“Small Ruminant Meat Production and Processing”

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Consumer Targets

- Food Safety
  - Concerns about Hormones
  - Antibiotics
  - Bacteria
  - Animal Welfare

- Positive eating experience

- Minimal leftovers

- Portions that fit today’s family size

- Quick Preparation
  - Poultry – luncheon meats
  - Beef – heat and serve dishes
Consumer Demographics
(Article Published in IFT’s Food Technology, Feb 2004 Author Elizabeth Sloan)

- Ready to eat (RTE) segment exploding!
  - $115 to $150 Billion in sales
  - “Do it for me” Dinner Solutions and snack food industry reached $12.7 Billion 2003 = 12% compounded annual growth rate since 1998.
  - Shelf-stable meat based dinners up 46%
  - Skillet and bowl dinners with meat up 36%
  - Nutrition/breakfast bars up 32%
  - Salad kits up 11%
Things Influencing Market Trends

Demographics

- Median age 35 years
- 74% 18 years or >
- Average family size 3.1
- 55% married
- 63.9% in labor force
- Average commute time to work 25.5 min
- 80% commute 50 to 99 miles one way

Producers tend to think consumers rationalize and make purchasing decisions the same as they do. However, producers are not typical consumers and often don’t understand consumer logic.
Things Influencing Market Trends

Demographics

• Single parent homes
• Dual income
• Soccer mom phenomenon
• Generation raised on potato chips
• More meals consumed in cars
• Bimodal age distribution
• Ethnic migration

Single moms average 5 kid related trips per day.

By 2025 there will be as many consumers over 65 as under 25.
Things Influencing Market Trends

Health & Environment (Green)

- 75% of health conscious products made a claim of: natural, low/light, or neutracutical in 2007.

- Recycled or recyclable packaging for food increased from 1.5% (2004) to 6.5% (2007)

- Whole Foods is the largest retailer of natural and organic foods in Europe and North America.

80% of U.S. and European consumers claim to be health conscious.

However, the incidence of diabetes and obesity is on the rise at an alarming rate.
Dynamics in the Small Ruminant Industry
Small Ruminant Industry: Challenges? Or Opportunities?

- Limited packer competition and accessibility =
  - Limited market structure
  - Value based marketing

- Carcass weight differences
  - Lambs range 16 - 95 lbs
  - Goats range 15 - 55 lbs (estimated)

- Nutritional differences
  - Grain vs Grass

- Lamb imports rise over last 20 years (>270%)
Small Ruminant Industry: Challenges? Or Opportunities?

- Wide range of markets can create many opportunities:
  - Conventional trade
  - Holiday
  - Ethnic

- Limitations may result from access to harvest and distribution:
  - State inspected,
  - Federally inspected, and
  - On-farm
Competition in the Lamb Case

- Who are American Sheep Producers and Packers competing with for space in the retail case?
  - Other species
  - Other countries

  - US producers supply ~40% of lamb consumed in the US with 100% of US produced lamb!
  - AUS and NZ producers supply ~60% of the lamb consumed in the US with ~13% of AUS or NZ produced lamb.

- Who can be more consistent?
US Small Ruminant Production

- How do we compete?
  - With large scale packers
  - Import product

- How do we set our selves apart?
  - Local
  - Niche
  - Product claims
Increase in Niche Marketing

Multiple Drivers

- Locally produced
  - Freshness
  - Carbon footprint
  - Support local sustainable agriculture

- Health, Environment & Production Concerns
  - Organic, Low fat, Grass fed
  - Animal Welfare, humanely raised, free-range
  - No added hormones and/or No antibiotics

- Status symbol (Luxury vs. necessity)
  - Restaurants
  - Backyard chefs
Consumer Desires Fit Direct Marketing

- Confidence in food supply
- Building a relationship
- Trust
- Questions answered
- Understand differences in labeling:
  - Organic, Natural, Grass Fed, Hormone Free, etc.

