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# Perceptions of What Is Important for Appetite—An Interview Study With Older People Having Food Distribution

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## Abstract

The proportion of older people in the population increases and more and more continue living in their own homes. Appetite among the elderly people is important to their nutrition and health. The increased risk of unintended weight loss and malnutrition is linked to food distribution among home-living elderly people. The aim was to describe experiences and perceptions of what matters to appetite among home-living elderly people having food distribution. The design was qualitative where interview data were collected among 13 interviewees in 2017 to 2018. Data were analyzed using qualitative content analysis. The results are presented in three domains: the food, the meal situation, and the adaptation to meal service with categories and themes responding to each domain. The six themes related to appetite among the elderly people concerned the following: eating tasty, savory, and culturally adapted food; eating healthy and sustainable food; eating alone or together with others; eating in a pleasant meal environment; having choices to make about the meal; and last, accepting disabilities and increased dependency. One conclusion is that many aspects should be taken into consideration when promoting appetites of people who also get food distribution. It is highly individual and an understanding of which aspects are relevant must be considered; consequently, person-centered care is suggested to promote appetite.

## Keywords

appetite, home-living elderly people, perceptions, food distribution, interviews, nursing

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## Introduction

The global population is increasing steadily and the proportion of people over 65 in the world's population is expected to double by 2050 (Statistics Sweden, 2016). The same trends can be seen in Sweden's population. Today, 87% of all Swedish people 80 years and over live in their own homes. The number of elderly people living at home is also expected to increase (SOU 2017:21, 2017).

A cross-sectional measurement in 2016 showed that 316,500 elderly people got assistance related to social services and of which 47,567 people had food distribution (National Board of Health and Welfare, 2017). Older people in Sweden who are unable to prepare their own food can choose help with food and meals by the municipality (SFS 2001:453, 2001). Food distribution in Sweden differs from food distribution in other

welfare countries in that in Sweden, the municipality is the only operator supplying food boxes (National Board of Health and Welfare, 2011). In other countries, for example in the United States and Canada, food distribution is often organized by private actors or welfare organizations (Frongillo & Wolfe, 2010; Keller, 2006). Alley et al. (2010) found among 800 community-living men that approximately 9 years before death, the rate of weight loss increased to an average of 0.39 kg/year ( $p < .001$ ) for all-cause mortality.

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Older people living at home with food distribution in Sweden have as a group an increased risk of loss of appetite and malnutrition as well as weight loss. (Agarwal et al., 2013; L. Johansson, Sidenvall, Malmberg, & Christensson, 2009; Soderstrom et al., 2013; Van Der Meij, Wijnhoven, Finlayson, Oosten, & Visser, 2015) Five percent of all people over age 70 living in Sweden are considered to be undernourished (National Board of Health and Welfare, 2011), but many more are estimated to be at risk (L. Johansson et al., 2009; Y. Johansson, Bachrach-Lindstrom, Carstensen, & Ek, 2009). Malnutrition is not only negative for the health of the individual but also costly for society (Guest et al., 2011; Van Bokhorst-De Van Der Schueren et al., 2013).

Previous research shows that age-related changes in the body can cause loss of appetite (Giezenaar et al., 2016; Malafarina, Uriz-Otano, Gil-Guerrero, & Iniesta, 2013; Sulmont-Rosse et al., 2015). The vision, taste, and sense of smell change and deteriorate, especially after the age of 70 (National Board of Health and Welfare, 2011; Sulmont-Rosse et al., 2015). Sequential degradation of the skeletal muscle occurs. Reasons are various, for example, malnutrition, malabsorption, decreased physical activity, diseases, hormonal disorders, and cachexia (Cruz-Jentoft et al., 2010; National Board of Health and Welfare, 2011). Older people usually eat less than younger individuals do. They experience fewer hunger pangs and satiation at meals is faster. Further, it may take longer before hunger return after a meal (Giezenaar et al., 2016). The feeling of quick saturation can be because of delayed emptying time in the ventricle and slow intestinal peristalsis (Malafarina et al., 2013).

Also, moods of the elderly people are known to affect eating and appetite during the meal. Depression has a major impact on the health of the individual and is related to malnutrition (L. Johansson et al., 2009; Van Bokhorst-De Van Der Schueren et al., 2013; Wham et al., 2015). Moreover, the presence of companions during the meal is known to affect eating (Gustafsson & Sidenvall, 2002; Hope, Ferguson, Reidlinger, & Agarwal, 2017; Odencrants, Ehnfors, & Grobe, 2005; Paquet, St-Arnaud-McKenzie, Kergoat, Ferland, & Dube, 2003; Porter, 2007; Wikby & Fagerskiold, 2004). Although personal values about food and customized meals can be of significance for the desire to eat, the meal environment and how the food is served seem to be of importance to appetite (Jacobsson, Pihl, Martensson, & Fridlund, 2004; Mahadevan, Hartwell, Feldman, Ruzsilla, & Raines, 2014; Wikby & Fagerskiold, 2004).

