



From Regional Ethnographies to Interdisciplinary Approaches—Research on Meals in Finland

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The paper reviews Finnish research on meals and meal patterns since the turn of the century. The main research traditions and cases representing various methodological approaches—qualitative interview, health behaviour questionnaire and dietary survey—are discussed. In line with studies undertaken in other industrialized countries, the Finnish studies show that meal patterns are related to socio-economic structure, work schedules, lifecourse, living conditions and food availability. Meal patterns vary by individual energy needs, and the nutrient contents of meals can be different from those of snacks. It is difficult to account for all determinants and characteristics of meals in a single study. The three cases shed light on the various aspects of the meal. When planning an empirical study on meals the researcher should ask herself/himself at least four questions: (1) who defines the meal?; (2) are meal patterns assumed to vary by time and between subgroups of the study population?; (3) is information on nutrient content of various eating occasions relevant to the study?; and (4) could information on meals be obtained from existing data sources?

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INTRODUCTION

The present paper reviews Finnish research on meals and meal patterns—the timing and structure of eating over the course of the day—since the turn of the century. The main research traditions and three cases representing various methodological approaches are described. Finally, advantages and disadvantages of these approaches are discussed.

Changes in Finnish Meal Patterns

Until the Second World War, Finland was predominantly an agricultural country, and the then typical Finnish meal pattern—three hot meals a day—followed agricultural work schedules. The first meal was eaten before going to work, the second in the middle of the day and the last meal in the evening. The three meals included bread, porridge or gruel, potatoes, root vegetables and small amounts of salted fish or meat (Prättälä & Helminen, 1990).

The traditional three-meal pattern has changed during the last 5 decades into a pattern of one or two daily meals. At least among urban women the pattern of three

Contribution to the IUNS Committee II/2 Symposium on “Methodology to Identify and to Assess Eating Patterns”.

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hot meals has vanished, and the number of daily meals is one or two (Mäkelä, 1996; Prättälä *et al.*, 1993). Breakfast is no longer a prepared meal, but a lighter eating event differing significantly from lunch and dinner. In 1992 (Kleemola *et al.*, 1997) the Finnish breakfast contributed 19% of the daily energy intake, and the typical foods consumed for breakfast included bread, cheese and coffee or tea. The other meals, lunch and dinner, are usually hot and cooked. Their basic structure is similar to the traditional one, and items used in the traditional meals are still included. The hot meat/fish dish, however, has replaced cereals and potatoes as the central component of the meal (Prättälä *et al.*, 1993).

Factors contributing to the shift towards fewer daily meals in Finland include changes in the nature of work, urbanization and increase in the availability of foods associated with a higher standard of living. Since the 1950s, Finns have migrated from rural areas to cities and moved from the agricultural to the service sector. In addition, increasing numbers of women have entered the labour force. In comparison to their grandparents, contemporary Finns need less dietary energy and have less time for food preparation but, on the other hand, have a broader variety of catering services, ready-made foods and snacks available to them.

RESEARCH TRADITIONS

Finnish meal patterns have been studied within the contexts of ethnology, nutritional and medical science, and sociology. The ethnological studies reach back to the turn of the century. Ethnologists have furnished detailed descriptions of regional traditions related to food-preparation techniques, recipes, dishes, foods and beverages. Ethnological research has focused on rural meal patterns (Prättälä & Helminen, 1990).

The first nutritional and medical studies on meals were also undertaken around the turn of the century (Prättälä & Helminen, 1990). The early studies described meals and classified them into various types on the basis of their assumed nutrient content. Due to the lack of suitable methodology, nutrient content of the total diet or of single meals could not be calculated in detail. After the Second World War the majority of Finnish nutritional scientists shifted their interest towards single foods and nutrients. This trend in research, supported by progress in computer and laboratory techniques, neglected information on meals themselves. Finnish nutritionists rediscovered the meal during the mid-1980s together with an interest in the social and cultural aspects of eating.

The first Finnish sociological study on food was a doctoral dissertation by Koskinen (1971). The concept meal was included in the Finnish title of the study, but the empirical results were limited to a small selection of food items. Systematic sociological research on meals was initiated during the 1990s by Mäkelä (1991, 1996), who began from the idea of the opposition between nature and culture. The choice of food is a process in which the nourishment produced by nature is transformed into food, a product of culture. Meals have both material (structural) and social aspects, the material side includes the proper preparation and composition of the meal while the social aspect refers to the fact that a meal is mainly a social sharing of both food and meanings. The composition of a meal is based on rules concerning the choice of foods, the number of courses and dishes and the methods

of cooking. A proper meal is a social affair structured by time and space (Mäkelä, 1991; Mäkelä *et al.*, 1994).

