

Food habits and beliefs in transitional societies

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This paper discusses the concept of the nutrition transition in detail. It commences with an overview of societies which are recognised as being in transition. The economic foundations of the transition from traditional to modern (and post-modern societies) will be emphasised. This will be followed by an examination of the nutrition problems and food habits associated with transitional societies. The public health context of such nutritional problems will also be described. Comparisons will be made between the food beliefs and habits held in traditional societies and those in transitional, modern and post-modern societies. It will be argued that nutritional and medical beliefs have come to play more extensive roles in non-traditional societies, most probably through the mass media. Changes in personal values associated with societal transition will be described in relation to the pursuit of luxury foods. Finally, some of the responses to the nutritional problems of transitional societies will be described. The essential roles of government and non-government organisations in moderating harmful effects of the global economy will be elucidated. It will be argued that the success of nutrition interventions such as food-based dietary guideline policies depend on the development of effective national and local social organisations.

Key words: transitional societies, nutrition, food habits.

Introduction

The links between clinical nutrition and public health have always been strong and as humankind enters the next millennium there will have to be a closer relationship between the two areas. At present we number approximately 5.6 billion people and in the next 20 years, if we are optimistic, we can expect to see another three billion humans on the planet.¹ If we consider that even now around one in four humans are fortunate if they consume more than one meal per day or that each year over 250 million children under five years of age die, then it is clear that as a world community we will have a great deal of work to do. It will be vital to integrate clinical nutrition expertise into public health efforts but given prevailing economic philosophies, it will be absolutely essential to promote the public good over all other considerations. In some countries an epidemic of amnesia has overcome governments and populations who now forget the responsibility of governments to foster the health and well-being of all of the members of their communities.

The world is in its present state because of its history, especially its recent history of massive change in all spheres of human activity. There are only a few signs that this change is likely to cease or slow down in the near future, though the slowing of population growth rates in most countries is a sign of stability in the long term.

In this paper I will outline some of the aspects of our recent history as they apply to the concepts of transitions in population health. I will then describe some of the forces which may drive these changes. I will spend some time examining links between populations' food beliefs and their food habits. I will conclude by discussing some of the responses to the nutritional problems in transitional societies.

Transitions

Many transitions are referred to in the public health literature, such as economic transition, demographic, social, technological, and epidemiological transition. There is also a case for reference to a cognitive-motivational-philosophical transition which has clearly occurred in some countries. All of these transitions are interrelated and in a sense they are all part of the same general societal change. Different countries are affected in different ways and to different degrees by transition.

The conventional wisdom is that economic change in the form of capitalism and industrialisation changes the means of production and the use of technologies so that populations reduce their death rates and increase their food production in order for their numbers to increase. This was observed first in the modern era in England, then in Europe and North America, and most recently in Latin America and Asia. The reasons for these economic and technological changes are clouded in controversy. Perhaps the long effect of medieval epidemics raised the price of labour so that technological innovation was made worthwhile, or maybe the extreme individualism enshrined in the Reformation and the Renaissance allowed the development of capitalism and the notion of limited liability, which encouraged risk taking. More recently, the Korean War and the prolonged Cold War coupled with United States farm surpluses did much to aid the economic restructuring of countries like Japan and Korea.²

One thing is clear: there have been a series of demographic transitions which have seen the world's population

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double then quadruple during the course of the 20th century. This has resulted in the development of megacities with unrivalled population densities throughout much of Latin America, Africa and Asia.³ Thus, much of the population of many of the countries in these regions is under 30 years of age. Such youthful populations are not seen in Europe or North America, with the exception of Ireland.