People suffering from malnutrition generally appear to utilize more resources in care such as more doctor visits, hospitalization, and longer hospital stays (Agarwal et al., 2013; Guest et al., 2011). A British study found that the cost of each malnourished patient was more than double in comparison with nonmalnourished patients (Guest

et al., 2011). Furthermore, malnutrition increases mortality (Agarwal et al., 2013; Dey, Rothenberg, Sundh, Bosaeus, & Steen, 2001; Huang, Wahlqvist, & Lee, 2014). People who suffer from malnutrition usually use more drugs, have a lower activity level, are more dependent on walking aids, and have more frequent urinary incontinence (Van Bokhorst-De Van Der Schueren et al., 2013) and urinary tract infections than people with sufficient nutritional status (Carlsson, Haglin, Rosendahl, & Gustafson, 2013). Payette, Coulombe, Boutier, and Gray-Donald(2000), found that among people over 70 years, a weight loss of more than 5 kg during a period of 3 to 5 years represented a significantly increased risk of moving from the home to any kind of nursing home.

A literature review by Zhu and An (2013) reported that various programs aimed at delivering food to the home can improve nutrition intake. The selected studies were conducted primarily in the United States, included a smaller number of participants, and were based on self-reports from the elderly people. In contrast to the findings in their review, studies from Sweden and Finland have demonstrated a relation between food distribution to the home for older people and increased risk of malnutrition (L. Johansson et al., 2009; Soderstrom et al., 2013; Soini, Routasalo, & Lauri, 2006). According to the Finnish study, only one-third of the people who had food delivery ate up the entire portion delivered for a meal. The others left part of their serving or saved it for later intake. The latter group also included the people with the lowest body mass index (Soini et al., 2006).

The rationale for this study was that previous studies have focused on people present in geriatric departments, housing in elderly homes, or people with specific disease states (Jacobsson et al., 2004; Mahler & Sarvimaki, 2012; Odencrants et al., 2005; Paquet et al., 2003; Wikby & Fagerskiold, 2004). Compared with inpatients who seldom eat food cooked or heated at place and also are in more acute phases of diseases, people living at home have their meals in their own kitchens, with other options as to reheat or fry potatoes or vegetables from a food box in a frying pan, not only using microwaves which may be a positive aspect of appetite and something we were interested to knowing more about. Edfors and Westergren (2012) described views on the importance of food and meals among the elderly people living at home, but they did not focus particularly on people with food distribution. Research on the perceptions or personal experiences of what matters to appetite among older people living at home with food distribution is limited. An increased understanding of aspects that may be important to appetite can be valuable information for health-care professionals in order to better meet the needs of people who live at home and have food distribution.

The aim was therefore to describe experiences and perceptions of what is important for appetite among home-living elderly people who have food distribution.

## Methods

### Design

An interview study with a descriptive qualitative approach was conducted. An applied sampling method was used to reach maximum variation (Polit & Beck, 2013). We used qualitative content analysis according to Graneheim and Lundman (2004), which aims to report variation in a data material. Maximum variation therefore concerns to catch various experiences about a phenomenon.

### Setting

The study was conducted in a northern Swedish municipality with approximately 50,000 inhabitants. Several caterers cook and prepare food boxes for food distribution in the municipality. The central caterers offer four dishes to choose among each day while the rural caterers offer two. The food boxes are handed out by the home care staff.

### Sampling Procedure

Selection criteria for the study were people who lived at home and had food distribution. A maximum variation sample was strived for whereby people from both sexes, in various ages (though over 70 years), with various medical conditions, and central or rural residences, were invited to participate because they were expected to exhibit a range of attributes, behavior, and experiences (Polit & Beck, 2013). Inclusion criteria were that the people would be over 70 years old and would have a good communicative ability in the Swedish language. Exclusion criteria were people with acute or severe illness.

Initially, the head of the municipality's service in ordinary housing was contacted with a request about approval to perform the study. With her help, four home care areas were selected, two urban and two rural areas. Subsequently, a written request was sent to the unit managers of the home service groups regarding participants based on the inclusion and exclusion criteria. Study information and a participation agreement were then distributed by letter to presumptive participants through home care staff. In a sealed letter, there was a response letter to sign and return. First then, the participant's identity and contact details were made available to the researchers, a procedure that was recommended by the municipality's lawyer. In total, 30 requests were sent out and 13 people accepted. Participants were then contacted by telephone and time for interview was booked.

### Participants

The 13 (men = 7, women = 6) participants were between ages 72 and 92 (mean  $82 \pm 7.47$ ). Two of the participants were married or living together, two had never lived together with any partner, and the other nine participants were divorced or widowed. The participants had a variety of health problems. Heart failure, stroke, and diabetes were most common, followed by mental ill health or slight cognitive impairment. Furthermore, leg ulcers, rheumatoid arthritis, chronic obstructive pulmonary disease, and ileostomy were reported. Two participants had severe vision impairment. The number of food boxes delivered per week varied; where six participants ordered one box a day, six ordered a box every other day and one person ordered two food portions a day.

