

"Review of Meal Pattern Changes in Germany"

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A) Introduction

In human nutrition research food and nutrients are in the focus of research. In food habit research the eating events - the meals - are the central constructs (Tolksdorf, Wiegelmann).

In public health nutrition there are huge tasks in order to prevent nutrition-related diseases and to reach the goals of the nutrition and health policy (James, WHO Europe), which have to recognize the socio-cultural dimensions of food habits (eating as total phenomenon). But even the "classical" nutritional sciences have to realize the differences of physiological effects between isolated food and nutrients compared with the "natural settings" of eating. Eating meals means interactions of food, furthermore there are socio-psychologic-neuronal interphases of eating (e.g. emotions, disgust). The current dietary advices are centered on nutrients (Recommended Dietary Allowances) and more recently on food groups (Food Pyramide). The consumers themselves have to translate these into their structured everyday activities around food procurement, storage, preparing, eating and disposal, which are important parts, but not the only one's, to master one's everyday needs of living.

It is most likely the way one is eating (distribution of meals during the day, during the week, during the years; the speed of eating: slow/fast eating; the distribution of portion sizes, nibbling/binge eating; monotonous vs. chaotic, etc.) is influencing the human wellbeing, its functions and health. But in nutrition epidemiology such interrelationships are not well documented, since they are neglected in the survey designs.

The official recommended dietary guidelines do not include meals, there are only very general advices, e.g. in brochures of the DGE (German Nutrition Society): eat three main meals with two small meals in between; with distribution of energy for breakfast (1st + 2nd) - 35%; for lunch - 30%; for dinner - 25% and for a noon break (Vesper) - 10%. There are no allowances for snacking, which obviously is a custom of many humans. Meal times for infants are more strict recommended; and there are some vague recommendation for shift workers.

B) Definition of Meals and Meal Pattern

Since there is only dispersed research on food habits, there is much basic research needed, which include definition work.

Good basis for that can be found in ethnological food habit research. It can be read in Mary DOUGLAS work: "Each meal is a structured social event which structures others in its own image" and "Food categories encode social events". For Germany one can mention TOLKSDORF and WIEGELMANN, who stressed the importance of meals as a central construct in food habit research (Fig.1). During an EURO-NUT Workshop on measurement and determinants of food habits and food preferences there were discussion on relevant definitions (Diehl, Leitzmann) (Fig.2), but still these and others cannot be regarded as general accepted.

There are too few studies which describe the eating habits of people. There is a need for collecting evidence, which meals people are eating, which dishes they are eating and in which sequence; at which time they are eating, how long the meals are lasting and in which situation the eating takes place. Such data collections (e.g. gathered by longitudinal food protocols) constitute the basis for identifying meal patterns. In traditional societies with monotonous diets, such patterns might be rather straightforward. The weekly "menu card" can be rather simple; but nevertheless such patterns obviously are not valid for an average society ("representative for a country"), but for an "cultural" homogenous group. In historical research (in reality only a few decades ago) it might be possible to identify such typical meal patterns in specified geographical areas (e.g. in Fig.3).

Considering such data from the viewpoint of a modern society, it is rather obvious that everyday activities - like eating - are changing rather quick and are depending on changing living situations. Today many food habits and dishes, which were common among the generation of our grandparents, are lost. In modern societies the cultural rules and traditions which fixed meal patterns are loosened. Today populations are not as stable and homogenous as before; migration and travelling is common. The eating situations are diversifying. It is a very difficult task to identify "meal patterns". But despite of increasing individuality and increasing potential for options for human behaviors (e.g. in considering the huge range of food varieties and food innovation on markets), the everyday activities of humans have to be patterned, in order to manage life. There are habitual activities in the dispersed society with diversified norms. It is the challenge of food habit research to identify them. Traditional meal structures, which were tightened to socio-cultural characteristics of the society, are disappearing. The new structures

obviously are related to more determinants, e.g. the different eating occasions have increasing influence, like eating during morning transport to work; eating between shopping; eating as leisure time activity. The research of identifying meal pattern has also to recognize, the different types of people (sociological, biographical, cultural, according to lifestyle etc.). In modern societies there are no "representative - general valid" meal patterns, but many different ones. This is a disadvantage, because it increases the difficulties of such food habit research; but that can be regarded also as an advantage, one can compare more at a given time and region. It has to be discussed which is the right way to identify "meal patterns" (task 4 of this workshop).

C) Knowledge about meals and meal pattern changes in Germany

There is no actual, valid description of meal patterns in Germany available. In a pragmatic way some relevant studies from recent years were screened for meal and meal pattern informations. Some examples from a premature annotated bibliography are included as annex of this paper (13 studies).