Not only are more people surviving into their reproductive years but a great many are living up to and beyond the Biblical ‘three score and 10 years’. While elderly people have played dominant roles in Western and Eastern literature, they were made remarkable by their relative rarity. It is only in very recent times that grandchildren can expect to know their grandparents in person — indeed, today in Western countries many grandparents play major roles in the rearing of their grandchildren. The idea that whole cohorts of people will live well past 60 years of age is a totally new human experience. Thus, not only do countries such as Australia and Japan have to grapple with the health of large numbers of people over 60 and 70 years, but so too do ‘youthful’ countries like Indonesia, which has 25 million people over 55 years of age. The children being born must be fed and nourished but at the other end of life, more people are living for longer and their nutritional needs are only now being explored. Do young people’s Recommended Dietary Intakes, for example, apply to people over 70?

Having many people to feed is a big problem. However, it is both compounded and relieved by technology and by affluence (the desire for ‘unnecessary’ personal technology). Large populations generate demands for energy, food, water, shelter, transport and much more. All of these are provided by technologies and many of them are extremely inefficient users of fossil fuel energy. Even the growing of vegetables has degenerated into the application of artificial fertilisers and fuel-guzzling equipment such as tractors. Commercial vegetable growing and transportation can be one of the most consuming forms of food production in terms of fossil fuel.

Large populations use many resources and generate a large amount of waste; this places great strains on the ecosystems on which these populations depend. There are intimate linkages between the states of these ecosystems and population health.¹ Affluent populations are much more eco-destructive than nonaffluent populations: the footprint of an affluent human is many times greater than that of a rural villager in Asia. We need to work with engineers and technologists to find forms of technology which are far less destructive of the ecosystems on which we depend.

There has been an essential shift in the means of production of goods and services from the family to industry outside the home. In post-industrial society some of this shift is being reversed towards smaller social groupings.

Despite these serious forebodings, the economic-demographic-technological transition has been accompanied in the main by greater longevity for many and also by an epidemiological shift from communicable towards non-communicable diseases.⁴ Thus, today heart disease, diabetes and depression, among others, are rapidly becoming more prevalent in most affluent regions of Asia and the Pacific. Obesity, in particular, appears to be becoming much more prevalent, especially among children (Fig. 1).⁵ This appears to have been caused in part by the greater availability of vegetable fats (e.g.

cheaper palm oil products) combined with less physical activity among affluent people. Hodge and Zimmet have noted a very strong correlation between Body Mass Indices of Papua New Guinean villagers and their ownership of labour saving devices such as cars, washing machines and televisions.⁶

Whether we act upon these problems depends in large part on the beliefs (philosophies and motivations) of the population at large and of those social elites who have access to, and control over, resources. It is apparent that there has been a cognitive or philosophical shift in many countries which has accompanied the economic, demographic and other transformations that have been experienced in the past two centuries. Accompanying (or predated) these changes in the means of production there has been greater condoning of individualistic, self-orientated, materialistic values in most ‘developed’ countries. This perhaps started with the subjectivist notions inherent in the Age of Enlightenment (or Age of Reason), when emotivist concepts of goodness were substituted for the traditional ideas of absolute morality.⁷ Thus, governments and others have emphasised the virtues of self-reliance and the acquisition of individual wealth and achievement. This is not to say that family and community values have been ignored but rather that the balance has changed. The abstract notion of ‘the community or public good’ has either been abandoned, or as in the Anglo countries, or, remains dormant.

Nutrition transition

Changes in the nutritional content of the food supply have been observed repeatedly in societies undergoing transitions. It is generally agreed that hunter-gatherer societies probably have the greatest food variety with strong reliance on carbohydrates. Agricultural societies tend to rely on a limited number of staples with perhaps an even greater orientation towards carbohydrates. Their reliance on a small number of staples has made them prone to occasional famines in cases of harvest failure and, in some societies, to the development of insurance systems such as the parish granaries in Tudor England. AJ McMichael has observed the problems of sustainability associated with the early civilisations of Mesopotamia, which were associated with over-irrigation of land and salination for wheat and subsequently barley production.^{1,8}

