



*PROFILES
IN AGRICULTURAL
ENTREPRENEURSHIP*

**PURITY FOODS, INC.
OKEMOS, MI**

AEC-EXT 2001-05

*Matthew Ernst, Extension Associate
Tim Woods, Assistant Extension Professor
August 2000*

Introduction

Purity Foods, Inc., was established more than 20 years ago as a purchaser, exporter, and distributor of bulk organic commodities. The company (referred to throughout this case as “Purity”) recognized that bulk organic commodity profit margins were narrowing over time. This mirrored the trend for other agricultural commodities.

There were two primary reasons for narrowing profit margins. First, the bulk organic commodity market was easy to enter. More players were entering and flooding the market with product. Second, Purity was primarily exporting American and Canadian commodities to Europe. Lower cost producers like China and South America were emerging as formidable competitors in the European market.

Purity hired two new employees in the late 1980s. The new employees, Don Stinchcomb and Jeff Kourofsky, realized that the company could assure increased profits if it could carve out a niche in the organic commodity market. They also realized that to accomplish this they would probably have to add value to one or more bulk organic commodities. This would differentiate their product from the competition. As it turned out, Purity had just started product development in response to German demand for a nearly forgotten ancient grain: spelt.

The prospect of developing a whole new product line from

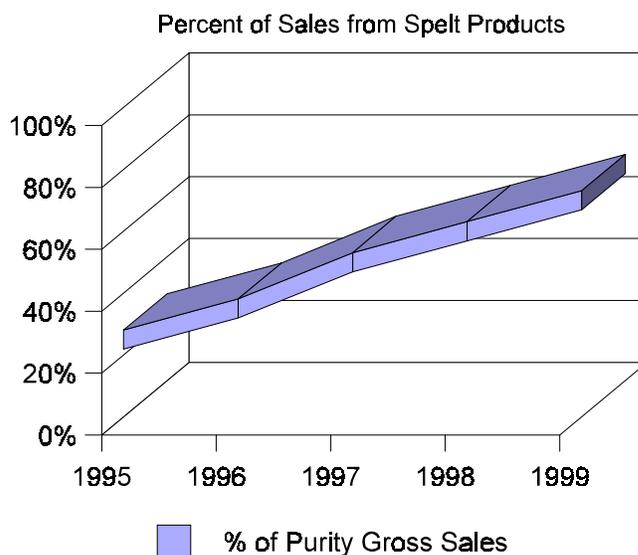
spelt for introduction into the natural foods market intrigued Stinchcomb and Kourofsky. Stinchcomb is now the president and Kourofsky is the vice president of Purity Foods. They successfully purchased the company from its founder in 1995. While spelt was virtually unheard of in the United States in 1989, Purity has patiently developed an entire line of spelt products over the past decade. Vita-Spelt is now Purity’s signature product.

Today, more than 70% of Purity’s annual sales come from its Vita-Spelt line of baking flour, pastas, bread mixes, and other spelt-based products. Purity’s spelt success story is a model of a company not only responding to customer demand, but also creating an entirely new market for a practically unknown commodity. This case will examine the general strategies Purity has used while adding value to spelt, focusing on the introduction of the Vita-Spelt product line into the natural and organic foods market.

Where Did Vita-Spelt Come From?

Purity Foods, Inc.

Purity Foods, Inc., was established in 1979 near East Lansing, MI, as an exporter of bulk popcorn to Europe. The founder and entrepreneur who established the company was an Austrian native fluent in German. The company encountered significant demands for other organic crops after responding to German demand for organic popcorn in the early 1980s. By the late 1980s, Purity was handling a complete line of bulk organic commodities from A to Z:



Industry Focus: Natural and Health Food Markets

The most rapidly growing segment of the U.S. grocery industry in the 1990s was the natural and health food market. According to *Natural Foods Merchandiser*, sales in the natural foods industry grew at an explosive 20% per year from 1992-1997. Leading the growth were organic food sales (Plank 2000).

