

Trace Mineral Needs of Modern Beef and Dairy Cattle

Stephanie L. Hansen

*Department of Animal Science
Iowa State University
Ames, IA*

Summary

Genetic selection, growth promoting technologies and improved animal husbandry practices have led to cattle that have tremendous capacity to produce meat and milk. Many of the trace mineral recommendations are based on data decades old, conducted with cattle of much lower production potential. This may explain why some nutritionists ignore recommendations and feed two to three times as much trace mineral. We will consider Zn and Cu as examples of why this may, or may not be, a good practice. Trace minerals are involved in nearly every biological process in the body and optimizing trace mineral requirements may support cattle immune function, recovery from stressors such as transit, and help maintain a positive eating experience for the consumer by maintaining or improving meat quality. Examples of each will be discussed.