



# PERCEIVED SCARCITY AND CONSIDERATIONS ABOUT FOOD CHOICE AND EATING BEHAVIOUR

A qualitative exploration

Mariëtte van der Leij  
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950430515060

Contact author: [mariette.vanderleij@wur.nl](mailto:mariette.vanderleij@wur.nl) or [mariettevdleij@hotmail.com](mailto:mariettevdleij@hotmail.com)

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## Abstract

Low-income people are generally less healthy than people from high-income groups. The relative unhealthy dietary behaviours of low-income people can partly explain this phenomenon. Previously proposed explanations do not fully explain why people with low-income eat less healthy. The aim of this study is to explore why mothers with low-income have poorer dietary behaviours than mothers with high-income. This study examined on what considerations, impulses or other thoughts food choice of both high- and low-income mothers is based. There was a focus on mothers as they are mostly responsible for the diet of their family. Besides, the scarcity theory was proposed as the explanation for the unhealthy eating behaviour of people with a low-income. The scarcity theory by Mullainathan and Shafir (2013) states that people who feel that their resources are insufficient to afford their needs experience scarcity. People who experience scarcity focus on what is scarce (money) which takes up cognitive capacity and leaves 'less mind' left for other issues in life (e.g. making deliberate decisions about healthy eating). Therefore, the following two hypotheses were formulated: H1: Mothers with low-income are less consciously engaged with healthiness of food choice and eating behaviour than mothers with high-income. Their food choice is based on convenience or impulses more often. H2: Compared to mothers with high-income, mothers of low-income groups mention financial considerations spontaneously more often when speaking about food choice and eating behaviour instead of consideration about health. Semi-structured interviews were conducted with 14 mothers (22-62 years old) from the Netherlands. Questions were framed as being about 'food' and not about 'health' or 'money' to investigate which topics emerged spontaneously. The participants were divided into a low- and a high-income group. The Dutch interview transcripts were analysed using an approach based on the grounded theory. Three food-related themes emerged: health considerations, convenience because of a hectic lifestyle, and cost considerations. Mothers of both income groups reported healthiness as an important consideration. However, mothers with a low-income were less elaborate on what fresh and healthy means. This could be attributed to insufficient knowledge to translate wishes to provide healthy food into practice beyond the inclusion of fresh vegetables and fruit. In contrast to what was expected, high-income mothers appeared to choose for food that is convenient because of a lack of time and energy due to work and family commitments. Scarcity of time and energy could play a role in their dietary behaviours. It is recommended to study the role of time/energy scarcity in diet in further research. As expected, mothers with a low-income mentioned monetary considerations more often than high-income mothers. However, this does not seem to interfere with the importance of health in their food choice. Further research in a larger group of participants across a larger range of income level to test the conclusions is recommended.

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## Introduction

A well-known phenomenon in society is that health varies enormously according to socioeconomic status (SES) and level of income. People from lower income suffer from higher rates of diabetes (Tang, Chen, & Krewski, 2003), cancer (Melchior, Goldberg, Krieger, et al., 2005), and obesity (Ljungvell, & Zimmerman, 2012). Also, lower SES has been associated with increased risk of the metabolic syndrome (Loucks, Magnusson, Cook, Rehkopf, Ford, & Berkman, 2007). As a result, mortality rates are much higher in lower socioeconomic groups (Mackenbach, Stirbu, Roskam, Schaap, et al., 2008). Inequalities in health among groups of various socioeconomic status constitute one of the main challenges for public health (Marmot, 2005).

It has been shown that lifestyle-related risk factors have an important role in premature death of people from lower socioeconomic positions in high-income countries and contribute to higher mortality rates (Ezzati et al., 2003). Some adverse lifestyle-related factors that are related to low SES are excessive alcohol consumption, smoking and too little physical activity (Droomers, Schrijvers, & Mackenbach, 2001). Also, diet quality is of a lower standard in people with a lower socioeconomic status (Darmon, & Drewnowski, 2008; Shahar, Shai, Vardi, Shahar, & Fraser, 2005). Many studies show that the poor adhere less to dietary guidelines compared to people from higher classes (Ball, Crawford, & Mishra, 2006). People from lower SES consume more calories from diets high in refined grains, added sugars, and added fats that are nutrient poor (Darmon, & Drewnowski, 2008). Besides, low SES people eat significantly less fruit and vegetables (Guenther et al., 2008).

Dietary behaviours including food choice are complicated behaviours that are determined by many interacting factors. These determinants include individual influences on diet, like taste, beliefs and values. Taste preferences can serve as a barrier for fruit and vegetable intake (Giskes, Turrell, Patterson, & Newman, 2002b). Beliefs about food which play a role in food choice consist of beliefs about health, or issues surrounding organic produce (Frewer, Howard, Hedderley, & Shepherd, 1998). Also, cognitive-affective factors such as perceived stress (Yau, & Potenza, 2013), anxiety and depression appear to influence eating behaviour (Brunton, 2015).

Beside individual matters, choices in relation to food and eating are influenced by social, cultural and environmental circumstances of peoples' lives. Past research indicates that people eat more when they are in the company of friends than when they eat alone (Cavazza, Graziani, & Guidetti, 2011). Additionally, friends and family may be a source of peer pressure and role modelling for trying new foods (Nestle et al., 1998). In addition, our food choices are influenced by how foods are marketed and advertised, and by earlier decisions and habits, even if these have not proven to be optimal (Leng et al., 2017).

Just as social environmental influences, diet is probably influenced by the physical

environment, like the cost and accessibility of food in the local neighbourhood (Dowler, 2001). The cost of food has been proven to be of strong influence on food purchases (Drewnowski, 2003). Given the fact that people of low SES have more limited budgets to buy food, financial matters may play an even larger role in their food choice (Giskes, Turrell, Patterson, & Newman, 2002a). The limited budgets of people of low SES can cause them to experience scarcity. This feeling of scarcity stems from an evaluation of how much resources someone has and what they can afford with it, together with the norms and expectations about what counts as a sufficient level of resources to fulfil one's desires (Mullainathan, & Shafir, 2013). The feeling of scarcity changes how people look at problems and make decisions. Previous research indicates that perceptions of scarcity influence food choice, as it leads to increased calorie intake (Bratanova, Loughnan, Klein, Claassen, & Wood, 2016).

In sum, food choice and eating behaviour are complex phenomena. Differences in food choice between people with low- and high-income account for a variation in health between the two groups. The present study aims to explore reasons for the relative unhealthy dietary behaviours of people with low-income. There will be a special focus on the feeling of scarcity described by Mullainathan and Shafir (2013), as it may serve as an explanation for the unhealthy eating pattern of people with low-income. Therefore, the focus of this thesis will be on level of income as an attribute of SES which is most related to the concept resource scarcity in the scarcity theory. A complete explanation of the theory will follow later in this report. Insights obtained by this study could lead to better understanding and eventually better interventions that tackle health inequalities as a consequence of the unhealthy eating pattern in low-income groups, or improve existing interventions.

