attractiveness of healthy food trends and the integration of those trends in daily life (quantitative main study). Those healthy food trends are here defined as trends that have become very popular in the last couple of years and that consist of a set of strict food rules for avoiding and/or promoting consumption of certain nutrients or substances, entire groups of food products or preparation techniques (Bugge, 2015), often supplemented with superfoods, with the goal to become healthier.

The research questions (RQ's) to dive into this issue are formulated as follows:

1. *How do Dutch female consumers (18-30) perceive and evaluate healthy food trends?*

2. *To what extent do key psychological determinants (i.e. healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern, individualism) predict the perceived attractiveness of healthy food trends and their integration in daily life among Dutch female consumers (18-30)?*

To answer the research questions, we set up a qualitative prestudy followed up by a survey. The prestudy consisted of two discussion groups with female consumers and five interviews with experts. The goal of this prestudy was to understand what criteria consumers use to perceive and evaluate healthy food trends and to gain first insights in the possible determinants that declare sensibility for those trends. The two focus groups consisted of six and eight female consumers, between 18 and 23 years old. From the discussion groups, we could derive consumers' view on healthy food trends and possible explanations for whether or not following those trends. Those findings gave a sense of how consumers categorize healthy food trends, which helped delineating the trends this study focuses on. It also formed a base for deciding what trends to include in the survey. Furthermore, interviews with experts (scientists, food bloggers and food trend watchers), supplemented the focus group results with an experience and expertise based view on healthy food trends and opinions on possible factors declaring the sensibility for those trends.

The second part of the study consisted of a survey among 413 young females between 18 and 30 years old. Scores on sensibility for healthy food trends were measured by asking to what extent participants find healthy food trends attractive and to what extent they try to integrate healthy food trends in daily life. Background variables as age, BMI, dieting and social media use were also taken into account. Moreover, we examined use and reliability of sources providing information on healthy food.

Whereas several healthy food trends are gaining popularity in Western society, little research has been done in this field. Therefore, we could hardly build on previous work. This explorative study started investigating where sensibility for such trends comes from, focusing on the role of seven psychological determinants. It can be seen as a first attempt filling the knowledge gap on popular healthy food trends. Moreover, better understanding of consumers' perception of and sensibility for healthy food trends could help institutions with properly reacting upon such trends and help to improve communication about healthy nutrition.

2. Theoretical framework

In the second chapter, we will explain the literature that we used to describe the field of research. As the topic is rather unexplored, this study could hardly build on existing literature. Therefore, in paragraph 2.1, best sold book rankings, newspaper articles, popular topics on social media and available scientific literature helped setting up a framework covering all healthy food trends focused on in this study. Characteristics of the trends are summarized and presented in section 2.2. Paragraph 2.3 describes literature on psychological determinants that we expect to be related to sensibility for those healthy food trends. Section 2.4 includes the conceptual model and the hypotheses.

2.1 Popularity of healthy food trends

A range of healthy food trends has gained popularity the last couple of years, as shown by books, healthy food blogs, restaurants and associations. Those trends can be characterised by several features. To explore what exactly those common features are, we investigated the top 100 of best-sold books in 2014 in the Netherlands (CPNB, 2015a). This list included several healthy food books, as shown below (Table 1). Furthermore, we looked at popularity of social networking sites focused on healthy food and lifestyles and at restaurants and associations related to such healthy food trends.

Table 1. Healthy food books included in top 100 best sold books in 2014 (CPNB, 2015a)

Rank	Book title	Author	Year of publication	Number of sold books (range)
7	Powerfood	Rens Kroes	2014	75.000-100.000
16	De mooie voedselmachine (Darm mit Charme)	Giulia Enders	2014	75.000-100.000
22	De Voedselzandloper (The food hourglass)	Kris Verburgh	2012	50.000-60.000
33	Het Voedselzandloperkookboek (The food hourglass cookbook)	Pauline Weuring & Kris Verburgh	2013	40.000-50.000
85	70 groene smoothies (70 green smoothies)	Marjolijn van der Velde	2013	>20.000

Table 12 (appendix 1) shows the top 100 sales lists of 2010 until 2013 even as of 2003 until 2005 (CPNB, 2015b). In 2013, “De Voedselzandloper” was ranked fourth and “Het Voedselzandloper kookboek” (The Food Hourglass Cookbook) was also included in the list (rank 80). In 2012, “De Voedselzandloper” was published and entered the list (rank 37). In 2011, even as in 2010 “Gezond slank met Dr. Frank” (Healthy slim with Dr. Frank) were highly placed in the list (rank 31; rank 5). In 2011, also the second part “Gezond slank met Dr. Frank Deel 2” was popular (rank 52). Different from a decade ago is that at that time, a smaller amount, even as other types of healthy food books (more focused on weight loss), were favored. In 2005, the books “Bereik je ideale gewicht!” (Reach your ideal weight) (rank 55) and “Wat je eet ben jezelf” (You are what you eat) (rank 97) reached the top 100. “Dr. Atkins” (rank 31) and “Het South Beach dieet” (The South Beach Diet) (rank 39) dominated

in 2005. Remarkably, two years earlier not even one of the books in the ranking lists was about healthy food.

Further, a ranking list in the category "Food and cooking" of popular Dutch web store "Bol.com" (2015) includes several healthy food books. "Powerfood: van Friesland naar New York" (Powerfood: from Friesland to New York), "Powerfood", "365 koolhydraatarme recepten" (365 carbohydrate free recipes), "Gezond leven doe je zo!" (How to live healthy), "Grip op koolhydraten" (Having control over carbohydrates), "Het Voedselzandloper kookboek", "Jamie's super food voor elke dag" (Everyday Super Food), "Good Food", "De Voedselzandloper" and "Het nieuwe koolhydraatarme kookboek" (The new carbohydrate free cookbook) all have high sales rates.

In addition to popular healthy food books, the appearance of (healthy) food on online social networking sites (SNS) shows that healthy eating is trending. Many healthy food blogs inspire and motivate their followers by posting images, recipes and stories. The last couple of years, the number of such healthy food and lifestyle blogs has increased enormously. Much of the content posted on Instagram, a highly popular social media platform for photo sharing, is food related. The popularity of food photos shared on Instagram and Pinterest shows that people love food they created themselves (Dohle, Rall & Siegrist, 2013). Not only enthusiastic amateur chefs post their creations on Instagram, also healthy food bloggers appear on this platform. Photos of accounts as @deliciouslyella (700k followers), @livegreenhealthy (617k followers) and even Dutch accounts as @healthyfans (56,6k followers) and @renskroes (275k followers) are being massively looked at. To illustrate, searching for the tags #healthy and #healthyfood on Instagram, returns over more than 62 million and more than 10 million posts (all numbers derived at the time of writing). Many of the posted "healthy meals" are being marked as gluten-, sugar- or lactose free and contain lots of fruits and vegetables.

Together with these healthy food pictures goes the phenomenon fitspiration. Tiggeman and Zaccardo (2015, p. 62) use the definition of Abena (2013) saying that fitspiration is "an online trend designed to inspire viewers towards a healthier lifestyle by promoting exercise and healthy food". Strength and empowerment is the philosophy of this movement, captured in the statement "strong is the new skinny". Tiggeman and Zaccardo (2015) found on the one hand positive influence on fitspiration on motivation, but on the other hand greater body dissatisfaction and negative effects on state appearance self-esteem. Furthermore, they emphasize the clear role of social comparison based on appearance, also of "everyday" women instead of supermodels (Tiggeman & Zaccardo, 2015).

Not only books and blogs show the popularity of healthy food trends, also growing numbers of associations and restaurants related to particular diets demonstrate the popular trends. Veganism, not consuming animal source foods, and the raw food diet, which consists of only plant-based foods not heated above 42°C, can be seen as healthy food trends that have gained attention the last couple of years as well. Membership of "De Nederlandse Vereniging voor Veganisten" (the Dutch Vegan Association) has grown with 60% in 2013 (NVV, n.d., a). The culinary offer on festivals is not restricted anymore to the regular fries and hotdogs, but also many vegetarian and vegan food trucks

nowadays present their veggie burgers and other plant-based dishes to the festival public. Veganism becomes more of a lifestyle that is not only based on animal well-fare reasons, but that is adopted in consideration of health (Dyett, Sabaté, Haddad, Rajaram & Shavlik, 2013). Raw food restaurants pop-up, starting in "hipster cities" as Berlin, London and Oslo and in 2010, Copenhagen opened even a raw food outlet (Foodinspiration, 2015). Brands offer their raw chocolate bars and celebrities, as Gwyneth Palthrow and Bryan Adams, are fanatic followers of the diet. It can therefore be argued that veganism and raw foodism both belong to the healthy food trends. In the first case namely, a whole category of animal source foods is excluded from the diet and in the second case, only raw prepared food is consumed. Besides, both diets are often supplemented by superfoods.

2.2 Characteristics of healthy food trends

In order to clarify the focus of this study, we present several characteristics of healthy food trends, based on findings from book rankings with best sold books (CPNB, 2015a), newspaper articles (Saner, 2015; "Glutenvrije burgers", 2015), reports (FMI, 2014; Sloan, 2015) and institutions (NVV, n.d. b; Raw Food Institute, n.d.; Voedingscentrum, n.d., a). First, we constructed a table with popular books and diets, together with their promised effects, banned and promoted nutrients or substances and/or entire product groups (Table 2). Second, we summarized the features of the different trends into several characteristics, which we added in the last column of this table.

1. *Avoidance of nutrients or substances*

The American Institute of Food Technologists (IFT) published an issue in Food Technology magazine in which they conducted a list with ten consumption trends in 2015 based on today's consumer needs, changing lifestyle trends and food- and flavor preferences (Sloan, 2015). One of the trends mentioned here was the popularity of "exclusion diets", also named "free-from diets" (Sloan, 2015), which stands for excluding specific nutrients as gluten or entire product groups as dairy products. Rousseau (2015) also notes that popular "fad diets" reject nuance and complexity in favor of new certainty, which often means eliminating specific food products, nutrients or substances as gluten, sugar or carbohydrates. Those suggestions are supported by a study of FMI (2014), saying that in 2014, a third of the adults in the USA tried such specialty regimen and the most popular were gluten-free, lactose-free, raw food, dairy-free or juice cleanse diets. Leaving out specific nutrients, substances or entire product groups is also visible in popular healthy food trends in the Netherlands, as shown by Table 2 (gluten in e.g. Powerfood and lactose in e.g. Superfood Recepten and raw food). Therefore, the first characteristic of healthy food trends is the avoidance of nutrients or substances.

"De Voedselzandloper" describes the way food can delay the ageing process (Voedselzandloper, n.d., a). It offers an instrument showing how to substitute unhealthy food by healthy alternatives linking the layers of the upper triangle with layers in the lower triangle

(Voedselzandloper, n.d., a). One of the main principles of this book is lowering consumption of carbohydrates (bread, potatoes, pasta and rice) and replacing them by oatmeal, legumes, fruits and vegetables. The avoidance of carbohydrates links to a gluten-free diet. Nowadays, it seems that not only coeliacs delete gluten from their diet, but avoiding gluten has become trending among non-allergic consumers as well. An Australian study has shown that a significant part of the Australian population, especially women, is consciously avoiding consumption of wheat-containing products, often without an official diagnosis of a certain allergy as celiac disease (Golley, Corsini, Topping, Morell & Mohr, 2015). A Mintel report shows that more than half of consumers avoiding gluten did so, because of the health advantage beliefs (Saner, 2015). In the USA, about a third of the consumers indicate trying to cut gluten from their diet, while only seven percent of the American population suffers from a gluten allergy or intolerance (Consumer Reports, 2015). It seems that many people just say they feel better without gluten, without having much scientific evidence to back that up (Severson, 2014). For coeliacs, a negative side effect of this gluten-free trend is that their disease is sometimes not taken seriously, because they are seen as "one of the many trying to be trendy" (Severson, 2014).

Food companies recognize the "gluten avoidance" trend as well. Firms offering gluten-free products make enormous profits (NOS, 2014). In 2013, sales of gluten-free products in the UK were 15% higher than the year before (Saner, 2015). McDonalds currently offers gluten-free burgers at several locations in Amsterdam ("Glutenvrije burgers", 2015) and General Mills released gluten-free Cheerios in July 2015 (Reford, 2015). Noteworthy is that consumers avoiding wheat, often also avoid dairy (Golley et al., 2015). Golley et al. (2015) therefore speculate about the possibility of simple heuristics leading consumers to this behavior, because they might classify foods as fundamentally good or bad (Rozin, Ashmore & Markwith, 1996). Next to gluten or lactose in dairy as avoidance nutrients, trends also often call refined sugar a substance one should not consume (e.g. Powerfood and Superfood Recepten).

2. *Avoidance of entire product groups*

Some healthy food trends not only prescribe exclusion of specific nutrients or substances, but even entire product groups. This is the second characteristic of the trends. A group of products that is often postulated as "to avoid" is dairy (e.g. in Powerfood, De Voedselzandloper and 70 groene smoothies). The food category dairy has received a lot of attention the last couple of years. The traditional statement "Melk, de witte motor" (Milk, the white motor) seems to be overshadowed by "Zuivel is de duivel" (Dairy is the devil). Media were filled with items about "Got Milked?" (translated into Dutch as "Zuivel, de witte sloper"), a book by the Canadian Alissa Hamilton, published in spring 2015. The writer claims that milk can actually weaken our bones, that milk consumption contributes to weight gain and that it can cause many health problems. According the Voedingscentrum (the Netherlands Nutrition Centre), the book contains lots of nonsense and the author uses a lot of "cherry picking", combining results from different scientific papers and drawing her own conclusions

(Voedingscentrum, 2015). However, rejuvenation coach and author of the book "Superfood Recepten", Jesse van der Velde, reviews the anti-dairy book very positively (Van der Velde, 2015).

An upcoming trend that goes further than avoiding dairy products is veganism, which means avoiding consumption of animal source foods. More and more cafés and restaurants offer vegan dishes (Roemaat, 2013). Besides, vegan food blogs as "De Groene Meisjes" (largest Dutch blog about a green lifestyle, 120.000 unique visitors a month) are gaining popularity. "The Vegan Challenge", a project initiated by the "Nederlandse Vereniging voor Veganisten" (Dutch association for vegans) stimulates twice a year to eat vegan for a full month (VeganChallenge, n.d.). In 2013, membership of this vegan association has grown with 60% (NVV, n.d., a). Individuals currently seem to adopt a vegan lifestyle not only because of animal welfare reasons. Next to care of animal wellbeing, health is an important reason for being vegan (Dyett et al., 2013; Radnitz, Beezhold & DiMatteo, 2015). As adopting a vegan diet also means living according to strict rules and deleting a complete category of food products from the diet, animal source foods, it can be classified as healthy food trend as well.

3. *Less processing, more natural*

A third characteristic of healthy food trends is using less processing techniques and consuming more natural food. The "Powerfood" books promote whole foods, "Superfood Recepten" emphasizes on avoiding e-numbers and white and artificial sugars and the raw food diet postulates only consuming food not heated above 42°C. This latter diet consists of mostly (green) vegetables, (dried) fruit, nuts, seeds, superfoods and legumes (Raw food, n.d.). So-called "raw foodies" belief that by preparing food at higher temperature, it will lose its nutrients and enzymes, which are important for digestion and other bodily functions (Raw food Institute, n.d.). Besides, the cooking process changes the molecular structure, which may be harmful for health, according to raw food followers (Raw food Institute, n.d.).

4. Claiming specific health benefits and prevention of diseases

Fourth, what typifies popular diets is that they claim specific health benefits as better skin (70 groene smoothies, Superfood Recepten, veganism) and promise reduced risk of several diseases (De Voedselzandloper, 70 groene smoothies, veganism). Popular healthy food trends often promote superfoods as additional to the diet, also because of the promising health benefits. For example, blueberries are believed to lower blood pressure, cholesterol and to reduce the risk of coronary heart disease (Greatist, 2013). Chia seed would boost energy, stabilize blood sugar, aid digestion and lower cholesterol (Coles, 2013). The term superfoods does not have a specific definition, but within academia it is seen as foods that are particularly appealing and energy dense (Lunn, 2006). Chia seeds, mulberries and goji-berries were very popular the last couple of years and their "superfood image" also appears to effect sales, according to BBC Radio (2006), as mentioned by Lunn (2006). For example sales of blueberries doubled in 2005-2007 following superfood claims, according to The Neilsen Company 2007 (Weitkamp and Eidsvaag, 2014). In 2014, Kellogg's launched a superfood

Special K variant in Australia, containing among others cranberries and almonds (Abdulla, 2014). Also Earnest Eats expanded its line of cereals with a superfood version, "Blueberry Chia", marketed as a respond to many request "our first gluten-free offering, for a delicious and healthy breakfast that's easier for those avoiding wheat and gluten" (Business Wire, 2014). Nowadays there is a tendency towards more accessible food branded as superfoods, as kale, sweet potato, blueberries and beetroot. McDonalds for example, is testing a kale-packed breakfast bowl in several Los Angeles area restaurants (Luna, 2015).

5. Use of role models

The fifth and last feature that characterizes healthy food trends is the use of role models to support health claims, instead of scientifically based research generally used by authorities. Spiteri Cornish and Moraes (2015) investigated the behavioral responses towards government healthy eating campaigns and found that inconsistent, incomplete and contradictory information confuses consumers about how to eat healthy. Results also implied that consumers had difficulties with differentiating between all those information sources, meaning that they often blamed policymakers and institutions for the confusing communication (Spiteri Cornish & Moraes, 2015). This subsequently resulted in an increase of trust and reliance on advertisement, labels and other commercial sources that often communicate a rather clear-cut message (Spiteri Cornish & Moraes, 2015). Rousseau (2015) also addresses the shift from authorities and expertise due to consumer anxiety about health and eating, and remarks that this feeling of insecurity offers a market for quick-fix solutions. Often celebrities promote such solutions, based on questionable science and success stories (Rousseau, 2015).

Healthy food trends generally have a face as well. Young females see gurus as Rens Kroes as the example who demonstrates how to live a happy and healthy life and many healthy food bloggers are being followed because of the exemplary role they play for their public. As so much information on healthy food is available nowadays, consumers easily get confused. Gurus pretending to have the answer to the question of what is healthy can then set up order in the chaos. Their messages are usually not in line with what authorities promote as a healthy diet. In general, authorities make more moderate and scientifically based claims, in contrary to what most healthy food trends carry out. For example, although most healthy food trends exclude products as bread, pasta and milk, authorities promote such types of products. The Voedingscentrum uses the "Schijf van Vijf" as a basis for a healthy diet (Voedingscentrum, n.d., a). This circle contains five parts that all stand for different types of food products, under which gluten and dairy products. Voedingscentrum also claims less specific health benefits, but makes more general statements as saturation, bowel health, well-working digestion and lower risk of cardiovascular diseases. Food products prescribed by the Voedingscentrum are fruit and vegetables, potatoes, bread, rice, pasta, dairy products, meat, fish or substitutes, (diet)margarine, oils and water (Voedingscentrum, n.d., a). American dietary guidelines also emphasize the importance of nutrient-dense foods and beverages and mention as examples whole grains, fat-free or low-fat milk,

and milk products (Dietary Guidelines for Americans, 2010). They promise health, reduced risk of chronic diseases and prevention of food borne illness (Dietary Guidelines for Americans, 2010). Furthermore, consumption of solium, satured fatty acids, dietary cholesterol, transfats and refined grains should be limited. Consumption of vegetables and fruits, whole grains, low fat or fat free milk and milk products and protein food (low in solid fat) are promoted (Dietary Guidelines for Americans, 2010). Taken all those characteristics together, the concept of healthy food trends in this study is operationalized as strict, outspoken food rules that:

1. prescribe avoidance of certain nutrients or substances;
2. prescribe avoidance of entire product groups;
3. promote less processing techniques and more natural food;
4. claim specific health benefits and prevention of diseases;
5. are linked to role models giving the right example, in contrast with what authorities say.

Table 2. Healthy food books and diets with the promised effects and banned and promoted product categories

Book title / diet	Author	Promised benefits	Banned (or reduced consumption of) product categories	Promoted product categories	Characteristic of diet
Powerfood (Kroes, n.d.)	Rens Kroes	- "to achieve and maintain a healthy, happy and beautiful body"	- Cow's milk - Products containing gluten -Refined sugar	- Whole foods - Green foods	- Exclusion of specific nutrients or substances - Exclusion of entire product groups - Less processing; more natural -Role model
De Voedselzandloper / Het Voedselzandloper kookboek (Voedselzandloper, n.d., a; Voedselzandloper, n.d., b)	Kris Verburgh Pauline Weuring & Kris Verburgh	- "retarding the risk of ageing diseases as cardiovascular disease, dementia, osteoporosis or diabetes"	- Milk, (drink)yoghurt -Carbohydrates: bread, potatoes, pasta, rice -Sweets -Red meat	- Food supplements - Sugar supplements - Dark chocolate, nuts, soy products - Fat fish and poultry, eggs, cheese, tofu, quorn - Oatmeal, legumes, vegetables, fruits - Water, green/white/ginger tea, red wine, plant based milk, coffee and fresh pressed fruit juice	- Exclusion of specific nutrients or substances - Exclusion of entire product groups - Claiming specific health benefits; prevention of diseases
70 groene smoothies (Van der Velde, n.d.)	Marjolijn van der Velde	- "more energy" - "improved immune system" - "brilliant skin" - "improved bowel movements" - "improved blood pressure" - "prevention of several diseases" - "weight loss"	- Dairy products	- Fruit - Vegetables -Superfoods	- Exclusion of entire product groups - Claiming specific health benefits; prevention of diseases

Book title / diet	Author	Promised benefits	Banned (or reduced consumption of) product categories	Promoted product categories	Characteristic of diet
Superfood Recepten (Superfood recepten, n.d.)	Jesse van der Velde	Superfoods: - "support the break off of toxic substances" - "give us direct, sustainable energy" - "improve our skin" - "support burning excess fat" - "support balancing hormone level" - "improve bowel health"	- Products containing gluten, lactose, e-numbers, white and artificial sugars	- Superfoods	- Exclusion of specific nutrients or substances - Exclusion of entire product groups - Less processing; more natural - Claiming specific health benefits; prevention of diseases
Veganism based on health beliefs (Vegansociety, n.d.)	-	- "increased energy" - "younger looking skin" - "eternal youth" - "reduced risk of cardiovascular disease" - "reduced risk of cancer and other diseases"	- Animal source foods (e.g. dairy products, eggs, honey)	- Fruits - Vegetables - Grains - Legumes - Nuts and seeds - Calcium rich foods - Other essentials (supplements)	- Exclusion of entire product groups - Claiming specific health benefits; prevention of diseases
Raw foodism (Raw food, n.d.; Raw foodfestival, n.d.; Raw food Institute, n.d.)	-	- "improvement of physical, mental, emotional and spiritual health" - "increased energy" - "better digestion" - "weight loss" - "reduced risk of heart disease, diabetes and cancer" - "great sense of wellbeing" - "improved skin"	- All food prepared under higher temperature than 42ºC - Meat - Products containing gluten and lactose	- Pure products - Superfoods - 100% plant-based products - Germs - Unprocessed food	- Exclusion of nutrients or substances - Exclusion of entire product groups - Less processing; more natural - Claiming specific health benefits; prevention of diseases

2.3 Determinants related to sensibility for healthy food trends

A substantive body of research has been done on factors that influence food decision making and eating behavior (Block, 2012). Several determinants could have an influence on the rising interest in healthy food trends as well. One type of determinants is personality traits, which can predict adoption of healthy dietary recommendations (Lunn et. al., 2013; Goldberg & Strycker, 2002). As hardly any research has been done on where sensibility for healthy food trends comes from, this study attempts to start exploring this field, by testing seven psychological determinants that are expected to partly declare the growing interest in those trends. We based the choice for those determinants on the link they have with typical characteristics of healthy food trends defined in section 2.2.

