Proceedings of the Nutrition Society (1997), **56**, 51–62

PROCEEDINGS OF THE NUTRITION SOCIETY

The Summer Meeting of the Nutrition Society was held at the University of Ulster at Coleraine on 24–28 June 1996

Symposium on 'Nutrition and poverty in industrialized countries'

Nutrition and poverty in Europe: an overview

BY E. A. DOWLER[1] AND B. M. DOBSON[2]

[1]*Human Nutrition Unit, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine, 2 Taviton Street, London WC1H 0BT*

[2]*Centre for Research in Social Policy, Department of Social Sciences, Loughborough University, Loughborough, Leicestershire LE11 3TU*

The paper begins with discussion of definitions of poverty that are currently used in Europe and some of the theoretical issues in which nutrition plays a part in operationalizing them. Data on those living in poverty are briefly reviewed, and the paper concludes with an even briefer review of nutrition data pertaining to the poor.

POVERTY DEFINITIONS

The definition adopted in the European Council in December 1984 is that 'the Poor shall be taken to mean persons, families and groups of persons whose resources (material, cultural, social) are so limited as to exclude them from the minimum acceptable way of life in the Member State in which they live'. Earlier European Union (EU) efforts to define and measure poverty had been confined to income-based measures, identifying those whose disposable income was below a specified level. The first EU poverty programme had set this level at 50 % of the average disposable per capita income in the relevant member state. This 1984 definition was a more far-sighted approach in that it included resources other than income, and introduced the idea of social exclusion. 'Exclusion processes are dynamic and multidimensional in nature. They are linked not only to unemployment and/or to low income, but also to housing conditions, levels of education and opportunities, health, discrimination, citizenship and integration into the local community' (definition from a recent European Social Policy White Paper; European Commission, 1994). In contrast to this definition, income gives only a crude measure of poverty as it excludes services in kind as well as household or individual access to resources and skills. Income-based measures also give no sense of the cumulative impact of poverty; of how exclusion from decent housing and social amenities, transport, from health and education services, and from the general way of life accepted as customary in a given society, affects people over time.

Defining poverty in terms of exclusion moves the debate on from absolute to relative issues and measures. 'Absolute' measures identify a threshold, below which people are recognized to be in poverty and above which they are not; in other words, a minimal level of income which is supposed to be adequate to meet basic needs. 'Relative' measures define poverty in relation to a generally accepted standard of living in a specific society at a

specific time; they go beyond basic biological needs to exclusion from the customs, practices and expectations of society (Oppenheim & Harker, 1996). Although these two definitions are different from one another, they tend to be operationalized in terms of disposable income. For example, with respect to absolute poverty, this is measured by those whose income is at or below a level just sufficient to purchase basic, subsistence needs; for relative poverty, it is the amount to enable minimal participation in society. In practice, this measure of households whose income falls below a given percentage of the average income (usually 50%) is most often used to quantify relative poverty, or 'inequality'.

Two key issues arise from these definitions. The first is related to measurement of income. Measuring an individual's income over time is a difficult task, and trying to do it for a household is even more problematic. Whose income should be measured and over what time period; how are other resources and amenities to be valued; what are the sources of other resources and amenities (and all attendant issues of entitlement, passport benefits and geographical access)? These issues are discussed in detail elsewhere (for example, see Roll, 1992*a*; Atkinson *et al.* 1995).

The second problem is how to define basic needs or minimal participation. Very few countries have systematically defined basic needs or what constitutes minimal participation. Rather, what tends to happen is that states (implicitly or explicitly) use the levels of national social assistance as a measure of minimal subsistence. Thus, the subsistence level has a recognized legitimacy, and numbers claiming social assistance can be monitored. (In the UK, for example, the Low Income Families series from the Department of Social Security uses income support receipt as an implicit subsistence level; for example, Department of Social Security (1994*b*).) However, using social assistance levels to define subsistence raises a number of problems. First, that of adequacy: are social assistance levels sufficient over long periods to enable people to lead a healthy life? (Who decides on the levels and on what basis; how are they uprated; how are the requirements of those with special dietary needs taken into account; who decides who has entitlement?) Second, if the levels are raised, it is conceivable that numbers in poverty would increase by virtue of the fact that the thresholds have moved upwards, and people not receiving social assistance might have incomes (from wages or pensions) below the new threshold. (In other words, raising the benefit to combat poverty would appear to have the effect of increasing the numbers who count as poor.) Third, comparisons across countries are difficult because of the differences in entitlements and administration.

