Acceptability of Convenience Food Among Older People

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Abstract

Independent living in their own home is currently an ideal shared by many older people. However, weakening physical strength and illness are often associated with nutritional risks. Convenience food is one option to ensure that nutritional needs are met, but convenience food itself and its packaging face negative attitudes. This article analyzes the factors connected to acceptability of and obstacles to using convenience food among older people in Finland. The analysis was done by using three sets of data gathered using a qualitative research method for examining how older people relate to convenience food and food packaging. The methods used were empathy-based stories (2011 n = 114) and two rounds of focus group discussions (2012 n = 22, 2014 n = 32). By and large, the study participants associated negative meanings with convenience food. Some saw convenience food as an easy solution in certain situations. Our study showed that elderly individuals valued healthiness of food, freedom of choice, and right of self-determination in eating. Acceptability of convenience food and easy-to-use and environmentally friendly packaging were valued by many interviewees.

Keywords

older people, convenience food, acceptability, packaging, empathy-based methods, focus groups

Introduction

Older people today want to stay living in their homes as long as possible and to prepare food and take care of household tasks independently (McKie, 1999; Sidenvall, Nydahl, & Fjellström, 2001; Wiles, Leibing, Guberman, Reeve, & Allen, 2012). They are also encouraged to do so because independent living is cheaper for society than institutional care (Laine, Linna, Noro, & Häkkinen, 2005; Lumio, 2015). At the same time, the growing numbers of older people living at home, in Finland, for example (Official Statistics of Finland, 2016), entail certain challenges from the perspective of nutrition and eating. These questions become especially vital in a stage of life when a person's physical capacity starts to weaken.

Changes caused by aging both in physical and mental health proceed at different paces with different people. On one hand, many elderly people are active and healthy, and can cope independently with their daily activities (Alden-Nieminen et al., 2009; Tedre & Pehkonen, 2014). On the other hand, there are those who have trouble getting around or suffer from some chronic diseases. For example, the number of elderly people with memory disorders has been growing (Alden-Nieminen et al., 2009).

People's food preferences and nutritional needs also change over the course of their lives. Sickness and lack of independence are associated with nutritional risks, whereas with older people with a higher degree of well-being, independence, and income, the risks are smaller (Payette & Shatenstein, 2005). The changes may be due to, for example, a weakening of the senses of taste and smell or chewing ability (Kremer, Bult, Mojet, & Kroeze, 2007). One third of Finns aged 70 or older have trouble chewing hard and tough food. Along with age, people's ability to prepare food also decreases (Helldán & Helakorpi, 2014). Moreover, weakening eyesight affects people's ability to do their own shopping or look after household chores. Similarly, new life situations, such as becoming widowed, can change people's eating practices (e.g. Kullberg, Björklund, Sidenvall, & Åberg, 2011; Vesnaver, Keller, Sutherland, Maitland, & Locher, 2016). In these circumstances, convenience food can be one alternative for older people to look after their daily nutritional needs.

The use of convenience food has constantly been increasing in Finland (Aalto & Peltoniemi, 2014; Heiniö, Pentikäinen, Rusko, & Peura-Kapanen, 2014) and in other Western countries, such as the United Kingdom (Buckley, Cowan, &

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McCarthy, 2007; Mahon, Cowan, & McCarthy, 2006), the Netherlands (Heiniö, Arvola, Rusko, Maaskant, & Kremer, 2017), and the United States (Devine et al., 2009). According to de Costa, Schoolmeester, Dekker, and Jongen (2007), ease of preparation is regarded as a central advantage of convenience food, but on the contrary, it is regarded as tasteless. On the whole, convenience food is considered unhealthy and low in nutritional value among consumers (Brunner, van der Horst, & Siegrist, 2010; Kahma, Mäkelä, Niva, Ganskau, & Minina, 2016; Kupiainen & Järvinen, 2009; Lundkvist, Fjellstrom, Sidenvall, Lumbers, & Raats, 2010).

