

Left: Producers should be aware of how long a product was warehoused before they buy and how long it may sit on their farm or ranch before it's fed, said Jeff Heldt of Micronutrients Intellibond.



40,000 international units (IU) of vitamin A each day, and most mineral on the shelves today provides more than that.

“Again, more is not always better,” Heldt said, noting the safety margins help compensate for storage losses over time.

Environmental factors like water and heat and light, from manufacturing to storage, pose a threat to vitamin efficacy.

“For example, potency loss can double for every 25° increase in temperature,” Heldt said.

Mineral source plays a role in the amount of vitamins delivered from the mix, too.

Vitamins that are organically sourced offer more stability, compared to those from oxide or sulfate trace minerals, he said. Yet storage time may be most critical.

“There could be some of those products that we’ve got in our warehouses that don’t get fed for three or four months,” he said. “Is that realistic?”

Producers should be aware of how long a product was warehoused before they buy and how long it may sit on their farm or ranch before it’s fed, Heldt reiterated. First, evaluate quality and vitamin quantity of their forage.

“I want you to go home and as you’re driving back, think about what you’re doing and why you’re doing it,” he said in closing. “Make sure you’re doing the right thing.”

Editor’s note: Jera Pipkin is an intern with producer communications for Certified Angus Beef LLC. Heldt made his comments at the August 2018 Feeding Quality Forum hosted by CAB in Sioux City, Iowa. The event was cosponsored by Where Food Comes From, Roto-Mix, *Feedlot Magazine*, Tyson Foods, Intellibond, Zoetis and Diamond V. For more information, including meeting proceedings, visit [www.feedingqualityforum.com](http://www.feedingqualityforum.com).

# VITAMINS & MINERALS

## Vitamins are part of doing the right thing.

by Jera Pipkin for Certified Angus Beef LLC

Like pieces of a puzzle, vitamins are essential in keeping cattle healthy year-round. Price spikes in the last year, however, have producers taking another look at how to fit savings into concerns about source and efficacy over time.

Jeff Heldt, with Micronutrients Intellibond, explored cost-effective vitamin and mineral strategies at the *Certified Angus Beef*® (CAB®) brand’s Feeding Quality Forum this summer in Sioux City, Iowa.

“Obviously, we all want to take care of our animals and do the right thing,” he said. “But also, we need to think about our competitive advantage. Where can I save some dollars, or maybe where can I spend a few more dollars to make sure I’m doing the right thing?”

Heldt’s comments were against a backdrop of recent shortages. Vitamin A prices skyrocketed 10-fold last fall after fire damaged

a German factory that made precursors of A and E. The market finally returned to normal, after much study of alternatives.

He drew a parallel to the industry’s rethinking phosphate mineral requirements after the ingredient price spiked about 10 years ago.

“Lo and behold, that 12% phosphorous mineral I’m feeding my cows got really expensive, and I decided I better do something different,” Heldt said. “Now what’s the common phosphorous level in cow mineral supplements — 4% to 6% maybe — and we seem to have gotten by just fine.”

The extra amount was seen as a safety factor, but a price spike drove home the point “more is not always better.”

That’s true with vitamins as well, partly because the fat-soluble

ones have a three- to six-month storage buffer in the liver, and the others, C and the B complex, cannot be stored in the body at all, Heldt explained.

Vitamin A is the most critical for cow-calf operations, with its connections to reproduction and immunity.

Particularly since the price spike, producers want to know what vitamins their feedstuffs are actually delivering and how to balance rations without unnecessary added cost, he said.

The National Research Council publishes recommendations, but diets of “good green-growing feeds” generally provide adequate vitamin A and E, Heldt noted, as does a ration of at least one-third corn silage and the rest grain. “If we’re just feeding all grain, we’re going to be short on the requirements.”

Vitamins are often part of a free-choice mineral supplement or premix where reading tags gives an accurate measure of the initial levels. Cattle need

