Agribusiness Marketing Report

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- ✓ *The potato's role in retail as a profit generator has slipped from the top spot in revenue per square foot to sixth*
- ✓ *Fresh consumption of potatoes continues to remain stable in spite of the fact that processed potato sales continue to increase. San Luis valley potatoes are grown exclusively for fresh consumption*
- ✓ *The San Luis Valley supplies 92% of the Colorado potato crop, however, over 95% of all potatoes grown in the Valley are shipped out of state*

San Luis Valley Potato Study

by

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In the midst of a nationwide farm financial crisis, Colorado potato producers are seeking value-added processes to improve the marketability of their product. The following outlines the current economic environment for potato production, and is the first in a series of fact sheets examining value-added potato processes.

The potato industry is facing several challenges, including:

- A downward trend in *real* potato prices since 1950 (2002 proved to be an unusually high priced year),
- Relatively flat consumption of fresh potatoes (ERS, 2000),
- A fall from first to sixth place in the amount of produce revenue generated per square foot in grocery stores (Perishables Group, 2000),
- Increased consumer demand for greater varieties and more convenience in all products,
- Little consumer recognition of potato varieties and uses,
- More health-conscious consumers concerned about the carbohydrates in potatoes.

Potatoes are the largest vegetable crop in the U.S. according to the USDA, and per capita use has increased by 10 percent to 142 lbs fresh equivalent since 1999. While processed consumption, which now accounts for 66 percent of the potato crop, has been rising during the last 10 years, fresh consumption continues to remain relatively stable at around 48 to 50 pounds per person (Hine, Loureiro, Meyer, Strategic Marketing Plan, 2001).

Colorado consistently ranks among the top six states in potato production and harvested acreage. In the chart below, you will note Colorado ranked 5th in acreage for harvest and 4th in production for the Fall 2000-2001 crop.

(Source: Colorado Administrative Committee, Market Policy Statement, 2000-2001 Fall Crop)

	Acreage for Harvest	Ranking	Fall Production (1,000 cwt.)	Ranking
Colorado	**75,600**	**5**	**27,972**	**4**
Idaho	441,000	1	152,320	1
Maine	63,000	6	17,920	8
North Dakota	115,000	3	26,950	6
Oregon	56,500	8	27,200	5
Washington	175,000	2	103,250	2
Wisconsin	85,000	4	37,800	3
Minnesota	60,000	7	21,600	7
Michigan	47,500	9	14,963	9
New York	21,000	10	6,177	10

As noted in the table, Colorado's primary competitors are Idaho, Washington, North Dakota, Oregon and Wisconsin. The most formidable competitor is Idaho because of its successful branding strategy in both educating and maintaining awareness with the consumer. Washington and Wisconsin potatoes are positioned in the consumer's mind as states that are environmentally friendly as well as fresh and clean (Hine, Loureiro, Meyer, 2001).

Canada is giving Colorado a different type of competition. Imports from Canada exceed two million pounds, 30.1% of which are fresh potatoes, 15.4% seed potatoes, 48.3% frozen, .4% flakes or granules, .06% dried and flour, and 5.7% starch. The frozen market comprises the largest share of the imports; a form of processing that Colorado does not currently provide in high volumes. (Source: ERS, USDA)

Survey results from The Perishable Group, Inc. from November 2000 provide valuable insight into potato markets and value-added opportunities. The potato's role as a profit generator in retail markets has slipped from the top spot in revenue per square foot to sixth with the majority of retailers viewing the potato's performance as flat. Potato revenues now lag behind bananas, apples, tomatoes, pre-packaged salads and grapes. Of particular interest are the retailers' projections that the potato is moving toward a value-added, convenience product requiring simple preparation.

To increase potato sales, resellers believe consumer awareness of potatoes must be increased in addition to the following practices:

- Light protection, better rotation of inventory and better temperature control for potatoes to prevent product deterioration,
- Additional effective merchandising ideas and point of purchase (POP) displays, promotional plans and customer support,
- Awareness of cooking or preparation methods by potato type,
- More promotional materials,
- Ideas for cross-selling, complementary product placement,
- Uniformity in labeling,
- Product consistency in texture and quality,
- Additional consumer information to help them market the potato,
- Consumer, market and competitive data,

At the same time consumer preferences are changing for potatoes, the potato industry is also evolving. Potato growers have witnessed increased coordination between shipper and buyer especially with the use of shipper/retailer contracts. When using these contracts, shippers need to be guaranteed a large supply of product in order to meet their contract specifications with retailers. In order for producers to meet these criteria, *cooperation is essential*.

Retailers and shippers alike will demand a *consistent market supply* of products.