Furthermore, Finns, for example, tend to have the opinion that food eaten at home should be self-made with basic ingredients, and they see preparing food as a way of relaxing (Kupiainen & Järvinen, 2009). The tradition of preparing food for oneself at home is still highly valued especially among elderly people (Edfors & Westergren, 2012; Kahma et al., 2016; Moisio, Arnould, & Price, 2004), and there is distrust toward convenience food (e.g. Lundkvist et al., 2010). In this context, previous studies have shown that older people especially often hold negative attitudes toward convenience food (e.g. Kahma et al., 2016; McKie, 1999; Saba, Messina, Turrini, Lumbers, & Raats, 2008; Sidenvall et al., 2001), and consume convenience food less compared with the younger age groups (Brunner et al., 2010; Hunter, & Worsley, 2009; Kahma et al., 2016). Among the elderly, those who live alone or have become widowed use convenience food more compared with two-person households (Edfors & Westergren, 2012; Hunter & Worsley, 2009; Saba et al., 2008; Vesnaver et al., 2016).

Convenience food attitudes may be affected not only by the product itself but also by the package in which it is sold. During recent years, studies have focused on food packaging from elderly consumers' perspectives. Physiological changes like weakening strength in arms and deteriorating eyesight are challenges for package design (Duizer, Robertson, & Han, 2009). There has been research concerning how elderly people see the package information (e.g. Rusko et al., 2011; Silayoi, & Speece, 2004) and what sort of problems they have experienced in package handling (e.g. Duizer et al., 2009; Laguna et al., 2016). Opening food packages is problematic for many elderly people because of tight lids, small print, and spillage during opening (Duizer et al., 2009). Moreover, small print on the package is related to usability of the package (Silayoi & Speece, 2004; Sudbury-Riley, 2014). The recyclability and easy disposability of packages are important to older consumers (Heiniö et al., 2017). The importance of the properties of the package as well as nutritional information on the package is emphasized especially in choices concerning groceries, which are often made fast and without planning in advance (Silayoi & Speece, 2004).

The convenience food markets have constantly been expanding and diversifying in various countries. In Finland, the convenience food selection in retail stores includes packaged ready-to-heat or frozen foods and warm foods available

at deli counters. Whole ready-made meal packages in the store have thus far been scarcely available in Finland compared with some other countries. Municipal or private service providers offer hot meals that are delivered to customers' homes on a daily basis. Some of the older people living at home have so-called food machines, which are filled with frozen meals and from which the user can take out meals daily, defrost them, and heat them (Alden-Nieminen et al., 2009; Nykänen, Rissanen, & Hartikainen, 2014).

Nutritional needs and related risks vary in different groups of older people, depending on their functional ability, illnesses, and living arrangements. Suominen et al. (2014) list adequate intake of energy, protein, nutrients, fiber and fluid, and a vitamin D supplement as one of the key nutritional guidelines for older people. Studies have shown that 7.8% of community-dwelling older people are malnourished (Soini, Suominen, Muurinen, Strandberg, & Pitkälä, 2011) and that homebound older adults have inadequate nutritional intake (Locher, Robinson, Roth, Ritchie, & Burgio, 2005). Convenience food can be one means of improving the nutritional intake of these groups—although it should be remembered that not all convenience food contains enough nutrients.

The above description of older people's use of convenience food shows that various factors and mechanisms are associated with food choices. In terms of practice theories (Reckwitz, 2002), to create a change in the old routines and to create a new routinized practice, there have to be positive images and meanings, material equipment, and adequate competence related to the new habit (Shove & Pantzar, 2005). As regards healthy convenience foods, this means that convenience food is available for a reasonable price, is associated with positive meanings, and consumers need to be able to prepare convenience food meals, for example.

The analysis of acceptability of convenience food among older people is inspired by the practice theoretical thinking. Hence, in this article, we analyze factors that are connected to the acceptability of and obstacles to using convenience food among older people. Here, acceptability is related to the convenience food itself and the food packaging as well, that is, meanings and images, materialities, and competence (Shove & Pantzar, 2005).

This article builds on three sets of data gathered using qualitative research methods for examining how older people relate to food, and especially convenience food and convenience food packaging. Focus is placed on those factors connected to food itself and food packaging that make people see food at large and convenience food in particular either as good or bad. We also explore what convenience foods and meals should be like, from the perspective of older people, for them to want to use them.

In this article, the term *convenience food* refers to the different convenience food products and ready-made meals sold in retail stores and meals delivered to older people's homes by various public or private meal-distribution services ("meals on wheels"). Convenience food always comes

Table I. Characteristics of the Data and Study Participants.