Profit increases for natural products retailers have slowed down as more firms (especially larger, traditional groceries) expand their product lines to include more natural and organic foods. However, organic sales still maintain a breakneck pace. A recent article in *Natural Foods Merchandiser* estimates organic market growth at 17-22% for 1999.

1999 reports by the Private Label Manufacturers Association and other food industry groups indicate that organic product sales will continue to increase. Sales in the organics market should reach \$6.6 billion in 2000 and are expected to increase by 20% annually over the next several years.

Adzuki beans, alfalfa, and amaranth all the way down to many different wheats.

Purity experienced a need for more personnel due to the growth of the company during the 1980s. Consequently, Don Stinchcomb and Jeff Kourofsky were hired during the 1987/88 operating year. Both men brought strengths which were needed in the growth of the business. Stinchcomb's specialty was in marketing and product development, while Kourofsky brought experience in handling bulk organic commodities all the way from the farm to the export market.

A Customer's Request

Not long after Kourofsky and Stinchcomb were hired, German product distributors inquired whether Purity handled any food-grade spelt. Few people in the U.S. had even heard of the grain. Purity found out that feed-grade spelt was being grown in Ohio and other areas of the U.S., but there was no American food-grade spelt production.

The staff at Purity finally located a group of German farmers in Ontario who were growing food-grade spelt. They negotiated a purchase of 500 pounds of spelt which was shipped to a miller in Ann Arbor, MI. There the grain was ground into whole-grain flour.

Purity was curious about the possibilities of spelt as a food product. The company had discovered that spelt was being made into all kinds of products in Europe, from pasta and crackers to bread and beer. If these products were being enjoyed by European consumers, Purity wondered, wouldn't the growing segment of health-conscious American consumers be interested in whole-grain spelt products?

The company initially decided to investigate the spelt pasta market. The nearest pasta manufacturer to their Okemos,

MI, headquarters was in Chicago. Purity shipped some of the spelt flour there to be extruded into pasta. When the pasta arrived back in Michigan, Kourofsky says, "we cooked it up, and it tasted pretty good." Since the spelt pasta tasted good, Purity shipped the product to a food lab for nutritional analysis. The nutritional data arrived back within a week or two, and the results showed spelt to appear nutritionally superior to durum and other semolina pastas. The spelt pasta also contained a complete protein with all eight essential amino acids, another potentially positive selling point.

What is Spelt?

Spelt is hardly a new crop. It emerged upon agriculture's scene between 6,000 and 9,000 years ago. Perhaps initially considered a weed in fields of the primitive wheat crops of einkhorn and emmer, spelt has a different chromosomal structure than other primitive wheats. It is also more easily milled into flour than other ancient wheats, which resulted in some initial popularity among the ancients.

Spelt belongs to a family of grains which do not easily thresh free of the outer hull (Stallknecht et al. 1996). Free threshing grains quickly replaced crops such as spelt as a preferred food grain; however, several areas in Europe remained significant spelt producers through the centuries. Spelt production in America peaked around 1900, when spelt was widely grown for cattle feed. In addition to containing a complete protein, spelt's high-fiber outer hull makes it ideal for cattle digestion.

A Patient Process

Stinchcomb and Kourofsky knew there were several favorable factors if the company were to concentrate its efforts on developing a retail line of spelt products. No one else in 1989 was offering any spelt-based foods. There were early indications that people with gluten intolerance (who

could not eat wheat) might be able to digest spelt products. Spelt contained a complete protein. More importantly, however, the market for whole grain and organic products had started to expand at explosive proportions. There was room for new products in the market.

Stinchcomb and Kourofsky also realized that profit margins would continually tighten in the bulk organic foods industry. Concentrating on a value-added line of spelt products would enable them to increase profits. Furthermore, the skills and patience which Stinchcomb and Kourofsky would bring to senior management positions would be essential for the long process of new product development. As Purity began to introduce value-added spelt products to the consumer market in the early 1990s, Stinchcomb and Kourofsky began to consider a purchase of the company.

