Change in Time Use for Daily Eating and Household Work Activities in Germany*

Uta Zander*, Uta Meier-Graewe*, Anke Moeser**

Institute of Home Economics and Consumer Research, University of Giessen, Germany*
Institute of Nutritional Science, Nutrition Education and Consumer Behaviour, University of Giessen, Germany**

Abstract : This paper gives special attention to the changes of time use patterns of the German population for eating and drinking as well as for household work. It especially examines the changes in time use for meals eaten at home and away from home as well as the division of labour for nutrition provision activities between men and women.

The presented results originated from two time budget surveys conducted in Germany in 1991/92 and 2001/02. In a secondary analysis time use patterns for eating and drinking and nutrition provision activities were examined on a base of a representative sample of 12600¹⁾ private households.

Surprisingly the amount of time spent on eating and drinking increased over the period. More Germans ate away from home at least once a day, whereas meals at home were still dominant. Moreover comparisons over time revealed that the share in household and food provisioning work has narrowed between men and women, especially in households with both partners being employed.

Overall the analysis shows that time use data allow general statements regarding the amount and changes of time spent on daily eating, household work and especially food provision activities. The extent of women's employment has shown to be most decisive for an equal division of household work between gender. To be able to better interpret the results and to understand the consequences for family life, it is necessary to complement time use data with qualitative interviews to gain comprehensive insight into peoples nutrition goals, motives and barriers of action.

Key Words: Time use survey: Household work; Food provision; Meal patterns; Gender division of household work

I. Introduction

A lot of international research to food and families has shown that nutrition habits, meal patterns, household chores and especially food provision tasks are activities and day-to-day routines that assume important functions in and for family life. The social aspects of shared family meals (e.g. communication,

socialisation, identity) play an important familysustaining role (Sobal 2000; Murcott 1995; Charles and Kerr 1988). At the same time meals and the involved necessary provisioning work (e.g. grocery shopping, meal preparation and dish washing) are also an important part in the negotiation of gender and power relations within the family and are an expression of internalized gender roles (Gregory

Corresponding Author: Uta Zander, Institute of Home Economics and Consumer Research, Bismarckstr, 37, University of Giessen, D-35390 Giessen, Germany E-mail: Uta.Zander@ernaehrung.uni-giessen.de

⁺ Financial support provided by Bundesministerium für Verbraucherschutz, Ernaehrung und Landwirtschaft in the project "Analysis of time budgets, nutrition behaviour and meal patterns" (Nr. 01 HS 091) is gratefully acknowledged.

¹⁾ In 1991/92 7200 private households participated in the time budget survey, in 2001/02 it were 5400 private households.

1999; Devault 1994). In a highly industrialized country such as Germany the food habits and the nutritional behaviour have undergone a dramatic and rapid change in the past two decades (Leonhaeuser 2002). This paper examines changes in time use patterns of the German population for daily eating and drinking as well as for household work, especially nutrition provision activities in the course of ten years (1991/92 and 2001/02). Thereby the special interest of the study lies on the temporal division of household labour between women and men. On the basis of different theoretical explanatory approaches relating influential factors were analysed and discussed. Furthermore it should be discussed how changes in time use for nutrition impact family life.

The paper is structured as follows: Section two contains a short review to what is known about family nutrition in Germany and presents the deduced research questions of the study. Section three gives a detailed description of the study's data base and methodology. Then, in section four, an overview is given on the time use for daily eating/drinking and household work, especially food provisioning work. The results concerning food provisioning work are distinguished by gender, employment status and household type and are discussed in comparison with other European countries. In the last section, results are summarised, conclusions are drawn, and suggestions for future research are given.

II. Family, Nutrition and Housework

Importance of family meals and meal patterns

As mentioned before daily meals have several functions for the family. Thereby socialisation of household members and communication between meal partners are at least as important as the saturation of hunger and thirst. However, the increasingly differing schedules and temporal ties of

family members such as employment, school and leisure activities, reduce the time household members spend together and make the taking place of shared family meals much more difficult than in the past, Nevertheless a range of researches could show that typical family meals with (all) household members gathered around the table are still on the daily agenda and play an important role in everyday life of German families (Brombach 2003; Klenner et al. 2003; Meier et al. 2003; Kutsch 1993). Barloesius also agrees in this opinion, however she states that the main family meal, that traditionally was lunch in Germany, has now shifted from lunch to dinner (Barloesius 1999, p. 184). Besides that shift of the main meal's time a prior analysis of the time use survey 1991/92 revealed that the typical German meal pattern with the three meals breakfast, lunch and dinner was then still integrated in the course of everyday life events. Furthermore it could be shown that the three main meals were usually consumed in the presence of other people (see Meier et al. 2003; Meyer/Weggemann 2001, p. 188 f.). At present often propagated fears claim the erosion of eating culture and a proceeding individualisation of daily eating through the elimination of common meals. This was at least out of question in 1991/92.