	Data		
	Empathy-based stories (2011)	Focus group discussions 1 (2012)	Focus group discussions 2 (2014)
Themes	The respondents were asked to describe in their own words a good and a bad meal, its taste and smell, what it looks like, and where the good/bad meal is prepared.	Key themes: what kind of things should be considered when planning meals for older people, expectations on ready-made meals, characteristics of a good package, ready-made meals of the future, and packaging of the future.	The respondents were shown two packaging models for readymade meals and asked to assess their usability, readability, and clarity.
Size of the data and background characteristics of the participants	 II4 empathy-based stories 70 women, 44 men age of respondents: 65 to 81 years 	 3 focus group discussions (22 participants) age: 65 to 82 years 13 women, 9 men duration from 100 to 120 min 	 6 focus group discussions (32 participants) age: 65 to 82 years 18 women, 14 men duration from 115 to 130 min

in some sort of packaging that also needs to be accepted by consumers. The concept and definitions of acceptability vary in different studies. Acceptability can, for example, simply mean liking or not liking something. Cardello (1994) associates it in his writings on food acceptability with phenomenology and also links an emotional and hedonistic aspect to it. Acceptability is thus formed on the axes of "pleasant-unpleasant" and "I like it—I don't like it." When speaking about acceptability of convenience food in the study at hand, acceptability is manifested as a positive attitude toward convenience foods and meals and a willingness to use them.

Method

The study is a part of a project where convenience food products and packaging especially aimed at older people were developed and evaluated. Three sets of qualitative data gathered in different phases of data collection were analyzed in the present study (Table 1). First, older people's perceptions of a good and bad meal were collected using the method of empathy-based stories (EBS). The data in the second and third phase were gathered through focus group discussions. The people who took part in the study were aged 65 to 82.

Data From EBS

In the method of EBS, the data comprise short stories written by study participants and prepared according to the instructions given in a frame story (Eskola, 1997). In the frame stories, the respondents are steered to assume a particular role and write about a particular topic. One essential element of the method is variation: at least two versions of the frame story are prepared, which deviate in terms of some key aspect (Eskola, 1997). In the study at hand, the variation had to do with the quality of food. The respondents were asked to describe a good (Frame Story 1) and a bad (Frame Story 2) meal. They were asked to describe the meals in more detail

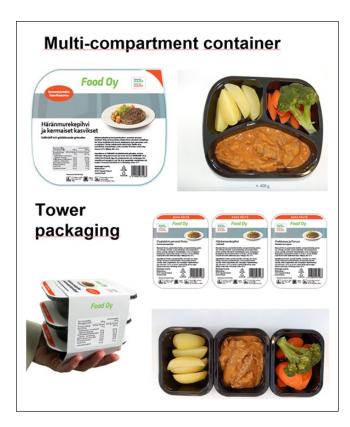
in terms of, for example, taste, smell, and appearance. In the instructions, the respondents were also asked to write about where and in what kinds of situations the meal would be had and whether it was prepared at home or ready-made somewhere else.

Altogether 300 older people were selected for the study, some of whom were found through the Consumer Panel of the National Consumer Research Center and the rest from the Finnish Population Information System. All the members of the panel who were more than 64 years old, 114 persons in total, were selected to participate in the study. A total of 186 study participants aged 65 or older were selected from the Population Information System. Of the participants, 150 were sent the "good meal" frame story, and 150 the "bad meal" frame story, in October 2011. More descriptions of a "good meal" (82 items, 55%) were sent back in response than descriptions of a "bad meal" (32 items, 21%). A closer inspection of the meal descriptions showed that in practice, the responses basically included nearly an equal amount of both types of descriptions, as many of the participants who were asked to describe a bad meal had in fact described a good meal. The participants explained this in their responses by stating that they had never had bad food or didn't know how to describe it.

The length of the study participants' stories varied to a great degree: the shortest ones consisted of only a few lines, the longest ones of a few pages. Many of the stories were rich, detailed, and also highly emotionally appealing in terms of language. The descriptions of bad meals were especially exact and expressive.

Data From Focus Group Discussions

Two sets of data were gathered within the project from focus group discussions. The first set of data was gathered in February 2012. There were altogether 22 members in the three groups, 12 of whom were women and 10 men.



Picture 1. Multi-compartment container and tower packaging.

The groups were made up of panel members residing in Southern Finland. In the focus group discussions, convenience food was discussed on a general level, to uncover, for example, the participants' views on ready-made meals and food products sold in stores or delivered to clients' homes by meal-distribution services, and what kind of future expectations are connected to the food, the packaging, and meal practices.

