



The Marketing of Isolated Soy Proteins

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ABSTRACT

The soy protein industry is an established industry today. Current isolated soy protein technology and know-how are practical and being used today. Isolated soy proteins are comparable in protein quality to traditional proteins. Cost effectiveness of isolated soy proteins will offer an economic advantage to processor and consumer. These products are available and strategically located to support commercial utilization anywhere in the world.

Several key marketing issues have been the subject of my company's marketing programs during the past six years. It is my intention, through an analysis of these points, to develop here a better understanding of vegetable protein and, particularly, isolated soy protein marketing.

The majority of papers presented at this conference dealt with evolving vegetable protein technology and associated regulatory dilemmas. I would like to discuss marketing concepts and the effect these concepts have had on shaping and directing our company's development of the isolated soy protein ingredient business. My comments will deal with the marketing of isolates on a worldwide basis with particular reference to the United States.

Five major factors properly describe today's industry:

1. The isolated soy protein industry is an established industry with enormous potential. It is a community of companies which has formed an active industry that today conducts business around the world. The growth rate of the isolated soy protein industry exceeds the average for the world food industry. We should not consider this industry as one in its prenatal stage; but rather, one that is highly sophisticated, active, and supported by all the required organizational functions.

2. Current technology has advanced to a point where the practical utilization of isolated soy protein is being implemented, in market after market, around the world. Papers presented here highlighted the exciting and continuing technological advancements taking place right now in various laboratories around the world. While this is a true and exciting fact of a very dynamic industry, it is important to understand that isolated soy proteins, as a class of protein products, are developed and being used today. This major distinction separates isolates from novel proteins yet to achieve commercial acceptance.

3. Nutritional knowledge regarding isolated soy protein has supported the conclusion that soy proteins can be used with, or in place of, traditional proteins in food systems without compromising nutritional value.

4. Cost effectiveness of utilizing isolated soy proteins in food systems consistently offers an economic advantage to the processor and ultimately the consumer.

5. Availability of isolated soy protein and other soy protein products is excellent and easily expandable to meet increasing demands. The network to deliver these products is operational, extensive, and capable of

servicing the food industry anywhere in the world.

Your comprehension of this profile enables us to establish and discuss a marketing perspective that is in many ways different from that which describes a still emerging industry and product line. The marketing perspective reflects an industry that is established, technically sophisticated, strategically located, has a renewable and abundant raw material source, available and suitable products and strong financial support. This is an industry that is poised to assist in answering many of the major food questions confronting us today.

The growth rate of isolated soy protein is several times greater than that of other classes of soy proteins. Today, its worldwide expansion rate is estimated to be more than 25% per year.

Several speakers have emphasized that two major factors affect food consumption patterns: culture and tradition. Introduction of foods not resembling traditional or culturally familiar food products have encountered additional burdens in gaining acceptable market share. While soybeans are an integral part of certain cultures, in the United States, soybeans as a human food source began to appear only in the early 1940s. In the well established cultural patterns of the United States, it was and is critical to the successful marketing of isolated soy protein that the protein be adaptable to existing food systems. The major reason for the success today of isolated soy proteins in the United States is the product's compatibility with existing food forms.

The importance of this fact cannot be underestimated. Foods which are combinations of traditional and isolated soy proteins, or exclusively dependent upon isolated soy proteins, must meet the same criteria the consumer applies to any protein food form. They must have acceptable texture, appearance, flavor, and value. Isolates can meet these standards. Because of this flexibility, today isolated soy proteins are being used in virtually all types of food products. Today, these nutritious, highly functional, isolated soy proteins have reached the point where in many cases they are the protein of choice by manufacturer and consumer.

Past marketing practices have emphasized the technical benefits of isolated soy protein – the structure-forming gel capability, the viscosity-building properties, the heat stability, or the binding characteristics, to name just a few. Only recently has the obvious benefit – nutrition – become a motivating marketing factor. With the recognition of isolated soy proteins as comparable nutritionally to meat, milk and eggs, the opportunity to position soy as a major nutrition source surely will be a future direction for marketing.

Our current success has not always come easy. The marketer of any new ingredient must address a multitude of issues as he moves from prototype to commercial reality. Successful marketing of isolated soy proteins, in any market, has to address four major issues. These four issues represent areas that need clarification with respect to the new concepts available when using isolated soy protein, and

areas that require careful education and product positioning. Divided by interest these areas are: (a.) the food manufacturers-marketers' understanding of our products' use and value, what isolated soy proteins are and how to use them correctly; (b.) the consumers' perceptions of this protein source, and expectations of finished foods that use isolated soy proteins; (c.) the legal or regulatory environment that must accommodate their use; and, (d.) the rate of technological advancement within this product category and its impact on food product development. Let me expand briefly on each of these perspectives and develop the current status and progress our marketing programs are making.

The food manufacturer's or marketer's concern with the effect an alternative protein will have upon his product's market share is paramount. The more established the product, the more assured the marketer must be that his product's share of market will increase, or as a minimum, stay the same, as a result of an ingredient change. There must be improved product performance along with solid economic justification to motivate a marketer to explore and incorporate new protein ingredients.

As industrial marketers, we have developed a high level of expertise in each industry in which we are active. We have assumed some of the research burden and developed some consumer data so that we might share this information with existing and potential customers. Reasons are to overcome reluctance to change; to encourage quicker acceptance; and to assist the marketplace in resolving questions outside of the traditional marketing framework.

