



International Policy Developments for Vegetable Protein Foods – The Consumer Perspective

D.H. GROSE, Head, International Organization of Consumers,
14 Buckingham Street, London WC2, United Kingdom

ABSTRACT

The first concern of any responsible consumer must be for the nonconsumers of the world. In the development of new food products, the food industry seeks to maximize profits. This is inevitable, but it means that many of the research resources and efforts may be directed toward the fabrication of analogs and highly sophisticated processing. What the world really needs is an increased availability of cheap basic foods. Consumers have their own ideas of what is "real food:" their personal experiences since childhood tell them what is safe and acceptable to eat. These instinctive rather than informed criteria are not irrational since for thousands of years these were the only ways of judging wholesomeness. If consumers are to judge in other ways, they must be given information. They must be certain that someone is ensuring that their diet is not being changed to their detriment. They must be sure that everything possible has been done to check that there is nothing in a new food product that will harm in the years to come. They must be sure they are not being conned, deceived and defrauded. This is vital wherever food is sold. Countries and societies may produce differing answers as to the degree of control needed. Internationally, there should be some agreement on the basic safeguards, but labeling requirements must take into account the connotation of particular descriptions in different countries.

CURRENT DEVELOPMENTS IN PROTEIN FOOD REGULATIONS; INTERNATIONAL POLICY DEVELOPMENT FOR VEGETABLE PROTEIN FOODS: THE CONSUMER PERSPECTIVE

It is very difficult to obtain an international overview on any subject. Fortunately I have colleagues in many countries. My own organization, the Consumers' Association of the United Kingdom, is a member of the International Organization of Consumers Unions. IOCU is an independent and nonpolitical foundation, promoting world-wide cooperation in all aspects of consumer information, education, protection and representation, with 103 members in 46 countries. So before preparing this paper, I wrote to a number of them; even so I am not going to attempt to do more than suggest the questions on which I, personally, think international policy should focus for the development and regulation of vegetable protein products. However, the general principles are agreed by consumer organizations: people need enough to eat; they need to be sure the food is wholesome; they want to know what they are eating.

First, and briefly, I want to ask you to think about the "nonconsumers" in the developing countries who are striving to pass from a bare subsistence agrarian way of life into a wage-earning cash economy, and of those who suffer chronic and long term undernourishment.

Priorities

In January this year, the consumers' groups in Asia and the Pacific met in Manila to discuss food and nutrition. The greater part of their discussions was on practical proposals such as identifying indigenous foods which have a high nutritive value and in promoting their greater use. This is grand, but we and they know that self-help cannot answer all their problems. So they also urged governments to take measures to ensure that there was proper production and marketing of nutritious foods, including low cost recipes from locally available sources, hygienic handling practices, adequate food storage and conservation systems, efficient distribution, and fair price levels.

Vegetable proteins can help to supply this type of nutritious food. Much work has already been done by the UN Protein Advisory Group and national standards organizations to develop compositional and safety standards for the defatted flours and for mixed products in which they may be used. Any additional work that is needed for this type of product at international level should be given a higher priority than the simulated meat products of affluent societies.

Toxicological Safety

Consumers, whether rich or poor, have their own ideas of what is "real" food: their own personal experiences since childhood have conditioned them so that they find some foods acceptable to eat and others not. In an earlier non-scientific world, tradition and prejudice were useful safeguards. Today this prejudice can defeat the nutritionist or producer who tries to introduce new foods. At the same time, people are wise to ask questions about unfamiliar and highly processed foods. They have a right to information about what has been done by producers and governments to ensure that any "new" food is free of any toxin and is wholesome to eat.

Consumers have often been told – in answer to their fears about food additives – that some plant foods would be toxic if consumed in large quantities. Many of the plants now being considered as a protein source are familiar to us as foods, such as oil seeds and legumes. We must not be asked to assume that new uses will not produce new hazards. We must be given evidence. Some of these raw materials are liable to contamination by aflatoxins, others have antinutritional factors. Processing of the vegetable source is usually complex, and consumers have a right to know that care has been taken to ensure that it does not introduce new and unacceptable residues and that nutrients in the final product have not suffered functional damage. The Protein Advisory Group has already issued guidelines for testing and for some products. I suggest that there is a need at international level for continuing and detailed assessment of products and publication of the conclusions. Reports similar to those prepared by the Joint Expert Committee on Food Additives would be welcome. In this way all countries may share in the results of testing.

Confidence could be further increased if international microbiological and hygiene standards were established and

guidance provided on sound technology.

