

"Knowledge for Life"

8. Do You Know Your Consumer? Differences in Consumer and Producer Views on Animal Welfare in the Beef Industry

Melissa McKendree

Melissa is a second year PhD student in Agricultural Economics. She received her B.S in Food and Resource Economics from the University of Florida in 2011 and a M.S. in Agricultural Economics from Purdue University in 2013. Melissa's research is focused on numerous issues related to the livestock industries. She is interested in studying issues spanning the supply chain from consumer preferences through producers. Melissa's current areas of concentration include general livestock economics, food demand, and supply chain relationships, as well as agribusiness marketing and management.

Glynn Tonsor

Glynn T. Tonsor joined the Dept. of Agricultural Economics at Kansas State University in March 2010 as an Assistant Professor. He obtained his Ph.D. from KSU in 2006 and was an Assistant Professor in the Dept. of Agricultural, Food, and Resource Economics at Michigan State University from May 2006 to March 2010. Glynn's current efforts are primarily devoted to a range of integrated research and extension activities with particular focus on the cattle/beef and swine/pork industries. He has broad interests and experiences which span issues throughout the meat supply chain. Through both applied research and first-hand knowledge with livestock production, Glynn has expertise in topics including animal identification and traceability, animal welfare and handling, food safety, and price risk management and analysis.

Abstract/Summary

The U.S. livestock industry is increasingly faced with mounting pressure to adjust practices in response to societal concerns. This session will compare the results from a 2013 consumer survey and a 2014 cow-calf producer survey regarding beef cattle welfare. Come discuss the implications of similarities and differences in consumer and producer views on practical and effective ways to improve beef cattle welfare moving forward.

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Topics studied

	Cattle dehorned/disbudded with pain control
	Cattle older than three months of age castrated with pain control
	Farms/ranches with consistent training program for employees focusing on principles of animal care and handling
	Farms/ranches with third party verification that appropriate animal care and facilities are provided
	Cattle provided access to fresh, clean feed and water
	Cattle provided antibiotics to prevent illness and disease
	Cattle provided shade, windbreaks, and ventilation
	Farms/ranches where injured or sick animals are treated or euthanized promptly
	Farms/ranches with a herd health plan, developed with the help of a veterinarian
	Farms/ranches with less than 100 beef cows
	Farms/ranches providing appropriate overall care for the well-being of their cattle
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What percentage chance do you believe the typical U.S. beef product comes from:

	0%-25%	26%-50%	51%-75%	76%-100%	Don't Know
Cattle dehorned/disbudded with pain control					
Cattle older than three months of age castrated with pain control					
Farms/ranches with consistent training program for employees focusing on principles of animal care and handling					
Farms/ranches with third party verification that appropriate animal care and facilities are provided					
Cattle provided access to fresh, clean feed and water					
Cattle provided antibiotics to prevent illness and disease					
Cattle provided shade, windbreaks, and ventilation					
Farms/ranches where injured or sick animals are treated or euthanized promptly					
Farms/ranches with a herd health plan , developed with the help of a veterinarian					
Farms/ranches with less than 100 beef cows					
Farms/ranches providing appropriate overall care for the well-being of their cattle					

What percentage chance do you believe the typical U.S. beef product comes from:

Producer average for Don't Know: 15% VS

U.S. Public average for Don't Know: 31%

	Don't Know		1.0
	Cow-Calf Producers U.S. Public		
Cattle dehorned/disbudded with pain control	22%	41%	
Cattle older than three months of age castrated with pain control	19%	42%	
Farms/ranches with consistent training program for employees focusing on principles of animal care and handling	19%	30%	
Farms/ranches with third party verification that appropriate animal care and facilities are provided	25%	31%	
Cattle provided access to fresh, clean feed and water	7%	24%	
Cattle provided antibiotics to prevent illness and disease	8%	27%	
Cattle provided shade, windbreaks, and ventilation	10%	30%	
Farms/ranches where injured or sick animals are treated or euthanized promptly	14%	33%	
Farms/ranches with a herd health plan , developed with the help of a veterinarian	13%	30%	
Farms/ranches with less than 100 beef cows	13%	30%	
Farms/ranches providing appropriate overall care for the well- being of their cattle	8%	25%	

What percentage chance do you believe the typical U.S. beef product comes from:

	Cow-Calf Producers	U.S. Public	Difference
Cattle provided access to fresh, clean feed and water	74%	44%	30%
Cattle provided antibiotics to prevent illness and disease	59%	44%	15%
Cattle provided shade, windbreaks, and ventilation	62%	32%	30%
Farms/ranches where injured or sick animals are treated or euthanized promptly	58%	31%	27%
Farms/ranches with a herd health plan , developed with the help of a veterinarian	50%	32%	18%
Farms/ranches with less than 100 beef cows	50%	24%	26%
Farms/ranches providing appropriate overall care for the well- being of their cattle	73%	39%	34%

Areas of Divergence

Can be viewed as both opportunities and/or threats

What percentage chance do you believe the typical U.S. beef product comes from:

	Cond Wtd Average		
	Cow-Calf Producers U.S. Public		
Cattle dehorned/disbudded with pain control	25%	24%	
Cattle older than three months of age castrated with pain control	24%	24%	
Farms/ranches with consistent training program for employees focusing on principles of animal care and handling	35%	31%	
Farms/ranches with third party verification that appropriate animal care and facilities are provided	23%	31%	

General Areas of Agreement

Effective and Practical Actions to Improve Welfare of Beef Cattle in the U.S.