### Data Collection

All interviews were conducted by the first author between June 2017 and March 2018 and took place in the participants' homes according to their own wishes. The interviews were digitally recorded and varied in length from 45 minutes to 90 minutes (median = 57). The interviews were semistructured and an interview guide focusing on appetite, eating, and eating issues was used. The interview guide was based on literature studies about appetite in older people but also on experiences from clinical work of the three authors. The initial question in all interviews was, when I say appetite, what does that mean to you? Other questions from the interview guide were, please tell me about your experiences of getting food delivery. Which choices do you have? How do you like the food? Are you longing for anything you cannot get? What is positive and what is negative? Please describe aspects around the food that matters to your appetite, and so on. Most questions were open-ended to stimulate statements of experiences and supplemented with follow-up questions to gain a deeper understanding of the topic and sometimes to attract the participant to the topic when the statement lost direction (cf. Polit & Beck, 2013). A pilot interview was conducted which was discussed and whereby the interview guide was adjusted slightly. The pilot interview was however considered to be of good quality and the content relevant to the purpose of the study and thereby included in the analysis. After about 10 interviews we judged that the data were enough because new interviews did not lead to new variations or interpretations, but continued to interview all 13 participants.

### Analysis

Each interview was transcribed verbatim by the first author, and then listened to and read through by all authors. Any misprints were corrected in the transcribed

material. Qualitative content analysis was used as guidance for the analysis (Graneheim, Lindgren, & Lundman, 2017; Graneheim & Lundman, 2004). The initial analysis was performed by the first and last author. Quite early, we understood that some domains of data existed which at some level had to do with the construction of the interview guide. The material was therefore divided into the three domains; the food, the meal situation, and the adaptation to meal service. The analysis of the texts within each domain started line by line with the aim in mind. Meaning units (i.e., words, sentences or paragraphs that responded to the aim) were condensed, analyzed, and labeled with a descriptive code. The codes were compared and sorted into categories based upon their similarities and differences. Threads of meanings going through various categories were, by all authors, identified and formulated into themes. During the analytic process, great attention has been paid to being textual and preserving the actual content and context. This implied a constant moving between the text of the original interview, codes, categories, and themes, whereby relabeling of some of the codes and categories was done.

### Ethics

The study has been carried out according to the research ethical principles required for a scientific study and was approved by the Ethics Advisory Board at the Department of Nursing, Umeå University. The requirement for informed consent has been completed and each participant has received written and oral information about the study that deals with the parts required by Codex (Swedish Research Council, 2017). All participants were given the opportunity to ask questions

about the study before the interview started; they could terminate their participation if they wanted, and they could contact the researchers after the study. According to the World Medical Association (2013), materials such as informed consent and recorded material that may reveal the identity of the participants have been treated confidentially. Interview material has been marked with numbers identifiable only by a code list.

### Results

The analysis of the interviews with elderly people about perceptions regarding what matters to appetite and when living at home and having food distribution revealed that there is much to improve to come closer to person-centered care. An overview of the domains, categories, and themes is given in Table 1 and these are explained in more detail in the following text.

#### The Food

In the domain regarding the food, two themes were identified. These concerned the importance of *eating tasty, savory and culturally adapted food* and *eating healthy and sustainable food*.

#### *Eating tasty, savory, and culturally adapted food*

**Food characteristics.** The food's characteristics regarding taste, appearance, and texture were of importance to appetite. The participants described the food as positive when it was tasteful, well-spiced, and carefully salted as opposed to the times the food was too sour, tasteless, or sometimes unbalanced or too hot. The appearance of the

**Table 1.** Categories and Themes Presented in the Three Domains.

Domains	Categories	Subcategories
The food	Eating tasty, savory, and culturally adapted food	Food characteristics Cooking Traditions
	Eating healthy and sustainable food	Healthy eating Societal and economic aspects
The meal situation	Eating alone or together with others	Community meals Lonely meals
	Eating in a pleasant meal environment	Dining environment Regular meals
The adaptation to meal service	Having choices to make about the meal	Freedom Self-determination
	Accepting disabilities and increased dependency	Longing Impairments Dependence on others Reconciliation

food was of great importance for appetite. The food was described as an appetite stimulant when it was colorful and beautiful unlike when it had a grayish color, drizzled with fat, and looked like a mess. Reference to “eating with your eyes,” was popular in quotations.

It’s nice if there’s some color. Yes, I think that’s good.

For many of the dishes, I sprinkle over parsley, since it makes it easier to eat (when one suffers from appetite loss). (Participant 3)

Some of the participants described the food texture as being important for appetite. If potatoes were watery and soaked or if the vegetables were overcooked, they were not popular. On the other hand, some participants mentioned that if the food was too hard, it was unappetizing and impossible to eat. They mentioned that the pancakes were thick enough and many of the participants had a desire to get thicker meat slices, something to bite into.

**Cooking.** Cooking aspects were highlighted as very important for the participants’ appetites. Homemade food was seen as “real” food and was contrasted with factory-made food, which was seen as a cause for loss of appetite. Likewise, the cooking aspects which referred to home cooked food or not concerned whether the food was freshly cooked or heated. Several participants described the sense of homemade, freshly cooked food as being important for stimulating hunger and much better than food from the supplied food box. They also gave examples of food boxes with very little meat or little fish in the serving size.