In most diet and nutrition surveys of Germany there are meal informations included, since the dietary methods (recalls and protocols) are structured generally according the common main meals (breakfast, lunch, dinner); but only in few cases such informations are evaluated. The publications on meals and meal pattern are rare (e.g. Abt; Oltersdorf et al.; Winkler et al.) and dealing only with selected population groups. Despite of recent date they are not very recent indicating a long delay between field work and publication. The given informations are concerned with time, but not with the contents of the meals.

There are several marketing oriented studies, which include different aspects of meals and meal pattern. Basis-Research, Frankfurt/M, made over many years (in the eighties) a serious attempt to identify meal pattern; but it was stopped several years ago. There are only internal informations on this "food monitor" project available.

The marketing oriented studies give empirical evidence that the traditional meal structures are in a process of disintegration. There are still traditional main meal patterns and people have the wish to keep it, but the conditions of modern live are pushing new habits. That means less meals are prepared and eaten at home, more convenient foods and pre-prepared meals are used and more meals are eaten outside home. There is a loss of cooking skills and competence in food handling. But in this general trends there are niches for "backward trends". More people

want to rediscover almost forgotten regional traditional recipes (may be there is a wave of "local ethnic" food). Other people may regard cooking as leisure time event.

Also the marketing oriented studies reveal more informations on time aspects of meals than on the content of meals.

There is in Germany no study which relates meal pattern and nutritional status.

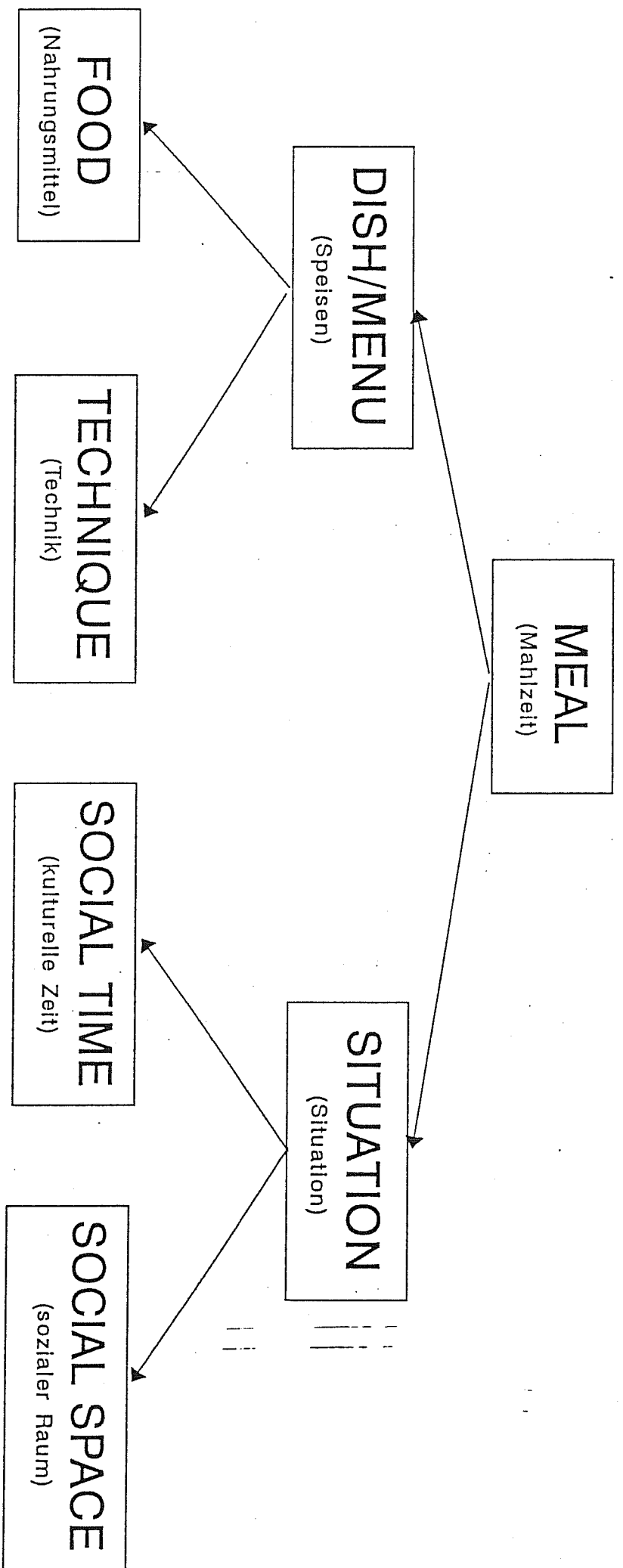
The investigations for informations on meal pattern in Germany revealed that there is a good potential for secondary data analysis, since there are several important survey databases available, which could be used for meal pattern analysis. It is one task to get such research funded. The informations on meal patterns should be put in a structured order (not representative, general meal patterns), which consider different consumer groups and different typical, specific situations (examples given in Fig.4).

