

ANR-0148

# Forage Testing for Beef Cattle

ANR-0148-Table 3

**Table 3. Mineral Requirements and Maximum Tolerable Concentrations (Dry Matter Basis).**

Mineral	Unit	Requirement			Maximum Tolerable Concentration
		Growing and Finishing Cattle	Cows		
			Gestating	Early Lactation	
Chromium	mg/kg, ppm	-	-	-	1000.00
Cobalt	mg/kg, ppm	0.15	0.15	0.15	25.00
Copper	mg/kg, ppm	10.00	10.00	10.00	40.00 <sup>a</sup>
Iodine	mg/kg, ppm	0.50	0.50	0.50	50.00
Iron	mg/kg, ppm	50.00	50.00	50.00	500.00
Magnesium	%	0.10	0.12	0.20	0.40
Molybdenum	mg/kg, ppm	-	-	-	5.00
Nickel	mg/kg, ppm	-	-	-	50.00
Potassium	%	0.60	0.60	0.70	2.00
Selenium	mg/kg, ppm	0.10	0.10	0.10	5.00
Sodium	%	0.06–0.08	0.06–0.08	0.10	-
Sulfur	%	0.15	0.15	0.15	0.30–0.50 <sup>a</sup>
Zinc	mg/kg, ppm	30.00	30.00	30.00	500.00

*Calcium and phosphorus requirements are specific for class and performance of the animal.*

<sup>a</sup>Source: NRC. (2016). Nutrition requirements of beef cattle (8<sup>th</sup> Ed). *National Academy Press*, Washington, D.C. Dependent on animal age, diet type, and dietary antagonists.