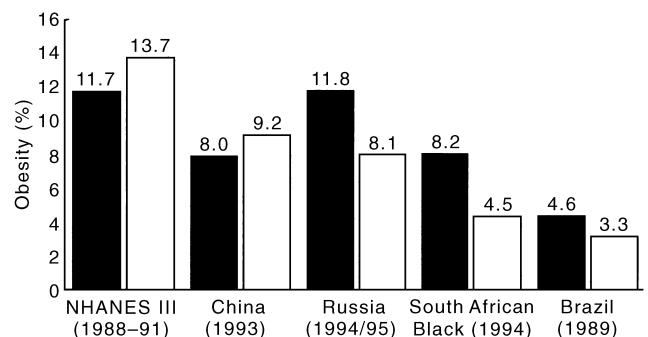


Figure 1. Rates of childhood obesity in males (■) and females (□) in selected countries.⁵ Note: 6–8 years is equivalent to 72–108 months; NHANES, National Health and Nutrition Examination Survey.

Early industrial society was associated with a great restriction of food variety among the poorer classes but it is generally believed that industrialisation has been associated with a highly diverse food supply among affluent sections of the community, with increased dependence on animal products and fat in particular. These last changes are believed to have been partly responsible for the epidemiological transition and for major increases in health and longevity.⁵ Figure 2 shows the older view of the links between national income and the nutritional composition of the diet, which has been superseded in recent years by increasing levels of fats in the diets of the poor.⁵

Whilst it is clear that nutritional changes have occurred along with the other forms of societal transition, the term 'nutrition transition' has several meanings. On the one hand, nutrition transition refers to the changes in diet and health alluded to above. On the other hand, it also has connotations of 'betweenness'; that is, of societies suffering the problems of both the undernourished (e.g. iron deficiency) and the 'overnourished' (e.g. excessive fat consumption, obesity and diabetes). Indeed, within some societies the same individuals may suffer simultaneously from combinations of both states; for example, they may be obese and suffer from micronutrient deficiencies at the same time.

Local cultural practices in countries such as Tonga may predispose the educated elites towards greater obesity than the less educated.⁹ More generally, however, there appears to be an emerging inverse relationship between social economic status and obesity in 'developing' countries, as is the case in the West.^{5,10} This appears to be associated with the widespread availability of cheap vegetable oils. It would be interesting to determine the extent to which countervailing forces such as the Western 'cult of thinness' permeate the affluent elites of Asia.

What drives transition?

Many factors have been cited as important influences over social change. I will mention only a few here. Perhaps the most common factor has been the rapid rise in population during this century, which has been associated with relatively sudden reductions in children's death rates and the expansion of agriculture. Rising population densities in the countryside push people towards the cities. Urbanisation is clearly a

major phenomenon of the late 20th century. Word of mouth, the mass media and dire hardship in rural areas all act to pull people towards the cities where conditions can be very hard indeed:

Three quarters of the cities that contain more than 5 million people are in developing countries. In these cities there are an estimated 100 million homeless adults and perhaps as many as 80 million homeless and, in many cases, abandoned children. Twenty-five percent of the people in these cities have no safe water and 40% lack access to sanitation... Children brought up in these circumstances have 40 times the mortality of other children. In many cities in the developing world air pollution is a much graver problem than it is in Western cities. Prostitution, of both sexes, and by no means excluding children, is rife.¹¹

Philip McMichael, in his writings on global economic development, has emphasised the roles of economic policy makers.² He describes the transition from colonial policies through the notion of industrial development and its unravelling during the 1970s to the current obsession with globalisation, which he and others term the 'race to the bottom'. Countries are encouraged to turn land over to commodity production in return for promised export income. An unfortunate consequence of such policies can be the malnourishment of rural populations because most forms of agriculture are dropped for the production of one or two export crops, as has been reported, for example, in the Punjab in India. The resulting monetary income is determined by external city-based organisations and is often less than that required for the purchase of a nutritious food supply.