Some of the participants described that the food in the food box felt impersonal because it was perceived as factory manufactured and a cause for loss of appetite. Not knowing who had cooked the food—which was put in a plastic bowl, cooled down to be reheated several days later—was not seen as positive for appetite. This feeling was not necessarily linked to the taste, appearance, and texture of the food box, but reflected a desire to know more about the food, who made it, and a wish to eat freshly prepared meals. The food did not necessarily have to be cooked at home, rather cooked just before eating it. Some participants described that freshly prepared food felt better and homemade and that the food box could not replace freshly prepared food. It did not feel good or stimulate appetite to always get reheated food and, for example, never get freshly cooked potatoes. Furthermore, it was of great importance for appetite how the food was heated. Several participants described that heating the delivered food with real butter in a frying pan so that it was very hot or warming potatoes and vegetables in boiling water, instead of in a microwave oven made their food smell and taste better,

and it felt more homemade. Some considered it easy and comfortable heating the food in the microwave oven while others meant that the food did not taste good. The way in which the food was cooked and packed in the food box also had a bearing on appetite, and not everyone thought it was positive.

It feels good, that it’s packed in different compartments in the box, I can eat what I prefer so that it’s not a problem. But I used to heat the potatoes in one pan and the sauce in another. (Participant 10)

**Traditions.** The personal habits and previous traditions surrounding food seemed to have a bearing on appetite. Likewise, there was no feeling of luxury or festive atmosphere, which affected several participants. In terms of habits, it could be a matter of eating familiar food or favorite food. The participants described how some dishes had been favorites during their whole life; they also gave examples of food that they had never liked but still had to eat. Some of the participants described how old memories came alive when they ate familiar food. The dishes they ate during childhood were described by most participants as favorites, and even though it was often cheaper food, it was still preferred.

Blood bread, white sauce, with a little syrup in, lingonberries and sliced and fried salted pork, I think that’s really good. We often ate that during the war, since that’s what we had access to. (Participant 13)

Foods associated with holidays were mainly described as particularly good and the thought of such traditional food stimulated appetite. It seemed important to have the opportunity to eat according to food traditions at major holidays, such as eating marinated herring, potatoes, sour cream, and chives on the Swedish Midsummer. More luxurious and fine dining was among some participants described positive for appetite, such as eating a well-hanged entrecôte with horseradish butter.

#### *Eating healthy and sustainable food*

**Healthy eating.** Health aspects were highlighted by several participants. Food that satisfies the needs of the body and provides a balanced nutritional composition was seen as important. Furthermore, food being safely cooked was mentioned as important for appetite.

Several participants described a clear awareness of what the body needs and they had a desire to meet this. This could, for example, be about the need for vitamins, fiber, or something sweet for energy. Knowing that the food was well composed, nutritious, and healthy was positive for appetite even if the taste not always was

the best.

I know, when I'm going to sleep, that the food in this box which I have eaten and sent to my stomach, that's healthy for me. (Participant 8)

The demand on the food box concerned the nutritional content and focus shifted from good taste to nutrition and sometimes even survival. Several participants expressed that the food did not have to be remarkable, but it had to have acceptable flavor and nutritional balance. Knowing that they got energy from eating food motivated some to eat. From a health point of view, it was also about food safety and feeling confident that the food would not make one sick. For example, some wondered if hygiene was considered in the kitchen where the food was cooked because they wanted to make sure that they did not have to be afraid of getting sick. Another example given was the importance of feeling safe; that is to say food boxes with fish, for example, had no bones in the fish that could get stuck in their throats.

**Societal and economic aspects.** The cost and whether the food felt affordable had a bearing on the desire to eat, as well as the importance of proper portion sizes. Furthermore, the importance of sustainable production and delivery was highlighted. As for the cost, some described that the food was offered at a good price while others felt that it was too expensive. These participants gave examples that they felt forced to pay too much money for food boxes containing cheap and simple dishes such as herring and potatoes. They therefore often avoided ordering such dishes. Another cost aspect, also related to appetite, was that they sometimes felt that the portions were unnecessarily large and then had to throw leftovers because they did not want to heat the food more than once. Some considered the portion size as just enough while others wanted a larger portion in the food box. Some participants highlighted that it would be more likely to eat the food if they could influence the portion size.

But I am sufficiently environmentally aware to know that too large portions are a waste. First potatoes are transported to the kitchen, then to me who throws them in the household garbage, and then they will be transported again to the dump. (Participant 12)

The proximity to the kitchen that produced the food boxes was mentioned as something positive for the desire to eat the food. Some participants described that if the food had been transported long distances, they would not eat it because they felt guilty about the unnecessary vehicle emissions.

## The Meal Situation

In the domain concerning the meal situation, two themes were identified. These concerned the importance of either *eating alone or together with others* and *eating in a pleasant meal environment*.

### *Eating alone or together with others*

**Community meals.** Both the meaning and importance of eating together with others were described, where the participants, in particular, highlighted the meaning of eating with those you know. It was perceived as more meaningful to eat with people with whom they had more private contact, for example, friends and relatives because they could have more private conversations during the meal. Eating community meals had a great bearing on appetite for most of them. Having someone to talk to and discuss with during the meal also adds a little sparkle. Eating together with others was though stated as most important when they had special meals or fine dining. However, a couple of participants considered it unimportant for appetite having social contacts during meals. Eating together in larger groups could create a sense of community and hearing what others felt and thought promoted hunger. They described meeting others during major holidays and eating together as real living. It was nice to have lunch in the municipal restaurant for the elderly people where you could often enjoy the company of others. There were also those who emphasized that they would really like to go for dinner at a restaurant but did not dare to go there themselves because they were unsure how to behave in a place they had never visited.

