Consumer Perceptions of Animal Health

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300k horses in London in 1900

“most malodorous environmental challenge facing the world’s biggest cities … was horse dung”
One decade later problem was addressed by the invisible hand of the market: Henry Ford’s Model T – by 1912 cars outnumbered horses in NYC
100 Years after being viewed as an environmental savior: oil is viewed increasingly as horse dung used to be – a menace to public health and the environment.
Horses in NYC & Animal Ag

- Current challenges can be addressed *IF* we:
  1) Accurately recognize the challenge
  2) Actively pursue solutions
  3) Identify technology & “let markets work”
Changes in Consumer “Signals”

- We must appreciate essential role of consumer demand & customer product acceptance

  - Consumers: you, me, other residents

  - Customers: McDonalds, Wal-Mart, etc.
Changes in Consumer “Signals”

• We must appreciate essential role of consumer demand & customer product acceptance

  – Complex and changing all the time

  – In agriculture:
    • increasingly involves “social issues”
    • calls to document, verify, and adjust “conventional” production practices
Ongoing calls for change, verification, &/or improvement:

<table>
<thead>
<tr>
<th>Credence Attributes</th>
<th>Other Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food safety</td>
<td>Price</td>
</tr>
<tr>
<td>Environmental impact</td>
<td>Freshness</td>
</tr>
<tr>
<td>Animal Welfare</td>
<td>Taste</td>
</tr>
<tr>
<td>Origin labeling</td>
<td>Nutrition</td>
</tr>
<tr>
<td>Antibiotic use</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>Convenience</td>
</tr>
</tbody>
</table>
Food Values Applied to Livestock Products (Lister et al., 2017)

• “Social Issues” less important in purchasing decisions than:
  – Safety
  – Freshness
  – Taste
  – Nutrition
  – Health
  – Price

## Importance Shares

<table>
<thead>
<tr>
<th>Importance</th>
<th>Ground Beef</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>21%</td>
</tr>
<tr>
<td>Freshness</td>
<td>20%</td>
</tr>
<tr>
<td>Taste</td>
<td>12%</td>
</tr>
<tr>
<td>Health</td>
<td>12%</td>
</tr>
<tr>
<td>Nutrition</td>
<td>8%</td>
</tr>
<tr>
<td>Price</td>
<td>7%</td>
</tr>
<tr>
<td>Hormone Free/Antibiotic Free</td>
<td>7%</td>
</tr>
<tr>
<td>Animal Welfare</td>
<td>5%</td>
</tr>
<tr>
<td>Origin/Traceability</td>
<td>3%</td>
</tr>
<tr>
<td>Environmental Impact</td>
<td>3%</td>
</tr>
<tr>
<td>Convenience</td>
<td>2%</td>
</tr>
</tbody>
</table>
Lister et al. (forthcoming)

“Social Issues” < safety, freshness, taste, price...

<table>
<thead>
<tr>
<th>Importance Shares by Product</th>
<th>Ground Beef</th>
<th>Beef Steak</th>
<th>Chicken Breast</th>
<th>Milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety &amp; Freshness</td>
<td>41%</td>
<td>37%</td>
<td>39%</td>
<td>38%</td>
</tr>
<tr>
<td>Taste, Health, Nutrition, Price, Conv</td>
<td>41%</td>
<td>47%</td>
<td>44%</td>
<td>45%</td>
</tr>
<tr>
<td>HF/AF, AW, Origin/Tr, Env</td>
<td>18%</td>
<td>16%</td>
<td>17%</td>
<td>17%</td>
</tr>
</tbody>
</table>
Lister et al. (forthcoming)

- **Heterogeneity must also be appreciated**

<table>
<thead>
<tr>
<th>Importance Shares by Product and Population Group</th>
<th>Ground Beef</th>
<th>Beef Steak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group 1</td>
<td>Group 2</td>
</tr>
<tr>
<td>Safety &amp; Freshness</td>
<td>42%</td>
<td>40%</td>
</tr>
<tr>
<td>Taste, Health, Nutrition, Price, Conv</td>
<td>46%</td>
<td>39%</td>
</tr>
<tr>
<td>HF/AF, AW, Origin/Tr, Env</td>
<td>12%</td>
<td>21%</td>
</tr>
<tr>
<td>Class Size:</td>
<td>31%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Current Situation

- Importance of attributes is clear
- **HOW** public wants outcomes achieved is less clear
  - *May also be changing over time…*
Economic Realities Going Forward

• Center for Food Integrity’s Sept. 4, 2013 tweet:
  “Science tells us if we can do something.
  Society tells us if we should do it.”