For this thesis, a qualitative descriptive study will be conducted to explore how mothers across different levels of income differ in their considerations about food choice and eating behaviour. The focus lies on women for a number of reasons. Firstly, despite increased participation in the labour market the last decades, women are still largely responsible for food provision in households (Rasmussen et al., 2006). Secondly, because most women are also caregivers, their responsibility is that of food gatekeeper which makes them responsible not only for their own diets, but also for those of their families (Coveney, 2002; Adams, Goffe, Adamson, et al., 2015).

## Aim and research question

The aim of this study is to explore why mothers with low-income have poorer dietary behaviours than mothers with high-income. This study will examine on what considerations, impulses or other thoughts food choice of both high- and low-income mothers is based. The following research question is formulated:

What are considerations of mothers across level of income regarding food choice and eating behaviour and how do they differ?

## Theoretical framework

### Explanations for the relative unhealthy eating pattern of people with low-income

Several studies investigated reasons that could serve as an explanation for the unhealthy eating pattern of lower income groups. One explanation is that healthy food is more expensive than unhealthy food. As said, food price is an important determinant of food choice (French, 2003). In the Netherlands, the price of healthy foods has risen with 22.2% between 2007 and 2017, whereas the price of unhealthy foods has risen with only 12.6% over this period (CBS & Voedingscentrum, 2018). So, the price gap between healthy and unhealthy foods has grown over the years. Other studies show that the budget of the poor to buy food is often insufficient to obtain a balanced diet (Drewnowski, Darmon, 2005). However, as seen in a study by Darmon, Lacroix, Muller and Ruffieux (2014), subsidizing healthy products while taxing unhealthy products does not per se lead to a reduction in income-related inequalities in nutrition. In this study, both low-income groups as well as medium-income groups improved their diet quality following the price manipulations, although the extent of improvement was larger for medium-income people. Furthermore, although lower expenditure is a cause for less healthy food choice for lower socioeconomic groups, the influence of cost may often be overestimated because many studies did not account for other possible mediators like supermarket choice or the possible reverse mediation between expenditure and healthiness of choices (Pechey, & Monsivais, 2016).

Secondly, the lack of knowledge about healthiness of food can be associated with unhealthy eating behaviour of lower income groups. Knowledge about nutrition has previously been demonstrated to be poorer among people with low-income (Parmenter, Waller, & Wardle, 2000; Turrell, & Kavagh, 2006). However, the contribution of nutrition knowledge to food choice is complex and is influenced by other environmental and demographic factors (Wardle, Parmenter, & Waller, 2000). Also, the measurement of nutrition knowledge is difficult and is done in various ways in different studies. Many of these have inadequate validation (Parmenter et al., 2000). Besides, health campaigns that teach people about healthy eating appeared to be less successful in groups of lower income (Viswanath, & Bond, 2007).

Another explanation can be found in the physical environment and access to healthy foods. While high-income neighbourhoods harbour many supermarkets and grocery stores, lower income neighbourhoods have been characterized as 'food deserts' in previous research (Caraher, Dixon, Lang, Carr-Hill 1998; Walker, Keane, & Burke, 2010). This influences the diet quality of people from low-income, because easy access to supermarkets has been shown to be associated with more intake

of fruit and vegetables (Morland, Wing, & Diez, 2002). Besides, it is less likely that people with a low-income own a car, so it might be difficult to reach supermarkets that are more far away (Caraher et al., 1998). However, the study about 'food deserts' is based on the situation in the United States and is not up to date, which limits the generalizability of the findings to the Dutch population.

## The current study

The reasons mentioned above probably play a role in the unhealthy eating pattern of people from lower income groups. Most public health interventions tend to focus on increasing people's nutritional knowledge and making healthy choices easy by decreasing costs or increasing availability of healthy foods (Antin, & Hunt, 2012). However, those factors alone cannot fully explain why people from lower socioeconomic groups eat unhealthy because the multidimensional experience of food choice is being ignored. The resource scarcity theory of Mullainathan and Shafir (2013), states that the mere experience of being poor creates a total mind set of perceived scarcity which influences behaviour and the choices people make. So, it takes into account the entire experience of being poor. The present study will explore if the theory of perceived scarcity could serve as an explanation for the relative unhealthy diet pattern of mothers of low-income groups compared to mothers of high-income groups.

## Scarcity theory

In their book 'Scarcity; Why Having Too Little Means So Much', Mullainathan and Shafir (2013) describe the theory about the feeling of scarcity. Their approach to scarcity is different from that of economists. The study of economics is about how people use limited means to achieve their unlimited desires; how we manage physical scarcity. Physical scarcity applies to everyone; all of us have a limited amount of money, even the richest. However, the approach of Mullainathan and Shafir to scarcity is about the feeling of scarcity together with physical scarcity.

In the concept 'feeling of scarcity', physical limits play a role (Mullainathan, & Shafir, 2013). For example, the amount of money people have on their savings account and the bills they have to pay with that money. However, another important contribution to the feeling of scarcity consists of people's subjective perception of what matters. This is about how much people desire to buy certain things or how important a purchase is. This subjective norm can be influenced by cultural norms, upbringing and even genetics. So the feeling of scarcity depends on both what is available and on our own tastes. Therefore, it can be that one of two people who own the same amount of money wishes to buy more with the same amount of money than the other. As a result, he experiences scarcity. This person has 'less than he feels he need'. This feeling of income scarcity does not have to be

related to the absolute amount of money that someone has but stems from a person's own perception of whether this money is enough to satisfy one's desires. Mullainathan & Shafir (2013, p. 16) try to answer the question 'What happens to our minds when we feel we have too little, and how does that shape our choices and our behaviours?'. Shah, Mullainathan and Shafir (2012) suggest that scarcity creates not only a physical constraint, but also its own mind set, and changes how people look at problems and make decisions.

Focus, tunnelling and reduced cognitive bandwidth

When scarcity takes its place in the mind, people become more attentive and efficient. This is the positive side of scarcity. It makes people focus on what seems, at that moment, to matter most. For example, in an Angry Birds-like game where people had to shoot blueberries at waffles, people who could only shoot a few times (i.e. people who faced scarcity) were more accurate than people who could shoot an infinite time (i.e. people who do not face scarcity). The poor shooters aimed more carefully and took more time on each shot (Shah et al., 2012). A downside of scarcity is that it leads people to 'tunnel' and neglect other, possibly more important things. So perceived scarcity makes people more effective in the moment, but as a consequence makes them less able to think about other things they care about. An example of tunnelling is when a student needs to study for his exam and skips a meal because he simply forgets to eat. The student's focus is on studying, but he neglects the long-distance health benefits of eating a meal. This tunnelling happens automatically, on a subconscious level.