The aim with the second set of data from focus group discussions was to explore how older consumers relate to new types of packaging for convenience food products. A total of 32 people took part in the six focus group discussions held in March 2014. The participants resided in the Helsinki Metropolitan Area. They were given two ready-made meal packages to assess, which had been developed within the research project based on the wishes of older consumers (see Picture 1). The meal inside the package—potatoes, vegetables, and meat sauce—was presented in pictures. In one of the packages, the different components of the meal were contained in separate boxes that were joined with a binder and the other package model was a so-called compartment package (Picture 1).

The aim of the discussions was to explore the participants' opinions on the packaging concept itself and on how clear and understandable the information on the package was. This article does not focus on the acceptability of these two packages specifically; the purpose of the packages was to inspire

discussion on convenience food packaging and convenience food in general.

The idea of focus group discussions is based on interaction within the group, which enables the group's internal dynamics to produce a large amount of information that is new and also richer than information gained in, for example, personal interviews (see, for example, Farnsworth & Boon, 2010). Different and even conflicting views exchanged by the participants, and the reasoning behind them, are fruitful when, for example, new innovations are being developed.

Analysis of the Data

The focus group discussions were recorded and transcribed. All the data were read through several times to formulate the themes regarding convenience food. We sought from the data statements concerning the use of convenience food, the reasons for using or not using convenience food, and expectations concerning convenience food. In the analysis of the data from the EBS, we paid attention to which factors changed in the responses when the frame story was changed.

By categorizing the data under themes in the analysis, we aimed to examine in more detail what kind of factors concerning the choice of either convenience food or self-made food appeared in the statements we had discovered. This enabled us to formulate sub-themes depicting the data, and they in turn formed a categorizing frame for presenting the results. The same themes were largely repeated in both the focus group discussions and the EBS. Some themes did however arise in the focus group discussions that did not appear in the data from the EBS.

The marks on the quotes picked from the EBS and from the focus group discussions (FG1, FG2) indicate which type of data they originated from and the gender of the respondent.

Results

The attitudes toward convenience food were mostly suspicious or critical among the participants in the focus group discussions and the writers of the EBS. In the data from the EBS, what emerged as a factor distinguishing between a good and a bad meal was the way in which the meal was produced: was it self-made or ready-made. Bad meals were often associated with ready-made food, and good meals with self-made food. In the data from the focus group discussions, the study participants also often juxtaposed self-made and ready-made food when they were asked about their practices, opinions, and experiences. The participants emphasized the positive aspects of self-made food and the negative aspects or shortcomings of ready-made food. The views presented in the focus group discussions on convenience food were not, however, as steeply negative as in the data from the EBS, whether speaking about store-bought ready-made food or food delivered to clients' homes by a meal-distribution service.

Many of the respondents found it hard to picture themselves regularly using convenience foods:

I don't have any experiences of using ready-made food, except maybe from eating airplane food when traveling, and I've sometimes come across some gems there too. But what I've seen my friends eat, those ready-made meals, they look pretty crummy to me. (FG1, woman)

Aside from the critical statements, some of the respondents regarded convenience food as satisfactory to eat or at least as food "that will get you by." Some of the interviewees associated the use of convenience food mostly with situations where it wasn't possible to cook food oneself.

Some of the respondents were not generally interested in cooking or eating, and had poor cooking skills. Some of them described eating as a necessary act to satisfy hunger, and thus did not show critical attitudes toward convenience food. As a participant in a focus group discussion stated,

I'm not interested in eating. When I have to eat, it might just as well be ready-made food. (FG2, man)

We discovered five elements in the data through which the study participants defined good and bad food in general and convenience food in particular. In the following, we will analyze those dimensions.

Sensory Properties of Food

Taste defined both good and bad convenience food and meals. The older people in our study found the range of tastes that they had become accustomed to throughout their whole lives important. They evaluated the taste of food based on the use of salt, spices, and flavor enhancers. Proper amounts of both salt and other seasonings made food taste good.

Opinions on the saltiness and seasoning of convenience food were, however, divided. Some of the study participants felt that convenience food was well seasoned, while others regarded it as tasteless explicitly because it wasn't salty enough. Excessive amounts of salt were also noted in the product information on the package. As one participant remarked,

All that salt, when I looked at them more closely, how much salt they contain and all those additives and all, it makes me shiver afterwards. (FG1, woman)

The opinions on the taste of food delivered to clients' homes by meal-distribution services also varied. Some of the study participants regarded it as tasty, others as tasteless. The negative experiences were attributed to the coldness and sogginess of the food. However, some of the participants were pleased with meal-distribution services in every respect: the food arrives at the agreed-upon time, and it is warm enough

and also tasty. The lack of fresh ingredients was something that was regarded as negative in turn.

