

The Taste of ‘the End of the Month’, and How to Avoid It: Coping with Restrained Food Budgets in a Scandinavian Welfare State Context

Annemette Nielsen*, Thomas Bøker Lund** and Lotte Holm***

*Department of Food and Resource Economics, University of Copenhagen

E-mail: anmn@ifro.ku.dk

**Department of Food and Resource Economics, University of Copenhagen

E-mail: tblu@ifro.ku.dk

***Department of Food and Resource Economics, University of Copenhagen

E-mail: loho@ifro.ku.dk

Based on a mixed methods approach, this article describes the prevalence of different levels of food budget restraints in a sample of 1,650 Danish households, and explores different types of coping strategies to deal with such restraints. Strategies concerned cooking, eating and buying food. A deeper knowledge of coping strategies was obtained by analysing qualitative data from interviews with thirty families who have experienced food budget restraints. Results revealed that more than 40 per cent reported some level of restraint on their food budget, while about 20 per cent experienced more substantial food budget restraints or food insecurity. Single parent households were at significantly greater risk of experiencing restraint than others. An investigation of coping strategies showed that some strategies, for example, using leftovers and cooking seasonal products, were common across all levels of budget restraint, while strategies affecting social life and taste preferences negatively were mostly applied when restraint was more severe. The qualitative analysis explored how the various strategies involved the potential for both positive and negative experiences for the individual, depending on the wider context surrounding the need to reduce household food budgets. Results from this study may be important for developing adequate measures to influence food purchases and eating practices in specific groups in situations of widespread economic turbulence in welfare societies.

Keywords: Food budget restraint, food insecurity, coping, mixed methods, Scandinavian welfare societies.

Introduction

If you have bought some cheap meat, for instance this minced chicken, then you can cook meat balls which actually taste alright. They don't necessarily have the taste of the end of the month. But that is only if you can find it at a reasonable price. Otherwise, I am not the big chef, in the sense that I can magically just turn some leftovers into a fancy meal. (Divorced mother with middle income, lost her child care benefits when her daughter turned eighteen)

This article examines the extent of food budget restraints in Denmark, outlines the socio-demographic groups that are most at risk of experiencing such restraints, and describes

how households cope with food budget restraints. The analysis is based on data from a larger project¹ investigating how food budget restraints influence dietary health, the sustainability of diets and quality of life.

Coping has been defined as a 'person's constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the person's resources' (Folkman *et al.*, 1986: 993). The concept covers both emotional regulation and concrete problem-solving strategies. Thus, individuals may experience a specific behavioral effort differently at a cognitive and emotional level. Changes made in shopping, cooking or eating practice in order to cope with budget restraints may be experienced as deprivation, but also as resilience and empowerment.

Most studies on reactions to restraints on private household finances in terms of food consumption address low-income groups in countries characterised by large socio-economic differences. Often, these studies focus on the part of the population experiencing food insecurity (Dowler, 1997, 2008; Oldewage *et al.*, 2006), and on risks related to health and nutrition (Darmon and Drewnowski, 2008). So far, the prevalence of food insecurity has not been studied in Scandinavian welfare societies such as Denmark. Until recently, dominant political and research discourses in Denmark have maintained that the existence of a universal social security system means that no-one need be deprived of basic necessities such as food (Sørensen, 2009; Hansen, 2010). Therefore, the need for introducing an official poverty line has been strongly debated and resisted by government. However, in recent years there have been increasing indications that among low-income groups, some people, including couples living on social welfare, immigrants, single parents and children in such households, experience serious forms of deprivation (Pedersen, 2011; Statistics Denmark, 2014). In 2013, the center-left government in Denmark decided to introduce a poverty line, defined as an income of less than 50 per cent of the median income for at least three consecutive years. However, in spite of this, the discussion of how economic restraint affects food and eating practices in the population has been largely absent from the Danish policy discourse, as well from research on poverty and deprivation.

However, in welfare societies like Denmark, it is not only low-income groups who are at risk of experiencing restraint on household budgets. Broader parts of the population may experience the effects of what is termed the 'economic crisis' through, for instance, governmental reforms of the social welfare system, more restrictive loan policies in the financial sector, falling housing prices and stagnating real wages (CASA and Socialpolitisk Forening, 2013; Statistics Denmark, 2014). In addition, food prices have fluctuated (Headey *et al.*, 2010). In effect, besides having to deal with occasional increasing costs of food, many Danish households may be insecure regarding the robustness of their private economy.

