

NUTRITIONAL REFERENCE

Courtesy of NUTRITIONAL SERVICES LLC

NUTRIENT



WHICH FUNCTIONS DOES IT ASSIST WITH?

WHAT DEFICIENCY CAN LOOK LIKE

VITAMIN A	◆	◆	<ul style="list-style-type: none"> Vision Growth Reproduction 	<ul style="list-style-type: none"> Skin/Hair Coat Immunity 	<ul style="list-style-type: none"> Weight loss Vision problems 	<ul style="list-style-type: none"> Dull hair coat
VITAMIN D3	◆	◆	<ul style="list-style-type: none"> Nutrient absorption 	<ul style="list-style-type: none"> Bone/teeth integrity 	<ul style="list-style-type: none"> Weak bone 	
VITAMIN E	◆	◆	<ul style="list-style-type: none"> Immune function Cell respiration 	<ul style="list-style-type: none"> Interacts with Vitamin A & Selenium 	<ul style="list-style-type: none"> Poor muscling 	<ul style="list-style-type: none"> Slowed healing
MAGNESIUM	◆	◆	<ul style="list-style-type: none"> Muscle contraction Enzyme activator 	<ul style="list-style-type: none"> Skeletal system 	<ul style="list-style-type: none"> Uncommon except for in lactating mares 	<ul style="list-style-type: none"> Muscle spasms
RIBOFLAVIN (B2)	◆	◆	<ul style="list-style-type: none"> Metabolism 	<ul style="list-style-type: none"> Energy production 	<ul style="list-style-type: none"> Rarely occurring 	
PANTOTHENIC ACID	◆	◆	<ul style="list-style-type: none"> Metabolism of carbohydrates, amino acids and fats 		<ul style="list-style-type: none"> Rarely occurring 	
VITAMIN B 12	◆	◆	<ul style="list-style-type: none"> Synthesis of red blood cells 	<ul style="list-style-type: none"> Digestion Energy 	<ul style="list-style-type: none"> Rarely occurring 	
THIAMINE (B1)	◆	◆	<ul style="list-style-type: none"> Metabolism 	<ul style="list-style-type: none"> Nervous system function 	<ul style="list-style-type: none"> Loss of coordination (uncommon) 	
CHOLINE CHLORIDE	◆	◆	<ul style="list-style-type: none"> Cell membrane structure 	<ul style="list-style-type: none"> Synthesis of Folic Acid and Vitamin B12 	<ul style="list-style-type: none"> Rarely occurring 	
MANGANESE	◆	◆	<ul style="list-style-type: none"> Bone and cartilage synthesis Enzyme systems 	<ul style="list-style-type: none"> Reproduction Immune response 	<ul style="list-style-type: none"> Abnormal bone and joint development Impaired ability to make or repair joint cartilage 	<ul style="list-style-type: none"> Abnormalities in skin, hair and hooves Reproductive challenges
ZINC	◆	◆	<ul style="list-style-type: none"> Protein synthesis Vitamin A utilization Epithelial tissue integrity 	<ul style="list-style-type: none"> Immune system Reproduction 	<ul style="list-style-type: none"> Abnormal skin and hooves Bone and joint problems 	<ul style="list-style-type: none"> Poor wound healing Fertility problems
COBALT	◆	◆	<ul style="list-style-type: none"> Fiber fermentation by bacteria in the cecum 		<ul style="list-style-type: none"> Low Vitamin B12 levels Poor growth 	<ul style="list-style-type: none"> Low body condition
COPPER	◆	◆	<ul style="list-style-type: none"> Collagen synthesis and maintenance Enzyme function 	<ul style="list-style-type: none"> Red blood cell maturation Reproduction Immune response 	<ul style="list-style-type: none"> Bone and joint disease Tendon and ligament problems 	<ul style="list-style-type: none"> Poor coat color Early embryonic losses
IODINE	◆	◆	<ul style="list-style-type: none"> Synthesis of thyroid hormones to regulate metabolism 	<ul style="list-style-type: none"> Thermoregulation 	<ul style="list-style-type: none"> Goiter Dull/loss of hair 	<ul style="list-style-type: none"> Dry, scaly skin
IRON	◆	◆	<ul style="list-style-type: none"> Hemoglobin Oxygen transport 	<ul style="list-style-type: none"> Myoglobin Interacts with various enzymes 	<ul style="list-style-type: none"> Rarely occurring Impaired performance 	<ul style="list-style-type: none"> Anemia
SELENIUM	◆	◆	<ul style="list-style-type: none"> Component of glutathione peroxidase 	<ul style="list-style-type: none"> Immune response 	<ul style="list-style-type: none"> Muscular cramping Poor stress tolerance 	<ul style="list-style-type: none"> Impaired immunity Subpar performance
BIOTIN	◆*		<ul style="list-style-type: none"> Co-enzyme associated with metabolism 	<ul style="list-style-type: none"> Hoof structure 	<ul style="list-style-type: none"> Thin, weak hoofs 	
CRUDE PROTEIN		◆	<ul style="list-style-type: none"> Provides amino acids for bone, muscle and soft tissue growth and repair 		<ul style="list-style-type: none"> Decreased growth and development Reduced appetite 	<ul style="list-style-type: none"> Weight loss Poor hair coat
CRUDE FAT		◆	<ul style="list-style-type: none"> Longer lasting energy source 	<ul style="list-style-type: none"> Provides volatile fatty acids 	<ul style="list-style-type: none"> True deficiency rarely occurs 	
CRUDE FIBER		◆	<ul style="list-style-type: none"> Main energy source for daily function 	<ul style="list-style-type: none"> Digestive health 	<ul style="list-style-type: none"> Dehydration Colic 	<ul style="list-style-type: none"> Laminitis
CALCIUM		◆	<ul style="list-style-type: none"> Bone structure and repair Cellular function 	<ul style="list-style-type: none"> Interacts with phosphorus 	<ul style="list-style-type: none"> Bone abnormalities/weakness 	<ul style="list-style-type: none"> Weight loss
PHOSPHORUS		◆	<ul style="list-style-type: none"> Bone growth & maintenance Energy metabolism 	<ul style="list-style-type: none"> Cellular functions Important in pregnant/lactating mares 	<ul style="list-style-type: none"> Bone weakness 	<ul style="list-style-type: none"> Possible lameness
POTASSIUM		◆	<ul style="list-style-type: none"> Element in electrolytes 	<ul style="list-style-type: none"> Helps maintain body pH 	<ul style="list-style-type: none"> Fatigue Muscle weakness 	<ul style="list-style-type: none"> Exercise intolerance Decreased feed/water consumption
SALT		◆	<ul style="list-style-type: none"> Regulation of body fluids Element of electrolytes 	<ul style="list-style-type: none"> Functions of the nervous system Digestion 	<ul style="list-style-type: none"> Uncommon 	<ul style="list-style-type: none"> May be seen when dehydrated

*Northwest Horse Supplement is available with and without Biotin

Chart meant to be used as an informative tool not as a replacement or substitute for advice from a trained professional