The above can all be answered through direct marketing!
Support for Direct Marketing

- National Sustainable Agriculture Information Service – ATTRA
  - Local Foods
  - Food Regulations
  - Food Security

- Cornell - Sheep and Goat Marketing Directory
  - http://www.sheepgoatmarketing.info/#&panel1-1
What is Direct Marketing of a Value Added Product?

- Customer Driven where farmer retains more of the food $
  - Processing, enhancing, packaging, and marketing
  - Production: Organic, grass-fed, no hormones administered, etc.
What is Direct Marketing of a Value Added Product?

- May increase farm viability and visibility
- May expand the market season
- May open new markets

- Considerable Risk!
  - Perishable product
  - Overhead
  - Customer base
Product Claims for all Markets

- “Raised without Antibiotics” *NOT* “Antibiotic Free”
- “No Hormones Administered” *NOT* “Hormone Free”
- “Certified Organic” - Strict Regulations
- “Grass Fed” – Little or no grain, minerals and vitamins may be added
- “Natural” – Refers to processing (no artificial ingredients, coloring agents, chemical preservatives, etc.)
Product Claims for all Markets

- “Naturally Raised” – NO growth promotants or antibiotics - Rumensin and Bovatec (coccidia) are exceptions. No animal by-products are to be fed (meat, fat, fish oil, etc.)

- “Humanely Raised and Handled” – Requires that you are enrolled in certification program

- “Pasture Raised”, “Sustainably Raised” and “Locally Grown” are NOT official labeling claims!

- Kosher and Halal – No national certification for Meats under this distinction.

- It is the Responsibility of the Farmer to check Federal and State Guidelines
• Each respondent provided three words they associate with a home-cooked meal. The tag cloud includes the top 40 words mentioned. The size of each word represents the number of times it was mentioned. For instance, the biggest word, “healthy,” was mentioned 172 times.
Industry Fallacies

- Increasing live weight does **NOT** increase muscle beyond animals genetic potential

- Feed efficiency is **NOT** linear as long as feed is cheap!

- *What ways can we Improve LEA, Flavor, and improve nutritional value?*
What Makes a Lamb or Goat Efficient and/or Palatable?

- Genetics
- Fatty acid profile
- Nutritional plane and diet
- Age
- Sex
- Cooking Method

Ask the Consumer
Production Differences: Type and Location?

● Production
  – East
  – Midwest
  – Mountain
  – West

● Packers
  – Small
  – Large

● Consumers
  – Traditional and Ethnic Markets
  – With a change in the Consumer May Come New Marketing Venues!!!!!!
Alternative Markets: Forage

- Forage feeding results
  - Heavier weights with reduced fat deposits
  - 14 to 16 months still break as a lamb or kid goat
  - Less input and reduced carbon footprint
    - *In an increased physiologic maturity*
    - *Forage differences and land access and availability!*
Alternative Markets: Grain

Grain feeding results in:

- More rapid time to market
- Younger animals
- Reduced land resources

- Cost of grains are on the rise
- Increased fat deposition may have negative implications to palatability and efficiency
Alternative Markets

- **Organic**
  - Without Hormones and Antibiotics
  - Organic Feed and Natural Methods of Weed Removal from the Pasture
  - Leg of Lamb $90 = 7 lbs ($12.90/# does not include shipping)

- **Natural**
  - Without Hormones
  - Minimally processed
  - Consumers like the sound of it!

- **Pet food/by-products – Growing**
  - Carcass is a breakeven pt?
  - Offal is the money maker in traditional industry!
## Alternative Markets

