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Consumer behaviour - case study Poland (Outline of the project)

Introduction of the market economy at the beginning of 90 ties has created consumer market in relatively short time.

The abundance of products supply and services particularly in the area of food has generated many changes in everyday behaviour of the Polish consumers.

It should be underlined that reorientation of the Polish economy has influenced very strongly the average living level which in addition is very diversified among various socio-economic groups (fig.1). According to the official estimations more than 15% of the working population is presently unemployed and about at least 25% of the total population is living below poverty line.

The deterioration of economic situation of wide number of the Polish families as well as worsening of nutritional status (tab. 1, 2, fig.2) followed by unfavourable trends in epidemiological indicators especially in the area of nutritional deficiencies require the creation of long term food policy programme.

One of the main components of such a programme should be permanent monitoring of food consumption, enabling to estimate different aspects of consumption, including evaluation of nutritional status as well as factors creating food patterns and consumer preferences itself.

There is a long tradition in collecting above mentioned data in Poland.

1. Food balance sheets are prepared every year as a basis for:
 - general trends evaluation in the main food products consumption
 - inter-countries comparisons of consumption level.
2. Household budget surveys are carried out also regularly, starting from 1972. The household budget survey is based on the sampling method, which allows for the generalisation of the results to the whole population of the country. The survey covers about 97% of the population.

Since 1993 six basic socio-economic groups of the population have been distinguished for the household budget surveys, namely: the households of workers, worker-farmers, farmers, self-employed persons, pensioners and

retired and persons living on unearned sources of maintenance. The households are divided by size-number of persons in a household and by average income per person. More than 30 thousands of households are participating in the survey now.

The balance and budget data are collected and evaluated by the Central Statistical Office in Warsaw.

3. Additional sources of data are obtained through individual field surveys in the area of food and nutrition as well as food patterns, habits, preferences and so on. These individual investigations are carried out by different organizations and institutions.

Warsaw Agricultural University – Faculty of Human Nutrition and Home Economics, where I am, contribute to nutritional evaluation. In addition since the beginning of transitional period wide interest is being paid to consumers' behaviour, preferences and food habits.

In the period of 1991-94, with the use of questionnaire method, preferences of Warsaw inhabitants were investigated, firstly in total food consumption, than in meat, milk and cereals products. Questionnaires – each time two hundred – were distributed among randomly chosen customers of Warsaw super markets and food shops. To decipher questionnaires the computer technique were used, especially SPSS PC+. Some of the results of our surveys were presented during 1-st Food Choice Conference in Brussels (1992), in Potsdam at European Interdisciplinary Meeting on Current Research into Eating Practices (1993) and during EUROFOODS - Infant Meeting in Portugal (1993).

On the basis of the experience with handling different food data the Polish Committee for Scientific Research offered me and my colleagues 3 year grant with the aim to evaluate consumer behaviour, preferences and habits.

At this moment my presentation might be considered as the answer to Prof. Oltersdorf question number one.

The definitions which we are using are as follows:

Meal

Regular intake of 3-5 meals (refreshments) daily at the appropriate size of portion (Leitzmann, Öhrig, Dauer – 1988).

Food habits

The ways in which an individual or group selects foods and consumes them in response to physiological, psychological, cultural and social influences (WHO – FAO – 1973).

Food patterns

The broad picture of the food consumed by a given community, showing especially the kinds and relative amounts of the more significant foods eaten over a given period rather than their distribution according to meals (WHO – FAO – 1973).

Attitudes

Attitudes are characterized by a predisposition or state of readiness to act or react in a particular way to certain stimulation. (Chisnall – 1995).

Food preferences

The attitude towards a given type of food, usually as compared with other foods, on the basis of favourable physiological reaction, sociological norms or pleasant sensations (WHO – FAO – 1973).

It should be added, that mentioned above grant is a part of wide survey devoted to establishing the food policy principles to be used in Poland.

The work is divided into three parts:

I - desk research on consumer behaviour and methods use for its evaluation

II - designing of questionnaires, distribution and evaluation

III - preparation of final report.

The following groups of products will be investigated : total food, edible fats, fruits, vegetables, potatoes, meat, milk. The distribution, each time of 500 questionnaires, will take a place in the different parts of Poland as well as in towns and villages.

Up to now the survey on consumer behaviour related to edible fats is completed.

I expect that this kind of survey will clarify several aspects of consumer behaviour, particularly in generating food demand which should be in market economy a driving force for food supply and may help to develop modern techniques to be used in such type of studies.