NUTRITION IN POVERTY DEFINITION

It seems unnecessary to point out that the definition of poverty and measurement of numbers who count as poor is contentious and difficult in most societies, not only for the technical reasons outlined but also because in many societies, as we have said, the threshold for inclusion in 'poverty' is often the threshold for inclusion in social provision, whether through systems of social insurance or social welfare (both of which are seen in Europe; Murray, 1994). Since state and federal government are constantly trying to reduce public expenditure, there is always downwards pressure on levels of social provision. Where the level of provision is much the same as the minimal subsistence level, the argument about thresholds and minimal amounts becomes particularly intense.

Thresholds

What role does nutrition play in such debates in Europe? Although few states do more than acknowledge it in passing, the role is potentially, and in reality, important in a number of ways; not least is that of determining thresholds between 'adequacy' and 'inadequacy'. Food is a basic element of subsistence, but costing minimal nutritional standards is more difficult and less objective than is often given credit. It is worth a quick review of the issues. There are no universal minimal thresholds for energy intake or nutrients. What are used as a requirement values where these are available, are probability statements about the likelihood of avoiding deficiency if a given amount is consumed (Department of Health, 1991). These levels are subject to controversy (Smith, 1995) partly because they are social constructs as much as scientific or objective constants (Dallison, 1996). What can be said about nutrients is that the further a group's mean intake is below the reference standard, the less likely it is that all members of that group are eating enough of the nutrient in question to avoid ill-health. Thus, reference intakes can reasonably serve as a cut-off for devising minimum food baskets. It is particularly difficult to interpret measured low energy intakes. The minimum energy expenditure for any given body weight of $1{\cdot}27 \times$ BMR was identified by Goldberg *et al.* (1991) as a 'survival requirement' which allows 'minimal movement not compatible with long-term health' with no allowance for the 'the energy needed to earn a living or prepare food' (Food and Agriculture Organization/World Health Organization/United Nations University, 1985). This level cannot serve as a lower reference cut-off: everyone needs more than this minimum requirement to live a normal social, economic, physiological life.

Moving from nutrients to foods is also not a purely objective process: no-one eats a diet devised by a least-cost analysis programme (Henson, 1991); no-one eats a diet costed at theoretical minimal prices (Walker & Church, 1978). An alternative to least-cost diet construction is to use budget standards. In this approach, diets actually consumed by people in different sorts of low-income households (with appropriate adjustments to allow for meeting reference intakes) are costed using prices from the sorts of shops to which low-income consumers have access. The National Consumer Council (1995) published a report on the use of budget standards within Europe in 1995. In Sweden, The Netherlands, Norway, Denmark and Ireland, for example, budget standards are used in a number of ways: in credit and debt counselling, and in the former three countries for determining or evaluating benefit levels. They are not so used in the UK.

The argument over choice of cut-offs for costing minimal survival diets has a long history in and outside Europe (for example, see Woolf, 1946; Osmani, 1992); operationalizing these thresholds is not easy. One of the first to do so, Seebohm Rowntree at the turn of the century, deliberately chose a diet for his poverty line which was so economical and unattractive that none should accuse him of setting too high a nutrition standard and, therefore, too generous a poverty line. ('My primary poverty line represented the minimum sum on which physical efficiency could be maintained. It was a standard of bare subsistence rather than living. The dietary I selected was more economical and less attractive than was given to paupers in work houses. I purposely selected such a dietary so that no one could possibly accuse me of placing my subsistence level too high.' (Rowntree, 1941; cited by Veit-Wilson, 1986).) He did not use this poverty line to identify who was poor, that was done visually and on a relative poverty basis (comparing the living conditions of working-class people in York with living conditions conventionally recognized and approved). Instead the poverty line was used to separate people identified as poor into those whose income was insufficient to purchase basic survival necessities, and those whose income was sufficient but who were unable so to do for other reasons (not

necessarily inefficiency; Veit-Wilson, 1986). It was others who translated this minimal diet for survival into that on which people who 'budgeted properly' could be expected to live, i.e. the rates used for national subsistence in the UK (Woolf, 1946; Walker & Church, 1978), and subsequently Income Support. Indeed, it is not without irony that at one of the earliest meetings of the Nutrition Society Woolf (1946) argued that levels of National Assistance were too low to allow purchase of an adequate diet for health, and that undertaking this analysis was a legitimate activity for scientists in nutrition. It is not clear how much progress has been made in 50 years.