1. *Endorsement of a healthy-eater identity*

Characteristic for healthy food trends is the exemplary role that gurus play in proclaiming how to eat. The number of healthy food blogs, together with the number of followers, is growing and growing in the last couple of years. Hundreds of photos of healthy meals and fit bodies are daily being posted and people seem to express their identity by what they eat and by how healthy they live.

Food consumption often links to the concept of identity. According to the Identity Theory (Burke, 2006), identity relates to control and regulation of behavior. Someone who endorses a particular identity wants to keep identity and behavior congruent and therefore engages in behaviors that fit into that identity (Cast and Burke, 2002). Food choice is a matter of identity as well (Franchi, 2012). As Fox (2003, p. 2) states, "since everyone must eat, what we eat becomes a most powerful symbol of who we are". The food choices we make, the eating patterns we have and the food trends we follow are examples of behavior we show to promote our identity. Several other researchers focused on the relationship between food consumption and identity. Choosing what we eat communicates meanings and expresses who we are (Martin, 2005). Dagevos, as referred to by Stevens (2015) says that not only what we eat, also the way we do that helps us deriving our identity. Therefore, food consumption is a way to display its self, its social identity and it creates a particular lifestyle (Bourdieu, 1984; Sneijder & te Molder, 2009). It says something about what is important for us. In line with this view is what Fox (2003) points out: with food, it is possible to convey a message accessibly and effectively to others. Bisogni, Connors, Devine and Sobal (2002) conclude that how one uses food is a way to assign a certain identity to oneself and others, by what is seen as edible, by different types of food and by methods of preparation. Furthermore, Bisogni et al. (2002) mention that typically in Western societies, the body is regarded as a marker for personal and social identity and a healthy and fit body stands for self-control, self-denial and willpower. Strachan and Brawley (2009) explore the concept of a healthy-eater identity and found that people who view themselves as a healthy-eater show more healthy eating behavior. We therefore expect that a healthy-eater identity is also associated with the extent to which one is sensible for healthy food trends.

2. Dichotomous thinking

One of the aspects of healthy food trends is the exclusion of several nutrients, substances or entire group of food products. This extreme way of categorizing food items in good and bad can be linked to the concept of dichotomous thinking. Because of the large amount of information nowadays available, consumers seek manners to structure and simplify nutrition information (Rozin et al., 1996). Categorical thinking, to categorize foods into for example either "good" or "bad" and dose insensitivity, the belief that something is harmful in high amounts is also harmful in low amounts, are two ways consumers use to structure the overload of nutrition information (Rozin et al., 1996). Furthermore, it is shown that a small portion of food categorized as "bad" is perceived as promoting greater weight gain than a much larger portion of "good" food, even if this last one contains much more calories (Oakes, 2005). This also appeared to be the case when the calorie-amount was mentioned next to the food portion (Oakes & Slotterback, 2005). Those findings suggest that reputation of the food is not dependent on the actual nutrient content of the food (Oakes, 2005).

A related concept is nutrient-centrism, which is the belief in nutrients as a crucial factor in avoiding diseases or achieving specific health benefits. Superfoods are an example of such a specific type of food that is claimed to prevent certain diseases or to be beneficial for health. Schuldt and Pearson (2015) show that people seem to prefer this focus on health promoting nutrients instead of whole-food centrism, which is the belief that whole foods containing these nutrients are more beneficial. One of the characteristics of healthy food trends is, as previously formulated, that they claim specific health benefits, for example, the positive effects of superfoods. This shows parallels to the belief in nutrients, compared to the whole-food centrism.

Categorizing food as good or bad relates to the current popular healthy food trends as well. Characteristic for those trends is the extremely strict rules they consist of, for deleting complete types of nutrients or groups of food products. When a whole category as dairy products is seen as bad, one could more easily delete any dairy product from the diet. Instead of looking at the nutrient content of the specific dairy product itself, for example low-fat yoghurt, followers of the current healthy food trends will categorize the product into the dairy category and therefore do not consume it at all. This is even the case if the reputation for healthfulness of this category (dairy) is not in line with nutrient-description ratings of wholesomeness of that food (Oakes & Slotterback, 2005). The Voedingscentrum (n.d., a) and Dietary Guidelines Americans (2010) prescribe low-fat dairy as part of a healthy diet. Thinking in such categories is in line with the concept of dichotomous thinking, which means thinking in terms of binary oppositions as "good" and "bad" (Oshio, 2009). Food and eating related dichotomous thinking appears to be a mediator for the association between restraint eating and weight regain (Palascha, Van Kleef and Van Trijp, 2015). Therefore, Palascha et al. (2015) also suggested a link between dichotomous beliefs about food and eating and a rigid dietary restraint. It is likely that

such type of dichotomous thinking also relates to the degree to which one feels attracted to and tries to integrate healthy food trends.

3. Perfectionism

Typical for healthy food trends is their strict eating rules that guide you to becoming as healthy as possible. A motivation for following those strict rules could be striving for doing something as good as possible (eating as healthy as possible), being excellent at something (healthy eating) and avoiding failure (not consuming avoidance nutrients or products). This connects with perfectionism, which is "the tendency to hold and pursue exceedingly high standards" (Chang, Ivezaj, Downey, Kashima & Morady, 2008, p. 102). Brown, Parman, Rudat and Craighead (2012) suggest that holding those high standards could make individuals rigidly following such strict eating rules.

Perfectionism is found to be related to eating disturbances as anorexia nervosa (Chang et al., 2008) and to orthorexia, striving for eating as healthy as possible (Fidan, Ertekin, Işikay & Kirpinar, 2010). The role food plays in achieving this mental and physical health perfection seems to become more important in the last decades (Bugge, 2015). Research indicates that perfectionism predicts symptoms of eating disorders as anorexia nervosa (Bastiani, Rao, Weltzin & Kaye, 1995) and bulimia nervosa (Bulik et al., 2003; Hewitt & Flett, 1991). Besides, body dissatisfaction and perfectionism seem to be associated (Downey & Chang, 2007). Orthorexia nervosa, literally meaning "proper appetite" (Koven & Abry 2015) is an obsession with healthy food. Although orthorexia is not recognized as psychiatric disease yet, it may lead to malnourishment, loss of relationships and poor quality of life (Koven & Abry, 2015). Koven and Abry (2015) mention that one who suffers from orthorexia nervosa has the goal to maximize one's physical health and well-being by constantly fixating on food quality (both nutritional value and its perceived purity). Perfectionism not only links to anorexic, but it also turned out to be a common trait of orthorexic (Fidan et al., 2010). A relation between perfectionism and the sensibility for healthy food trends and rules is thus expected.

4. Trait self-control

An aspect that comes back in healthy food trends is the extreme rules that they hold. Not eating particular nutrients, substances or groups of products can be seen as rules for healthy eating. To be able to follow those strict rules, one needs to have a certain amount of control over oneself. Following those trends is a way to demonstrate the capability of controlling your body, mind and emotions (Bugge, 2015). Having control over oneself is called trait self-control and is an important predictor of health behaviors (Crescioni et al., 2011). Research has shown that high self-control predicts weight loss (Crescioni et al., 2011) and is associated with higher consumption of healthy food (Giese et al., 2015). Today, self-control is a dominant value and the body symbolizes whether or not one possesses this trait (Lupton, 1996). The amount of self-control one has, therefore could also associate with the extent to which one is sensible for the current healthy food trends.

5. *Desire for control (desire to control self)*

Following the strict rules that healthy food trends prescribe not only requires the ability to control oneself, but also the willingness to do so. Those rules could give individuals a certain grip on how to eat healthy and promote the feeling of being in control of one's eating pattern. Especially in the current foodscape, full of energy-rich foods and drinks that constantly tests one's willpower on food temptations (Winson, 2004), such rules could be helpful to consumers. However, not every individual might be that sensible for control than others and therefore consumers might differ in the strength of feeling attracted to healthy food trends. This connects to the concept of desire for control, which strength varies among individuals. Being in control positively relates to health status and desirability for such control stands for the general desire for control over events occurring in one's life (Gebhardt & Brosschot, 2002). Desire for control relates to orthorexia nervosa (Fidan et al., 2010). Koven and Abry (2015) pose that orthorexic individuals see sticking to their diet as a marker for self-discipline and deviating from the diet as failure of self-control. Besides, orthorexic seem to feel in control when eating healthy (Koven & Abry, 2015). We therefore expect desire for control to partly declare sensibility for healthy food trends as well.

6. *Body image concern*

A distinctive factor of healthy food trends is their claims on promising health benefits and on preventing from specific diseases. Besides, the goal of current healthy food trends is to become healthy by handling your body with care. The idea of taking care about your body and appearance links up with the concept of a body-conscious society. Crossley (2004) describes this society as one in which fitness, health and thinness is celebrated and all serve as ideals for their members. The popularity of yoga the last couple of years (Gfk, 2014), particularly among young women (Neumark-Sztainer, Eisenberg, Wall & Loth, 2011) can also be seen in the light of this body-conscious society, as it reasons for practicing yoga are becoming aware of one's body and increasing control over one's body (Vereniging Yoga Docenten Nederland, n.d.).

Body image concern, being concerned about one's body and how others look at it, is related to this characteristic of healthy food trends. Getting a healthy body, according to healthy food trends, should be achieved by eating as healthy as possible. Being obsessed with such healthy eating behavior is called orthorexia nervosa. Brytek-Matera (2012) treats orthorexia nervosa as a disturbed eating habit, connected with obsessive-compulsive symptoms. Key is the fact that orthorexic give up their normal lifestyle. Having a negative body image is a risk factor that develops maladaptive eating (Cooley and Toray, 2001). Orthorexia often goes together with a negative body image as well (Brytek-Matera, 2012). Furthermore, it has been shown that exposure to fitspiration imagery results in greater body dissatisfaction (Tiggeman & Zaccardo, 2015). Although current healthy food trends are far from real eating disorders, the strict rules those trends characterize are somewhat parallel to disordered

eating patterns. Thus, the extent to which one is concerned about one's body image may be linked to the desire to follow healthy food trends as well.

7. Individualism

Following healthy food trends is quite individualistic behavior. Central is your own lifestyle, in which you apply your specific, strict rules and methods to become a healthy individual. In Western society, the individual health project, as Svensson and Hallberg (2011) call it, is gaining attention. Taking care of your body by deciding how and what to eat, exercise regularly and maintaining social relationships, is becoming one's own responsibility more than ever (Svensson & Hallberg, 2011). People also actively look for information about how they can improve health and well-being (Svensson & Hallberg, 2011).

Eating promotes individualism and personal power (Counihan, 1992). Individualism can be defined as "the subordination of goals of the collectivities to individual goals and a sense of independence and lack of concern for others" (Hui & Triandis, 1986, p. 245). By eating according to healthy food trends, one stands out from the crowd and shows one's identity. Such an individualistic attitude is therefore likely to relate to sensibility for healthy food trends as well.

2.4 Hypotheses and conceptual model

We suppose to find a positive associations between the seven characteristics (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) and sensibility for healthy food trends. To measure sensibility for healthy food trends, we divided this concept into attractiveness of those trends and integration of the trends in daily life.

We expect that all psychological determinants positively relate to attractiveness of healthy food trends and tendency to integrate them in daily life. In addition, we expect that attractiveness of healthy food trends positively relates to tendency to integrate them. Hence, the hypotheses are formulated as follows:

H1: A healthy-eater identity is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H2: Dichotomous thinking is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H3: Perfectionism is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H4: Body image concern is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H5: Trait self-control is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H6: Desire for control is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H7: Individualism is positively associated with attractiveness of healthy food trends and tendency to integrate healthy food trends in daily life.

H8: Attractiveness of healthy food trends is positively associated tendency to integrate healthy food trends in daily life.

Those hypotheses together form the conceptual model, as shown in Figure 1.

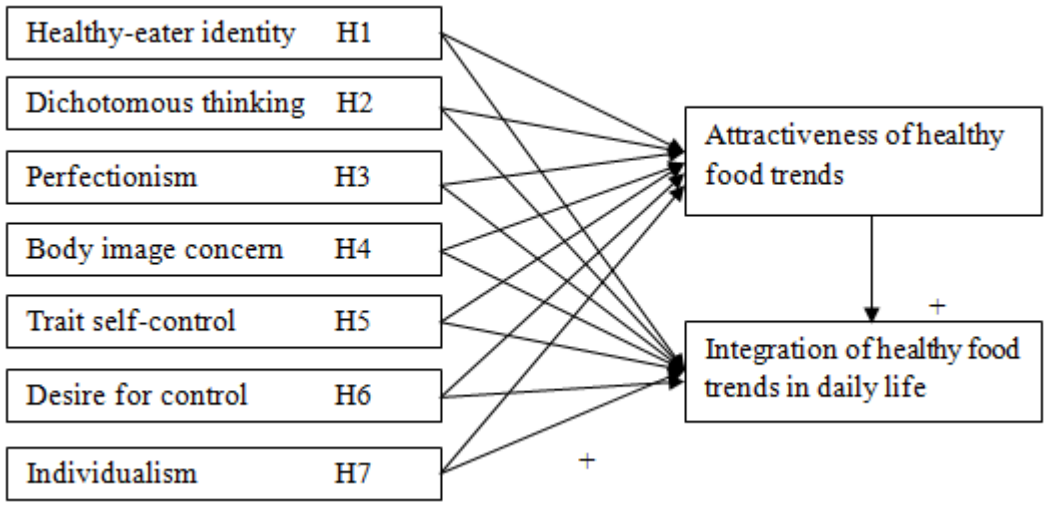

Figure 1. Conceptual model of the study

3. Study 1

The study presented here consisted of two parts: a qualitative prestudy and a survey. The prestudy was set up to answer the first research question *"How do Dutch female consumers (18-30) perceive and evaluate healthy food trends?"*. The goal of this study was to develop insight in how consumers perceive and evaluate healthy food trends, how experts perceive healthy food trends and how they declare the sensibility for those trends. As hardly any scientific literature is available on healthy food trends and on how consumers perceive and implement those trends, this prestudy was conducted to explore the phenomenon, to get familiar with currently popular healthy food trends and to help constituting a base for characterizing the healthy food trends this study focuses on. Further, specific findings on communication channels and information sources were used as input for setting-up the survey. This chapter describes the prestudy, providing methodology (section 3.1), followed by the results of the focus groups (section 3.2.1) and the expert interviews (section 3.2.2). Then, we discuss the results and draw a conclusion in section 3.3, serving as input for the main study.

3.1 Methodology

3.1.1 Participants

In the qualitative prestudy, two focus groups were conducted, one consisting of six (aged 18 to 23) and one of eight participants (aged 22 and 23), presented in Table 3. Those participants were recruited via e-mails sent to friends and acquaintances, who were asked subsequently to forward the e-mail to possible interested people in their own network. Both groups therefore consisted of participants the researcher was familiar and unfamiliar with. Selection criteria for participants were age (between 18 and 30 years old), female, Dutch and somewhat interested in healthy food. We targeted this group, because we expected sensibility for healthy food trends to be highest among those consumers. Especially young females are interested in healthy food trends (NVVL, 2015). Furthermore, it has been found that young women are more likely to think in terms of "good" and "bad" food categories and place fat more in the "bad" category, compared to men and older women (Oakes & Slotterback, 2001; Oakes, 2003). Next to that, research has shown that avoidance of wheat-containing products, one of the characteristics of some trends in this study, was greatest among females (Golley et al., 2015).

Young females can be considered as the early adopters of healthy food trends, being the first picking up trends from the innovators who started them, and implement them in their lives (Rogers, 1962). Further, a characteristic of early adopters is that they communicate the usefulness of products to their followers (Rogers, 1962), which corresponds with the large number of posts on social media in which people share their enthusiasm about healthy food trends. Rogers (1962) explains also that early adopters have favorable attitudes towards new ideas and innovations, which also is in line with those upcoming healthy food trends targeted in this study. The explorative approach of this research makes

it most interesting to focus on this particular group of early adopters, that is expected to show most revealing results.

Furthermore, the prestudy consisted of five interviews with experts who are presented in Table 4. We chose to interview scientists, food bloggers and food trend watchers, because they could give insight in what exactly are the current healthy food trends, based on their expertise and experience, which would help defining those trends. Furthermore, their familiarity within the field enabled experts to shed light on what determinants can declare sensibility for healthy food trends. Possibly, some factors should be adapted, removed or added to the list, because of reasons that the researcher did not yet take into account.

Table 3. List of focus group participants

Participant number	Age	Level of education	Following a diet (yes/no)	Reason for dieting
1	18	Havo/VWO	Yes	Preparation for modeling
2	19	HBO/WO	Yes	Vegetarian for 10 years, not because of health reasons, but because of not willing to eat animals.
3	23	HBO/WO	Yes	Vegetarian, because killing animals for human consumption is not necessary. Human beings do not need meat for a healthy living.
4	21	HBO/WO	No	-
5	23	HBO/WO	No	-
6	22	HBO/WO	No	-
7	23	HBO/WO	Yes	Vegetarian
8	23	HBO/WO	No	-
9	23	HBO/WO	No	-
10	23	HBO/WO	No	-
11	23	HBO/WO	Yes	Vegetarian, not willing to eat animals.
12	23	HBO/WO	No	-
13	23	HBO/WO	No	-
14	22	HBO/WO	No	

Table 4. List of interviewees

Name	Function	Field of expertise
Jan Peter van Doorn	Director of The Food Agency	Marketing, communication, innovation
Jaap Seidell	Professor Nutrition and Health	Relation environment, behavior and health from a health perspective
Denise Kortlever	Culinary journalist, food trend consultant	Culinary trends, food service industry
Marielle Bordewijk	Food designer and trend watcher	Food trends, food design and innovation
Katja Gruijters	Food designer	Food design

3.1.2 Design and procedure

The qualitative prestudy consisted of focus groups and expert interviews. The focus groups were held in Utrecht and Nijmegen. Both locations, a café and the researchers' home, assured that participants felt relaxed and comfortable during the discussion. Each session took about 90 minutes. During both sessions, two smartphones recorded the conversation. We chose focus groups, because they work well when trying to determine the perceptions, feelings and thinking of people about issues (Krueger & Casey, 2000). Specifically in the food context, focus groups are used more often to investigate consumer perceptions on healthy food consumption (McGee et al., 2008; Stevenson, Doherty, Barnett, Muldoon & Trew, 2007). One of the goals of a focus group is that it helps to understand a specific topic of interest (Krueger & Casey, 2000). As healthy food trends are rather unexplored, consumers could help build understanding of what makes those trends so appealing and come up with reasons the researcher did not yet think of herself.

We set up a focus group manual to provide guidance during the sessions (appendix 3). Stimuli material (14 cards with images of healthy food trends) can be found in appendix 5. During the sessions, we used an emphatically open approach, focused on participants' experience in daily life. The focus group sessions started with a general introduction in which the researcher and participants introduced themselves to each other. As introductory assignment, the participants were asked to mention their associations with healthy eating. The second phase consisted of a sorting task, in which the participants were asked to group the 14 cards with images of healthy food trends, based on similarities and differences. Card sorting enables representation of underlying mental processes (Spradley, 1979). A sorting task is a widely used method to let consumers describe food and non-food products (Lelièvre, Chollet, Abdi & Valentin, 2008). During the focus group discussions, participants were asked to execute such a sorting task, to roughly identify how consumers perceive and describe healthy food trends. After sorting, motivation of choice for each specific category was discussed.

During the third phase of the focus group sessions, participants ordered the same 14 cards based on attractiveness, after which again motivation was discussed. The fourth exercise was again a ranking task, but this time based on tendency to integrate the trends in daily life. Each time, the researcher took photos of participants' categories and rankings. Finally, the participants filled in a short questionnaire asking demographical characteristics as age and education level and they could mark if they were currently on a diet. Participants could also indicate if they would like to receive a copy of the report at the end of the study. Finally, the groups were thanked for their time and for taking part in the study.

The other part of the prestudy consisted of five semi-structured, face-to-face interviews with experts, taking approximately 60 minutes. A smartphone was used to record the interviews. As consumer's opinions on the one hand give insight in how people categorize and define healthy food trends, experts on the other hand can provide information on popularity of healthy food trends and

possible determinants of sensibility for those trends, based on their knowledge and expertise in the field. We chose interviews for this purpose, because the flexibility of this method enables researchers to dive into the psychological dynamics behind consumers' dietary behaviors (Denzin & Lincoln, 2005; Gray, 2004). Several food bloggers, designers, trend watchers and scientists were interviewed to develop insight in the possible characteristics that are related to sensibility for healthy food trends. The set-up of the interviews was comparable with that from the focus groups. It included the same sorting task, but this time no questions were asked about attractiveness and tendency to integrate trends. Instead, possible characteristics that might declare sensibility for healthy food trends were questioned. First, an open question was asked about possible factors declaring sensibility for those trends. Second, the seven psychological determinants were presented and experts were asked to what extent they believed those determinants relate to sensibility for healthy food trends. At the end of each interview, also the experts filled in a short questionnaire about their background, field of expertise, age and gender. They could also indicate if they wanted to receive a copy of the report. Finally, experts were thanked for their time and cooperation.

3.1.3 Stimuli

For the sorting task, we conducted 14 cards with images of healthy food trends (appendix 5). Those trends were chosen based on the literature study presented in chapter two, i.e. all trends fit (some of) the characteristics that describe the healthy food trends this study focuses on. The stimuli set consisted of relatively new healthy food books (e.g. Powerfood, De Voedselzandloper, Superfood Recepten) as older diet books (e.g. Sonja Bakker, Dr. Frank), but also included broader healthy food trends (gluten-free diet, dairy-free diet). We chose this mixed set, because it could give insight in how consumers think the large amount of different healthy food trends relate to each other and if they distinguish recent trends from older diets. Consumers' views helped defining more precisely the healthy food trends targeted in this study, which also served as input for the survey.

3.1.4 Background variables

At the end of each focus group and each interview, participants filled in a short questionnaire with demographic information (for the focus group participants: age and education level, for the experts: expertise, age and gender). Furthermore, focus group participants indicated if they are currently on a diet and with what reason. We used those characteristics to describe the sample. Following a specific diet with the goal to lose weight could influence the answers of the focus group participants, because then other reasons for following healthy food trends could come up. To account for such a bias, this dieting control variable was included.