Challenges related to food budget restraints vary in different types of society. As the world economy and global food production appear to have entered a more turbulent form of normality, policy initiatives to meet food-related issues adequately in different societal contexts are important. This requires a thorough understanding of how coping patterns develop in households trying to reduce food expenditure. As part of this, it is relevant to study whether food budget restraints are particularly severe in some socio-demographic segments, which types of coping strategies households develop and the experiences related to such strategies. Therefore, and as a starting point for future research, this article aims to define different degrees of food budget restriction in Danish households, outline

their prevalence in socio-demographic segments and provide insight into typical patterns of coping among budget-restricted households.

Methods

The present study is based on a mixed-methods approach where quantitative and qualitative data resources are employed.

The qualitative data source consists of interviews with thirty individuals from Danish households with different socio-economic characteristics, who had implemented changes in their everyday food handling practices due to economic restraints. The interviewees were recruited by a commercial survey company who screened contacted individuals and stratified them in terms of the following socio-demographic background characteristics: education, household composition, income and place of residence. Individuals were included in the study if they confirmed that they had changed their way of shopping for food, eating at home, or eating outside the home due either to less money or to an increase in food prices during the last twelve months. In order to ensure that interviewees had made substantial changes and were able to describe in detail strategies and practices concerning cooking and shopping for food, individuals were excluded if they: reported a substitution of shopping place as the only change of practice; did not have access to cooking facilities in their home; or had no (important) influence on what food was bought or served to them. People who fulfilled the inclusion criteria and did not meet the exclusion criteria both in the long term (>2 years) and short term (<2 years) were recruited. Additionally, in order to avoid households that were likely to deviate significantly from an ordinary Danish lifestyle, individuals were excluded if they had a very high income (above 2 million Danish Kroner (DKK) a year (€250,000)). Students supported by a government grant were also excluded as their low budgets are taken to be temporary and their living expenses generally to be relatively low.

The contacted people were informed about the purpose of the interview, the conditions of anonymity and that they would receive a gift certificate of 350 DKK for their participation. The qualitative interviews lasted between one-and-a-half and two-and-a-half hours, and were in most cases conducted in the home of the interviewee. The study was approved by the Danish Data Protection Agency.

The interviewees were invited to talk about the financial situation of the household and recent causes of change. They were asked to describe in detail how they had changed their habits of shopping, cooking, storing and eating food in order to reduce their spending. Further, they were prompted to reflect on the motives, consequences and experiences connected with these changes.

A survey was conducted among members of the GfK Household Consumer Panel. Of the approximately 3,000 panel members, 1,999 were invited to respond to a questionnaire (either postal by paper and pencil or by an online 'read and click' system) in December 2012.² The survey was designed and carried out as part of the *Food in Turbulent Times* study. Of the 1,999 invited, 1,650 members responded to the questionnaire, resulting in a response rate of 82.5 per cent (55 per cent of the entire panel). The composition of the entire panel is designed so as to represent Danish households. While the average number of persons in the household in the sample is relatively close to the Danish population (1.9 versus 2.14 in the population), the family composition is not. Thus, men that live alone (8.1 per cent of the sampled compared to 23.6 per cent of Danish households)

and families with children (18.5 per cent in the sample compared to 27.0 per cent of Danish households) are substantially underrepresented. In contrast, couple families without children are overrepresented (41.9 per cent compared to 26.0 per cent of Danish households), as are women living alone (31.5 per cent compared to 23.4 per cent of Danish households) and the over-fifty-five age group (61 per cent compared to 33.4 per cent of Danes). The youngest generation below thirty-five years of age is underrepresented (6.8 per cent compared to 30.9 per cent of the Danish population). Furthermore, as the main shopper usually responds to surveys in the panel, 79.3 per cent are women and only 20.7 per cent are men).