Poverty is a form of scarcity of which one cannot take a vacation from. Poverty means scarcity in the very commodity that underpins almost all other aspects of life (Shah, Mullainathan, & Shafir, 2012). When someone has enough money, 'simple' daily expenses like food can be easily afforded. But when money is scarce, daily expenses can be a problem. Because of the limited resources, trade-offs about what is most important to buy have to be made. Therefore, more attention is needed for the daily expenses. This concerns an important aspect of the theory of Mullainathan and Shafir (2013). Because the focus on scarcity is involuntary, and because it captures attention, it impedes someone's ability to focus on other things. A person who lives in poverty and experiences scarcity has 'less mind' left for other issues. By constantly drawing poor people back into the tunnel of their resource scarcity, it taxes their 'cognitive bandwidth' and as a result, inhibits the most fundamental capacities of the mind (Mullainathan, & Shafir, 2013).

Bandwidth consists of cognitive capacity and executive control. Cognitive capacity concerns the psychological mechanisms that underlie our ability to retain information, engage in logical reasoning and solve problems. Executive control respectively, underlies the ability to manage cognitive activities, including planning, controlling impulses, initiating and inhibiting actions. Scarcity

reduces both. The concepts tunnelling and reduced cognitive bandwidth of the scarcity theory have some similarities with the theory of ego depletion (Baumeister, Bratslavsky, Muraven & Tice, 1998). This theory is about self-control or willpower which draw upon limited mental resources that can be used. Acts of self-control, responsible decision making, and active choice seem to deplete other vital resources of the mind such as executive control (Baumeister et al., 1998). When people's limited capacity for self-control is used up by managing their daily expenses, there is no more ability for self-control left for decision making about other problems. So, the lack of cognitive resources makes it difficult for people with lower financial resources to focus on other issues. This is especially true for problems that lay further in the future (Shah et al., 2012), and could also apply to concerns about health.

Health is often the consequence of unhealthy behaviour which occurred a long time before the effect of the behaviour. For example smoking, which may cause lung cancer after decades of smoking (Alberg, & Samet, 2003). Maintaining a healthy diet is a long-term goal as well, because eating unhealthy does not necessarily show much negative effects on the short term. Eventually, it can contribute to many adverse health outcomes (World Health Organization, 2003). Since cognitive resources are necessary to think about healthiness of food choice, eating healthy would be more difficult for those who experience scarcity and can make use of less cognitive capacity as a result. Previous research showed that eating behaviour is indeed influenced by cognitive load and the depletion of cognitive resources. People under cognitive load make less healthy food choices, consume more calories (Zimmerman & Shimoga, 2014) and consume less fruits and vegetables (Byrd-Bredbenner, Quick, Koenings, Martin-Biggers, & Kattelman, 2016). Perhaps, because there is little cognitive bandwidth left, people make choices about food and eating based on short-term impulses, on what is convenient and easy to prepare, tasty, and not per se on considerations about healthiness.

However, the resource scarcity theory could also be interpreted differently. As already explained; resource scarcity draws attention and creates cognitive load. As a result, scarcity improves some dimensions of cognitive function, while worsening others. In a recent study, Shah, Zhao, Mullainathan, & Shafir (2018) aimed to answer the question: 'How does scarcity influence the content of cognition?'. The authors reasoned that the content of thoughts of people who face scarcity must be attuned to the economic dimension of experiences. Previous research showed that people who face resource scarcity become more focused on limited resources (Shah et al., 2012). For example, people who face financial scarcity are more likely to remember what things cost (Mullainathan, & Shafir, 2013), and they notice hidden taxes better (Goldin, & Homonoff, 2013). As expected, Shah et al. (2018) found that thoughts about cost and money are triggered by everyday circumstances in people who face scarcity. These thoughts come to mind spontaneously for the poor

and are difficult to suppress. If we follow this line of thinking, thoughts about money may also be triggered spontaneously in food choice and eating behaviour in people with low-income. In this way, poorer people would mainly think about the financial aspect of food instead of other aspects like healthiness. This interpretation is different from the one mentioned above, which supposes that people who face scarcity choose unhealthy foods because of the reduced cognitive bandwidth which causes them to ignore the long-term health benefits of a healthy diet and base their choices on impulses and on what is convenient, for example.

## Scientific relevance

The relationship between level of income or SES and eating behaviour has been studied before, using experimental designs. In a study of Pavela, Lewis, Dawson, Cardel and Allison (2017) participants were assigned to a higher or lower social status group, which was operationalized as being a leader or follower in a partner activity. Energy intake to assess the influence of social status on obesity was measured. An effect of social status on energy intake was not observed in this study. In contrast, another recent study did find that people who were experimentally induced to view themselves as poor (versus wealthy) exhibited increased calorie intake (Bratanova et al., 2016). A relationship between experimentally manipulated low SES and calorie intake was also found in a third study (Cardel et al., 2016). In this study, SES was manipulated by letting people play monopoly with a Rolls Royce piece (high socioeconomic condition), or a shoe piece (low socioeconomic condition).

These experimental studies all manipulated different aspects of social status: objective social status (Pavela et al., 2017), absolute poverty and wealth (Bratanova et al., 2016) and subjective or perceived social status (Cardell et al., 2016). However, for the present study it is believed that it is insufficient to manipulate one single aspect of social status, or to assign people to different income groups. Shah et al. (2018) suggest that there is a more fundamental divide between the poor and the wealthy; the subjective experience of being poor is more than the sum of material disparities or just a single aspect of social status. The total experience of being poor accounts for a different mind-set in people of lower status (Shah et al., 2012). To gain a more in-depth understanding of this mind set, and the considerations about food choice and eating behaviour of mothers across level of income, qualitative methods will be used for the present study.

The relationship between level of income and diet pattern has been studied using qualitative methods before as well. Clark, Duncan, Trevoy, Heath and Chan (2010) interviewed people of low-income groups with coronary heart disease to examine the perspective and decision-making around changes to their diet. They found that for people of low-income groups, food consumption was not simply a matter of knowledge or rational choice, but it was constrained by an ever-present sense of

scarce resources and the need to prioritize other expenses which are believed to be more important than a healthy diet. This study focused on people who suffered from a disease and who had to change their diets, therefore the results may not be generalizable to the population of healthy mothers.

To investigate influences on the diet of young pre-school children of low SES-families in the United Kingdom, Lovelace and Rabiee-Khan (2015) conducted semi-structured interviews with mothers of young children. In this study, parents did not have a wide range of knowledge of what constitutes a healthy diet. Besides, the cost of fruit and vegetables was considered prohibitive but it did not prevent parents from feeding their children fruit and vegetables. In addition, they were motivated to provide their children with healthy diets.

In another qualitative study (Fielding-Singh, & Wang, 2017), the differences in the nature of food-related dialogue between mothers and adolescents of different socioeconomic status' were examined by interviewing both parents and their adolescent children. The authors found that low SES-families talk about healthy eating infrequently and that their conversations are predominantly about price, whereas conversations about healthy eating are more commonplace in high SES-families. Previous research that used face-to-face interviews showed that health consciousness influenced food choice among high SES women, and that the perceived high cost of healthy eating and lack of time due to work was more salient among women of lower SES (Inglis, Ball, & Crawford, 2005). However, in these studies participants were explicitly asked about the value of health and costs in their food choice. For the present study, the aim is to find out which thoughts come to mind spontaneously in food choice and eating behaviour. Besides, no such study has been conducted in the Netherlands, which adds to the scientific relevance of this thesis.

