

## Overcoming resistance to new food products

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### *Introduction*

Selling new food products is seldom easy. Of those conceived by the food industry in any year the proportion which are finally found acceptable by the public in terms of the only true criteria of success, namely continuous purchase, is relatively small. But when we turn to products conceived and marketed under the auspices of the international agencies and of the philanthropic bodies of the world the success rate falls to virtually zero.

It is not my intention to examine in any detail the reason for the high failure rate amongst commercially conceived products, although in practice some of the points I will make in relation to social and psychological aspects of change, have their relevance in this field. My main concern is to try and indicate why nutritionally desirable foods created for the developing countries and sponsored by these well-intentioned organizations have a failure rate a good deal worse than the commercial world. If it were only possible to achieve the modicum of success normally obtained in commercial operations, it could at least be argued that we were making some satisfactory attempts to solve the world food problem.

### *The reasons for failure*

What are the reasons for these almost total failures? I would see three basic causes. Firstly, there is the problem of the climate sometimes engendered by the type of recruitment and the work environment established by the international agencies. Secondly, there is the frequent unwillingness of scientists to appreciate the nature and extent of social and psychological attitudes to food and their impact upon the behaviour of the ordinary individual. Thirdly, and perhaps the most important of all, there is the intricacy of the problem to be solved; influencing major changes in food habits is seldom easy.

*The climate of the international agencies.* The problem here seems to be a complex one. Partly the specification laid down by some agencies may lead to poor recruitment: partly the atmosphere of the job once attained may 'soften up' the individual. Let me elaborate. Recruitment in some instances is based upon two dubious criteria. Firstly, there is the quota system by which it is promulgated that the proportion of staff recruited from any one country as against the whole, should broadly reflect the financial contribution of that country in relation to that of the rest of the world. Intrinsically this system means that ability is by no means the sole criterion determining employment. Secondly, there is often the myth of experience coveted to a degree almost unbelievable in the commercial world. The philosophy sometimes suggested is that the only person who can work for an international agency in a developing country is the man already with experience of working in such an area.

The great dilemma of this philosophy is that virtually the only way to get experience is by working for an international agency. It is also, of course, questionable whether experience should be so narrowly defined. Certainly in the commercial world no such specific standards are usually set up. Often it is recognized that the man who is able in pharmaceuticals will also probably be good in electronics or fit to run a nationalized industry. The new Chairman of Beechams, one of the great growth companies of this decade, has previously been Chairman of the Central Electricity Council, a university lecturer and professor, and a professional accountant. In reality, perhaps if any criterion of experience is required it is the experience of being successful.

Also unfortunately, once they are inside such an organization the atmosphere encourages some to adopt the quiet life. Frequently in commerce high salaries and luxury living are matched by high risk levels and the essential order is to be successful or get out. No such criteria are required of the international civil servant. He lives both richly and in comparative security. The atmosphere chokes rather than encourages activity especially of a controversial kind; he is secure providing he does not offend. He possesses all the qualities imbued in national civil servants; he must always speak for himself, not for the organizations, and he must be the soul of tact. Yet he has the mandate to take decisions at a level which no national civil servant possesses.

To some extent I have painted a caricature of reality but the message is clear. The international agency must attract the top men of industry and Government to their ranks. These men must be allowed to take forthright action to achieve success. Essentially, a climate must be established where it is intrinsically more attractive to succeed than to fail and in which the success and failure are rewarded in totally different ways.

*Attitude of scientists.* The basic problem in this area seems to be the inability of the scientist to maintain the high level of critical objectivity and analysis in the market place that he achieves in his laboratory. Frequently in the past the products that he has tried to persuade people to eat and his methods of marketing them have lacked finesse. All too often the products have been unpalatable and expensive; the attempts at persuasion have been based simply on a demonstration of the product's nutritional superiorities; the marketing efforts have not been handled by the professional food manufacturer but by the scientist playing at selling his product.

But times are changing. Much greater use is now made of business firms and people. It is fairly widely accepted that nutritional value is not a major factor determining the individual's choice of food, and the emphasis upon this particular issue has been modified. Moreover, marketing is now usually preceded by taste acceptance tests and the product is sold at a reasonable price.

However, we must not be encouraged too quickly by all this. On the one hand many scientists remain unconvinced and unsophisticated in this area and continue to argue that whilst protein from new sources may lack immediate appeal it becomes accepted when people become accustomed to its texture and appearance. Such views imply a latitude in the behaviour and feelings of consumers which is often far from

reality. By analogy it is the same as suggesting that someone who likes Beethoven will necessarily like Schubert, or somebody that likes whisky will equally like gin. On the other hand, even if we are able to establish fairly closely that taste and price are satisfactory for the consumer, even this does not provide total assurance of success. All we indicate by such activities is a *prima facie* case for consumption. It does not demonstrate that in a competitive market the consumer will choose this product in preference to another. This in reality leads us directly to an analysis of the very nature of the problem of implementing changes in food habits.