References:

- Abt, H.: Ernährungsverhalten in Familienhaushalten. Ergebnisse einer empirischen Untersuchung. Ernährungs-Umschau 40(Beiheft) 95-103 (1993)
- Diehl, J.M., Leitzmann, C.: Measurement and determinants of food habits and food preferences. EURO-NUT report 7, Wageningen, 1986
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- Oltersdorf, U., Ulrich, H.-J., Jost, A., Bayer, O.: Food patterns of policemen on patrol duty. A case study of Stuttgart, Germany. AGEV Publication Series Vol.10; Supplement to Ernährungs-Umschau Vol.42, p.47-49 (1995)
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- Winkler, G., Döring, A., Keil, U.: Mahlzeitenmuster in einer süddeutschen Bevölkerung. Ergebnisse der Ernährungserhebung 1984/85 des MONICA-Projektes Augsburg. Z.Ernährungswiss. 34(1) 2-9 (1995)

Fig. 1

Definition of Meal according to FOLKSDORF



(U. Tolksdorf: Strukturalistische Nahrungsforschung. Ethnologica Europaea IX(1) 64-85 (1976))

Nutritional behaviour (nutritive behaviour, food-oriented behaviour, eating and drinking behavior):

All planned or spontaneous/habitual activities directed towards the procurement, preparation and consumption of food, including the social, symbolic and ritual uses of food.

Includes Diets (food consumption according to a regimen). Special diets (food prescribed, regulated or restricted as to kind and amount, for therapeutic or other purposes).

Food habits (food customs, foodways, dietary practices):

Recurrent performances of food related behavioural sequences by which an individual or group selects, prepares or consumes food, directly or indirectly, as a part of cultural, social and religious practices.

Food pattern (dietary pattern):

Repeated arrangements of food and beverages that can be observed in food consumption records, including the combination of foods into meals or into recipes for prepared items in meals or snacks.

More loosely, types of foods consumed by people in a country, culture or locale emerges as a result of food habits.

Eating pattern (eating practices):

There exists no consensus on a single meaning. Includes: combination of foods eaten together (food pattern); variations in times and places of eating; social function of meals (including eating companions).

J.M.Diehl, C.Leitzmann (eds): Measurement and determinants of food habits and food preferences. EURONUT-Report No.7, Wageningen, 1985; p.5-11: C.Leitzmann, U.Ollersdorf: Introductory remarks and definitions.

Fig.3

Menu of medium farmer families in the Spessart (mountainous area with large forests in Lower Franconia, Bavaria, Germany) in 1880 ¹⁾

	Food served in the morning	Food served at noon (for lunch)	Food served in the evenings
Monday	On all days of the week: Coffee substitute (made of rye) with plenty of skim milk; bread, potatoes and soft cheese	Soup made of cream or milk, potato dish,	Potatoes and curds or soup
Tuesday		Cabbage or beans, and pork;	Brown roux soup and bread or potatoes
Wednesday		Soup made of legumen and dumplings (dried fruit)	Brown roux soup and bread or potatoes
Thursday		Kohlrabi or carrots, and pork. In summer: Spinach or knot-weed	Soup made of buttermilk
Friday		Paste food and mixed fruit	
Saturday		Liver sausage and potato dish. In winter: Pork and cabbage	Curds and fried potatoes, coffee
Sunday		Beef and horseradish	

¹⁾ WEHSARG/WILL: Das Ernährungsproblem im Spessart und seine wirtschaftlichen Grundlagen, Zeitschrift für Ernährung 2, 1932, 265-274

Menu of medium farmer families in the Spessart (mountainous area with large forests in Lower Franconia, Bavaria, Germany) in 1930 ¹⁾

	Food served in the mornings	Food served at noon (for lunch)	Food served in the evenings
Monday	On all days - except sunday: Homebaked brown bread, cheese, butter now and then, coffee and milk	Homemade sausage and potatoes	Herring or sausage and potatoes
Tuesday		Soup made of legumen, beans of kohlrabi, and pork	Salad containing bacon coffee and bread
Wednesday		"Buttersuppe" and paste food, dried fruit, fruit preserved in vacuum jars	Sausage and potatoes
Thursday		No soup; pork and sauerkraut	Reheated food (leftovers)
Friday		Paste food or "Platz" ¹⁾ , potato soup	Herring and potatoes
Saturday		Soup made of legumen; cabbage and meat, "Haspel" ²⁾ or sausage	Cottage cheese or sausage, potatoes
Sunday	Roll, coffee, milk	Beef and horseradish, potatoes, vegetables	Sausage and potato salad