## Hypotheses

To answer the main research question of this study, 'What are considerations of mothers across level of income regarding food choice and eating behaviour?', the scarcity theory of Mullainathan and Shafir (2013) will be considered as it may serve as an explanation for the unhealthy eating pattern of mothers with low-income. The scarcity theory could be interpreted in two ways, which lead to the following two hypotheses:

H1: Mothers with low-income are less consciously engaged with healthiness of food choice and eating behaviour than mothers with high-income. Their food choice is based on convenience or impulses more often.

H2: Compared to mothers with high-income, mothers of low-income groups mention financial considerations spontaneously more often when speaking about food choice and eating behaviour instead of consideration about health.

## Method

### Participant selection

For this study data has been gathered by means of semi-structured interviews, conducted individually with 14 women living in the Netherlands. Inclusion criteria for the study included having at least one child between the age of 0 and 21 who lives at home. Participants with a low-income were recruited in community centres and schools in the neighbourhood the Grote Waal in the city of Hoorn in the northern part of the Netherlands. Participants from Grote Waal were approached via a contact person of the community centre, at walk-in sewing clubs and mother-child mornings. This neighbourhood was selected because the mean income per year per inhabitant in Grote Waal is respectively 20.100 euro (AlleCijfers, 2018) and the neighbourhood has a relatively low status score (SCP Statusscores, 2016). Mothers of a high-income family were recruited in and around the town Ursem, where the mean income per year is 24.200 euros (AlleCijfers, 2018). Although the difference in mean income of both places is small, only 3% of households has a low-income in Ursem, compared to 8% on average in the Netherlands. In comparison, 5% of the inhabitants of Grote Waal receive social assistance benefit.

As mentioned, to create a low- and a high-income group, participants have been recruited in different towns with different income levels. However, some interviewees from Grote Waal appeared to have a high-income and vice versa. Therefore, only after the interviews had been conducted, the participants were divided into two groups. Participants of a household with a total monthly income of €0 to €3000 were assigned to the low-income group. When the total household income was more than €3001, participants belonged to the high-income group. Although a monthly income of €3000 is modal in the Netherlands, the National Institute for Family Finance Information reported that traditional families with modal income have difficulties making ends meet (Nibud, 2015). Besides, the sample was too small to create a medium income group as well. Eventually, both income groups consisted of seven participants.

### Respondents

For this study, 14 women were interviewed. One of the participants is the grandmother of two grandchildren. She has been included because she provides food regularly for her two grandchildren. The other 13 interviewees were mothers who are also primary caregivers. The age of the participants ranged from 22 until 62 years old with a mean age of 36 years. The main ethnic group of the sample was Dutch, two participants were Turkish and one was Eritrean. One of the participants did not fill in the monthly income of her family. However, some factors indicate that she

and her husband belonged to the high-income group. They were both employed and her husband ran a successful shop in electronics. Besides, they were building their own house. For the main characteristics of the participants, see Table 1.

**Table 1**  
*Profile of interviewed women*

Selected characteristics	High-income group n = 7	Low-income group n = 7	Total n = 14
<b>Race/ethnicity</b>			
Dutch	7	4	11
Turkish	0	2	2
Other, namely ....	0	1, Eritrean	1
<b>Marital status</b>			
Single	0	2	2
Living together	2	2	4
Married	5	3	8
<b>Level of education</b>			
Primary education	0	2	2
Secondary education	0	2	2
Secondary vocational education	3	3	6
Higher professional education	4	0	4
University education	0	0	0
<b>Employment status</b>			
Employed	7	3	10
Housewife (unemployed)	0	4	4
<b>Total monthly income</b>			
€0 - €1000	0	1	1
€1000 - €2000	0	3	3
€2000 - €3000	0	3	3
€3000 - €4000	2	0	2
€4000 - €5000	4	0	4
Unknown	1	0	1

## Research instrument

The semi-structured interviews included questions about food provisioning and preparing, considerations in supermarket and food choice and eating behaviour throughout the day. Questions were based on the study Table talk: How Mothers and Adolescents Across Socioeconomic Status Discuss Food by Fielding-Singh & Wang (2017). The interview protocol of Fielding-Singh & Wang has been used as a basis, with some questions reformulated, some questions removed and some new questions added. The questions were translated in Dutch. A question asked could be: 'What do you usually get when you do grocery shopping?', followed up by additional questions to gather more information based on their responses. To minimize the influence of social desirability on the

mothers' responses, the interviews consisted of open-ended questions that allowed respondents to guide the conversation. The interview protocol was framed as being about 'food' and not about 'health' or 'money', because the aim is to explore if these topics emerge spontaneously. The words health and money, and terms such as healthy, costs and finances were not mentioned during the interviews until mothers mentioned these topics themselves. Only by the end of the interviews, if participants did not bring it up themselves yet, participants were being asked explicitly about money and health. For the complete interview guide, see Appendix B.

## Procedure

The interviews were conducted by myself and took place at the interviewees' home, at the community centre or some other place convenient to the participants. After receiving the women's consent (for the informed consent see appendix A), the interviews were audio recorded. All participants gave consent for recording the interview. Interviews lasted approximately 20-30 minutes. After the interview had been conducted, the interviews were transcribed verbatim and anonymized. The transcripts were written in Dutch. All names of interviewees used in this master thesis will be pseudonyms.

## Data analysis

All interviews were transcribed by the same researcher, which made it possible to become fully immersed in the data generated. Data coding was undertaken by the same researcher as well. The transcribed data were analysed using an approach based on the grounded theory (Bryant, & Charmaz, 2007), which is a systematic methodology involving the construction of theories through methodical gathering and analysis of data. Interviews were analysed one by one. At first, the data was being analysed using open coding, which is the process by which codes are attached to the observed data. Secondly, the data was being coded by axial coding which means the process of relating codes to each other to create categories, via inductive and deductive thinking combined. Themes that emerged from one interview in the axial coding phase, were incorporated into the next interview and so on, and were explored in greater depth. By doing so, a coding scheme to code for topics and themes emerged from the interviews. Through these multiple rounds of coding some topics related to food choice and diet pattern emerged. The last step concerned selective coding. During selective coding, previously identified concepts and categories were further defined, developed, and refined and then brought together to core themes which tell a larger story. Quotes were selected to reflect different considerations in food choice and eating behaviour of mothers'

across level of income. The data analysis compares the differences and similarities between low- and high-income mothers. To ensure anonymity, each participant was given a unique number.