The study participants mentioned standardized flavors as one obstacle to using convenience food. Many of them felt that "all ready-made food tastes the same." This was attributed to the flavorings used in convenience food. Excessive seasoning is seen as a means of concealing, for example, the poor quality of the ingredients:

I've used ready-made foods quite a lot, I mean, grabbed some in the morning on my way to work, and stuff. It's true that they've got better, but my general impression is that they all taste the same. Maybe I'm exaggerating a little, or a lot, but they do. Perhaps it's because of those flavor enhancers or whatever they put into them, or the fat, but you get this feeling like, hey, what is this, it tastes just like what I ate yesterday, even though it's supposed to be something entirely different. (FG1, woman)

On the contrary, the following participant in the focus group discussions wanted to stress that there are also tasty alternatives and pleasant surprises to be found among convenience food, coupled with improvements in quality and a diversified selection:

Really, there are lots of alternatives these days, and the packages come in different sizes. I think the quality has clearly improved and it's not just a choice of those traditional preheated oven foods and such anymore. They've managed to balance the amount of salt, and sugar as well. You just have to dare to step out of the box and try one of those new kind of ready-made foods. You can get many pleasant surprises and tasty surprises. (FG1, man)

The EBS, in particular, pointed out the impact of the smell of food on its acceptability. The participants regarded a pleasant aroma as one distinctive feature of a good meal. The smell of a bad meal in turn was found repellent:

The delicious smell of sausage soup already as it boils, it tastes good, the colors are beautiful, and it's seasoned properly. (EBS, woman)

I didn't get that delicious smell of a meal, it actually may have tasted a little burnt. (EBS, woman)

The study participants expected the same familiar, clear, and identifiable tastes from convenience food that they had become accustomed to when they had cooked food for themselves. Convenience food should taste like homemade food.

Appearance and structure also affected the attractiveness and acceptability of a meal. A bad meal was often seen as "grey mush," which is how many of the study participants described the convenience food that they had seen or eaten from, for example, meal-distribution services. Many of them regarded the structure of store-bought convenience food as unsatisfying. Food should be easy to eat but not pureed to paste:

Easy to eat is fine, but it still has to have some structure, and not be mushy.

(FG1, woman)

The study participants also hoped for convenience food to be pleasant and appealing in appearance. For example, colorfulness could increase its attractiveness and make up for the effects of physical changes in the other senses, such as a weakening sense of taste, as in the following extracts:

I think that that meal should somehow be made look attractive, it should have colors and not look like any old fodder. (FG1, woman)

And the way it looks, it matters to me, like those rolls, they looked tempting. The thing is that the sense of smell become weaker when you get older, at least it has in my case, and that whole visual side, the way it looks, has become pretty important to me. (FG1, woman)

Healthiness

Many older people stressed that they wanted to eat healthy food. The differences between self-made food and convenience food were explained through various paths of reasoning. One of the grounds offered for the healthiness of self-made food was that a self-made meal always includes vegetables or fresh ingredients. Participants in this study felt that today's convenience food is not nutritionally balanced. They did not regard convenience food as complete food because it lacks fresh ingredients such as vegetables and greens in the form of a salad, for example. Some of the participants were annoyed because they had found the picture indicating healthiness on the package of the convenience meal misleading:

Some of the ingredients in the picture were added there kind of as a side dish, and the meal doesn't really contain them. (FG1, man)

The origin and ingredients were other important criteria among the study participants in assessing the healthiness of food. A self-made meal made of domestic ingredients was seen as clean and healthy, and one knows what it is made of. Many of the study participants also stressed their preference for ingredients that they have gathered from nature or grown themselves. With convenience food, the ingredients and their origin or amounts are not always disclosed, as in the following extract:

The worst thought is having a so-called convenience meal made of ingredients with which you can't tell where they've come from and what they really are. (EBS, woman)

The amount of additives in convenience food was also a cause of concern for many of the study participants. The

unhealthiness and poorer quality is also reflected in fattiness, which the participants noted in the list of ingredients or saw by just looking at the food. This, together with the included preservatives or additives, was stated as a reason for not using convenience food. The participants also believed that expiration dates too far in the future reduced the quality of the food.

