Section 3.1
Consumer Tastes & Preferences: What Research Indicates

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Section Summary

• Understand consumer adoption of innovations

• Show current trends in consumer tastes and preferences
  ▶ Throughout the U.S.
  ▶ Throughout the state
  ▶ Grass-fed vs. corn-fed

• Summarize marketing implications
Understanding Consumer Adoption Of New Products

• Important to understand consumer behavior about new products when targeting a niche segment

• Appropriate to target groups that value specific characteristics of your product (grassfed, natural, etc.) and consumers who welcome change

• Sociology has developed a system to classify consumers by their attitudes toward change (see following table and Appendix Figure 1)
# Consumer Adoption Of Innovations

<table>
<thead>
<tr>
<th>Innovation Category</th>
<th>Category Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovator</td>
<td>2.5%</td>
<td>Very eager to try new ideas and take risks that products may fail</td>
</tr>
<tr>
<td>Early Adopter</td>
<td>13.5%</td>
<td>Leaders who have a reputation for choosing successful ideas see strategic advantage in adopting an innovation</td>
</tr>
<tr>
<td>Early Majority</td>
<td>34%</td>
<td>Follow in adopting an innovation, but make a deliberate decision to adopt</td>
</tr>
<tr>
<td>Late Majority</td>
<td>34%</td>
<td>Skeptics who adopt after innovation becomes norm, pushed by peers to adopt</td>
</tr>
<tr>
<td>Laggard</td>
<td>16%</td>
<td>Traditionalists who are fixated on the past and the last to adopt</td>
</tr>
</tbody>
</table>
Put Theory To Practice: Target Your Consumers

• Use adoption model to assess appropriate product development and promotion plans
  ▶ Assume both adoption categories and preferences for beef characteristics are important

• First, look at what consumers prefer and have adopted at the national level

• Next, examine particular consumer segments in Colorado
Growing Segment Wants Direct Market Experience

Consumers want:

- Better flavor
- Nutrition, healthy, safe
- Pleasing aesthetics
- Heritage/nostalgia
- Agritourism
- Convenience

Farmers Markets Are Booming…

• By August 2000, 2,863 in operation; 63% increase since 1994

• USDA-AMS found customers spent $306 per market season in 2000

• A 2001 USDA press release said sales would top $1 billion “with most of that money going directly to small family farmers“

• As a result, the 2002 Farm Bill includes programs to support farmers market activities and institutions

New Opportunities
Create New Markets

• “Consumer-driven” product markets vs. “supply-driven” commodity markets

• Changing U.S. economy and demographics

• Technology improves products

• Global markets - opportunities to expand sales
Consumer-Driven Vs. Supply-Driven Markets

• Markets evolving towards more differentiated and consumer-oriented products

• Consumers demanding more variety and convenience
  ➤ Supermarkets carry more items
  ➤ Increased number of ready-to-eat entrees and side dishes
U.S. Population Is Changing

- Grew from 152 to 280 million from 1950 to 2000
- Projected at 323 million by 2020
- More single and single-parent households
- Ethnic diversity is up: non-white population increased 5% from 1990-2000
- Median income per capita was $22,851 in 2001; increased by 23% from 1991 ($18,526)
## Changing Demographics

<table>
<thead>
<tr>
<th></th>
<th>1960</th>
<th>1980</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. pop (millions)</td>
<td>178</td>
<td>226</td>
<td>280</td>
</tr>
<tr>
<td>Households (millions)</td>
<td>53</td>
<td>80</td>
<td>105</td>
</tr>
<tr>
<td>Single parent HH (%)</td>
<td>26</td>
<td>38</td>
<td>46</td>
</tr>
<tr>
<td>Female head (millions)</td>
<td>9</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Both work (%)</td>
<td>26</td>
<td>43</td>
<td>61</td>
</tr>
<tr>
<td>Metro (%)</td>
<td>70</td>
<td>74</td>
<td>81</td>
</tr>
</tbody>
</table>
Changes Mean:

- Need more food for growing population
- Single and single-parent households demand quick, easy-to-prepare meals
- Growing ethnic diversity sparks demand for more varied cuisine
- People with higher incomes demand more prepared foods

➡ See Appendix 3.1, Figures 2-5
As Incomes Rise, Consumers...