## Results

Analysis of the interviews with mothers and a grandmother across level of income illustrated how various aspects of food choice and eating behaviour came forward from the interviews. First I will describe general dietary behaviours of both high- and low-income mothers, after which I will focus on three important themes that manifested differently in the interviews between the income groups. After selective coding, these themes turned out to display the most relevant differences between mothers of the low- and high-income groups in considerations about food choice and eating behaviour. The themes are: health considerations, convenience because of a hectic lifestyle, and cost considerations.

### Dietary behaviours

Responses to questions about what participants usually eat and what a typical weekday looks like in terms of dietary behaviours, suggested that interviewees consume three meals a day. There appeared to be little difference between income groups in eating pattern during the day. Breakfast mostly consisted of bread and/or yoghurt with cereals. The participants reported that bread was main part of the lunch as well. Apparently, the evening meals consisted of rice, pasta or potatoes with vegetables, meat and/or fish. Vegetables were mostly served in the evening meal whereas fruit was generally not part of a main course, but was eaten as a snack. According to the mothers, unhealthy snacks consisted of sweets, crisps and cookies.

Often, weekends appeared to be an exception concerning unhealthy eating for both high as low-income families. For example the evening meal, which consisted of fast food or something easy to prepare. Also, responses suggested that children were allowed to eat some more unhealthy snacks during the day, have some crisps in the evening, or have a glass of soda. In high-income families, the lunch or breakfast seemed somewhat more luxurious than on a normal weekday.

*Yes the weekends are a bit more easy concerning 'in between meals'. But we try to eat in the morning, eat a snack, eat lunch, a snack and eat evening meal. A fixed rhythm. During the weekends there is more often a candy in between meals. Because it's weekend. (27 years old, low-income)*

*Sunday mornings, when we eat breakfast, we have it here at the table. We just do that.. It's a bit special. We bake off some bread, we boil eggs and drink orange juice. On Sundays we make it something special. (42 years old, high-income)*

The low-income group consisted of three participants of a non-western ethnic background. Those participants had different eating behaviour in the sense that they reported to cook traditional

dishes from their home county. This was mostly based on rice, with vegetables and meat (chicken and beef, no pork).

*In the evening we always eat a hot meal. Soup or Turkish dishes. Not just one kind of dish. We always have a full blown dinner. Soup, salads and other dishes. I always prepare two or three different dishes. My son likes it. He eats a few spoons of everything, or some rice with it (48 years old, low-income)*

## Health considerations

In general, both mothers with high-income and low-income reported they find it important for themselves and their families to eat healthy. In both groups, all women mentioned spontaneously that they pay attention to healthiness of their eating pattern, in their food purchases and cooking style. Mothers across level of income agreed that fruits and vegetables are healthy and that soda and fast food is less healthy. Across level of income, mothers reported that they try to maintain a varied diet. Hence, irrespective of one's definitions of a healthy diet, they all reported trying to eat healthy. Besides, all mothers displayed having difficulties taking into account everyone's tastes and the dislike of healthy foods of children. There was, however, variation across level of income on some aspects of healthy eating: consuming fresh or 'pure' food and the avoidance of food additives was more important to mothers with high-income whereas mothers with low-income were not as elaborate in what they mean with 'fresh'. Explanations and examples will follow below.

## Taste vs. health considerations

There appeared no difference between the income groups related to the influence of taste on food choice. All participants mentioned taste as an important factor on which their food choice is based.

*I ask my husband and child what they would like for dinner. Or I think of something I like (...) I think of what I'm hungry for. Sometimes I ask them, would you like fish tonight. It should be tasty. (48 years old, low-income)*

*Well actually, I want it to be a nutritious meal. So that I think, it's tasty for everyone. I have children of different ages, I adjust my meals to that. And just something that I like to cook. (48 years old, high-income)*

Secondly, mothers of all levels of income reported having difficulties with differences in taste in their families. Especially the discrepancy between what mother thinks is healthy, and taste of the children is considered difficult.

*My granddaughter is ten years old now. Before, it has been a struggle, eating. Nowadays it's difficult with my youngest granddaughter. If I ask her what she wants to eat, she always says 'rice'. No, I say, you need to eat a little bit of carrot with it, a little broccoli. No! She cries, I don't want it. It's very difficult, very difficult. It used to be a struggle with the eldest as well. Now she eats it herself! She fills up her own plate at the table. It's a struggle with the little one now. She always wants jam or chocolate spread. (62 years old, low-income)*

*That's a thing with Jenny and Frank. They both don't like cheese. And I give them sandwiches with meat in their lunch bag. Sometimes they get cheese spread. But they prefer sweet sandwiches. (40 years old, high-income)*

Of both the high- and low-income group, three mothers drew up rules to make sure their children eat their vegetables and other healthy foods, and to limit their intake of sweet, unhealthy products. The following example followed up the statement above about Jenny and Frank.

*If Jenny takes two sandwiches to school, at least one has to be a healthy one. (40 years old, high-income)*

Fresh and 'pure' food

Five mothers with high-income told that eating a fresh meal was something they consider important when choosing their groceries or meal of the day. Of the low-income group, two mothers mentioned they preferred fresh food as well. However, this seems to be on a more basic level. When they were asked about what healthy eating means, they mentioned wanting to cook fresh. They reported to prefer vegetables and potatoes, instead of a ready-to-eat meal. Meanwhile, four mothers of the high-income group were more specific in what they consider fresh, as they preferred food without additives. For example, they opt for cutting their vegetables themselves instead of cooking with pre-cut vegetables, or avoid buying prefab soups, sauces and canned ingredients.

*I try to pay attention to not having 'easy' food all week. A quick bite, so to say. So that we eat at least a few times a week potatoes and some fresh vegetables. And something like pasta or fish. (41 years old, low-income)*

*I think vegetables are healthy. Preferably fresh vegetables that I have to cut myself instead of packages of pre-cut vegetables. That kind of things (...) I always cook everything fresh. I never cook from prefab powders or something. I try to avoid preservatives, food dyes and that kind of junk. (48 years old, high-income)*

Some mothers of the high-income group reported they prefer 'pure' and unprocessed full cream milk products, because they believe it is more healthy than light products.

*I always use dairy butter on sandwiches instead of margarine. I attended a training once, and I understood that that contains the best nutrients. Better than light products. So everything in the fridge is 'whole' so to say. (40 years old, high-income)*

### Convenience because of a hectic lifestyle

Lack of time because of a hectic lifestyle due to work and family was seen as a barrier to take time for cooking for all of the women in the high-income group, compared to two mothers in the low-income group. The high-income mothers reported to choose for a quick and easy meal sometimes, because they do not have time to spend much time in the kitchen. Most women in the high-income group were employed, in contrast to the low-income group which consisted of many stay-at-home mothers. It was common for high-income mothers to express a lack of time to spend on food provisioning due to work commitments, next to family commitments, as a reason to prepare simple meals. Those simple meals were less healthy sometimes.

*I do prepare an oven dish with endive. I have to admit that I do not peel and stamp the potatoes myself. I use instant mashed potatoes. Quick. You only need to add some water. Stir the raw endive in. A tasty sausage (...) Well, I mix it up, put it in the oven, and it's done. That's quick, healthy and easy (...) It has to be healthy and practical if you're a working mother. (42 years old, high-income)*

On a question about what she considers to be a difficulty in providing food for her family.