Out of this short synopsis two main research questions are derived. First the question for the effects of the rise of gainfully employed women in the last decade on the amount of time spent with eating, distinguished for time use for eating at home and eating away form home. Secondly it needs to be verified whether the typical triad of three main meals per day still remains the dominant meal pattern in the years 2001/02 and whether lunch or dinner is the main family meal²⁾.

2. Men and women's time use for household work and food provisioning

High demands in work life such as long working

Here the main meal is defined as the meal that lasts the longest and that is consumed with other family members.

hours, flexibility and mobility not only have an effect on people's dietary patterns and that of their families but also on the division of household work between men and women. During the past decade the rate of women in workforce has significantly increased in Germany (Bmfsfj 2002, p. 78 f). Taking into consideration that meal preparation, cleaning, washing and child-care are traditionally accomplished mainly by women the question arises whether the allocation of household work between men and women has changed depending on the different degree of women's employment at the beginning of the 21th century. Until the Nineties the organisation and the resulting commitment of time used on household work activities, especially on laundry and food provision work, still showed an unequal allocation of time use between women and men (Kunzler et al. 2001). Brombach (2001, p. 133) and Sellach (1996, p. 80) also confirm that especially food preparation is still the domain of women. At the same time results of the first German time budget study (1991/92) showed that in family households with employed mothers less time is spent for food-related activities than in family households with unemployed mothers (Meier et al. 2003, p. 139 f.). On the assumption that the dramatic increase of women participating in the labour force, and the changing gender-roles of men and women in society would result in greater sharing of household work (Schafer/Schafer 1989, p. 119) the study wants to look at time use for household work, particularly on food provision, of women with different degrees of employment and of their partners. The time-availability approach argues that the time spent on household work is dependent upon a person's other obligatory time load. The less time a person has to his or her disposal, the less time he or she will be able to spend doing household work. Since this approach is gender neutral, the gender division of household work is above all an effect of differences in women's and men's time spent in employment. According to the normative role theory, another approach used to explain gender differences in household work, only in couples with

both partners holding liberal attitudes a more equitable division of labour is likely to develop (Kuenzler *et al.* 2001, p. 65 ff). To investigate the development of the division of household work in the course of time, the study looked at the time spend on housework activities of men and women. In addition the division of household work between women with different degrees of employment and their partners is of interest.

2. Food prepared at home versus food prepared away from home

The last subject area in the field of family nutrition addresses the development of eating out and the linked consequences for the preparation practices of food at home. Despite the maintenance of joint family meals with home-prepared food the proportion of food events with food consumed away from home increased during the last ten years. In Germany the expenditures spent on food consumed outside the home increased between 1993 and 1998 from 78? per month and household to 83? (plus 7,1%). At the same time the expenditures spent on food prepared at home decreased from nearly 280? per month and household to 260? (minus 7,2%) (Krebs 2002, S. 297).

These reverse developments are assignable to several causes as for example the increased rate of women in gainful employment and a higher number of households with two employed people and higher incomes. It is easily comprehensible that people who spent long hours away from home everyday are much more likely to eat outside the home than people working at home. Other discussed factors leading to higher food consumption outside the home is an increase in affluence in the majority of the population, the increase of single households as well as the growing market for fast food and takeaway food places (Guthrie, Lin, Frazao 2002, p. 140; Mitchell 1999, p. 877). At the beginning of the nineties Germans visited on average 2,3 places for food prepared away from home per week. At the end of the nineties the number increased to 3,6 places. A

total of 17,9% of the German Population ate away from home at the beginning of the nineties (Meier *et al.* 2003, p. 76). At the beginning of the 20th century the consumption of food prepared away from home had now become a daily affair (Frohn 2000, p. 182 ff.). It all gives reason to believe that the number of people that consume at least one or two meals/snacks outside the home every day has risen between 1991/92 und 2001/02 considerably. Therefore this study analyses the development of time spent with eating outside the home in this period of time and takes a closer look at people of different age groups. Additionally it will be examined how the time spent for food preparation at home has developed on the other hand.