Budgeting for food

This brings us to a second role for nutritionists, relating to issues of budgeting, efficiency and food choice. If the poor are shown to have inadequate diets, why should that be, and whose responsibility is it? It is all too easy to argue that for those with incomes above a poverty threshold, any dietary inadequacy must be the person's own fault; they are not spending their money appropriately. The EU has defined the poor as those whose means are so limited as to prevent their participating in the acceptable way of life in the society in which they live. The debate is what counts as 'so limited'; what is the level of income which excludes people from normal life? What is an appropriate poverty threshold? We have already argued that there is a natural tendency for any state to set this level as low as possible if it also triggers social payments (whether of social insurance or welfare). Since the role of policy is to arbitrate conditions of scarcity, it behoves those who administer social payments to assert that minimal levels are sufficient because they are scientifically determined, and that those who cannot manage on them are exhibiting some degree of incompetence or inefficiency, for which the state is not responsible.

The evidence for inefficiency is to the contrary. People in low-income households are very skilled at budgeting, they have to be, otherwise they cease to be households and become homeless (Dobson *et al.* 1994; Kempson, 1996). What is also clear is that food is often the only flexible item of household expenditure for low-income households: people put a higher priority on paying bills than buying fruit (for example, see Kempson, 1996). In the UK, households in the lowest income decile spend the highest proportion of income on food (26 % *v.* 15 %), although they spend less than richer households in absolute terms (in 1991, households in the top income quintile spent £21.50 per week on alcohol and £73.63 per week on food; households in the bottom quintile spent £2.91 per week on alcohol and £21.07 a week on food; households with incomes below £80 per week spent about £1 per week on fruit; households with income above £550 per week spent £3.60 or more per week on fruit (Central Statistical Office, 1992). The National Food Survey (Ministry of Agriculture, Fisheries and Food, 1995) shows that poorer households are the most efficient purchasers of nutrients per unit cost. Similar relationships between income groups and spending on food can be shown for other European countries.

There is also evidence for the UK that foods which are currently recommended for a healthy diet (such as wholemeal bread, leaner meat, fresh fruit and vegetables) not only cost more than cheap filling foods (which are not always 'healthy') but they also cost more in the shops where poorer people live (Mooney, 1990; Dowler & Rushton, 1994).

We are moving from a simple picture of 'enough income' and 'appropriate nutrients' to one of shops, prices, budgeting strategies and patterns of food choice. We need some sort of framework to disentangle these links between income and nutrient outcomes. Fig. 1, which is similar to that used in the UK by the Low Income Project Team (Department of Health, 1996), distinguishes the factors to do with choice and access from simple