*... and the time as well. Sometimes I think to myself, I would like to eat something nice and tasty on Wednesday. But, well, then I come home from work and have to pick up the children from school. They're tired and so am I, so I don't feel like cooking a fancy dinner. It must be easy as well. (30 years old, high-income)*

Strikingly, some mothers reported that they take good care of their children but tend to eat less healthy themselves, because of lack of time and stress due to their hectic work and family schedule. This was mentioned by two mothers of the high-income group and one of the low-income group.

*Well actually I would like to eat better during the day. In the morning, especially when I have to work, I'm busy with the children so I almost don't have the time to eat myself. I eat something real quick. Later I think, I didn't eat a good breakfast today. And at work as well (...) I don't have a lunch break. When the children are having lunch, I just want to fill in an observation or prepare something for the*

*afternoon, print something. And after three p.m. I think to myself, I didn't eat yet.. (30 years old, high-income)*

*Well, lately I gained some weight. In between meals I eat snacks, when the children don't watch. Because it's so hectic, and I'm tired. I realise it's my handicap (...) After giving birth to the twins, it was heavy. It was hard work with short nights. We had serious lack of sleep (..) So in the evenings we tend to flop on the couch. Finally, some time for ourselves! You're all day busy caring, arranging things, organising, and then there is some rest at last. A nice cup of tea, and chocolate. And after that a ginger ale, and a bag of crisps or some cheese. Lovely. That meant relaxing. But it's unhealthy (...) We thought of it as a reward for the hard work (40 years old, high-income)*

*Sometimes I skip breakfast after a night shift at work, because I'm already busy with the day ahead. It's the pressure of the day mostly. I cannot flip the switch to take some rest. Actually it is better to take some time for breakfast and start a bit earlier, in my own time, and start the day off easy (38 years old, low-income)*

## Cost considerations

The cost of food was most frequently reported as a purchasing consideration for mothers with low-income. Seven mothers of the low-income group mentioned considering the cost of food compared to four mothers of the high-income group. Five of those seven mothers with low-income mentioned the cost of food or monetary considerations spontaneously, before they were asked about their budget or the role of food price. However, when they were asked to rank the importance of different factors on what their food choice is based, all mothers reported the cost as the least important. Overall, taste and health were viewed as most important. On questions about what factors they have in mind in purchasing food and choosing supermarkets;

*I used to go shopping every day. But I stopped doing that. Because actually, it's much more expensive compared to going shopping once or twice a week. You always get some extra stuff. In general, I go to Lidl for most of the groceries. I get some extra things at the shopping mall and Dekamarkt. Cheese sauce for example, which they do not have at Lidl. The small things (41 years old, low-income)*

*Some things are a bit expensive in some supermarkets. Other shops are cheaper. I always choose where it is the cheapest. I don't work so I have the time to shop. I search for the cheapest shops or where I can find Turkish products (48 years old, low-income)*

Three mothers of the high-income group explicitly reported cost not playing a role in food purchasing considerations. Three mothers emphasised the fact that they did not consider the cost of food as most important when purchasing food items, although being price-conscious. Four mothers

of the high-income group stated that the items for sale are not important because of the reduced cost, but that it is more like a source of inspiration for the meal of the day.

*Sometimes I didn't think of what we are going to eat yet and then I just see what looks nice and tasty in the supermarket. Yeah.. I wanted to say what is for sale, but that isn't per se the case. Sometimes I think 'Oh that's for sale and it looks nice, I'll take that today' (30 years old, high-income)*

On a question about the role of cost:

*Actually I always get what I want. Sometimes I run into some items that are for sale, and I think oh that's nice. Then I buy it. But I do not search for the lowest price in papers or get my groceries in different shops, for example (44 years old, high-income)*

Eating out

Mothers of the low-income group reported to eat out way less than mothers of the high-income group. For all mothers of the low-income group, eating out only happened at special occasions, for example on a wedding day. Three mothers of the high-income group eat out regularly, because they just like it. However, for the other mothers of the high-income group, eating out happened at special occasions only as well although more often than in the low-income group.

*Yes, yes. We eat out quite regularly. Once or twice a week at least. Most on Saturdays or Sundays we eat out (...) My son is used to it, to be honest (48 years old, high-income)*

*No not very often. But sometimes when I'm in the city, I eat lunch there, or at the end of a holiday, autumn break or whatever holiday. Usually we go out for dinner then. It's not a monthly thing (44 years old, high-income)*

*Once in a while. When it's my birthday or if it's a wedding day. On special occasions. Mostly I cook dinner at home. I always cook. My husband can't cook, so that's my job (...) It's expensive, I think. I can cook everything at home (48 years old, low-income)*

Quality of food

Concerning monetary considerations and the difference between mothers with high- and low-income, something that stood out was the willingness of mothers of the high-income group to pay more for products of better quality. This was mentioned by four mothers compared to one in the low-income group. For example, they opted for meat from the local butcher instead of buying their meat at the supermarket, or buy bread at the bakery.

*When I'm sure that the food is of good quality, I'm willing to pay for it. A good piece of meat for example from the local butcher's shop. Or good cheese from the cheese factory in de Beemster. I'm willing to pay some more for that (52 years old, high-income)*

*I feed the twins Hero baby food. I heard that it contains more nutrients. More than in whole milk. I thought, it is more expensive but I like the idea that I give them the best food (40 years old, high-income)*

## Discussion and conclusions

For this thesis, qualitative methodology was used to examine differences between mothers with high- and low-income regarding considerations about food choice and eating behaviour. Specifically, it was explored if perceived scarcity accounts for the differences in food related habits between high- and low-income families. Despite being a small-scale study, this study provides interesting findings which add to existing research and produces new insight in the relationship between scarcity and food choice. Results from this study reveal variation in how mothers make decisions in three food-related topics: health considerations, convenience because of a hectic lifestyle and cost considerations.

### Health considerations

Mothers with both high- and low-income appear to find it important to eat healthy. Mothers of both groups consider fresh food as an important contributor to a healthy meal. However, high-income mothers appear to have a more elaborate view on what a fresh meal means compared to low-income mothers. High-income mothers seem to value fresh food, pure products and try to avoid instant, prefab and food with additives. Mothers with low-income prefer fresh food over ready-to-eat meals, but mention factors like food additives, food colouring, prefab powders, nutritional values much less than high-income mothers. Previous research showed that nutritional knowledge is poor in low-income adults, and declines with every step lower on the 'income ladder' (Cluss et al., 2013). It could be that the difference between high- and low-income mothers in the present study can be attributed to insufficient knowledge to translate their wishes to provide healthy food into practice beyond the inclusion of fresh vegetables and fruit in the diet.