In the questionnaire study, three levels of food budget restraint were defined: food insecurity, substantial budget restriction and mild budget restriction. Household food insecurity was operationalised according to USDA standards, employing the short-form measure where six questions are used to define food insecurity (Bickel *et al.*, 2000). Food insecurity implies that members of the household have limited or uncertain access to food and sometimes even experience hunger (Nord *et al.*, 2010). Participants were defined as having substantial budget restrictions if they responded that they 'very often' or 'sometimes' during the last twelve months, 'Have been forced to purchase cheaper food to be able to afford other things', and at the same time could not confirm that they 'Always had enough food of whatever kind they would like'. This kind of budget restriction, while not involving hunger or uncertain access to food, implies that less preferable foods are often procured. Participants were categorised as mildly budget restricted if they responded as indicated to one of the two statements above but not both. This is arguably a relatively non-intrusive type of food budget restriction, and it is primarily included so as to serve as a comparison group when analysing coping strategies among those experiencing food insecurity or substantial budget restriction. The formulation of items exploring the kind and prevalence of coping strategies aimed at distinguishing between strategies related to shopping, cooking/storing and eating experiences. These formulations were based partly on existing literature about food insecurity (Dowler, 1997; Hamelin *et al.*, 2002; Radimer, 2002), partly on other analyses of food procurement strategies typically employed by Danes, and partly on collegial discussions about what items should be included in a Danish context.³

The definitions of food budget restriction used when screening for the qualitative interviews were broader than those used to construct a budget restriction typology in the quantitative data. The two data sets are, therefore, not precisely matched. However, as shown later, those interviewed for the qualitative analysis certainly exhibited both more and less severe cases of restraint. We, therefore, assume that there is a clear overlap in the qualitative and quantitative material, making a mixed analysis legitimate.

Analysis

We started by using the quantitative data to outline the prevalence of food budget restrictions across different levels of household income (adjusted for number of adults and children in the household (OECD, 2009)), education, and by gender of the respondent and household type. Chi² tests were carried out to detect possible significant differences in the prevalence of food budget restrictions.

In the subsequent analysis of how households cope with food budget restrictions, the qualitative data and questionnaire data were analysed in a convergent parallel design

(Creswell and Plano-Clark, 2011) where the two sets of data are combined with a view to comparing and interpreting the findings in order to obtain a more complete understanding of typical coping strategies.

The qualitative data served to provide a nuanced description of coping. The interviews were recorded and transcribed and the analytical approach followed a combined inductive and deductive procedure. First, a deductive template procedure inspired by King (2004) resulted in the continuous organisation of data in a matrix distinguishing between different coping strategies. A set of main coping strategies were identified, which covered both the contexts of shopping, cooking and storing food and various dimensions of eating. Following an inductive re-coding of the data, different categories of 'positive' and 'negative' experience expressed in the narratives concerning coping strategies were added to the matrix.

We measured coping strategies quantitatively in the subgroup of survey participants who responded that, during the past twelve months, they had often or sometimes been 'forced to purchase cheaper food to be able to afford other things' ($N = 606$, 36.7 per cent). A number of additional questions regarding the actions taken to cope with the financial situation were presented to this subgroup. More specifically, they were prompted for the frequency with which they had attempted to save money on the food budget, for example, by 'Purchasing cheaper versions of the same kind of food'. There were five response options (and also a 'don't know' option): 'never', 'seldom', 'sometimes', 'often', 'very often'. These options were scaled to range from 0 (indicating that the strategy in question is never pursued) to 100 (indicating the strategy is very often pursued). We present the frequency with which these strategies are adopted in the three budget restricted groups organised according to shopping, cooking/storing and eating experience.

Results

We first present results from the survey which describes frequency and socio-demographic characteristics of food budget restrained households. We then use the survey data to outline the prevalence of various coping strategies among budget restricted households, and finally we provide in-depth accounts of the identified coping strategies through qualitative data. We have provided interviewees with fictive names.

Who experiences restraints on their household food budgets?

In total, 40.7 per cent experienced some degree of restraint on their food budgets: 20.4 per cent experienced mild budget restrictions; 12.8 per cent substantial restrictions; and for 7.5 per cent of the households, budget restraint involved food insecurity.

Table 1 shows socio-demographic characteristics of the respondents who were food secure, mildly food budget restrained, substantially food budget restrained, or insecure.

Neither gender nor education significantly predicted differences in the budget restriction categories.

