

DEVELOPMENTS IN CONSUMER CONCERNS ABOUT ANIMAL PRODUCTION IN THE 1980s AND THEIR INFLUENCE ON MEAT MARKETING AND ITS REGULATION

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Summary

Concern about the way animals are treated in the context of food production varies considerably from society to society and over time. The 1980s have seen in Europe a growing awareness on the part of interest groups and media commentators that the pressure for greater productivity and efficiency has led animal production practice in directions increasingly unacceptable to many.

The concerns embrace, inter alia, mutilation, confinement, effects on the environment, pollution, the unnaturalness of the housing and feeding systems, the use of various methods for stimulating growth and carcass leanness and, most recently, embryo and genetic manipulation.

The major effects of these increasing concerns are discussed.

Résumé

Le développement de la production animale dans l'intérêt des consommateurs durant les années 1980 et son influence sur le marché des viandes et sur sa régulation.

Les inquiétudes relatives au traitement des animaux dans le contexte de la production alimentaire varient considérablement d'une société à l'autre et selon l'époque considérée. Les années 1980 ont été le témoin, en Europe, d'une prise de conscience plus grande, par les associations et les reporters des media, des pressions en matière d'augmentation de productivité et d'efficacité, qui s'exercent sur la production d'animaux, l'entraînant vers des directions de plus en plus inacceptables pour maintes personnes.

Les inquiétudes portent, entre autres, sur la mutilation, la réclusion, les effets de l'environnement, la pollution, le manque de naturel de l'habitat et des systèmes d'alimentation, l'utilisation de diverses méthodes de stimulation de la croissance et la maigreur de la carcasse, avec tout récemment, en outre, la manipulation génétique et celle des embryons. Les effets majeurs de ces inquiétudes de plus en plus pressantes se voient discutés dans cet article.

Key Words

Consumer Concerns, Animal Production, Vegetarianism, Meat Marketing

Mots clés

Intérêt des Consommateurs, Production animale, Végétarisme, Marché des viandes

Introduction

In the EEC alone there are 350 million consumers, over a third of whom are below the age of twenty-five. Their perceptions of animal production as an activity and meat as a food vary very widely.

At this time, one can safely assume that a substantial majority - at least of those over 25 - view meat production as a normal practice, that they are

largely unconcerned about the methods used by farmers and meat traders, and that they see meat and meat products as tasty and nutritious foods. The only restraints on their consumption of meat are habit, availability and price, coupled at the more sophisticated end of the European market with the pressures created by changing lifestyles (the move towards convenience foods, for example).

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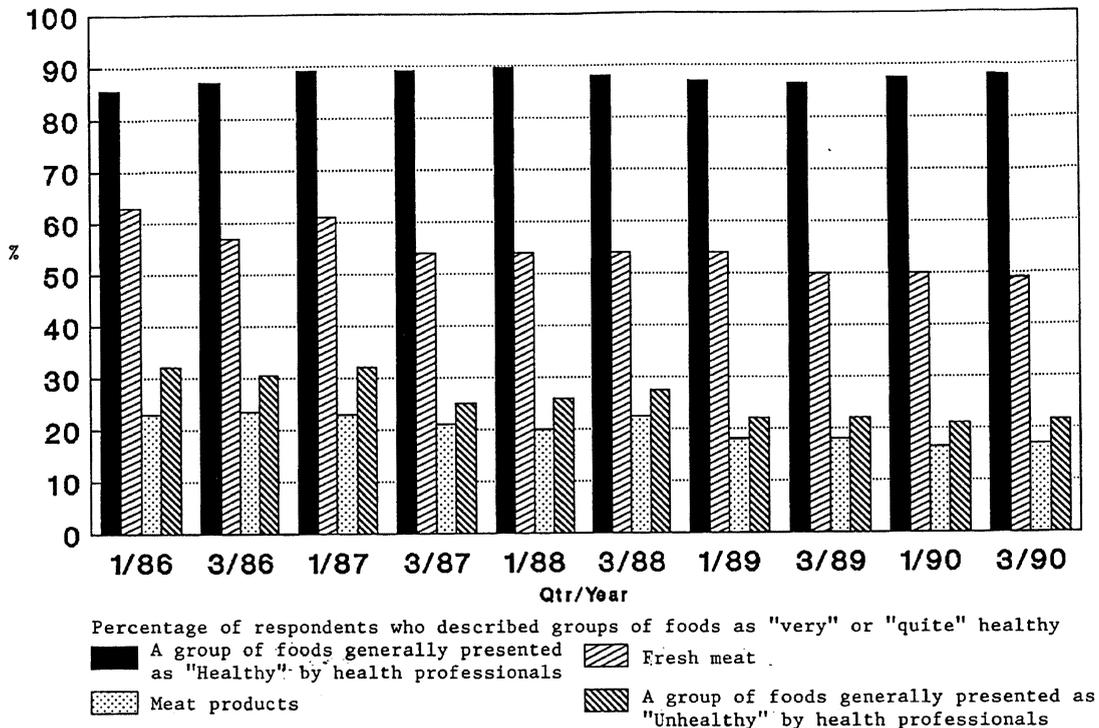


