

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

**Report Prepared by**

**Harvest New England Association**  
**116 State St. , Drawer 20**  
**Montpelier, VT 05620-2901**

**February 15, 2006**

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

**Table of Contents**

Introduction/ How the Study was Conducted..... 2  
Conclusions and Next Steps..... 3  
Appendix..... 5

## In-Market Product Test Pilot A Regional Market Analysis for Fresh-cut Apple Slices

### Introduction

The **In-Market Product Test Pilot**, or Phase 2 of the **A Regional Market Analysis for Fresh-cut Apple Slices**, was to test proto-type packaging and consumer acceptance of the packaged, pre-sliced apple product. The contractor, the Harvest New England Association, with input from the Activity Manager and Cooperators developed a test pilot program where a proto-type package of the sliced apple product was developed for introduction to the consumer.

The in-market activities goals were to allow Cooperators to:

- Survey consumers and determine reactions to products, package sizes, other factors influencing purchasing;
- Identify issues affecting distribution and marketing through both foodservice and supermarket/retail venues;
- Create a "hands on" marketing opportunity involving the apple industry and selected market sectors.

A regional co-packer, identified in Phase 1 of the study was contracted to develop product and packaging for sampling, using apples from New England sources. The Harvest New England Association, in conjunction with the Cooperators, conducted the in-market activities.

### How the Study was Conducted

To begin with, a proto-type package for New England sliced apples was developed by a regional processor/packer, Champlain Valley Specialty of Keeseville, NY. This company was reasonably nearby for ease of delivery of product for processing, had the production capacity and facility infrastructure in place, including the ability to develop New England packaging, and was willing to work with the project.

The apple varieties that were used for the test marketing were Gala and Empire. These varieties were among those recommended for processing in Phase 1 and were available at the time of the testing. As part of the processing, the apple slices were treated prior to packaging with an all natural preservative material containing ascorbic acid and calcium. The product as tested was called "**Grab Apples**." See Appendix E for product photo.

The **Grab Apples** product was presented to the public at various events to collect reaction from consumers who were offered the opportunity to taste the product and evaluate the

## **In-Market Product Test Pilot A Regional Market Analysis for Fresh-cut Apple Slices**

packaging. The consumers were surveyed about product taste and appearance and about packaging appearance, size, etc. The apple slices were sampled at several venues:

Eastern States Exposition, September, 2005

Selected school locations in VT, NH and RI, October and November, 2005

Special events in VT and CT, October and November, 2005

NE Fruit Industry Conference in NH, December 2005

Nearly 500 consumers saw the packaging, sampled the apple slices and answered survey questions via face to face interview at the Eastern States Exposition (ESE). The ESE is an annual six-state fair that occurs in W. Springfield, MA during September. The 2005 ESE ran from Sept. 16 through Oct. 2. Over 1.2 million people attended.

The apple slices samples were distributed from an exhibit area adjacent to the Harvest New England Kitchen, a demonstration stage within a larger commercial exhibit pavilion on the ESE grounds. The booth was staffed with representatives of the New England departments of agriculture and with staff hired from a commercial exhibit staffing company. Apple samples were made available to the public from 11am to 5 pm daily during the 17 days of the exposition. An informational brochure was created to inform the public about the product and the program.

### **Conclusions and Next Steps**

The reaction to the product and packaging was extremely positive. Nearly 97% of the respondents liked the taste of the product making comments about the product such as “crispy”, “fresh”, “just like fresh cut”. Ninety-five percent of respondents approved of the package appearance and size, with comments like “kid friendly”, “handy for school or work”. See Appendixes for questionnaire, summarized responses, brochure, and photo of packaging.

Samples of apple slices packages were also distributed to selected schools in VT, NH and RI. Food Service was asked to provide the packages to students and give feedback on the reaction to the product. The response was overwhelmingly positive from food service personnel and students. Even parents expressed positive sentiments when the product was available in their children’s schools. See summary of anecdotal responses in Appendix C.