Consumers' expectations are relatively straightforward. A consumer expects a good, high quality product that performs as it is supposed to, and provides value. The consumers' perception of isolated soy protein is positive. The consumer recognizes isolated soy proteins as a high quality, nutritious product.

The Gallup organization's 1976 survey showed that soy protein is most often named by consumers as the protein source of the future. In addition, two out of three consumers indicated that use of soy protein in a food would either cause an increase in purchases or have no effect on purchase patterns. The consumer is receptive to change provided he receives real or perceived value. Products being marketed with isolated soy protein as a major protein ingredient must be high quality, just as any other new product must be in order to survive. Successful products meet the consumers' expectations in appearance, flavor, texture and value.

That simple statement has not always been respected fully by producers. In the past many have attempted to market a food reduced in overall quality along with a change in protein source from traditional to soy. More often than not, the product's failure was incorrectly associated with the incorporation of soy protein, rather than the inherent deficiencies of the products themselves. No protein source, regardless of its value, can compensate for poor product quality or concept.

Food regulations historically have been based on traditional products and historic consumption patterns. A major marketing hurdle is the need to blend regulatory requirements with good marketing promotion of new products or reformulated products. To accomplish this a continuing effort of education, familiarization, and development of full recognition of isolated soy protein and its value has been undertaken with government decision makers. Better understanding of the protein's functional, nutritional, and economic benefits will enable regulators to find a legislative home for soy protein products, and solve the problems that may present delays or limit the marketing opportunities for food enhanced by soy isolate.

Our marketing programs are generally encouraged by the regulatory trend to accommodate and encourage utilization

of plant proteins. This trend has occurred not only in specific areas such as meat, but also in more generalized food product classifications. While regulations have long permitted utilization of isolated soy protein and other vegetable proteins, it is only recently that they have begun to create an environment that equally considers vegetable protein and traditional proteins. This is a major step forward. However, new legislation for vegetable proteins is far from being simple or easily resolvable when considered country by country. The need for leadership in providing intelligent and responsible input with governments regarding the regulation of vegetable proteins will continue to have a high priority in overall marketing efforts.

The final perspective for consideration is the accelerating rate of technological development within the isolate industry. Today, isolated soy proteins provide functional requirements for a wide variety of products. Compatibility of this protein source has been proven in the majority of products in which isolates have received consistent testing. However, because technological advances are continuing, development of new forms of protein designed to fill exact needs of particular industries are a natural and continuing evolution. These new proteins will help marketers build products that fit specific market needs, while offering precise economic and functional benefits. Again, the essence of this is satisfying the demand of a consumer anywhere in the world.

Marketing programs that have positioned isolated soy proteins favorably within these four interdependent areas have resulted in success. The current status of this success can be seen easily in a casual walk through a supermarket. Products utilizing isolates include hypoallergenic infant formulas, processed meats, canned soups, bakery products, coffee whiteners, dips and sour creams, confections, and cereals, to name a few.

Technological advances have contributed significantly to the favorable rate of acceptance of isolate-based products. The research and development commitment to the worldwide utilization of isolated soy protein is impressive. In the United States alone, private estimates of the dollars being spent annually on the development of soy protein-based products by consumer companies exceed 20 million dollars per year.

In today's world, a variety of factors ranging from politics to agro-economics are determining the areas of application for isolated soy protein products. As an example, the opportunity and the incentive in the United States is to utilize isolated soy proteins as replacements for manufacturing grade milk ingredients used in a variety of food products because of their functional contribution. The high cost of nonfat dry milk, casein and sodium caseinate in the U.S. provides a major opportunity for replacement with functionally comparable or superior isolated soy protein ingredients. This marketing motivation is contrasted to the situation in Europe where high cost and agro-economics of meat protein have created opportunities for isolated soy protein in stabilizing the price of meat products.

A third example can be described in Japan and other parts of Asia where there exists an uncertain supply of fish protein due to the limited nature of the resource and the increasing cost per unit of catch. Because of these market conditions, isolated soy protein represents a means of assuring a supply of finished fish products to the consumer. Incorporation of isolate in this product category provides economic incentive, nutritional equivalency, and availability of alternative protein sources.

A final example are those areas of the world where shortages exist of animal protein. These same areas also lack sufficient hard currency required to expand their animal protein supplies. Isolated soy protein offers the most efficient method of extending the available supply of animal protein products.

While motivation to incorporate isolated soy protein into the food systems of markets around the world varies, the criteria by which processors select these products will continue to be the same. They must represent an economic alternative; they must perform in quality food systems; they must be available and capable of maintaining pace with increasing demand; and, finally, they must provide a nutritious source of protein. Isolated soy proteins meet these criteria.

Soy protein probably is the most widely researched food in the history of man. In May 1978, at the Keystone Conference on Soy Protein and Human Nutrition, nutritionists from the United States and several foreign countries reviewed the current status of the quality of soy protein as it relates to the human body. Data were offered that represented adult and child feeding studies. Results of these human feeding studies have established isolated soy pro-

teins as high quality proteins which are comparable in protein quality to traditional proteins like meat, milk and eggs. If soy isolate has such great possibilities, one might ask why, then, have we not seen even greater acceptance and utilization of this protein source? The answer to that question is simple; and, also our greatest marketing challenge and our most persistent and universal obstacle to faster industry development. The answer to the question is knowledge and understanding of isolated soy protein and its use. The challenge that faces all manufacturers of isolates is to fully acquaint the food processor, the regulator, and the consumer with the advantages and benefits isolated soy protein can represent to the food industry's needs today. With increasing recognition by both processor and consumer of this product's value, I do see the growth of isolated soy protein exceeding all current expectations.