Provide access to fresh , clean feed and water appropriate for the animal's physiological state.	FCW
Provide adequate comfort through the use of shade, windbreaks, and ventilation assuring clean, dry, sanitary environmental conditions for cattle.	swv
Promptly treat or euthanize all injured or sick animals.	PTE
Develop a herd health plan with the help of a veterinarian .	VET
Consistent training program for owner and employees focusing on principles of animal care and handling.	СТР
Restrict use of antibiotics to only disease treatment.	ADT
Castrate male calves either within the first three months of age or with pain control.	СЗМ
Dehorn/disbud calves either before horn tissue adheres to skull or with pain control.	DDC
Third party verification that appropriate animal care and facilities are provided on farm.	TPV

There are many different options being discussed for the U.S. beef industry to adopt in response to growing animal welfare discussions. Please consider the following <u>six sets</u> of actions and your ranking of the action which would be <u>most effective</u> and <u>least effective</u> to improve welfare of beef cattle in the U.S. (Check only one issue as the most and only one as the least effective)

Most Effective	Action	Least Effective
	Provide access to fresh, clean feed and water appropriate for the animal's physiological state (appropriate energy for milk production, pregnancy, or weight gain).	
	Provide adequate comfort through the use of shade, windbreaks, and ventilation assuring clean, dry, sanitary environmental conditions (housing, pasture, or dry lots) for cattle.	
	Restrict use of antibiotics to only disease treatment.	
	Promptly treat or euthanize all injured or sick animals.	
	Dehorn (remove horns)/disbud calves either before horn tissue adheres to skull or with pain control.	
	Castrate male calves either within the first three months of age or with pain control.	

Most Effective and Practical Actions to Improve Welfare of Beef Cattle in the U.S.

- Provide access to fresh, clean feed and water appropriate for the animal's physiological state.
- Provide adequate comfort through the use of **shade**, **windbreaks**, **and ventilation** assuring clean, dry, sanitary environmental conditions for cattle.
- · Promptly treat or euthanize all injured or sick animals.

We asked cow-calf producers.....

WHICH OF THE FOLLOWING ACTIONS/PRACTICES ARE CURRENTLY IMPLEMENTED ON YOUR OPERATION?





Which of the following actions/practices are currently implemented on your operation?

Actions/Practice	Freq. out of 686	Percent (think of as lower bound)
Provide access to fresh, clean feed and water appropriate for the animal's physiological state (appropriate energy for milk production, pregnancy, or weight gain).	600	87%
Provide adequate comfort through the use of shade, windbreaks, and ventilation assuring clean, dry, sanitary environmental conditions (housing, pasture, or dry lots) for cattle.	573	84%
Promptly treat or euthanize all injured or sick animals	551	80%
Owner/operator assessment that appropriate animal care and facilities are provided on farm with animals monitored daily for illness and injury.	526	77%
Plan the timing of transport to minimize traveling and waiting time for the cattle.	527	77%
Properly move cattle that are unable to walk on their own, do not try to market cattle if there is a reasonable chance they will not be able to walk on their own, and never drag cattle.	524	76%

Which of the following actions/practices are currently implemented on your operation?

Actions/Practice	Freq. out of 686	Percent (think of as lower bound)
Provide access to fresh, clean feed and water appropriate for the animal's physiological state (appropriate energy for milk production, pregnancy, or weight gain).	600	87%
Provide adequate comfort through the use of shade, windbreaks, and ventilation assuring clean, dry, sanitary environmental conditions (housing, pasture, or dry lots) for cattle.	573	84%
Promptly treat or euthanize all injured or sick animals	551	80%
Owner/operator assessment that appropriate animal care and facilities are provided on farm with animals monitored daily for illness and injury.	526	77%
Plan the timing of transport to minimize traveling and waiting time for the cattle.	527	77%
Properly move cattle that are unable to walk on their own, do not try to market cattle if there is a reasonable chance they will not be able to walk on their own, and never drag cattle.	524	76%

Which of the following actions/practices are currently implemented on your operation?