III. Description of Data Base and Methodology

The quantitative analysis is based on two time budget surveys which were carried out by the National Statistical Office in Germany. The first one was conducted in 1991/92 with an actual sample size of 7.200 households and 21.000 informants. The first survey included an introductory interview, a time diary and a concluding interview. All household members over twelve years of age were asked to write down their activities in 5-minute time slots on two following days in a diary. The introductory interview collected data about the household members, housing conditions, household equipment and income. The concluding interview collected data concerning help the household members rendered for other people as well as rendered assistance the household received from other people.

The second survey conducted in 2001/02 was methodologically aligned to European standards for time budget surveys. This survey is based on a sample size of 5.400 households with 16.000 informants and three types of documents. Questionnaires for the individual household members collected information on socio-

demographic variables, assistance people rendered for third people outside the household and honorary activities. The household questionnaire contained questions concerning housing conditions, household equipment, income and help, the household received from third people outside the household. All household members over ten years of age kept a time diary with 10minute time slots. In both surveys respondents entered into their diaries their primary activities as well as any possible simultaneous activity, location of activities and people activities have spent with. The informants described their activities with their own words. Out of the answers of the informants the German Statistical Office created for both surveys a list of activities, which include more than 200 different activities. Despite some methodologically changes in the second survey the data base of both studies is comparable (Ehling/Holz/Kahle 2001). The German Statistical Office provided for each survey a Public Use File.

The sample structure of both surveys is shown in <Table 1>.

The following results of this secondary analysis are extracted from the Public Use File by using the statistical program SPSS. Out of the list of all activities the time use for eating/drinking and household work, including food provisioning activities, was analysed and combined with personal data like sex, age, household type etc.

To answer the research questions the time spent on these activities was analysed in the course of time. Methodologically three different key figures were determined: first, the *average time use per person asked*. It describes the average time use per day of all informants for a particular activity, irrespectively whether this activity was performed or not. Second, the

<Table 1> Sample structure of the time budget surveys 1991/92 and 2001/02 (Source: author's computations)

Time budget	N	l en	Women		
survey	n	%	n	%	
1991/92	7339	46,9%	8320	53,1	
2001/02	5825	48,5	6187	51,5	

average time use per person practised characterises how much time is spent for a particular activity of the people, who really practised the respective activity this day. For example the activity "supply inventory" is performed by very few people per day. Therefore the average time use per person asked would be very low, but the average time use per person practised would be much higher, because only the time use of the people, who performed supply inventory, would be considered. The last key figure is the degree of participation which explains the percentage of people that accomplish the respective activity per day.

After the computation of the different key figures, the analysed differences in time use were controlled for significant differences per relevant test procedures. Although the time budget data show no normal curve of distribution, the appliance of the ttest is justified since the sample sizes are very high (see BORTZ 2005, p. 141). The results of the t-test show that e.g. the time difference for food provision between men and women in the time budget survey 2001/02 (23 minutes vs. 1 h 6 min) is statistically significant (see Table 4). Since several time comparisons were made, only some t-tests were showcase conducted. The t-tests identified as a result of the high sample size that time differences with more than three minutes are statistically significant (Meier et al. 2003, p. 17).

IV. Empirical Results

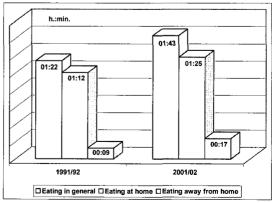
1. Time use for daily eating and drinking

The daily time budget Germans use for eating has risen from 1 h 22 min in 1991/92 to 1 h 43 min in 2001/02 (see Figure 1). In spite of peoples continuously increasing stress in employment and social life the Germans spent 21 min more time with eating than ten years ago. Most part of that time is spent eating at home (1 h 25 min) and not as it might be expected with food consumption away from home

(17 min). No significant differences between men and women could be found.

A comparison with time use for eating and drinking of other European populations revealed that in 2001/02 Germans rank in the middle with using more time for daily eating and drinking than for example Norwegians (1 h 3 min) (Statistics Norway 2004), Fins (1 h 20 min) (Statistics Finland 2004a) and Dutchman (1 h 28 min) (SCP 2004) but less time than Belgians (1 h 49 min) (Glorieux, Vandeweyer 2004, S. 17) and Spaniards (1 h 46 min) (INE 2004, S. 17).

These results indicate that eating is still among the most important activities of the day. It seems that for the Germans it matters to have enough time for their daily meal consumption. The rise in time for eating and drinking, especially eating at home, indicates that the social and communicative aspects of meals have become more important. Hand in hand with this interpretation is the finding that on Saturdays and Sundays, the days of the week with more disposable time, people spent 24 min more time around the table eating and drinking than on the weekdays. In comparison to food consumption at home, the time for food consumption away from home still plays an inferior role. The average time use for eating out has gone up from 9 min per day and person in 1991/92 to an average of 17 min per day and person in 2001/02.