- Upgrade their diets (eat more meat)
- Increase food variety (ethnic, world foods)
- Spend a smaller share of income on food
- Demand more value-added marketing services, especially convenience
- Eat away from home more often
- Mix social concerns with food purchases (environment, animal welfare, world hunger, etc.)

See Appendix 3.1, Figures 2-5
What Do Consumers Prefer, Corn-Fed Or Grass-Fed?

• Study conducted to determine consumers’ tastes and preferences and willingness to pay for them

• Performed consumer taste panels

• Paired samples of beef (1 domestic, 1 foreign):
  ➤ Australian grass-fed with United States corn-fed
  ➤ Canadian barley-fed with United States corn-fed

Corn-Fed Vs. Grass-Fed, Perceived Differences

• Consumers note significant difference between domestic corn-fed beef and foreign grass-fed/barley-fed beef

• Rate corn-fed beef (domestic) an average of 1 score higher for flavor, juiciness, tenderness and overall, than grass-fed beef (Australian)

• Perceive slight difference between domestic beef and Canadian (barley-fed); rate domestic an average 0.2 of a score higher

⇒ See Appendix 3.1, Figures 6-7

Consumers Willing To Pay More For Domestic Corn-Fed

• In general, most consumers preferred corn-fed beef over Australian grass-fed

• Consumers in Denver and Chicago preferred the taste of corn-fed beef and were willing to pay a higher premium for it

→ See Appendix 3.1, Figure 8
Corn-Fed Vs. Grass-Fed: Results & Implications

- General population prefers corn-fed beef over grass-fed
- Consumers are willing to pay a premium for the product they prefer
- Potential small niche market exists for those who prefer grass-fed (20% of the Denver-Chicago sample prefer grass-fed)

⇒ See Appendix 3.1, Figures 9-10

Regional Consumer Tastes & Preferences

Two studies completed:

1. Survey by Kamina Rosenstiel, Dawn Thilmany, Wendy Umberger and Marcia Bugbee for Colorado Homestead Ranches, funded by a USDA value-added grant

2. Panel study of natural meats demand was conducted by Ed Sparling, Jennifer Grannis and Dawn Thilmany with funding from Rocky Mountain Farmers Union
1. Colorado Homestead Ranches Study

- Determined consumer purchase motivation and how consumers ranked product attributes

- Surveyed people who shop at:
  - Farmers markets
  - CHR’s Homestead Market
  - Other locations that sell CHR natural beef products
CHR Study Results: Purchase Motivations

• Support local agriculture and small business
• Trust the quality, flavor, freshness and safety of the product
• Not as motivated by:
  ➤ Colorado Proud Program
  ➤ Idea of personal relationship with producer

➤ See Appendix 3.1, Figure 11

CHR Study Results: Product Attribute Rank

• Highest rank: quality, freshness, convenience, juiciness & leanness

• Moderate: source assurance, grass-fed, natural & premium brand

• Lowest: frozen and organic

See Appendix 3.1, Figure 12

2. Panel Study On Natural Meats Demand

- Provide base for a small Western CO producer group to establish direct marketing strategies

- Producers needed to know:
  - Customer buying behavior, differences between rural & urban regions
  - Potential interest in freezer beef
  - Willingness to pay for natural steak & ground beef
  - Market share associated with various price levels
Panel Study On Natural Meats Demand

• Surveyed a random sample of the Intermountain Region (Colorado’s Front Range and Western Slope, urban New Mexico, Four Corners area)

• Survey was conducted by the National Family Opinion Organization
Buying Behavior, Geographic Differences