These policies tend to be disseminated by small powerful elites in governments in developing and developed countries. The economic restructuring policies proposed by the International Monetary Fund provide good examples of these modes of free market thought.

Ralston Saul, based in Canada, offers criticism of this current orthodoxy.¹² Essentially there is a problem of government. The basic purpose of government appears to have been forgotten. It is to be responsive to the population's needs. Ralston Saul notes that nowadays governments are often unresponsive to people's needs as they tend to share more in common with international elites than with their citizenry. Governments should act to soften the harshness of the free market.

What Ralston Saul and McMichael allude to is the fact that across the world there has been a downplaying of community values and the notion of public good in favour of individualistic, materialistic values. A good example comes from our work in Beijing: it is fairly typical of affluent populations in most developed or developing countries. In focus groups we found, for example, that while men and women under 45 years of age could easily tell us how they would reward their spouses, or themselves, for successful events in their lives by buying presents, women over 45 years of age simply could not understand the idea of rewarding oneself. This situation seems to apply to the general population — although traditional values of community have not declined, they seem to have been overshadowed by the recent emphasis on self-orientated materialistic values (A Lowe and A Worsley, unpubl. data, 1998).

Thus, not only has the economy and the means of production changed but so have the ways people, and in partic-

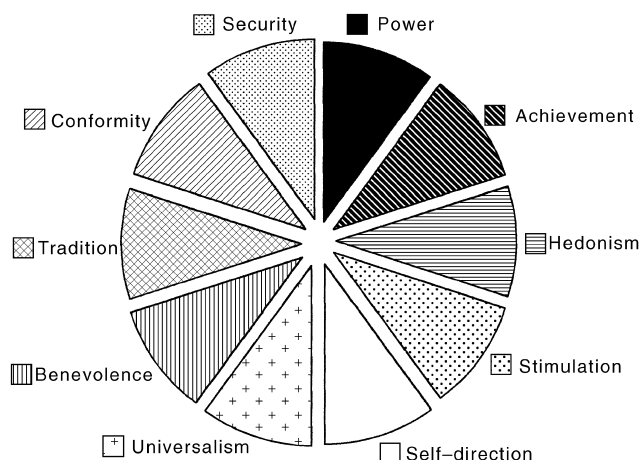


Figure 2. Schematic diagram of Schwartz's structure of human values.

ular powerful elites, think. The main disseminators of these changes in economic policy and mindset appear to be the mass media, facilitated by the ease of mass communications. Indeed, the so-called ‘good’ (read ‘materialistic’) life is vividly broadcast across the world into most people’s lives. The purveyors of new technologies, the traders, politicians and technologists etc. also seem to have had a large impact on the ways we produce food and on what we take to be normal (e.g. that foods should be available in or out of season in a seemingly endless variety in supermarkets).⁸ Further, the push for mass education, whilst valuable in itself, also helps to disseminate both community and materialistic philosophies.

Finally, it is worth noting that current market policies (as well as command economy communist policies) are associated with environmental degradation, which compounds the illhealth of populations.¹

Food beliefs and food habits

Whatever phase a society is in, foods usually have great social and symbolic significance. Foods are tools for achieving social and cultural ends; they are much more than mixes of nutrients and other chemical compounds. Long ago, de Garine, along with other social scientists, showed that food was used in a variety of ways to delineate social, gender, and age-group differences or to achieve social prestige, health or well being.¹³ Foods are tools for the achievement of ends, usually social ends. As societies change the ambitions and guiding principles of people change and so we must expect that the uses to which foods are put will also change.