Even though it was important for some participants to have home care staff assisting them during meals, it could also feel unnatural and troubling to sit with someone but eating alone. Eating while others were watching and viewing them could be perceived as an unnatural meal situation and create a sense of being monitored, which did not promote appetite.

It's like they're watching if you're eating or not, or something like that. (Participant 5)

It could also feel natural to eat in the presence of home care staff, but it was because of the close relationship with them and depending on how long they had known each other. However, the participants, in general, described home care staff as important to them and therefore it was necessary that they were pleasant and committed. If the staff was new and completely unknown or did not speak the same language, it inhibited appetite.

**Lonely meals.** It was also common that the participants had their meals by themselves, which could mean

feeling alone, which was negative for appetite. On the other hand, situations were also described when it was considered advantageous to eat alone, even if it was seldom their first choice. For example, feeling unwelcome in a group of people where one could be badly treated could give feelings of inferiority which, in turn, could lead to loss of appetite. Eating alone could be a better solution.

He expressed himself in such a way that he was patronizing me, so it was not fun to sit and eat with him. (Participant 7)

### *Eating in a pleasant meal environment*

**Dining environment.** The meal environment included aspects such as table settings and food arrangement on the plates, the eating place, and also the time allocated for the meal. Many participants described how the table setting and the meal environment were important for appetite. If the surroundings were pleasant and it was tidy and clean where you ate, it felt nice to eat. Positive examples were given about attractive tablecloths or table mats and candle light on the table. Food served from real pots felt more positive for appetite than food served directly from the plastic box or serving the food heated directly on the plate. Furthermore, the importance of arranging the food in a pleasant manner on the plate was emphasized, which could be difficult but possible even if the food was delivered in a plastic food box.

You cannot get it that nice from a box, compared to if you can go to the food service and you get food straight out of the pots, but I wish it would be nicer for people who cannot go out to eat. (Participant 6)

The smell of food in the meal environment was mainly described as positive for the desire to eat, something which they seldom experienced from reheated food boxes.

A meal without smell is not a meal, which I think it's hard. I want to feel the smell of fried onion because it becomes easier to eat then. (Participant 13).

A strategy for making food from the box more appetizing even if the meal was in the usual environment was to divide the various parts of the serving on the plate or serve different kinds of food on different plates. Decorating with fruit and fresh spices was described positively for appetite because food became both colorful and felt more luxurious. At the same time, there were some participants who considered the table setting and decoration of food as rather meaningless for their appetite but that they valued other things instead. Having a

good time eating and sitting in peace and quiet and not being in a hurry or stressed was described as important. Some participants also expressed a need to eat during more festive circumstances sometimes, perhaps with entertainment.

**Regular meals.** According to several participants, regular meal times were important for maintaining appetite. For many, fixed meal times were something that they had been used to their entire life, like always having breakfast at a certain time.

It is positive to have dinner at certain times, but it is a bit of a joke there (It's seldom exact). (Participant 4)

Someone described that to maintain food cravings during the depression regular meal times were particularly important. Even in good moods, regular meals were described as important, as it meant that you avoided snacks, which in turn could only increase a loss of appetite.

### *The Adaptation to Meal Service*

In the domain about the adaptation to meal service, two themes were identified. These concerned the importance of *having choices to make about the meal* and *accepting disabilities and increased dependency*.

#### *Having choices to make about the meal*

**Freedom.** Even if the importance of regularity in meal times was emphasized by the participants, there was also a need for freedom regarding meals. Some described that they would prefer eating first when they were hungry. To actually feel very hungry before the meal made the dining experience more positive. Several participants described experiences of not being hungry because they were served food so often, but during a short period of the day. One participant pointed out, quite ironically, that the elderly people with food delivery and home service must eat at regular times even if they aren't hungry.

I think it's so "well-planned" that you must eat now and then, and before we get hungry. (Participant 4)

Others also stated that they wanted more freedom to eat when it suited their social activities and other plans in daily life.

**Self-determination.** Self-determination also allowed for an increased number of choices. The participants described that they often had many dishes to choose from when ordering the food boxes, which increased the likelihood that there was something they liked and wanted and they could also avoid choosing what they did

not like. Usually, they always found something acceptable and if they lived together with a partner they did not even have to choose the same dish. Choosing food in advance, however, was both positive and negative for appetite. It was positive that they knew in advance which food they could have to eat, but also negative because it was not certain they were craving the dish just when that day came. Examples were given that they would choose dishes after weather or season. If it was hot outside, they might want cold foods. The opportunity to make spontaneous food choices for the day was therefore important to them. To decide more about how the food should taste and be cooked was described as positive for appetite. One way to handle this was to help the staff with cooking or spicing up the food or boiling the potatoes delivered in the food boxes to get it more as you wanted it. Self-determination for some participants concerned the ability to influence the content of the food boxes such as exchanging rice for potatoes.