Self-made food wasn't always seen as healthy either, as unhealthier practices, such as using butter and cream in cooking to improve flavor, were also sometimes reported. This was not always seen as a problem, however. One of the participants in the group discussions who was more than 80 years old felt that in that stage of life, it didn't matter very much what a person eats. Unhealthy eating was accepted if it means that the food tastes better:

There has to be cream and butter in food for it to have any taste. And once you've turned 80, it doesn't really matter anymore, as long as the food tastes good. (FG1, man)

Financial Factors

In the comparison between convenience food and self-made food, the price of food and groceries was also discussed. Self-made food was seen as cheap because, for example, one can prepare meals that can be eaten for several days. Ingredients that one gathers or cultivates oneself make self-made food cheap to prepare. Many older people also take advantage of special offers in stores when they plan their meals for the week.

Some of the older people in our study regarded store-bought convenience food and ready-made meals, as well as food from meal-distribution services, as expensive. However, some of the users of convenience food regarded it as cheap. The price/quality relationship was also recognized in convenience food. Many of the study participants were ready to pay for good-quality convenience food. It was, however, also acknowledged that cheap convenience food is of lower quality than expensive convenience food.

The price of convenience food appeared to be a central factor affecting its acceptability. The concepts of expensive and cheap are, however, relative, and opinions on the price of food reflect the financial situation of the eater. Some of the study participants stated that they have to consider very carefully how much money they can spend on food, whereas others said that they can buy food without having to give much thought to how much it costs.

Effortlessness and Ease

Some of the study participants named effortlessness as a central reason for using convenience food. It was seen as an easy solution in certain situations. Many of the participants who lived alone did not want to be bothered by cooking food themselves—not regularly, at least. Effortlessness and ease

were one reason to continue using convenience food in the future. Using convenience food saves time and trouble:

I would say from my own experience and for my own part that I tend to use more and more of these ready-made-foods and keep looking through the shelves for new options. Simply because I can't be bothered with cooking. The thought of cooking for myself, although I do it sometimes . . . I'd rather just get something ready and different. I guess that's the main motive. (FG1, man)

On the contrary, those study participants who mainly cooked for themselves explained it with reasons of comfort. They stated that they had time to cook, they found cooking an enjoyable pastime and a highlight in the day, and that convenience food only rarely offers the same experience. They felt that planning meals, grocery shopping, and cooking at home improved their physical capacities, mental vigor, and well-being:

At least you know what goes into the food, and as a pastime it's good for the mental health, and it's a good thing that you do it while you still can. (FG1, woman)

Staying Independent

The older people who took part in the focus group discussions rarely reflected on a situation where they would no longer be able to cook for themselves, as it was something many of them found hard to imagine. They did however admit that as they get older and lose strength, it may not be as possible for them to cook food for themselves as it is now. Some of them even saw a future of living at home and only being able to use convenience food as scary. To avoid it, they were ready to work on their physical capacities, as the following quotes from the group discussions testify:

I find myself actually dreading the future if it means I have to regularly rely on convenience food. I try to stay fit so that I can keep on cooking. (FG1, woman)

It's important to maintain your physical capacities, so that you get to go to the shop yourself, buy the ingredients, decide what you need, to perform that productive function. (FG1, man)

Some of the study participants were scared and worried about having to rely exclusively on, for example, meal-distribution services in the future, rendering them dependent on others. The alternative of meal-distribution services that deliver a hot meal to clients' homes every day at a certain time was also one of themes of the focus group discussions. Many of the participants felt that using meal-distribution services would mean submitting to decisions made by others. They would no longer be able to decide for themselves when and what to eat:

. . . You'd get that Styrofoam box of food made who knows where delivered behind the door, twelve o'clock every day, and you'd have no influence on the contents. (FG1, man)

... Things have come to the point even with food, that it gets delivered to retired people who just stay lying around there at home and are in poor shape to begin with, and the city thinks, hey, fine, we'll just throw the food in through the door, they'll be all right, and efficiency wins big. Not a good idea. (FG1, man)

The study participants felt more positive about the option of getting to choose their food from among different alternatives and to thus influence the contents of the meal, as it would allow them at least a certain degree of independence in deciding for themselves.

Properties of Convenience Food Packaging

With store-bought convenience food, the older people of our study hoped for more attention to be paid to individual preferences and needs. For example, they were not pleased with the sizes of the meals or packages. Many of them felt that the meals were too big for one person and hoped for them to be packed either in smaller, one-person packages or in packages serving at least two people.