The San Luis Valley supplies 92% of the Colorado potato crop taking advantage of a high-altitude growing environment that reduces the impact of pests. Ideal summer growing conditions and minimal environmental stresses enable the Valley to require less pesticide and put out a crop with smoother skins. Interestingly, 95% of all potatoes grown in the Valley are shipped out of state. The Valley grows at least 84 varieties of potatoes with approximately 77% going to the fresh market and 23% used as further processed potato products (these percentages vary from those shown in the National Potato Council's 2000-2001 Potato Statistical Yearbook; there is no explanation for the variance). Russet potatoes and yellow potatoes make up more than 50% of the total varieties grown, while white and chipper potatoes have a smaller share. The varieties' breakdown is as follows:

	TOTAL	**Russet**	**Red**	**Yellow**	**White**	**Chippers**	**Specialty**
Varieties by Type	84	24	13	20	8	8	11
Percentage of Total	100.0%	28.6%	15.5%	23.8%	9.5%	9.5%	13.1%
Totals by (not additive)							
Fresh	65	24	13	18	8	1	1
Processed	20	9	3	3	3	5	
Chipped	5			5		5	
Specialty	20				1		11
Percent By (not additive)							
Fresh	77.4%						
Processed	23.8%						
Chipped	5.9%						
Specialty	23.8%						
Total # with White Flesh	72	24	10	20	8	7	3
Total # with Yellow Flesh	9		3			1	5
Total # with Other Color	3						3

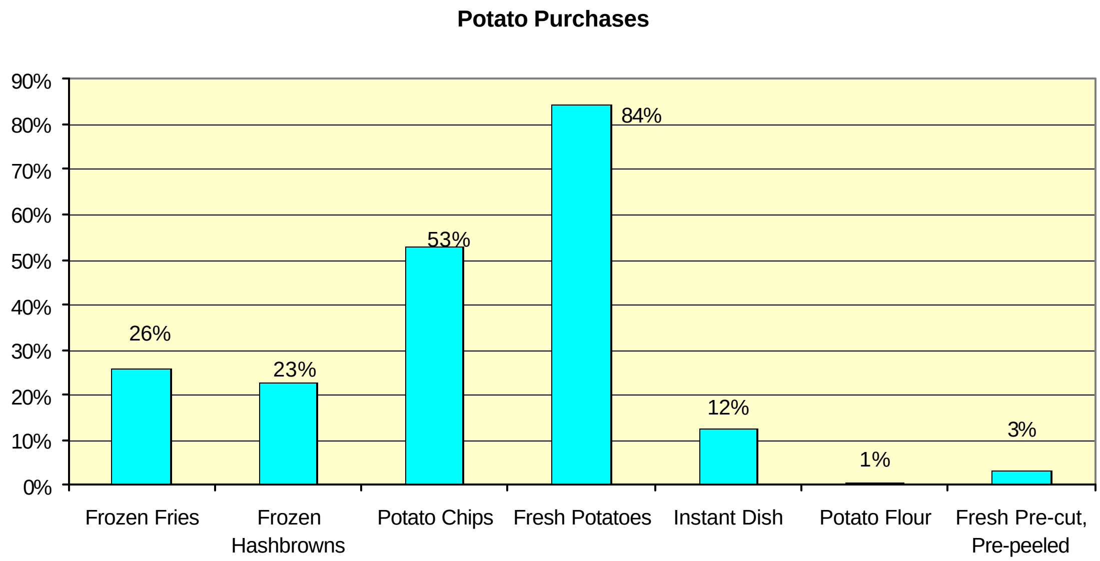
Potatoes are an accepted vegetable in the American diet; but with the increased pressure on the consumers' time, convenience is an attribute that takes on greater importance. Potatoes are not an impulse purchase but rather are a planned purchase 90% of the time. Nearly one-quarter of all in-home meals feature the potato as either baked, mashed or boiled; the potato is served more often than rice and pasta. According to the Perishable Group, Inc., in-home consumption of the baked potato has increased since 1997. Meals prepared with beef are most likely to feature a potato followed closely by pork or ham. The potatoes' relationship with all four-protein groups (beef, pork/ham, poultry, and fish/seafood) has remained relatively stable over the last 10 years. This supports the conclusion that the potato is a planned purchase; further, it supports the need to motivate increased purchase spontaneity on the part of the consumer (Hine, Loureiro, Meyer, 2001).

At the same time that the fresh potato market has stabilized and is declining, the frozen food sector continues to grow at an average rate of nearly 5% per year. Consequently, frozen potato products have a bright future, as well as instant mashed potatoes whose consumption has increased usage 23.3% over the last 10 years. Both of these products suggest a "heat and serve" marketing thrust.