<Figure 1> Average time use per day for daily eating of people older than 12 years (comparison of time between 1991/92 and 2001/02)

(Source: author's computations)

2. Family meals and meal patterns

The results of the analysis clearly demonstrate that traditional meal patterns are not diminishing in favour of "eating around the clock". The survey 2001/02 shows that the main meals are consumed at fixed times of the day and therefore structure the chronology of daily activities. More than 60% of the Germans eat breakfast between 6.00 am and 9.00 am, lunch between 12.00 pm and 14.00 pm and dinner between 18.00 and 20.00 pm. Altogether 56 minutes were spent on daily eating (Table 2) at that hours. The residual time of the total budget is spent with consuming snacks in between meal time hours. Their time budget has significantly risen over the last 10 years.

In 2001/02 Germans spend on average 20 minutes with the consumption of lunch between 12.00 pm and 14.00 pm as well as 20 minutes with eating dinner between 18.00 and 20 pm. The time duration of these meals couldn't be used as an indicator for a main meal. But it was found out that dinner is the meal most people eat in the presence of other people. The daily main meal is a "social event" which most Germans share with other people (family or household members, relatives and/or friends etc.).

The time use of family households with children and employed parents differ from this general pattern: In these households dinner takes more time than lunch.

Therefore dinner could be identified as the main meal.

3. Time use for household work and food provision

As said before household work activities play a central role in the discussion about gender- specific division of labour. In 1991/92 German women spent 2 h 21 min more time on daily household work than men. The comparison of time shows that in 2001/02 women have reduced their total time for household work by 21 minutes whereas men have increased the amount of time spend on household work by 14 minutes (Figure 2). Nonetheless the difference women and men spend on household work still adds up to 1 h 46 min per day. Even though this can be regarded as a clear tendency to a more equal allocation of household work activities between men and women, it needs to be taken into account that in 2001/02 fewer German women and men accomplish single household work activities every day. With the exception of shopping, the number of people that accomplish one of these household activities every day was declining, explaining at least a part of the fall in the overall amount of time spent on housework activities.

Again to turn the attention to the European

<Table 2> Average time use for daily eating of people older than 12 years for time of the day and present people (2001/02)

(Source: author's computations)

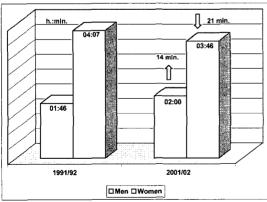
	People older than 12 years				
Out-and-adicial-	Aver	Degree of participation			
Selected activities	person asked ¹ person practised ²				
	h.:	%			
Meal between:					
6.00 - 9.00 am	00:16	00:26	62,0		
12.00 - 14.00 pm	00:20	00:32	62,6		
18.00 - 20.00 pm	00:20	00:33	62,1		
Meal at home together with other people					
12.00 - 14.00 pm	00:13	00:31	37,7		
18.00 - 20.00 pm	00:13	00:32	42,8		

¹ = Respondents with time diary.

² = Respondents with statements to selected activities.

perspective the typical division of unpaid labour has not changed significantly anywhere. Even in the Nordic countries such as Norway and Finland where women in workforce is the normality, women still perform most of the household work with a much higher expenditure of time and energy. And these findings are common all over Europe. But if one looks at the allocation of time between women and men for household work in different European countries typical cultural differences are readily identifiable. In Spain which is still a country with a more traditional appreciation for gender roles, women bear the highest temporary work load in the household whereas in no other country men spent as less time for household work as the Spaniards. In comparison to other European nationalities Finish and Swedish men work the longest hours every day in the household. This represents a more equalized division of household work between genders in the Nordic countries and underlines the normative role theory approach (see Table 3).

<Figure 2> shows the amount of time spent on household work in general. 2001/02 fewer German women and men accomplish single household work activities every day than ten years before. With the exception of shopping the number of people that accomplish one of these household activities every day



<Figure 2> Average time use per day for household work activities of women and men older than 12 years (comparison of time between 1991/92 and 2001/02)

(Source: author's computations)

(degree of participation) has decreased (see Table 4).

Accordingly to the time-availability approach the amount of time that is spent on household work activities depends on the degree of women's employment status. Therefore the time spent on household work is analysed for full time and part time employed women versus non-employed women and their partners. <Figure 3> shows that the more time women are involved in gainful employment the less time is used on household work. Women with full time jobs spend 3 h 13 min per day on household work activities, unemployed women more than 5 hours. A look at the time budgets of husbands/partners reveals that those of full time employed women spend most time with household work (2 h 12 min). Husbands/ partners of unemployed women spend on average 1 h 40 min on household work and those men with wives working part time working invest only little more time helping with the chores (1 h 46 min).

