1999 Audit

- Fewer condemnations
- Less Bruising
- Less Branding Damage
- Fewer Injection Site Lesion Sites
- Still more work to do

US BEEF

- Initial Audit in 1991
- Research basis for change
- Used to define damage and origination variables
  - Like injection site lesions
  - Bruising etc

What Constitutes a Quality Assurance Program?

- Animal health
- Animal Management
- Animal Handling

Why do we care about dairy?

Quality Assurance Progression

Strategy Summit

Data Collection Totals
- December ’06 – September ’07
- Approximately 5,500 live animals surveyed
- Approximately 5,000 carcasses surveyed during harvest
- Approximately 3,000 carcasses surveyed while in the coolers

Top quality challenges facing the market cow industry

<table>
<thead>
<tr>
<th>1999 Quality Challenge</th>
<th>2007 Quality challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bruises</td>
<td>1. Food safety</td>
</tr>
<tr>
<td>3. Birdshot/Buckshot</td>
<td>3. Animal welfare and handling issues</td>
</tr>
<tr>
<td>4. Arthritic Joints</td>
<td>4. Poor conditioning/nutrition</td>
</tr>
<tr>
<td>5. Yield</td>
<td>5. Antibiotic residues</td>
</tr>
<tr>
<td>7. Condemnation Rate</td>
<td>7. Hide damage</td>
</tr>
<tr>
<td>8. Condition/Leanness</td>
<td>8. Lameness/soundness</td>
</tr>
<tr>
<td>10. Injection site prevalence and location</td>
<td>10. Injection site prevalence and location</td>
</tr>
</tbody>
</table>

**Highlighted = Present in 1999 and 2007 Interviews**

What Constitutes a Quality Assurance Program?

- Animal health
- Animal Management
- Animal Handling

Dairy Cattle Involved

- Lactating
- Steers
**Calves**
- Dairy Bull Calves
  - Veal Industry
  - Market Beef
  - Misc. (ie Mink Farms)
- Dairy Heifers
  - Heifer Raisers
  - Farm Replacement Herd

**Replacement Heifers**
- Replacement Herd
- Custom Raisers
- Beef Heifers (maybe in the future)

**Dairy Steers**
- Feeders
- Finishers
- 15-20% of fed beef steers are Holsteins
  ([Rull et al. 2004](#))

**Lactating Cows**
- Lactating and Dry Cows
- Cull Cows
- Sick and Downer Cows
- Treated Cows

**What Constitutes a Quality Assurance Program?**
- Animal health
- Animal Management
- Animal Handling

**Injection Zone in the Neck Region**
- Injection Triangle
  - A - Ahead of point of shoulder
  - B - Above the vertebrae
  - C - Below Nuohal Ligament
Why We Want Injections in Neck

- Ever ordered a “neck steak”?
- Increase value derived from carcass of the animal
- Impact of injection blemish on tenderness

What Constitutes a Quality Assurance Program?

Animal health
Animal Management
Animal Handling

MUSCLE SCORE FREQUENCY DISTRIBUTION %

<table>
<thead>
<tr>
<th></th>
<th>Beef Cows</th>
<th>Dairy Cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>35</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Avg.</td>
<td>2.06</td>
<td></td>
</tr>
</tbody>
</table>

Bruising & Severity

<table>
<thead>
<tr>
<th>Cows</th>
<th>1994</th>
<th>1999</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>30</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td>Minor</td>
<td>42</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>Medium</td>
<td>21</td>
<td>23</td>
<td>22</td>
</tr>
<tr>
<td>Major</td>
<td>21</td>
<td>37</td>
<td>12</td>
</tr>
</tbody>
</table>

All Cattle 1999 - 11.8% No Bruises 2007 - 36.6% No Bruises

FREQUENCY DISTRIBUTION BRUISES

<table>
<thead>
<tr>
<th></th>
<th>Beef Cows</th>
<th>Dairy Cows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>FPB</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Loin</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Rib</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Chuck</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Animal Handling

Animal Handling

Animal Handling
Bruising
- Increased lameness, decreased BCS, lighter muscling likely contributing to higher bruising
- Need to look at facilities for “bruising risks”
  - Beds / Stalls
  - Breeding Rails
  - Parlors
  - Loading area

Transportation Considerations
- Consider cattle may not go directly to plant
  - Hauled for a time on a trailer
  - Taken to sale barn / facility
  - Loaded again on truck & hauled
- Dairy cows need to be strong & sound enough to endure the marketing process
- Suspect cows should be separated & loaded on the rear of trailer

It is critical to remember all three parts work together.

A dairyman’s role in beef quality assurance

Equals

A beef producer’s role in beef quality assurance

Questions?
- Thank-you to Dr. Sandy Stuttgen & Dr. Jeff Lehmkuhler for some of today’s info.