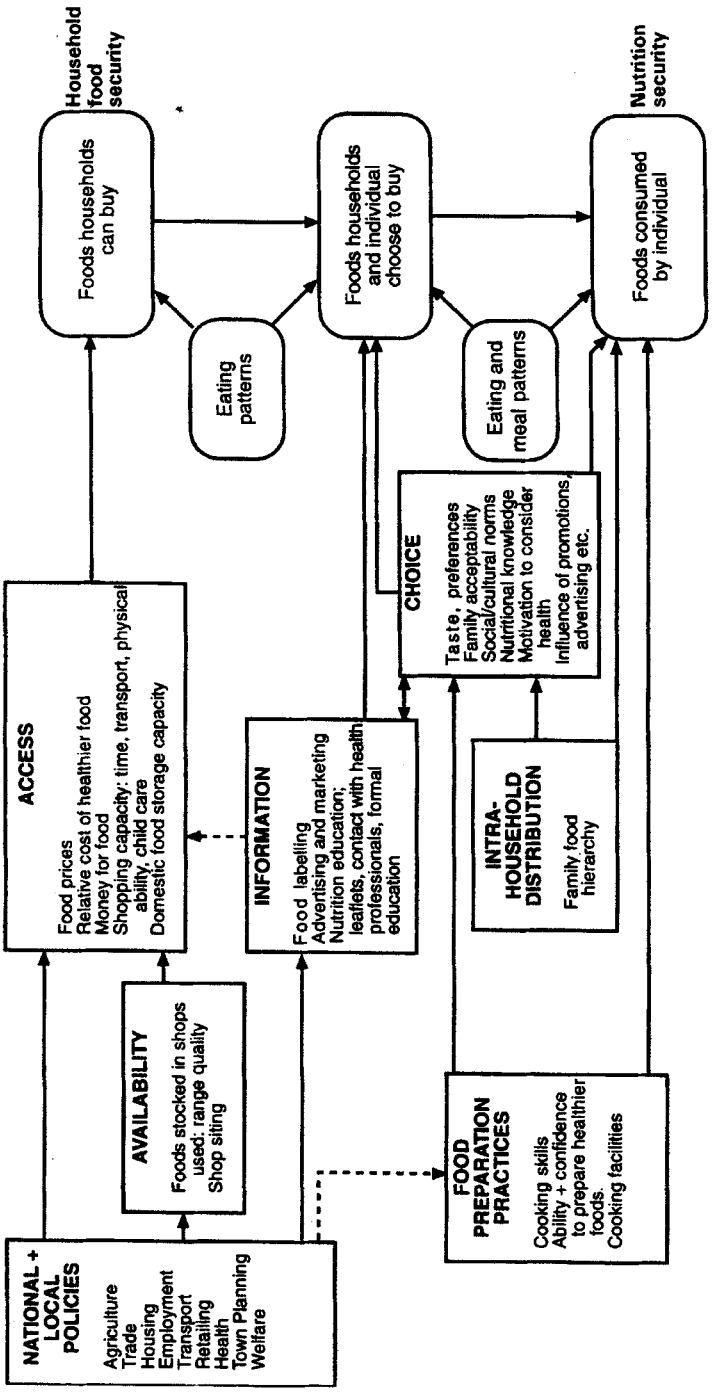

Fig. 1. Framework of the determinants of food and nutrition security in the UK. (Modified from Department of Health, 1996.)

https://doi.org/10.1079/PNS19970009 Published online by Cambridge University Press

availability, and depicts their relationship to nutritional outcomes. The actual importance of each factor for nutritional outcomes probably varies by geography, demography and national or regional conditions. Access includes ideas of entitlement to food (Sen, 1990) through food production or procurement and, probably more important in the European context, effective demand: the amount of money a household or individual allocates to food expenditure. This in turn depends on how much money they have and how they balance competing expenditure demands. Access is also determined by the location of shops and markets, and the trade-off between the range of commodity choices and prices. There is an obvious link to availability. The foods a household chooses to buy depend on access plus individual tastes and skills, which might be influenced by official and commercial information. Intra-household food allocation additionally determines who gets what.

Mainstream food patterns

A third area where nutrition and food come into the poverty debate is in social exclusion. It is widely acknowledged that prevailing customs or cultural expectations help determine the choice of poverty thresholds. People should be able to maintain mainstream food patterns even though they are poor. They should not be isolated; they should be able to shop like everyone else and not have no choice but to buy cheap food or subsist on hand-outs. This is very much the budget standards principle. The problem for many who are poor in Europe is that they have limited access to food and shops that most people use, either because they lack money, or they have no shops sufficiently near where they live, or both. In addition, many who are poor are classed as technically homeless (or marginally housed), or as refugees or asylum seekers; such people may have entitlement to very specific forms of social assistance or food which reinforce their social exclusion.

POVERTY: THE FIGURES

We have discussed the definition of poverty and nutrition's contributions in theoretical terms, with passing mention of practical issues like shops and money. Turning now to facts and figures on European experience of poverty, Fig. 2 shows the proportion of the populations living below 50% of average national income in each country in 1988 (Oppenheim & Harker, 1996). There was considerable variation between countries: the levels were high (17–32%) in Greece, Italy, Portugal and Spain; about average (15%) in France, the Republic of Ireland and the UK, and relatively low (4–11%) in Belgium, Denmark, Germany and The Netherlands. At the end of 1992, nearly fifty million Europeans were living on incomes below 50% of the national averages, which is about 15% of the European population (Snyder, 1993; Oppenheim & Harker, 1996). These rates of poverty increased throughout the 1980s in all EU countries, except The Netherlands, Portugal and Spain, the sharpest increases occurring in Italy, Germany and the UK (Oppenheim & Harker, 1996).