The social properties of foods make it necessary to consider the status of human beliefs, both beliefs about foods as well as beliefs about ourselves, other people and the world in general. We cannot divorce foods from the desires and goals of everyday life. This means that we cannot divorce the symbolism of foods from everyday social life. Nor can the various properties of foods be easily separated from each other in everyday life. People’s beliefs about foods overlap each other; for example, their beliefs about the fat content of food relate to their beliefs about the people they aspire to be (e.g. slim, socially accepted people). We can also see food beliefs as observations of social actors regarding the worlds they live in; for example, teenagers who value gender equity and environmentalism tend to be vegetarian.¹⁴ In this sense, food beliefs reflect people’s beliefs about the nature of the world as well as their values.

Often in nutrition we may be tempted to focus on notions of food content, or the effects of nutrients on the body. But foods are much more than nutrition; their origin, for example, may be very important (e.g. the Islamic ban on pork). Marvin Harris noted that in tribal societies foods reflect the tribe’s definitions of humanity itself — other tribes tend to eat foods that are not fit for humans.¹⁵ If we really want to understand why people choose the foods they do, we also have to look at their beliefs about themselves and how they want to be. For example, a person who wants to be fit and healthy is likely to eat foods which are said to be good for health and fitness — traditional medicinal folklore has codified these sets of beliefs for centuries. The recent development of ‘functional foods’ is merely the application of scientific validation techniques to these old beliefs. Note that the kinds of things that

we want foods to do for us depend very much on what is ‘real’ in society. Thus, in hunter–gatherer and agricultural societies foods could bring about symbolic union with spiritual entities (e.g. the eating of breadfruit in some South Pacific societies was associated with ancestor worship), whereas in affluent industrial societies the beliefs which flourish are those associated with physical health and body shape, which are associated with preoccupations with the self and the pursuit of social influence and hedonism.

Some beliefs which humans hold are central to the ways they perceive themselves; they have motivational properties and implications for the things we feel we ought to do. These are sometimes referred to as cultural and personal values. Hofstede¹⁶ and Schwartz,¹⁷ among others, have proposed that all large societies support limited sets of values. Societies differ in the emphasis they place on each set of values. Figure 2 shows the 10 value segments derived by Schwartz from studies in over 20 countries.

We have found that some of these value segments are associated with the consumption of different foods.^{18–20} Thus, young Australians who hold strong traditional values tend to eat more red meat than others, and Beijingers tend to eat more luxury foods (e.g. imported biscuits, yoghurt, confectionery) if they have strong materialistic values or active (materialistic) lifestyles (A Lowe and A Worsley, unpubl. data 1998) (Figs 3 and 4). A promising line of research, then, is to examine the links between these values and food consumption in countries at various stages of transition. However, we would also expect culture-specific beliefs about health, social prestige and wellbeing to be related to the choice of foods to the extent that foods are associated with a particular symbolism. For example, in Korea beef is prized as a nutritious food because of its historical connotations.²¹

What influences food beliefs?

Within any culture there are stories or clusters of beliefs along particular themes (often called historical discourses or social representations) which are handed down through generations. These include concepts about the correct relationships between the generations, between men and women,

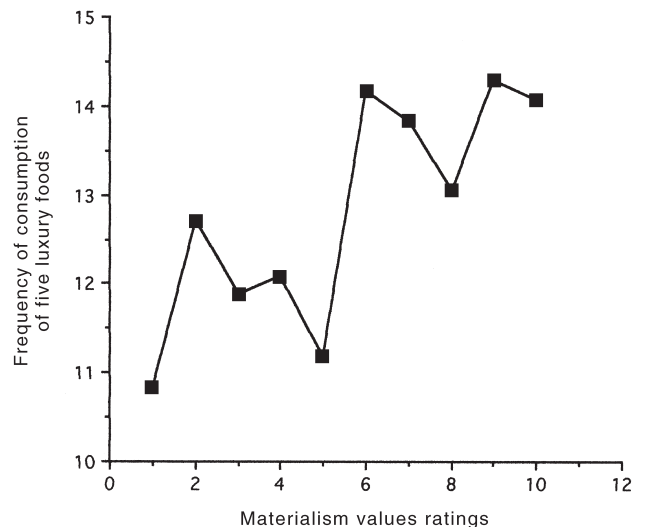


Figure 3. Luxury food consumption and materialism values among Beijing consumers.¹³