In 1995, an ownership transfer was successfully negotiated. The vision of a spelt product line emerging as Purity's primary product has been realized. Both organic and non-organic Vita-Spelt products accounted for 70% of Purity Foods' gross sales in 1999. Purity expects this percentage to continue increasing in future years.

Developing the Market

Patience is the word that summarizes Purity's success in developing a market for Vita-Spelt. Introduction of any new food product is difficult—especially a product made from a grain no one has ever heard of before! But Kourofsky and Stinchcomb were convinced they had a quality product and patiently developed their market. This section will focus on the development of the Vita-Spelt product line, picking the Vita-Spelt story back up at the initial nutritional analysis.

“Let's Give It a Try!”

After Purity received the initial nutritional analysis, the company decided to give spelt a try. They ordered the Chicago pasta manufacturer to make three kinds of pasta and package them in cellophane bags. Purity had three labels printed up, slapped the labels on the bags of the whole-grain spelt pasta, and headed off to some natural food trade shows.

Although Arrowhead Mills of Texas introduced a line of spelt products in 1990, Purity was the first to “discover” spelt. Purity's spelt products were met with a lot of questions at the 1989 trade shows. The questions from distributors and retailers ranged from “What is spelt?” to “Why should I buy it?” Response was positive overall, even with all the questions, and Purity ended up with some orders for spelt.

Focus: New Product Introduction

New food products, especially baking products, are tough to introduce. Although the natural and health foods market only comprises about 5% of US food purchases, competition there is still tough and new product introduction is difficult and expensive. New food product introductions across the food industry have dropped substantially in recent years. According to a USDA report (Gallo 1999), new food product introductions in 1998 were 35% lower than in 1995.

Amid this decline, however, introductions of organic products have actually exploded. According to the 1999 USDA report, *New Product News* reported the introduction of products labeled “organic” was 55% greater in 1998 than in 1995. Market growth in the organic foods sector has apparently been great enough to justify the expense and difficulty of introducing new foods.

One plus for organic foods is their nutritional nature. Foods which emphasize a positive nutrient content have had a much easier time garnering the limited shelf space in both retail stores and distribution warehouses. While new foods introduction is by no means an easy task, the explosive growth in the organic foods industry presently appears to offer a more attractive market for companies considering the introduction of a new product.

Going into 2000, the organic market is by no means slowing down. According to one organic processor, interest in organics at the May 2000 Food Merchandising Institute trade show was greater than ever. This bodes well for those companies like Purity Foods who are introducing new products into the organic market.

Purity persisted in publicizing spelt and at the same time continued to handle a variety of bulk organic commodities. Orders began to slowly flow in, and Vita-Spelt products began to generate more and more interest. An important factor in growing the market was spelt's continued acceptance as a substitute for wheat products in gluten-intolerant diets.

Purity sold the spelt through food distributors, picking up “a distributor here and a distributor there.” By the mid-1990s, Purity had national distribution of the spelt product and introduced a second generation of packaging. The national market continues to expand while Vita-Spelt products move into the third generation of packaging.

Expanding the Domestic Market

It took four orders from distributors for Purity to know spelt had reached a satisfied consumer:

- First sale lands in the distributor’s warehouse;
- the second indicates that product has moved on to a retailer;
- the third order shows consumer purchase;
- the fourth order indicates the retailer has reordered to stock the warehouse shelf.

When the fourth orders for Vita-Spelt began arriving, Purity’s hunch that spelt products would sell was confirmed. Purity was targeting two markets: the natural foods and baking industries.

Purity initially targeted two markets. The first target market was the natural foods industry. Purity first marketed whole grain pastas to the natural foods market, where consumers were used to whole-grain pasta products. With the growth of the Vita-Spelt product line, Purity has introduced unbleached white pastas. The white pastas appeal to a larger consumer base which is more used to white pastas.