I've chosen food without rice and pasta, and that's not because I do not like it. It's because I'm shaking like a leaf, and it is very difficult to eat rice, you know. (Participant 9)

Those participants who had been denied changing the contents of their food box experienced a negative effect on their appetite. It could also concern choosing what was served on the plate. Several participants would rather put food on the plate themselves without help from the staff. At times when it was difficult to choose their meal, appetite was impaired. It could be that the contents of the food box were not what they had expected from their order as if the name of the dish was misleading.

One participant mentioned that the labels of the dishes said nothing about the real contents. Steaks with a different origin were always served in thin slices, which meant the portions looked the same. They could feel that they were being fooled by the name of the dish, thus limiting their choice.

**Longing.** The category concerning longing not only included expectations and wishes for food that was never served but also a feeling that the food served was too one-sided. There were occasions when the participant felt that there was nothing to choose from that stimulated their appetite, meaning that they wanted more variety. They experienced that some dishes were frequently repeated and eating the same dish was boring. Several also described that the amount of food in one food box could easily be enough for two meals, but it felt uninspiring to eat the same food two meals in a row when you longed for something else. The desire for special dishes was described as strong.

Liver steak, my God, how good it would have been. Because it is something that's really good. (Participant 1)

Dishes they longed for were, for example, moose roasts or some "better" food or a fresh salad, which were requested as they considered this to be of great importance to their appetite.

### *Accepting Disabilities and Increased Dependency*

**Impairments.** The category impairments included experiences of various forms of health problems or lack of physical activity that was of major importance to appetite. Vision implied "visual" hunger and therefore, vision was described to be of great importance to the food and taste. Loss of vision could lead to difficulties to cook and to see the food that would be eaten.

You know, food is . . . you do not only eat with the taste, it is also with your eyes. When you see the food in front of you (it stimulates your appetite). (Participant 2)

The presence of various diseases reduced appetite. One participant described that she had difficulty inhaling food vapors which could cause respiratory distress. Fatigue could cause appetite loss and some participants were so tired that they simply slept through meals. Accidents or illnesses involving hospital care, restricted mobility, and pain could cause poor appetite and they simply had to decide to eat in spite of periodical loss of appetite. Being depressed or being in a difficult life event or sadness made them lose their desire to eat, something that was described by several participants.

Am I depressed, then nothing tastes right. (Participant 8)

Also, other kinds of psychiatric illness such as bipolar disease could influence appetite. During periods of mania, food intake could be significantly worse than periods when the disease was in balance. On the other hand, the possibility of being physically active, walking, and exercising made things easier. Being active, either indoor or outdoor created a better appetite while sedentary behavior caused by, for example, pain could be an obstacle to activation and meant reduced appetite.

**Dependence on others.** While the increased dependence on staff in home care influenced appetite, it meant decreased flexibility, nevertheless the relationship with the staff was also seen as necessary and important relationship. Being dependent on their help influenced the desire and ability to eat. Some of the participants expressed that they had no choice but food boxes, and they felt forced to eat what was offered, even if they did not want to. A food box was not seen as optimal and

they would love to have it differently, but it felt impossible to get it the way they would like it. Some also expressed that it was unfair not being able to get freshly prepared food just because you cannot walk to the food service. Needing help meant that the meal situations became routine and less flexible. It also meant that you had to adapt to the schedule of the home service staff and eat when they arrived.

Before, when I cooked by myself, it did not matter when they came. Now, I have to wait for them to come (even if I am hungry). (Participant 11)

It was hard to be spontaneous. If they had unscheduled visits by friends over lunch, it would feel awkward and strange to sit down and eat and not be able to offer the friend anything. At home, you could no longer offer people food. Going to the food service instead was not easy because they wasted their food box at home. Three days' advanced notice was required to cancel a food box, which resulted in that they sometimes stayed at home and ate alone instead of going out and meeting others. However, when being dependent, the relationship with home care staff could be important and necessary for them in order to eat at all. The participants described the staff as important people to socialize with and it was important that the staff was pleasant, committed, and interested in them as individuals. Nevertheless, the dependence on food delivery and dependence on home care staff meant limited flexibility in daily life, which caused appetite loss.

**Reconciliation.** The last category Reconciliation concerned that despite the participants increasing dependence they accepted their situation and even experienced food delivery as an exemption. Once they got settled into their situation, managing food and cooking themselves to some degree was described to be significant for better appetite. Some participants, therefore, tried to cook some simple dishes themselves in order to become reconciled with increasing dependency. When the food or meal situation was not optimal or not as they wished, acceptance of the situation and the delivered food boxes was described as being very important.

Clearly, you have to accept it (the box) as the situation is. It's probably not the optimal meal maybe, but you have no choice. (Participant 2)

Even if they had appreciated having the food in a different way, they accepted that this kind of catered food could not be perfect all the time. This acceptance helped them to eat. There was also an understanding about that it would be too expensive to make more luxurious food. It was for several participants a question of

gradually getting used to a new kind of food. Surprisingly, among some participants, an inner struggle was identified that on one hand concerned the feeling of having the great benefit of getting food delivered to their homes, and on the other hand, a feeling of not deserving the food, because you no longer worked for it. However, it resulted in gratitude for getting help with the food. This gratitude and being pleased and reconciled with the situation were mainly described as having an effect on the desire to eat.