3.1.5 Analysis

Both focus group discussions and interviews were recorded using a smartphone. The researcher took pictures of stimuli material after each task. In addition, field notes were taken during the interviews. Focus group discussions even as interviews were transcribed from the recordings. Before starting the analysis, transcriptions were read several times. Often recurring elements and patterns were marked. We presented the findings roughly according to the structure of the discussion guidelines prepared beforehand, supported by most relevant quotations.

3.2 Results

3.2.1 Focus groups

Broad range of associations with healthy food

As a warm-up exercise of the focus group sessions, participants were asked to mention associations with healthy food. They gave a broad range of associations, from fruits and vegetables (most mentioned) to a varied diet, lifestyle and several nutrients.

Graphical representation of guidelines for a healthy diet

The second task of the discussion was categorizing the stimuli material (appendix 5) into groups. Table 13 presents the formed groups (appendix 6). The "Schijf van Vijf" and the "Voedselzandloper" were placed together by most participants (12 out of 14), whereas those guidelines considerably differ at certain points. Arguments for combining those cards were that both provide certain guidelines for a healthy diet and because those two are more strongly underpinned, as illustrated by the following statements: *"I put the Voedselzandloper and the Schijf van Vijf together, because I think, these are certain guidelines"* and *"and this is, according to me, a bit more strongly underpinned"*.

A healthy lifestyle

Vegan and raw were also mostly combined into one category (12 out of 14). They were both seen as lifestyles *"..more because it is also more a lifestyle.."* or as trends, associated with superfoods *"..milk, raw, vegan, superfoods I put all together as trends"*.

The influencing role of the spokesperson

Several participants constructed a group with all books or authors (Sonja Bakker, Rens Kroes, Dr. Frank and Superfood Recipes) and stressed the role of the person *"I feel that people look less often at institutions, but more at persons as Rens Kroes, that do not forbid many things, but just say 'it can be very tasty!'"*.

Free-from diets seen as hypes and trends

Cards with "free-from" diets were either categorized as one group, or subdivided into smaller categories (e.g. sugar-free and refined sugar-free, bread-free and gluten-free, dairy). Participants suggested that popularity of avoiding such product categories, nutrients or substances has increased the last couple of years: *"Because for me it is a sort of trend nowadays that everyone has something he or she cannot or does not want to eat and therefore starts to eat differently"*.

Schijf van Vijf and Voedselzandloper seen as stable bases for a healthy eating pattern

The third part of the discussions consisted of ranking the cards with healthy food trends on attractiveness and on tendency to integrate the trends in daily life. Generally, rankings of attractiveness and integration were not considerably different (rankings are shown in Table 14 and Table 15, appendix 6). Participants generally were most attracted to the "Schijf van Vijf" and the "Voedselzandloper" (9 and 10 out of 14 participants) and tended to integrate those two most (10 and 11 out of 14). Participants perceived both diets as stable bases for a healthy eating pattern and as accessible formats to rely on. The following statements illustrate this vision *"I think this is kind of the basis, I do think that everyone thinks the Schijf van Vijf, that that stays stable"* and *"I think this one is accessible, because those are just guidelines and a varied diet"*. Also the graphic design of both diets makes both diets clear and attractive *".. you do not have to read a whole book for this to understand it"*.

Weight loss diets not attractive and outdated

The outdated image of weight loss diets as Dr. Frank and Sonja Bakker makes those diets not attractive and hardly ever integrated, as illustrated by the following statements *"..Sonja at the total end, I have a very negative image of her…dull"* and *"..Dr. Frank and Sonja Bakker, I will never start doing that"*.

Most free-from diets are too extreme

In general, consumers perceived free-from diets as too extreme. Gluten-free and bread-free were never ranked as most attractive, raw food and sugar-free only once. Several participants literally stated that *"..banning something from my eating pattern is something I would never do"* or *"..and this with forbidding or reducing does not attract my either"*. However, some participants mentioned trying to integrate avoiding bread, sugar and especially refined sugar (5, 6 and 9 out of 14). Those trends seemed to be less radical to them. Someone stated *"This is too extreme, while I think this, this is just bread, so this can be left out"* and another participant argued *"…I try to eat less bread during lunch, sometimes it is so heavy on the stomach and then you get a dip around 3 o'clock"*. Several participants mentioned being sensitive for particular food products or nutrients and did think that the number of people being sensitive has grown lately. Someone stated that more and more people are experimenting with avoiding certain food products, nutrients or substances. Another participant said that nowadays, people seem to recognize acknowledge sensitivities, intolerances and allergies more easily. A vegan diet was often positioned in the middle. Four out of 14 participants were vegetarian and indicated that it would not be such a big change for them to go vegan: *"I actually have vegan at 1…because I am already a vegetarian, so than the step towards really without dairy, eggs and that kind of things is not that big"*.

Superfoods only temporary, not believed and too expensive

Superfood Recepten, Rens Kroes and superfoods were not seen as very attractive. Generally, they were expected to be only temporary trends, which are perceived as too expensive and which are not really believed *"I thought superfoods and Powerfood, that is temporarily attractive, I do not think for doing it three years, but temporary I think it is okay"*, *"Superfoods, I am not interested in that at all"* and *"Superfoods are way too expensive for me and I do not really believe in it"*.

Exemplar function of the spokesperson in times of confusion

According to the focus group participants, the spokesperson seems to play an influencing role in making healthy food trends appealing. This was especially expected for low educated people, that search for an authority that claims to know the truth *"I think that is also a kind of example, such a Rens Kroes, that many girls kind of admire her, like oh that is the perfect, good looking and eh.. doing lots of exercise"*. Also the uncertainty and ignorance of people about health and at the same time the large amount of information available on what is healthy seems to play a role in attractiveness of healthy food trends *"..it holds you up. There is so much, it changes so often. First they say like do eat bread, then do no teat bread and I think that because there is so much focus on it, that people do not know it anymore"* and therewith, the important role that food plays in here *"In the past your food was just, you just ate, and know really what you eat is who you are. That is why I also think so many people, because it is hip I eat that"*.

Social influence

Attractiveness for healthy food trends was explained as being a result of social influence *"..it is something fun that you can just do together"*. The role of social media was pointed out here as well "*..and then you think oh, she does that, than I am going to make that as well, then I am going to share it and then Rens Kroes will like it again, you know, like that. I think that happens very often"*. Also the stage of development in which young women find oneself could explain their sensibility for trends because they are *"..still very sensible for the environment. Older women are a bit more, so this is who I am, and I am happy with it"*.

3.2.2 Expert interviews

Wide range of associations with healthy food trends in current society

To start the discussion, I first asked interviewees to call spontaneously what they think of when hearing "healthy food and trends in current society". This led to a large variety of associations. Four out of five participants explicitly stressed confusion about what is a healthy diet. Variation and fear for certain products came back often either.

Three main categories: general guidelines, what to eat, what to avoid

Next, I asked interviewees to group the cards with healthy food trends (appendix 5). Table 16 summarizes the categories that were formed (appendix 6). Generally seen, participants divided cards between general guidelines (Schijf van Vijf and Voedselzandloper), food products you should eat (superfood related diets) and products or nutrients you should avoid (free-from diets). Three out of five interviewees took apart the "Schijf van Vijf", because according to them, this represents the traditional recommendations about how one should eat. The other two participants placed the "Schijf van Vijf" together with the "Voedselzandloper", because *"general advises of, about different sorts of food products and actually a sort of diet"*. Then, often a "what to eat" category was made with newer or more trendy diets that prescribe what to eat to become healthy, as Rens Kroes, Superfood Recepten, superfoods and sometimes also raw and vegan. Those diets were generally seen as *"temporary, those are all hypes"*. Most interviewees created a "to avoid" category from all free-from diets, sometimes including Dr. Frank, vegan and raw. By two interviewees, vegan and raw were taken apart because both lean on other reasons than health *"it is a kind of spiritual lifestyle"*. Two participants also separated Sonja Bakker from other diets, because *"she just counts calories"*.

Obesity is a major problem

Most participants stress the problem of obesity in Western society, which they saw as one of the causes for our concern about healthy food and therewith the popularity of healthy food trends. The obesity problem literally visualises the negative effects of our current eating pattern on our health. Consumers are not aware of what they eat, which easily leads to overeating. To compensate for that, consumers search for a solution *"they search for a quick-fix"* because *"overeating makes you feel guilty. And that causes actually the effect that people look for a kind of grip.."*

Overload of information on healthy food

Three interviewees underlined the overload of information on healthy food, which causes that consumers lose the overview. Two interviewees illustrated this by referring to the WHO report about meat consumption and cancer. One described consumers' feelings by saying *"What should I do, what should I not do, what should I stop doing, can I rely on what is news messages at all?"*. The other explains that information overload leads to confusion *"..because of that as a consumer you do not know that well anymore what you should or should not eat"*. Accordingly in a period of confusion and insecurity, consumers aim for grip and stability and search that in food *"…so they want guidelines, like you can eat this, you cannot eat this. I think that that is very much the case"*. Food plays an important role in current society *"Everyone is concerned with going out for dinner, cooking, eating consciously.."* and what you eat seems to define more and more who you are.

Lack of trust in institutions

Confusion also relates to institutions losing their credibility, stressed by three interviewees: *"The government is not trusted, the official organs, the scientists, the Voedingscentrum, but also nutrition scientists. In the past, you listened to them...but that is not the case anymore at all. That is now really much in the first place like, I'm wondering who pays him.."* and *"I believe that it is not appealing for people when science says something"*. Also, one interviewee mentioned that despite the exemplar function it has, the Voedingscentrum (the Netherlands Nutrition Centre) now has a nerdy image, and that *".. they could focus much more on youth.."*.

Healthy food trends offer magic solution for a healthy life

Because of confusion that is prevalent, consumers look for someone else to trust *"And there is always someone who tells he does know how it works"*. Three interviewees call upon this magic solution for a healthy lifestyle such gurus have to offer *"...it is a kind of, yes magic formula that is presented and then they are very smart that they cherry-pick from scientific research and that of course they take out a few studies that endorse their case.."*. Three interviewees demonstrated the influence of such gurus, by saying *"And I see like, he looks also very skinny and reliable and that is maybe also the evidence that it works for him or her...typically the people like, Rens Kroes or so...that are very conscious about their nutrition and well, travel the world with their lifestyle.."* and *"if someone communicates that very convincingly and you see that kind of pictures, then you also start to believe in it a little bit of course"*.

Other factors influencing sensibility for trends

When asking what could explain the sensibility for healthy food trends, only one interviewee mentioned several psychological determinants, namely perfectionism, insecurity and body image concern. Two interviewees were skeptical about particular types of persons being more sensible for healthy food trends than others are. They recommended focusing on other factors as education level, socio-economic status, consumption patterns, eating styles and age *"It has a lot to do with education level and income and those kind of things, so maybe socio-economic class and less with the, no not with individual personality characteristics as far as I know"*. Furthermore, two interviewees remarked that in general, women are more interested in dieting, body and health than men are. In addition, living in an urban or rural environment seems to be influencing *"Because I think it is very "city" to be concerned with this"*.

3.3 Discussion and conclusion study 1

The goal of the qualitative prestudy was to create understanding for what criteria consumers use to perceive and evaluate healthy food trends and to gain first insights in possible determinants that could declare sensibility for those trends. Focus group discussions, even as interviews revealed a wide range of criteria for categorizing healthy food trends. Roughly seen, we can distinguish three categories, with substantial variety among participants. The first category composed of general and traditional guidelines for a healthy eating pattern. The second category included the "to-avoid" products and the third category was based on what to eat to become healthy. Those categories correspond with some of the characteristics of healthy food trends described in chapter two, i.e. avoidance of nutrients, substances and entire product groups and the specific health claims that characterize the trends. Alternative criteria for creating groups were motivations other than health (vegan for ethical reasons and Dr. Frank and Sonja Bakker for weight loss reasons), or the role of the spokesperson or author (Rens Kroes, Dr. Frank, Sonja Bakker, Superfood Recepten). This latter one was also formulated as a characteristic of healthy food trends in the theoretical framework presented in chapter two.

Furthermore, both consumers and experts could not explicitly declare sensibility for healthy food trends. Focus group discussions clarified that the step towards really following those trends seems to be one too far. Most consumers did not feel very attracted to the healthy food trends, especially the extreme ones (completely avoiding sugar, dairy or gluten). Some participants seemed to be interested in just a few ideas of the trends and used those as an inspiration for their own lifestyles. In general, though, the healthy eating regimes seemed to be too extreme to actually integrate.

Experts were quite sceptical about the trends, both concerning content and the influence of healthy food trends on consumer's lives. When asking why they think people would feel attracted to those trends, participants from focus groups even as from interviews mentioned several reasons, but they had difficulties with putting their finger on the problem. Both focus group participants and experts did hardly spontaneously refer to psychological determinants as described in the literature study (chapter 2). Only one expert mentions two determinants corresponding with the literature described in chapter two, namely perfectionism and body image concern.

A striking result was that focus group participants generally found the traditional guidelines from the Voedingscentrum (Schijf van Vijf) very attractive and that they tended to adopt those guidelines in their eating pattern as well, whereas interviewees pointed out that consumers are losing their trust in such institutions. In the literature chapter, it was described that institutions are losing their influence in prescribing how to eat healthy and that role models of healthy food trends are taking over this task. To dive into this contrast more deeply, two questions concerning information sources for healthy food and reliability of those sources were included in the survey.

Interviewees indicated that healthy food trends served as a sort of manual in current society, because of all confusing information about healthy food that is available nowadays. Consumers from

focus groups, however, perceived most free-from diets as too extreme to integrate in practice and looked at superfoods as unattractive and temporary hypes. Apparently, there is a clear break line between having a little interest in such trends and really integrating them on a daily basis. Further, both results of focus groups and interviews reveal that the spokesperson plays an important role in popularity of healthy food trends and that social influence (healthy food trends widely present on social media, a "community thing") is a factor that could declare the sensibility for those trends. Social influence was also touched upon in chapter two. The large amount of Instagram and blog posts on healthy eating shows that the topic is trending and that influencing movements as "fitspiration" are popping up (Tiggeman & Zaccardo, 2015).

From this qualitative prestudy it can be concluded that regular consumers turn out to be not that attracted to healthy food trends and that the step towards integrating those trends on a daily basis is one too far. Further, the sceptical attitude of some interviewees suggests that healthy food trends concern a very particular, small group of consumers, which should be taken into account when doing further research. Hence, the target group for the survey is a specific group of consumers, mainly reached by social media. Besides, to measure for the possible influence of social media in sensibility for healthy food trends, also questions on use of several types of social media channels, dedication to (healthy) food accounts and blogs and posting about (healthy) food on social media were included in the survey. Outcomes of the prestudy, especially of the grouping task, also helped deciding what specific healthy food trends to include in the survey.

Another point we accounted for when setting up the survey was to measure what sources consumers use to find information on healthy food and how reliable they think those sources are. Whereas consumers during focus group discussions indicated a traditional model as "Schijf van Vijf" as being reliable, several interviewees pointed out the lack of trust in institutions, official organisations and science when it comes to healthy food information. This latter finding is in line with what Spiteri Cornish and Moraes (2015) found, namely that consumers are confused about nutrition information and blame this confusion on government. Advertising and labels of food products appeared to be often used as a source when it comes to information on healthy food (Spiteri Cornish & Moraes, 2015). To test for use of information sources and reliability of those sources, the survey contained two questions on this issue.

4. Study 2

Having finished the qualitative prestudy, we started the survey. The goal of the survey was to investigate the growing interest in healthy food trends among Dutch female consumers (18-30) and to explore if those consumers have something in common that triggers their fascination, by identifying to what extent seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) are associated with the attractiveness of healthy food trends and the integration of those trends in daily life (main study). The research question formulated in order to reach this goal was *"To what extent do key personality determinants (i.e. healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern, individualism) predict the perceived attractiveness of healthy food trends and their integration in daily life among Dutch female consumers (18-30)?"*.

Next to scores on the seven psychological determinants and attractiveness and tendency to integrate trends, several descriptive and control variables were measured. The lack of existing studies on healthy food trends was the reason we chose an explorative approach to study this issue. The prestudy aimed at consumers' perception and evaluation of healthy food trends helped adjusting the survey. Based on the characteristics of healthy food trends defined in the theoretical framework in chapter two, together with the prestudy findings, we chose which trends to include in the survey. Further, as we found in the prestudy, experts and consumers differently look at the role of institutions in providing information on healthy food. Therefore, we incorporated questions on use and reliability of healthy food information sources. In chapter two, even as from prestudy findings, it became clear that social media had an influence on sensibility of healthy food trends. Questions on social media use were thus included in the survey as well.

This chapter describes the main study by presenting firstly the methodology (section 4.1) and secondly the results (section 4.2). It ends with a conclusion of study two (section 4.3).

4.1 Methodology

4.1.1 Participants

While 693 respondents started the survey, the sample contained only 413 respondents. First, deleting all male respondents and female respondents younger than 18 and older than 29, resulted in a sample of 577. From this group, only 418 respondents completed the questionnaire. Furthermore, we deleted five respondents from the sample, as they were not familiar with any of the healthy food trends. Their opinion was therefore not of value for the study. This resulted in a final sample of 413 respondents. As for the sample of the focus group discussions, we targeted young females for the survey. The explorative nature of this study, aimed at constructing a starting point for research in the field of current healthy food trends, makes it most interesting to focus on a particular group that is expected to be most sensible for the trends.

Table 5 summarizes the sample characteristics. Age of the respondents ranged from 18 to 29, the average age of the respondents was 23.22 (*SD* = 2.90) and average BMI was 22.20 (*SD* = 3.30). No respondents followed only primary education, 9.7% did secondary education, 2.2% did intermediate vocational education and most respondents were highly educated (52% higher vocational education or Bachelor's degree and 36.1% Master's degree or doctorate). Furthermore, 37% indicated they wanted to maintain current weight and 47.4% would like to lose weight, whereas most respondents indicated they were not actually trying to lose weight (84.2%). The larger part of the respondents (62.7%) did not find oneself too thin or too fat. On average, respondents had three social media accounts, mostly Facebook, LinkedIn and Instagram, and followed 10 (healthy) food accounts on social media. Respondents in general hardly ever posted on social media about (healthy) food (*M* = .66, *SD* = 2.09) and 75.1% even indicated not posting any message or photo about (healthy) food on social media per week.

Table 5. Sample characteristics

Variable	*N*	*M (SD)*	Range		
Age	413	23.22 (2.90)	18 – 29		
BMI	402	22.20 (3.30)	14.69 – 38.97		
				Frequency	Valid percent
Education	404	Secondary education		39	9.7
		Intermediate vocational education		9	2.2
		Higher vocational education or Bachelor's degree		210	52.0
		Master's degree or doctorate		146	36.1
Goal concerning weight	405	I would like to maintain my current weight.		150	37.0
		I would like to lose weight.		192	47.4
		I would like to gain weight.		13	3.2
		I do not have one of the aforementioned goals concerning my weight.		50	12.3
Trying to lose weight	405	Yes		64	15.5
		No		341	84.2
Opinion about figure	405	I find myself way too thin.		1	.2
		I find myself too thin.		15	3.7
		I find myself neither too thin, nor too fat.		254	62.7
		I find myself too fat.		121	29.9
		I find myself way too fat.		14	3.5
Variable	*N*	*M (SD)*	Range		
Number of social media accounts	413	3.15 (1.41)	0 – 6		
Number of followed (healthy) food accounts	411	10.26 (18.14)	0-100		
Number of (healthy) food posts per week	406	.66 (2.09)	0-25		

4.1.2 Design

The main study composed of a quantitative survey to measure scores on the seven psychological determinants described in the literature study in chapter two, i.e. healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism. Moreover, we measured scores on respondents' sensibility for healthy food trends by asking to what extent they were attracted to eleven healthy food trends and to what extent they tended to integrate those eleven trends in daily life. For this purpose, respondents filled in independent self-report for each construct. Subsequently, we could link scores on the seven psychological determinants to scores

on attractiveness and integration of healthy food trends in daily life. The complete questionnaire can be found in appendix 7.

4.1.3 Procedure

The survey was administrated by using software Qualtrics. It was distributed digitally by placing the link directing to the survey in an e-mail sent to a mailing list of Wageningen University and by posting it on social media channels Facebook, Twitter, Instagram and LinkedIn (accounts of the author). A short introduction text explained that the research concerned an MSc thesis about healthy food trends and that it was targeted at Dutch females aged 18 to 30. This text, even as the survey itself, was in Dutch. Furthermore, food blog "I am a Foodie" posted a blog dedicated to the study, which included the link directing to the survey. The questionnaire started with a short introduction by which the respondents were welcomed and by which they were told that the study was part of an MSc thesis of Wageningen University, regarding healthy food trends. Moreover, the time participating in the study was mentioned, even as the fact that respondents could withdraw from the survey at any moment. In addition, anonymity was guaranteed.

Then, respondents were asked to indicate their gender and age. Male respondents and respondents that did not meet age requirements (younger than 18 or older than 29) were directed to the end of the survey. The next section of the survey consisted of questions measuring scores on the seven psychological determinants, alternated with questions about several diets or food lifestyles and social media use, sources of information on healthy food, dieting, body weight, length and education level. At the end of the questionnaire, respondents could make suggestions or remarks to the researcher and they could fill in their e-mail address if they wished to receive the results of the study. They could also fill in their e-mail address if they would like to be approached in the future for participating in studies of Wageningen University. At the end of the survey, subjects were thanked for their participation.

4.1.4 Measures

The questionnaire composed of several types of questions, namely to measure scores on the seven psychological determinants (dependent variables) and to measure scores on attractiveness and integration of healthy food trends (independent variables). Other questions measured background characteristics as gender, age, education level and control measures BMI, dieting and social media use. Moreover, the survey included questions to measure use of sources on healthy food information and reliability of those sources (see appendix 7 for the complete questionnaire).

4.1.4.1 Background characteristics

Gender and age

Gender was measured by asking respondents to indicate being “male” of “female”. Age was measured by asking “What is your age?”. Subjects could indicate their age on a slider ranging from 15 to 85.

Education level and BMI

Education level was measured by asking respondents “What is your highest level of education?”. They could answer this question by choosing from the following options: “primary education”, “secondary education”, “intermediate vocational education”, “higher vocational education or Bachelor’s degree” and “Master’s degree or doctorate”. BMI was measured by asking self-reported length and weight. Length was measured by asking “What is your length?”. Respondents could indicate their length on a slider, ranging from 140 to 220 cm. Weight was measured by asking “What is your weight?”. Respondents could indicate their weight on a slider, ranging from 40 to 130 kg. Afterwards, we calculated BMI by dividing weight (in kg) by the square of length (in cm).