When handled properly (appropriate refrigeration), the product is of high quality and has high consumer acceptance. The fact that the apples offered in the packages were from New England was important to 72% of the respondents who indicated that they would choose the New England product over other similar products. This seems to suggest that a New England sliced apple product would be potentially quite marketable in the New England region.

The schools, in particular, offer tremendous marketing opportunity for this product, as the packaging is very child attractive and appropriately sized (USDA serving quantity). From the

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

testing done in schools, food service directors were eager to purchase the sliced apple product because of its quality, healthfulness and reduced food waste (students ate all or most of the serving, whereas significant portion of whole apples is not consumed and ends up in the trash).

The product is also attractive to adults as a healthy, convenient snack alternative. The marketing opportunity to this group may be in convenience store sales for snack consumption, or in multi-pack bags for sale at convenience stores or supermarkets. The product shelf life of up to three weeks under proper refrigeration may be an important sales advantage for this product. The product appears to be as good at the end of the shelf term as at the beginning when held under refrigeration.

**In-Market Product Test Pilot  
A Regional Market Analysis for Fresh-cut Apple Slices**

**Appendix A Consumer Survey**

The surveys were used by interviewers who asked the questions of willing consumers and recorded the responses.

**Sliced Apple Consumer Survey**

**Apple Product**

1. Do you like the taste of the product? \_\_\_yes \_\_\_no  
What do you especially like or dislike?
2. Do you like the texture of the product? \_\_\_yes \_\_\_no  
What do you especially like or dislike?
3. Please comment on the appearance of the product:  
Color:  
Skin:  
Flesh:  
  
Size of slice:

**Dips/Companion product**

1. Do you like the dip? (flavor being sampled \_\_\_\_\_) \_\_\_yes \_\_\_no
2. Would you prefer a different flavor or product? Specify: \_\_\_\_\_
3. Would you like the sliced apples to be packaged together with a dip or companion product? \_\_\_yes \_\_\_no

**Packaging**

1. Do you like the package appearance?  
Comments:
2. Do you like the package size?  
Comments:

**General**

1. Would you buy this packaged sliced apple product?

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

2. Is it important to you that the apples come from New England orchards?

In-Market Product Test Pilot  
 A Regional Market Analysis for Fresh-cut Apple Slices

**Appendix B Consumer Survey Summary**

# Sliced Apple Consumer Survey – Results

Number of Responses Recorded: 452

<b>Apple Product:</b>	<b>Yes</b>	<b>No</b>	<b>No Responses</b>
1. Do you like the taste of the product?	438	13	1
2. Do you like the texture of the product?	425	14	13
<b>Dips/Companion Product:</b>			
1. Do you like the dip?	391	31	30
2. Would you prefer a different flavor or product?	84	253	115
3. Would you like the sliced apples to be packaged with a dip or companion product?	237	78	137
<b>Packaging:</b>			
1. Do you like the package appearance?	429	11	12
2. Do you like the package size?	400	24	28
<b>General:</b>			
1. Would you buy this packaged sliced apple product?	417	21	14
2. Is it important to you that the apples come from New England orchards?	324	99	29

## Sliced Apple Consumer Survey Comments

**Apple Product:**

- bitter taste, texture good, looks good
- dislike color
- dislike taste, too soft, clean, sweet
- price is great!, crisp
- sour
- crisp, fresh
- fresh, medium texture
- excellent, crisp, fresh, colorful
- crunchy, juicy, crisp, fresh cut
- fresh, crisp, good
- not brown, crunchy
- tart, fresh
- not mushy, very crisp
- no preservative taste
- taste like fresh cut
- snappy



## In-Market Product Test Pilot

### A Regional Market Analysis for Fresh-cut Apple Slices

- color dull, tart
- skin tough

#### **Dips/Companion Product:**

- soft cheese
- caramel
- cheese
- peanut butter
- cheddar
- apple dip, honey
- yogurt
- cinnamon
- chocolate
- pina colada
- plain
- nuts
- sour cream