Actions/Practice		Percent (think of as lower bound)
Handlers strive to move cattle at a comfortable pace, refrain from using loud noises, and use an electric prod on less than 10% of cattle. Sticks and flags can be used as extensions of the handler's arm but must not be used to hit cattle.	493	72%
Restrict use of antibiotics to only disease treatment	454	66%
Develop a herd health plan with the help of a veterinarian.	398	58%
Castrate male calves either within the first three months of age or with pain control.	376	55%
Consistent training program for owner and employees focusing on principles of animal care and handling.	269	39%
Dehorn (remove horns)/disbud calves either before horn tissue adheres to skull or with pain control.	224	33%
Third party verification that appropriate animal care and facilities are provided on farm.	64	9%
None	10	1%

VOTE VS BUY DEBATE



U.S. Public Response

Would you:	Yes	No	Don't know
Vote to limit antibiotic use for cattle to only disease treatment			
Pay premium for beef from cattle provided antibiotics only for disease treatment			
Vote to ban cattle castration without use of pain control			
Pay premium for beef from cattle castrated with pain control			
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U.S. Public Response

Would you:	Yes	No	Don't know
Vote to limit antibiotic use for cattle to only disease treatment	71%	13%	16%
Pay premium for beef from cattle provided antibiotics only for disease treatment	48%	31%	21%

Difference of 23 percentage points

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12.00

K.STATE

U.S. Public Response

Would you:	Yes	No	Don't know
Difference of 30 percentage	points		
Vote to ban cattle castration without use of pain control	66%	15%	19%
Pay premium for beef from cattle castrated with pain control	36%	37%	27%
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Producer Response

What percentage of the U.S. public do you believe would:	Cond. Wtd. Average	Don't Know
Vote to limit antibiotic use for cattle to only disease treatment		
Pay a premium for beef from cattle with limited antibiotic use		
Vote to ban cattle castration without use of pain control		
Pay a premium for beef from cattle castrated with pain control		
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U.S. Public Survey

Demographic Variable	Percent/ Average
Household Size	
Average Number of Adults	2.1665
Average Number of Children	0.592
Gender	
Male	44.7%
Age	
Average Age (mean)	46.7
Education Level	
Did not graduate from high school	2.7%
Graduated from high school	39.4%
Associate's or Trade Degree earned	24.7%
Bachelor's (B.S. or B.A.) College Degree earned	23.8%
Graduate or Advanced College Degree (M.S., Ph.D., Law School) earned	9.5%

Demographic Variable	Percent/ Average
Income	0
Less than \$25,000	22.5%
\$25,000-\$49,999	32.9%
\$50,000-\$74,999	21.6%
\$75,000-\$99,999	11.2%
\$100,000-\$124,999	5.5%
\$125,000-\$149,999	3.0%
\$150,000-\$174,999	1.8%
\$175,000 or more	1.7%
Race	
White or Caucasian	75.8%
Black or African American	11.6%
Asian or Pacific Islander	5.3%
Mexican or Latino	5.2%
American Indian	0.7%
Other	1.5%
Geographic Region	
South	34.7%
West	24.4%
Midwest	23.4%
Northeast	17.6%
Weekly food expenditure	140.799

Producer Demographics

Demographic Variable	Percent/ Average
Gender	Ŭ
Male	89%
Age	
Average Age (mean)	42
Education Level	
Did not answer	6%
Did not graduate from high school	3%
Graduated from high school	36%
Associate's or Trade Degree earned	14%
Bachelor's (B.S. or B.A.) College	31%
Degree earned	31/0
Graduate or Advanced College	
Degree (M.S., Ph.D., Law School)	11%
earned	
Income	
Did not answer	10%
Less than \$25,000	4%
\$25,000-\$49,999	18%
\$50,000-\$74,999	18%
\$75,000-\$99,999	15%
\$100,000-\$124,999	12%
\$125,000 or more	23%

Demographic Variable	Percent/ Average
Portion of household income from beef cattle operation	
Did not answer	3%
Less than 25%	34%
26% to 50%	29%
51% to 75%	15%
Over 75%	18%
Years raising beef cattle	
Less than 10 years	8%
11-20 years	11%
21-30 years	13%
Over 30 years	67%
Didn't answer	1%
Years expected for operation to be raising beef cattle	
Less than 10 years	23%
11-20 years	29%
21-30 years	14%
Over 30 years	32%
Didn't answer	2%

Farm Demographics		Farm Demographic Variable Sold in 2012: Calves	Percent/ average 103.362
	Percent/	Yearlings Finished cattle	88.0452 68.5598
Farm Demographic Variable	average	Beef cows on operation January 1st, 2013	08.3398
Geographic Region		Did not answer	3%
South	34%	None	8%
West	17%	1-49 cows	19%
Midwest	37%	50-99 cows	20%
Northeast	1%	100-199 cows	25%
	170	200-299 cows	9%
Claims used to most frequently market cattle	0004	300-499 cows	9%
None (Conventional production)	30%	500-999 cows	5%
Age and source verified (ASV/SAV)	20%	1000 or more cows	2%
Natural (no hormones/no antibiotics)	14%	Cattle Marketing Outlets Did not answer	9%
Organic	1%	Local auction	59%
Humanely raised	28%	Direct to packing plant/processor	4%
NHTC (Non-hormone treated)	13%	Video/Internet auction	6%
, , ,	1070	Direct to consumers	3%
Pre-Conditioned (weaning or vaccination	45%	Direct to background/stocker operation	4%
claims)		Direct to feedlot operation	8%
Other	3%	Other	7%