The second target market was the baking market. This consists of at-home consumers as well as commercial and retail bakeries. Purity introduced whole grain flour, which

it mills at its Okemos plant. It also quickly introduced unbleached white spelt flour, which is milled elsewhere in Michigan. Rounding out its baking products line are bread and muffin mixes as well as a pretzel mix introduced in 1999.

Product Distribution

Purity estimates over 90% of its Vita-Spelt products are marketed through natural foods stores and bakeries. This figure is hard to estimate, however, because Purity is only able to control which food distributors it sells product to. These distributors then sell the product to the retailers. Using food distributors has both drawbacks and advantages for Purity. A drawback is that using distributors keeps another middleman in the equation between Purity and the consumer. A clear advantage in using distributors is that Purity’s products get wider distribution. Some Vita-Spelt products even end up in mainline supermarkets, which are demanding more organic products as consumer demand expands.

Purity is aware that some of its products are being retailed in mainline groceries because it uses a significant amount of retail couponing as a marketing strategy. When the company receives coupons back from mainline supermarkets such as Kroger, it knows that the product is expanding beyond traditional natural and health foods stores. This market expansion, however, is entirely dependent on where food distributors are selling spelt products.

Purity currently employs two sales people, one focusing on distributors on each U.S. coast. We will address the sales challenges for a growing company in the section on growth management, but now turn to some regulatory issues specific to Purity’s business.

Regulation

There are two major areas of regulation which affect Purity Foods: U.S. food labeling requirements and organic restrictions. The first area affects any food company; the organic regulations are specific to Purity’s presence in the organic market.

U.S. Food Labeling Standards

Purity’s products are packaged in standard kinds of pasta and baking products packaging. There are certain standards which must be met by these packages and their labels. For example, the font size used to indicate the net weight of the package must be in a certain proportion with the size of the

Spelt Products Offered By Purity Foods	
<i>White Pastas</i>	<i>Whole Grain Pastas</i>
Spaghetti	Spaghetti
Rotini	Rotini
Angel Hair	Angel Hair
Elbows	Small Shells
Lasagne	Lasagne
Penne	Elbows
	Egg Noodles
<i>Whole Grain Spelt Flour</i>	<i>White Flour</i>
2 lb & 5 lb bags	5 lb bags
25 lb & 50 lb bags	25 & 50 lb bags
<i>Other Products</i>	
Pancake/Muffin Mix	
Spelt Pretzels	
Vita-Spelt Toasted Flakes	

food container. Such standards are universal and are extensively outlined by the Food and Drug Administration.

The most complex part of a food package is usually the nutritional label, which also must be displayed in a certain manner. It is relatively easy for Purity to develop a label for a product because a standard label is easily obtained from an analytical food laboratory such as the Chicago lab Purity which provides nutritional analysis for Purity's products.

Special care must be taken to ensure that a package measures up to FDA packaging and nutritional information standards, because the minimum order is 30,000 units. Any mistake which would require a whole new run of packaging to correct would be costly. Thus, the primary concern for government labeling restrictions is simply following the outlined restrictions and standards set for food packaging.

Organic Restrictions: The Real Regulatory Challenge

Organic certification is a more specific regulatory challenge in Purity's industry. Not only does Purity have to ensure the organic integrity of its grain milling and warehouse handling facility, but the company also has to be able to trace all of its products labeled "organic" to organic producers—which include farmers and processors. This tracing is an intricate practice demanding meticulous paperwork.

There are over thirty private organic certifiers currently operating in the United States (Hamilton 1999). In addition, many states offer organic certification programs for farms. Both certification programs certify farms and processing facilities as "organic" according to a set of criteria which have been established as national standards by the USDA. Purity is dually certified by two agencies which annually inspect Purity's facility and audit company books.

An organic certification is an intense process. First, the inspecting agency picks an invoice at random from Purity's files and makes sure everything is in order with that particular invoice. The lot number from the invoice is then traced through Purity's system. The auditor makes sure that this lot number matches with that of the inbound goods. Finally, the organic certification of the particular farmer or processor whom the goods came is verified.