Not surprisingly, experience of budget restrictions was influenced to a significant degree by income. Households in the 1st income quintile had a higher prevalence of food insecurity (12.9 per cent) and quite high prevalence of substantial (16 per cent) and mild budget restrictions (24.3 per cent) when compared with higher income quintiles. There appears to be a threshold after the 3rd quintile, as food security was much more

Table 1 Socio-demographic characteristics of the food budget restrained groups ($N = 1,650$)

	Food secure	Mild budget restrictions	Substantial budget restrictions	Food insecure	Total
Household income*					
1st quintile	152 46.8%	79 24.3%	52 16.0%	42 12.9%	325 100.0%
2nd quintile	164 55.6%	52 17.6%	52 17.6%	27 9.2%	295 100.0%
3rd quintile	181 56.2%	71 22.0%	38 11.8%	32 9.9%	322 100.0%
4th quintile	201 65.9%	64 21.0%	33 10.8%	7 2.3%	305 100.0%
5th quintile	235 72.5%	54 16.7%	26 8.0%	9 2.8%	324 100.0%
Unreported	46 58.2%	16 20.3%	11 13.9%	6 7.6%	79 100.0%
Pearsons $\chi^2(15) = 80.055$, $p = 0.000$					
Education					
No education	179 57.4%	67 21.5%	42 13.5%	24 7.7%	312 100.0%
Vocational	351 55.9%	144 22.9%	86 13.7%	47 7.5%	628 100.0%
Short (1–2 years)	156 64.2%	40 16.5%	27 11.1%	20 8.2%	243 100.0%
Middle long (3–4 years)	217 61.0%	69 19.4%	49 13.8%	21 5.9%	356 100.0%
Long (5 years or more)	76 69.7%	15 13.8%	8 7.3%	10 9.2%	109 100.0%
Pearsons $\chi^2(12) = 16.739$, $p = 0.160$					
Family type					
Single woman	303 58.4%	110 21.2%	67 12.9%	39 7.5%	519 100.0%
Single man	73 54.5%	31 23.1%	14 10.4%	16 11.9%	134 100.0%
Couple household	479 69.2%	126 18.2%	59 8.5%	28 4.0%	692 100.0%
Couple with children	106 43.3%	53 21.6%	57 23.3%	29 11.8%	245 100.0%
Single with children	18 30.0%	16 26.7%	15 25.0%	11 18.3%	60 100.0%
Pearsons $\chi^2(9) = 99.718$, $p = 0.000$					
Gender					
Women	772 59.0%	272 20.8%	175 13.4%	90 6.9%	1309 100.0%
Men	207 60.7%	64 18.8%	37 10.9%	33 9.7%	341 100.0%
Pearsons $\chi^2(3) = 4.858$, $p = 0.183$					

Note: * The household income level reported by participants is adjusted to account for the number of adults and children in the household following the OECD-modified equivalence scale (OECD, 2009).

prevalent in the 4th and 5th quintile, while, conversely, the experience of food insecurity was rare.

Households with children were generally more likely to experience either food insecurity or substantial and mild budget restraints. Single-parent households, in particular, carried this burden: 18.3 per cent experienced food insecurity and 25 per cent experienced substantial budget restrictions.

Frequency in use of coping strategies

Table 2 shows the extent to which different coping strategies were reported by the budget restricted sub-groups.

From the totals it can be seen that a range of strategies are quite widespread in Danish households that experience food budget restrictions. Strategies related to storing and cooking are very often pursued as a way of reducing the food budget, as are strategies related to shopping behaviour. The most prevalent of these are attempting to save money by storing and using leftovers (81.7), and purchasing cheap seasonal vegetables and fruit (72.8). These strategies are widespread in all budget restriction groups, and for storing and using leftovers to the same extent in all subgroups (average score is approximately 80). In all subgroups, the average score does not go below 50. In contrast, some of the actions that imply changes in eating experiences are less frequently adopted. Cutting down the number of restaurant and cafe visits is relatively common. However, compromising the tastiness of food and dishes is relatively rare (31.5), as is making sure that fewer guests are invited to dinner (42.9). There are, furthermore, clear differences between the three sub-groups with regard to the extent to which these changes are adopted. In mildly budget restricted households, compromising the tastiness of foods (21.7) and inviting fewer guests are infrequent strategies (30.6), while they are somewhat more common strategies in households with substantial budget restrictions (33.6 and 45.5 respectively). Among the food insecure households, these two strategies are, indeed, quite common (49.4 and 65.7).