*Social and psychological problems involved in changing food habits.\** I believe we frequently continue to fail to influence food choice because we have not overcome man's social and psychological resistance to the products we have tried to sell, or demonstrated in acceptable terms their superiority over food at present being consumed. Such a view is of course often equally true for the commercially produced and marketed product.

In trying to establish a place in the consumer's budget, a series of complex social and psychological resistances have to be recognized. Firstly, food has a profound psychological role to play in society. It is one of the very first means by which we demonstrate our mood and individuality; thus a baby demands food and then perhaps rejects it; it comes to assert its personality by demanding particular foods and rejecting others. As we grow older, simply because we eat three meals every day, we come to regard ourselves as experts on the subject. In the same way food asserts itself as an integral part of our culture and many social events in our lives take place round the meal table. More than this, every aspect of our lives is related to it and the intricate network surrounding food is as great whether we live in a sophisticated Western society or in a slowly developing poor community.

This is the outward display of food in relation to social functions. But there are also deeper inbuilt psychological issues. Food helps to satisfy hidden needs for all of us. These needs include security, reassurance, adventure, pleasure, maternal satisfaction and paternal pride, individuality, group acceptance, and prestige. Thus the traditional and long-established meals that we eat at particular times of the year or on particular meal occasions each week reassure us that all is well in the world and both that our food supplies are secure and that life is going on quite normally. The creative skill of an intricate dish well cooked and served and enjoyed by the family provides immense material satisfaction. A dinner for two in soft candlelight provides immense individual pleasure and background for romance.

Similar responses may be evoked for specific foods. To some fillet steak represents the extreme in palatability and symbolizes the excess of gluttony whilst at the other pole potato will stand for blandness and moderation. A cup of tea may provide immense reassurance to the British housewife in times of duress, and for many sugar and sweet foods generally serve as compensation for lack of affection in life.

Secondly, it must be recognized that if change involves anything more than

\*This and the following section of this paper are based on a lecture *Social and Psychological Factors affecting the Acceptance of New Protein Sources* given at Massachusetts Institute of Technology in October 1967 (McKenzie, 1968).

a switch of two identical brands of a particular type of food, then it sets off a series of complex interrelated movements. In essence all foods are competitive with each other. At a physiological level once in terms of bulk we have enough to eat, increased consumption of one food tends to lead to the reduction in consumption of another.

Similar interrelationships exist both in economic and socio-psychological terms. Most people have a relatively fixed amount of money which they are prepared to spend on food, at least in the short run. A change in the amount spent on one set of food products automatically leads to a change in the amount of money available for other food products. Similarly, a change in one food may change the whole meal pattern because only certain foods are regarded as acceptable in combination with others.

The marketing implications of the two issues outlined are clear. To sell a product it must be shown to satisfy needs at least as effectively as foods already consumed. In addition, because one item in the diet cannot be changed without a whole series of repercussions on overall choice, some support must be provided to justify these resultant total responses. This is why commercial involvement is so important—these sorts of problems frequently face the businessman. He is always working in competitive situations. Most cigarettes marketed at a given price and using a particular type of tobacco have a similar appearance and taste. Most tins of canned fruit will have the same basic constituents as each other. Thus once price has been settled and the taste found to be acceptable, the job of selling has only just begun. Complex advertising themes will be required to encourage the consumer to believe he needs these products and that this packet of cigarettes or that tin of canned fruit is the best brand to buy. When the problem involves a totally new type of product the task becomes of even greater importance.

It has to be recognized, however, that this war of commercial persuasion is not always successful. Sometimes the battle is just badly fought but on other occasions, especially with totally new products, the social and psychological resistances are too strong to be overcome. Hence the incredibly high failure rate of new products in the United States and the United Kingdom.

Nevertheless, I believe that if we carry out a post-mortem on attempts to sell nutrient supplements or change food habits, it is evident that even the businessman has often not studied the social and psychological problems involved when planning his marketing strategy. Perhaps this has been partly due to the false assumption that these problems are less significant and these patterns are less complex in developing society. Perhaps it is that some salesmen have for the first time become really convinced that the products they are trying to sell are really good and that in these circumstances they imagine they will be successful without persuasive encouragement. Whatever the reason, it seems that in this context too often the marketing men have at worst left at home or at best skipped a couple of pages in their text book on how to sell products.

In consequence, whether the scientist or the marketing man or both have been involved, information has seldom been obtained as to why people should want to buy this product, what is an appropriate name to sell it under, what are likely

to be its basic competitors, what needs does it fulfil more effectively than other products, what are the basic problems it will have to overcome. Yet it is these very factors which should influence the marketing scheme and will be vital issues in determining success or failure.