Fig. 1 : Perceptions of the "healthiness" of food groups. Percentage of adults describing food groups as "very", or "quite healthy" in 1st and 3rd quarters of 1986-1990.

However there are minorities who do not conform to this stereotype for a variety of reasons :

(a) they may not accept that humans should exploit animals for food and other materials ;

(b) even if they do find that acceptable, they may regard some production practices as cruel and/or "unnatural" and/or unethical ;

(c) they may regard some production practices as leading to unacceptable risk of human health problems ;

(d) they may regard the nutritional virtues of meat as overstated ;

(e) they may regard current levels of meat production as a misuse of the world's limited resources, and the production process itself as a significant factor in environmental pollution.

While these minorities remain small, it is clear that they are growing, that they embrace a significant proportion of the younger generation, that they tend to find stronger expression when and where affluence increases, and that their growth is encouraged by modern teaching and communication methods. These minorities are spreading and growing throughout much

of the English-speaking world and Northern Europe, but the balance of the different issues varies from country to country as does the extent to which each has developed as a factor in the market.

The central issues for the meat industry are the extent to which this growth of concern is leading to a declining demand for its products and how this can be mitigated by production and marketing action, but also the extent to which it will lead to a tighter regulatory framework and/or the need for more industry self-regulation and discipline.

The central issue for scientists and technologists is the extent to which these trends fundamentally change their objectives in seeking technological advance in meat production and processing methods. Will the "improvements" they achieve, aimed at enhancing demand by providing the cheap, lean, tender meat that for the last 30-40 years scientists have understood that consumers wanted and towards which they have been working, actually have the effect of reducing demand because of a perceived increase in the "unnaturalness" of production practices derived from their technologies ?

Basic nutrition

Health professionals in Northern Europe and elsewhere in the developed world have become converted to the need for their populations, said to be suffering from the diseases of affluence, to follow a more prudent lifestyle. This involves no smoking, weight control, more exercise and a diet lower in fat (particularly saturated fat) : the diet should also be higher in complex carbohydrates, dietary fibre, fruit and vegetables, with a good balance of the two families of polyunsaturated fatty acids, and so-called *w-3* and *w-6* PUFA.

Red meats, and particularly meat products, are thought of, often incorrectly, as foods high in saturated fats : so many professionals and those reporting their views tend to argue for less red meat and meat products consumption as a part of their "healthy eating" advice. The recent World Health Organisation review of the European diet appears to have taken this view (WHO, 1990).

Figure 1 shows how the perceptions of the "healthiness" of meats and meat products has fallen in Britain since 1985 in comparison to that of groups of foods generally promoted by health professionals as "healthy" (such as wholemeal bread, semi-skimmed milk, cereals) and others as "unhealthy" (such as cream, butter, chocolate biscuits). Not all of this downward trend can be attributed to the awareness of the advice about fat consumption ; many nutritionists are talking down the importance of high levels of protein consumption and stressing the availability from other sources of the minerals and vitamins obtainable in abundance from meat.