¹⁾ WEHSARG/WILL: Das Ernährungsproblem im Spessart und seine wirtschaftlichen Grundlagen, Zeitschrift für Ernährung 2, 1932, 265-274

¹⁾ "Platz" is a special kind of cake

²⁾ "Haspel" - a special kind of fine cutted meat/bacon

Fig.4 Examples for used dimensions in food habit research

a) for different consumer groups:

- biographical (infant to elderly)
- regional ("traditional ethnic")
- socioeconomical (income; profession, jobless)
- sociological (lifestyle; milieu; household structure)
- psychological (preferences/aversions; attitudes - type)
- biological (men/women/pregnant/; biochemical individuality - sensitivities; allergies; body constitution)
- health parameters (sick people; handicapped)

b) for typical, specific eating situations:

- eating related to work/job (including travel from home to work);
- eating as social event (e.g. with friends; invitations, small partys, up to prestige celebrations);
- eating as every day situation at home and outside home (e.g. shopping);
- eating at leisure time; during sport, during vacancies;
- eating beside other activities (during work, during wating; during TV; in cinema, etc);
- eating at holidays, at different seasons

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

IGLO-Forum Studie '95: Kochen in Deutschland (Cooking in Germany)
Union Deutsche Lebensmittelwerke, Hamburg (Unilever)

Year of Survey: spring 1995

Methods: Sample (size, age, location, etc.)

Data sources (interview, questionnaire, etc.)

N=2600; representative sample (random route; >14y; Persons in private households), personal interview (about 1h);

Some Features of Results:

82% of all main meals eaten in private households (88% breakfast; 73% lunch; 87% dinner); younger eat less at home.

No further information on meal composition, eating situation.
Reduced cooking skills in young population segments; increasing trend in usage of convenient foods.

Identifying of 6 types

type 1 - is cooking without ambitions (16%)

type 2 - young non-cooking (8% - mainly males)

type 3 - youngster without talent (17% - mainly males)

type 4 - hopeful cook-talent (30% - mostly females)

type 5 - experienced top-cook (22% - mostly females, elderly)

type 6 - seniors without interest in cooking (7% - mainly males)

Publications:

only from: Iglo-Forum; Bodelschwinghstr.17; 22337 Hamburg
phone: 040 / 50 43 25

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

IFAK, Taunustein is carrying out since many years surveys which contain questions about preparing meals in private households

Year of Survey: starting 1960 (?)

Methods: Sample (size, age, location, etc.)

Data sources (interview, questionnaire, etc.)

representative samples of former FRG
questions on meal, cooking

Some Features of Results:

Nov.1960 - preparing warm meals on working days
78% lunch / 36% dinner

preparing warm meals on working days				
	only lunch	only dinner	lunch/dinner	no
1976	55	16	23	5
1978	46	19	32	3
1980	48	16	31	3
1981	46	18	33	3
eating warm meals on working days				
1983	75	44		3
1985	76	56		3
1987	74	53		2
1989	76	52		2
1990	72	56		3

Publications:

Internal IFAK-Reports
(IÖS-Bibl.)

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

"Ernährung und Kreativität (1992)" (Nutrition and Creativity)
GfK-Marktforschung, Nürnberg; for: Nestlé, Frankfurt/M

Year of Survey: 1989 (?)

Methods: Sample (size, age, location, etc.)

Data sources (interview, questionnaire, etc.)

N=1000; + further GfK Data

Some Features of Results:

Food habits are changing, less rules, norms, conventions are determining eating/meals; but more the situations for eating. Still the traditional 3 main meals (breakfast - lunch - dinner), but only 43% have this regularly (more in elderly - 49%, than in the younger - 37%). Snacking/eating in between is increasing: 39% of population (33% in elderly, 46% in younger).

Regular time of meal by 80% during working day / 77% during weekend

younger:	70%	68%
elderly:	89%	86%

Breakfast meal pattern given: 7 types; for lunch and dinner: only warm/cold category; lunch 72% warm. Warm main meal: lunch: 59% / dinner: 23% (elderly: 74/6; younger: 47/32) - changing from lunch to dinner. Eating in late evening: after 20,00 - is increasing: occasionally done by 34% (elderly - 23; younger: 45). Skipping of lunch by 25%.