EXAMPLES OF METHODOLOGICAL APPROACHES

Current research on meals in Finland is a combination of the social and nutritional sciences. Several different data-collection methods, such as qualitative interviews, structured questionnaires and food records, have been applied.

Qualitative Interview (Meal Patterns among Working-class Men)

During 1991–1992, 20 Finnish construction workers and 21 lumberjacks were interviewed. The lumberjacks lived in rural Eastern Finland, and the construction workers in the metropolitan area of Helsinki. The aim of the study was to describe associations of working and living conditions with lifestyle among working-class men. Food consumption and meal patterns were included in the study as elements of lifestyles.

One of the authors (Ritva Prättälä) conducted semi-structured interviews in the homes of workers, the 1–2-h interviews were tape-recorded and transcribed verbatim. The themes discussed included childhood homes, current family and housing conditions, work history, food ideologies, health-related lifestyles and meal and eating patterns.

The research questions on meals were developed in connection with a multi-disciplinary research project, “Sociocultural variation in meal patterns in Finland and Kentucky” (Mäkelä *et al.*, 1994; Prättälä *et al.*, 1994; Roos *et al.*, 1994). The three members of the research team each had responsibility for an individual qualitative project. The individual projects were conducted under various circumstances, but meal questions followed similar lines in every project.

The research team first discussed theoretical and methodological issues, such as the division of eating occasions into meals and snacks and the social and material aspects of a meal (Mäkelä, 1991). In the interviews the aim was to determine whether the lay definitions of a meal corresponded to the theoretical definitions, thus, the personal wordings by subjects were used as a starting point. The subjects were first asked to describe freely what they had eaten during the previous day. From the description the interviewer registered all eating occasions, eating times and names given to the eating occasions. After the general description the interviewer checked whether the social and material aspects—company, place, time, components, preparation—of the meal had been included in the description. If not, these were asked separately in relation to every eating occasion. At this stage of the discussion the interviewer did not use the words “meal” or “snack” or any of the common names for meals.

At the second stage of the meal interview the subjects were asked to discuss which eating occasions they considered as meals and to give a name to those eating occasions that were not meals. Finally, the subjects described reasons why certain eating occasions were meals and gave their opinion on what constituted a proper meal. If the subject did not mention composition of the proper meal or meal company, these were asked separately.

Health-behaviour Questionnaire (Changes and Socio-economic Variation in Finnish Meal Patterns in 1980–1995)

The aim of the study (Mäkipää, 1998) was to describe trends in meal patterns between 1980 and 1995 in relation to broader socio-economic changes occurring in Finland during the same time period. The questions to which the study sought answers were: (1) have Finnish meal patterns changed during 1980–1995?; and (2) have the changes in meal patterns been similar in all subgroups of the study population, e.g. among farmers and office workers, employed and unemployed and in higher and lower educational groups?

A survey on health behaviour has been conducted annually in Finland since 1978. A random sample of 15 to 64-year-old Finns annually answer a posted questionnaire: the number of respondents is about 5000 and the response rate about 70% (Helakorpi *et al.*, 1996). The health-behaviour survey has included questions on meal patterns since 1980. The form of the meal questions as well as questions on sociodemographic background (age, sex, educational level, employment status, occupation) were identical in every survey.

Questions on meals are structured: in the forms, breakfast is defined by its Finnish name “aamupala” (morning snack), lunch and dinner by the names “lounas” and “päivällinen” and the times for lunch and dinner, 10.00 a.m. to 3.00 p.m. and 3–8.00 p.m. The participants answered whether they eat breakfast, lunch and dinner every day; in addition, the respondents were asked whether they have a hot lunch and/or dinner. On the basis of the individual questions concerning breakfast, lunch and dinner, a combined variable describing meal pattern, i.e. the pattern of one, two or three meals per day, was constructed.

Dietary Survey (Meal Patterns and Nutrient Intake among Adult Finns)

The purpose of the study (Roos & Prättälä, 1997) was to investigate the relationship between meal pattern and quality of the diet. The difference in diet quality among people following a conventional meal pattern and those following other meal patterns were analysed, and nutrient contents of meal, snacks and other eating occasions compared.