A consumer survey was developed, reviewed, and revised by the SLV Research Center Committee during the summer of 2000 in order to elicit consumer preferences and demographics. The survey was divided into four sections. Section I focused on general consumption patterns and potato attributes that consumers found important including the premium that these consumers were willing to pay for various attributes. Section II dealt with nutrition issues and what would prompt consumers to purchase more potatoes. Section III asked questions about biotechnology and consumers' general attitude associated with genetically modified foods. The last section provided demographic information with which to develop a target audience. Survey results were tabulated, and the following is a brief summary of some findings.

Respondents were asked about their potato purchases, and as is shown in Figure 1, the majority of consumers interviewed (84%) buy fresh potatoes.

Figure 1 Source: Consumer survey, 2000



One interesting fact that we observed is shown in Figure 2. When asked about variety of potatoes, 55% of the respondents indicated they were unable to distinguish among potato varieties. This creates an excellent opportunity for market niche development. Branding of potatoes could be a way in which a Colorado potato variety could become better known and respected.

Figure 2 Source: Consumer survey, 2000

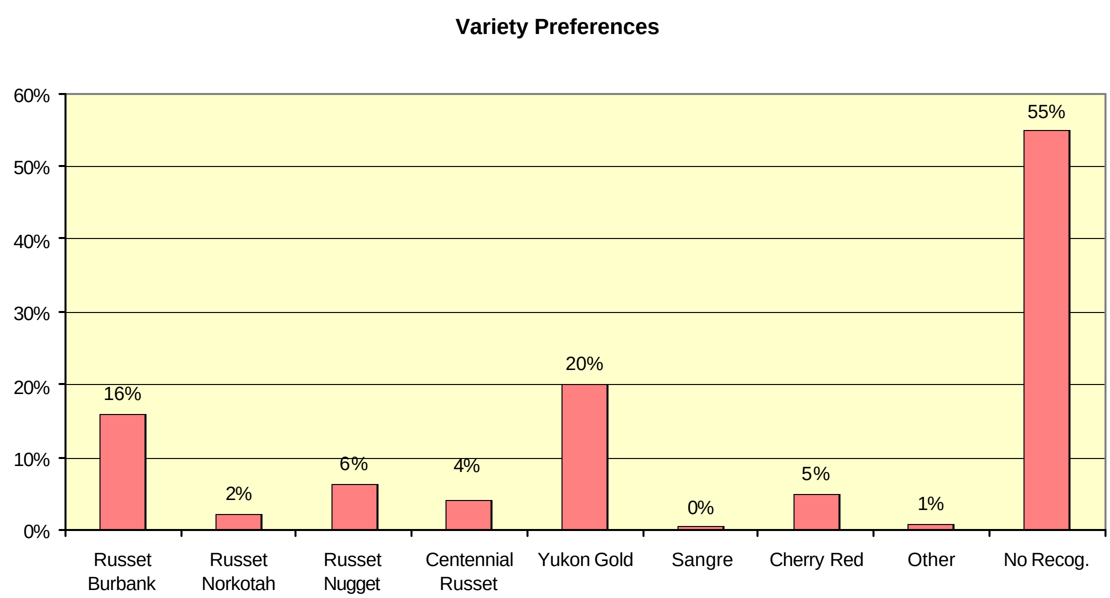


Table 1 (in percentage terms) is the respondents' ranking of various potato characteristics. Two points become very noticeable here. First, price is the not the most important characteristic for consumers suggesting potato purchases are relatively inelastic; thus discount pricing will not increase the amount of potatoes sold enough to offset lost revenues due to a price decrease. Rather, marketing based on appearance and flavor, both of which signify higher quality, might be successful because these attributes are ranked the highest among most respondents. Another interesting point to note is where the consumers ranked the attribute *variety,* which received a high importance ranking by only 22% of the respondents, supporting an opportunity for branding by variety.

Table 1: Potato Attribute Importance Ranking

Source: Consumer survey, 2000

Characteristic	% over Entire Sample
Appearance	79%
Flavor	72%
Size	59%
Nutrition	57%
Texture	55%
Price	48%
Storability	47%
Preparation and Convenience both	45%
Pesticide Free	38%
Type	33%
Colorado Grown	32%
Variety	22%
Organic Certification	19%

Tables 2 and 3 summarize the premium that respondents would be willing to pay for various potato attributes. With respect to the attributes ranked the highest (from Table 1), 61% of the respondents were willing to pay some level of premium for appearance, and 57% would pay some level of premium for flavor. In addition to these attributes, consumers were asked if they would pay a premium for a Colorado grown potato and 60% indicated that they would. In particular, those characteristics garnering the highest level of premiums include appearance, pesticide-free, enhanced flavor, storability, Colorado Grown, and specialty potatoes. In particular, 58% were willing to pay a premium for pesticide free potatoes (a comparative advantage for the SLV), 62% were willing to pay extra for storability but only 39% were willing to pay a premium for pre-cut pre-peeled potatoes and 35% were willing to pay for precooked potatoes. Again, we have evidence of the consumers' lack of familiarity with branding and new methods of packaging including chilled potatoes. There is an opportunity here for new cultivar and process development with the right marketing and promotional tools.