Since Purity handles both organic and non-organic spelt, proper accounting and record maintenance is essential. Any discrepancies found during an audit could result in a potential loss of certification. This loss would obviously not be in the best interest of a company involved in the high-growth organic foods market.

An additional regulatory consideration Purity has to account for is that of facility maintenance. The Okemos warehouse where Purity stores its product has to be maintained in an organic matter. If there is an insect or rodent problem in the warehouse, Purity has to deal with the infestation using organic rather than chemical devices. These problems are not always easy to manage, but Purity has creatively used mechanical and other organic means of pest control with success.

Financing

Purity incurred a need for additional financing as its product emphasis shifted to Vita-Spelt. As Purity's need for spelt grain increased, more cash was needed at harvest time to pay producers.

Fortunately, Purity had no problem in acquiring an increase in its bank line of credit to accommodate this cash need. The company had established a solid record as an exporter of bulk organic commodities, and its bank was willing to grant the necessary credit line increase. This enabled Purity to fulfill its obligation for spelt contracts priced with delivery at harvest. Purity presently contracts over 6,000 acres of spelt in Michigan, Ohio, Illinois, Indiana, Iowa, Colorado, and Montana as well as Ontario and Saskatchewan, Canada.

Purity has also utilized a product handling strategy to help manage its cash flow and minimize its need for additional financing. After contracted acreage reaches a certain level, Purity requires producers to store grain for delivery in the late fall or winter. This enables Purity to stretch out cash payments for grain over several months because producers are not paid until the product is delivered.

Another benefit of Purity's contracting strategy is that it allows Purity to use its Okemos facility to grind all the whole wheat flour. Purity is unable to handle the entire whole grain flour portion of the 6,000-acre crop at its milling facility. Staggering the spelt delivery times thus enables Purity to eliminate the need for an increase on its line of credit. It also eliminates the need for additional grain storage capacity before the spelt is ground into whole flour at the Okemos plant.

Like any other business, Purity is in need of capital to make improvements and expansions. Fortunately from a financial management standpoint, the company has been able to avoid additional term debt. One of the strategies it has used is to

FIBREX: A Lesson in Networking

One of the benefits Purity Foods has in the area of financing is that it has made relationships with a variety of individuals who have available investment capital. If Purity would be in need of additional future capital investment, it already knows potential investors. Building personal relationships like these with customers and other businesses is an essential part of Purity's business. Relationships such as these are essential to success in all kinds of areas.

FIBREX is a sugar beet by-product from Sweden which can be used to provide fiber and extend the shelf life of breads. A few years ago, one of the bakers who was working with spelt flour let Purity know about the product. It offered promise, and Purity obtained sole distribution rights for the product in the United States.

FIBREX now fits right in line with Purity's expansion into the flour and baking ingredient market. In addition, Purity also sells FIBREX into the pharmaceutical industry as a "filler" ingredient in medications. The story of FIBREX is simply the story of someone who knew Purity could handle product distribution telling Purity of an interesting product—an ideal lesson in networking.

just pay interest on a friendly note without paying large principal payments on the note. The debt is still there, but since it is a friendly note Purity is comfortable with using the funds it might use to retire the principal for marketing and capital expansion.

Growth Management

Sales of Vita-Spelt products have grown incredibly in the past five years. Vita-Spelt products grew from 25% of Purity's sales in 1995 to 70% in 1999. Purity Foods expects this increase to continue. This growth poses many challenges for Purity. We will break these challenges into three areas: physical facilities, product volume, and marketing.

Physical Facilities

Purity currently leases a facility in Okemos, MI as its headquarters. This facility houses Purity's corporate offices, warehouses all the commodities and Vita-Spelt products, and stores the spelt grain.

Purity had spelt dehulled at a single Michigan site prior to 2000, when Purity aligned itself with a company operating seven grain elevators in Michigan. The spelt will be received at one of the larger elevator sites and dehulled using three spelt dehullers purchased from Australian manufacturers. After the elevator runs it through the dehullers, the finished product is then shipped to Okemos. Grain to be milled into white flour is shipped to other milling locations, which are already equipped with the expensive grinders, rollers, and sifters needed to mill dehulled spelt into white spelt flour.