Coping strategies and related experiences in everyday life contexts

The qualitative data reflected the survey findings quite well. Thus, regardless of the level of food budget restriction, strategies such as utilising food products better by storing and eating leftovers, as well as cooking seasonal produce and changing the shopping location, were reported very often. Other types of strategies, especially cutting back on invitations for guests to eat in the home, and making do with less tasty products, were clearly practiced by households experiencing more severe financial pressure. However, the qualitative investigation also showed that most strategies have the potential for generating both positive and negative experiences when contextualised at the individual household level. The following presentation of the qualitative data has been organised so as to illuminate this finding.

Food shopping – substitution of shopping place and choosing seasonal products

To some, changing the shopping place involved a loss of enjoyment both in terms of the products bought, but also in terms of the shopping trip itself.

Table 2 Prevalence* of coping strategies (N = 570–597) among mildly budget restricted, substantially budget restricted, and food insecure – average scores and (s.d.)

		Mild budget restrictions		Substantial budget restrictions		Food insecure		Total	
Shopping	Shopped in cheaper places than usual	51.2	(29.5)	61.5	(29.6)	69.2	(26.9)	58.4	(29.8)
	Bought in-season cheap fruit and vegetables	68.4	(25.2)	75.7	(24.0)	77.8	(24.2)	72.8	(24.9)
Storing/cooking	Took care to store and use leftovers	79.4	(22.3)	85.5	(18.3)	80.4	(22.6)	81.7	(21.2)
	Stretched the food to make it last longer	56.2	(28.3)	67.7	(26.2)	76.4	(21.6)	64.4	(27.4)
	Cooked dishes with cheap and filling products	55.1	(24.9)	69.5	(23.0)	76.8	(25.3)	64.6	(25.9)
Eating experience	Made compromises regarding the tastiness of food and dishes	21.7	(21.6)	33.6	(24.9)	49.4	(29.5)	31.5	(26.7)
	Cut down on food intake outside the home (for example restaurants and cafes)	60.6	(34.9)	70.3	(34.7)	79.4	(30.8)	67.8	(34.7)
	Made sure to invite fewer guests to eat at home	30.6	(28.2)	45.5	(32.5)	65.7	(33.2)	42.9	(33.5)

Note* Reported as average score on a scale from 0 (coping strategy never pursued) to 100 (coping strategy pursued very often).

Karen and Peter, a couple in their early sixties, experienced a cut in their budget when Peter retired from his job. Subsequently, they ceased doing their main grocery shopping in *Superbest*, which is a rather expensive supermarket chain offering a wide selection of goods for sale. Karen, however, missed her regular trips to *Superbest*:

Karen: [In *Superbest*] we used to buy most of our meat and delicacies. And perhaps a nice piece of cheese of some sort . . . Delicacies and treats, you know. We don't do that sort of thing very often any more. That's one of the things we have cut away . . . But sometimes, I go just to look around, but without buying more than just the one single thing we need.

Karen and Peter also stopped buying fresh fish at the local fish shop in order to save money. For them, as for many of the other interviewees, stopping shopping at specialty stores, such as cheesemongers, fishmongers, bakeries and, in particular, butchers, involved a clear drop in food quality as they turned to the frozen or pre-packed alternatives from the supermarket counters. For these interviewees, the strategy of changing the place they shopped for food involved them feeling they were compromising on the quality and taste of the food they ate.

On the other hand, for many, finding a more affordable place to shop for food also involved positive changes, such as feeling more competent with managing the budget, and getting better food.

Per's income had dropped significantly due to the economic recession, while at the same time, the family had increased expenses due to their son starting boarding school. For this reason, Per had begun to buy their food at local producers:

Per: Instead of using the big supermarkets as we did when we had more money to spend, we now drive to the farm and buy eggs for instance. They are 1 DKK each and they could not be more organic. And that's fine . . . It is good quality, and really I feel that I get more for my money than when you buy something which is nicely wrapped up in a supermarket.

Per also stressed the higher quality in terms of, for example, taste, animal ethics and environmental friendliness of the locally procured products. Per's positive experience of moving away from the supermarket as a shopping place is in line with others who had also begun to buy more local food produce. However, other interviewees described similar positive experiences connected with beginning to shop at discount supermarkets. They reported that their initial negative expectations had actually proven to be misplaced, as they discovered that some products found in discount stores were both cheaper and of better quality than those at the more expensive supermarkets.

