



## ALWAYS “FIXED FORMULA” FOR CONSISTENT

### Feed Ingredients – Why Are They In There? KING FEED INGREDIENT GLOSSARY

***Ammonium Hydroxide***- acts as a buffer; “time-releases” organic acids.

***Calcium Carbonate***- concentrated natural source of calcium.

***Calcium Pantothenate***-Vitamin B5- necessary for fat metabolism, nerve function & reproduction.

***Choline Chloride***- important for fat metabolism & liver health.

***Chromium Tripicolinate***- highly available source of chromium-essential component of Glucose Tolerance Factor which helps maintain balanced glucose levels in the body.

***Cobalt Glucoheptonate***- Highly available cobalt, essential component of Vitamin B-12.

***Copper Lysine***- strengthens ligaments and tendons, ensures proper nervous system development, improves hemoglobin production for maximize oxygen carrying capacity, essential for pigmentation (hair & skin color).

***Copper Sulfate***- source of Copper-essential for hemoglobin formation, growth, hair pigmentation and lactation.

***D-Biotin***- involved in metabolism of protein, fats and carbohydrates; important for maintaining the integrity of skin, hair & hooves.

***DL-Methionine***- essential amino acid (the building blocks of protein) that balances total dietary protein for better growth and lactation.

***Distillers Dried Grains with Solubles***- from yeast fermentation of grain after removal of ethanol by distillation; moderate protein (26%) & fat (8%), low starch, high in B-Vitamins.

***Ethylene Diamine Dihydroiodide***-source of Iodine-necessary for thyroid function, which regulates body temperature, circulation, reproduction & growth.

***Ferrous Sulfate***-source of Iron- necessary for respiration & oxygen transport.

***Folic Acid***-necessary for synthesis of DNA components.

**Ground Lima Beans**- moderate protein (21%) with balanced amino acids; soluble fiber helps prevent rapid rise in blood glucose (glycemic spikes); improves pellet durability.

**L-Ascorbic Acid Phosphate**- currently the only source of Vitamin C that is very stable and resistant to destruction by heat & light.

**Manganese-Methionine**- important for production of sperm and sex hormones, enhances strong bone growth.

**Manganese Sulfate**-source of Manganese-necessary for proper skeletal growth.

**Menadione Sodium Bisulfite**- Source of Vitamin K activity-for blood clotting.

**Mixed Tocopherols, Rosemary Extract, Ascorbic & Citric Acids, Lecithin**- combination of natural antioxidants to prevent rancidity & vitamin losses.

**Molasses Dried Beet Pulp** –fiber left after sugar extraction, highly digestible fiber. A small amount of molasses is applied to pulp to reduce fines & dust.

**Monocalcium and Dicalcium Phosphate**- highly available source of phosphorus and calcium for bone development.

**Monosodium Phosphate**-highly available source of phosphorus.

**Niacin**- necessary for maintaining tissue integrity of skin, nerves & intestines.

**Probiotic** (“heat-stable”)- Lactobacillus acidophilus & casei, Bifidobacterium thermophilus & Enterococcus faecium. Naturally occurring, live beneficial bacteria that colonize digestive tract, inhibit growth of pathogenic gut microflora (E. Coli, Salmonella, Clostridium) and improve nutrient absorption. Survives heat of pelleting.

**Propionic, Acetic, Sorbic & Benzoic Acids**- Organic acids that inhibit the growth of molds, yeasts and bacteria in feed; animals convert acids to energy.

**Pyridoxine Hydrochloride**- Vitamin B6-necessary for protein metabolism.

**Riboflavin**- Vitamin B2-necessary for activation of many metabolic enzymes.

**Rice Bran**-outer layer of rice grains-for energy from digestible fiber and vegetable oil.

**Salt**- source of dietary sodium & chloride (electrolytes); necessary for body fluid balance.

**Sodium Lignosulphonate**-digestible “gums” derived from wood pulp to strengthen pellets; reduced dust & fines helps prevent respiratory problems.

**Sodium Selenite**- source of selenium-necessary for production of enzymes, which break down peroxides & prevent cellular damage.

**Soybean Meal, Dehulled**- high protein (47%), amino acids well-balanced, low fiber & fat.

**Thiamine Hydrochloride**- Vitamin B1-necessary for metabolism of carbohydrates (starch, sugars, fiber).

**Vegetable Oil (Corn & Soybean)**-provides high levels of linoleic acid (an essential fatty acid) for a glossy hair coat.

**Vitamin A**- necessary for vision, reproduction & cell membrane stability.

**Vitamin B12**- necessary for energy metabolism; maturation of red blood cells.

**Vitamin D3**- active form of Vitamin D-important for bone development, absorption & metabolism of dietary calcium and phosphorus.

**Vitamin E (alpha Tocopherol)**- Antioxidant, helps prevent cellular damage under stress and improves the immune response.

**Wheat**- source of energy from starch; improves pellet durability & reduces fines (powder).

**Wheat Millrun**-source of digestible wheat bran fiber with smaller amounts of wheat flour.

**Whole Pressed Safflower Seed Meal**- high fiber, moderate digestibility; stimulates gut motility & helps prevent hair pulling, impaction & enteritis.

**Yeast Cell Wall Extract**- binds aflatoxin & other mold toxins-prevents toxins from being absorbed by animal; does not affect absorption of other nutrients.

**Yeast Culture**- stabilizes gut microflora and improves fiber digestion, which means better over all feed utilization and a healthier gut.

**Yucca Schidigera Extract**- binds ammonia and other odors to prevent respiratory problems & increase comfort.

**Zinc-Methionine**- improves paw & skin health, promotes wound healing, promotes proper fetal development and stimulates immune system.

**Zinc Sulfate**-source of Zinc-necessary for activation of many metabolic enzymes & proper DNA formation.