employers and employees, ideals of health and beauty, notions of equality, purity, holiness, cleanliness etc. Foods are associated with these stories. In Anglo-American society, for example, red meats were traditionally associated with male dominance and power. Thus, vegetarians rejected not only the consumption of red meat but also prevailing notions of male dominance and patriarchy. This may explain why among young Australians and other Anglo groups, vegetarianism is associated with gender equity and environmentalism and is practised mainly by young women.¹⁴

In Tonga, notions of the Tongan body and its beauty have become confounded with the pursuit of traditional customs including, nowadays, the consumption of large amounts of high fat foods. Tupoulahi has shown that the Body Mass Indices of Tongan adolescents depend in part on their attendance at weekend feasts rather than on attitudes towards specific foods or, indeed, on the consumption of fast foods from the consumerist society (e.g. hamburgers, cola drinks).⁹ We need far more examination of the links between the specific discourses in different cultures, and food consumption and nutrition status in countries which belong to different phases of the nutrition transition. A further clue to the importance of this is found in Beaumont Smith's work among young Koreans.²¹ She found that their perceptions of the nutritiousness of foods bore little resemblance to nutrition science and more to historical and social views of foods. For example, meats were prized as being nutritious whilst vegetables were seen to be uninteresting and generally non-nourishing. This theme has also been noted by Drownowski and Popkin, who note that people's incorrect beliefs about the nutrition properties of present day foods are serious obstacles to improving health.⁵

There are some recent phenomena associated with socio-economic transition which appear to have major influence on food beliefs and habits. These relate to consumers' involvement in the food supply. In traditional hunter-gatherer and agricultural societies there was, in a sense, no such thing as a passive consumer. Whilst it is true that people consumed foods, they usually produced them as well, or at least, they usually knew the people who produced the foods for them.

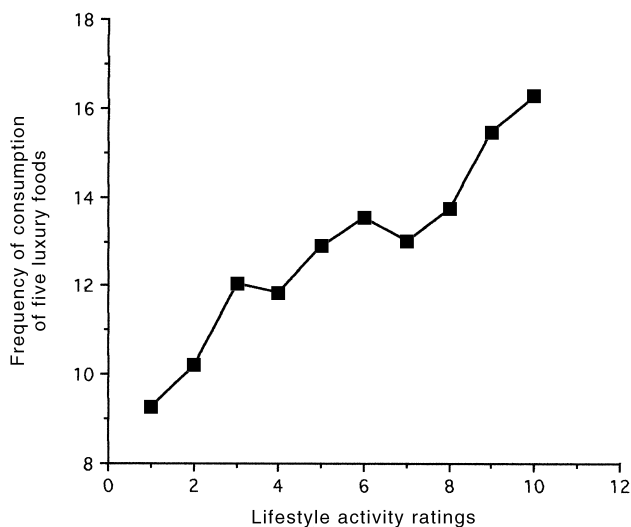


Figure 4. Luxury food consumption and lifestyle activities among Beijing consumers.¹²

The chains of supply were short and food beliefs (e.g. about who was a safe supplier or when foods were safe to eat) based on trial and error were handed down from parent to child.²² In industrialised societies and 'post-industrial' societies, however, the food supply is opaque and long. Most people are passive consumers; they go to the supermarket or wet market and purchase foods after inspection. Indeed, in some recent retail initiatives some food products can be purchased without inspection via a computer terminal! Foods may be produced many thousands of kilometres away from their point of consumption and they may have passed through many stages of production and distribution — all by people totally unknown to the consumer.⁸ There is a high interdependence on other people and organizations and a plethora of 'new' foods (variations of traditional products).