Many interviewees described how the pressure on their budgets had caused them to cut down on various types of fruit and vegetables. Now they only bought the cheapest, the most filling and those easiest to store. For some, this strategy was linked to compromises on the tastiness of food and meals, as this was experienced as resulting in a more boring diet, while for others, the increased use of seasonal fruit and vegetables was linked to positive experiences of buying more food from local producers, or to being introduced to cheaper and more filling vegetables which they could find in their usual shopping places. Some had re-discovered making vegetable soups, while others had experimented with new dishes and new ways of preparing vegetables. On the whole, such experiences were seen as meaningful and empowering.

Storing food and cooking – using leftovers and ‘stretching’ food

Interviewees often stressed the positive experience of having improved their ability to fully utilise the food products they bought, thereby reducing food waste.

Anita and Lars, a middle-income couple with two teenage boys, were forced to cut their budget due to the fact that Lars’s bonus payout was stopped as a result of the economic recession. Also, Anita had begun training for a new profession. On top of the fall in income, Anita noticed that food prices had gone up, while at the same time, their growing sons were consuming more and more food. Whereas Anita, who was very interested in cooking, particularly regretted the fact that she could no longer afford to buy as much organic produce as before, she also described the positive side of having to save money:

Anita: It turns into a kind of a game. To save the top of the leek and potatoes and such things. I think it is really nice, and it gives me such a good gut feeling to clean out my refrigerator like that . . . Often, you buy a bag of carrots, and then there are five left, all wrinkled. Why not use those for a snack? If you have decided to only serve potatoes for a side dish, well just cut those carrots up, add some olive oil and put them on the table as well.

Being able to fully utilise food products not only applied to fresh products, but also to leftovers, which, with a few additions, could either be transformed into another dish the following day, or eaten cold for lunch instead of the traditional open rye bread sandwiches. This was a change many found pleasant.

For other interviewees, however, the increased need to fully utilise their food involved the introduction of a less varied diet. For these individuals, using leftovers and stretching food was more a matter of eating the same dish for several days without any improvements to it.

Esther and Dan, on a low income and with three children, experienced a drop in household income due to Esther’s long-term depression, which had caused her to retire from the labour market aged forty. Esther complained that their food was always the same. In particular, she regretted not being able to provide her children with more varied packed lunches, and worried that this affected the children’s health. For instance, the need to make the food go further entailed buying only a small range of spreads for sandwiches in order to avoid waste of meat cuts in open packages. The need to use leftovers and ‘stretch’ the food clearly exacerbated Esther’s already reduced life quality.

Esther: It is not that I have any problem eating the same dish two days in a row, but I would like things to be more varied. To be able to open the fridge and say: Now, I want a sandwich with something other than sausage, liver pate or ham. That is probably what I miss the most.

In line with others, Esther reported a lack of inspiration and energy to make new and exciting dishes from a limited and unchanging range of products such as minced meat and pasta. Thus, for some of the interviewees, the strategy of avoiding waste entailed compromising on the general quality experience of their food.

Eating – going out to eat and inviting guests

Respondents often reported that cutting down on restaurant visits, eating take-out meals and meeting up with friends in cafes were the first actions taken to reduce food

expenditure. For some of the poorer households it was a strategy which had first been applied many years ago, and they claimed that they no longer went out to eat.

Isabella had been through a divorce and lived with her daughter and new boyfriend who had lost his job. She had experienced a radical drop in income and change in life situation as her former husband had a much higher income, and she bemoaned that she no longer could go out:

Isabella: We don't go out to eat anymore. It is very seldom that we have a steak. It is 'once in a lifetime', because otherwise it's not possible to make ends meet. And that was something which I used to enjoy a lot with my ex-husband, going out for dinner. Going out for a pizza.

For many, the need to reduce eating out involved a drop in life quality in terms of the enjoyment of food, of family togetherness and also social relations. For some of the most financially constrained interviewees, their social life was additionally affected as fewer guests were invited home to eat.