I should add that apart from mentioned surveys other important activities are going on in Poland with the aim to change and improve food habits as well as nutritional and health status.

For example:

- Food and nutrition goals for the Polish population were formulated by the research workers from the National Food and Nutrition Institute (fig. 3) and by Prof. Berger himself from Warsaw Agricultural University (fig. 4).

- The National Food and Nutrition Institute is a project leader of National Cholesterol Prevention Programme, which is accepted and supported by the Ministry of Health and Social Welfare.

This programme includes such activities as:

- a nationwide extension of knowledge of healthy diet and its significance for atherosclerosis prevention,
- under- and postgraduate medical education in the methods of atherosclerosis prevention with the particular emphasis put on the role of nutrition,
- efforts for initiation of a modern nutrition policy in Poland.

As far as surveys on food habits within nutrition research is concerned there are several studies, some presented during the First National Congress on Food, Nutrition and Health in Warsaw (1992) e. g.:

- "Dietary Guidelines" – advantages and controversies (A. Gronowska-Senger),
- Time for a new organization for prevention of nutrition – related diseases (J. Dzieniszewski, W. B. Szostak),
- Evaluation of consumers' preferences in food and nutrition (B. Kowrygo),
- Training of nutritionists at academic level (S. Berger).

I hope that up to now I was able to answer questions 1-3.

As far as question 4 is concerned I would suggest the following areas for joint European research projects:

1. Comparative studies on food habits in different European countries with emphasis on methodological aspects.
2. Food habits of new socio-economic groups of the population in the countries in economical transition:
 - self-employed (exercising the profession),
 - unemployed (maintaining from non-income sources, other than retirement and disability pensions).
3. Food habits of vulnerable groups of population in different countries.
4. Preparing European data-bank on present and planned food habits research as well as education programmes.

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Expenditures (%) for food as compared to total expenditures in Polish households during 1989-1995