The effect of this has been to place a premium on trust. This can be achieved in many ways: through branding of products; through marketing and advertising; through, above all, government regulation and inspection; and, recently, through Hazard Analysis Critical Control Point systems. Today's foods are only as good as consumers' trust in them. Survey after survey has shown that consumers want governments to oversee the food system, that they distrust the food industry and that they rely on media 'experts' and friends to form their opinions.²³

What are consumers worried about? Our own work suggests that there are several major issues which attract consumers' attention. The first set of issues relate to what might be termed the 'wellbeing of me and mine': the composition of food, the presence of additives, fat and sugar; other nutrients, and constituents; food safety and the enforcement of food regulations; taste, price and value for money; health-giving properties (e.g. Does the food help children's growth? Is it good in pregnancy?); the food's potential to cause diseases like heart disease and cancer; the food's effects on performance and wellbeing; effects on appearance and body weight; and finally, its use for generating conviviality (e.g. party foods, birthday cake). A second set of issues concern the 'wellbeing of others'; for example, the welfare of poor malnourished people, the welfare of animals, the honesty of food labels, and the effects of food production on the environment and of food imports on local employment.²⁴ The values held by consumers are linked to their concerns about particular issues.²⁵

Somewhat paradoxically, highly industrialised affluent societies appear to be highly individualistic and materialist but at the same time seem to need to trust government authorities more than people in, for example, agricultural societies. In fact, different groups of consumers trust different sources of information according to their values.²⁶

It is fairly clear, then, that people's beliefs about foods and about themselves and others coincide to influence their food habits. Food beliefs guide much food purchasing and consumption behaviour and they also limit food choices (e.g. note the British avoidance of horse flesh). They also provide explanations of events (e.g. someone became ill because they ate food 'X') and thus, are likely to impinge on the nutrition status of the population.

Healthy responses to problems of transition

Six principles are listed below which may be used by nutritionists and others in their responses to the problems generated by societal transition. These will help to supplement those expressed in the Ottawa Charter (1986) and the Jakarta Declaration (1996).²⁷ They are as follows:

1. The health of *all* the population in a society comes first. We need to promote the idea of 'the public good' and to retain our belief in 'community' and community organisations. This means that governments should be held accountable for their responsibility towards all sections of the community.
2. Knowing and naming. We need to know when health is or is not present. This is helped through the use of accurate names, not euphemisms. If people are malnourished we should say so and not merely call them poor or outcasts.
3. The market is a good servant but a terrible master. The essential role of government is to represent and promote the welfare of its citizens. While the small business market can be an immense generator of community wellbeing and health, it is important that local economies are fostered so that wealth is well-distributed. Ideological pursuit of large abstract market goals may or may not generate health. If it does not, it should be modified. Governments should try to maintain control of local markets. Participation in large global 'free' markets tends to hurt the poor and drain nutrients out of the population, replacing them with hunger (e.g. as is the case in the Punjab and elsewhere).
4. Encourage local economies and markets. Local production and consumption of local products tends to foster the distribution of health (e.g. VACVINA in Vietnam).
5. Food-based dietary guidelines and nutrition education are useful approaches which emphasise variety and local food sources.^{26,28} We need to be cautious about high-tech fixes when they are applied in 'free' markets. Coveney and Santich have described the advantages of low-tech pro-environment food production.³⁰
6. Several responses to government irresponsibility or inaction have been well described by P McMichael and others.² They include cooperative movements, feminist and environmentalist groups, and girls' and women's education and action. The importance of female education cannot be over-estimated.³¹ Finally, the informal economy itself provides a living for much of the population in poor countries.

Conclusion

Some of the themes inherent in the nutrition transition have been outlined along with their likely causes. Food beliefs reflect the socio-economic and cultural changes in society and in themselves are likely to play a major role in changing food consumption habits. Just as the nutrition transition is itself a multifaceted phenomenon, so nutritional responses to it are likely to be multifaceted and to extend far beyond the domains of food and nutrition.

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