Weight and dieting

Consumers that are currently trying to lose weight could already be more sensible for healthy food trends because of their diet, apart from the influence of psychological determinants. To control for this factor, three questions about weight and dieting were included in the questionnaire. The first question was “What is your goal regarding your weight?”, which could be answered by “I would like to maintain my current weight”, “I would like to lose weight”, “I would like to gain weight” or “I do not have one of the aforementioned goals concerning my weight”. The second question was “Are you currently trying to lose weight?”, which could be answered by “yes” or “no”. The third question was “What do you think of your current figure?”, which could be answered by “I find myself way too thin”, “I find myself too thin”, “I find myself neither too thin, nor too fat”, “I find myself too fat” and “I find myself way too fat”.

Social media accounts, (healthy) food accounts and (healthy) food posts

As became clear from the literature study in chapter two, many healthy food trends are being promoted on social media (Instagram, blogs, Facebook). Prestudy findings revealed that social influence might play a role in sensibility for healthy food trends. Therefore, it is expected that the degree to which one uses social media and how many (healthy) food blogs or accounts one follows could affect attractiveness and integration of those trends as well.

In addition, the survey was spread via several social media channels, so the fact that respondents are active on social media could have an effect on the outcomes. To take this into account, several questions were asked concerning social media. First, respondents were asked “Do you have an account at the following social networking sites?”, which they could answer with “yes” or “no” for 8

social media channels (Facebook, Twitter, Instagram, Pinterest, LinkedIn, Vimeo, Tumblr and Vine). Respondents could also add a channel. Next, the question "How many (healthy) food blogs / (healthy) food accounts do you follow on social media?" was asked, which respondents could answer on a slider ranging from 0 to 100. Participants were also asked "How many times do you post something on social media about (healthy) food? (think of a blog, article, picture etc.). Give your indication per week." Respondents could answer this question on a slider ranging from 0 to 25.

Information sources on healthy food

As explained in the theoretical framework, one of the characteristics of healthy food trends is the influence role models have. Experts from study 1 indicated that consumers seem to lose trust in institutions as Voedingscentrum (the Netherlands Nutrition Centre) and that they start using other sources when searching for information on healthy food. Research has shown that consumers differ in their view on what constitutes a healthy diet and that authorities stimulating healthy eating seem to lose their credibility (Bugge, 2015). In addition, it is found that consumers even blame policymakers for the often-contradictory information on how to eat healthily, which increases reliance on food adverts, product labels and other commercial sources providing healthy food information (Spiteri Cornish & Moraes, 2015). Two questions concerning reliability of sources were included in the survey, namely "How often do you use the following sources when searching for information on healthy food?", which could be answered on a 5-point Likert scale (1 = "never" and 5 = "always") and "How reliable do you think the following sources are when it comes to information on healthy food?", which could be answered on a 7-point Likert scale (1 = "very unreliable" and 7 = "very reliable"). Based on previous research (NVVL, 2015), traditional, even as newer sources were included in the survey.

4.1.4.2 Psychological determinants

The seven psychological determinants that are expected to relate to sensibility for healthy food trends were derived from the literature, as explained in chapter two. For all determinants, we constructed a scale based on existing scales derived from the literature. Table 6 shows the number of items and Cronbach's alpha of each scale.

Table 6. Reliability of scales of psychological determinants

Variable	Number of items	Cronbach's Alpha	Deleted items (item number)	Cronbach's Alpha after deletion
Healthy-eater identity	9	.84		
Dichotomous thinking	8	.87		
Perfectionism	8	.91		
Trait self-control	10	.73		
Desire for control	6	.72		
Body image concern	8	.89		
Individualism	5	.50	1 and 2	.66

Healthy-eater identity

To measure the construct healthy-eater identity, we used a 9-item scale, based on the adopted version of The Exercise Identity Questionnaire (Anderson & Cychosz, 1994) used by Strachan and Brawley (2009). The researcher translated the items into Dutch. Reliability of the scale was high (α = .84). Example questions are "I consider myself to be a healthy-eater" and "When I describe myself to others, I usually include my involvement in healthy eating". Participants indicated their scores on a 7-point Likert scale (1 = "strongly disagree" and 7 = "strongly agree").

Dichotomous thinking

Dichotomous thinking was measured by a scale of Byrne, Allen, Dove, Watt and Nathan (2008), translated in Dutch by Palascha et al. (2015). To reduce the length of the survey, several items were deleted, which resulted in a reliable scale of 8 items (α = .87). An example question is "I think of food as either good or bad". Participants could indicate their scores on a 7-point Likert scale (1 = "strongly disagree" and 7 = "strongly agree").

Perfectionism

Perfectionism was measured by a scale based on the Multidimensional Perfectionism Scale of Hewitt and Flett (1991). Only the self-oriented perfectionism part from this scale was used, because it was most related to this study. To reduce the length of the questionnaire, seven items were deleted, resulting in a reliable scale of 8 items (α = .91), translated by the researcher. Item 8 was recoded before analysis. Example questions are "It makes me uneasy to see an error in my work" and "One of my goals is to be perfect in everything I do". Participants could answer the questions on a 7-point Likert scale (1 = "strongly disagree" and 7 = "strongly agree").

Trait self-control

To measure trait self-control, a reduced version of the Brief Self Control measure of Tangney, Baumeister and Boone (2004) was used, resulting in a 10-item scale with adequate reliability (α = .73). The researcher translated the items into Dutch. Before analysis, item 2, 3, 4, 6, 7, 9 and 10 were recoded. The scale included questions as "I am good at resisting temptation" and "I refuse things that are bad for me". Participants could indicate their scores on a 7-point Likert scale (1 = "strongly disagree" and 7 = "strongly agree").

Desire for control

Desire for control was measured by a 6-item scale of Gebhardt and Brosschot (2002), translated by the researcher, with adequate reliability (α = .72). Item 3 was recoded before analysis. Example questions are "I try to avoid situations where someone else tells me what to do" and "I prefer a job where I have

a lot of control over what I and when I do it". Those questions could be answered on a 7-point Likert scale (1 = "strongly disagree" and 7 = "strongly agree").

Body image concern

To measure the construct body image concern, a scale developed by Littleton, Axom and Pury (2005) was used. Several items were deleted to reduce the length of the survey, resulting in a reliable 8-item scale (α = .89), translated by the researcher. Example statements of this scale are "I am dissatisfied with some aspects of my appearance" and "I am ashamed of some parts of my body". Respondents were asked to rate how often they have the described feeling or perform the described behavior on a 7-point Likert scale (1 = "never" and 7 = "often").

Individualism

Individualism was measured by a translated and reduced scale developed by Sividas, Bruvold and Nelson (2008), based on previous work of Singelis, Triandis, Bhawuk and Gelfand (1995), resulting in 5 items. Item 1 and 2 were recoded before analysis. Because of low reliability (α = .50) item 1 and 2 were deleted, resulting in a 3-item scale with reasonable reliability (α = .66). Example questions were "My happiness depends very much on the happiness of those around me" and "I am a unique individual". Questions were answered on a 7-point Likert scale (1 = "strongly disagree" and 7 = "strongly agree").

4.1.4.3 Attractiveness of healthy food trends and tendency to integrate healthy food trends

To measure sensibility for healthy food trends, this concept was divided into attractiveness and integration of trends in daily life. The choice for the 11 healthy food trends included in the survey was based on the theoretical framework, presented in chapter two, and the outcomes of the prestudy. The theory section resulted in five characteristics of healthy food trends, derived from best sold book rankings, newspaper articles, sales rates from specific products, membership numbers of organisations and popular topics on social media. During the prestudy, participants were asked to categorize the healthy food trends and motivate their choice, which also helped deciding which trends best fit the survey.

First, respondents were asked "Are you familiar with the following diets / food lifestyles?". They answered this question by "yes" or "no" for each of the following 11 trends: gluten-free diet, a dairy-free diet, Dr. Frank, a bread-free diet, a raw food diet, veganism, Powerfood, Voedselzandloper, superfoods, a sugar-free diet and Sonja Bakker. Some diets (e.g. Sonja Bakker and Voedselzandloper) were supplemented by a short sentence explaining what it concerns, to enlarge the chance that respondents would recognize them.

Second, we asked for each of the 11 diets "How attractive these diets / lifestyles seem to you?", which respondents could answer on a 5-point Likert scale (1 = "not attractive at all" and 5 =

"very attractive"). The attractiveness scale was reliable (α = .75). Third, we asked respondents for the same 11 diets "To what extent do you try to integrate those diets / lifestyles in your daily life?". They could answer this question on a 5-point Likert scale (1 = "never" and 5 = "always"). The integration scale was reliable (α = .76).

To guarantee analysis was still possible in case of non-reliable scales for attractiveness and integration, respondents answered two extra questions about attractiveness and integration. "After having seen those diets / food lifestyles, could you indicate how attractive those types of diets / food lifestyles seem to you?" could be answered on a 5-point Likert scale (1 = "not attractive at all" and 5 = "very attractive"). "After having seen the aforementioned diets / food lifestyles, could you indicate how often you try to adopt certain aspects of those in your daily life?", could be answered on a 5-point Likert scale (1 = "never" and 5 = "always").

4.2.5 Statistical analysis

IBM SPSS statistics 21 was used to analyze the data. We calculated correlation coefficients using Pearson's *r*. To measure the extent to which the seven psychological determinants declare attractiveness of healthy food trends and integration of healthy food trends, we carried out two multiple linear regression analyses with the seven psychological determinants as independent variables, even as BMI, age and social media use as control variables and attractiveness and integration of healthy food trends as dependent variables. A third, singular linear regression analysis was executed to measure to what extent attractiveness of healthy food trends could declare tendency to integrate healthy food trends.

4.2 Results

In this section, the results of the survey are presented. First, we show the descriptive information (section 4.2.1), including use and reliability of healthy food information sources and attractiveness and integration scores per healthy food trend. Next, we present the correlation matrix for attractiveness and integration of trends, psychological determinants and background variables (section 4.2.2). Then, we show the results of the three regression analyses (section 4.2.3).

4.2.1 Descriptive information

Use and reliability of healthy food information sources

One of the outcomes of the qualitative prestudy was that consumers and experts differed in their view on what sources currently are used and trusted upon when searching for information on healthy food. The survey therefore contained questions on use of sources providing information on healthy food, even as reliability of those sources. Figure 2 shows frequency of consulting sources on healthy food information, per source. Respondents indicated most frequently using the package of food products when searching for information on healthy food (M = 3.22, SD = 1.18). Dietitian (M = 1.50, SD = 1.02), gym (M = 2.50, SD = 1.12), doctor (M = 1.31, SD = .64) and advertisements (M = 1.26, SD = .52) were least often consulted.

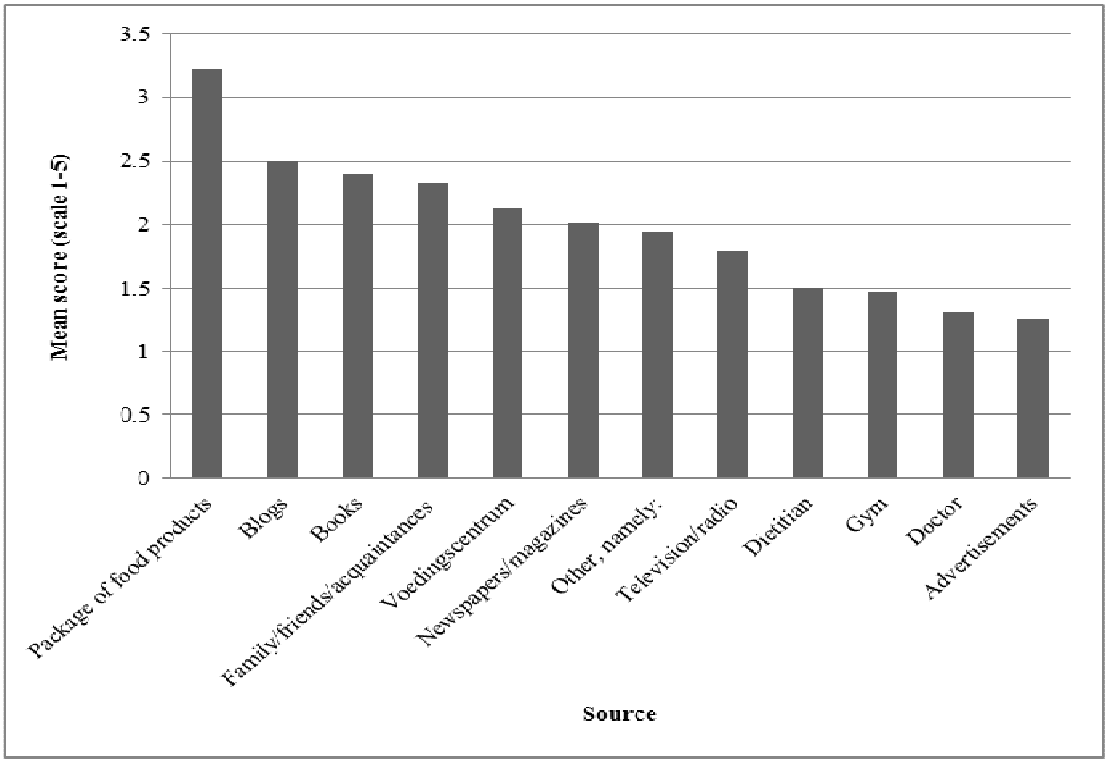

Figure 2. Sources used for information on healthy food (mean) (scale 1-5)

Apart from use of several information sources, also reliability of those sources was measured (Figure 3). Whereas for use, scores on dietitian and doctor were very low, those sources were seen as relatively reliable (*M* = 5.99, *SD* = 1.07 and *M* = 5.55, *SD* = 1.39). Reliability of the Voedingscentrum was also relatively high (*M* = 5.36, *SD* = 1.41).

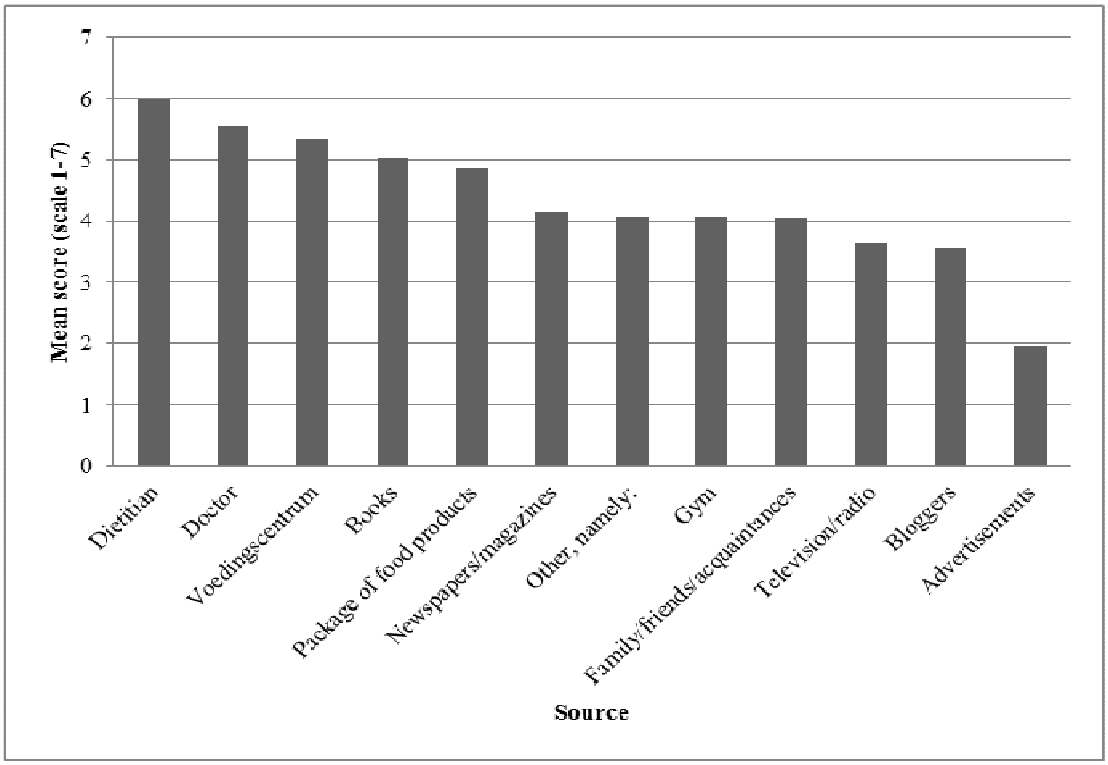

Figure 3. Reliability of sources used for information on healthy food (mean) (scale 1-7)

Familiarity, attractiveness and integration of healthy food trends

The survey was conducted to measure scores on psychological determinants and on attractiveness and tendency to integrate healthy food trends. Further, respondent's familiarity with healthy food trends was measured, to assure scores on attractiveness and integration were generally based on knowledge of those trends instead of guessing. On average, respondents were familiar with most of the 11 healthy food trends presented in the study (*M* = 9.90, *SD* = 1.45). Familiarity scores on the trends were extremely high, i.e. seven out of eleven trends were known by 90 to 100% of the respondents. In general, familiarity was not highly different among trends, but respondents were a little less familiar with Powerfood (79.9%), Dr. Frank (75.8%) and the Voedselzandloper (72.2%) (Figure 4).

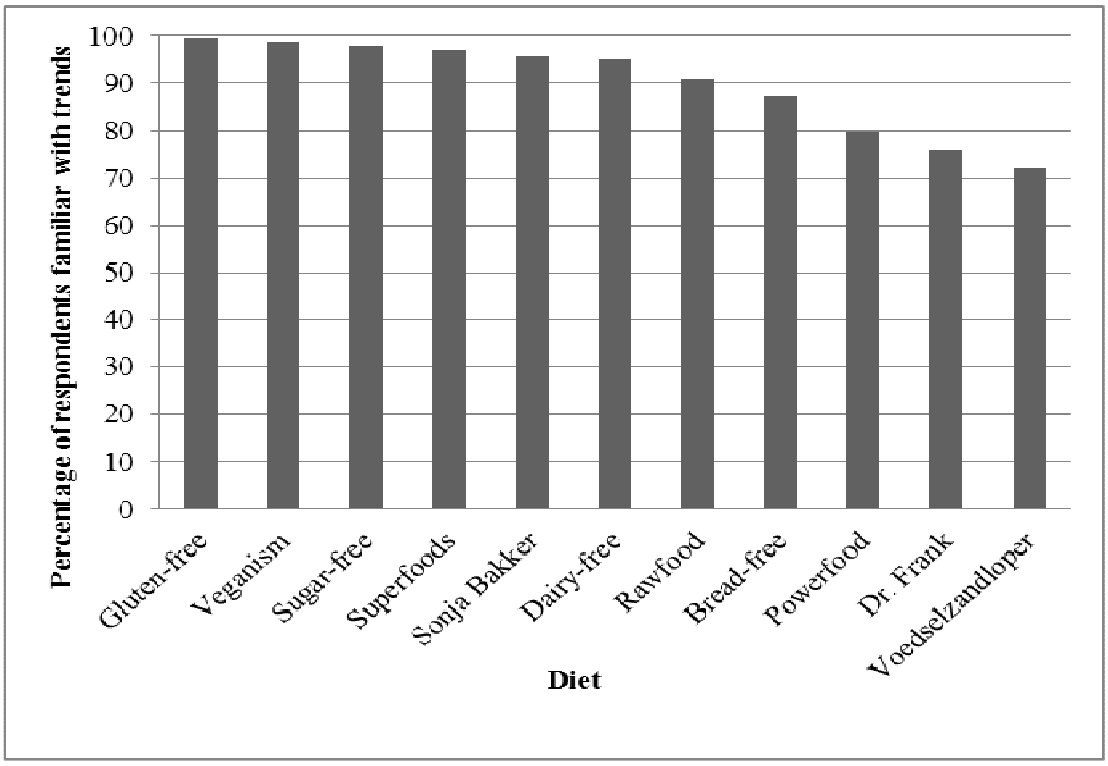

Figure 4. Familiarity with healthy food trends (% of respondents being familiar with the trends)

Next to familiarity with healthy food trends, we measured attractiveness and tendency to integrate those trends. Table 7 presents the mean score and standard deviation for each trend. Whereas generally, attractiveness scores were higher than integration scores, none of the healthy food trends was perceived as very attractive or was very much integrated by the participants (Table 7). A sugar-free diet was seen as most attractive (M = 3.07, SD = 1.35). In addition, the Voedselzandloper and Powerfood scored slightly above average (M = 2.85, SD = 1.17 and M = 2.78, SD = 1.22). The raw food diet (M = 1.62, SD = .03) and a gluten-free diet (M = 1.95, SD = 1.12) scored lowest on attractiveness.

Scores on tendency to integrate were even lower than on attractiveness. Respondents were most attracted to a sugar-free diet and they also tended to integrate this trend mostly. Still, it was negatively evaluated. Sonja Bakker was least integrated (M = 1.15, SD = .47), just as raw food being hardly ever integrated by participants (M = 1.23, SD = .52). Mean scores on integration for the other healthy food trends were somewhat comparable.

Table 7. Attractiveness and tendency to integrate scores per healthy food trend (*M, SD*)

	N	Attractiveness *M (SD)*	Tendency to integrate *M (SD)*
Gluten-free	413	1.95 (1.12)	1.45 (.94)
Dairy-free	413	2.17 (1.32)	1.68 (1.15)
Dr. Frank	413	2.55 (1.24)	1.59 (.86)
Bread-free	413	2.22 (1.20)	1.66 (1.02)
Raw food	413	1.62 (.03)	1.23 (.52)
Veganism	413	2.17 (1.38)	1.61 (1.04)
Powerfood	413	2.78 (1.22)	1.55 (.81)
Voedselzandloper	413	2.85 (1.17)	1.56 (.92)
Superfoods	413	2.56 (1.14)	1.64 (.82)
Sugar-free	413	3.07 (1.35)	2.07 (1.14)
Sonja Bakker	413	2.16 (1.17)	1.15 (.47)

Note. Attractiveness and tendency to integrate scores were measured on a 5-point Likert scale

Moreover, an independent sample t-test for attractiveness of healthy food trends with the factor trying to lose weight or not, showed a significant difference between attractiveness of healthy food trends among dieters and non-dieters (t (403) = 3.04, $p < .01$). Participants that were trying to lose weight (M = 2.60, SD = .62) appeared to be more attracted to healthy food trends than participants that were not (M = 2.33, SD = .65). An independent sample t-test for tendency to integrate healthy food trends also showed a significant difference between participants that were currently trying to lose weight or not (t (403) = 4.61, $p < .001$). Dieters (M = 1.82, SD = .52) tended to integrate healthy food trends more than non-dieters (M = 1.51, SD = .47).