Table 2 Willingness to Pay
Source: Consumer survey, 2000

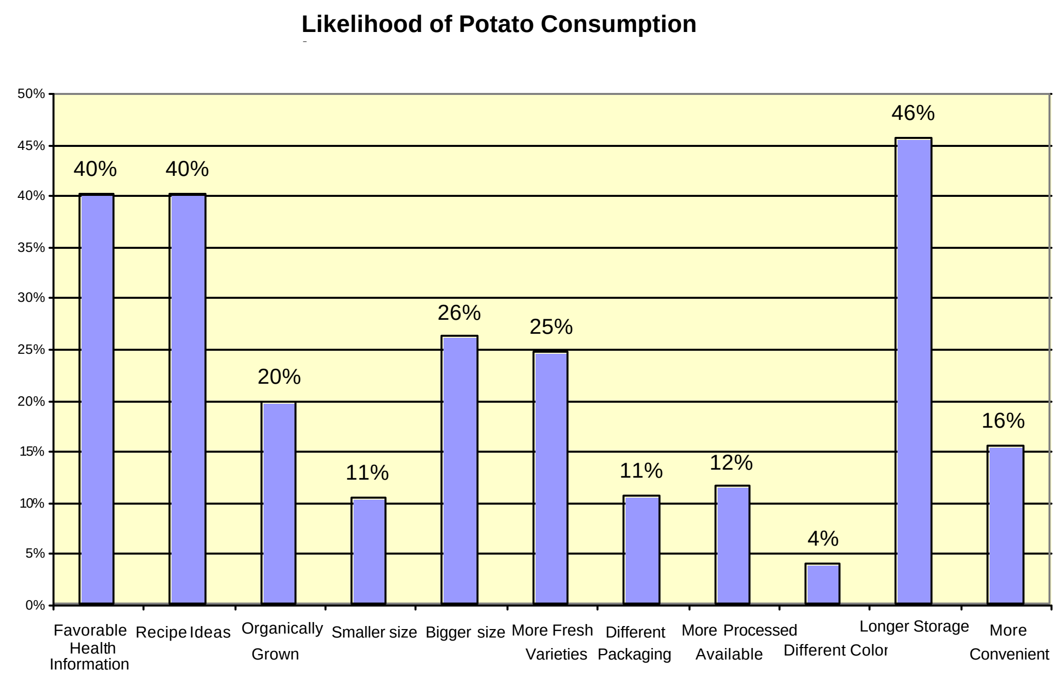
Premium	Specialty	Pesticide Free	Enhanced Flavor	Superior Appearance	Colorado Grown
None	*30%*	*25%*	*25%*	*23%*	*24%*
<5 cents	*10%*	*11%*	*8%*	*12%*	*16%*
5 – 10 cents	*20%*	*22%*	*25%*	*24%*	*25%*
11 – 15 cents	*7%*	*9%*	*11%*	*12%*	*9%*
16 – 20 cents	*4%*	*7%*	*6%*	*8%*	*5%*
> 20 cents	*7%*	*9%*	*7%*	*5%*	*5%*
No Answer	*22%*	*17%*	*17%*	*15%*	*15%*

Table 3 Willingness to Pay
Source: Consumer survey, 2000

Premium	Superior Storability	Precut/Pre-Peeled	Pre-Cooked	Genetically Modified Free	Organically Grown
None	19%	43%	47%	42%	34%
<5 cents	15%	12%	13%	12%	12%
5 – 10 cents	24%	16%	12%	14%	17%
11 – 15 cents	10%	5%	5%	6%	9%
16 – 20 cents	8%	2%	2%	2%	4%
> 20 cents	5%	4%	3%	3%	5%
No Answer	18%	18%	18%	20%	18%

Consumers were also asked what would encourage them to purchase more potatoes. In other words, what promotional campaigns needed to be addressed? These results are summarized in Figure 3. Forty-six percent of consumers indicated that longer storage without "sprouting" or spoiling would result in more purchases and 40% said that health information and recipe ideas would also result in more potato purchases.

Figure 3 Source: Consumer survey, 2000



Understanding consumer trends is only one part of the potato story. In the next article, we will discuss some of the specific concerns that producers and warehouse owners have concerning the future of the SLV potato industry.