Nutritional Assessment

The nutritional assessment of the product must be made known and an evaluation made and based on the diets on the people to whom the products are to be promoted. Mandatory fortification must vary according to the needs of particular countries or groups of people. In particular, consumers want to be certain that any known adverse effects on particular groups in the population have been considered. Some people are unable to metabolize constituents of cereals, e.g., wheat gluten. Just possibly more people than we know at present suffer minor symptoms. A large shift in the balance of people's present diets could suddenly highlight such problems. Any contraindications should be given the most careful scrutiny.

After the products have been introduced and are in use, their safety and quality should be regularly checked. National government monitoring units should analyze new vegetable protein products from time to time in order to check that an acceptable nutritional profile is being maintained and that no unexpected and unacceptable residues are appearing. Results of these checks should be published. Clearly, people are far more likely to have confidence in new foods if the evidence supporting their introduction and establishment as part of the national diet is not hidden from public view.

Breakfast foods and canned foods were introduced without a nutritional assessment or serious suggestions that use and consumption should be limited by law. Are vegetable protein products different? They are even more complex. Knowledge has increased. There is increasing awareness that the balance of nutrients in many people's diet is changing, and this may have implications for their health. Above all, the vegetable proteins are promoted as basic foods and substitutes for basic foods. Even so, generalization is inappropriate. When a new food is being used to try to improve the nutritional status of vulnerable sections of any community, then there must be evaluation of the effect of the product on the diet — for example, that the consumption of other and necessary and cheaper foods has not diminished — and on the people eating it. This must apply equally to people in the developing countries and people in institutions or receiving food aid within affluent societies. In the latter, even greater caution is possible, and therefore, desirable. Each country should set its own guidelines and regulations in the light of its study of its population's nutritional needs.

A particularly close watch should be kept on infants and children who are being fed largely on products containing new vegetable proteins.

What Sort of Food?

There are moves, particularly from certain sections of the farm lobby, to restrict the use of vegetable proteins in ordinary North American and European diets. I suggest that the industry has brought this on themselves by concentrating on simulating farm produce and underlining them as cheap substitutes primarily for meat, but also for fish and dairy products. Personally I see no reason to limit their use as one of many foods the ordinary consumer may buy so long as they do not become too large a part of a person's diet and sufficient information is provided for the buyer to understand just what he is getting. I recognize that the marketing people have a problem in getting the public to accept vegetable protein products in their own right and that it may require a major consumer education program. However, I hope that the industry in its effort to get people to identify with the product will not travel too far along the simulation road. I do not usually support legislation that hinders innovation, but I would have sympathy at any move to stop simulated lamb chops. There should be a

gradual move away from simulation. These vegetable products are potentially valuable as basic foods and should be treated as such.

People in the Third World have often resisted attempts to change their staple diet. This is understandable. I do not believe that people on mixed diets are so conservative; Western diets have changed remarkably over the last fifty years. There are two requirements for a new food. The taste and texture must be acceptable. It must have a place in people's meal patterns. A new food may, preferably, increase choice — a new main dish to add to steak, pasta, omlette, salad or a new side dish or even a versatile product like baked beans — or, it can be a substitute product in the tradition of margarine. The last may mean it will have a second-class image for decades. Sadly the vegetable proteins are being treated as imitation, simulated, extender product, and this is affecting decisions on fortification and labeling. The industry would have fewer problems if they seemed less ashamed of their product.

Fortification

If the volume use of plant protein is to be as extenders and simulated products, then they must be reasonably nutritionally equivalent to the products which they replace, because people are being guided to think of them as equivalents. (If they could be offered as products in their own right, then people could be given information about their nutritional value so that they could use them as any other food product.) Canadian legislation has already specified that an extender or simulated product must be nutritionally equivalent to meat products, with respect to protein content, protein rating, vitamin and mineral nutrients. Stress must be placed on the need for good quality control to ensure that a desirable and mandatory nutritional value is maintained and not diminished by poor processing.

Functional Properties

The use of soluble protein isolates and other vegetable protein ingredients in small quantities for functional purposes should be controlled. I come from a country which has had a very unhappy experience with the use of polyphosphates, allegedly to produce texture changes but with an additional effect of adding undesirably to the moisture content of meat products. The authenticity of a claim that the addition of any substance serves a functional purpose should always be substantiated.