4.2.2 Correlation between attractiveness and integration of trends, psychological determinants and background variables

To measure correlations between both attractiveness and integration of healthy food trends and the seven psychological determinants and control variables, we conducted a correlation analysis (Table 8). A relatively strong positive correlation was found between attractiveness of healthy food trends and tendency to integrate trends in daily life (r = .624, $p < .01$). Further, positive correlations were found between attractiveness of healthy food trends and the four psychological determinants a healthy-eater identity (r = .202, $p < .01$), dichotomous thinking (r = .185, $p < .01$), perfectionism (r = .091, $p < .05$), body image concern (r = .101, $p < .05$) and the number of (healthy) food accounts participants followed (r = .154, $p < .01$). Tendency to integrate healthy food trends positively correlated with all seven psychological determinants: having a healthy-eater identity (r = .329, $p < .01$), dichotomous

thinking $r = .165$, $p < .01$), perfectionism ($r = .136$, $p < .05$), trait self-control ($r = .134$, $p < .01$), desire for control ($r = .122$, $p < .01$), body image concern ($r = .136$, $p < .01$) and individualism ($r = .165$, $p < .01$). In addition, positive correlations were found between tendency to integrate trends and the number of (healthy) food accounts participants followed ($r = .316$, $p < .01$) and number of (healthy) food posts participants did ($r = .121$, $p < .01$).

Furthermore, results revealed positive correlations between several psychological determinants. The correlation analysis showed strongest relations between dichotomous thinking and body image concern ($r = .505$, $p < .01$) and perfectionism ($r = .402$, $p < .01$). Having a healthy-eater identity and trait self-control appeared to be relatively strongly positively correlated ($r = .340$, $p < .01$), even as perfectionism and body image concern ($r = .307$, $p < .01$).

Table 8. Matrix of bivariate correlation coefficients attractiveness and integration of healthy food trends, 7 determinants and background variables (*M*, *SD*, Pearson's *r*)

	N	*M**** *(SD)*	Attractiveness HFT	Integration HFT	Healthy-eater identity	Dichotomous thinking	Perfectio-nism	Trait self-control	Desire for control	Body image concern	Individualism	BMI	Social media accounts	Followed (healthy) food blogs/accounts	(healthy) food posts
Attractiveness HFT	413	2.37 (.65)	1												
Integration HFT	413	1.56 (4.89)	**.624****	1											
Healthy-eater identity	412	5.09 (.98)	**.202****	**.329****	1										
Dichotomous thinking	329	3.58 (1.23)	**.185****	**.165****	**.108***	1									
Perfectionism	412	4.03 (1.32)	**.097***	**.136***	**.244****	**.402****	1								
Trait self-control	412	3.8 (.84)	.032	**.134****	**.340****	**-.094***	**.286***	1							
Desire for control	412	4.99 (.83)	.020	**.122****	**.123****	**.101***	**.100***	**.097***	1						
Body image concern	410	5.27 (.85)	**.101***	**.136****	.067	**.505****	**.307****	**-.273****	-.048	1					
Individualism	406	5.27 (.86)	.065	**.165****	**.173****	.011	-.053	.015	**.255****	**-.135****	1				
BMI	402	22.20 (3.29)	-.005	-.044	**-.209****	**.093***	-.046	**-.229****	.061	**.203****	.003	1			
Social media accounts	413	3.15 (1.41)	0.76	.081	.051	-.014	.038	**-.089***	.027	**.083***	.028	.000	1		
Followed (healthy) food blogs/accounts	411	10.26 (18.14)	**.154****	**.316****	**.290****	.071	**.132****	.039	**.105***	**.130****	.056	.030	**.309****	1	
(healthy) food posts	406	.66 (2.09)	.013	**.121****	**.111***	.003	**.094***	-.020	.062	**.124****	-.070	.042	**.188****	**.315****	1

*. Correlation is significant at the 0.05 level (1-tailed), **. Correlation is significant at the 0.01 level (1-tailed), *** Scale 1-5

4.2.3 Regression

In total, we conducted three linear regression analyses. Two multiple linear regression analyses were executed, first to predict attractiveness of healthy food trends and second to predict tendency to integrate healthy food trends by seven psychological determinants. The dependent variables were, in the first analysis, attractiveness of healthy food trends and in the second analysis tendency to integrate those trends. The independent variables were the seven psychological determinants. Control variables BMI, age and number of followed (healthy) food blogs and accounts were included in both analyses as well. Further, a single linear regression analysis was conducted tot test if attractiveness was a significant predictor of integration of healthy food trends. Also in this analysis, control variables BMI, age and number of followed (healthy) food blogs were included.

Hypotheses 1-7: seven determinants declaring attractiveness and integration of healthy food trends

Hypothesis 1 until 7 were jointly tested with two multiple linear regression analyses, first with attractiveness as the dependent variable and second with tendency to integrate healthy food trends as the dependent variable. For both dependent variables, the assumptions for regression analysis were investigated. First, for the model with attractiveness as dependent variable, we checked residuals on normality. A histogram even as a normal P-P plot showed normal distribution of the standardized residuals. To control homoscedasticity, a scatterplot was constructed with the standardized residuals and standardized predicted values. This plot did not show a horn shape or clear pattern, which means linearity can be assumed. Multicollinearity was not a problem among the predictor variables used in the regression analysis (tolerance > .01).

A multiple linear regression was conducted for attractiveness of healthy food trends as dependent variable. The seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) were entered as independent variables. Further, control variables BMI, age and number of (healthy) food blogs/accounts were included in the analysis. Results showed that variation in attractiveness of healthy food trends can be declared with 7% by the seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern, individualism), BMI, age and the number of (healthy) food accounts one follows (F (10, 311) = 3.402, $p < .001$) (Table 9). The independent variable healthy-eater identity appeared to have a significant positive effect on attractiveness of healthy food trends ($\beta = .17$, $p < .01$), even as dichotomous thinking ($\beta = .13$, $p < .05$). A 1-unit increase on the 7-point Likert scale of healthy-eater identity (1 = “strongly disagree” and 7 = “strongly agree”) appears to positively affect attractiveness of healthy food trends with .17 on a 5-point Likert scale (1 = “not attractive”, 5 = “very attractive”). A 1-unit increase on the 7-point Likert scale of dichotomous thinking (1 = “strongly agree” and 7 = “strongly disagree”) positively affects attractiveness of healthy food trends with .13 on a 5-point

Likert scale (1 = “not attractive”, 5 = “very attractive”). Further, control variable age is shown to have a significant negative effect on attractiveness of trends (β = -.17, p < .01). A 1-unit increase in age appears to negatively affect attractiveness of healthy food trends with .17 on a 5-point Likert scale (1 = “not attractive”, 5 = “very attractive”). The other psychological determinants perfectionism, trait self-control, desire for control, body image concern and individualism, even as the control variables BMI and number of (healthy) food blogs and accounts participants followed were not significant predictors (β = .01, p = .897), (β = .02, p = .773), (β = .01, p = .871), (β = .01, p = .871), (β = -.01, p = ..833), (β = .04, p = .517) and (β = .07, p = .258) (Table 9).

Table 9. Results of regression analysis for the variables that predict attractiveness for healthy food trends (N = 322)

Variable	*B*	*SE B*	*β*	*t-value*
Constant	2.183	.515		4.243
Independent variables				
Healthy-eater identity	.112	.042	.172**	2.664**
Dichotomous thinking	.069	.034	.133*	2.010*
Perfectionism	.004	.031	.009	.129
Trait self-control	.014	.049	.019	.288
Desire for control	.007	.044	.009	.163
Body image concern	.006	.036	.011	.163
Individualism	-.009	.045	-.012	-.211
Control variables				
BMI	.007	.011	.038	.649
Age	-.037	.012	-.167**	-2.962**
Amount of (healthy) food accounts followed	.002	.002	.066	1.134
R2	.099***			
R^2 adjusted	.070***			
F	3.402***			

* = p<.05, ** = p<.01, *** = p<.001

Next, assumptions were checked for the regression model with tendency to integrate healthy food trends as the dependent variable. Normal distribution of the residuals was investigated by a histogram and a P-P plot of the residuals. Homoscedasticity was checked by a scatterplot with the standardized predicted values and the standardized residuals. The scatterplot did not show a specific horn shape, which means homoscedasticity could be assumed. The assumption for linearity of the regression model was met, as the scatterplot did not show a clear pattern. Multicollinearity was not a problem among the predictor variables used in the regression analysis (tolerance > .01).

Also for integration of healthy food trends, a multiple linear regression analysis was conducted with the seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) as independent variables and BMI, age and number of (healthy) food blogs/accounts as control variables. The analysis showed that variation in integration of healthy food trends could be declared with 21.8 %

by the seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern, individualism), BMI, age and the number of (healthy) food accounts one follows (F (10, 311) = 9.945, p < .001) (Table 10). A healthy-eater identity appeared to be a significant predictor of tendency to integrate healthy food trends (β = .27, p < .001). The control variable number of (healthy) food accounts one follows on social media was shown to significantly predict tendency to integrate healthy food trends as well (β = .21, p < .001). Every 1-unit increase on the 7-point Likert scale of healthy-eater identity (1 = "strongly disagree" and 7 = "strongly agree") affects the tendency to integrate healthy food trends with .27 on a 5-point Likert scale (1 = "never" and 5 = "always"). Following one more (healthy) food blog or account affects the tendency to integrate healthy food trends with .21 on a 5-point Likert scale (1 = "never" and 5 = "always"). The other psychological determinants (dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern, individualism) and the control variables (BMI and age), were not significant predictors (β = .09, p = .136), (β = -.02, p = .768), (β = .11, p = .063), (β = .03, p = .563), (β = .08, p = .211), (β = .09, p = .107), (β = -.01, p = .833) and (β = -.00, p = .971) (Table 10).

Table 10. Results of regression analysis for the variables that predict tendency to integrate healthy food trends (N = 322)

Variable	*B*	*SE B*	*β*	*t-value*
Constant	.051	.363		.141
Independent variables				
Healthy-eater identity	.136	.030	.272*	4.589*
Dichotomous thinking	.036	.024	.090	1.495
Perfectionism	-.007	.022	-.018	-.295
Trait self-control	.064	.034	.111	1.864
Desire for control	.018	.031	.030	.579
Body image concern	.032	.026	.081	1.254
Individualism	.051	.032	.086	1.617
Control variables				
BMI	-.002	.008	-.011	-.211
Age	.000	.009	-.002	-.036
Amount of (healthy) food accounts followed	.005	.001	.211*	3.955*
R^2	.242*			
R^2 adjusted	.218*			
F	9.945*			

* = p<.001

Hypothesis 8: attractiveness declaring tendency to integrate healthy food trends

Before analysis, assumptions for regression were checked. A histogram and P-P plot showed reasonably normal distribution. A scatterplot did not show an obvious horn shape or clear pattern, so homoscedasticity and linearity assumptions were met. To measure if attractiveness positively relates to tendency to integrate trends, we conducted a simple linear regression analysis with tendency to integrate trends as dependent variable and attractiveness of trends as independent variable. Further,

control variables BMI, age and number of (healthy) food blogs/accounts followed were included in the analysis. Multicollinearity was not a problem among the predictor variables used in the regression analysis (tolerance > .01).

The singular linear regression analysis showed that variation in integration of healthy food trends could be declared with 44.3% by attractiveness of healthy food trends and BMI, age and number of (healthy) food blogs/accounts followed (F (4, 396) = 8.581, p < .001) (Table 11). Attractiveness of healthy food trends appeared to be a significant predictor of tendency to integrate trends (β = .60, p < .001). For each 1-unit increase in attractiveness on a 5-point Likert scale (1 = "not attractive" and 5 = "very attractive"), there was an increase in tendency to integrate trends by .596 on a 5-point Likert scale (1 = "never" and 5 = "always") (Table 11). Also control variables age (β = .08, p < .05) and number of (healthy) food blogs/accounts followed (β = .24, p < .001) appeared to be significant predictors of tendency to integrate trends (Table 11). Every one year older, participants tended to integrate trends with .082 more on a 5-point Likert scale (1 = "never" and 5 = "always"). Every blog/account participants followed extra, participants tended to integrate trends with .236 more on a 5-point Likert scale (1 = "never" and 5 = "always").

Table 11. Results of regression analysis for attractiveness predicting tendency to integrate healthy food trends (N = 413)

Variable	*B*	*SE B*	*β*	*t-value*
Constant	.310	..200		1.551
Independent variable				
Attractiveness of healthy food trends	.448	.029	.596**	15.691
Control variables				
BMI	-.009	.006	-.060	-1.597
Age	.014	.006	.082*	2.167
Amount of (healthy) food accounts followed	.006	.001	.236**	6.230
R^2	.449**			
R^2 adjusted	.443**			
F	80.581			

* = p < .05, ** = p < .001

4.3 Discussion study 2

Study two consisted of a survey among 413 Dutch female consumers (18 to 30), aimed at exploring to what extent seven psychological determinants declare attractiveness and tendency to integrate healthy food trends in daily life. We investigated the association between seven determinants and attractiveness and integration of those trends (H1-H7), even as the association between attractiveness and tendency to integrate trends (H8). Moreover, we measured several descriptive and control variables.

The results demonstrated that participants were familiar with most healthy food trends included in the survey. When it comes to searching for healthy food information, it appeared that young female consumers often consulted the package of food product. Subjects perceived dietitian and doctor as most reliable sources, whereas they hardly consulted those experts. In addition, consumers indicated the Voedingscentrum being reliable, when it comes to healthy food information. Subjects hardly used the gym or advertisements as information sources.

Next, we observed positive relations between attractiveness of healthy food trends and the psychological determinants healthy-eater identity, dichotomous thinking and perfectionism. In addition, the number of (healthy) food blogs/accounts participants followed was positively related to the attractiveness of healthy food trends. A multiple linear regression revealed that differences in attractiveness of healthy food trends could partly be declared by the seven psychological determinants and the factors BMI, age and the number of (healthy) food accounts/blogs followed. Only a healthy-eater identity (H1 confirmed), dichotomous thinking (H2 partly confirmed) and age appeared to be significant predictors of attractiveness of healthy food trends, with a healthy-eater identity as the strongest predictor. Other psychological determinants were not significant (H3 until H7 rejected).

We did not only research attractiveness of healthy food trends, but we also looked at the extent to which participants try to adopt those trends into their lives. The results showed positive relations between integration of trends and all seven psychological determinants. Tendency to integrate trends was also found to positively relate to the number of (healthy) food blogs/accounts participants followed and the number of (healthy) food posts participants did on social media. A multiple linear regression analysis showed that differences in tendency to integrate healthy food trends could partly be declared by the seven psychological determinants and the characteristics BMI, age and the number of (healthy) food accounts/blogs followed. A healthy-eater identity (H1 confirmed) even as the number of (healthy) food accounts participants followed significantly predicted the tendency to integrate healthy food trends in daily life, with a healthy-eater identity as the strongest predictor. Other psychological determinants were not significant predictors of tendency to integrate healthy food trends (H2 partly rejected, H3-H7 rejected).

The findings also imply positive relations between attractiveness of and tendency to integrate healthy food trends. A singular linear regression revealed that attractiveness of healthy food trends

together with BMI, age and number of (healthy) food blogs/accounts followed partly declare differences in tendency to integrate healthy food. We showed that the extent to which one is attracted to healthy food trends, has a significant positive effect on the tendency to integrate those trends in daily life (H8 confirmed).

Moreover, results demonstrated a mutual relation between several psychological determinants. Relatively strong relations were found between dichotomous thinking and the determinants perfectionism and body image concern.

General discussion

Today, healthy food has become one of the most discussed subjects in Western society. Every day, newspapers present articles, interviews and studies with new findings on what one should eat to become healthy. Healthism, a term introduced by Crawford (1980) that refers to the new health consciousness, becomes a more and more prevalent key value in the Western world. The popularity of current healthy food trends, especially among young females, illustrates the importance attached to the value of health. A few studies on consumer behavior have focused on upcoming food movements as veganism (Cherry, 2015; Dyett et al., 2013; Radnitz et al., 2015), the slow food movement (Rombach & Bitsch, 2015; Leitch, 2003) and organic food (Padel & Foster, 2005; Goetzke, Nitzko & Spiller, 2014). However, hardly any research has been done on where sensibility for popular healthy food trends among young female consumers comes from. Hence, this study can be seen as a first attempt bridging the gap between science and practice.

To our knowledge, only one study investigated why alternative and rather extreme diets are so appealing to the current food consumer, but this study targeted Norway and included a wide variety of methods (Bugge, 2015). The present study links to what Bugge (2015) delved into, but it has a slightly different approach and a smaller scope. We aimed at investigating where the growing interest in healthy food trends under young Dutch female consumers (18-30) comes from, by identifying what criteria those consumers use to perceive and evaluate healthy food trends (prestudy) and by exploring to what extent seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) are associated with attractiveness of healthy food trends and the integration of those trends in daily life (main study).

As this field of research is relatively new, we have used an explorative approach and introduced a new methodology for investigating the phenomenon. The popular healthy food trends targeted in this study are yet neither explicitly investigated, nor clearly defined. Therefore, we firstly derived the theoretical framework from a wide range of sources that formed the base for defining the healthy diets this study concerns. This resulted in five characteristics of the trends, namely: avoidance of nutrients or substances, avoidance of entire product groups, consumption of less processed and more natural food, use of claims for specific health benefits and/or prevention of diseases and use of role models serving as an example, in contrast with what authorities say.

Further, the study composed of a qualitative prestudy, including five interviews with experts on food and trends and two focus groups with six and eight Dutch female consumers (aged 18-23), and a survey among 413 Dutch female consumers (18-29). The prestudy was set up to develop insight in how consumers perceive and evaluate healthy food trends, how experts perceive them and how they declare the sensibility for those trends. As hardly any scientific literature is available on healthy food trends and on how consumers perceive and implement those trends, this prestudy helped exploring the

phenomenon, becoming familiar with healthy food trends and their popularity and helped constituting a base for characterizing the healthy food trends focused on in this study.

The survey was conducted to measure scores on seven psychological determinants (healthy-eater identity, dichotomous thinking, perfectionism, trait self-control, desire for control, body image concern and individualism) and to investigate if those determinants relate to the extent to which young female consumers are attracted to healthy food trends and to extent to which they try to actually integrate those trends in their daily lives. Further, background variables as age and BMI, even as questions on sources consulted when searching for information on healthy food, were taken into account.

The study outcomes revealed that familiarity with healthy food trends was rather high among focus group participants, interviewees and survey respondents. Compared with a study of NVVL (2015) among a representative sample of the Dutch population (18+), those findings are remarkable. According to NVVL (2015), only half or less of the respondents was familiar with the prescriptions of a wide range of healthy food trends presented, varying from Sonja Bakker (52%), to vegan (47%), bread-free (33%), superfoods (36%) and Dr. Frank (17%). Further, the study showed that familiarity was higher among women than men (NVVL, 2015). Based on these differences, it can be concluded that the target group of the present study is well chosen, as familiarity appeared to be explicitly high among young female consumers.

However, even though young females seem to be aware of the popular healthy food trends, the findings of this study suggest that they hardly adopt the diets in their everyday lives. Focus group participants perceived most diets as “too extreme” and “not for me” and survey results showed that integration was rather low for all trends. Besides, all of the 11 trends scored higher on attractiveness than on tendency to integrate. This implies that trends are too extreme to incorporate completely. Yet something in those diets attracts young females, whether it is reduced bread consumption, substitution of specific ingredients, or the perfect healthy image that role models create. Especially when trends are perceived as functional, for losing weight, i.e. respondents being on a diet were more attracted to healthy food trends and tended to integrate them more in their daily eating pattern.

This implies that, in general, young females rather see healthy food trends as inspirational sources, as rough guidelines that help constituting their own healthy lifestyle that makes them feel good. This idea strokes with Kristensen, Askegaard and Jeppesen (2013), who suggest that “feeling good” is considered as one of the main outcomes of a successful healthy lifestyle. Further, due to information overload on healthy eating, consumers appear to rely more and more on personal experiences and their own body to uncover what healthy food is for them (Kristensen et al., 2013). Healthy food trends then might be interesting diets with which consumers can experiment.

Further, the study findings suggest that psychological factors influencing sensibility for healthy food trends are restricted to those closely related to the phenomenon (healthy food trends) itself. Specifically, we only identified significant results for the psychological determinants a healthy-

eater identity and dichotomous thinking being predictors of sensibility for healthy food trends. Scales for both determinants included several eating-related items (about dieting and eating behavior), whereas this was not the case for the other five determinants.

Females who see themselves as a healthy-eater apparently find such trends more appealing and are at the same time more trying to integrate trends. It has been previously proposed that viewing oneself as a healthy-eater predicts healthy-eating behavior (Strachan & Brawley, 2009). This study suggests that not only eating enough fruits and vegetables or consumption of low caloric foods is affected by holding a healthy-eater identity, but also sensibility for current healthy food trends is associated with such a character. Several studies shed light on the concept of identity related to health and the influence of situational factors (Oysermann, Fryberg & Yoder, 2007; Strachan & Brawley, 2009). The Identity Based Motivation model proclaims that identities are formed by the context (Oysermann et al., 2007). People interpret situations in such a way that they stroke with their currently active identity and they prefer identity-congruent actions (Oysermann et al., 2007). Speaking of context, we can characterize today's society as a health-appreciative culture, in which people are defined by their health related successes or failures, i.e. being healthy, slim and fit (Bugge, 2015). The growing consciousness about our health might emphasize consumers' health-based identity and therewith explain that healthy-eaters perform congruent behavior. In this case, that means feeling attracted to trends and integrating them.

In line with the expectations, next to a healthy-eater identity, dichotomous thinking turned out to be a significant predictor of attractiveness of healthy food trends. As those diets are extreme in what they claim, dichotomous thinkers could find those extreme rules and exclusions more appealing than others do. Palascha et al. (2015) revealed that people thinking in opposites as "good" and "bad", especially when it concerns food and dieting, may often show restraint eating behavior. The present study extends this finding by showing that dichotomous thinkers also feel more attracted to healthy food trends, which often include restraint eating as well. It is remarkable however, that we did not find a relation between dichotomous thinking and the behavior itself, i.e. integration of the trends.

We did not provide support for the other five psychological determinants (perfectionism, trait self-control, desire for control, body-image concern and individualism) declaring attractiveness and tendency to integrate healthy food trends. This might be explained by the fact that compared to a healthy-eater identity and dichotomous thinking, those five determinants are more general concepts, less related to healthy eating. Besides, the present study used a psychological approach, i.e. it focused on investigating if young female consumers have something specific in common, which makes them sensible for healthy food trends. As it was explorative in nature, the choice for the seven psychological determinants was not based on previous studies focusing on healthy food trends, but on similarities with characteristics of the trends defined in the theoretical framework (chapter 2) and on outcomes of the prestudy. Therefore, it should be noted that we cannot rule out that other psychological factors we did not include in our study, might be having an influence on sensibility for trends. Further, prestudy

findings suggested that the role of psychological characteristics declaring sensibility for trends could be inferior to the influence of socio-economic factors. It may be possible that education, social class and income also relate to attractiveness and integration of healthy food trends. Previous research on healthy eating behavior emphasized on the importance of other factors, next to individual determinants, influencing healthy eating behavior (Raine, 2005). Raine (2005) mentioned that individual determinants are necessary, but not sufficient in explaining eating behavior and that interpersonal, physical, economical and social environment play a role here as well. In addition, research has shown that sensibility for specific trends is more prevalent in urban regions in the Netherlands (NVVL, 2015). Future research might consider taking a rather sociological approach in exploring sensibility for trends, including other than psychological factors.