Partners of full time employed women are the ones that are most engaged in household work activities. This result is consistent with the normative role theory: couples with both partners working could be expected to hold more liberal attitudes and therefore the household work is more equitable shared.

The amount of time spent on household work activities is also influenced by the household

<Table 3> Average time use per day for household work activities of women and men older than 12 years in selected European countries (1999 - 2003)

(Source: STATISTICS NORWAY 2004; STATISTICS FINLAND 2004a; SCP 2004; GLORIEUX, VANDEWEYER 2004; INE 2004, p. 110; author's computations)

TT11.1 1 4''4'	Women	Men h.:min.	
Household work activities	h.:min.		
Germany (2001/02)	03:46	02:00	
Holland (2000)	03:42	01:27	
Belgium (1998-2000)	03:56	02:01	
Swiss (2000)	03:49	01:55	
Finland (1999-2000)	03:47	02:27	
Norway (2000)	03:14	02:17	
Spain (2002/03)	03:56	01:18	

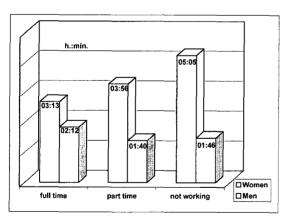
<Table 4> Average time use per day for household work activities of women and men older than 12 years (1991/92 and 2001/02)

(Source: author's computations)

·	Men			Women		
Selected activities	Average per		Dagmag of	Average per		D . C
	person	person	Degree of participation	person	person	Degree of participation
	asked ¹ practised ²	practised ²		asked	practised	
	h.:min.		%	h.:min.		%
Household work activities 1991/92	01:46	02:05	84.3	04:07	04:14	97.2
among them:						
Food provision	00:24	00:40	60.1	01:25	01:34	91.0
Laundry	00:03	00:30	10.5	00:39	01:11	55.3
Indoor cleaning	00:14	00:37	38.5	00:47	00:57	81.3
Shopping for the household sector	00:13	00:43	31.0	00:22	00:45	48.0
Household work activities 2001/02	02:00	02:33	84.3	03:46	03:57	95.3
among them:						
Food provision	00:23	00:44	53.5	01:06	01:22	81.5
Laundry	00:02	00:36	8.2	00:27	01:06	40.9
Indoor cleaning	00:16	00:47	33.5	00:40	01:02	64.9
Shopping for the household sector	00:19	00:56	34.9	00:26	01:00	44.4

¹ = Respondents with time diary.

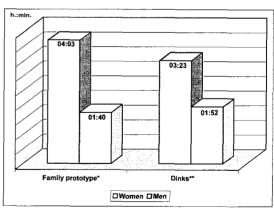
² = Respondents with statements to selected activities.



<Figure 3> Average time use per day for household work activities of women with different degrees of employment and their partners (2001/02)

(Source: author's computations)

composition and size. A comparison of time use between a family prototype household with married partners, double income and two children between six and 18 years and a household with two employed



<Figure 4> Average time use per day for household work activities of women and men of different household types (2001/02)

(Source: author's computations)

- * Family prototype: Married partners with two children between six and 18 years, double income.
- ** Married partners with double income, no kids.

partners and no kids was made ("double income no kids households" the so called "dinks"). The results are

shown in <Figure 4>. Employed mothers with two children spend on average more than 40 minutes more on household work (4 hours and 3 minutes) than working women without children (3 hours and 23 minutes). Additionally these mothers receive less support from their partners. Men of the family prototype household spend 12 minutes less on household work than men of the "double income no kids" households. This clearly shows that traditional role expectations and less equal division of labour between partners are strengthened by the presence of children in the household.