In the UK, inequality and poverty levels increased faster than in any other industrialized country except New Zealand (Goodman & Webb, 1994). The numbers living in 'households below average income' (after housing costs have been taken into account) increased from five million, or 9% of the population in 1979 to 14·1 million, or 25% of the population in 1992–3 (Department of Social Security, 1994*a*, 1995). Of the average household income 50% would have been approximately £118 per week, which is in fact comparable with the amount a couple with two dependent children would have received per week in income support, the cut-off is not a generous one. Indeed, the

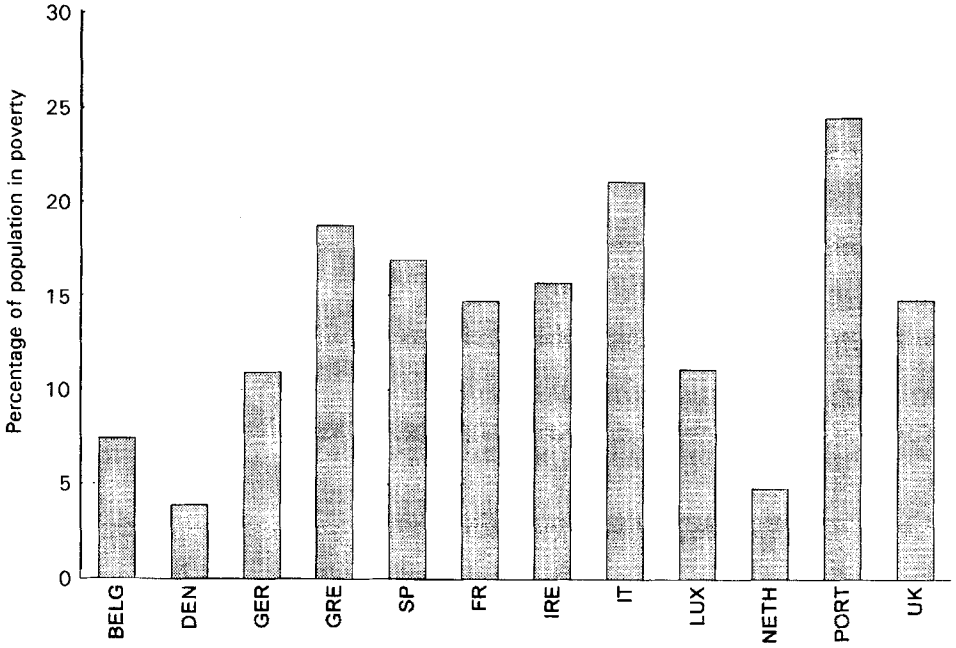

Fig. 2. Proportions of the population in poverty 1988: European Union. Poverty line, 50% of the national average household expenditure adjusted for family size. BELG, Belgium; DEN, Denmark; GER, Germany; GRE, Greece; SP, Spain; FR, France: IRE, Republic of Ireland; IT, Italy; LUX, Luxembourg; NETH, The Netherlands; PORT, Portugal. (From Oppenheim & Harker, 1996.)

Department of Social Security's (1994*b*) figures show that in 1992 about ten million were living in households receiving income support.

Why have these rates of poverty gone up so much in Europe? There are a number of reasons. Rapidly increasing rates of unemployment and insecure employment, homelessness, unstable family structures, asylum seekers (particularly in Germany: over 700 000 from the former Yugoslavia in 1992 alone) and the rise in numbers claiming social assistance, are all cited as the primary causes of the 'new' poverty or 'social exclusion'. The latter terms are used to describe the poverty experienced by the able bodied of working age, some of whom are in the labour market (Snyder, 1993; Oppenheim & Harker, 1996). We comment briefly on each factor in turn.

Employment

The relationship between unemployment and poverty is a complicated one. The Eurobarometer survey on perceptions of poverty showed that 62% of Europeans think long-term unemployment the main reason for poverty; the risk of being poor is very high in households headed by someone unemployed. Nicarse *et al.* (1995) found (re)entering employment a major route of escaping poverty. Of course, unemployment does not necessarily lead to poverty in terms of the definitions used so far: it depends what alternative income sources are available and how quickly people are re-employed. Social protection measures and their implementation vary throughout Europe (for details, see Murray, 1994; Nicarse *et al.* 1995), but the massive increase in unemployment over the last

15 years has faced all European governments with two linked problems: a growing proportion of unemployed people not covered by contributory benefits and the ever larger number, therefore, needing some sort of minimum income from social security payments (Murray, 1994). The need to control budget deficits and inflation has led a number of EU member states to cut back on social welfare programmes (Snyder, 1993) when many more have need of them, either because their social insurance cover has run out, or because their employment record was insufficient in the first place to qualify. Entitlement to and levels of social security thus become increasingly important in determining the numbers of people living on low incomes, who may or may not also fall into the category defined as 'poverty'.