Cooking in household is decreasing; from daily duty to occasional optional choice ("Kür"); cooking as hobby, culinary leisure time activity, societal events, convenience and creativity; following 10 types are identified:

(1) breakfast hectic	18%	(2) lunch ascetic	14%
(3) dinner opulent (sumptuous)	20%	(4) fitness fetishist	18%
(5) health neurotic	7%	(6) nutrition professor	8%
(7) eating aristocrat	10%	(8) eating square	12%
(9) eating chaotic	6%	(10) eating ignorant	12%

Publications:

Internal Publications by GfK and Nestlé

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

Nationale Verzehrsstudie (NVS) - National Dietary Survey
funded by: Bundesministerium für Forschung und Technologie
(BMFT) - Federal Ministry of Research and Technology
survey work made by: Gesellschaft für Konsumforschung (GfK),
Nürnberg

Year of Survey: Oct.1985 - Jan. 1989

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

personal interview (food frequency) and 7 days dietary protocol

sample: age >14 years; N= 10.985 - representative sample (only
former FRG)

Some Features of Results:

Since 1995 a public use file of the data available.
In principle it is therefore possible to analyse data for meal
and meal patterns.
The publication till now contain no information on meal, only on
food consumption patterns (per week).

Publications:

see attached list, and:
Projektträgerschaft Forschung im Dienste der Gesundheit in der
Deutschen Forschungsanstalt für Luft- und Raumfahrt e.V. (DLR)
(Hrsg.): Die Nationale Verzehrsstudie - Ergebnisse der Basisaus-
wertung (Materialien zur Gesundheitsforschung, Bd.18), Bonn,
1991

VERA-Schriftenreihe

Herausgeber:

Werner Kübler, Gießen
Hans-Jürgen Anders, Nürnberg
Walther Heeschen, Kiel

- Band I: Speitling, A., Hüppe, R., Kohlmeier, M., Matiaske, B., Stelte, W., Thefeld, W., Wetzel, S.: Methodenhandbuch der Verbundstudie Ernährungserhebung und Risikofaktoren Analytik. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1992)
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- Band II: Schneider, R., Eberhardt, W., Heseke, H., Moch, K.J.: Die VERA-Stichprobe im Vergleich mit Mikrozensus, Volkszählung und anderen nationalen Untersuchungen. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1992)
- Band III: Heseke, H., Adolf, T., Eberhardt, W., Hartmann, S., Herwig, A., Kübler, W., Matiaske, B., Moch, K.J., Schneider, R., Zipp, A.: Lebensmittel- und Nährstoffaufnahme Erwachsener in der Bundesrepublik Deutschland. (Zweite überarbeitete Auflage) Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1992)
- Band IV: Heseke, H., Schneider, R., Moch, K.J., Kohlmeier, M., Kübler, W.: Vitaminversorgung Erwachsener in der Bundesrepublik Deutschland. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1992)
- Band V: Erdinger, U., Kohlmeier, M., Stelte, W.: Versorgung Erwachsener mit Mineralstoffen und Spurenelementen in der Bundesrepublik Deutschland. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (in Vorbereitung, 1994)
- Band VI: Wetzel, S., Heeschen, W., Stelte, W., Stüber, C., Kübler, W., Eberhardt, W.: Belastung Erwachsener mit persistenten Organochlorverbindungen, toxischen Schwermetallen und Nitrat in der Bundesrepublik Deutschland. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1994)
- Band VII: Kohlmeier, M., Berndt, B., Thefeld, W.: Verbreitung von klinisch-chemischen Risikoindekatoren in der Bundesrepublik Deutschland. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1993)
- Band VIII: Schneider, R.: Die Beurteilung der Nährstoffversorgung bundesdeutscher Bevölkerungsgruppen am Beispiel von Vitamin C und β -Carotin. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1992)
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- Band XI: Adolf, T., Schneider, R., Eberhardt, W., Hartmann, S., Herwig, A., Heseke, H., Matiaske, B., Moch, K. J., Rosenbauer, J.: Ergebnisse der Nationalen Verzehrsstudie (1985-1988) über die Lebensmittel- und Nährstoffaufnahme in der Bundesrepublik Deutschland. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (in Vorbereitung, 1994)
- Band XII: Adolf, T., Eberhardt, W., Heseke, H., Hartmann, S., Herwig, A., Matiaske, B., Moch, K. J., Schneider, R., Kübler, W.: Ergänzungsband zum Ernährungsbericht 1992. Lebensmittel- und Nährstoffaufnahme in der Bundesrepublik Deutschland Oktober 1985 bis Januar 1989 auf der Basis der Nationalen Verzehrsstudie. Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (1994)
- Band XIII: Herwig, A.: Körperliche Aktivität und Lebensgewohnheiten, Nährstoffzufuhr, klinisch-chemische Parameter Ergebnisse der Nationalen Verzehrsstudie (NVS) und der Verbundstudie Ernährungserhebung und Risikofaktoren-Analytik (VERA). Wissenschaftlicher Fachverlag Dr. Fleck, Niederkleen (in Vorbereitung, 1995)

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

Trend- and Food Monitor by Basisresearch, Frankfurt/M
(one of the customers was CMA, Bonn - Agricultural Marketing Board)

Year of Survey: From 1982 - 1988 (?)