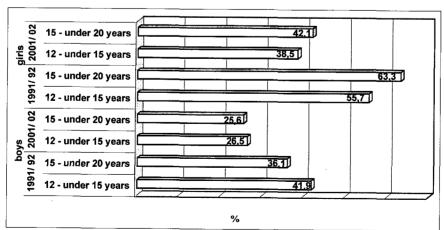
Provisioning work or alternatively food-related activities can be seen as the most important tasks of households. First no other field of activity in the household work absorbs as much time as the daily routine of grocery shopping, food preparation, cooking, dish washing etc. And secondly the special importance of these tasks consists in the necessity of it's daily performance to secure the feeding of the family. The analysis of time use for this important area of work has repeatedly proved that the main responsibility for daily food provision lay in the hands of women (see Table 4). And this has not at all altered between 1991/92 and 2001/02

At the beginning of the nineties women spent 1 h 25 min on food provision, whereas men spent on average

only 24 minutes (see Table 4). Food provision activities are of a special interest: In 2001/02 food provision remains the most time-consuming field of all household work activities. However women's amount of time used for food provisioning activities has dropped from 1 h 25 min to 1 h 6 min. Contrary to the extended time spent with eating women required 19 min less time for food provision than ten years ago. The same pattern is found in other European countries. For example in Finland women spent 15 minutes less time for food provisioning in 1999-2000 (1 h 03 min) than in 1987/88 (1 h 17 min) (Statistics Finland 2004b).

Searching for reasons shows that fewer girls between twelve and 20 years participate in food preparation activities and therefore reduced the mean time budget for all women (Figure 5). It is also possible that some women make use of food provision services and that especially women in gainful employment might have reduced their demands concerning the quality of food preparation and tend to use more time-saving convenience products.

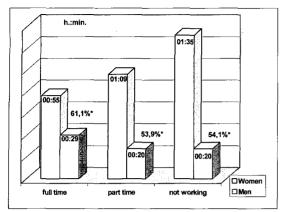
The analysis of the amount of time spent on food provision as one part of household work in dependence on the degree of employment of women confirms also the time-availability approach and normative role theory. Full time employed women spent 55 min on



<Figure 5> Average degree of participation* in food preparation of kids and teenagers per day (comparison of time between 1991/92 and 2001/02)

(Source: author's computations)

^{*} Share of respondents (percentage) with at least one food provision activity per day.



<Figure 6> Average time use per day for food preparation of women with different degrees of employment and their partners (2001/02)

(Source: author's computations)

* Percentage of all men, who spend daily time on one or more food provision activities.

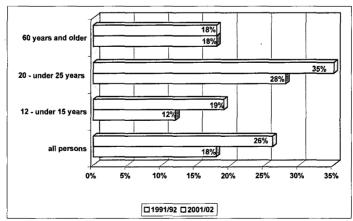
food preparation compared to more than one and a half hour of not working women (see Figure 6). In households with full time employed women, men spend only little more than half of the time women spent on food preparation. But the degree of participation and the average amount of time spend on food preparation is significantly higher with partners of full time employed women than with partners of part time or unemployed women. Altogether, our analysis is in line with Brombach (2001) and Sellach (1996) and confirms that food preparation stays for the most part a female affair³⁾.

4. Eating at home and away from home

<Figure 1> very clearly shows that 2001/02 most part of the time for eating and drinking is spent with eating at home (1 h 25 min) and not as it might be expected with food consumption away from home (17 min). Nevertheless, the time spend with eating away from home increases in the last ten years from nine min up to 17 min.

26,1% of the surveyed people eat at least once a day away from home, but particular groups of the population (like younger grown ups between 20 and 25 years or employed people) eat much more often outside the home than others (see Figure 7). Overall today more Germans eat away from home more

3) Although ZULEHNER and VOLZ (1998) declared a change of responsibility in household activities and stated, that more men are engaged in a more equal allocation of household work, our results show that food preparation is still in domain of women.



<Figure 7> Average degree of participation* per age of people older than 12 years on eating away from home (comparison of time between 1991/92 and 2001/02)

(Source: author's computations)

^{*} Share of people (%) eating at least once daily away from home.

regularly than at the beginning of the Nineties. Eating out is of increasing importance in the daily routine of eating, but the supply with food at home is still dominating.

V. Conclusions and Suggestions for Further Research

Examining the changes of time budgets of men and women for household work activities, no general trend could be found on the base of the two time use surveys. On the one hand the amount of time spent on household work shows a more equal allocation of household work activities between women and men. On the other hand there is a clear polarisation within the group of men. Fewer men participated in the daily household work, but those men who participated in household work activities regularly spent much more time with it than ten years earlier (e.g. fathers or partners of full time employed women). This leads to men's overall increased mean time budget spent on household work. Contrary the number of women with exception of shopping activities - who daily cooked, did the laundry or cleaned the house decreased in the last ten years. So the overall amount of time spent on household work has narrowed between men and women in the last ten years. However 2001/02 women still spent almost twice as much time on household work activities than men. Full time employment of women in households with incomes above-average advantages whereas the existence of children in households disadvantages a more equal allocation of labour.