The dietary survey used in the analyses was conducted in 1992 (Kleemola *et al.*, 1994). Dietary data were collected from 1861 adults 25–64 years of age by two different methods: a posted questionnaire and a 3-day food record. Meal-pattern data were also collected by two methods: by one structured question in the questionnaire and by the food record in which the subjects could freely structure their daily eating into eating occasions and define these as meals or snacks.

Due to the large number of respondents, unstructured meal-pattern questions could not be used in the questionnaire. Eating occasions were defined and named by the researchers, and the question structured into six time-based options: breakfast, snack in the morning, lunch, snack in the afternoon, dinner and snack in the evening. For every eating occasion the subject could choose from among three precoded alternatives: (1) do not eat; (2) eat hot prepared food (including porridge); or (3) eat something else—what?

The conventional meal pattern was defined by criteria outside the scope of the present study (dietary guidelines for various population groups). The conventional meal pattern included three daily meals: hot breakfast, hot lunch and hot dinner.

Subjects who ate hot breakfast, hot lunch and hot dinner were identified by the precoded meal-pattern question and considered as conformers to the conventional meal pattern. Since hot breakfast was rare, subjects eating a "cold" breakfast were also considered as conformers to the conventional meal pattern. To locate these subjects, the food-record data were used. From the food records, those subjects who had eaten solid food (as opposed to those simply drinking liquids) before 10.00 a.m. (and had hot dinner and hot lunch according to the meal-pattern question) were included among conformers to the conventional meal pattern. The nutrient and food intake (estimated from the food records) of those following the conventional meal pattern and others were compared among men and women to determine whether an association is present between meal pattern and nutrient intake.

The food record was open and unstructured and with no predefined meal pattern, as opposed to the questionnaire. When maintaining the food record, the subjects were instructed to classify every eating occasion as either a meal or a snack and to name the occasion. The recorded eating occasions in the food records were classified into three groups: meal, snack and other eating occasion. Other eating occasions included those not defined by the subjects (more than 10% of the energy intake was derived from these uncoded eating occasions). The nutrient density of the various eating occasions among men and women were compared to determine whether meals were "healthier" than snacks.

CONCLUSIONS

In line with studies undertaken in other industrialized countries (e.g. Quandt *et al.*, 1997; Roos *et al.*, 1993; Wood, 1995), the Finnish studies show that meal patterns are related to socio-economic structure, work schedules, lifecourse, living conditions and food availability. Meal patterns vary by individual energy needs, and the nutrient contents of meals can be different from those of snacks. Typical conclusions drawn in meal studies refer to the social nature of the meal and the various definitions used by professionals, lay people and more generally, by various cultures. It is difficult to account for all determinants and characteristics of meals in a single study. The three methodological examples presented here shed light on the various aspects of the meal.

With the help of the qualitative interviews, it was possible to determine people's personal definitions of meals and to reveal how individual foods were combined into larger entities. Personal descriptions by subjects of their daily eating could also cover other aspects of everyday life relevant to meal patterns. If the researcher is not conscious of these aspects, they will not emerge from structured questionnaires. The qualitative study, however, was limited to a small number of subjects and did not result in information on the nutrient content of the diet.

The national health-behaviour questionnaire posted to a large group of subjects could not account for the personal definitions of meals by the subjects. In addition, the questionnaires which included several themes from subjective health to symptoms and health behaviours, could not measure nutrient intake. This type of method however showed certain advantages. Since the data were collected annually from 1980 to 1995 and from a sample representative of the Finnish adult population, time trends in relation to socio-economic factors could be analysed to determine whether Finnish meal patterns still change in line with changing socio-economic conditions.

Meal questions included in the cross-sectional dietary survey allowed analyses of nutrient content of various eating occasions. Since the names or times of meals and snacks were not precoded in the food-record forms, the subjects could use their own meal definitions, however, recording all food eaten during three days is time consuming. In a dietary survey in which the main aim is to obtain information on nutrient intake, it is difficult to cover the various social and structural aspects of the meal and the context of eating. In the survey presented here, only a small number of structured questions on eating place and company were included.

The fact that people structure eating into meals and snacks is consciously used as a memory aid in dietary recalls. Questions on meals and meal times have predominantly served as tools for obtaining reliable data on the consumption of single food items. With little additional work, the standard methods of dietary surveys can result in valuable information on how individual food items are combined into meals, snacks and other eating occasions. When planning an empirical study on meals the researcher should ask herself/himself at least four questions: (1) who defines the meal?; (2) are meal patterns assumed to vary by time and between subgroups of the study population?; (3) is information on nutrient content of various eating occasions relevant to the study?; and (4) could information on meals be obtained from existing data sources?

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