Methods: Sample (size, age, location, etc.)

Data sources (interview, questionnaire, etc.)

24-h-Recall (after-day-recall): interview on food intake (non
quantitativ; but specific on food, eating situation)
every year - three times in one month (Feb/June/Oct) interviews
(each time N = 1000; >14y, only former FRG)

Some Features of Results:

	1982	1986	1988
breakfast	98%	96%	97%
lunch	95%	91%	92%
dinner	93%	95%	95%

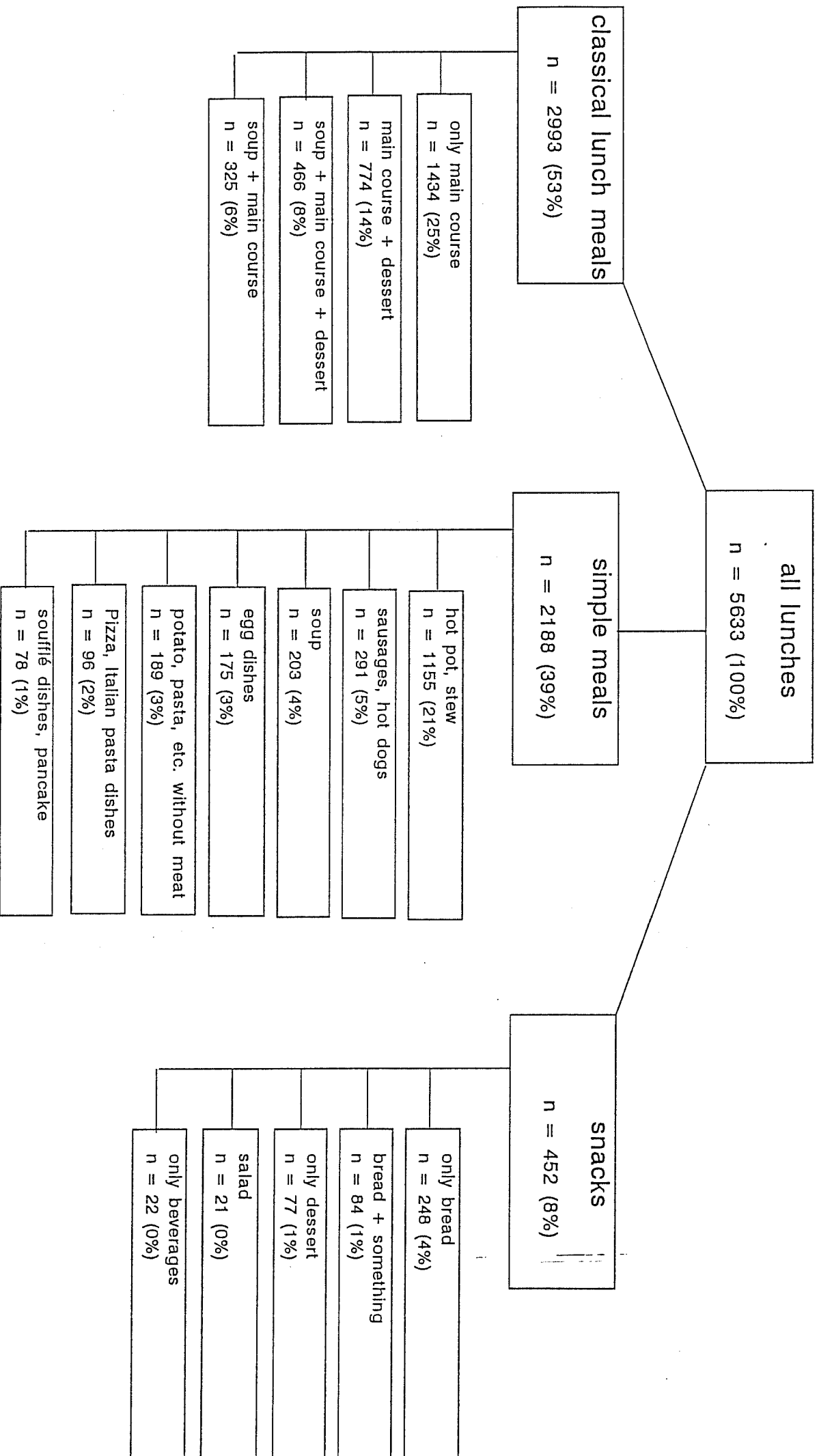
also tried to identify for each meal - typical patterns,
example in enclosed figure.