But the need and wish to cut down also for some put the former practice of spending money on restaurants, cafes or takeaways into a new perspective: it became framed as extravagant, while the new practice was seen as more rational. In particular, interviewees who were still relatively well-off, in that they had the opportunity to go on holiday and eat out, considered this strategy a worthwhile sacrifice. They not only emphasised the money they saved, but also the health benefits gained. In this way, they appreciated their budget restraint as it helped them achieve what they perceived as a healthier lifestyle.

Discussion

This study showed that food budget restraints and their consequences are relevant to discuss even in the context of a Scandinavian welfare-state. In the present survey, as many as 20 per cent experienced either severely restrained food budgets or direct food insecurity, while another 20 per cent experienced mild forms of food budget restraint.

The findings support other studies which have argued that there is a significant divide between socioeconomic segments of the Danish and other Nordic welfare states (CASA and Socialpolitisk Forening, 2013; Harslöf and Ulmestieg, 2013). However, interestingly, our study shows that it is not only those with the lowest income or levels of education that experience food budget restraint. It is particularly noticeable that single-parent households were at relatively high risk of experiencing severe types of food budget restraint. This indicates that the targeted efforts made in Danish social policy to support single parents have not achieved their goal (Nordic Social-Statistical Committee, 2004).

The quantitative results show that some strategies are common across all levels of food budget restrictions. They are, so to speak, generic practices when a household is forced to save money. In terms of enhancing sustainable consumption and reducing food waste, it is noticeable that the strategy to store and use leftovers is a widespread practice. Strategies related to the eating experience, such as compromising the tastiness of food and giving up social ties involved in inviting guests, are less common and seem to appear only when food budget restrictions increase. The qualitative study suggested that these more burdening strategies were often linked to negative experiences, and emerged only when other strategies proved insufficient to meet the income constraints. In this way, in addition to being strategies in their own right, certain strategies had the character of being

consequences resulting from other strategies. Similarly to the study of food insecurity in other countries (Hamelin *et al.*, 2002), the present study indicates the relevance of making a distinction between the core components and the consequences of these components when investigating the broader experience of food budget restraint.

Further, the qualitative data revealed important factors that link strategies to either positive or negative experiences. Interviewees who found cooking with more filling ingredients (for instance seasonal vegetables), reducing eating out and using leftovers to be a positive experience, displayed a higher surplus of resources than did interviewees who had negative experiences. They, for instance, expressed great interest and joy in cooking, and reported having a supportive social network or the ability to establish contact with local producers.

Nevertheless, interviewees who had positive experiences also typically had enough room in their budget to set a limit to the compromises they would accept. In support of this, the quantitative data imply that the 'tipping point', where food budget restraints lead to the adoption of negatively experienced strategies, is when households become food insecure. It is possible that some households with substantial food budget restrictions also encounter this 'tipping point'. Whether or not this entails differences in the overall drop in quality of life and food enjoyment needs further analysis.

Securing enough food of adequate quality is central to ensuring good life quality in any population, and raises issues of social justice, of responsibility for health and sustainability, and of popular trust in authorities and market actors (Sen, 1982; Lang, 2005). The present survey was carried out in 2012 when the effects of the economic crisis of 2008 were still high. Therefore, the results reflect how such a crisis influences the Danish population's food purchases and eating patterns across various socio-economic segments. The results may also contribute to developing adequate measures to influence food purchases and eating practices towards healthier, more sustainable and more positively experienced practices in specific groups and in cases of widespread economic turbulence.

Limitations

The sample for the quantitative survey is not representative of Danish households with respect to age and family composition. Further, consumption practices of panel members may differ from those of the average population. This may to an unknown extent bias the prevalence and mean levels reported. We do, however, believe that much can be learned about the relationship between food restrictions and coping strategies by using this sample of households, even though our results need to be validated in future studies based on probability sampling.

The present study examined coping strategies, which were most relevant in a Danish context. Reducing portion size or skipping meals are other strategies, which are commonly studied in quantitative explorations of food insecurity (Radimer, 2002). These strategies were addressed in our survey, but the results are not reported here, as they were not commonly applied in the studied population.

Notes

1 *Food in Turbulent Times* is supported by the Danish Strategic Research Council grant no. 1–116175.

2 The reason that not all 3,000 panel members were invited is that a large proportion of the panel members were informed about the questionnaire only if they accessed the GfK online facilities during the field period.

3 Research logistics did not allow us to make use of knowledge from the qualitative sub-study during the survey design phase.

