A Regional Market Analysis for Fresh-Cut Apple Slices

Final Report to
Agricultural Marketing Service, United States Department of Agriculture

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Final Report

The Problem

There is a critical need to develop alternative markets for New England apples that will increase grower profitability. The current apple market is characterized by declining returns in the wholesale market for New England apple growers due to consolidation in the food industry and from competition from western and global apple sources. As the wholesale price drops, growers find it increasingly difficult to make ends meet, forcing more and more orchards out of business, New England-wide.

The fresh-cut produce industry has experienced phenomenal growth in recent years, as advances in processing technology and changes in the marketplace have coincided. Industry surveys show convenience as the major driver for growth of this category.

How the problem was addressed by the project

By conducting an analysis of New England's fresh-cut market, including processing, distribution and marketing costs, growers and apple marketing organizations in the region can evaluate potential opportunities for regional fresh cut apples. Those opportunities may lead to grower investments in their own processing facilities, or alternatively, to using existing contract/co-packaging operators. In either case, apple growers will be in a better position to benefit from the growing fresh-cut fruit category. The New England Departments of Agriculture collaborated on such an analysis beginning in the fall of 2004 with funding from USDA AMS.

The purpose of the study was to provide growers, grower cooperatives, apple marketing organizations and other interested parties with the information needed to 1) determine the feasibility of procuring, processing, distributing and marketing apple slices in New England, 2) develop the marketing basis for a consumer test of the product; and 3) support operational business planning.

The project was divided into 2 phases. A consultant was hired to conduct phase 1 of the study with input from the New England Departments of Agriculture. This portion of the study looked at product development including criteria, procurement, handling, processing and facilities. The distribution system was also examined.

Phase 1 also included a thorough market analysis looking at trends and different marketing channels. Finally, this report looked at costs associated with production and developed some budget scenarios to help clarify expenses to those considering this type of business.

Phase 2 was to launch a pilot product and gauge reaction from consumers to a packaged, pre-cut New England sliced apple product through taste testing and surveying. A second consultant was hired to manage this phase.

Contribution of public and private agency cooperators

The major cooperators in this project were the New England departments of Agriculture, the New England Apple Growers Association, the JP Sullivan Co. and Champlain Valley Specialty. The departments of agriculture contributed staff time throughout the project and some also contributed cash. The industry organizations contributed staff time and expense and apples for processing to be used in the test marketing.

Results, conclusions, lessons learned

A Regional Market Analysis for Fresh-cut Apple Slices and **In-Market Product Test Pilot** (Phase 1 and Phase 2, respectively) were completed in the December, 2005 and learned that:

- McDonald's is now introducing sliced apple product to thousands of New England consumers each day, speeding knowledge, interest and acceptance of sliced apples. On a national level, Mc Donald's uses about 64 million pounds of apples a year, about 1.5% of the fresh market supply, to make Apple Dippers. The Waldorf type apple walnut salad adds another 40 million lbs. Besides boosting total apple consumption, McDonald's impact could replicate and exceed its effect on the grape tomato industry which saw sales increase by 25% since the chain began using the product in its premium salads.

- The fresh cut produce industry considers apple slices to have the potential to be the next baby-cut carrot success story which at twice the retail cost per pound has seen carrot consumption double, and now far outsell traditional poly bagged carrots.

- While the technology for maintaining the shelf life of fresh apple slices is available, the manufacturing process is extremely challenging and requires a substantial capital investment. A 7, 500 square foot facility capable of producing 500 lbs of slices per hour is estimated in excess of $1.5 million. Entry as a processor is most feasible for an existing fresh – cut business that could retrofit to add fresh slice apples to its product line. Because of investment risk and the need for food processing expertise, this is not a business that one orchard or a group of growers is likely to enter until the market for New England apples slices is firmly and extensively established.

- The market for sliced apples in New England is undeveloped. **The opportunity for New England growers is to work with an existing sliced apple processor to develop the sliced apple market in the region with a branded New England product.** Growers could simply supply apples to the processor or they could create a marketing venture to sell slices made with their apples.

- Consumers say they would buy sliced apples primarily for snacking; 65% would purchase fresh slices over whole; 55% would buy both. (Michigan study) Consumer response to New England slices during testing at the Big E was extremely positive; 72% of respondents indicated that they would choose New England apple slices if they had a choice. School introductions in Vermont, New Hampshire and Rhode Island have seen enthusiastic response from students and food service directors. An existing company

with capacity for processing New England Apple slices has begun packaging and selling a New England sliced apple product. The federal school lunch programs in Vermont and New Hampshire have purchased the pre-packaged New England apple slices "Grab Apples" for distribution in the school lunch programs in those states. There is tremendous potential to expand distribution of this product.

- The retail market is receptive to 2 oz. multi-packs and to larger 6 to 10 oz grab and go packs. Food service channels, especially those in hospital, health and fitness organizations, would consider larger 5 lb. packs for salad bars and small packs for cafeteria lines. Vending companies prefer 2 oz. packs.

- All markets need significant promotional support. All are price sensitive. The product needs to prove itself in all channels. The good news for apple growers in New England is that in a region where local is strongly preferred, there is significant opportunity for a branded sliced apple product.

- New England growers have a $ 4 - 5 per case freight price advantage over whole apples shipped from the west to slice processors and over sliced apple products shipped to New England markets.

- New England growers also have a freshness advantage over western slices, an important attribute for a perishable product with a 2-3 week shelf life. All markets prefer frequent deliveries to assure product quality.

Description of the major project beneficiaries

Producers: There are approximately 1100 commercial apple farms in New England (according to the National Agricultural Statistics Service, 2004), ranging in scale from small direct-to-consumer operations to large wholesale packing houses. Those growers in the wholesale market could benefit directly from this project by selling their apples for processing into a New England apple slices brand. Success of this product could lead to increased demand for New England apples for slices and in general, ultimately raising prices received by all New England apple growers.

Processors: There are two processors in Massachusetts and a third in New York, on the NY/VT border, with the facilities to process apple slices. The two Massachusetts firms have existing markets in place and are happy with business as it is. They were not interested in developing a New England apple slice product at this time. The New York processor was interested in producing a New England packaged pre-sliced apple product and was willing to adapt existing packaging they had for another product to accommodate a New England product.

There is still opportunity for other processors to develop and offer their own New England packaged sliced apple product.

Distributors: Local distributors have the opportunity to benefit from the sale of a new product. Produce distributors have numerous accounts including schools and other institutions and retailers of all types.

Consumers: Consumers seeking healthy alternatives to snack foods, or desire the convenience of prepared, ready to eat fresh produce will benefit from the purchase and consumption of a new sliced apple product. Children will benefit at school and at home from consuming this product.

School food service programs will benefit by having more healthy apple product consumed and reducing food waste.

Current or future benefits derived

The New England sliced apple product has already entered the marketplace and demand is increasing in schools. As sales increase and more New England apples are sold to sliced apples New England apple growers will benefit.

Suggestions for further research

The success of this sliced apple product in the market place thus far, indicates tremendous potential for other fresh-cut produce. A project similar to this, but looking at fresh processing for other types of regional produce would be very valuable.

Additional information available

Full reports from Phase 1 and Phase 2 of the project are attached. These reports are also available online at www.agriculture.nh.gov and at www.harvestnewengland.org.

Contact person for additional information

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