Secondly, it appears that both high- and low-income mothers have difficulties with differences in taste in their families. This study shows that mothers try to adjust their food choice to the taste of their family members as the desire to eat healthy is not always supported, especially by their children. Previous research found that women's own food choices come second to those of their partner or children (Lupton, 2000). Besides, Inglis et al. (2005) reported that family support for healthy eating is an important influence on women's dietary choices across income groups, an outcome which is confirmed by the present study.

### Convenience because of a hectic lifestyle

It appears that mothers with high-income base their food choice on convenience. Time constraints and a hectic lifestyle are reported as a barrier to buying and preparing healthy meals. In contrast to the present study, previous research reported that time constraints due to work

commitments were most salient to women from lower SES (Inglis et al, 2005; Pelletier, & Laska, 2012). Another study shows that people of low- and middle-income groups spend the least amount of time preparing and cooking food, and are more likely to rely on ready-prepared meals (Greder, & Brotherson, 2002). In the present study, more women with high-income were employed compared to many unemployed women with low-income. The fact that employed mothers have less time to cook and prepare a meal may have implications for the healthiness of their food choice. Healthy food consumption patterns, characterized by less money spent on food away from home and more frequent consumption of fruit and vegetables are associated with more time spent preparing, cooking and cleaning up from meals (Monsivais, Aggarwal, & Drewnowski, 2014).

### Cost considerations

The cost of food was reported as a purchasing consideration for mothers with low-income. Compared to high-income mothers, they pay more attention to items for sale and finding the cheapest shops. Besides, mother with high-income are willing to pay more for items of good quality and eat out more often. These finding supports previous studies which show that the cost of food is an important purchasing consideration for low-income people (Hough, & Sosa, 2015; Inglis et al., 2005; Quan, Salomon, Nitzke, & Reicks, 2000). However, for all mothers in the present study, the cost of food was considered least important when they were asked to rank the importance of different factors. This supports the finding of Lovelace and Raibee-Khan (2015) that the cost of fruit and vegetables is considered prohibitive but does not prevent low-income parents from feeding their children fruit and vegetables.

### Interpretation of the results in relation to the scarcity theory

The aim of this study is to find out if the scarcity theory could serve as an explanation for the relative unhealthy eating pattern of low-income people. The theory can be interpreted in two different ways which resulted in two hypotheses. According to the scarcity theory, relative poverty causes people to focus on their scarce resources which makes them neglect other factors of life. There is less cognitive capacity left for other issues, especially problems that lay further in the future like health. Therefore, the first hypothesis states that mothers of low-income groups are less consciously engaged with healthiness of food choice and eating behaviour than mothers with high-income. It was expected that their food choice is mostly based on convenience or impulses because of the little cognitive resources as a consequence of the experienced scarcity. The results of this study provide no support for this hypothesis. It appears that mothers with low-income were just as concerned about the healthiness of their food choice as mothers with high-income.

In contrast to what was expected, mothers with high-income base their food choice on convenience more often compared to mothers with low-income. Although the first hypothesis is rejected, the results of this study could yet provide confirmation for the scarcity theory. Some employed mothers report to take good care of their children but tend to eat less healthy themselves. They snack between meals or forget to eat because of a lack of time and energy due to work and family commitments. It seems that in this case scarcity of time and energy plays a role in food choice, instead of scarcity of financial resources. Previous studies investigated the impact of work hours on perceived lack of time to eat healthfully. These studies reveal that time constraint due to more hours of work per week is seen as a barrier to healthy dietary behaviours (Pelletier, & Laska, 2012; Escoto, Laska, Larson, Neumark-Sztainer, & Hannan, 2012). Perhaps the mechanism of perceived scarcity of time and energy, tunnelling, neglect and reduced cognitive bandwidth leads employed mothers to choose food out of convenience and impulses.

The second hypothesis stated that, compared to mothers with high-income, mothers of low-income groups mention financial considerations spontaneously more often than health considerations when speaking about food choice and eating behaviour. Results of this study partly provided support for this hypothesis. Women with low-income tend to report the cost of food spontaneously more often than mothers with high-income when being asked about their eating habits. Food price and monetary considerations are common factors on which food choice is based for those mothers. This corresponds with findings from the study of Shah et al. (2018) which show that thoughts about money come to mind spontaneously among the poor in everyday situations and are difficult to suppress. However, it seems that the spontaneous considerations about money regarding food choice of low-income mothers does interfere with the amount of considerations about health.

## Limitations and recommendations for further research

The outcome that women with low-income mention financial considerations more often, while this does not seem to make them think less about health of food choice could be the result of a methodological limitation of this study. As part of the oral information that was given prior to the interviews, the participants were informed about the nature of the study as being a master thesis in Health and Society. Although the interviews were framed as being about 'food', and not about 'health' or 'money', the fact that participants were aware of my study background could unconsciously prime them to express thoughts about health. This would make it a factor of social desirability bias.

Several other methodological issues need to be considered when interpreting the results of this study. The sample included three women of a non-western cultural background who were part

of the low-income group. This seems to have influenced the results as previous research shows that considerations about food choice in non-western migrant groups in the Netherlands differs from native Dutch people (Nicolaou et al., 2009). Secondly, the interview protocol was based on the study of Fielding-Singh & Wang (2017). In practice, it appears that some questions are too abstract. Questions like 'What factors contribute to your decisions about food', did not lead to satisfying responses. Additional and more specific questions like 'What do you look at when you stand in front of the grocery store shelf?' made the topic more vivid for the interviewees and should be added to the interview protocol. Besides, the questions require a certain degree of introspection or self-reflection about the behaviour of the participants. Previous research shows that people are generally not accurate in giving accounts for their behaviour (Fox et al., 2012). Lastly, all interviews and analyses of the data has been conducted by the same researcher which might have influenced the results because it depends on the interpretation of one researcher (i.e. researcher bias).

For further research, to build on results of the present study and increase objectivity of the results, a suggestion would be to use methods similar to the study of Shah et al. (2018). This study relied on existing differences in income among participants as well but used quantitative methods. To investigate whether concerns about money are easily triggered, participants rated how much they think about a cost-related and a non-cost-related thing when they were presented with an everyday scenario. The researchers tested if money-related thoughts arise spontaneously by asking participants to list thoughts that come to mind as they consider a kind of experience. Also, they used a test on thought suppression, which shows that when poor people are instructed to avoid thinking about money, they have a hard time doing so. Such methods could be adjusted to the topic of food choice and provide a more reliable way to investigate differences between people with low- and high-income in considerations regarding food choice.

Additionally, to gain more in-depth insight in the relationship between income, perceived scarcity and food choice it would be useful to investigate whether the findings of this study are replicated in a larger group of participants across a larger range of income level. Also, further research into the role of fathers would be interesting. Mostly, men fulfil the role of sole provider in a family (Merens, & Van den Brakel, 2014). Accordingly, they may have a different perception of scarcity and therefore, different considerations about food choice and eating behaviour than mothers. Lastly, further research should be undertaken to investigate how the relationship between perceived scarcity of time and energy and food choice operates.