Residues and contaminants

For many people in Europe, the most disturbing feature of modern animal production is the "chemicals" that are used and the residues they may leave. Many are unconvinced by the process by which medicines (including antibiotics) and growth stimulants are approved for use and controlled in use. Following the misuse and subsequent proven carcinogenicity of the hormone di-ethyl stilbestrol (DES), attention focused on natural and synthetic steroid hormones ; in due course, these were banned by the European Economic Community despite scientific advice that they were safe if properly used.

Consumer organisations and journalists say "but how can we be sure they are properly used ?" and point to the availability of illicit supplies, to veterinarians prepared to break rules and the very small sample of carcasses checked for residues, as well as a market already over-supplied with beef.

While growing consumer concern about production practice does certainly embrace animal welfare issues (see below), the much quoted dislike of "factory farming" has a deeper basis. People criticize "factory farming" because they envisage many animals, closely confined and densely packed in unsavoury conditions, which have to be extensively "drugged" to contain rampant disease. For many, their first concern is the danger that the residues of these drugs (or the bacterial resistance induced by their continuous application) might present to the humans who consume the meat - with concern for the animals themselves rather less important.

One consequence of these particular concerns is the promotion of the so-called "Fourth Hurdle" (CEC, 1990), whereby it is suggested that the criteria of "need" and "socio-economic impact" are added to the existing requirements of safety, efficacy and quality when approval is being sought for a new product to be administered to animals for the purpose of treatment, disease prevention, growth stimulation or yield improvement.

However this essentially subjective criterion has little meaning in a market where different producers compete to produce cheaper and/or leaner and/or more succulent meat : how do you argue that consumers do not "need" a food a little cheaper or leaner or juicier if the reduction in price or the improvement in eating quality allows or encourages some people to buy who would otherwise not have been able to or would not have wished to ?

These issues will surely become very prominent in the near future in the context of biotechnology - for example, as pig growth hormone, porcine somatotrophin (PST), follows the much publicized bovine somatotrophin (BST) through the regulatory process.

Genetic engineering

The genetic manipulation of animals themselves, while the subject of intense debate among interest groups, philosophers and scientists and a frequent subject for articles in specialist literature and conferences (for example, WHEALE and McNALLY, 1990) has not yet had an impact on the ordinary consumer. Although raising very fundamental issues of animal exploitation, it may be that the consuming public will see these developments as reasonable extensions of long-standing animal breeding techniques, without the negative impact of issues like "residues" or "factory farming" - provided the genetic changes made have no extreme physical manifestations or obvious welfare defects.

Bacteria and disease

All meat carries a bacterial load which may include pathogens of varying degrees of potency and the agents of any disease from which the animal is suffering. There is no doubt that some aspects of modern meat production, processing and distribution have increased such contamination and/or provided more favourable conditions for multiplication. For one reason or another, the incidence of food poisoning is increasing in many countries including Britain.

So superimposed on an underlying growth of concern about production practices, there are frequent sharp movements of purchasing patterns due to "food scares". Extensive media coverage of an incident and/or of an expert opinion about the microbiological dangers for the consumer of a particular industry practice or product causes immediate consumer resistance. In particular, in Britain, salmonella (eggs and poultry), listeria (soft cheese, paté and convenience foods) and botulism (yoghurt) have had marked effects on sales, some longer-lasting than others. The British consumer seems particularly liable to be "scared" about the safety of the food supply.

From the red meat industry's point of view, Bovine Spongiform Encephalopathy (BSE) has been the prime example of a food scare. People, particularly parents, were concerned about a possible link between this cattle disease and the similar disease of humans, knowing that if there was a link it could take 10 or 20 years to be revealed. Government relied on their scientific evidence and advisory committees but this proved unconvincing to many people particularly as the media had no difficulty in finding scientists to disagree with the official advice.

The subject has generated many articles on risk assessment, risk perception and the degree of scientific literacy of today's consumers. But the consumer regards any risk associated with a particular food - however small in relation to that associated with other daily activities - as an *avoidable* risk because of the much greater food choice now available to them.