Getting help with the food could also generate a sense of liberation. Being free from cooking tasks was positive for several of the participants. It was comfortable to get the food delivered and to have it served even if it was in a plastic box. If the choice was between good food and convenience, the convenience factor was more important to several of the participants. The food box thereby became a symbol of security and health, which meant that it contained all nutrients they needed. Examples were given that thanks to the food box they ate different vegetables, something they would not have prioritized otherwise.

## Discussion

Six themes relating to the aim to describe experiences and perceptions of what matters to appetite among home-living elderly people having food distribution emerged from the analysis. The first theme regarding eating tasty, savory, and culturally adapted food was extensive with many experiences relating to appetite and appetite loss. The comments of the participants conveyed a clear message that the food needs to be individually tailored for taste, appearance, texture, and preparation to create a desire to eat. This is in line with findings from others. Wikby and Fagerskiöld (2004) reported that the elderly people's appetite improved if the food was savory, tasted good, and corresponded to what they had expected in terms of texture and layout. Our participants frequently referred to previous food traditions, such as favorite dishes highlighted as positive for appetite. Some of our participants expressed that the cooking (i.e., microwaved food) was not really appreciated. This is something about which Edfors and Westergren (2012) have reported, namely that older people requested more old-fashioned food, cooked in the traditional way with familiar spices such as salt, pepper, dill, and bay leaves, not pizza with unfamiliar spices, taste, and texture. Among the participants in our study, eating food from the past was familiar and implied that old memories came alive. Edfors and Westergren described how food preferences from the past such as porridge, whole wheat bread, potatoes, pork, and fresh fish still were present among older people. The authors concluded that it is important, in order to optimize the nutritional status for older people

living at home, to gain the knowledge of individual preferences and habits from both their earlier and current lives. Traditional food was also preferred by the older people in Wikby and Fagerskiöld's study. Hanssen and Kuven (2016) reported that among people with dementia who lived in institutions, their appetite and feeling of togetherness and joy increased if they were served traditional food. It created memories and joy and people who did not speak any more pronounced words. Plastow, Atwal, and Gilhooly (2015) argue that the food one eats can help to maintain their ethnic and social identity. People's personal identities could thereby be maintained by cooking and eating origin dishes viewed as traditional for them. As early as the 1960s, Henderson and Silfvenius (1982) expressed individually adapted food as an important aspect for increasing the desire to eat. From a person-centered perspective, this goes hand-in-hand with seeing people in their own context, understanding what matters to them individually and for the retention of the personal identity (American Geriatrics Society, 2016).

The second theme about eating healthy and sustainable food can be connected to previous research by Mahadevan et al. (2014) and by Wikby and Fagerskiöld (2004), who reported that healthy food felt motivating to eat among the elderly people. The aspect that we found about sustainably produced food has not been found in previous research related to food preferences among the elderly people. This may be a result of a general increase in awareness of sustainable and safe food in recent years not only in Sweden (cf. Swedish Trade, 2016) but also internationally (cf. Alles et al., 2017). This is a view that will probably be more prominent among the elderly people in the future as questions about social awareness, sustainability, and responsibility for future generations are increasingly discussed in Swedish media and from other national and international initiatives (Sveriges kommuner och landsting, 2009), for example, Earth Hour. In terms of safety, food hygiene received more focus in the municipalities on January 1, 2006, when new rules for food began to apply to European Union members (The European Parliament, 2004).

Eating alone or together with others was the third theme. Companionship during the meal was expressed to be an extra spice and positive for appetite, something that has previously been described from several contexts (Mahadevan et al., 2014; Odencrants et al., 2005; Porter, 2007; Wikby & Fagerskiöld, 2004). One aspect of eating not described in previous studies that was highlighted in our study was that when eating with the home care staff, they still ate alone and felt uncomfortable and felt they were being controlled. This had a negative impact on the desire to eat. Contrary to this result, Hope et al. (2017), reported from an interview study among older patients in hospitals that if the

nurses did not pay attention to food left on the plate, it reduced patients' motivation to eat.

The fourth theme, eating in a pleasant meal environment, was another aspect that had a bearing on food cravings. The meaning of a satisfying meal environment for eating and appetite is described in many other studies involving older people and is commonly adhered to by health-care professionals in order to maintain appetite among the elderly people (Jacobsson et al., 2004; Mahadevan et al., 2014; Wikby & Fagerskiöld, 2004). Also the nursing theorist Virginia Henderson emphasized the importance of the meal environment for appetite and satisfying such needs is seen as part of the basic nursing care (Henderson & Silfvenius, 1982). A meta-analysis of Baldwin, Kimber, Gibbs, and Weekes (2016) however showed that although evidence of interventions aimed at improving meal situations in adults with risk for malnutrition risk is quite low, it may relate to insufficient quality of existing studies.

