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FOOD AND NUTRITION POLICY AND DEMOCRACY; food consumption surveys
in the quest for better nutrition

Introduction

In the Netherlands nutrition policy hinges on two principles. The one is each individual's responsibility for his or her health, the other his or her freedom of choice. In its quest for better nutrition the Dutch government relies on nutrition education and rejects differential food pricing as undemocratic for it might put some foods out of reach of the lower socio-economic strata of the Dutch society (Nota, 1983). Which implies that the government takes it for granted, that nutrition education is not un-democratic. And indeed, it seems preposterous to entertain even for one second the notion, that Nutrition Education might be as un-democratic as Differential Food Pricing. But, alas, it is only too true, as will be made clear in the first paragraph of this paper. In the second it will be shown that a new approach to the data of food consumption surveys can help to detect discriminatory messages and in the third that the same approach might solve the Norwegian riddle, that Differential Food Pricing worked for some foods and misfired for others (Milio, 1990).

Nutrition Education as Discriminator

At least for the Netherlands the question if nutrition education is by any change discriminatory can be answered indirectly as since the mid-50ties more girls of lower-class families were exposed to formal Nutrition Education than in the middle and higher classes and most lower-class men married lower-class girls (data CBS). So when food consumption surveys prove, that the food choices of lower-class women born after World War II are nutritionally not inferior to those of middle or higher class women of the same cohort, nutrition education was not discriminatory. However, this outcome is highly unlikely. Not because on intend Nutrition Education discriminates between higher and lower class women, but because members of the higher socio-economic classes spend many years on general education, whereas people from lower classes go primarily for technical training. In his study on the diffusion of new facts and skills in infant care Luc Boltanski made it very clear indeed that the more years one spends on general education, the more it becomes instilled into him firstly, that in the course of time everything might be subjected to scientific investigation, secondly that experiments will eventually prove that some facts are absolutely true and others false, and thirdly, that knowledge is cumulative and a new discovery a sure

sign of advancement.

So his is an inquiring mind, which in combination with his knowledge about science in general makes him well-disposed to new ideas even on subjects he never heard about when at school. Quite different is someone's outlook who went to a technical school. At those schools there is time to teach specific rules, skills and recipes, not the underlying principles. Their pupils are therefore unable to integrate these bits and pieces of learning into meaningful patterns. Which makes it difficult to retain them. So when they are of little value outside the classroom, they are sooner forgotten as learned. Later on these pupils will neither be able to relate new rules and skills to the underlying principles, which makes it difficult to apply them correctly. For instance, a young mother with a technical training might well snap up the message that boiled water should be used when deluting the milk for her baby without drawing the conclusion that for the very same reason one is supposed to scald the feeding bottle as well, as Boltanski noted. He discovered moreover that the instruction 'the feeding bottle and teat should be scalded out regularly' had been understood to signify that one had to boil these appliances once a week like one did with underwear. (Boltanski, 1969). In other words boiling water for deluting baby's milk and cleaning the feeding bottles and teats were part and parcel of cooking and cleaning-up respectively, two different classes of domestic affairs.

Boltanski's findings compare quite well with some from an investigation into housewives' felt needs for nutrition education (Edema, 1966). One respondent complained, that she was at a quandary how to apply the nutritional rules she learned at school, for at dinner her aged mother, her self-employed baker-husband, a baker's man of 18, a servant-girl of 14, and her five children - the oldest 10, the youngest not yet one year old -, and she herself, who was either nursing or expecting, set at her table. And she had neither the time nor the energy for cooking elaborate meals as on top of her housekeeping she had to mind the baker's shop and keep the books. In other words: she asked for advice on planning meals, that fitted into the warp and web of her activities (fig.1), not for mere nutritional rules.

