The attitude of the food industry

J. GREEN

B.Sc., Ph.D., F.R.I.C., F.I.F.S.T.

H. J. Heinz Company Limited

Summary

The food industry necessarily provides what the nation will eat. Whilst taking care to meet all the standards laid down, the industry has to follow fashion rather than to dictate it. It welcomes advice from the medical profession but much advice has been slow to come. In this spirit of co-operation the food industry accepts its role to feed the nation and does so with responsibility for health and hygiene.

THE first modern legislation controlling food was enacted more than one hundred years ago. Since then many laws have been passed and numerous Codes of Practice agreed. The result is that the food industry is probably more closely controlled than any other and yet knowledge of it – and of the legislation – is often weak. This applies even to the opinion-formers of the community including many members of parliament, of the medical profession, consumer activists and journalists. This is a tragedy especially in these days of instant communication and the fault probably lies in the fact that the day-to-day responsible job done by the food industry is not considered newsworthy.

The title of this symposium cannot be factual, unless it is accepted that the child is father of the man. If so, the food industry is being asked "What is your attitude to promoting health from cradle to the grave?" The answer comes in two words – utterly responsible. That responsibility may not be completely altruistic but it is certainly one of enlightened self-interest. Non-consumers of manufactured foods are profitless. Competition within the food industry itself is fierce and the ultimate competitor is the housewife. It needs only one producer to do the thing that is known to be required and the rest must follow or lose the business. The difficulty is that no one, not even the medical profession, knows with certainty the foods that are required to promote health. The food industry has to do the best it can and the author proposes to show that the best is pretty good.

The paramount task of the food industry is to provide food. That is, to secure ingredients, process and package them to be acceptable and palatable at the time of consumption. The ramifications of that

simple statement are legion and some will have to be considered. Nutrition *per se* is not normally a main consideration in formulating a foodstuff. The first consideration is market acceptability with all its constraints – one of which at present is an almost complete ignorance of, and worse, a lack of interest in, nutrition. This is well demonstrated by the lack of stress on nutrition in courses for the training of members of the medical profession.

Infant feeding

The field where most progress has been made is in infant feeding because paediatricians have recognized the importance of trying to get the nutrition right. They believe that nature has provided the ideal foodstuff in the form of breast milk, although it contains animal fats and no dietary fibre. They do, however, accept that it is a variable commodity (dependent on the diet of the mother) and in need of some vitamin supplementation. Certain members of the food industry supply replacements for breast milk and some details have been given in an earlier paper. The fact that compositions vary widely, and no direct evidence is given to show that health is impaired, suggests that human metabolism is tolerant from a very early age.

The suckling animal has to be converted to one that chews and the age at which this process should start is not universally agreed. The present consensus is that it is not before the age of about 4 months and the conversion is very often done through the use of convenience foodstuffs prepared by the food industry.

The manufacturers started by doing that which mother did but generally more hygienically and with better ingredients. The process has produced at least three generations of healthy children in the Western world. The problem – if any – has been one of over-feeding and evidence is that that has been the responsibility of mothers and their medical advisers. Most recently, because of the improved knowledge of nutrition and interest by the paediatricians, baby foods are formulated to put the knowledge into practice. Diets are recommended with control of calories, and nutrients supplied from a wide range of ingredients which are supplemented

where there is real evidence of deficiency. It must be emphasized that doing the wrong thing because of imperfect knowledge is probably much more dangerous than doing the traditional thing which has been shown to work. Progress must be cautious. The food industry cannot afford to react to fashions but will react favourably to any new advance in knowledge that will improve the health of its consumers. This is well illustrated by the availability of foodstuffs free from gluten, lactose, etc. for special needs.

Food and coronary heart disease

No evidence has ever been adduced to show that foods prepared for infants has played a part in the development of coronary heart disease. On the other hand there is a 100% correlation between food and death. Healthy people will normally stay that way simply by doing many things in moderation and none excessively. When they become ill for any reason normal mechanisms are upset and remedies induce other abnormalities. The desire for preventive medicine is relatively new and, even now, it is not always recognized that sound nutrition is a prerequisite for good health. Unfortunately no one can define sound nutrition and many do not even realize that the different interests of agriculture, food and nutrition can be wide enough for a national policy for one to be completely at odds with the other two.

The products of the farm with the possible exceptions of liquid milk, fresh fruit, salad vegetables and nuts, are not foods but ingredients. They have to be processed before being edible, even if that process is limited to cleaning and cooking. But even a properly processed foodstuff is not nutritive until it is eaten and it will not be eaten if it is not available, affordable and palatable.

Palatability is closely related to traditional eating habits. For example, the milk which plays such an important role in Western diets is unacceptable to the Chinese. Horse flesh is rarely eaten in England yet is popular on the Continent. The food industry must make products that will sell but it does not dictate eating habits – these are matters for the consumers and in a free society cannot be imposed. The Norwegians have made an attempt to impose a policy through a comprehensive report on Nutrition and Food Policy presented to their parliament in 1975. There is no evidence that coronary heart disease is being reduced in that country but there is evidence that Norwegians are travelling abroad to eat the foods they like.

Earlier this year a Select Committee of the Senate of the United States published the following six dietary goals:

- (1) Increase carbohydrate consumption to account for 55–60% of the energy (caloric) intake.

- (2) Reduce overall fat consumption from approximately 40–30% of energy intake.
- (3) Reduce saturated fat consumption to account for about 10% of total energy intake; and balance that with polyunsaturated and monosaturated fats, which should account for about 10% of energy intake each.
- (4) Reduce cholesterol consumption to about 300 mg/day.
- (5) Reduce sugar consumption by about 40% to account for about 15% of total energy intake.
- (6) Reduce salt consumption by about 50–85% to approximately 3 g/day.

These six goals suggest the following seven changes in the selection and preparation of food:

- (1) Increase consumption of fruits and vegetables and whole grains.
- (2) Decrease consumption of meat and increase consumption of poultry and fish.
- (3) Decrease consumption of foods high in fat and partially substitute polyunsaturated fat for saturated fat.
- (4) Substitute non-fat milk for whole milk.
- (5) Decrease consumption of butter fat, eggs and other high-cholesterol sources.
- (6) Decrease consumption of sugar and foods high in sugar content.
- (7) Decrease consumption of salt and foods high in salt content.

Dietary goals of themselves are inadequate. Health and enjoyment of life are closely related to food: too little or too much at any time makes for misery. On the other hand ingestion of the necessary calories in the form of balanced nutrients appropriately spiced and washed down makes for happiness and it is legal, safe and healthy.

It is suggested that at the present time, the best advice that can be given is to maintain a recommended weight for height and age and to take nutrients from as wide a range of foods as possible and to be physically very active.

Long-term effects

The food industry itself cannot study the clinical effects of nutrition. Its role must be secondary and its attitude supportive. It is faced with the dilemma of the time factor. Consumers must eat today and the clinical effects be observed tomorrow or years hence. There is, therefore, need for cautious progress together.

Responsibility is collective and the consumer or potential patient also has a share. The food industry will continue to produce from a wide range of ingredients. Competition will remain fierce and ensure that value is given for money received. Close

attention will be paid to developments in the medical field but evolution will be cautious. The industry is composed of responsible people who will not jeopardize the excellent reputations that have been built up by dedicated service over many years. Its

attitude is to co-operate in the making of the law and to obey it when made. If laws can be passed based on real knowledge which will prevent the development of coronary heart disease then the food industry will welcome them.