➢ Think about beta-agonists, feeding GM corn, gestation stalls, laying hen cages, handling techniques, euthanasia practices, …
Economic Realities Going Forward

• Outcomes will only partially align with “best science” approaches or recommendations

  ➢ Public will give license to utilize only a subset of available production options that ‘technically work’

  ➢ Economic & political optimality critical to see
Economic Realities Going Forward

• Outcomes will only partially align with “best science” approaches or recommendations
  – Vote-buy disconnect will persist
Economic Realities Going Forward

- Outcomes will only partially align with “best science” approaches or recommendations
  - Vote-buy disconnect will persist

Table 2. Willingness to Vote for Restrictions and to Pay Premiums, December 2013

<table>
<thead>
<tr>
<th>Production Practice</th>
<th>Vote to Ban/Limit</th>
<th>Pay a Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limit antibiotic use for cattle to only disease treatment</td>
<td>70.9%</td>
<td>48.0%</td>
</tr>
<tr>
<td>Ban cattle castration without use of pain control</td>
<td>66.1%</td>
<td>35.9%</td>
</tr>
<tr>
<td>Ban use of sow gestation stalls in the swine industry</td>
<td>51.3%</td>
<td>34.9%</td>
</tr>
<tr>
<td>Ban use of laying hen cages in the egg industry</td>
<td>49.7%</td>
<td>40.5%</td>
</tr>
</tbody>
</table>

- Short-term “unfunded mandates” will continue…
## Public’s vote-buy consistency & producer perceptions of behavior

<table>
<thead>
<tr>
<th></th>
<th>Consumer-Yes</th>
<th>Consumer-Don't know</th>
<th>Producer-Conditional Average</th>
<th>Producer-Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote to ban cattle castration without use of pain control</td>
<td>66%</td>
<td>15%</td>
<td>53%</td>
<td>16%</td>
</tr>
<tr>
<td>Pay a premium for beef from cattle castrated with pain control</td>
<td>36%</td>
<td>38%</td>
<td>26%</td>
<td>18%</td>
</tr>
</tbody>
</table>

30% gap

27% perceived gap

Note: Cow-calf producers were asked what they thought typical American would do.
Will Consumers Pay for Changes?

➢ Short-Term: NO

➢ Long-Term: YES
Will Consumers Pay for Changes?

➢ Not the only question we must consider…

Will we survive if we do not recognize, adapt, and evolve to changes?
Who wants to go home with a new phone?
Who wants to go home with THIS phone:

Who wants to go home with THIS phone:

Consider how much phones have changed...

Consider how much MORE phones WILL change...

How should we think about feedlot processes and calf health and well-being?

Program Examples
1. Transportation
2. Feed Additives & Implants
3. Pens – Mud, Shade, and Space
How should we think about feedlot processes and calf health and well-being?

Must directly consider:

1) Effectiveness

2) Feasibility

3) Acceptability
Effectiveness & Feasibility

• Why create something with limited odds of industry adoption?
  – How would investors react?
Effectiveness & Feasibility

• Just because something “works” doesn’t mean it will be 100% implemented
  – Feasibility, effectiveness, & net econ. value (reflects acceptance) are key

  • *E.coli* vaccines for fed cattle are prime example
“Consumer is Always Right”

-even if they “technically speaking” are wrong
“If you think you can, you can.
And if you think you can’t, you’re right.”

Henry Ford (1863-1947)
Take-Home Message

• Public’s role in Animal Health is here to stay
  – Documenting, verifying, &/or changing practices is increasingly a cost of doing business

• The industry can effectively respond if it:
  1. Accurately recognizes the challenge
  2. Actively pursues solutions
  3. Identifies technology & lets markets work
Take-Home Message

• Our approach to Animal Health will change with:
  – Technology availability
  – Dynamic consumer perceptions & preferences
  – Market signals & Regulations
Take-Home Message

• Our approach to Animal Health will change with:
  – Technology availability
  – Dynamic consumer perceptions & preferences
  – Market signals & Regulations

AND THAT’S OKAY!!!
More information available at:

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