An analysis of some letters to the Dutch Nutrition Education Bureau proofed, that the background of a certain nutritional rule is sometimes quite clearly mis-understood (Edema, 1966). One letter, for instance, read: 'my son is not yet 15 years old but 1.80 m tall, should he still take his milk?'. Other letters proved Boltanski's point that not nutritional knowledge but rules play an important part in nutritional behaviour. Those contained statements like 'grown-ups don't drink milk, they have some milk in their coffee', or 'at breakfast one has tea'. Another investigation brought to light, that the longstanding message 'reduce your fat-intake' had missed it's mark on two points. Firstly because the interviewees had not been aware, that 'fat' in the nutritionist's jargon is a collective noun and as such encompasses not just bacon but all visible and invisible edible glycerides of fatty acids. This misunderstanding caused them to exchange butter or lard for rendered bacon as soon as

circumstances allowed and to drop pulses cum (rendered) bacon from their weekly bill of fare for 'pulses without bacon are not the thing' (Edema, 1988). Very recently we came even upon a case where lard had been exchanged for rendered bacon.

fig.1 Model of a Household's Economic Web.

(Source: Edema 1985:37)

welt	household tasks*)	home production+) for stock or sale	occupational activities
warp			
capital assets			
time			
vital energy			
money			
knowledge			
skills			

*) e.g. cooking, serving foods, drinks, and meals, tidying up, shopping.

+) e.g. making cloth(es), producing vegetables, refurbishing and repairing the house and its contents.

Dropping pulses because a main course of pulses without rendered bacon is not to be thought of points out, that for dinner housewives don't just throw some foods together, but that they plan courses for a meal. That is why a housewife answered when asked if she knew how to cook lentils: 'O, that I know for sure, but I don't know how to turn them into a proper meal. So I don't and won't use them.' (Da Costa & Duister, 1986).

From these examples it is evident, that for more reason than one nutrition education fosters discrimination: firstly by couching a message in nutritional jargon and secondly by trusting the public to do the translation in terms of exchanging foods, of adjusting familiar recipes and of meals, that fit their tastes.

The Food Consumption Survey as Detector of Discrimination

The Dutch food consumption survey of 1987 provides information on the then actual food consumption of a nationwide sample of households (Lüwik & Hermus, 1988), which will be repeated every five year at least. The person principally responsible for the domestic affairs within the household, the so-called head housekeeper, provides the data by recording for two consecutive days all the food she or he supplied to the members of her/his household, the precise methods of cooking and recipes employed, the ingredients used, and for every single meal who were at table, visitors included. (Hulshof & Van Staveren, 1991). To nutritionists it is second nature to subject the data thus collected to a content

analysis in order to estimate a population's nutritional intake at the time of the survey and the changes that intake underwent from one survey till the next. However, one can equally well treat these very same data to a socio-cultural or semantic analysis (Edema, 1966). In that case foods are coded as they appear at table: simple ready bought foods like bread and butter, in the kitchen prepared foods like a soup, a stew, a salad, and a pudding, or as a starter, a main course and a dessert or other courses of a meal. This kind of analysis might help to estimate the discriminative effect of a nutritional guideline. For instance the internationally endorsed one: 'use fat in moderation and linoleic acid not too sparingly' (Spelregels, z.j.). For when but technically trained housewives are not aware, that 'fat' stands here for 'edible glycerides of fatty acids' and equate fat with rendered bacon but not with lard or bacon lower class housewives may well have exchanged butter, margarine and/or lard for rendered bacon without having reduced the total amount of visible fats used. They may even have increased that amount, for they may well have interpreted the message 'use linolic acid not to sparingly' as 'linoleic acid rich margarines should be used in fair amounts'. And when they equate bacon with meat as an interviewee evidently did, as she related very proudly indeed 'For years on end I had to scrape and scrape. But still my family was well-looked after, as I had exchanged bacon for meat and sausages' (Edema, 1966) lower class housewives will still serve bacon as a matter of course.

As housewives with but a technical training will neither be able to relate nutritional messages on sucre-intake, on the consumption on starch and dietary fibre, or on cholesterol to the underlying principles it is to be expected, that a semantic analysis on the intake of sucres, starch and dietary fibre will reveal that these messages are also discriminatory.