#### **Packaging:**

- nice, good size
- put whole apple in it
- small
- kid friendly
- nice size
- bigger
- cute, love size
- handy for work
- snack size
- eye catching
- not big enough package
- clear package

#### **General:**

- depends on price
- keep cost down, local product
- support New England
- packaging needs to be easier for children
- keep same quality level
- vending machine potential
- good for school lunches
- need easier to open!
- it's very healthy
- convenient package size
- prefer without skin
- possible to make larger pre-sliced bag of apples for apple pie
- prefer to buy in packs of 10
- zip lock bags
- offer near apples for choice
- great idea!
- convenient
- can it be shipped to a school—Waterbury, CT, Rev. Elaine Burke, 203-754-2557
- I think you have a hit!
- great for daycare

**In-Market Product Test Pilot  
A Regional Market Analysis for Fresh-cut Apple Slices**

**Appendix C Anecdotal Comments from School Trials**

**Comments from students at the Folsom School, Vermont**

Folsom Grades 1 and 2 sampled the three apple products listed below. With their teachers the students created their own criteria and rating systems.  
January 2006

<b>Apple Products:</b>	<b>Criteria #1 Taste</b>	<b>Criteria #2 Appearance</b>	<b>Criteria #3 Size</b>	<b>Criteria #4 Shelf Life</b>
<b>Packaged “Apple Slices”</b>	1-delicious, 1 - pretty good, 2 -Good 1 - yummy 22 -yes	22 – Yes 1-big 1 – fresh 1 – small and juicy looking	1 big 1 medium 2 small, 1 just right 1 ok 16Yes, 1 no	1 long probably 1 medium 2-15-06 16 - yes, 3 no,
<b>Allenholm Apples Sliced In The Classroom</b>	1-delicious 1 good 16 - Yes, 5 -no,	1 - Fresh, small and juicy looking 1 – good 17 - Yes, 3 – no	15 - Yes, 1-no 1 - good, 2 - small, 1 -Large, 1 –big 1 -ok	1 – good, 1 - Very long time, – I’m guessing 11- yes 8 -No,

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

3<sup>rd</sup> and 4<sup>th</sup> grade Folsom School student's results

<b>Apple Products:</b>	<b>Criteria #1</b>	<b>Criteria #2</b>	<b>Criteria #3</b>	<b>Criteria #4</b>
	Taste	Looks	Smell	Convenience
<b>"Apple Slices"</b>	0-yucks 0-not OKs 2-OKs 9-Wows	0-yucks 0-not OKs 2-OKs 10-Wows	2-yucks 0-not OKs 8-OKs 2-Wows	2-yucks 4-not OKs 2-OKs 3-Wows (6 "bags hard to open")
<b>Whole Apples Sliced In Classroom</b>	0-yucks 2-not OKs 5-OKs 6-Wows	1-yucks 1-not OKs 7-OKs 3-Wows	0-yucks 3-not OKs 2-OKs 7-Wows	0-yucks 0-not OKs 5-OKs 7-Wows
<b>Dried Apples</b>	5-yucks 2-not OKs 3-OKs 2-Wows	4-yucks 5-not OKs 2-OKs 1-Wow	4-yucks 1-not OKs 2-OKs 5-Wows	1-yuck 2-not OKs 1-2.5 4-OKs 4-Wows (1 hard to eat)
<b>Apple Sauce</b>	6-yucks 2-not OKs 1-OK 3-Wows	5-yucks 0-not OKs 4-OKs 3-Wows	5-yucks 0-not OKs 3-OKs 4-Wows	2-yucks 5-not OKs 2-OKs 1-3.5 2-Wows

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

**Comments from Laconia Schools in New Hampshire**

Original Message -----

**From:** [Tess Seymour](#)

**To:** [Tim Goossens](#)

**Sent:** Wednesday, November 02, 2005 3:18 PM

**Subject:** apples==cheese

Hi Just wanted to let you know that the apples and cheese were a big hit with project extra kids. A couple of parents called me to let me know that they thought this was a wonderful idea. I spoke with one of the workers here a WHS and he said they might like to have some peanut butter in cups for them to have with the apples. I said fine so she is going to come in early to cup some of the peanut butter for them. PS: I am going to put it on the salad bar for them tomorrow. Have a good evening. Tess