Many argue that BSE arose from another "unnatural" practice - the feeding of meals based on rendered animal by-products to herbivores. Although this has been going on for a hundred years, to many of today's consumers the practice came as a real surprise and just does not sound right to them.

Welfare

Despite regular well-publicized examples of cruelty to animals (wild animals and pets, as well as farm animals), Britain is largely a country of animal lovers whose general attitudes to the animal kingdom is more humane than those of many other societies.

A high proportion of the population of Britain consists of urban dwellers whose contact with the country is infrequent : most have virtually no day-to-day contact with animal production practice and certainly no contact with animal slaughter and the mechanics of meat preparation and processing operations. When production and processing practices are drawn to their attention, whether by newspaper, illustrated magazine, radio or television, then the urban population can be quite taken aback and frequently distressed by procedures which are regarded as normal to livestock producers and meat traders. Naturally the articles or the films can be prepared in such a way as to focus on the more startling aspects, such as the high density of animals in pens, the difficulties of persuading them to climb ramps into lorries, the inevitable diseased or injured animal sometimes found on the farm or at the market. And, of course, most particularly the process of stunning, sticking, evisceration and carcass splitting lends itself to lurid treatment and is never pleasant to watch.

Since the early 80s, such articles and programmes have been a regular feature of the British scene and, after each, some more consumers are upset to the point of eating less meat, or changing their meat purchasing habits, or giving up meat entirely. Schools are particularly targeted by animal welfare groups with illustrated literature and videos.

There is no doubt that recent events in France, where British sheep have been let loose, slaughtered by the roadside or, in one infamous case, burnt to death in their lorry, have focused the British public's attention on the mistreatment inherent in long-distance transport of livestock as carried out today. And, while some have merely used this to criticize the French mentality, others have focused on a more fundamental point - the extent to which farmers - any farmers - will go "in pursuit of profit".

Some aspects of animal production practices have evolved under economic pressures to the point when many farmers and scientists feel uncomfortable with them and wish to develop, encourage or adopt modified systems which ensure the "five freedoms" for the stock. These are :

1. freedom from starvation or malnutrition ;
2. freedom from thermal or physical discomfort ;
3. freedom from pain, injury or disease ;
4. freedom from fear or distress ;
5. freedom to express normal patterns of behaviour.

While veal crates have been banned in Britain, we continue to export our calves for use by continental producers who are not so constrained. So we read sentimental articles about Daisy, the brown-eyed calf, and what happens to her during and after export. In magazines read by several million British women, the same general tone is found day after day in teenage magazines and (somewhat less sugary) in quality newspapers - particularly their colour supplements.

The market response

Industry response to evidence of declining demand for meat, because of the range of concerns described, is to offer concerned consumers the choice of an identified alternative from more "consumer (and animal) friendly" systems. These are proliferating across Europe and North America and there is widespread confusion among consumers as to the meaning of some of the descriptions applied and a real need for effective labelling systems and controls.

Since these modified production systems reject some or all of the technologies that have been developed to reduce costs and increase leanness, the meat derived from them tends to be more expensive (and frequently fatter) than that from modern main-stream production, while being promoted as more tasty, more "natural" and healthier for the consumer as well as more compassionate to animals. However this market segmentation is severely criticized by some who argue that it is unacceptable that consumers should have to pay more for food that is (in their view) healthy, safe and nutritious in contrast to the suspect mass-produced output of technology.

To date, none of the higher-priced "low-tech" alternatives has gained a real market hold, with 95% of sales being of essentially unidentified meat produced in the main by systems which incorporate recent technology ("high-tech").