Surprisingly the daily time budget for eating has increased during the last ten years. More people eat away from home regularly, but meals at home still represent the dominant eating pattern. Dinner is the main meal in family households with two employed partners. Social aspects such as conversations between children and parents characterise the importance of this family times besides the eating itself.

These changing patterns - especially regarding food provision - have implications in the context of nutrition socialisation. If the time budget spend on meal preparation and the number of women who cook daily continues to decrease and the number of meals consumed outside the home is going to increases further more, the opportunities to include children in the process of meal preparation and to teach them food related techniques as well as nutritional knowledge are reduced. Therefore public institutions like kindergartens and schools in Germany should be prepared to supplement the nutrition education of children.

Time use data allow general statements regarding the amount of time spend on daily eating/drinking, household work and especially food provision activities. Unfortunately the data sets can not serve with explanation for changes in time use. For example the analysis of the time use surveys shows that the amount of time women spend on food provision activities decreased in the last ten years. Background knowledge concerning why and how women reduced the amount of time for household work and provisioning tasks, e. g. if they used convenience products more frequently or if they reduce their own standards of quality are not found in these data but are inevitable for coherent explanations. Therefore in the context of a target group oriented nutrition research, it would be necessary to complete the time use data with qualitative methods in order to analyse everyday life eating practices in a more differentiated and extensive way.

■ References

Bundesministerium fur Familie, Senioren, Frauen und Jugend Bmfsfj (HG) (2002). Frauen in Deutschland. (Women in Germany). Berlin.

Brombach, C. (2003). Das Mahlzeitenverhalten von Familien im Verlauf von drei Generationen. (Meal patterns in family households in the course of three generations). *AID infodienst* (*Hg.*) *Ernaehrung im Fokus*, 3-05/0, 130-134.

- Brombach, C. (2001). Mahlzeit Familienzeit Mahlzeiten im heutigen Familienalltag. (Meal time family time Meals in everyday life practice of families). *Ernaehrungs-Umschau,* 48(6), 238-242.
- Charles, N., & Kerr, M. (1988). Women, Food and Families. Manchester.
- Devault, M. (1994). Feeding the family: The Social Organization of Caring as Gendered Work. Chicago.
- Ehling, M., Holz, E., & Kahle, I. (2001). Erhebungsdesign der Zeitbudgeterhebung 2001/2002. (Design of the time use survey 2001/2002). Wirtschaft und Statistik, (6), 427-436.
- Frohn, H. (2000). Ernaehrungsberichterstattung ueber "Essen außer Haus" und Trends bei Großverbrauchern. (Nutritional report about "Meals away from home" and trends of the consumer market). Koehler, B M u.a. (Hg.): Ernaehrungsberichterstattung in der Bundesrepublik Deutschland. Berlin, 182-197.
- Glorieux, I., & Vandeweyer, J. (2004). The Belgians: waffle eating, beer drinking and fine chocolates tasting people? On how Belgians spend their time. http://www.vub.ac.be/TOR/main/publicaties/downloads/t2001_59.pdf (25.06.2004).
- Gregory, S. (1999). Gender roles and food in families. In: McKie L; Bowlby S; Gregory S (Eds): Gender Power and the Household, New York: 60-75.
- Guthrie, J. F., Lin, B-H., & Frazao, E. (2002). Role of Food Prepared Away from Home in the American Diet, 1977-78 versus 1994-96: Changes and Consequences. *Journal of Nutrition Education and Behaviour*, 34(3), 140-150.
- INE (Instituto Nacional des Estadistica) (Hg.) (2004). Encuesta de empleo des tiempo 2002-2003.

- Tablas de resultados http://www.ine.es/daco/daco42/empleo/general.pdf (28.06.2004).
- Klenner, C., Pfahl, S., & Reuyß, S. (2003). Flexible Arbeitszeiten aus Sicht von Eltern und Kindern. (Flexible working hours from the perspective of parents and children). ZSE (Zeitschrift für Soziologie der Erziehung und Sozialisation), 23(3), 268-285.
- Krebs, T. (2002). Konsumausgaben privater Haushalte fur Nahrungsmittel, Getranke und Tabakwaren 1998. Ergebnis der Einkommens- und Verbrauchsstichprobe 1998. (Expenditures of private households for food, beverages and tobacco 1998. Results of the income and consumption survey 1998). Wirtschaft und Statistik, (4), 294-305.
- Kuenzler, J. *et al.* (2001). Gender division of labour in unified Germany. WORC REPORT. Tilburg University Press.
- Kuester, C. (2000). Familienleben zwischen Eigentaetigkeit; Netzwerken und Dienstleistungen Visionen und Modelle. (Family life between self-performed household tasks, honoray appointments, social networks and service offersvisions and models). Kettschau I; Methfessel B; Piorkowsky M-B (Hg.): Familie 2000 Bildung für Familie und Haushalte, Europaeische Perspektiven, Hohengehren, 182-195.
- Kutsch, T. (1993). Emachrungssoziologie. (Nutrition sociology).