Packages were an important issue when the older people discussed convenience food. They were expected to be easy to open, handle, and discard. Even if a meal tastes good, it might not be bought again if the package is difficult to open. As physical capacities weaken, the significance of how easy the package is to open becomes all the more central. As one study participant remarks,

Being able to open the package, that's one key thing. Even normal younger people can't get them open. Let alone an older person whose hands keep shaking or has only one hand or something like that. (FG2, man)

The information on the packaging of convenience food should be clear and easy to read. Older people are especially interested in the origins of the different ingredients in the meal and in its nutritional value, as well as in the expiration date. A see-through part in a package adds to its attractiveness. A ready-made meal should be served in a package where the different components are either in individual segments or containers.

Discussion

The attitudes toward convenience food among the older people in our study were rather reserved and critical, although more positive aspects were expressed too. In this respect, our study is also supported by previous studies on the food choices of older people (e.g. Hunter & Worsley, 2009; Lundkvist et al., 2010; McKie, 1999; Saba et al., 2008; Sidenvall et al., 2001). The central factors relating to the use and acceptability of convenience food shown by earlier research also emerged in our study. They include, for example, sensory factors (taste, smell), healthiness, and values.

This result suggests that negative images and meanings related to convenience food are a major barrier to its use (c.f. Reckwitz, 2002).

Taste, smell, appearance, and health-related properties are clearly markers of distinction between self-made food and convenience food. For most of our study participants, their experiences of convenience food did not match their taste preferences. The negative properties linked to the taste of convenience food could be explained by two factors.

First, traditions and other cultural factors are of central importance in the acceptability of convenience food. The older people of our study stressed that they have always cooked their food themselves. According to Moisio et al. (2004), "homemade is a malleable cultural construct that consumers find 'good to think with." The participants of our study associated the notion of good food with flavors and impressions familiar from childhood. When they were young or starting families of their own, there were hardly any convenience food products available in stores. Good food always involves a personal relationship, an emotional bond (Mäkelä, 2000). Convenience food, in turn, is impersonal for the very reason that that it isn't self-made (Mäkelä, 2000). Brunner et al. (2011) as well as Kahma et al. (2016) in fact speak about a generational effect: older people today represent a generation that have always cooked food from scratch themselves, and they wish to maintain the practice. Taste and smell preferences and experiences acquired in childhood have also been found to have a long influence on perceptions and atmospheres associated with food (Edfors & Westergren, 2012). People find it difficult to give up traditional practices connected to eating (e.g. Edfors & Westergren, 2012; Fjellström, Sidenvall, & Nydahl, 2001). It is likely to take time for the older generation to become accustomed to convenience food and relate it to new positive meanings. It can only happen gradually, as aging people will also start to have experiences of convenience food they enjoyed as children.

Another explanation for some older people in our study might be that as the sense of taste weakens with age, the meals should contain enough elements that produce taste and mouthfeel suited for an older person (Hall & Wendin, 2008).

Although our study showed that a significant segment of older people have reservations about convenience food, some of the study participants did, nevertheless, point out effortlessness as a positive aspect. The significance of ease of use to the acceptability of convenience food becomes especially pronounced in changing life situations (e.g. Kahma et al., 2016; Saba et al., 2008). The older people of our study who live alone may not always want or even know how to prepare food themselves. Vesnaver et al. (2016) reported that the older widowed women significantly reduced their meal preparation activities. For many widowed men, convenience food is a usual choice (also Edfors & Westergren, 2012; Kullberg et al., 2011).

The older people in our study regarded the presumed unhealthiness of convenience food as a significant obstacle to their using it, and in this finding, our study is also supported by earlier research (Brunner et al., 2011; Lundkvist et al., 2010). Convenience food is seen as unhealthy due to the additives used in it, lack of information about the origin of the products, and fattiness. For older people, self-made food is real, proper food (e.g. McKie, 1999; Moisio et al., 2004); it is traditional in terms of structure and method of preparation, and it contains natural ingredients. Homemade and natural meals were seen as healthy, unlike ready-made meals (also Lundkvist et al., 2010). As the writers of EBS for our study, Lundkvist et al. (2010) found that older people categorize food as either good or bad in relation to its health aspects.

The ways in which older people relate to the health aspects of food are, however, conflicting. In the study by Lundkvist et al. (2010), some of the older people interviewed paid attention to the healthiness of the food they ate, while others did not find reason to shift toward healthier eating practices. In our research, as well, some of the study participants regarded the healthiness of food as important, whereas others no longer cared, or had never cared, about the health aspect to any great extent. Some even reported that ingredients known to be unhealthy, such as butter and cream, are at least occasionally consciously used to improve the flavor of food (Jallinoja, Pajari, & Absetz, 2010).