Light and dark green

The alternative systems alluded to are sometimes referred to as "Green" because they involve higher welfare standards, greater extensification (less pollution,

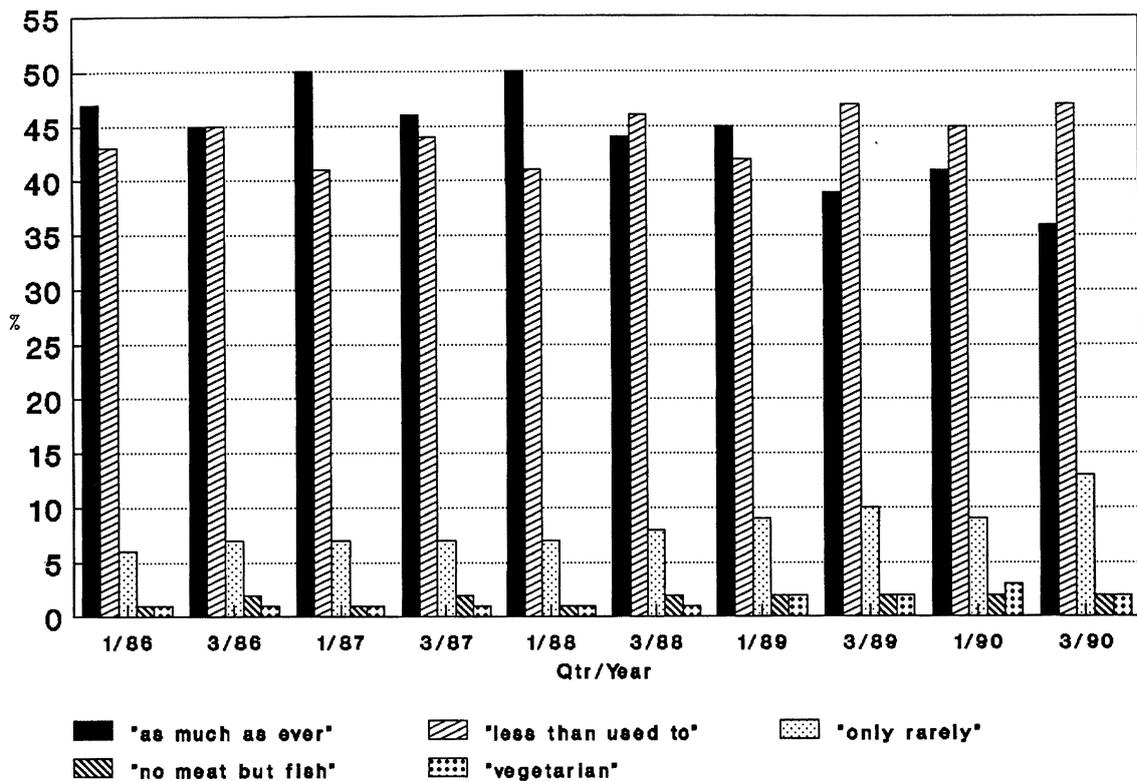
etc.) and reduced use of chemical inputs. However this only satisfies "light green" demands for more sustainable and environmentally friendly systems.

"Dark green" philosophies, which focus on the damage - probably irreversible - that mankind has done to nature through the greenhouse effect, interfering with the ozone layer, acid rain and profligate use of natural resources, coupled with a wildly disproportionate deployment of these resources between developed and undeveloped nations, inexorably lead to arguments for substantially reduced meat consumption worldwide.

The best-seller "50 simple things you can do to save the earth" includes (No.45) "Cut down on meat" and this thought is echoed by such key figures in this movement as Jack Lovelock (who sees the major threats to the world as "chain saws, cows and cars" (LOVELOCK, 1989) and Bill McKibben (McKIBBEN, 1990). These philosophies do not generally go to the extreme of vegetarianism because the role of animal production for some communities in some environments is seen as sensible resource use - but the large scale destruction of rain forests to allow ranching (for a few years until the soil deteriorates) and the diversion of cereals and other potentially human food from undeveloped countries to the developed world for animal feed are seen as major contributory factors in the world's environmental despoilation and misuse of resources.