- Western Slope: most potential for producer sales (24% buy some meat directly from producers)
- Urban New Mexico: least potential for producer sales (4% buy some meat directly from producers)
- Rural: greatest potential for freezer beef producer sales, makes logistical sense – go to store less often
- Urban: more potential for specialty shop and natural food store sales

See Appendix 3.1, Tables 1-2
Freezer Beef Interest

- Households with freezers and hunters (large overlap) most likely buy directly from producers
- Western Slope and Four Corners more likely to buy from producers than consumers from the Front Range and urban New Mexico
- Fewer freezer beef sales in urban areas, but target market size may be potentially large due to denser population

⇒ See Appendix 3.1, Table 3
Attribute Importance At Different Price Premiums

- As premiums increase on natural steak, demand for grass-fed beef and antibiotic-free or hormone-free beef increases.

- Natural ground beef ratings are less than steak, but follow similar pattern.

=> See Appendix 3.1, Figures 13-14

Willingness To Pay

• Consumers of natural beef are willing to pay higher premium for natural steak and ground beef than typical consumers

• Percent of people willing to pay more than $1.00/lb. above conventional price drops quickly for both natural steak and ground beef

➔ See Appendix 3.1, Figures 15-16

Market Share In Colorado

• Like willingness to pay results, market share drops quickly when both products are priced higher than $1.00/lb. above conventional price

• Important to consider costs of producing natural beef when looking at consumer willingness to pay
  ➤ For example: irrigated pastures, time to slaughter, slaughter costs, byproduct values

⇒ See Appendix 3.1, Figures 17-18

Marketing Implications In Colorado Target Market

• Target market is accessible and local

• Volume demanded is manageable

• Consumers with freezers able to store large volumes

• Products are less price sensitive at lower premium levels

Marketing Implications In Colorado Target Market

From both studies, target market demands:

- Product free of antibiotics and hormones
- Fresh product that is nutritious
- Grass-fed product
Appendix 3.1

Figures and tables - Section 3.1
Figure 1: Distribution Of Consumer Adoption Categories
Figure 2: Consumers Spend Less Of Their Income On Food

Figure 3: As Income Changes, Consumer Preferences About Food Change

Figure 4: Consumers Spend More On Fast Food, Specialty Items Than Groceries

Percent of Total Food Expenditures

Fast Food
Grocery
Other
Figure 5: Major U.S. Food Consumption Trends, 1960-2000

- Nominal retail food prices
- Consumer food expenditures
- Pounds eaten per capita
- Daily calories
- Eating out
- Demand for marketing services
- Share of income spent on food
- Time spent cooking at home
- Nutrition ???

Figure 6: Perceived Difference Between Australian & Domestic Beef

Figure 7: Perceived Difference Between Canadian & Domestic Beef

Figure 8: 
Consumers Willing To Pay More For Corn-fed

Average Bids: Australian vs. US

<table>
<thead>
<tr>
<th>Location</th>
<th>Domestic</th>
<th>Australian</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver</td>
<td>$3.61</td>
<td>$2.75</td>
<td>$1.04</td>
</tr>
<tr>
<td>Chicago</td>
<td>$3.90</td>
<td>$2.56</td>
<td>$1.34</td>
</tr>
<tr>
<td>Overall</td>
<td>$3.75</td>
<td>$2.57</td>
<td>$1.19</td>
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</table>

Figure 9: Consumer Willingness-To-Pay For Tastes (U.S. vs. Australian)

Figure 10: Consumers Willingness-To-Pay For Tastes (U.S. vs. Canadian)

Figure 11: Local Purchase Motivators For CHR Consumers

Figure 12: CHR Consumer Ranking Of Beef Attributes

Average Rank 1-5
(5 Being Very Important)

Figure 13: Natural Steak Attribute Ranks At Different Price Premiums

Average Rank 1-5
(5 Being Very Important)

Figure 14
Natural Ground Beef Attribute Ranks At Different Price Premiums

Average Rank 1-5
(5 Being Very Important)