As previously mentioned, the grain handling system at Purity's plant is already unable to store the entire spelt harvest for its products. The existing grain handling system is also not set up in a way that would easily enable expanding the amount of grain handled. There is simply not enough space at the Okemos site to expand the grain handling system. There is land for sale adjacent to Purity's warehouse and whole grain flour mill; however, that unimproved land is in a prime industrial and development setting and was being offered for around \$90,000 per acre in the spring of 2000.

Purity is not specifically tied to their site. They could avoid the price of expansion at their current location by simply moving their existing facilities. There was no escape clause in their 5-year lease contract in the past, but they renewed their lease and negotiated terms that would allow them to leave on six months notice without a contractual penalty.

Product Volume

Purity has historically contracted many organic commodities, but the only crop presently contracted is spelt. Purity's board of directors has taken an aggressive posture on how much spelt is contracted. The current level—over 6,000 acres—represents an aggressive contracting strategy by Purity's board of directors.

There are many obvious variables Purity considers when contracting spelt. For example, spelt is planted in the fall and, like other winter grains, can experience winterkill in extreme weather. Winterkill one year in the early 1990s accounted for a 70% loss of Purity's contracted acreage. This loss had Purity scrambling to find enough spelt to continue developing their product line. Purity imported extra spelt from Australia and Germany. This importing of

spelt turned out to be a beneficial move for Purity, because healthy business relationships with these international companies were built.

Purity will have to continue to guard itself against crop failures as the Vita-Spelt product line continues to grow. Good relationships with foreign sources are a sound strategy to ensure the company has enough spelt each year. Purity also plans to continue its aggressive stance on spelt contracts, with the board of directors annually ordering contracts for slightly more spelt than it predicts it will need each year.

Marketing and Product Development

A small company such as Purity faces many marketing decisions. Purity employs two people as a sales staff to maintain relationships with food distributors. One of the sales staff is headquartered on the West Coast, while the other is headquartered in Ann Arbor, MI and works the Midwest and Northeast markets. With two of its 10 employees focused solely on sales, Purity obviously places a high priority on expanding the current market for Vita-Spelt.

A key marketing goal strategy for Purity is to beat its competition in introducing new spelt products. Purity has several new products in development in the spring of 2000 but scrapped one halfway through the year. The cost of introducing a new organic food product, as for other food products, is high. Product development and new packaging

design are expensive. In addition, it takes a tremendous amount of energy and expense to convince food distributors to add another of a company's product to its shelf. Food distributors may demand free product or discounts for their best customers, discounts on initial orders, or that a company advertise in the distributor's catalog from which retailers order.

An additional area of product development and research for Purity concerns the spelt hulls. After Purity purchases the spelt, it removes the hulls. This year, Purity will have over two million pounds of spelt hulls. The current market for these hulls basically requires treating them as a waste product. However, the hulls are high in fiber and very absorbent. Potential exists for their use in livestock diets and bedding, among other uses.

Purity also face the challenge of its size when competing with larger food companies. Shortly after Purity introduced Vita-Spelt, Arrowhead Mills of Texas also began developing spelt-based products. Arrowhead was already established in the organic/natural foods flour and grain products market. One of Arrowhead's products, a flaked spelt cereal, became one of its best sellers. In April of 1998, Hain Food Group acquired Arrowhead Mills. Hain is a large natural foods consortium, and the acquisition means Purity has a formidable competitor in terms of distribution and new product introduction.

As the organic and natural foods industry matures, mergers and acquisitions may affect the rate at which Purity does business. In the near future, however, the merger trend should be limited more to the retail side of the natural foods business rather than the wholesale sector.