In addition, many who are defined as economically active in fact work part-time for very low wages with precarious job security, often having to be available to work at any time. Many in this position are women, who are usually paid lower rates than men (sometimes because they are less skilled) and often at rates so low they do not qualify for national insurance or pension contributions. Their present low income, which may well categorize them as poor, is also a contribution to their future undoubted poverty, when they will have no entitlement to unemployment benefits or pensions (Dowler, 1996).

Homelessness, migrants, refugees, asylum seekers

Figures on the numbers of people in these categories are hard to obtain. Estimates on homelessness range from about 600 000 people homeless in the UK and in France in 1993 to about one million in Germany (Snyder, 1993; Kutsch, 1997). Snyder (1993) estimates immigration from north Africa and eastern Europe to western Europe increased to about three million in the early 1990s, about one-third of whom were refugees. It is hard to characterize refugees' circumstances in relation to standard poverty definitions, although most should probably count as poor. In Germany, for instance, which took almost half the refugees in 1992, immigrants in this category are housed, clothed and fed and in some cases receive a minimal allowance (Mohammadzadeh, 1997). Since 1993, a number of countries have restricted further refugee entry, and/or made conditions for those already registered more restrictive, which makes characterizing their circumstances even more difficult.

Family structures

There are many more families with dependent children among the poor throughout Europe and particularly in the UK, where they have borne the brunt of unemployment (Goodman & Webb, 1994). However, when people refer to problems in family structures they are usually talking about lone parenthood, which is rising the fastest throughout Europe in the UK, mostly because of separation and divorce (Roll, 1992*b*). As with unemployment, lone parenthood does not necessarily lead to poverty; the relationship between the two depends on social provision: of child care, of income from the absent parent, of access to paid employment for the 'parent-with-care', and the level of social assistance. The level of, and entitlement to, all these factors varies throughout Europe (Roll, 1992*b*). The disabled and the long-term sick have always been vulnerable to poverty; again, whether they actually experience it depends on levels of social provision (Hantrais, 1995).

NUTRITIONAL OUTCOMES IN THOSE WHO ARE POOR

What is the evidence about food and nutritional conditions for those who are poor? There is arguably a dearth of published data and information. This lack is partly because it is

difficult to measure the food and nutrient intakes of those who are marginalized in society, or to identify and access 'the poor' in research (Dowler & Rushton, 1994). People who are poor are often missed out of national surveys; their circumstances are not often studied specifically. For instance, many speakers (for example, see Köhler, 1997; Kutsch, 1997; Le Bihan *et al.* 1997; Mohammadzadeh, 1997; Prättälä *et al.* 1997) at the recent conference on Poverty and Food in Welfare Societies held in Freising, Germany, organized under the auspices of the Arbeitsgemeinschaft Ernährungsverhalten e.V. in October 1995, commented how difficult it was to obtain figures on nutrient intakes or food patterns of those in receipt of social assistance, or attending food distribution centres, or who were unemployed. It is possible to extract data by occupationally-based social class from national consumption surveys; but whether people in manual classes constitute the 'poor' is a moot point and it is not always clear how those who are unemployed are classified in such surveys.

Data from British surveys can be presented in terms of employment status, household size and benefit receipt, as well as occupational social class. For example, in the National Food Survey (for example, see Department of Social Security, 1994*a*) nutrients per head and foods eaten are presented for five income groups and for households receiving benefits. Intakes of many nutrients are less likely to be adequate in households receiving benefits, or with the lowest incomes (for example, see Department of Social Security, 1994*a*). Data are presented also by household composition: intakes of vitamin C, folate, Fe, Zn, Mg are less likely to be adequate in households with more than three children or in households headed by a lone parent, the majority of whom are women.

