

Economics of Care

Economist explains supply and demand aspects of animal welfare, including pain management.

by Kasey Brown, associate editor

nimal welfare is now a consumer concern, and therefore will affect both supply and demand. The lone economist in

the speaker lineup at the 4th International Symposium on Beef Cattle Welfare, Glynn Tonsor explained a tweet from the Center for Food Integrity in economic terms.

"Science tells us if we can do something. This is the supply side of it. Society tells us if we should do it. This is the demand," the Kansas State University (K-State) research and extension agricultural economist noted.

The current situation is that animal welfare is not a top-of-mind issue for the typical U.S. meat, milk and

egg consumer. He said this is supported by direct survey assessment, and it is consistent with limited animal welfare labels on retail products. If it were a top priority, there would be more consumer willingness-to-pay behavior, and increased product differentiation by suppliers.

The dissention is when there is forced change through voting ballots, though the "vote-buy" disconnect is not unique to animal welfare. "The debate is being carried out more in media, ballots and legislative arenas than the retail shelf," Tonsor added.

Public concerns are not unique to any species. Trust in the source of animal welfare information, whether from ranchers or the Humane Society of the United States (HSUS), is the key driver of ballot voting. Online videos, and their timing, influence perceptions, but not the willingness to pay. In states where ballot legislation has gone through, Tonsor said residents are insensitive to timetables. If agriculture is in on the discussion, it can at least get a longer timeline to implement the changes.

However, the public does not know about retail price impacts. Media attention to animal welfare influences meat demand. Beef demand is not impacted, but total meat expenditures have decreased.

He listed some economic realities moving

forward. The public will give license to only a few tools in our toolbox. The vote-buy disconnect will persist; these short-term

"unfunded mandates" will continue.

Public perceptions frequently drive change, and the trend of pressure coming from sources "outside the retail shelf" is also likely to stay.

"Get used to being frustrated, but that doesn't mean we should quit trying. It just means we have to be judicial on which issues we fight or which we put up with," he added. These realities are not exclusive to animal welfare, but could be applied to food safety or environmental issues.



► K-State's Glynn Tonsor said public perceptions frequently drive change, and the trend of pressure coming from sources "outside the retail shelf" is likely to stay.

Can analgesics pay for themselves?

Pain management for livestock is the right thing to do, but it can have other benefits, explained Hans Coetzee, associate professor at Iowa State University's (ISU's) College of Veterinary Medicine. Packers have called for

routine analgesic, or painrelieving drug, use in other species, and it could be only a matter of time before it is required in beef cattle.

With ever-increasing input costs, analgesic use may become the price of doing business. Coetzee highlighted some economic benefits available to producers for using analgesics. For example, analgesic use gives access to more markets. He noted that the European Union has proposed legislation

requiring analgesic use for all livestock.

The public believes it is the right thing to do, and it opens more niche marketing with welfare labeling. Analgesic use could reduce pressure from animal rights groups and possible legislative scrutiny, so use could be a proactive avenue of action. This proactive approach would maintain consumer



confidence in beef production practices. Coetzee added that analgesic use has health and performance benefits.

While the body of research studying performance impacts of analgesic use is rare in published literature, Coetzee shared a systemic review's findings. Average daily gain was shown to be higher in cattle that received pain management during castration and dehorning. Coetzee emphasized that is an area that needs more research.

There are about six types of analgesics, though none are approved for use in cattle. This is a barrier for cattlemen who want to give pain management to their cattle, because they must use the drugs extra-label under the supervision of their veterinarian. He gave an anecdote from a producer who says his calves look visibly better after using meloxicam at dehorning.

The withdrawal time of meloxicam is a month, so using it for dehorning and castration poses no issue. There is more concern in using it in lame cattle in the feedlot, he explained.

In a study that looked at oral meloxicam use before surgical castration on high-risk, far-from-home sale-barn calves, Coetzee reported that the calves given meloxicam had

a 25% pull rate in the feedyard compared to a 45% pull rate in the control group. Meloxicam also reduced the number of treatments for bovine respiratory disease (BRD) in the castrated calves, but not the steers. Results may be due to the prolonged anti-inflammatory effect of meloxicam after castration, he added.

Another study showed that analgesic use prior to castration or dehorning and transportation suppressed the cortisol response and helped calves maintain their

immune function. Coetzee explained that if analgesics reduce the stress associated with long-distance transportation, this may reduce the incidence of BRD on arrival at the feedlot, and reduce the need for preventative antimicrobials or make vaccinations/ antimicrobials more effective.



► Hans Coetzee of ISU's College of Veterinary Medicine, predicted analgesic use may become the price of doing business.