Publications:

Publications by BASISRESEARCH, Frankfurt/M
and as well by CMA e.g.
Ernährungsverhalten im Wandel; CMA-MAFO-Brief 011/1988

LUNCH-STRUCTURE

BASIS RESEARCH
food-monitor
1982 + 1983



*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

Project of Institute of Medical Sociology, University Düsseldorf (Prof. Dr. Christian von Ferber); supported Federal Ministry of Youth, Family, Women and Health, Bonn

Year of Survey: Spring 1987

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

284 Household (with school children) in two towns (Duisburg, Velbert) in North Rhine-Westfalia.
different questionnaires; included: 7-day-food protocol; questions on meals; shopping, cooking, information

Some Features of Results:

importance of eating meals together - especially on weekends;
during week - on dinner;

eating alone	father	mother	child
breakfast	37%	23%	20%
lunch	59%	18%	33%
dinner	17%	13%	24%

main meal: warm meal on lunch; especially on weekends

Publications:

Abt, H.G.: Ernährungsverhalten in Familienhaushalten. Ergebnisse einer empirischen Untersuchung. Ernährungs-Umschau 40 (Beiheft; AGEV), 95-103 (1993)

*Annotated "Bibliography" on
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Name of Study:

WHO MONICA Augsburg Dietary Survey

Year of Survey: 1984/85

Methods: Sample (size, age, location, etc.)

Data sources (interview, questionnaire, etc.)

N = 899 men aged 45-64y (random sample) in Augsburg region (Bavaria); 7-d-food records

Some Features of Results:

80% have 4 meals or more per day; almost all have the three traditional meals (breakfast, lunch, dinner)

1st breakfast 94%

2nd breakfast (Brotzeit) 6%

lunch 81%

afternoon (Kaffee) 16%

dinner 89%

late evening meal 11%

76% of meals are eaten at home; 16% on work site; 5% in restaurants

speciality in Bavaria: men on Sunday - second breakfast (Früh-schoppen) outside home;

informations on time of meals; and energy and nutrient density; no information of meal contents.

Publications:

Winkler, G., Döring, A., Keil, U.: Mahlzeitenmuster in einer süddeutschen Bevölkerung. Z.Ernährungswiss. 34(1) 2-9 (1995)

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

German Nutrition Report 1984 (Federal Ministry of Youth, Family and Health): Study on Eating in Family and School survey field work done by IFAK (?)

Year of Survey: April 1982 - June 1983

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

representative sample (N=2910 German families with children 0-18y, only former FRG);
interviewing of mothers and children (<6y only mother's interview), 3-day-food protocol
content: body weight, body image, food preferences, eating disorders; nutrition information and knowledge;
meals in family and in school

Some Features of Results:

Main meal for children: lunch - 69%
eating together with the family:
 breakfast 63%
 lunch 52%
 dinner 95%

includes some information on breakfast compositions; eating style - "table manners" - at home

Publications:

Deutsche Gesellschaft für Ernährung: Ernährungsbericht 1984. Kap.3.3.: Essen in Familie und Schule. DGE, Frankfurt/M., 1984

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

Esskultur '82 (Eating Culture)
by Journal "Essen&Trinken" ("Eating & Drinking") - Hamburg
survey work done by: Sample Institut, Hamburg

Year of Survey: May/June 1982

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

repeating of a study in 1971 (N= 903) - in 1982 (N=1018)
only women, representative sample, only former FRG

Some Features of Results:

types of women	warm meal on	
	lunch	dinner
1) only housekeeping with kids (19%)	50	11
2) women with jobs and kids (9%)	41	18
3) only housekeeping, without kids (9%)	49	20
4) women with jobs without kids (11%)	40	26
5) singles with jobs (5%)	32	28
6) married women > 50y (32%)	61	12
7) elderly >60y, alone (14%)	77	1

Information on food, shopping, cooking and eating (attitude, interest, problems, needs); time of meals, eating situation; informations on meal content; main dishes, courses;

1971 a typical warm meal: meat, potato, vegetables, sauce
1982 more varied; less vegetables, more salad; less potatoes, more pasta, rice, etc.

Publications:

essen&trinken: Esskultur '82. Gruner+Jahr AG & Co., Hamburg, 1982

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

Psychosocial Evaluation of Nutrition; Part of The German Nutrition Report 1980; field survey work done by: IFAK, Taunustein

Year of Survey: 1978

Methods: Sample (size, age, location, etc.)

Data sources (interview, questionnaire, etc.)