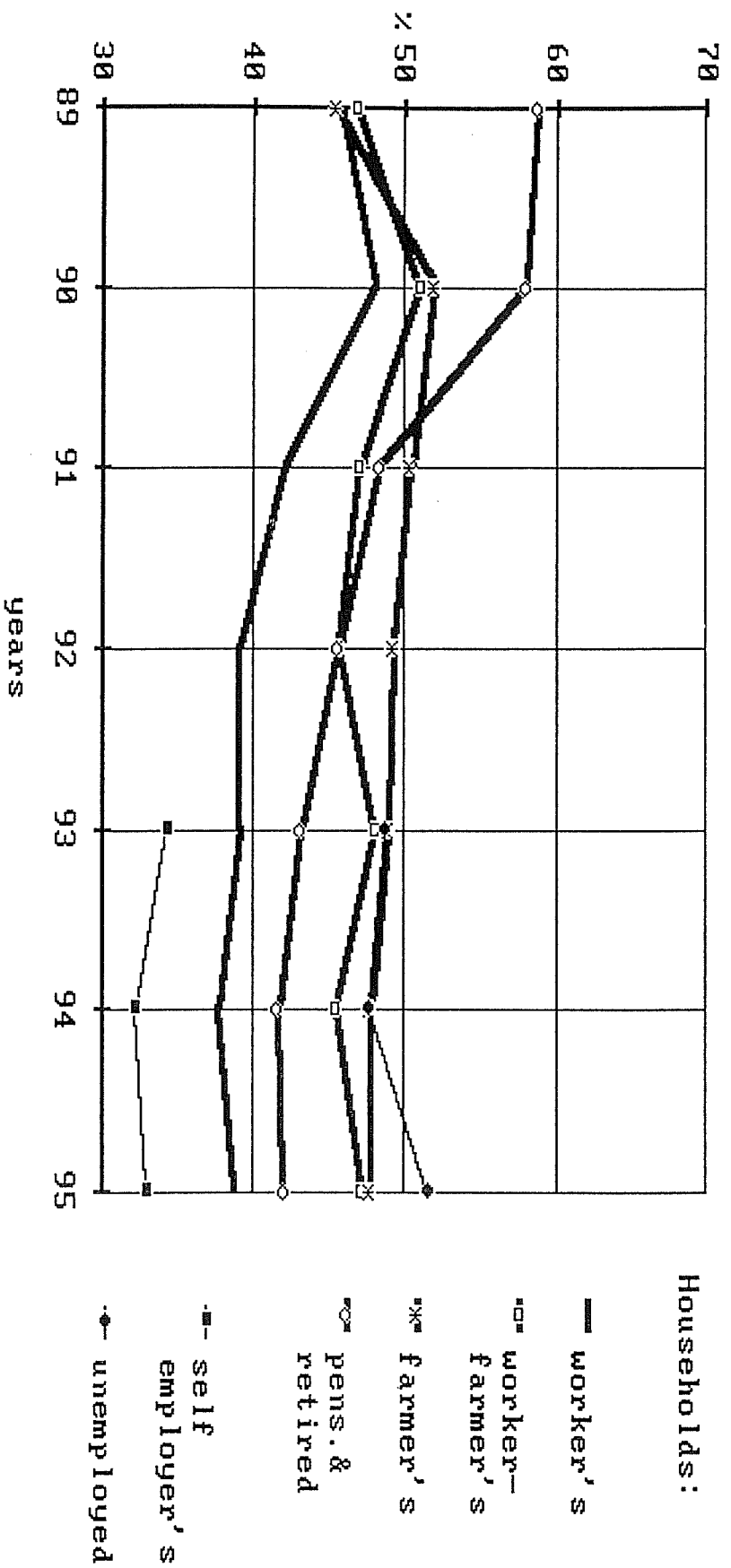


Table 1. Food consumption in six socio-economics groups in Poland in 1994

Products	Households					
	Worker's	Worker-Farmer's	Farmer's	Pens. & Retired	Self employer's	Un-employed
Cereals	81,8	105,8	114,6	112,1	74,5	82,7
Potatoes	82,1	116,6	121,4	140,8	75,5	95,8
Pulses	0,7	1,3	1,4	1,6	0,8	0,8
Vegetables	59,4	74,3	81,5	86,0	58,4	52,2
Fruit	40,8	37,8	40,4	49,8	47,3	27,6
Meat	54,1	62,4	73,8	69,2	56,4	44,4
Fish	5,0	4,1	4,9	7,1	5,4	3,7
Butter	4,0	4,3	4,4	5,2	4,6	2,6
Animal fats	2,6	5,4	7,3	5,0	1,9	3,8
Plant fats	10,3	9,6	9,8	14,3	9,1	9,7
Eggs (pcs)	152,9	197,9	222,5	208,9	149,4	129,4
Milk (l)	104,5	189,4	204,0	168,5	106,4	104,4
Cheese	10,5	11,3	10,3	13,4	11,5	7,1
Sugar	25,4	34,7	40,4	38,3	24,8	22,0

Source: Own calculations based on unpublished data from Central Statistic Office.

Berger et al. 1995

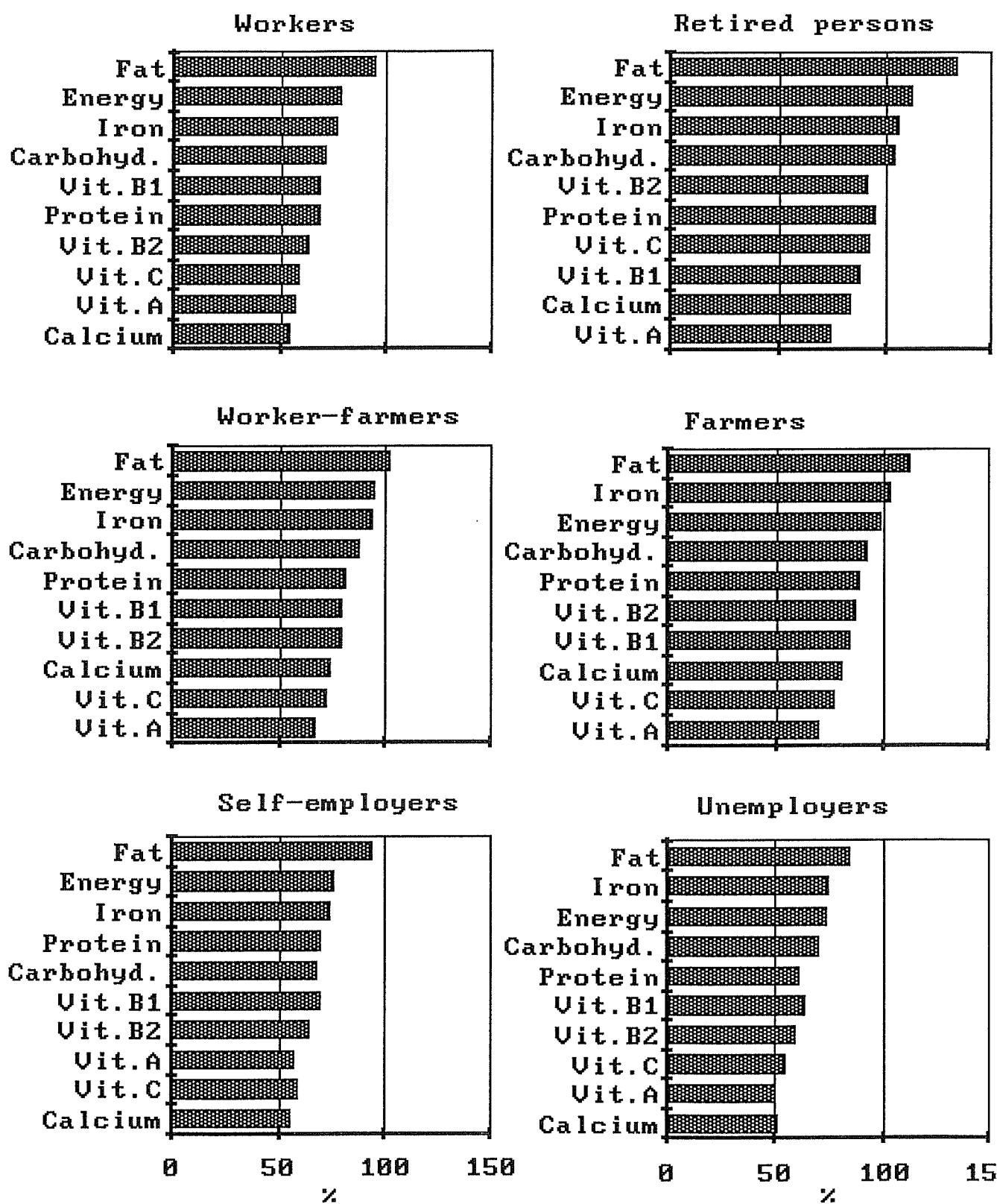
Table 2. Nutrient intake in six socio-economics groups in Poland in 1994