**From:** [Wendy Hamilton](#)

**To:** [Tim Goossens](#)

**Sent:** Friday, November 04, 2005 12:04 PM

**Subject:** Apples & Cheese

Hi~

I just wanted to let you know that the apples and cheese are a HUGE hit!!! The kids like the look of the package and the cheese is a nice treat. I have been stapling the cheese packs to the apple packs so they know they go together. I put out a bunch last night for project extra and EVERY bag was gone. Today at lunch we put them out when our fruit ran out and you'd of thought the kids won the lottery. It's a huge hit here and they are looking forward to having them again! Have a great weekend.

~Wendy

**Comments from Our lady of Mercy School in Rhode Island**

**From:** Peter Petrone [mailto:[PeterP@doh.state.ri.us](mailto:PeterP@doh.state.ri.us)]

**Sent:** Thursday, November 10, 2005 11:00 AM

**To:** Ron Newman; Stephen Volpe

**Subject:** Apple Slices

Steve and Ron -

The apple slice packages were a "big hit" at lunchtime last week at Our

**In-Market Product Test Pilot**  
**A Regional Market Analysis for Fresh-cut Apple Slices**

Lady of Mercy School in East Greenwich. The packages were all gone after about 175 kids tried them throughout three lunch periods on Thursday, November 3rd.

Some of the collected comments (from kids who sampled them) were as follows:

"The apples were crunchy"

"They were very fresh"

"I liked them already sliced"

"It was just the right amount"

"It's fun to eat apples like that"

"I would like these every day"

The only negative comment from the cafeteria staff and a couple of the kids was that they "were hard to open up" - it seems more from the smaller kids.

Separately, Steve, the school has asked me about ordering them and contacts you might have to do that. If you could forward that information to me. I'd appreciate it. My wife Laurie also works with Dept. of Ed. staff who she mentioned the product to and they are also interested in it. Again, I can pass that information along.

Thanks again for this sampling opportunity. I look forward to hearing back from you about ordering information.

Peter

Peter J. Petrone

Telephone 401-222-4930

FAX 401-222-2488

[peterp@doh.state.ri.us](mailto:peterp@doh.state.ri.us)

In-Market Product Test Pilot  
A Regional Market Analysis for Fresh-cut Apple Slices

**Appendix D Informational Brochure**

**NEW SNACKING TREND**  
**New England**  
**Freshly-Sliced Apples**

Crispy, Crunchy,  
Healthy, Convenient!

Washed, sliced  
ready to eat or  
dip and enjoy!

Try some today!

The Harvest New England program was created by the New England State Agricultural Departments to make it easier for New Englanders to identify locally produced food and agricultural products when they shop.

Buying local produce and agricultural products is beneficial for everyone. You enjoy the wonderfully fresh products, while helping New England farms and our local economy.

Visit our web site at  
[www.harvestnewengland.org](http://www.harvestnewengland.org)  
for more info.

Along with apples & apple products,  
New England farmers and  
food processors also provide us with:

- Fresh & Processed Produce (fruits & vegetables) Products
- Milk & Dairy Products
- Greenhouse & Nursery Products
- Processed/Value-Added/Gourmet Foods Products
- Fish & Seafood Products
- Maple Syrup & Maple Products
- Christmas Trees, Wreaths & Similar Products
- Farm-Derived Fiber & Processed Fiber
- Livestock & Livestock Products
- Fresh Eggs
- Honey

Visit our web site at  
[www.harvestnewengland.org](http://www.harvestnewengland.org) for more info.

**Harvest New England**

In-Market Product Test Pilot  
A Regional Market Analysis for Fresh-cut Apple Slices

Appendix E New England “Grab Apples” Sliced Apples Test Packaging