In *Dietary and Nutritional Survey of British Adults* (Gregory *et al.* 1990) men and women who were unemployed had significantly lower intakes of many vitamins and minerals, as did those who lived in households receiving benefits, than those not in these conditions. Men and women in social classes IV and V had lower intakes of most vitamins and minerals than those in the higher social classes (Department of Social Security, 1994*b*). In *Diet and Nutrition Survey: Children Aged 1½–4½ Years* (Gregory *et al.* 1995), young children from manual social classes or from less-advantaged homes (where the head of household was unemployed, or claimed means-tested benefits) had lower intakes and/or blood levels of carotene, niacin, vitamin C, Fe, Ca, P and K than those from non-manual or more-advantaged households. Children from lone-parent families had lower levels of carotene and vitamin C. There were no significant differences in energy intake by any socio-economic characteristic (Gregory *et al.* 1995). In the study on diets of school children, those who received free school meals (and were, therefore, from households in receipt of benefits) had lower vitamin and mineral intakes than those not from benefit households (Department of Health, 1989).

There are similar findings reported from other large-scale surveys in the UK, such as the Scottish Heart Health Study (Bolton-Smith *et al.* 1991; where the data were controlled for smoking and education level) and the 36-year follow-up to the National Birth Cohort Study (Braddon *et al.* 1988). The survey of nutrient intakes in Northern Ireland found similar nutrient differences by occupational social class (Barker *et al.* 1989). These findings from large surveys are comparable with those from smaller surveys looking at nutrient intakes in different socio-economic circumstances (for example, Nelson & Naismith, 1979; Doyle *et al.* 1982; Moynihan *et al.* 1993; Calvert *et al.* 1994) including the homeless (e.g. Rushton & Wheeler, 1993). Our own recent survey of nutrient intakes in lone-parent households showed that where parents had lived for some time on income support, and particularly where they had fixed regular deductions for debt recovery (not an uncommon experience for benefit claimants) their nutrient intakes were about half the

levels of those not living under such circumstances, and were much less likely to reach 100% reference values. This finding was largely true whether or not parents smoked (Dowler & Calvert, 1995).

Turning briefly to measures of variety and healthy dietary patterns, poorer households consume less fruit juice or fruit, lean meat, oily fish, wholemeal products and fewer salads, and are more likely to eat white bread, potatoes, cheaper fatty meats, beans, eggs and chips (for example, see Whichelow *et al.* 1991; Anderson & Hunt, 1992; Department of Social Security, 1994*b*; Gregory *et al.* 1995). Not all these foods can be crudely classed as 'unhealthy' but more are on the list of foods to be avoided for a healthy, longer life. Those on lower incomes also have a much less diverse food base: monotonous diets with little variation.

Data from other European countries that are available tend to support these conclusions (for example, see Hulsof *et al.* 1991; Trichopoulou & Vassilakou, 1995; Köhler, 1997; Le Bihan *et al.* 1997; Prättälä *et al.* 1997).

CONCLUSIONS

These surveys show that poorer consumers consistently have lower nutritional outcomes than richer members of their society. Poor consumers share dietary aspirations in common with the rest of society and are usually very good at budgeting for food and producing economical meals. Inefficiency is an implausible explanation of people's inability to eat adequately on low incomes. These studies also contribute to demonstrating the costs to health, measured by increased mortality risk, of setting minimal standards of subsistence too low.

We have both observed how families manage food on very low incomes: the pressures under which people operate, the sacrifices they continually make (Dobson *et al.* 1994; Dowler & Calvert, 1995). We have had little space to comment on the gendered nature of poverty, but many studies make clear that women tend to bear the burden of going without: either foods to stave off hunger, or particular foods such as meat or fruit. The main determinant of what is bought is cost; and, for example, families cannot follow contemporary eating patterns in which family members eat different things at different times. Food has to be acceptable to every family member and is eaten at the same time, in order to save money; those who are poor experience an enforced commensality. Food shopping is no longer a relatively relaxed activity, but severely constrained by a tight budget from which all expenditure is allocated and the only elasticity is the amount spent on food. Families' coping strategies and their lifestyles are determined by the discipline of poverty. This is the reality of life which is easily obscured by data on claimant numbers or the adequacy of nutrient intakes.

The poor could arguably subsist on bread, cabbage and tea with the occasional vitamin or iron pill; the question is, should they have to? Stronks & Gunning-Schepers (1993) recently argued that 'health has long been viewed as a randomly distributed good rather than a basic capability in society of which the quantity and distribution can be influenced by policy, ···'. Nutrition and food intake have a fundamental part to play in defining an acceptable level of living in Europe appropriate for a new millennium, and in pointing to the ways of achieving them for everyone.

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