Nutrients	Households					
	Worker's	Worker-Farmer's	Farmer's	Pens. & Retired	Self employer's	Un-employed
Energy (kcal)	2144	2710	2994	3042	2086	2006
Protein (g)	58,9	73,8	81,2	81,9	59,6	52,5
- animal (g)	25,8	43,5	48,6	48,4	37,8	29,4
Fats (g)	90	106	120	123	89	80
Carbohydrates (g)	274	365	397	402	261	268
Calcium (mg)	506	698	751	742	518	476
Iron (mg)	11,2	13,9	15,2	16,0	10,8	10,8
Vitamin A (µg)	642	764	806	890	635	564
Vitamin B1	1,13	1,40	1,58	1,54	1,14	1,05
Vitamin B2	1,13	1,50	1,65	1,62	1,14	1,05
Vitamin C	67,7	84,4	89,9	113,8	67,5	62,6

Source: Own calculations based on unpublished data from Central Statistic Office.

Berger et al. 1995

Comparison of nutrients daily intake with RDA in Poland in 1994



DIETARY GUIDELINES - POLAND, suggestions for the year 2000

1. The variety of food items included in everyday diet ensures health safety
2. The maintenance of ideal body mass protects against metabolic civilization diseases
3. Brown bread is a better source of vitamins, minerals and fibre than white bread
4. Two glasses of low-fat milk a day supply the adequate amount of calcium
5. Fish is a more healthy protein source than meat
6. Large quantities of fruit and vegetables ensure adequate amounts of vitamin C and beta-carotene, minerals and fibre
7. Reduction in the consumption of animal fats and cholesterol-rich food products is the necessary condition in the prevention of myocardial infarction
8. Avoidance of sugar and confectionery protects the teeth against decay and facilitates the maintenance of ideal body mass
9. Less salt lowers the risk of hypertension
10. Total avoidance of alcohol is more reasonable than moderation in drinking. Excessive alcohol consumption ruins your health

DIETARY GUIDELINES
by Prof. S. Berger (Poland)

"4+1 U"

U – Upowszechnianie wiedzy o żywności (Extention of nutrition knowledge)

No. 1÷4 general advice for all, No. 5 – for groups of high risk of civilization and degenerative diseases

1. **U – różnorodność** (Variety; as many as possible food groups in each meal)
2. **U – umiarkowanie** (Moderation; maintain optimal body-weight, 20-25 BMI index)
3. **U – regularność** (Regularity; timing and volume of meals)
4. **U – uprawianie ćwiczeń fizycznych** (Physical exercise, walk, sport especially for people with low energy expenditure)

5. **U – unikanie** (Avoidance of too much fat, cholesterol, salt and sugar or overprocessed foods)

Remark: "Diet" in Greek = style of life