The fifth theme within the domain adapting to meal service concerned the elderly people's need to have choices about the meals and the dishes. A Swedish case-control study showed when using the Mini Nutritional Assessment Scale that appetite among older people in nursing homes improved by individually designed meals and by educating of staff about nutrition among the elderly people (Lorefalt, Andersson, Wirehn, & Wilhelmsson, 2011). Hamirudin, Charlton, and Walton (2016) in their study of several welfare states highlighted a need for further evaluation of nutrition screening and elaborated guidelines for the care of older people at risk of malnutrition. A study by L. Johansson, Bjorklund, Sidenvall, & Christensson (2017) reported that the staff viewed it as a prerequisite to individualize the meal according to the person's own wishes. They talked to relatives to get an overall picture of the person and to learn personal needs. According to an expert panel on person-centered care within the American Geriatrics Society (2016), a combination of focusing on the individual's preferences and at the same time giving the staff adequate training for the task is completely in line with person-centered care. According to Tellis-Nayak (2007), it is important if the organization and leadership have a person-centered approach toward the staff because it affects the staff's motivation to work person-centered. Something that is positive for the future is that the Swedish National Food Agency (2018) recently published new recommendations concerning food and meals for old people in elderly care, which highlight the need of a more individualized meal planning.

The last theme, accepting disabilities and increased dependency concerns the struggle of becoming older, and seems to be an important part with implications for appetite.

Our participants described getting used to meal service and eating food from food boxes as something they had to adapt to it because they had no other choice. Also, Edfors and Westergren (2012) have reported similar findings, namely that if you are dependent on help with food, it means that you have no choice but to accept and get used to. Loss of vision was in our study described as negative for appetite. On the other hand, Spence et al. (2016), reflect on cues in the environment that might also trigger hunger more often than is good for us and that vision plays an important role regarding the increasing exposure of images of desirable foods in media and advertisements, leading to overweight in the population. Spence et al. have reviewed cognitive neuroscience research that has demonstrated a profound effect of such images on neural activity, physiological and psychological responses, and visual attention, especially in the “hungry” brain. Such visual hunger could be used for opposite purposes, to increase hunger among those with poorer appetites.

### Strengths and Limitations

None of the researchers was very experienced in the research area of appetite among the elderly people with food distribution, but instead well experienced in elderly and home care. There are shared opinions regarding the benefit of preunderstanding in qualitative research. Graneheim and Lundman (2004) discuss whether the researcher should exploit or try to put the preunderstanding of the phenomenon aside or not. They argue that a researcher can benefit from previous knowledge and experience to gain further perspective on the studied phenomenon. On the other hand, Sandelowski (1998) argues that a layman’s limited knowledge of a phenomenon combined with an expert’s knowledge of qualitative method can outweigh some of the pitfalls that might exist with having too much prior knowledge.

One of the study’s strengths is the diverse sample that mirrored a variation in age, sociodemographic background, and health status, thereby increasing validity (cf. Graneheim & Lundman, 2004). Likewise, it is a strength that the results reflect the experiences of people who have received food distributed from more than one kitchen. The food itself may vary between different kitchens, and in this study, participants had the option of choosing from four different dishes in the urban home area and two dishes for subscribers who have food distribution in the rural area.

Upon trustworthiness in interpretation, we argue that we have reported the most probable meaning from our perspective. Seeking for agreement in interpretation concerns confirmability in qualitative research, but because multiple realities exist, dependent on subjective

interpretations, it could also be questioned. However, according to Graneheim and Lundman (2004), the intent is not to verify that data are labeled and sorted exactly between researchers, but to determine whether or not various researchers would agree with the way data are handled. We have therefore sought for consensus in interpretation within the research group, because we believe that it strengthens trustworthiness in this analytic phase of coding and categorizing. In the various steps of the analysis, preliminary interpretations were also continuously compared with the original data to check that the findings and interviews seemed to be consistent (cf. Graneheim & Lundman, 2004).

### Conclusion

This study contributes to an increased understanding about aspects that influence appetite among elderly home-living people receiving food distribution. The importance of an individualized meal planning is highlighted. The introduction of food distribution as a solitary measure when the nutrition is impaired does not mean that the person actually eats the food portion. Many aspects may be taken into account to stimulate appetite and only the individuals can describe what matters most for them. A core value in person-centered care is a holistic view of people, who have physical and psychosocial needs with respect for the person’s dignity and self-determination, understanding of the person’s perceptions and perspectives and priorities, and promoting a meaningful existence, enrichment of relationships in order to maintain their own identity (Coulter & Oldham, 2016; Ekman et al., 2011; Kitson, Marshall, Bassett, & Zeitz, 2013; McCormack & McCance, 2006). Person-centered care and alternative solutions for the food delivery, other than distribution of food boxes must be studied to meet the need for individually adapted meals. Our results could be used in order to develop a questionnaire or as a foundation for an intervention to increase appetite among older people with food distribution in their homes.

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### Authors’ Contribution

Å. Hörnsten and M. Nordlander were responsible for the study concept, study design, and acquisition of subjects. M. Nordlander, Å. Hörnsten, and U. Isaksson analyzed the data and prepared the manuscript. All authors critically revised, contributed with comments, and approved the final version of the manuscript.

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