In addition to the images and meanings related to convenience food, materialities and related competences also mattered (c.f. Shove & Pantzar, 2005). For some study participants, convenience food was too expensive. When it came to packaging, the study participants placed importance on how easy a package is to open, as well as on usability and ecological aspects. They appreciated clear information and easy-to-read markings. Our results are in line with earlier findings on older people's requirements for food packaging (Duizer et al., 2009; Heiniö et al., 2017; Rusko et al., 2011). Like Heiniö et al. (2017) and Sudbury-Riley (2014), the older people in our study emphasized the importance of the environmental impacts of packaging. They may in fact decide not to buy a convenience food product for environmental reasons. They have, ever since childhood, become accustomed to a lifestyle where no extra "waste" is produced around food: all of the food is eaten and used. They are used to saving food packages for later use. When convenience food packaging, or any other packaging, can be sorted and utilized later, it increases the acceptability of a product. Laguna et al. (2016) emphasize that packages that fulfill the requirements of older people would also help them to maintain a sense of autonomy and control in their lives.

Many of our study participants saw no need or reason to start using convenience food as long as they feel they have the physical capacity to prepare meals for themselves (also Gustafsson, Andersson, Andersson, Fjellström, & Sidenvall, 2003; Kullberg et al., 2011; McKie, 1999; Pajalic et al., 2012). Moreover, they dreamed of being able to stay living at home for as long as possible. Sidenvall et al. (2001) point out that it is especially the activities connected to eating that

keep older people active and healthy. Being able to cook food for oneself and to do grocery shopping also means independence in deciding about one's own affairs (Gustafsson et al., 2003; McKie, 1999).

Among older people, concern over meal management in new life situations can increase the fear of becoming dependent on others (e.g. Sidenvall et al., 2001). In our study, in the context of convenience food, the risk of decreasing selfdetermination was especially linked to use of meal-distribution services. There were differences between women and men in how they adapted to new life situations, especially depending on what kind of role or experiences they had had in food management at home before. In earlier studies, changes in life situations, such as the death of a spouse, often mean either resorting to store-bought convenience food or meal-distribution services. According to Edfors and Westergren (2012), many men reported positive experiences with meal-distribution services and saw them as a good alternative for getting nutritionally balanced food. Women find it important to remain independent of others (also Gustafsson et al., 2003; Pajalic, Persson, Westergren, Vanja, & Skovdahl, 2012; Sidenvall et al., 2001). Widowed older people easily give up cooking, partly or altogether, and start to use storebought convenience food (Kullberg et al., 2011).

Conclusion

Our study offers bases for the development of convenience food products and packaging for older people through analysis of the factors older people find important when it comes to their future food and eating needs. Acceptability of convenience food among older people requires an availability of meals that contain positive meanings, for example, by matching taste preferences and sensory capacities, and also taking healthiness and sustainability into account. This could mean that the food is seasoned so that it tastes good even for eaters with a weakened sense of taste. Moreover, current culinary cultures have to be taken into account, as older people often prefer to eat foods they are used to. However, in the near future and even already today, older people increasingly have experiences of various ethnic cuisines, and hence following the traditional local cuisines will no longer suffice in convenience food.

Earlier studies have typically analyzed either the acceptability of certain foods or the packaging. In the present study, we provide a broader perspective by simultaneously analyzing the perceptions of both food items and their taste and packaging. Moreover, the results show that both the materialities and the images related to food are central in the acceptance, and that these are in mutual interaction.

In the development of meal-distribution services, it would be important to understand older people's individual needs and cultural customs and practices. Older people value freedom of choice and right of self-determination as a consideration in how meal-distribution services are organized. When it comes to food choices and preferences, older people, as with other population groups, do not form a homogeneous group in their attitudes toward convenience food. This heterogeneity should be taken into account when planning nutritional interventions for older people, meal-distribution services, and the food selection in senior homes.

When studying acceptability of convenience food, concern should be paid for both food and the packaging. What should future convenience food for older people—and its packaging—be like? One of the participants in a focus discussion summarizes.

Most importantly they should be nutritious, taste good, look good, attractive and come in a size that doesn't produce unnecessary waste, so that the whole of the product could be used in a person's own circle of life.

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