*Acceptability of food products from new sources of protein*

What will be the resistances to new foods based on sources of protein as yet unused by man and which increasingly attract the scientist? Because such products will be based on materials previously not regarded as a source of food, such as grass, oil or cellulose, it is likely that there will be some initial objections. Nevertheless, such disadvantages should not be over emphasized. If properly promoted, the introduction of a completely new food may be achieved with less difficulty than a product which involves the straightforward consumption of an existing local food which for one reason or another has been rejected and is consequently surrounded with emotional antipathy.

However, there is no doubt that, if possible, probably one of the best solutions would be to include the new protein sources as supplements in foods which are already extensively consumed by the community. There is nothing new in this approach. For example, in the United Kingdom bread and margarine are still fortified. The only requirement must be that it should involve a food which is at present, and is likely to continue to be, a basic staple of the community, particularly of the poor, and that the addition of the supplement should not intrinsically change the taste or appearance of the product. It should also not add much to the cost. If these requirements are fulfilled, no major social or psychological problems should emerge.

If a new protein source is to sell in its own right either as a supplement to be consumed with other foods or as a basic new type of food then, as has already been indicated, it will be essential to establish its likely role in the consumer's food pattern, the nature of the difficulties to be overcome, and methods of dealing with these difficulties. The key areas to be examined are listed in Table 1. Armed with such information it should be possible to obtain more rational and effective marketing decisions.

The other area in which new protein sources might be utilized would be as parts of a new synthetic food which set out to 'imitate' as closely as possible existing foods. Probably this is the only way in the foreseeable future by which new protein sources might be directly used by the consumer in Britain or America. Such products would be likely to further enrage consumers who already deplore the increasing 'manufacture' of foods. There tends to be an inherent belief in the mind of the public that fresh foods untouched by artificial fertilizers and in no way forced in their growth are of supreme quality. Such views also extend into adverse attitudes to processing and preserving.

Nevertheless, however much people grumble, most continue to consume processed food produced by the most advanced techniques, and in practice of course the nutritional value of these foods is usually just as good if not better than the 'natural'

Table 1. *Key information required before initiating sale of new product*

Area	Type of information required
1. Product usage	When is the product likely to be used, and with what foods will it be combined? Will it blend well with these foods?
2. Product competitiveness	With what other foods will the product effectively be competing? Can it successfully demonstrate some acceptable superiority? If the product is a supplement to be added to existing foods during preparation, then can methods of justifying this addition be substantiated?*
3. Impact on food habits	Does its acceptance require any major or minor modification in eating habits? If so, can these changes in consumer behaviour be successfully achieved?
4. Equipment required	Is any new equipment or cooking procedure necessary? If so, can the housewife be easily persuaded to make this change?
5. Storage	Does the product require any different type of storage arrangements? If so, will these special facilities be available and acceptable?
6. Advertising copy	How can advertising copy be designed to indicate effectively the fulfilment of a need, overcome competitive products, and justify changes in behaviour†
7. Name	What from the consumer's viewpoint would be a suitable name for the product?
8. Packaging	What sort of packaging would be most acceptable to the consumer?

\*The superiority or justification will not be in health or nutritional terms but in terms of appeal based on taste, better fulfilment of psychological needs, etc.

†This will imply general knowledge of the consumers' motivations.

product. However, if new imitation foods emerge on the market it is clear that the same type of attitudinal criticisms will arise on an even greater scale. Whilst at a political level pressure to have these foods banned may be great, it is unlikely that the general public will refuse to purchase them on these grounds. Providing the new product looks and tastes exactly like an existing food but is cheaper, most people will buy it. Appearance will be just as important as taste because slight variation in colour or texture will tend to increase suspicion and deter people from the initial tasting of the product. Such problems are now being found in the sale of total accelerated freeze-dried meats where the initial product before reconstitution often looks like a piece of cardboard and this tends to upset the housewife.

### *Conclusion*

Human beings seldom react like machines. They do not begin work at the touch of a button or provide formula type responses to given stimuli. But most of us are manageable. The better we get to know someone, the more easily we can predict his reaction to situations and the more we know how to influence his behaviour. In reality this is probably all we need in terms of persuading man en masse to change his food habits.

Thus the answer lies firstly in accepting that to change food habits social and psychological problems have to be overcome and secondly in obtaining enough basic data to deal with particular problems. It is vital that these data should be obtained

with such specific problems in mind and not as at present is so often the case gleaned from hotch-potch general studies. Secondly, we need to develop an increasing band of skilled personnel who not only have an overall understanding of nutrition and food habits, but also of the behavioural sciences. They must also be market-orientated. Thirdly, we must create an effective environment in which such a group of specialists can work.

If such developments can be achieved I am confident that within 10 years, perhaps even less, we shall almost as if by instinct know how to persuade people to change their food habits. But the plain truth is, and I cannot stress this too strongly, that in order to get the right answers to the problems that confront us today, we have to be sure that we have the right people asking the right questions!

## REFERENCE

- McKenzie, J. C. (1968). In *Single-Cell Protein*, p. 391. [R. I. Mateles and S. R. Tannenbaum, editors.] Cambridge, Massachusetts and London: M.I.T. Press.