A prestigious think-tank (WORLDWATCH INSTITUTE, 1990) forecasts that, "Halting desertification also depends on eliminating overgrazing. The global livestock herd in 2030 is thus likely to be much smaller than today's 3 billion. Since open grazing is likely to diminish, more farmers will integrate livestock into their diverse farming systems, using for fodder the leaves from trees in their agroforestry systems or the cover crop in their rotational cropping patterns. It seems inevitable that adequately nourishing a world population 60 per cent larger than today's will preclude feeding one third of the global grain harvest to livestock and poultry, as is currently the case. As meat becomes more scarce and expensive, the diets of the affluent will move down the food chain." (p.185)

As dark green awareness increases, particularly through its increasing incorporation into school teaching, the meat industry must expect it to exert a downward influence on demand - young people are much more likely to accept a recommendation to eat less meat than a recommendation to use their cars less.



Source: National Health Survey (1986-90)

Fig. 2 : Claimed meat-eating habits. Response to questions (percentage of each sample of adults) in 1st and 3rd quarters of 1986-1990.

Vegetarianism

Clearly, with so many aspects of meat and meat production under criticism, it is not surprising that some people, who have perhaps felt uneasy about the farming and slaughter of animals for food and other uses, should be “pushed over” the edge into vegetarianism and even the vegan way of life (which avoids the use of all animal products - even honey). Publicity about “how to live a vegetarian lifestyle” has been at a high level in Britain for the last ten years ; most restaurants (even pubs) provide vegetarian alternatives, many prepared dishes in the supermarket cabinet bear the symbol “approved by the Vegetarian Society”, there are frequent TV programmes on vegetarian cookery and most cookery magazines carry vegetarian recipes in each issue.

It is therefore surprising that full vegetarianism has been contained at about 2-3 per cent of the adult British population (figure 2 shows the recent trends). However, it is 10 per cent or more among teenage girls. What is

more important is the effect of all the publicity and the availability of alternatives on the remainder - a half of whom now claim to be eating less meat. Actual average consumption of red meat has been static in Britain over the 1980s, but it is likely that those unaffected by all this noise have benefited from reduced demand and therefore prices and bought more, to compensate for reduced consumption among the others.

Conclusions

Although the impact on many may be superficial, marginal and possibly transitory, there is no doubt a real resurgence in adherence to deeper philosophies opposed to animal exploitation. These go back in our culture over the centuries to Pythagoras and Plutarch and, no doubt, even further back in other cultures.

The writings of the high priests of animal liberation and animal rights (REGAN, 1984 and SINGER, 1983)

have been very influential, with some adherents so incensed by our species inhumanity to the others that they feel able to justify the attacks on property and, in some cases, individuals, carried out by such organizations as the Animal Liberation Front.

In 1986, the Oxford English Dictionary first included the following definition :

“Speciesism : Discrimination against or exploitation of certain animal species by human beings, based on assumptions of mankind’s superiority”

originated by Richard Ryder to set concern about animal exploitation in the same context as “sexism” and “racism”. In his book “Animal Revolution” (RYDER, 1989) he expresses his hopes for a change in mankind’s attitudes.

“The worldwide campaign must continue, in all its aspects, undaunted by the apparent slowness of change. It may take thirty or forty years for a movement such as ours to turn the great ships of commerce and custom. But the up-and-coming generations of legislators and managers will be those who have heard about animal liberation and had time to think about it. They may not accept the whole ethic, but mindful of its logic, of

public opinion and the twinges of their own consciences, they will turn the rudder by degrees until we have a full revolution.”

I make no predictions of the extent to which this thinking will influence today’s schoolchildren, tomorrow’s consumers, faced with meat production systems increasingly biotechnologically manipulated. But the range and strength of consumer opinions must, at least, cause regulators, politicians, those concerned with scientific policy and finance, farmers and traders faced with the decision whether to exploit new technologies and, not least, the biotechnologists themselves, to weigh the costs and disbenefits in the new climate (critical of animal exploitation and “manipulated” foods) against the benefits as measured by traditional criteria (the efficiency of lean tender meat production).

We run the risk of reducing the potential market size for our meat as technological advance is seen as increasingly exploiting animals and manipulating the products, so that the advantages gained in terms of costs and intrinsic qualities may be cancelled out at least in the developed world.

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