Food Consumption Surveys and the Norwegian Riddle

In Norway differential food pricing policy was successfully applied for some foods as the consumption of whole milk, margarine and other fats (butter excl) had decreased and of skimmed milk increased as was intended. However it was less succesful for others as the consumption of pork should have come down, and of fish and potatoes gone up, but the changes were very slight indeed. For butter, cheese, beef, and sugar this technique failed even as the consumption of these commodities increased instead of declined as was intended. (Milio, 1990:28). This implies, that for quite a number of foods price-incentives as applied did not fit the food habits*) of Norway's inhabitants (Edema, 1981). Or more precisely put: they did not fit the rules which lay down at what time of the day, at what place and in whose company (in short: at what food event. fig.3) one is supposed to consume which foods, dishes, and/or drinks. (Tamminga, 1983). These rules may differ from one social class to another, from one province to another, from one ethnic group to another, from one country to another, from one continent to another, their content may never be put into print, but they are to be found in the diaries of every

single food consumption survey. Because at that occasion investigators

fig.3. Daily food events in the Netherlands

TIME	COMPULSORY	OPTIONAL
on rising	a drink	-
breakfast	food	drink
10 -11 a.m.	drink	food
12 a.m. - 2 p.m.	food	drink
3 - 4 p.m.	drink	food
6 - 7 p.m.	food	drink
8 - 11 p.m.	drink	food
before going to bed	-	drink, fruit or a snack

(Source: Tamminga, 1983)

all over the world ask of every participant to record not only all the food consumed, the precise methods of cooking used, the recipes employed, and the ingredients used, but as well the exact time and the place these foods were taken (Rutishauser, 1988). When each food is coded as just that food, every drink as that specific drink, each dish as that particular dish a semantic analysis is feasible of hypotheses on the relationship between foods, drinks, and dishes and food events at home or away from home.

Such an analysis was once tried out on the diaries of 10-year old boys, as these boys had bread-and-butter for breakfast as well as for lunch and the investigators wondered if one could tell these two food-events apart. That was very well possible indeed. For boys, who had milk for breakfast, had buttermilk, yoghurt or cocoa for lunch, and those, who had tea for breakfast had never tea for lunch. At breakfast bread-and-butter were moreover just slices of bread with butter or margarine topped with cheese, marmelade, peanut-butter, chocolate-sprinkles and the like, where at lunch-time they had toasted bread-cum-cheese, some rolls, a currant bun or something similar. (Breure & Nuesink, 1984). This implies, that their mothers: serve foods with an eye to the preceding food-event and the next one respectively. Other investigators discovered, that women neither plan their dinners haphazardly. Not even when living on their own. When they have reason to assume, that their appetite will be large, they will prepare potatoes cum pork-steak, or pulses cum bacon, with mixed lettuce salad as a side dish and soft custard for dessert. Otherwise they will have potatoes with beefsteak or force-meat, a cooked vegetable and yoghurt or fruit for dessert. And when bent

on treating oneself or some guest(s) they will serve potatoes or rice but never pulses, and chicken or some nice meat but never steaks, force-meat, or bacon, and a raw vegetable salad but no lettuce or a cooked vegetable, and chocolate pudding or ice cream for dessert but no yoghurt, soft custard or fruit (Dieleman c.s., 1979). Of course, mothers of large families may pattern their dinners differently and so may mothers of average-sized households. However, these differential patterns can be uncovered by a semantic analysis of nationwide or other sized food consumption surveys as respondents of different socio-economic and socio-cultural background and different areas have put the relevant data into their diaries. Once established these patterns will raise informed questions on their real meanings, an auspicious vantage point for the kind of research on which to decide on the pros and cons of a differential food pricing policy.

Conclusion

In Webster's New Collegiate Dictionary democracy is defined as a government in which the supreme power is vested in the people and exercised by them either directly or indirectly through a system of representation. Hence a democratic government has first to provide scientific evidence that a certain food & nutrition policy is in the community's interest and secondly to deliver scientific evidence that in the circumstances given the public at large will benefit from nutrition education on specific subjects and/or from differential food pricing of certain foods and that neither is discriminatory.

It is general agreed, that national and other food consumption surveys are essential in establishing the need for a food & nutrition policy, in this paper it is argued that they are indispensable as well in establishing the democratic character of specific nutritional messages either in education or in food pricing. As food consumption surveys are very expensive indeed, this is a blessing in disguise the general public should benefit from.

NOTE

*) The operational definition of food habits used here reads: Food habits are more or less conscious behaviour, collective in most cases and always repetitive, which lead people to consume a certain food, or a certain dish, or a certain drink, or a certain meal with a certain frequency. (after: C.Thouvenot, 1979)

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