

# Vitamin and Trace Mineral Supplementation<sup>1</sup> (Parent Stock Diets)



Nutrient	SOURCE	UNIT	0 - 42 Days	43 - 202 Days	>203 Days	% Nutrient Recovery <sup>2</sup>
Vitamin A	Vitamin A Acetate (stabilized)	IU/kg	12,000	9,600	12,000	84
Vitamin D <sub>3</sub>	Vitamin D <sub>3</sub> , 25-Hydroxy Vitamin D <sub>3</sub>	IU/kg	5,000	4,800	5,000	84
Vitamin E	dl- $\alpha$ Tocopherol Acetate, d- $\alpha$ Tocopherol Acetate	IU/kg	100	60	100	84
K <sub>3</sub> (Menadione)	MSBC <sup>3</sup> , MPB <sup>3</sup> , MNB <sup>3</sup>	mg/kg	4	3	5	56
Thiamine	Thiamine Mononitrate	mg/kg	4.5	2	4.5	84
Riboflavin	Riboflavin	mg/kg	15	12	18	84
Pantothenic Acid	D-calcium Pantothenic Acid	mg/kg	28	23	30	84
Niacin	Nicotinic Acid, Niacinamide	mg/kg	110	85	110	84
Pyridoxine	Pyridoxine Hydrochloride	mg/kg	5	3.5	5	84
Biotin	Biotin	ug/kg	300	170	500	84
Folic Acid	Folic Acid	mg/kg	3.5	2.5	4.5	77
Vitamin B <sub>12</sub>	Cyanocobalamin	ug/kg	40	20	40	74
Choline	Choline Chloride <sup>4</sup>	mg/kg	1,200	600	1,200	-
Manganese	Manganous Oxide, Manganous Sulfate, Manganous Amino-Acid Complex/Chelate, Manganous Proteinate	mg/kg	100	90	100	-
Iron	Ferrous Sulfate, Iron Amino-Acid Complex/Chelate, Iron Proteinate	mg/kg	60	40	60	-
Copper	Cupric Sulfate, Copper Amino-Acid Complex/Chelate, Copper Proteinate	mg/kg	15	10	15	-
Iodine	Calcium Iodate, Ethylene Diamine Dihydriodide (EDDI)	mg/kg	3	2	3	-
Zinc	Zinc Oxide, Zinc Sulfate, Zinc Amino-Acid Complex/Chelate, Zinc Proteinate	mg/kg	100	90	100	-
Selenium	Sodium Selenite, Selenomethionine, Selenium Proteinate	mg/kg	0.3	0.3	0.3	-

- Nutrient amounts listed as minimum amount to add to complete feed regardless of method of heat or chemical processing of feed.
- Minimum allowable nutrient recovery analyzed in complete feed subsequent heat or chemical processing. If nutrient recovery is lower than that specified due to excessive heat or chemical processing of feed, the nutrient amount added to feed should be given consideration to be increased to compensate for that lower recovery.
- Menadione Sodium Bisulfite Complex (MSBC), Menadione Dimethylpyrimidinol Bisulfate (MPB), Menadione Nicotinamide Bisulfite (MNB). MNB is preferred as it is the most stable of the vitamin K sources.
- To improve vitamin stability, Choline Chloride should not be added to a vitamin trace-mineral premix. It should be added directly to the complete feed according to a "Choline" specification.
- Sources of vitamins and trace minerals not listed are not excluded but should be considered on the basis of quality, stability and bioavailability.
- The information contained herein is a guideline only and may not reflect current feed regulations in all geographic regions. Please consult local feed regulations when considering applicability.