Representative sample (>14y, 280 sampling points), additional samples: physicians, pharmacists; food traders; reformhaus traders; teachers, pregnant women, cooks, food journalists, questionnaire dimensions: alcohol, food shopping, food storage, body image, food attitudes, nutrition knowledge, food habit, nutrition information, smoking, TV
Part of food habit included questions to cooking of meals; meals eaten away from home (catering).

Some Features of Results:

95% have a three meal pattern. Warm meal is the main meal - 93% have it every day. No information of kind of meals.

	eaten		most important	
	during week	at weekend	week	weekend
First Breakfast	95%	93%	21%	19%
Second Breakfast	23%	9%	2%	2%
Lunch	95%	96%	72%	78%
Afternoon	27%	55%	2%	3%
Dinner	96%	95%	13%	7%
Late Evening	7%	7%	0%	0%

Publications:

Deutsche Gesellschaft für Ernährung: Ernährungsbericht 1980 + Materialband, Frankfurt/M, 1980

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

German Nutrition Report 1976; Pilot Survey to Psychosocial Determinants of Wrong Food Habits (funded by Ministry of Youth, Family and Health, Bonn)
survey field work done by Institut für empirische Soziologie, Saarbrücken

Year of Survey: Nov 1974 - April 1975

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

Representative sample of 400 families in the state of Saarland (N=401 housekeeping women; N=144 husbands; N= 48 women, who participated on nutrition education courses)

Some Features of Results:

Chapter on "theory of meals"; nutrition education and information; cooking skills; recipes; composition of meals.

eating meals together	working day	weekend
breakfast	20%	78%
lunch	25%	86%
dinner	64%	83%

main meal for 89% lunch (warm meal)

Good compilation of informations on other German food habit studies (mainly marketing studies, like Maggi-Study, Attwood-Study, etc.)

Publications:

Deutsche Gesellschaft für Ernährung: Ernährungsbericht 1976; Kap.6: Psychosoziale Ursachen des Fehlverhaltens in der Ernährung - Ergebnisse einer empirischen Testuntersuchung. DGE, Frankfurt/M., 1976

Neuloh, O.; Teuteberg, H.J.: Ernährungsfehlverhalten im Wohlstand. Ergebnisse einer empirisch-soziologischen Untersuchung in heutigen Familienhaushalten. Verlag F.Schöningh, Paderborn, 1979

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

German Nutrition Report 1972: Study on food habits in the Federal Republic of Germany.
Literature survey, mainly results of Maggi-Study

Year of Survey: <1972

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

different marketing surveys

Some Features of Results:

	1957	1961	1965	1969
breakfast	98%	98%	98%	98%
lunch	90%	90%	86%	86%
dinner	96%	95%	91%	92%

time for meals

breakfast on working days - 50% > 15min
on weekend 80% > 15min

breakfast:	6 a.m.	16%
	7 a.m.	37%
	8 a.m.	27%
lunch	12 a.m.	33%
	12,30	21%
	1 p.m.	33%
dinner	6 p.m.	40%
	7 p.m.	44%

Eating soup as starter of a menu
1957 - 38% 1969 - 25%

Publications:

Deutsche Gesellschaft für Ernährung: Ernährungsbericht 1972.
Kap.II Ernährungsgewohnheiten in der Bundesrepublik Deutschland.
DGE, Frankfurt, Main, 1972

citations of:

Maggi GmbH: Trenduntersuchung: Eßgewohnheiten, Mai 1969 (N=1802)
EMNID-Umfrage: Frühstücksgewohnheiten in Deutschland, August 1970 (N=2001)
Institut für Verbrauchs- und Einkaufsforschung, Hamburg. Umfrage: Zubereitung warmer Mahlzeiten, Februar 1969 (N=899)

*Annotated "Bibliography" on
"Meal Patterns in Germany"*

Name of Study:

Studies for Federal Ministry of Food, Agriculture and Forestry,
Bonn; done by Attwood Institut für Marktanalyse, Wetzlar.

Year of Survey:

Autumn 1965 - Where the main meals are eaten?
Autumn 1967 - Home Economics and Housekeeping Women

Methods: Sample (size, age, location, etc.)
Data sources (interview, questionnaire, etc.)

N = 5156 households (interviews only with housekeeping women);
1965; 2-days-meal-recall
N = 4000 housekeeping women ; 1967
(representative random samples; FRG + West-Berlin)

Some Features of Results:

	at home	outside
breakfast	94%	6%
lunch	79%	21%
dinner	95%	5%

housekeeping women - cooking daily: 93%
cooking skills, baking, preservation, etc

Publications:

Internal Research Reports:
Wo werden die Hauptmahlzeiten gegessen? Attwood, Wetzlar, 1965
Hauswirtschaft und Hausfrau. Attwood, Wetzlar, 1967