As expected, this study also showed that attractiveness of healthy food trends significantly predicted tendency to integrate trends. Young females who feel attracted to those healthy diets, apparently also sooner tend to integrate them in their eating pattern. This might be somewhat related to cognitive dissonance. According to this theory, human beings are constantly striving to consistency with the self (Festinger, 1962). Cognitive dissonance will normally lead to behavior that reduces this uncomfortable state, either by adapting the behavior, or changing the attitude (Festinger, 1962). Consumers who feel attracted to healthy food trends, but who are not integrating the trends in their daily eating patterns, probably feel uneasy. To reduce this unpleasant state, they tend to actually adopt the diets, so that their behavior is consistent with their attitude towards the trends. This is likely to apply also vice versa. Adopting extreme diets in one's daily eating pattern requires a certain amount of effort. To compensate for the energy put in living according to a certain diet, trend followers might become very positive about the trends as well. However, according to the results, there still seems to be a gap between being attracted to the popular healthy eating diets and having the tendency to actually integrate them in a daily eating pattern. Therefore, it would be of interest to more deeply examine the association between attractiveness and integration of healthy food trends in future research.

We observed a positive relation between the amount of (healthy) food blogs and accounts participants followed and tendency to integrate healthy food trends. Apparently, female consumers perceiving more healthy food trend posts are also more likely to adopt those trends in their eating pattern than females who are hardly looking at such blogs or accounts. It can be suggested that this slightly links up with the mere exposure effect, which includes that "mere exposure of the individual to a stimulus enhances his attitude toward it" (Zajonc, 1968, p.1). In this case that means, the more healthy food pictures, stories and articles consumers perceive, the more positively they evaluate the healthy food trends. However, it is striking that exposure to (healthy) food blogs or accounts was not significantly associated with attractiveness of healthy food trends. Seemingly, social media content on healthy food does not directly influence attractiveness, but more indirectly influences the actual behavior promoted by those trends. We suggest for future research to deepen out the role of social

media in attractiveness and integration of healthy food trends.

Today, health and fitness-related social media content is unavoidable for many social media users (Carrotte, Vella & Lim, 2015). The link between social media use and healthy eating has often been explored (Boepple & Thompson, 2014; Bissonnette-Maheux et al., 2015; De la Peña & Quintanilla, 2015). Research has shown that social media use is negatively related to body image, both networking sites Facebook (Tiggeman & Slater, 2013) and Instagram (Tiggeman & Zaccardo, 2015) and healthy eating blogs (Boepple & Thompson, 2014). However, social media can also be used for health improving purposes. Positive effects are found for blogs promoting a healthy eating style (Bissonnette-Maheux et al. 2015) and digital media motivating people to achieve their health-related goals (De la Peña & Quintanilla, 2015). Official institutions as doctors and dieticians, but also science providing information on healthy nutrition, could recognize the growing importance of health and healthy eating in consumers' identity and take into account the role social media plays here. Such institutions could make use of this relatively new type of communication for the promotion of a healthy eating pattern. By adapting the media strategy into one that emphasizes on how to reach and maintain a healthy lifestyle, organizations could stimulate consumers to identify with them. In turn, reliability of such sources providing healthy food information might increase. Instead of what e.g. Voedingscentrum (n.d., b) does now, just spreading information on and stimulating healthy and sustainable food choices, such an adapted strategy might be more effective.

Moreover, Spiteri Cornish and Moraes (2015) focused on the impact of health communications and suggested that institutions and policymakers should be more clear and unambiguous about what healthy eating means, what healthy food is and what a healthy diet looks like. Distinction from other, unreliable sources of nutrition information is of primary importance for institutions (Spiteri Cornish & Moraes, 2015). This could be another recommendation for official organs as Voedingscentrum, doctors and dietitians. Related to the findings of Spiteri Cornish and Moraes (2015), we identified that young female consumers often use blogs as a source of information on healthy food, whereas they do not see blogs as reliable. Those consumers might have a point here, i.e. research has shown that bloggers' dietary advice not always corresponds with official recommendations (Simunaniemi, Sandberg, Andersson & Nydahl, 2011). On the other hand, we showed that young females make less use of Voedingscentrum, doctors and dieticians when searching for healthy food information, whereas reliability of those sources was much higher than reliability of often-consulted sources as bloggers. Apparently, those sources communicate their messages quite differently. It might be an opportunity for official institutions, making use of the blogosphere in spreading their information. We suggest that further research is needed to explore how exactly blogs and other social media channels supported by dietitians, doctors, official organizations and science, can be used as tools for promoting dietary habits.

5.1 Limitations

Several limitations of this study should be acknowledged. The first one is the large number of uncompleted questionnaires. Especially during the final days the questionnaire was online, many participants started the survey without even getting halfway. This could be due to the blog "I am A Foodie" at which the survey was presented. Readers of this blog could have been attracted to the picture and the title of the blog post, but might not have had enough motivation to complete the survey. In addition, boredom and fatigue could have played a role here. For future research, it is recommended to close the questionnaire earlier, which probably results in a smaller percentage of dropouts.

Second, it should be noted that the findings of this study are not representative for the whole population. The sample consisted of young Dutch females (18-29) who were approached mainly by Facebook, Twitter and a Dutch healthy food blog "I am A Foodie", which targets consumers interested in healthy eating. Nutrition knowledge and type of education were not considered as control variables, whereas this first is shown to be a prerequisite for processing nutrition-related information when making food choices (Spiteri Cornish & Moraes, 2015). Consumers that know the ins and outs of healthy eating might perceive and process healthy food trends differently than nonprofessionals in the field of healthy nutrition, which enables generalizing the findings. However, representativeness was not the goal of the study, as it was aimed at exploring possible relations between variables in a particularly interested group. Thus, the focus on a specific target group could also be seen as a strong point, as it was most probable to find effects among exactly those consumers.

Third, whereas focus group participants were asked if they followed a diet and if yes, with what reason, in the survey, the influence of food allergies, intolerances or other reasons than health was not taken into consideration. It is likely that consumers adopt certain diets (e.g. gluten-free, dairy-free, vegan) not because of health, but because of medical or sustainability reasons. We suggest that future research on healthy food trends should account for such food choice motives.

Moreover, a limitation of the study was the reliance on self-reports and biased responding. Psychological determinants even as attractiveness and integration of healthy food trends were measured by a self-reported questionnaire, which could have influenced the findings. In addition, participants only roughly indicated the number of blogs and accounts they followed and the number of posts they did on social media. Future research could consider using technologies that track social media use for measuring this more precisely. Finally, causality statements cannot be made.

5.2 Future research

Hardly any research has been done in the field of healthy food trends. The present study therefore could be regarded as a starting point for developing our understanding of the popularity of those eating trends. Trends are changing, probably also healthy food trends. During the interviews, experts

emphasized on the continuing influence trends will have in the future. Therefore, we suggest pursuing the study of consumers' attitudes, perceptions and behavior towards healthy food trends.

Next to the seven psychological determinants this study concentrated on, other psychological factors could also affect sensibility for healthy food trends. In the theoretical framework, seven psychological determinants are described that relate to some extent to aspects of the healthy food trends used in this study. Moreover, those determinants were presented to the experts interviewed in the prestudy to see if we were in the right direction. However, those experts have experience in the field of food and trends, whereas (consumer) psychologists may have another view on what psychological determinants could have an influence on sensibility for healthy food trends. Future research could make use of their knowledge, finding other determinants that might affect sensibility for such diets.

Moreover, this study targeted only Dutch female consumers. It is possible that consumers with different cultural backgrounds react differently on healthy food trends. Consumers from countries with a more culinary culture might be less sensible to healthy food trends, independently of their personality. Cross-cultural research could therefore be an interesting approach.

Further, we found that age had an effect on attractiveness of healthy food trends. The younger female consumers are, the more they were attracted to trends. Besides, a social media channel as Instagram, at which healthy food trends are substantially present, is especially popular among teenagers between 15 and 19 years old (Turpijn, Kneefel, van der Veer, 2015). This could indicate that an even younger sample might have been more appropriate. Future research could consider focusing on a younger target group.

Moreover, future research might focus on the link between sensibility for healthy food trends and (excessive) sports behavior. Haman, Barker-Ruchti, Patriksson and Lindgren (2015) already emphasized on the need for research examining the role of sports and exercise in relation to orthorexia. The so-called happy and healthy lifestyle that is desired by eating according to popular food trends, also stresses enough exercise. In addition, during focus group discussions, healthy food trends were associated with healthy food trends as well. Several studies focused on the fitspiration trend in relation to body image concern (Tiggeman & Zaccardo, 2015; Boepple & Thompson, 2014), but a possible link with fitspiration and sensibility for healthy eating trends might also be identified in future research.

Taken the limitations into account, this study deepened our understanding of why healthy food trends are so appealing to young female consumers. Still, possibilities for further investigating the extreme interest in healthy food trends are as far-reaching as the search for a healthy and happy lifestyle itself.

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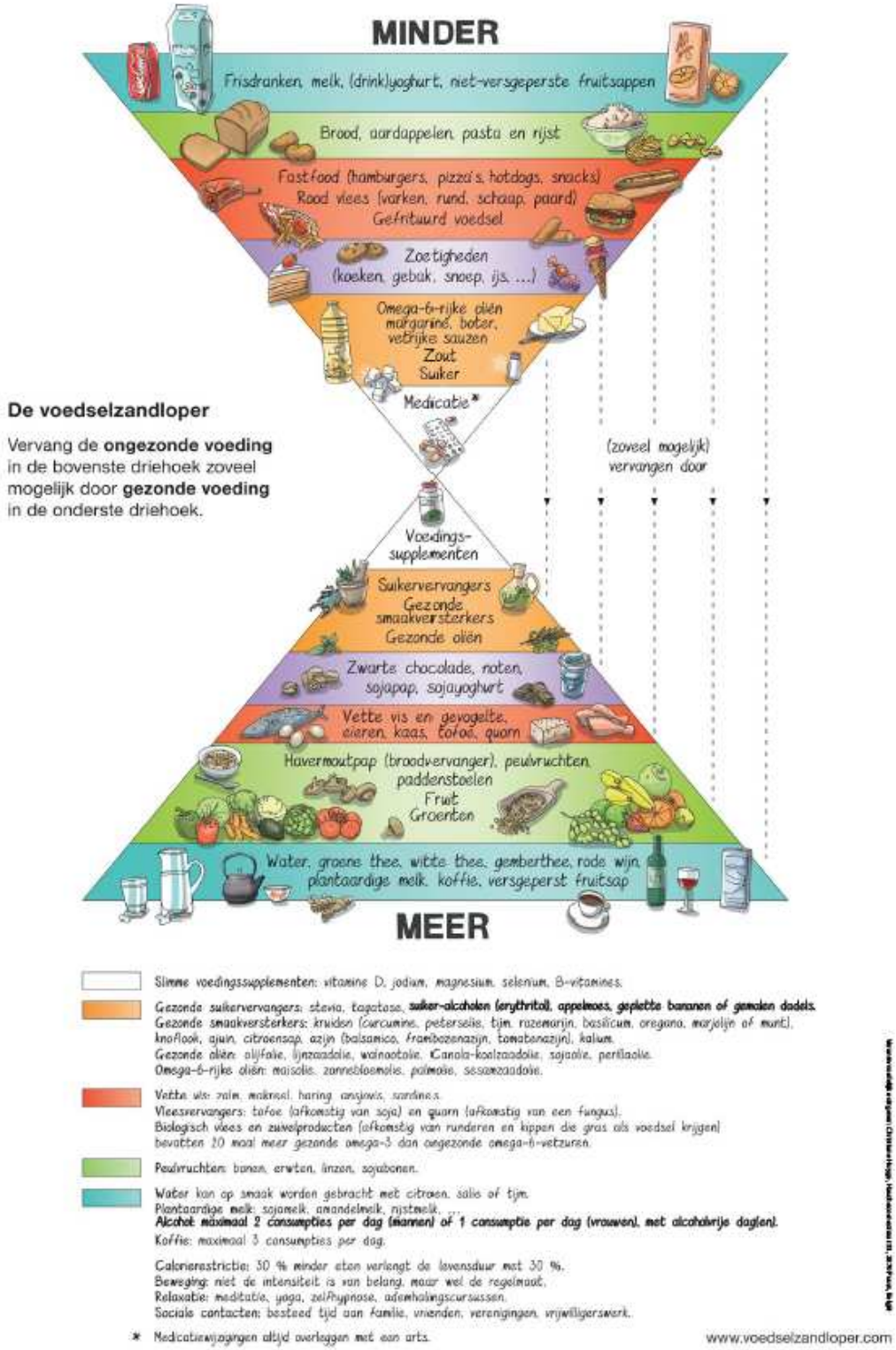
Appendix 1: Healthy food books in top 100 best sold books

Table 12. Healthy food books in top-100 best sold books in the past decade (CPNB, 2015b)

Year	Rank	Title	Author	Year of publication
2013	4	De Voedselzandloper	Kris Verburgh	2012
	80	Het Voedselzandloper kookboek	Pauline Weuring & Kris Verburgh	2013
2012	4	De Voedselzandloper	Kris Verburgh	2012
	66	Het 17dagendieet	Mike Moreno	2011
2011	31	Gezond slank met Dr. Frank	Frank van Berkum	2010
	52	Gezond slank met Dr. Frank Deel 2	Frank van Berkum	2011
2010	5	Gezond slank met Dr. Frank	Frank van Berkum	2010
2005	55	Bereik je ideale gewicht!	Sonja Bakker	2005
	97	Wat je eet ben jezelf	Gillian McKeith	2005
2004	31	Dr. Atkins' nieuwe dieetrevolutie	Robert C. Atkins	2004
	39	Het South Beach Dieet	Arthur Agatston	2004
2003	No healthy food books included in top100			

Appendix 2: Voedselzandloper



(Voedselzandloper, n.d., b)

Appendix 3: Focus group manual

Discussiegroep met vrouwelijke consumenten: Handleiding voor interviewer

Achtergrondinformatie

Het hoofdonderwerp van deze discussiegroep met consumenten is de huidige gezonde voedingstrends. Het doel van deze sessie is te begrijpen welke criteria consumenten gebruiken om gezonde voedingstrends te kenmerken en evalueren. Ik wil graag weten welke trends de deelnemers onderscheiden, hoe ze de trends groeperen en in hoeverre ze de trends aantrekkelijk vinden en/of (willen) toepassen in hun dagelijks leven.

Voorbereiding groepsdiscussie

Zorg dat:

- voorbereidingen klaar zijn, tenminste 30 minuten voor de start van de discussie
- er genoeg stoelen in de kamer zijn
- de audio recorders klaar staan

Print uit:

- Set met 14 kaartjes stimulusmateriaal
- Interviewhandleiding
- Vragenlijst voor iedere deelnemer

Neem mee:

- Twee werkende audio recorders (genoeg batterij en geheugen)
- Telefoon voor foto's stimuli materiaal
- Flipover papier
- Werkende stiften voor op het flipover bord
- Plakband
- Genoeg pennen voor elke deelnemer
- Een klok of horloge
- Uitgeprinte materialen
- Namenlijst deelnemers
- Laptop
- Verlengsnoer
- Koffie/thee/wat lekkers voor de deelnemers

Verwelkomen van deelnemers (5 minuten)

Heet mensen welkom wanneer ze binnenkomen. Zodra iedereen er is:

Allereerst wil ik jullie graag welkom heten en bedanken voor jullie komst. Heel erg fijn en leuk dat jullie enthousiast zijn mee te werken.

Mijn naam is Anne, ik ben een Master studente van de Wageningen Universiteit (Consumer Studies) en ik zal vandaag met jullie praten over gezond eten.

- Vandaar gaan jullie in de groep praten over gezond eten.
- Reageer ook op wat andere mensen zeggen, ik ben geïnteresseerd in alle meningen en er zijn geen goede of foute antwoorden),
- af en toe zal ik doorvragen om nog meer te weten te komen over bepaalde onderwerpen,
- als er vragen zijn waar je geen antwoord op wilt geven dan hoef je dat niet te doen.

Heeft iemand nog vragen of opmerkingen hierover?

De discussie van vandaag zal opgenomen worden met een audio recorder omdat we geen enkele opmerking die wordt gemaakt willen missen. Al jullie antwoorden zullen verder anoniem zijn, want we zullen geen namen of andere persoonlijke informatie bekend maken.

Vindt iedereen het oké dat er geluidsopnames gemaakt zullen worden?

Deelnemers die het niet prettig vinden mogen de discussie verlaten.

De discussie zal ruim 1 uur duren. Omdat we maar weinig tijd hebben zal ik misschien zo nu en dan een discussie moeten onderbreken om alle onderwerpen binnen de tijd te kunnen bespreken. Je mag op elk moment stoppen met dit onderzoek zonder opgaaf van reden.

Heeft iemand nog vragen of opmerkingen voordat we beginnen?

Start de twee audio recorders en leg ze neer op verschillende plaatsen in de kamer.

Als begin zou ik graag een rondje willen maken waarin iedereen zichzelf even heel kort voorstelt.

Vertel ons alsjeblieft je voornaam en wat je doet in het dagelijks leven.

Oké, dit was een kleine opwarming om elkaar wat te leren kennen. Nu wil ik graag een eerste echte opdracht met jullie gaan doen.

Gespreksfase 1: Vrije associaties over gezond eten (10 minuten)

Discussie associaties

Denk even na, en vertel dan waar je aan denkt bij de woorden “gezond eten”. Schrijf ze voor jezelf op een vel papier. (noem eventueel een voorbeeld als deelnemers het lastig vinden e.g. genoeg vezels, groente en fruit binnen krijgen).

Dan wil ik graag nu wat van jullie antwoorden opschrijven op één vel, om te overleggen of iedereen ongeveer hetzelfde idee heeft over “gezond eten”. Waar denken jullie aan bij het woord gezond eten?

Schrijf sleutelwoorden die genoemd worden op de flipover onder de term.

Bespreek een voor een de genoemde steekwoorden. Waarom denken mensen hieraan?
Mogelijk te gebruiken activerende vragen:

- Hebben jullie nog andere ideeën over gezond eten die niet op de flipover staan?
- Waar is gezond eten goed voor, wat doet het met je lichaam?
- Waar denk je aan bij gezond eten? En waar denk je aan bij ongezond eten?

➔ Maak foto’s van de flip-over!

Ik denk dat we nu wel klaar zijn. Heeft iemand nog een laatste opmerking of vraag?

Dan gaan we door naar het volgende onderwerp.

Gespreksfase 2: Categoriseren van voedingstrends op overeenkomsten en verschillen (20 minuten)

Sorteren van 14 kaartjes individueel (3 minuten)

Instructie: maak 2 of meer stapeltjes van kaartjes die jij bij elkaar vindt horen. Later gaan we het erover hebben waarom.

Discussie motivatie (17 minuten)

Allemaal klaar? Waarom heb je de kaartjes zo ingedeeld? (laat iedereen haar categorieën uitleggen)

→ maak foto van hoe kaartjes zijn neergelegd

Ik denk dat we nu wel klaar zijn. Heeft iemand nog een laatste opmerking of vraag?
Dan gaan we door naar een volgende opdracht.

Gespreksfase 3: Categoriseren van voedingstrends op aantrekkelijkheid (15 minuten)

Sorteren van 14 kaartjes individueel (2 minuten)

Instructie: leg de kaartjes op volgorde van heel aantrekkelijk (links) naar helemaal niet aantrekkelijk (rechts).

Discussie motivatie (13 minuten)

Allemaal klaar? Waarom…

- Waarom vind je de kaartjes links heel aantrekkelijk?
- Waarom denk je dat anderen deze kaartjes niet aantrekkelijk vinden?

- Waarom vind je de kaartjes rechts helemaal niet aantrekkelijk?
- Waarom denk je dat anderen deze kaartjes wel aantrekkelijk vinden?

→ maak foto van hoe kaartjes zijn neergelegd

Ik denk dat we nu wel klaar zijn. Heeft iemand nog een laatste opmerking of vraag?
Dan gaan we door naar een volgende opdracht.

Gespreksfase 4: Categoriseren van voedingstrends op mate waarin je ze zou willen toepassen (15 minuten)

Sorteren van 14 kaartjes individueel (2 minuten)

Instructie: leg de kaartjes op volgorde van heel graag willen toepassen (links) naar helemaal niet willen toepassen (rechts).

Discussie motivatie (13 minuten)

Allemaal klaar? Waarom....

- Waarom zou je de concepten op kaartjes links heel graag willen toepassen?
- Waarom denk je dat anderen deze concepten niet willen toepassen?

- Waarom zou je de concepten op kaartjes links helemaal niet willen toepassen?
- Waarom denk je dat anderen deze concepten wel willen toepassen?

- Volg je zelf één of meerdere van deze trends?
- Waarom (niet)?
- Waarom denk je dat anderen deze trends wel volgen?

→ maak foto van hoe kaartjes zijn neergelegd

Ik denk dat we nu wel klaar zijn. Heeft iemand nog een laatste opmerking of vraag?
Dan gaan we door naar een volgende opdracht.

Gespreksfase 5: Afsluiting (10 minuten)

Individuele vragenlijst invullen (5 minuten)

Tenslotte zou ik jullie graag nog een individuele opdracht willen laten doen. De antwoorden hiervan gaan we niet bediscussiëren.

Is iedereen klaar?

Afsluiting groepsdiscussie (5 minuten)

Dit was de laatste opdracht. Ik wil jullie graag hartelijk bedanken voor jullie komst en voor het delen van jullie meningen met mij. Ik hoop dat jullie de discussie prettig hebben gevonden, voor mij was hij in ieder geval erg waardevol. Mochten jullie eenmaal thuis nog vragen hebben over het onderzoek dan kunnen jullie me een
e-mail sturen. Ik wens jullie nog een fijne dag.

Bijlage 1

Vragenlijst met achtergrondkenmerken

Participant nummer: ……..

Wat is je leeftijd? ..... jaar

Wat is je hoogst gevolgde opleiding?

- o Geen / lager- of basisonderwijs
- o VMBO/MAVO/LBO
- o MBO
- o HAVO/VWO
- o HBO/WO

Volg je op dit moment een dieet of voedingsvoorschrift? Ja/nee

Zo ja, met welk doel volg je dit dieet of voedingsvoorschrift?

.....

.....

Heb je verder nog opmerkingen of vragen voor de onderzoeker?

.....

.....

.....

.....

.....

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.....

.....

.....

.....

Zou je na afloop van het onderzoek een kopie van het thesis rapport willen ontvangen? Ja/nee

Bijlage 2

Vragen om deelnemers te activeren:

- Ik zie dat # van jullie trend X wel/niet aantrekkelijk vonden. Wat vonden jullie er wel/niet aantrekkelijk aan en waarom?
- Ik zie dat # van jullie trend X wel/niet zou willen toepassen. Wat maakt het dat jullie deze trend wel/niet zouden willen toepassen?
- Wil iemand hier iets aan toevoegen of hierop reageren?