Labeling

When national governments come to discuss draft international standards for these products, I do not doubt that as much or even greater heat will be generated by the labeling requirements than questions of biological quality and nutritional equivalency. Even the use of the word protein is misleading. Groundnut oil is just groundnut oil. Similarly groundnut flour needs no further description. A typical packet of "textured vegetable protein" contains something over 50% protein and approximately, possibly 30% carbohydrate. An accurate description would be "textured groundnut product high in protein." I am sure most people will settle for "textured groundnut protein product," but it is not an exact description.

When preparing to write this paper, I studied the United States, Canadian and European legislation on the more sophisticated products and, at the end, my mind was in a whirl. I was at least convinced by then of the need for guidelines in the Codex labeling standard on how to write a descriptive name for a food product. I must stress that my views on the designations for vegetable protein are strictly my own, but I feel strongly enough to make my position clear.

The name of the food should clearly tell the intending buyer what it is - not state what it is not. Canada, for

example, allows the use of the common name of the simulated product preceded by the word "simulated" and followed by the phrase "contains no meat." I understand that the Consumers' Association of Canada were involved in the joint discussions with industry and government on the development of these regulations and preferred the familiar designation to new fanciful names. This I understand. However, I see no reason why the products should not be called "minced textured soy protein product," or "textured soy protein slices: artificial turkey flavor," or "soy protein sauce: use as a change from cheese."

In Europe a distinction is being made between vegetable protein used as an extender and composite foods, so there might be a product called "stewed steak extended with textured soy protein product," and another, "soy vegetable protein product and meat stew." The concept of extension is linked to controlled substitution in traditional processed products, or in the meat dishes served in restaurants and institutions. Again I understand the reasoning and that it is intended to protect the consumer. In the long term, I suspect it will mean distinctions between products which people in general will not understand. Some countries will want to protect some or all traditional meat products and forbid any substitution. Others will wish to permit combinations. The name of the product should make clear not only the use of both foods, but also the percentages in which they were included in the recipe. The aim should be to distinguish clearly between products.

There is also the problem of words describing the form in which the product is presented. The English-speaking world may be fairly relaxed about using "sausage" and "paté" for nonmeat products. It would be anathema to most European consumer organizations. For them words such as "sausage" and "paté" denote a wholly meat product, and they would resist debasement. In the United Kingdom, such a debasement took place a long time ago, but we are agonizing over the word "mince." Many years ago "minced meat" became "mince." Will people be misled if we have "soy protein mince?" Should it be "minced soy protein?" There are problems resolving these questions nationally, but is there any point in even attempting to lay down internationally precise, as against general, requirements? What people understand by a description depends on their past experience and the relation to local habits, customs, terminology and existing legislation. I do not think it is worthwhile spending precious time trying to harmonize labeling at this level.

I am increasingly disturbed that shoppers find it so difficult to distinguish between meat products of varying quality when reading the labels. There are now on the

market products made from reformed meat using vegetable protein isolate, products made largely from rind, offal and fat, and products made from lean meat and fat in the right proportion. Price and quality competition is harmed when it is so difficult to distinguish between products on the supermarket shelf.

Restaurants

No longer can we tolerate the provision of information being in effect limited to prepackaged foods. The information must be provided in restaurants, institutions and butcher's shops. Of course there are practical and enforcement problems. How much information should be given about the bun as well as the hamburger? Both contain vegetable protein. National governments have too long swept this one under the carpet, and consumer organizations, I fear, have let them.

Many of us today are regularly consumers in countries other than our own — as many of us are here in Amsterdam. Therefore, international guidelines for describing food served in hotels and restaurants seem to be particularly appropriate.

Enforcement

A corollary of labeling must be the means to check its accuracy. Recently, in the UK, there have been a number of successful prosecutions as the result of the development of a new analytical method. This must be good news for consumers everywhere, particularly as some of those prosecuted said they had understood that the vegetable protein could not be detected.

Nutritional Information

The advent of new foods highlights the need for more nutritional education and even greater effort being devoted to finding ways of giving people nutritional information in forms they can understand and use.

So what have consumers to gain from international standards and guidelines being developed for these new foods? Everything, when it means that expertise on safety, nutrition and usage from all countries can be pooled and agreement reached on acceptable standards and practice. If this work is published and becomes public knowledge, then confidence in these new products will be raised. General rules could also be agreed for labeling, but I suspect that it will be necessary not to be too detailed and precise on the use of some traditional names if those who are to work on the standards are not to spend years in futile argument. So I wish the new committee of the Codex Alimentarius Commission well, and God speed in its work.