## Strengths, conclusion and implications for practice

This study provides insight into perceived scarcity as an explanation for the relative unhealthy dietary behaviours of people with low-income. Despite limitations, there are a number of

strengths to the present study. This study contributed to scholarship on considerations about food choice and eating behaviour as no such study has been conducted in the Netherlands. Similar studies focused on differences in health between mothers with low- and high-income, but explicitly asked participants about their view on health or monetary considerations. In the present study, questions asked are framed as being about 'food' and do not mention health and money until the end of the interviews. This makes it possible for individual, social and environmental influences on food choice and eating behaviour to arise. Besides, this thesis takes a different angle of approach to the relationship between poverty and healthy eating as it considers the mere experience of being poor and takes the perception of scarcity into account.

In summary, this study reveals variation in how mothers make decisions in three food-related topics: health considerations, convenience because of a hectic lifestyle and cost considerations. Although health considerations are important for both high- as low-income mothers, mothers with high-income are more elaborate on what fresh and healthy means. This might be attributed to less knowledge about healthy eating of low-income people. In contrast to what was expected, not mothers with low-income but mothers with high-income choose for food that is easy-to-prepare, quick and convenient. The fact that mothers of the high-income group were employed and reported having a hectic life-style due to work and family commitments might explain this. It seems that scarcity of time and energy plays a role in their dietary behaviours instead of scarcity of money. As expected, mother with low-income mention financial considerations more often when speaking about food choice and eating behaviour. However, they do not mention considerations about health less than high-income mothers.

The findings of this study could have implications for practice. Although it is encouraging that low-income women display interest in providing healthful food for their families, including fruits and vegetables, food price is a clear motivator for their food purchasing. Governmental measures to make sure that healthful food stays in the price range of low-income people could prevent that people with little financial resources opt for unhealthy food because of cost considerations. Furthermore, because a lack of time and energy is seen as a barrier to cook healthy, and the tendency of employed mothers to eat unhealthy as a consequence of their hectic lifestyle, food providers such as grocery stores could offer pleasant, easy-to-prepare and at the same time healthy foods (e.g. meal boxes). This would also be useful to make it easy to cook a healthy meal for those who have little knowledge about what consists a healthy diet.

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## Appendices

### Appendix A - TOESTEMMINGSFORMULIER (INFORMED CONSENT)

#### **Betreft: interview voor scriptie 'Perceived Scarcity and Considerations About Food and Choice Eating Behaviour – a Qualitative Study'**

##### Geïnterviewde

Ik verklaar hierbij op voor mij duidelijke wijze mondeling te zijn ingelicht over de aard, methode en doel van dit onderzoek.

Ik verklaar dat:

- ik geheel vrijwillig bereid ben aan dit onderzoek mee te werken;
- ik voldoende informatie heb ontvangen, namelijk:  
*Ik heb informatie over het project ontvangen. Ik heb voldoende de gelegenheid gekregen om vragen te stellen en heb daar bevredigende antwoorden op gekregen.*
- ik begrijp dat ik mijn medewerking aan dit project kan stoppen
  - *op ieder moment*
  - *zonder een reden te geven*
  - *zonder dat dit verdere gevolgen heeft.*
- mijn uitspraken anoniem in het onderzoeksverslag verwerkt mogen worden
- ik akkoord ga met het opnemen van het interview (de opname wordt niet voor verdere doeleinden gebruikt).

Handtekening: .....

Naam: .....

Datum: .....

##### Interviewer

Ik heb mondeling toelichting verstrekt over de aard, methode en doel van dit onderzoek. Ik verklaar mij bereid nog opkomende vragen over het onderzoek naar vermogen te beantwoorden.

Handtekening: .....

Naam: .....

Datum: .....

## Appendix B - Interview

### I. Achtergrond

1. Kun je wat over jezelf vertellen?
  - a. *Leeftijd, aantal gezinsleden, geboorteplaats/ethniciteit, middelbare school en andere opleidingen, beroep, burgerlijke staat, inkomen.*

### II. Voedsel gerelateerd gedrag en overwegingen

2. Vertel me over je familie en wat jullie eten.
  - a. *Wat kan je vertellen over de voeding die in je gezin gegeten wordt?*
3. Denk eens terug aan gisteren. Loop de dag door, en vertel me wat jij en je gezinsleden hebben gegeten.
  - a. *Was gisteren een dag zoals gebruikelijk?*
  - b. *Hoe was deze dag in vergelijking met andere dagen?*
  - c. *Hoe was deze dag vergeleken met weekenden, wat betreft wat jullie eten?*
  - d. *[Vraag naar snacks en drinken als het niet genoemd is]*
4. Vertel me over hoe boodschappen doen er uit ziet in je gezin?
  - a. *Wie doet de boodschappen? Hoe vaak?*
  - b. *Hoe beslis je wat je koopt wanneer je boodschappen doet?*
  - c. *Wanneer je in de supermarkt bent, hoe kies je wat je koopt?*
5. Vertel me over maaltijden met je gezin.
  - a. *Waar eten jullie meestal?*
  - b. *Hoe veel maaltijden eten jullie per dag?*
  - c. *Wie kookt het eten?*
  - d. *Hoe zou je je kookstijl omschrijven?*
  - e. *Eet je wel eens buiten de deur of haal je eten buiten de deur af? Hoe vaak? Waar ga je heen? Waarom?*
6. Hoe worden beslissingen over voedsel gemaakt in je gezin?
  - a. *Waar denk je aan als je beslist over het voedsel dat jij en je gezin eten? Wat neem je mee in je keuze?*
  - b. *Hoe veel denk je na over het eten dat je gezin eet?*
7. Neem een moment om na te denken over factoren die bijdragen aan hoe je keuzes wat eten betreft maakt. Wat zijn de dingen waar je over nadenkt bij het kiezen wat je koopt en/of wat je kookt? Hoe zou je deze factoren rangschikken?
  - a. *[let op wat men relatief belangrijk vindt, bijv. kosten, gemak, toegankelijkheid, smaak en gezondheid]*

8. Zijn er dingen die je moeilijk vindt in het verzorgen van eten voor je gezin?

### III. Reflectie

9. Zijn er aspecten van je voedselpatroon die je zou willen veranderen?

*a. Wat?*

*b. Wat houd je hier in tegen?*

10. Vertel me over de rol van geld in je voedselkeuze.

*a. Heb je een bepaald budget voor de boodschappen?*

11. Speelt gezondheid een rol in je voedselkeuze?

*a. Wat betekent 'gezond' voor jou?*

*b. Hoe weet je wat gezond is? Waar heb je deze informatie vandaan?*

### IV. Afronden

12. Is er nog iets anders wat je met me zou willen delen over hoe je je eten uit kiest en wat je doorgaans eet?

13. Eventueel: weet je nog meer mensen die ik zou kunnen interviewen?

14. Eventueel: demografische variabelen, voor zover nog niet besproken: leeftijd, etniciteit, opleidingsniveau, beroep, opleidingsniveau/beroep partner.