References

- Bickel, G., Nord, M., Price, P., Hamilton, W. and Cook, J. (2000) *Guide to Measuring Household Food Security*, Revised 2000, Alexandria, VA: Department of Agriculture, Food and Nutrition Service.
- CASA and Socialpolitisk Forening (2013) *Social Årsrapport – Ulighed* [Social Annual Report – Inequality], Copenhagen: Socialpolitisk Forening.
- Creswell, J. W. and Plano Clark, V. L. (2011) 'Choosing a mixed methods design', in J. W. Creswell and V. L. Plano Clark, *Designing and Conducting Mixed Methods Research*, Thousand Oaks, CA: Sage Publications, pp. 53–106.
- Darmon, N. and Drewnowski, A. (2008) 'Does social class predict diet quality?', *American Journal of Clinical Nutrition*, 87, 5, 1107–17.
- Dowler, E. (1997) 'Budgeting for food on a low income in the UK: the case of lone-parent families', *Food Policy*, 22, 5, 405–17.
- Dowler, E. (2008) 'Poverty, food and nutrition', in J. Strelitz and R. Lister (eds.), *Why Money Matters: Family Income, Poverty and Children's Lives*, London: Save the Children, pp. 34–43.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A. and Gruen, R. J. (1986) 'Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes', *Journal of Personality and Social Psychology*, 50, 5, 992–1003.
- Hamelin, A.-M., Beaudry, M. and Habicht, J.-P. (2002) 'Characterization of household food insecurity in Québec: food and feelings', *Social Science and Medicine*, 54, 1, 119–32.
- Hansen, E. J. (2010) 'Træk af fattigdomsforskningens og fattigdommens nyere historie i Danmark' [Features of poverty research and the recent history of poverty in Denmark], *Samfundskøkonomien*, 2010, 5, 4–8.
- Harsløf, I. and Ulmestig, R. (2013) 'Introduction', in I. Harsløf and R. Ulmestig (eds.), *Changing Social Risks and Social Policy: Responses in the Nordic Welfare States*, New York: Palgrave Macmillan, pp. 1–24.
- Headey, D., Malaiyandi, S. and Fan, S. (2010) 'Navigating the perfect storm: reflections on the food, energy, and financial crises', *Agricultural Economics*, 41, s1, 217–28.
- King, N. (2004) 'Using templates in the thematic analysis of text', in C. Cassell and G. Symon (eds.), *Essential Guide to Qualitative Methods in Organizational Research*, London: Sage.
- Lang, T. (2005) 'Food control or food democracy? Re-engaging nutrition with society and the Environment', *Public Health Nutrition*, 8, 6A, 730–7.
- Nord, M., Coleman-Jensen, A., Andrews, M. and Carlson, S. (2010) *Measuring Food Security in the United States, Household Food Insecurity in the United States, 2009*, Economic Research Report 108, Washington: US Department of Agriculture.
- Nordic Social-Statistical Committee (NOSOSCO) (2004) *Single Parents in the Nordic Countries*, Copenhagen: NOSOSCO.
- OECD (2009) *What Are Equivalence Scales?*, Paris: OECD, <http://www.oecd.org/eco/growth/OECD-Note-EquivalenceScales.pdf> [accessed 17.11.2014].
- Oldewage-Theron, W. H., Dicks, E. G. and Napier, C. E. (2006) 'Poverty, household food insecurity and nutrition: coping strategies in an informal settlement in the Vaal Triangle, South Africa', *Public Health*, 120, 9, 795–804.
- Pedersen, P. J. (2011) *Immigration and Welfare State Cash Benefits – The Danish Case*, Study Paper No. 33, Sølvgade: Rockwool Foundation Research Unit and University Press of Southern Denmark.

- Radimer, K. (2002) 'Measurement of household food security in the USA and other industrialized Countries', *Public Health Nutrition*, 5, 6A, 859–64.
- Sen, A. (1982) *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford: Clarendon Press.
- Statistics Denmark (2014) 'Mange har pengeproblemer' [Many people have financial problems], *News from Statistics Denmark*, no. 431, 26 August, www.dst.dk/nytudg/18713.
- Sørensen, H. (2009) *Hvordan forstås fattigdom i Velfærds Danmark?* [How is poverty perceived in welfare state Denmark?], Copenhagen: CASA.