 Kutsch, T. (Hg.): Ernaehrungsforschung interdisziplinaer. Darmstadt. Wissenschaftliche Buchgesellschaft, 98-135.
- Leonhaeuser, I. U. (2002). Concerning food pattern in a comparative way. In: Butijn C A; Greot-Marcus J P; van der Linden M *et al.* (Eds.): Changes at the other end of the chain: Everyday consumption in a multidisciplinary perspective Maastricht. 19-30.
- Meier, U. (2001). Wie zukunftsfaehig ist die "Arbeit des Alltages"? (What are the future

- perspectives of everyday-life work). Andruschow K, Hans Boeckler Stiftung (Hg.): Ganze Arbeit. Feministische Spurensuche in der Non-Profit-Oekonomie. Berlin, 41-54
- Meier, U., Kuester, C., & Zander, U. (2003). Auswertung von Zeitbudgets, Ernährungsstilen und Mahlzeitenmustern. (Analysis of time budgets, nutritional styles and meal patterns). (Unveroeffentlichter Endbericht des gleichnamigen Forschungsprojekts im Auftrag des BMVEL).
- Meyer, S., & Weggemann, S. (2001).

 Mahlzeitenmusteranalyse anhand der Daten der Zeitbudgeterhebung 1991/92. (Analysis of meal patterns with time budget data from 1991/92). Ehling M; Merz J u.a. (Hg.):

 Zeitbudget in Deutschland Erfahrungsberichte der Wissenschaft. Band 17 der Schriftenreihe Spektrum der Bundesstatistik, Stuttgart, 188-201.
- Mitchell, J. (1999). The British main meal in the 1990s: has it changed its identity *British Food Journal*, 101(11), 871-883.
- Murcott, A. (1995). Eating at home. In: Marshall D. (Ed): Food Choice and the Consumer. Glasgow: 105-128.
- Schafer, R. B., & Schafer, E. (1989). Relationship Between Gender and Food Roles in the Family. *Journal of Nutrition Education*, 21, 119-126.
- SCP (Social and Cultural Planning Office of the Netherlands) (Hg.) (2004). The Time Use Survey. http://www.scp.nl/onderzoek/tbo/english/default.htm (29.06.2004).
- Sellach, B. (1996). Wie kommt das Essen auf den Tisch Die Frankfurter Beköstigungsstudie. (How does the food comes on the table? The Frankfurt food provision study). Baltmannsweiler.

- Sobal, J. (2000). Sociablility and meals: facilitation, commensality and interaction. In: Meiselman H (Ed.): Dimensions of the Meal: The Science, Culture, Business and Art of Eating. Aspen, 119-133.
- Statistics Finland (Hg.) (2004a). Culture, Media and Time Use. http://statfin.stat.fi/ StatWeb/start. asp?STB=G1,G2,G3,G4&LA=en&DM=SLE N&PA=muutos5e&D1=a&D2=a&D3=l&D4=a&D5=a&HDR=T&TT=2 (09.08.2004).
- Statistics Finland (Hg.) (2004b). Culture, Media and Time Use. http://statfin.stat.fi/ StatWeb/start. asp?STB=G1,G2,G3&LA=en&DM=SLEN&PA=muutos4e&D1=a&D2=a&D3=a&D4=a&HDR=T&TT=2 (09.08.2004).
- Statistics Norway (Hg.) (2004). Time Use Survey 2000. More time for leisure activities. http://www.ssb.no/english/subjects/00702/20/tidsbruk en/ (29.06.2004).
- Statistisches Bundesamt (Hg.) (1995): Die Zeitverwendung der Bevoelkerung: Ergebnisse der Zeitbudgeterhebung 1991/92. (Time use of the German population: results of the time budget survey 1991/92). Tabellenbaende I IV, Wiesbaden.
- Zulehner, P-M., & Volz, R. (1998). Maenner im Aufbruch. Wie Deutschlands Maenner sich selbst und wie Frauen sie sehen. Ein Forschungsbericht. (Men on departure. Self imas of German men and womens' view of men. A research report). http:// www.univie.ac. at/pastoraltheologie/lbi/seiten/download/BRD %20summary.pdf (25.06.2004).

Received September 1, 2005 Accepted November 5, 2005