Figure 15: Willingness To Pay For Natural Steak

Base Price = $4.99

Figure 16: Willingness To Pay For Natural Ground Beef

Base Price = $1.69

Figure 17:
Market Share Of Natural Steak
As A Function Of Price

"Final Report: Panel Study of Natural Meats Demand".
Figure 18: Market Share Of Natural Ground Beef As A Function Of Price

Table 1: Regional Meat Purchase Choices

<table>
<thead>
<tr>
<th>Region</th>
<th>Vendor Type</th>
<th>Relative Frequency of Purchase from Vendor Percent Respondents</th>
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<tbody>
<tr>
<td></td>
<td>Most</td>
<td>Some</td>
</tr>
<tr>
<td>Front Range</td>
<td>Supermarkets</td>
<td>89.4%</td>
</tr>
<tr>
<td></td>
<td>Natural Foods</td>
<td>1.2%</td>
</tr>
<tr>
<td></td>
<td>Specialty</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>Producers</td>
<td>3.3%</td>
</tr>
<tr>
<td>Western Slope</td>
<td>Supermarkets</td>
<td>80.1%</td>
</tr>
<tr>
<td></td>
<td>Natural Foods</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Specialty</td>
<td>0.0%</td>
</tr>
<tr>
<td></td>
<td>Producers</td>
<td>11.0%</td>
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Table 2: Regional Meat Purchase Choices (continued)

<table>
<thead>
<tr>
<th>Region</th>
<th>Vendor Type</th>
<th>Percent Respondents</th>
<th>Relative Frequency of Purchase from Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban New Mexico</td>
<td>Supermarkets</td>
<td>82.50%</td>
<td><strong>Most</strong></td>
</tr>
<tr>
<td></td>
<td>Natural Foods</td>
<td>2.30%</td>
<td><strong>Some</strong></td>
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<tr>
<td></td>
<td>Specialty Shops</td>
<td>3.20%</td>
<td><strong>None</strong></td>
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<tr>
<td></td>
<td>Producers</td>
<td>1.40%</td>
<td><strong>Percent Respondents</strong></td>
</tr>
<tr>
<td>Four Corners</td>
<td>Supermarkets</td>
<td>87.40%</td>
<td><strong>Most</strong></td>
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<tr>
<td></td>
<td>Natural Foods</td>
<td>0.00%</td>
<td><strong>Some</strong></td>
</tr>
<tr>
<td></td>
<td>Specialty Shops</td>
<td>0.00%</td>
<td><strong>None</strong></td>
</tr>
<tr>
<td></td>
<td>Producers</td>
<td>9.20%</td>
<td><strong>Percent Respondents</strong></td>
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Table 3: Potential Consumer Purchases Of Freezer Beef

<table>
<thead>
<tr>
<th>Region</th>
<th>Households with Freezers</th>
<th>Households that Buy from Producers</th>
<th>Households with Hunters</th>
<th>Percent Hunter Households with Freezers</th>
<th>Percent Hunter Households that Buy from Producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Range</td>
<td>347 (54%)</td>
<td>46 (7.2%)</td>
<td>135 (21%)</td>
<td>85.20%</td>
<td>17.80%</td>
</tr>
<tr>
<td>Western Slope</td>
<td>218 (77.9%)</td>
<td>71 (24.4%)</td>
<td>130 (46.4%)</td>
<td>93.10%</td>
<td>33.80%</td>
</tr>
<tr>
<td>Urban New Mexico</td>
<td>169 (51.5%)</td>
<td>15 (4.3%)</td>
<td>36 (11%)</td>
<td>91.70%</td>
<td>13.90%</td>
</tr>
<tr>
<td>Four Corners</td>
<td>64 (73.6%)</td>
<td>17 (19.5%)</td>
<td>42 (48.3%)</td>
<td>90.50%</td>
<td>28.60%</td>
</tr>
</tbody>
</table>

(Figures in parentheses give number as percent respondents from respective regions)

References & Additional Resources