Conclusion

Purity Foods is an example of an agribusiness which has expanded into an emerging, rapidly growing market. Purity has shifted the bulk of its business from dealing with organic commodities to developing a value-added line of Vita-Spelt products. However, it continues to handle a variety of commodities (like FIBREX), taking advantage of its historical presence and connections in the bulk organic commodity industry to capture higher profit margins.

Purity will be faced with a number of decisions concerning growth and marketing in the future. It will continue to deal with the regulatory framework of organic commodities and products. It may outgrow its current facilities. Decisions

FOCUS: New Product Development

Purity Foods purchases spelt from its contracted growers with the hull intact. Part of the process in milling spelt flour is to remove the hull. In 2000, Purity will have over two million pounds of hulls. There is currently very little value for the hulls. This is one of the product development areas Purity is currently addressing.

Spelt hulls are extremely high in fiber. The hulls are also highly absorbent. Purity is currently investigating product development related to the livestock feed and bedding markets, as well as uses for the hulls in other sectors.

Since the company already owns the hulls, it makes sense to attempt to add some value to what is currently a "waste" product. Finding a successful use for spelt hulls will only increase the company's gross sales and add more value to the spelt processed by Purity.

will continue to confront Purity with respect to how the company should align itself with processors, wholesalers, and other industry players.

Sound finances, a good reputation, and meticulous attention to detail in all realms of the business should continue to mark Purity Foods, Inc. in the future. For the present, the company continues to enjoy the success of a patient and perseverant new product introduction strategy in the rapidly growing organic and natural foods market.

References

Gallo, Anthony. "Fewer Food Products Introduced in Last 3 Years." *Food Review*, September-December 1999, pp. 27-29.

Gregory, Catherine S. "A Step Closer to Defining 'Organic.'" *Natural Foods Merchandiser*, December 1999.

Hamilton, Neil D. *The Legal Guide For Direct Farm Marketing*. Des Moines: Drake University, 1999.

Kaufman, Phil. "Natural Foods Supermarkets Gaining in Popularity." *Food Review*, September-December 1998, pp. 25-27.

Kaufman, Phil. "Nontraditional Retailers Are Challenging Traditional Grocery Stores." *Food Review*, September-December 1998, pp. 31-33.

Kassler, Karl. "Spelt: A New Role for an Old Grain." *The Furrow*, January 1996.

Organics: Growing From the Margins to the Mainstream. 1999 Private Label Manufacturers Roundtable Report.

Plank, Dave. "New Studies Hold Good News, Bad News For Industry." *Natural Foods Merchandiser*, March 2000.

Stallknecht, G.F. et al. "Alternative Wheat Cereals as Food Grains: Einkhorn, Emmer, Spelt, Kamut, and Triticale." In J. Janick (ed.), *Progress in New Crops*. Alexandria: ASHS Press, 1996, pp. 156-170.

Wells, Danny. "Don't Cry Over Industry Growing Pains." *Natural Foods Merchandiser*, January 2000.

Wild Oats 1998 Annual Report

Acknowledgements

Special thanks to Mr. Jeff Kourofsky and Purity Foods, Inc. for participating in this project.

Thanks also to Mr. Phil Kaufman and the case reviewers.

This case study was prepared by Matthew Ernst, Extension Associate, and Tim Woods, Assistant Extension Professor, UK Department of Agricultural Economics, 400 Agricultural Engineering Building, Lexington, KY, 40546-0276. Questions may be directed to mernst@uky.edu.

This case was originally prepared as part of a casebook to be edited by Dr. Timothy A. Woods, UK Department of Agricultural Economics, tawoods@uky.edu.

Funding for this project was originally provided by a grant from the Delta Enterprise Network. www.deltanetwork.org

University of Kentucky
Department of Agricultural Economics
400 Charles E. Barnhart Building
Lexington, KY 40546-0276

Phone: 859-257-5762
Fax: 859-323-1913
URL: <http://www.uky.edu/Ag/AgEcon/>

Educational programs of the Kentucky Cooperative Extension Service serve all people regardless of race, color, age, sex, religion, disability, or national origin.