Vragen om de diepte in te gaan:

- Waarom (niet)?
- Wat spreekt je erin aan?
- Kun je iets specifieker zijn?
- Kun je me daar iets meer over vertellen?
- Waarom denk je dat?
- Heb je daar een voorbeeld van?
- Kun je iets meer toevoegen?
- Is er nog meer?

Vragen om andere deelnemers te betrekken:

- Heeft iemand anders dat ook ervaren?
- Heeft iemand een andere ervaring/een ander perspectief?
- Vind jij dat ook?
- Ben je het daar ook mee eens?
- Denkt iemand hier anders over?
- Is dat ook zo voor de rest?
- Heeft iemand anders hier nog iets over te zeggen?

Appendix 4: Experts interviews manual

Interviews met experts: Handleiding voor interviewer

Voorbereiding interview

Print uit:

- Set met 14 kaartjes als stimulusmateriaal
- Interview handleiding

Neem mee:

- Werkende audio recorder (genoeg batterij en geheugen)
- Camera voor foto's kaartjes
- Uitgeprinte materialen
- Papier voor aantekeningen / steekwoorden

Schets achtergrond van studie (5 minuten)

Het hoofdonderwerp van deze interviews met experts is de huidige gezonde voedingstrends. Ik wil graag weten welke karakteristieken volgens u deze trends kenmerken en welke psychologische karaktereigenschappen naar uw mening de interesse in gezonde voedingstrends zouden kunnen verklaren.

Vindt u het oké dat er geluidsopnames gemaakt zullen worden?

Gespreksfase 1: Vrije associaties over gezonde voedingstrends in huidige maatschappij (10 minuten)

Schrijf sleutelwoorden die genoemd worden op een blad onder de term.

Bespreek een voor een de genoemde steekwoorden. Waarom denkt de expert hieraan?
Mogelijk te gebruiken activerende vragen:

- Heeft u nog andere ideeën over gezonde voedingstrends die niet op het blad staan?
- Waar denkt u aan bij een gezonde voedingstrend?
- Hoe definieert u een gezonde voedingstrend?
- Wanneer spreekt u van een gezonde voedingstrend?
- Waar blijkt uit dat iets een gezonde voedingstrend is?

Ik denk dat we nu wel klaar zijn. Heeft u nog een laatste opmerking of vraag?

Dan gaan we door naar het volgende onderwerp.

Gespreksfase 2: Categoriseren van voedingstrends op overeenkomsten en verschillen (20 minuten)

Sorteren van 14 kaartjes (3 minuten)

Instructie: maak 2 of meer stapeltjes van kaartjes die u bij elkaar vindt horen. Later gaan we het erover hebben waarom.

Klaar?

Waarom....
Wat maakt welke groep aantrekkelijk voor consumenten?

→ maak foto hoe plaatjes zijn neergelegd !

Ik denk dat we nu wel klaar zijn. Heeft u nog een laatste opmerking of vraag?
Dan gaan we door naar een volgende opdracht.

Gespreksfase 3: Determinanten (20 minuten)

Open vraag: type mensen

Instructie: wat voor type mensen zouden zich aantrokken voelen tot dit soort gezonde voedingstrends? En wat voor type mensen zouden dit soort gezonde voedingstrends graag (willen) volgen? (5 minuten)

- Aantrekkelijkheid: welk type mensen aangetrokken? Waarom?
- Willingness to integrate in daily life: welk type mensen volgen? Waarom?

Psychologische karaktereigenschappen (15 minuten)

Instructie: verschillende psychologische karaktereigenschappen zouden gerelateerd kunnen zijn aan de mate waarin iemand zich aangetrokken voelt tot gezonde voedingstrends. Ik heb een lijst van 8 mogelijke eigenschappen. Zou u kunnen aangeven in hoeverre u denkt dat deze karaktereigenschappen hier een rol in spelen?

1. Healthy-eater identity / gezonde eter identiteit:

   De mate waarin je jezelf ziet als een ‘healthy eater’

2. Dichotomous thinking / dichotoom denken:

   Denken in termen van tweedelige tegenstellingen, bijvoorbeeld ‘goed’ en ‘slecht’

3. Perfectionisme:

   De neiging om extreem hoge standaarden te hebben en na te streven

4. Trait self-control / zelf controle

   De karaktereigenschap om controle te hebben over automatische impulsen

5. Desire for self-control / verlangen naar controle

   De wens om controle te hebben over je eigen leven

6. Body image concern

   De mate waarin je bezig bent met lichaamsbeeld, met hoe je eruit ziet

7. Trait appearance comparison

   De karaktereigenschap om jouw uiterlijk te vergelijken met dat van anderen

8. Individualisme

   De karaktereigenschap om individuele doelen belangrijker te vinden dan collectieve doelen, onafhankelijk willen zijn en je weinig zorgen te maken om anderen

- Zijn er volgens u naast deze determinanten nog andere karaktereigenschappen die ik niet genoemd heb, maar wel van invloed kunnen zijn op aantrekkelijkheid van de trends en/of de mate waarin men ze wil toepassen in het dagelijks leven?

Gespreksfase 4: Afsluiting (10 minuten)

Individuele vragenlijst invullen (5 minuten)

Tenslotte zou ik u graag nog een individuele opdracht willen laten doen. De antwoorden hiervan gaan we niet bediscussiëren.

Bent u klaar?

Afsluiting interview (5 minuten)

Dit was de laatste opdracht. Ik wil u graag hartelijk bedanken voor jullie komst en voor het met mij willen delen van uw mening. Ik hoop dat u het interview prettig hebben gevonden, voor mij was het in ieder geval erg waardevol. Mocht u eenmaal thuis nog vragen hebben over het onderzoek dan kunt u me een e-mail sturen. Ik wens u nog een fijne dag.

Bijlage 1

Vragenlijst met achtergrondkenmerken van u als expert

Wat is uw huidige functie?
.....
.....
.....
.....
.....

Hoe zou u zelf uw expertise gebied beschrijven?
.....
.....
.....
.....
.....

Hoeveel jaar ervaring heeft u in uw huidige functie? ..... jaar

Wat is uw leeftijd? ..... jaar

Wat is uw geslacht: O man
O vrouw

Zou u na afloop van het onderzoek een kopie van het thesis rapport willen ontvangen? Ja/nee

Als u verder nog opmerkingen of suggesties heeft, dan kunt u ze hier schrijven:
.....
.....
.....
.....
.....

Bijlage 2

Vragen om de diepte in te gaan:

- Waarom (niet)?
- Kunt u iets specifieker zijn?
- Kunt u me daar iets meer over vertellen?
- Waarom denkt u dat?
- Heeft u daar een voorbeeld van?
- Kunt u iets meer toevoegen?
- Is er nog meer?

Appendix 5: Stimulus material focus groups and interviews

Figure 5. Sonja Bakker (Boekenplatform, n.d.)

Figure 6. Dr. Frank (Bol.com, n.d.)

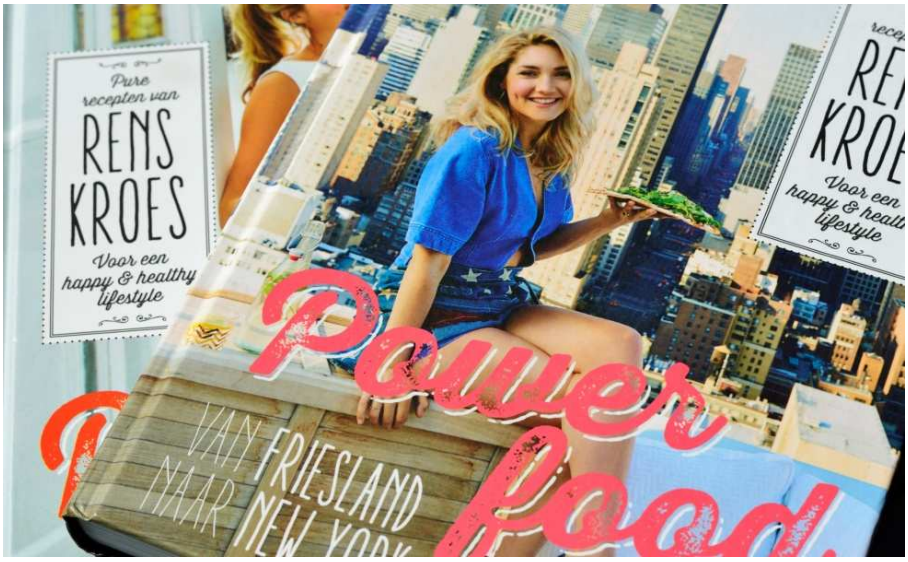

Figure 7. Rens Kroes (Powerfood) (Boersma, 2015)

Figure 8. Superfoods (The Art of Healthy Living, 2015)

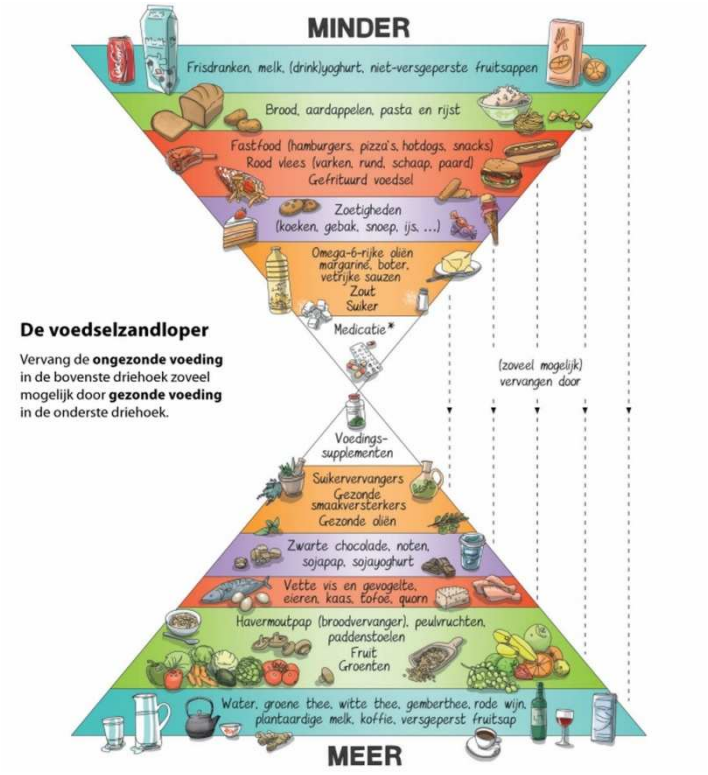

Figure 9. Voedselzandloper (Voedselzandloper, n.d., b)

Figure 10. Schijf van Vijf (Voedingscentrum, n.d., a)

Figure 11. Raw foodism (Glutenull, 2015)

Figure 12. Veganism (The Dodo, 2015)

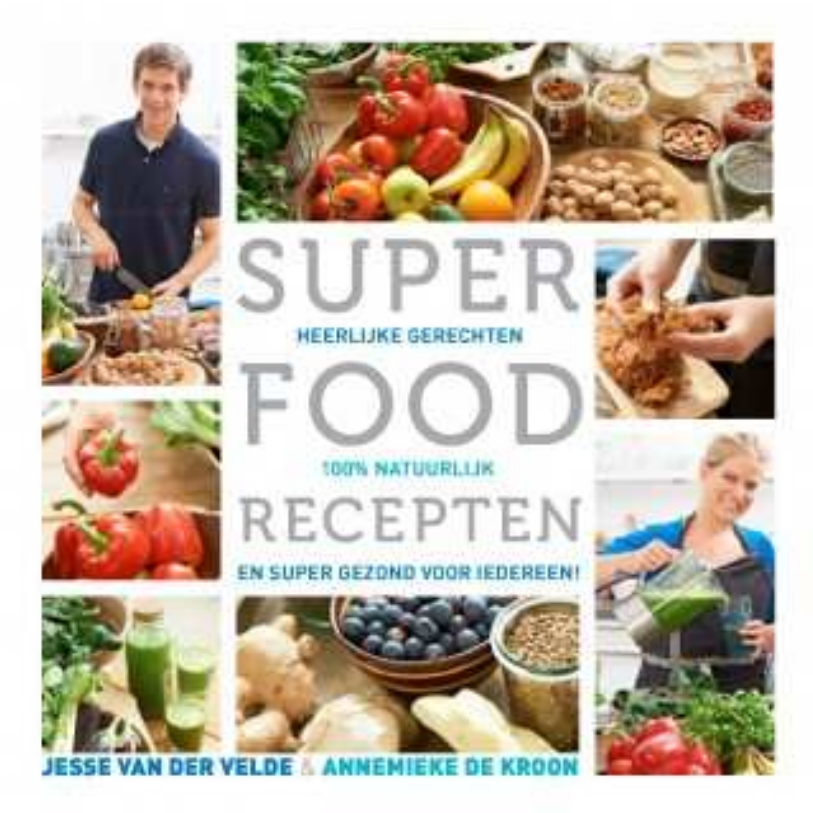

Figure 13. Superfood recipes (Steviahouse, n.d.)

Figure 14. Gluten-free (Medical News Today, 2015)

Figure 15. Dairy-free (Hoover, n.d.)

Figure 16. Sugar-free (Wise, 2013)

Figure 17. Refined sugar-free (Etherton, n.d.)

Figure 18. Bread-free (Romm, 2014)

Appendix 6: Findings focus groups and interviews

Table 13. Categories healthy food trends focus groups

Participant number	Groups	Reasoning
1	1. Voedselzandloper, Schijf van Vijf 2. raw food, superfoods, Superfood Recepten, Rens Kroes 3. vegan, dairy-free 4. gluten-free, bread-free, Dr. Frank 5. sugar-free, refined sugar-free 6. Sonja Bakker	- All superfood items together with Rens Kroes, even as raw food - began together with dairy-free, because both diets exclude dairy products - both sugar items together - Dr. Frank with gluten-free and bread-free because of low-carbs - Sonja Bakker did not fit anywhere
2	1. Schijf van Vijf, Voedselzandloper 2. raw food, vegan 3. superfoods, Superfood Recepten, Rens Kroes 4. dairy-free, bread-free, gluten-free 5. refined sugar-free, sugar-free 6. Sonja Bakker, Dr. Frank	- Sonja Bakker and Dr. Frank as diets to lose weight - dairy-free and gluten-free together with bread-free - superfoods related items together - Schijf van Vijf and Voedselzandloper together - sugar-free twice, both concern sugar
3	1. Schijf van Vijf, Sonja Bakker, Voedselzandloper, refined sugar-free, superfoods, Rens Kroes, Superfood Recepten, Dr. Frank 2. vegan, dairy-free, bread-free, sugar-free, raw food, gluten-free	- extreme diets or eating patterns (exclusion, as never eating bread or sugar anymore or eating only raw) versus - more conscious patterns - superfood related items in the latter group, because they are not about exclusion, but concern a healthy supplement to the diet
4	1. Voedselzandloper, Schijf van Vijf 2. vegan, sugar-free, refined sugar-free, Superfood Recepten, superfoods, bread-free, gluten-free, raw food, dairy-free 3. Dr. Frank, Sonja Bakker, Rens Kroes	- Voedselzandloper and Schijf van Vijf as guidelines - Dr. Frank, Sonja Bakker and Rens Kroes as books - others as trends together, that will fade away at a certain moment
5	1. Voedselzandloper, Schijf van Vijf 2. vegan, raw food 3. refined sugar-free, sugar-free 4. superfoods, Superfood Recepten, Rens Kroes 5. dairy-free 6. Sonja Bakker, Dr. Frank 7. bread-free, gluten-free	- Sonja Bakker and Dr. Frank as diets to lose weight - all superfood related items together - all ‘free from diets’ grouped in pairs, because those are all different things you can be occupied with

6	1. Voedselzandloper, Schijf van Vijf 2. superfoods, Superfood Recepten, Rens Kroes, dairy-free, gluten-free, bread-free, vegan, raw food, sugar-free, refined sugar-free 3. Sonja Bakker, Dr. Frank	- Voedselzandloper and Schijf van Vijf as models together - All superfood related items even as 'free from diets' as trends together - Sonja Bakker and Dr. Frank are both diets and both marketing oriented
7	1. Schijf van Vijf, Voedselzandloper 2. raw food, vegan 3. Superfood Recepten, superfoods, Sonja Bakker, Rens Kroes, Dr. Frank 4. sugar-free, refined sugar-free, dairy-free, gluten-free, bread-free	- On the one hand everything that is not allowed (sugar, dairy, gluten, bread) - Vegan and raw food together - Trends together or books that are linked to a person - Schijf van Vijf and Voedselzandloper together because they are more strongly underpinned
8	1. Voedselzandloper, Schijf van Vijf 2. vegan, raw food 3. gluten-free, bread-free, sugar-free 4. superfoods, dairy-free, refined sugar-free 5. Dr. Frank, Rens Kroes, Superfood Recepten, Sonja Bakker	- Dr. Frank, Rens Kroes, Superfood Recepten and Sonja Bakker together, because those are books - Vegan and raw together because it is more of a lifestyle - The rest not really clear distinguished
9	1. Voedselzandloper, gluten-free, bread-free, Dr. Frank 2. Schijf van Vijf, Sonja Bakker 3. Superfoods, Superfood Recepten, Rens Kroes, raw food, vegan, sugar-free 4. dairy-free, refined sugar-free	- Superfoods, Superfood Recepten, Rens Kroes, raw food, vegan, sugar-free - Voedselzandloper, gluten-free, bread-free, Dr. Frank together, because they all say that you should avoid bread - Gluten associated with bread (whereas it is more than that) - Schijf van Vijf and Sonja Bakker together, because Sonja used the principle of the Schijf van Vijf
10	1. Schijf van Vijf, Voedselzandloper 2. superfoods, vegan, raw food, Rens Kroes, Superfood Recepten 3. bread-free, gluten-free 4. Sugar-free, refined sugar-free 5. dairy-free 6. Sonja Bakker, Dr. Frank	- six categories, namely: - sugar - bread - what you should or should not eat to get everything you need - dairy, apart from sugar or bread, because thinking in terms of ingredients, dairy sugar and bread differ - superfoods together with hype kind of things, also raw and vegan seen as such type of trends - Dr. Frank and Sonja Bakker together because those diets concern weight
11	1. Voedselzandloper, Schijf van Vijf 2. superfoods, bread-free, sugar-free, refined sugar-free, raw food, Superfood Recepten, Rens Kroes 3. vegan	- Dr. Frank and Sonja Bakker together because of weight loss reasons - gluten-free and dairy-free together, because you can adopt those diets because of an allergy or because of lifestyle reasons - vegan apart, because it is a trend, but is is also adopted because of ethical reasons

	4. Sonja Bakker, Dr. Frank 5. gluten-free, dairy-free	- other together as trends, seen as temporary - Voedselzandloper and Schijf van Vijf together because it is more scientifically underpinned, less sensitive for trends than the others
12	1. Schijf van Vijf, Sonja Bakker, Dr. Frank 2. Voedselzandloper, Rens Kroes, Superfood Recepten 3. vegan, dairy-free, superfoods, raw food 4. sugar-free, refined sugar-free 5. gluten-free, bread-free	- Voedselzandloper not together with Schijf van Vijf, because this latter one is outdated and not used that often anymore. - Schijf van Vijf with Sonja Bakker and Dr. Frank, because they have more rules and forbid more food products and they are more outdated - Rens Kroes together with Voedselzandloper and Superfood Recepten, because those diets do not forbid certain things, but show how tasty those types of food are - Sugar and bread separately - Vegan, dairy, superfoods and raw food together as trends
13	1. Voedselzandloper, Schijf van Vijf, Sonja Bakker, Dr. Frank 2. vegan, raw food, superfoods, Superfood Recepten, Rens Kroes 3. sugar-free, refined sugar-free, gluten-free, dairy-free, bread-free	- Schijf van Vijf, Voedselzandloper, Dr. Frank and Sonja Bakker all together, because you can choose living according to one of them, use them as guidelines, as a philosophy - Vegan, raw food, superfoods, Superfood Recepten, Rens Kroes all together as separate lifestyle things
14	1. superfoods, Schijf van Vijf, Voedselzandloper 2. vegan, raw food 3. dairy-free, sugar-free, refined sugar-free, gluten-free, bread-free 4. Superfood Recepten, Dr. Frank, Rens Kroes, Sonja Bakker	- Superfood Recepten, Dr. Frank, Rens Kroes and Sonja Bakker together, because they are linked to a person - Schijf van Vijf and Voedselzandloper together, because it is about eating from different ‘parts’ of the circle or triangle

Table 14. Focusgroup ranking rates attractiveness of diets

		Rank						
		1	2	3	4	5	6	7
Diet	Schijf van Vijf	9	1	1	1	1	1	-
	Voedselzandloper	10	2	1		1	-	-
	Sonja Bakker	1	3	5	2	1	1	1
	Dr. Frank	-	4	5	2	2	-	1
	Superfood Recepten	2	2	5	4	1	-	-
	Rens Kroes	3	2	5	3	1	-	-
	Superfoods	2	2	5	3	1	1	-
	Raw food	1	4	3	3	2	1	-
	Vegan	2	6	4	-	1	1	-
	Bread-free	-	4	5	3	1	1	-
	Gluten-free	-	4	6	2	1	1	-
	Dairy-free	2	4	6	-	1	-	1
	Sugar-free	1	5	6	1	1	-	-
	Refined sugar-free	2	6	5	1	-	-	-

Note. Numbers indicate the number of times a diet is placed at a certain rank

Table 15. Focusgroup ranking rates tendency to integrate diets

		Rank					
		1	2	3	4	5	6
Diet	Schijf van Vijf	10	2	1	1	-	-
	Voedselzandloper	11	1	1	1	-	-
	Sonja Bakker	-	5	5	2	2	-
	Dr. Frank	-	4	5	3	2	-
	Superfood Recepten	2	6	3	2	-	1
	Rens Kroes	3	3	4	3	-	1
	Superfoods	1	5	5	2	-	1
	Raw food	1	4	6	1	2	-
	Vegan	4	1	6	3	-	-
	Bread-free	1	5	7	1	-	-
	Gluten-free	-	2	10	1	1	-
	Dairy-free	1	3	10	-	-	-
	Sugar-free	-	6	6	-	2	-
	Refined sugar-free	2	9	3	-	-	-

Note. Numbers indicate the number of times a diet is placed at a certain rank

Table 16. Categories healthy food trends interviews

Partici-pant number	Groups	Reasoning
1	1. Schijf van Vijf, Dr. Frank, Voedselzandloper 2. Sonja Bakker, Rens Kroes, Superfood Recepten, superfoods 3. gluten-free, bread-free, dairy-free, sugar-free, refined sugar-free 4. raw food, vegan	- Group 1: those are about eating styles. Nobody knows the truth, but all three have something to say - Group 2: all temporary hypes, which are about communication, without real content or a real idea - Group 3: this is serious business, here it becomes interesting. This is what is happening right now, what we actually eat and how and why. All concern specific ingredients. - Group 4: this is about belief, spirituality, belief in a better world
2	1. Schijf van Vijf, Voedselzandloper 2. Rens Kroes, Superfoods, Superfood Recepten, raw food, vegan 3. gluten-free, bread-free, dairy-free, sugar-free, refined sugar-free, Dr. Frank 4. Sonja Bakker	- Group 1: general recommendations about different types of food products. Both present some kind of eating pattern in which moderation and variation are main principles. The main difference between the two is the high amount of grains prescribed in the Schijf van Vijf and not in the Voedselzandloper. Both are mainly science based. - Group 2: those are the “heroes” that offer a solution to make you healthy. All are positively formulated and based on glorifying a particular group of food products or nutrients. - Group 3: those are the “demons” that cause all types of diseases. Those are negatively formulated. All point out one particular evildoer. - Sonja Bakker does not fit in one of the other categories, it is just a diet for losing weight, without a philosophy or theory about what is good or bad.
3	1. Rens Kroes, Voedselzandloper, Superfood Recepten, superfoods, Dr. Frank, Sonja Bakker 2. Gluten-free, dairy-free, bread-free, sugar-free, refined sugar-free, vegan, raw 3. Schijf van Vijf	- Group 1: those are guidelines for how you should eat. - Sonja Bakker prescribed traditional products, the others prescribe newer products - Group 2: those are food lifestyles that have in common that you should avoid certain things - Vegan also in group 2 because it has become a lifestyle that is also adopted because of health reasons - Group 3: the old, traditional guidelines
4	1. Schijf van Vijf 2. Dr. Frank, gluten-free, bread-free, sugar-free, refined sugar-free, Voedselzandloper 3. superfoods, Superfood Recepten, Rens Kroes 4. vegan, raw food 5. Sonja Bakker 6. dairy-free	- Group 1: traditional guidelines, the basis for healthy eating: variation and moderation. Not specifically about particular types of food products that are good or bad. - Group 2: represents change from avoiding fat to avoiding carbohydrates. Started with Dr. Atkins and gained momentum by the Voedselzandloper. It is more important where calories come from (compared to group 1 or 5) - Group 3: those are more hypes, which will fade away quickly - Group 4: those are still small, but veganism becomes more influencing, also because it is nowadays chosen out of health reasons - Sonja Bakker and dairy-free do not really fit in one of the other categories. Sonja Bakker is just about counting calories, no matter where they come from

5	1. Schijf van Vijf 2. Vegan, superfoods 3. Rens Kroes, Dr. Frank, Sonja Bakker, Superfood Recepten, gluten-free, dairy-free, bread-free, sugar-free, refined sugar-free, Voedselzandloper	- Group 1: the ultimate manual, serves as an exemplar function. Less strict guidelines than group 3. Doley image, not popular amongst youth. - Group 2: pure ingredients and more plant-based will become a longer term trend. - Group 3: all hypes that cause confusion, sort of lifestyles with little attention for what is healthy for you as a person.