### Holiday Calendar for Marketing Sheep and Goats

<table>
<thead>
<tr>
<th>Holiday</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<td>January 1</td>
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<td>Epiphany</td>
<td>January 6</td>
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<td>Eid ul Adha Festival of Sacrifice</td>
<td>Nov. 6</td>
<td>Oct. 26</td>
<td>Oct. 15</td>
<td>Oct. 4</td>
<td>Sept. 23</td>
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<td>Islamic New Year</td>
<td>Nov. 25</td>
<td>Nov. 15</td>
<td>Nov. 4</td>
<td>Oct. 25</td>
<td>Oct. 14</td>
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<td>Christian Easter</td>
<td>April 24</td>
<td>April 8</td>
<td>March 31</td>
<td>April 20</td>
<td>April 5</td>
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<td>Orthodox Easter</td>
<td>April 24</td>
<td>April 15</td>
<td>May 5</td>
<td>April 20</td>
<td>April 12</td>
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<tr>
<td>Passover/Pesach</td>
<td>April 19-26</td>
<td>April 7-14</td>
<td>March 26-April 2</td>
<td>April 15-22</td>
<td>April 4-11</td>
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<tr>
<td>Mawlid al Nabi Birth of the Prophet</td>
<td>March 20</td>
<td>Feb. 4</td>
<td>Jan. 24</td>
<td>Jan. 13</td>
<td>Jan 3 and Dec. 23</td>
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<td>Ramadan Begins Month of Fasting</td>
<td>August 1</td>
<td>July 20</td>
<td>July 9</td>
<td>June 28</td>
<td>June 18</td>
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<td>Rosh Hashanah Jewish New Year</td>
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<td>Sept. 5-6</td>
<td>Sept. 24-25</td>
<td>Sept. 14-15</td>
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<td>Thanksgiving</td>
<td>Nov. 24</td>
<td>Nov. 22</td>
<td>Nov. 28</td>
<td>Nov. 27</td>
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<tr>
<td>Eid al Fitr Ramadan Ends</td>
<td>August 31</td>
<td>August 19</td>
<td>August 8</td>
<td>July 29</td>
<td>July 18</td>
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<td>Chanukkah</td>
<td>Dec. 21-28</td>
<td>Dec. 9-16</td>
<td>Nov. 28-Dec. 5</td>
<td>Dec. 17-24</td>
<td>Dec. 7-14</td>
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</table>
Industry Response to Consumer Desires

Changes in fabrication styles
- Predominantly boneless cuts
- Individual muscles & portion size targeted for family of 1, 2 or 4 persons

Further Processing
- Post-harvest processes to enhance tenderness
- Fully- or Pre-cooked items (heat-n-serve)

Improved packaging technology
- Case-ready packaging
- Cook-in films & microwaveable containers
Branded Products

- Greater number of products being marketed under branded programs
- More retail stores are setting up in-house brands
- Targeting consumer loyalty

Store branded product
Whole muscle beef moved from 15% in 2004 to 31% in 2007.
Ground beef moved from 7% in 2004 to 21% in 2007.
Presentation in the Retail Case is Stagnant
Alternatives to the American Retail Case
American Lamb Board: Check off funded
32 minute video on lamb carcass breakdown

http://www.youtube.com/watch?v=smIhOh4REcA
Innovative Cuts: Result from Deconstructing Larger Cuts
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Innovative Cuts: Result from Deconstructing Larger Cuts
Innovative Cuts: Further Processed
Optimal Operation Size for Niche’ Marketing

- What size operation is realistic to use a direct marketing scheme?
- Does it matter how big your operation is?
Lava Lake Lamb

- Certified Organic
- Selling to 3 markets
  - Organic (Initially)
    - 33%
  - Mountain State Lamb Cooperative
    - 65%
  - Local Auction Markets
    - 2%
Lava Lake Lamb

- Large Commercial Operation
- 6,000 head of ewes
- 25,000 acres owned
- 860,000 acres grazing rights FS or BLM
- Custom harvest and selling through direct and internet sales
- www.lavalakelamb.com
What can the U.S. Industry do?

- Lamb and Goat meat consumption per annum 0.5 kg or about 1.0 lb
  - [http://www.scribd.com/doc/91840616/Meat-Consumption-Per-Person](http://www.scribd.com/doc/91840616/Meat-Consumption-Per-Person)

- Create products that reach the consumers price point without sacrificing the high end cuts

- Further fabrication of legs and shoulders
What can the U.S. Industry do?

- Concentrate on!!!
  - Consistency
  - Pursue local markets
    - Niche markets
  - Take active role
  - Ask the consumer
  - Accept Global Market
  - Be proactive versus reactive