



Beef MOOving Minutes

March 2018

Megan Van Emon, Extension Beef Cattle Specialist

RIISING COSTS OF VITAMINS A AND E

As many may have noticed, cost of vitamins A and E have increased over the past few months, and subsequently, mineral supplements that include vitamins A and E. The rising costs were mainly due to a fire on October 31, 2017 at the BASF plant in Germany, which produces citral, a precursor in manufacturing vitamin A and E products. The BASF vitamin A and E manufacturing plants were shut down for scheduled, routine maintenance at the time of the fire and will reopen once the citral plant begins production again and other production intermediates become available. Currently, the plant is working on repairs and information about those repairs can be found on the BASF website (<https://nutrition.basf.com/en/Citral-plant.html>). The earliest the citral plant will be operational is the end of March, barring any delays in materials, inspections, and other issues. Downstream products, such as vitamin A and E, will become available 6 to 12 weeks after the citral plant resumes production. However, shipment and delivery of vitamin A and E may take up to several months.

Vitamins A and E are fat soluble vitamins and are required daily for beef cattle production. Vitamin A does not occur naturally in plant material, but precursors, such as carotenes and carotenoids do occur in plants. The conversion of carotenes to vitamin A primarily occurs in the wall of the small intestine. Pregnant beef heifers and cows require 1,273 IU/lb of dry feed and lactating cows and breeding bulls require 1,773 IU/of dry feed to meet maintenance requirements. The majority of vitamin A is stored in the liver, with the remainder stored in fat and other organs. Vitamin A deficiency symptoms include night blindness, lowered fertility, abortions, and lameness. Vitamin E is present in feeds as tocopherol, with alpha-tocopherol having the greatest biological value. Vitamin E requirements for reproducing beef cattle are not as clear as vitamin A. For young calves, the vitamin E requirement is between 7 and 27 IU/lb of dry feed and between 50 and 100 IU/head/day for older growing and finishing cattle. Vitamin E's main role is as an antioxidant. Vitamin E deficiency symptoms include impaired reproduction and white muscle disease. Vitamins A and E are consumed in the diet and are also available as an injectable.

Montana Nutrition Conference

Each year Montana State University Extension and the Montana Feed Association host the Montana Nutrition Conference and Livestock Forum. Dr. Rachel Endecott has been, for the past several years, the conference coordinator and this year she passed the reins on to me. I want to thank Dr. Endecott for her support and developing this conference into such an excellent event.

We hope you will join us for this excellent conference. You can register online at: <https://www.montana.edu/nutrition/>. A block of rooms at the GranTree has also been reserved for the event under the Montana Nutrition Conference and Livestock Forum.

Questions for Megan? 406-874-8286 or megan.vanemon@montana.edu



2018 Montana Nutrition Conference and Livestock Forum

April 17th and 18th, 2018
GranTree Inn • Bozeman, MT

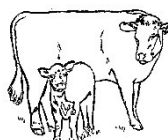
Drought Resource Management

TUESDAY, APRIL 17

- 11:00 Registration
- 12:30 Welcome
Megan Van Emon, John Gates, Pat Hatfield
- 1:00 **2018 Weather Outlook**
Brian Bledsoe, Chief Meteorologist, KKTU
- 1:50 **Madison Food Park Development**
Todd Hanson, Norsman Group Consulting
- 2:20 **Alternative Forages and Economics**
Dr. Emily Meccage, Extension Forage Specialist,
Department of Animal and Range Sciences,
Montana State University
- 3:00 Break
- 3:15 **Forage Sampling and Analysis**
Dr. Megan Van Emon, Extension Beef Cattle
Specialist, Department of Animal and Range
Sciences, Montana State University
- 3:45 **Beef Cattle Supplementation Strategies**
Darrin Boss, Superintendent, Northern Agriculture
Research Center, Montana State University
- 5:15 Social
- 6:30 Dinner and Program
Scholarship presentations
Evening speaker: **Amberley Snyder – There is No
Future in Giving Up**

WEDNESDAY, APRIL 18

- 7:00 Breakfast, Grad Student Poster Judging
- 8:00 **Water Quality and Geological Indicators**
Trey Patterson, CEO/President of Padlock Ranch
- 8:50 **Post-Fire Grazing Management**
Lance Vermeire, USDA-ARS Fort Keogh
- 9:40 Break
- 10:00 **Cost of Cow Production and Insurance Programs
During Drought**
Bridger Feuz, Livestock Marketing Specialist,
University of Wyoming
- 11:00 **Forage Storage Techniques and Impacts on Quality**
Danielle Peterson, Forage Research Lab Manager,
Department of Animal and Range Sciences,
Montana State University
- 11:30 Presentation of Grad Student Poster Awards
Pat Hatfield
- 11:45 Conference Wrap-up



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Livestock Forum**