Appendix 7: Survey

Q1

Fijn dat je mee wilt doen aan dit onderzoek van Wageningen Universiteit! Deze vragenlijst gaat over gezonde voedingstrends en de mate waarin bepaalde typen personen zich hiertoe aangetrokken voelen. Het invullen van de vragenlijst zal ongeveer 15 minuten duren. Als deelnemer aan dit onderzoek blijf je geheel anoniem. Er zijn geen risico's of voordelen verbonden aan het invullen van de vragenlijst. Je kunt op ieder moment beslissen om te stoppen met invullen. Voor eventuele vragen kunt je contact opnemen met Anne Mebelder (anne.mebelder@wur.nl).

Alvast ontzettend bedankt voor je deelname!

Door op 'ja' te klikken geef je aan dat je bovenstaande hebt gelezen en ermee instemt:

❍ ja, ik doe mee aan dit onderzoek (1)

Q2 Wat is je geslacht?

❍ Man (1)
❍ Vrouw (2)

If man is selected, then skip to end of survey

Q3 Wat is je leeftijd?

_____ Leeftijd in jaren: (1)

If leeftijd in jaren: is less than 18, then skip to end of survey

If leeftijd in jaren: is greater than 29, then skip to end of survey

Q4 De volgende vragen gaan over verschillende diëten / voedingsleefstijlen. Geef aan of je wel eens hebt gehoord van onderstaande diëten / voedingsleefstijlen. Je hoeft niet volledig te weten wat de diëten / voedingsleefstijlen inhouden. Het gaat erom of ze je bekend voor komen.

	Ken je de volgende diëten / voedingsleefstijlen?	
	Ja (1)	Nee (2)
Glutenvrij dieet (1)	❍	❍
Zuivelvrij dieet (2)	❍	❍
Dr. Frank (afvallen aan de hand van minder koolhydraten) (3)	❍	❍
Broodvrij dieet (4)	❍	❍
Raw-food dieet (al je voedsel ongekookt consumeren) (5)	❍	❍
Veganisme (geen enkel dierlijk voedingsmiddel consumeren) (6)	❍	❍
Powerfood (van Rens Kroes) (7)	❍	❍
De Voedselzandloper (van Kris Verburgh) (8)	❍	❍
Superfoods (9)	❍	❍
Suikervrij dieet (10)	❍	❍
Sonja Bakker (afvallen met behulp van voorgeschreven menu's) (12)	❍	❍

Q5 Onderstaande vragen gaan opnieuw over deze diëten / voedingsleefstijlen. Geef aan hoe aantrekkelijk deze diëten / voedingsleefstijlen jou lijken.

	Hoe aantrekkelijk lijkt je dit dieet / deze leefstijl?				
	Helemaal niet aantrekkelijk (1)	Niet heel aantrekkelijk (2)	Neutraal (3)	Enigszins aantrekkelijk (4)	Heel aantrekkelijk (5)
Glutenvrij dieet (1)	❍	❍	❍	❍	❍
Zuivelvrij dieet (2)	❍	❍	❍	❍	❍
Dr. Frank (afvallen aan de hand van minder koolhydraten) (3)	❍	❍	❍	❍	❍
Broodvrij dieet (4)	❍	❍	❍	❍	❍
Raw-food dieet (al je voedsel ongekookt consumeren) (5)	❍	❍	❍	❍	❍
Veganisme (geen enkel dierlijk voedingsmiddel consumeren) (6)	❍	❍	❍	❍	❍
Powerfood (van Rens Kroes) (7)	❍	❍	❍	❍	❍
De Voedselzandloper (van Kris Verburgh) (8)	❍	❍	❍	❍	❍
Superfoods (9)	❍	❍	❍	❍	❍
Suikervrij dieet (10)	❍	❍	❍	❍	❍
Sonja Bakker (afvallen met behulp van voorgeschreven menu's) (11)	❍	❍	❍	❍	❍

Q6 De volgende vragen gaan over dezelfde diëten / voedingsleefstijlen. Geef nu aan in hoeverre jij deze diëten / voedingsleefstijlen probeert toe te passen in je dagelijks leven.

	In welke mate probeer je dit dieet / deze leefstijl toe te passen in je dagelijks leven?				
	Nooit (1)	Af en toe (2)	Regelmatig (3)	Zoveel mogelijk (4)	Altijd (5)
Glutenvrij dieet (1)	❍	❍	❍	❍	❍
Zuivelvrij dieet (2)	❍	❍	❍	❍	❍
Dr. Frank (afvallen aan de hand van minder koolhydraten) (3)	❍	❍	❍	❍	❍
Broodvrij dieet (4)	❍	❍	❍	❍	❍
Raw-food dieet (al je voedsel ongekookt consumeren) (5)	❍	❍	❍	❍	❍
Veganisme (geen enkel dierlijk voedingsmiddel consumeren) (6)	❍	❍	❍	❍	❍
Powerfood (van Rens Kroes) (7)	❍	❍	❍	❍	❍
De Voedselzandloper (van Kris Verburgh) (8)	❍	❍	❍	❍	❍
Superfoods (9)	❍	❍	❍	❍	❍
Suikervrij dieet (10)	❍	❍	❍	❍	❍
Sonja Bakker (afvallen met behulp van voorgeschreven menu's) (11)	❍	❍	❍	❍	❍

Q7 Hierboven zag je een lijst met allerlei diëten / voedingsleefstijlen. Nu je deze gezien hebt, kun je aangeven hoe aantrekkelijk dit soort diëten / voedingsleefstijlen jou lijken?

	Helemaal niet aantrekkelijk (1)	Niet aantrekkelijk (2)	Neutraal (3)	Enigszins aantrekkelijk (4)	Heel aantrekkelijk (5)
Aantrekkelijk (1)	❍	❍	❍	❍	❍

Q8 Nu je bovenstaande diëten / voedingsleefstijlen gezien hebt, kun je aangeven hoe vaak jij bepaalde aspecten hiervan probeert toe te passen in je dagelijks leven?

	Nooit (1)	Af en toe (2)	Regelmatig (3)	Zoveel mogelijk (4)	Altijd (5)
Toepassing in dagelijks leven (1)	❍	❍	❍	❍	❍

Q9 De volgende vragen bevatten verschillende stellingen. Geef per stelling aan in hoeverre je het daarmee eens bent.

	Helemaal mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Ik zie mezelf als een gezonde eter. (1)	❍	❍	❍	❍	❍	❍	❍
Wanneer ik mezelf beschrijf, noem ik vaak mijn betrokkenheid bij gezond eten. (2)	❍	❍	❍	❍	❍	❍	❍
Ik streef meerdere doelen na die gerelateed zijn aan gezond eten. (3)	❍	❍	❍	❍	❍	❍	❍
Gezond eten is een centrale factor voor mijn zelfbeeld. (4)	❍	❍	❍	❍	❍	❍	❍
Ik moet gezond eten om me goed over mezelf te voelen. (5)	❍	❍	❍	❍	❍	❍	❍
Anderen zien mij als iemand die regelmatig gezond eet. (6)	❍	❍	❍	❍	❍	❍	❍
Voor mij betekent een gezonde eter	❍	❍	❍	❍	❍	❍	❍

zijn meer dan alleen gezond eten. (7)							
Ik zou het erg vinden als ik werd gedwongen niet meer gezond te eten. (8)	❍	❍	❍	❍	❍	❍	❍
Gezond eten is iets waar ik vaak aan denk. (9)	❍	❍	❍	❍	❍	❍	❍

Q10 De volgende vragen bevatten opnieuw verschillende stellingen. Geef per stelling aan in hoeverre je het daarmee eens bent. Als je nog nooit in je leven hebt geprobeerd te lijnen, laat de vragen over lijnen dan open.

	Helemaal mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Ik denk over voedingsmiddelen als hetzij “goed”, dan wel “slecht”. (1)	❍	❍	❍	❍	❍	❍	❍
Ik denk over dingen in “zwart-wit” termen. (2)	❍	❍	❍	❍	❍	❍	❍
Ik denk over mezelf als hetzij goed dan wel slecht. (3)	❍	❍	❍	❍	❍	❍	❍
Ik zie mijn lijnpogingen als ofwel successen of mislukkingen. (4)	❍	❍	❍	❍	❍	❍	❍
Als ik tijdens het lijnen iets eet wat	❍	❍	❍	❍	❍	❍	❍

ik eigenlijk niet wilde, dan vind ik dat ik gefaald heb. (5)							
Tijdens het lijnen zie ik mijn eetgedrag als ofwel goed of slecht. (6)	❍	❍	❍	❍	❍	❍	❍
Ik zie er ofwel aantrekkelijk of lelijk uit. (7)	❍	❍	❍	❍	❍	❍	❍
Ik denk over mijzelf als iemand die dingen zeer goed of zeer slecht uitvoert. (8)	❍	❍	❍	❍	❍	❍	❍

Q11 Ook voor onderstaande stellingen geldt de vraag: in welke mate ben je het eens met deze stellingen?

	Helemaal mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Wanneer ik aan iets werk, kan ik niet relaxen tot het perfect is. (1)	❍	❍	❍	❍	❍	❍	❍
Een van mijn doelen is om perfect te zijn in wat ik ook doe. (2)	❍	❍	❍	❍	❍	❍	❍
Ik streef ernaar zo perfect mogelijk te zijn. (3)	❍	❍	❍	❍	❍	❍	❍
Ik eis niet minder dan	❍	❍	❍	❍	❍	❍	❍

perfectie van mijzelf. (4)							
Ik voel me ongemakkelijk wanneer ik een fout in mijn werk zie. (5)	❍	❍	❍	❍	❍	❍	❍
Ik ben perfectionistisch als het gaat om doelen stellen. (6)	❍	❍	❍	❍	❍	❍	❍
Ik moet op elk moment naar mijn volledige kunnen presteren. (7)	❍	❍	❍	❍	❍	❍	❍
Ik hoef niet de beste te zijn in alles wat ik doe. (8)	❍	❍	❍	❍	❍	❍	❍

Q12 De volgende vragen gaan over social media. Heb je een account op de onderstaande social media kanalen? Heb je nog een account van een andere social media kanaal dat er niet tussen staat? Voeg dat dan onderaan de lijst toe.

	Ja (1)	Nee (2)
Facebook (1)	❍	❍
Twitter (2)	❍	❍
Instagram (3)	❍	❍
Pinterest (4)	❍	❍
LinkedIn (5)	❍	❍
Vimeo (6)	❍	❍
Tumblr (7)	❍	❍
Vine (8)	❍	❍
Anders, namelijk: (10)	❍	❍

Q13 Hoeveel (gezonde) voedingsblogs / (gezonde) voedingsaccounts volg je op social media? (denk aan blogs, Instagram, Facebook etc.). Geef je inschatting.

_____ Aantal blogs/accounts dat ik volg (1)

Q14 Hoeveel vaak post je iets op social media over (gezonde) voeding? (denk aan een blog, artikel, foto etc.). Geef je inschatting per week.

_____ Aantal posts per week (1)

Q15 De onderstaande items bevatten stellingen. Geef per stelling aan in hoeverre je het daarmee eens bent.

	Helemaal mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Ik ben goed in verleidingen weerstaan. (1)	❍	❍	❍	❍	❍	❍	❍
Ik vind het moeilijk gewoontes te doorbreken. (2)	❍	❍	❍	❍	❍	❍	❍
Ik weiger dingen die slecht voor me zijn. (3)	❍	❍	❍	❍	❍	❍	❍
Ik wenste dat ik meer zelfdiscipline had. (4)	❍	❍	❍	❍	❍	❍	❍
Mensen zouden zeggen dat ik over een ijzeren discipline beschik. (5)	❍	❍	❍	❍	❍	❍	❍
Plezier en lol houden me	❍	❍	❍	❍	❍	❍	❍

soms van mijn werk af. (6)							
Ik heb moeite met me concentreren. (7)	❍	❍	❍	❍	❍	❍	❍
Ik ben in staat om effectief naar lange termijn doelen toe te werken. (8)	❍	❍	❍	❍	❍	❍	❍
Soms kan ik mezelf niet stoppen om iets te doen, zelfs als ik weet dat het slecht is. (9)	❍	❍	❍	❍	❍	❍	❍
Ik doe vaak dingen zonder alle alternatieven in overweging te nemen. (10)	❍	❍	❍	❍	❍	❍	❍

Q16 In welke mate ben je het eens met de volgende stellingen?

	Helemaal mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Ik geef de voorkeur aan een baan waarin ik veel controle heb over wat ik doe en wanneer ik	❍	❍	❍	❍	❍	❍	❍

dat doe. (1)							
Ik probeer situaties te vermijden waarin iemand anders me vertelt wat ik moet doen. (2)	❍	❍	❍	❍	❍	❍	❍
Normaal gesproken weten anderen wat het beste voor me is. (3)	❍	❍	❍	❍	❍	❍	❍
Ik maak graag mijn eigen beslissingen. (4)	❍	❍	❍	❍	❍	❍	❍
Ik heb graag controle over mijn eigen lot. (5)	❍	❍	❍	❍	❍	❍	❍
Ik vermijd graag situaties waarin iemand anders me moet vertellen wat ik zou moeten doen. (6)	❍	❍	❍	❍	❍	❍	❍

Q17 De volgende vragen gaan over informatiebronnen over gezonde voeding. Hoe vaak gebruik je de volgende bronnen als je informatie zoekt over gezonde voeding?

	Helemaal nooit (1)	Af en toe (2)	Regelmatig (3)	Vaak (4)	Altijd (5)
Kranten/tijdschriften (1)	❍	❍	❍	❍	❍
Televisie/radio (2)	❍	❍	❍	❍	❍
Arts (3)	❍	❍	❍	❍	❍
Diëtist (4)	❍	❍	❍	❍	❍
Het Voedingscentrum (5)	❍	❍	❍	❍	❍
Advertenties (6)	❍	❍	❍	❍	❍
Verpakking van voedingsproducten (7)	❍	❍	❍	❍	❍
Blogs (8)	❍	❍	❍	❍	❍
Sportschool (9)	❍	❍	❍	❍	❍
Boeken (10)	❍	❍	❍	❍	❍
Familieleden/vrienden/bekenden (11)	❍	❍	❍	❍	❍
Anders, namelijk: (12)	❍	❍	❍	❍	❍

Q18 Hoe betrouwbaar vind je onderstaande bronnen als het gaat om informatie over gezonde voeding?

	Heel erg onbetrouwbaar (1)	Onbetrouwbaar (2)	Een beetje onbetrouwbaar (3)	Neutraal (4)	Een beetje betrouwbaar (5)	Betrouwbaar (6)	Heel erg betrouwbaar (7)
Bloggers (1)	❍	❍	❍	❍	❍	❍	❍
Kranten/tijdschriften (2)	❍	❍	❍	❍	❍	❍	❍
Televisie/radio (3)	❍	❍	❍	❍	❍	❍	❍
Arts (4)	❍	❍	❍	❍	❍	❍	❍
Diëtist (5)	❍	❍	❍	❍	❍	❍	❍
Het Voedingscentrum (6)	❍	❍	❍	❍	❍	❍	❍
Advertenties (7)	❍	❍	❍	❍	❍	❍	❍
Verpakking van voedingsproducten (8)	❍	❍	❍	❍	❍	❍	❍
Sportschool (9)	❍	❍	❍	❍	❍	❍	❍
Boeken (10)	❍	❍	❍	❍	❍	❍	❍
Familieleden/vrienden/bekenden (11)	❍	❍	❍	❍	❍	❍	❍
Anders, namelijk: (12)	❍	❍	❍	❍	❍	❍	❍

Q19 De volgende stellingen gaan over een bepaald gevoel of bepaald gedrag. Geef per stelling aan hoe vaak jij het beschreven gevoel hebt of het beschreven gedrag uitvoert.

	Helemaal nooit (1)	Zelden (2)	Bijna nooit (3)	Neutraal (4)	Af en toe (5)	Regelmatig (6)	Vaak (7)
Ik ben ontevreden over sommige aspecten van mijn uiterlijk.	❍	❍	❍	❍	❍	❍	❍

(1)							
Ik heb het gevoel dat anderen negatief over mijn uiterlijk praten. (2)	❍	❍	❍	❍	❍	❍	❍
Ik heb het gevoel dat sommige delen van mijn uiterlijk heel onaantrekkelijk zijn. (3)	❍	❍	❍	❍	❍	❍	❍
Ik zoek bevestiging over mijn uiterlijk bij anderen. (4)	❍	❍	❍	❍	❍	❍	❍
Ik heb het gevoel dat ik bepaalde delen van mijn uiterlijk zou willen veranderen. (5)	❍	❍	❍	❍	❍	❍	❍
Ik schaam me over sommige delen van mijn lichaam. (6)	❍	❍	❍	❍	❍	❍	❍
Ik vergelijk mijn uiterlijk met dat van modellen of met dat van anderen. (7)	❍	❍	❍	❍	❍	❍	❍
Ik heb het gevoel dat anderen fysiek aantrekkelijker zijn dan ik. (8)	❍	❍	❍	❍	❍	❍	❍

Q20 Geef voor onderstaande stellingen opnieuw aan in hoeverre je het ermee eens bent.

	Helemaal mee oneens (1)	Mee oneens (2)	Een beetje mee oneens (3)	Neutraal (4)	Een beetje mee eens (5)	Mee eens (6)	Helemaal mee eens (7)
Mijn geluk hangt erg af van het geluk van de mensen om me heen. (1)	❍	❍	❍	❍	❍	❍	❍
Normaal gesproken offer ik mijn eigen interesse op ten behoeve van mijn groep. (2)	❍	❍	❍	❍	❍	❍	❍
Ik geniet ervan uniek en anders dan anderen te zijn op verschillende gebieden. (3)	❍	❍	❍	❍	❍	❍	❍
Ik doe vaak mijn eigen ding. (4)	❍	❍	❍	❍	❍	❍	❍
Ik ben een uniek individu. (5)	❍	❍	❍	❍	❍	❍	❍

Q21 Wat is je doel ten aanzien van je gewicht?

- ❍ Ik wil graag mijn huidige gewicht behouden. (1)
- ❍ Ik wil graag afvallen. (2)
- ❍ Ik wil graag aankomen. (3)
- ❍ Ik heb geen van bovenstaande doelen ten aanzien van mijn gewicht. (4)

Q22 Ben je momenteel aan het lijnen?

- ❍ Ja (1)
- ❍ Nee (2)

Q23 Wat vind je van je huidige figuur?

- ❍ Ik vind mezelf veel te dun. (1)
- ❍ Ik vind mezelf te dun. (2)
- ❍ Ik vind mezelf niet te dun en ook niet te dik. (3)
- ❍ Ik vind mezelf te dik. (4)
- ❍ Ik vind mezelf veel te dik. (5)

Q24 Nu zou ik nog willen vragen of je de onderstaande gegevens zou willen invullen. Wat is je hoogst genoten opleiding?

- ❍ Basisonderwijs (1)
- ❍ Voortgezet onderwijs (LBO / VBO / VMBO / MAVO / HAVO / VWO) (2)
- ❍ MBO (3)
- ❍ HBO / WO Bachelor (4)
- ❍ WO Master / Doctoraal (5)

Q25 Wat is je lengte in centimeters?

_____ Lengte in centimeters: (1)

Q26 Wat is je gewicht in kilo's?

_____ Gewicht in kilo's: (1)

Q27 Als je nog suggesties of opmerkingen hebt voor de onderzoekers, schrijf deze dan hieronder.

Q28 Als je aan het einde van dit onderzoek graag een samenvatting van de resultaten wilt ontvangen of een blog over het onderzoek wilt lezen, dan kun je hieronder je e-mailadres invullen. Dit e-mailadres wordt niet gekoppeld aan je antwoorden, je antwoorden blijven geheel anoniem.

Q29 Aan Wageningen Universiteit worden vaker studies verricht waarvoor wij op zoek zijn naar deelnemers. Mogen wij je hiervoor af en toe (maximaal 1 keer per maand) benaderen per e-mail? Zo ja, schrijf hieronder je e-mailadres:

Q30 Hartelijk dank voor je deelname aan het onderzoek! Vergeet niet op het pijltje naar rechts te klikken om de vragenlijst in te sturen.