

Crystal Creek® Paladin® Swine Program



By Erik Brettingen, B.S.

Crystal Creek® has a highly successful, comprehensive swine program that can help swine operations with their ever-changing needs. The Paladin® Swine Program includes ration balancing services, innovative products and veterinary consulting to help support the profitability of a swine operation.

synthesize essential amino acids through microbial protein production, making it critically important that the proper amino acid profile be supplied through the diet. Lower quality protein sources, like distillers' grains, do not supply the optimal amino acid profile that soy-based protein ingredients do. The consistency of feed by-products can also be questionable. In some research studies, the true lysine digestibility in distillers' grains has been shown to vary from 43.9 to 63%. When diets are formulated to provide precise levels of nutrients, these inconsistencies can cause deficiencies in key nutrient areas.

Ration Balancing Services

The Crystal Creek® Paladin® Swine Program considers nutrient quality, mycotoxin prevalence and remediation, and the need for flexibility of feed ingredients when balancing the ration.

Nutrient Quality

Regardless of the species, Crystal Creek® practices a core philosophy that is rooted in using the highest quality ingredients when it comes to diet formulation. Many nutrition companies use a least cost ration formulation to provide cheap feed on a cost per ton basis. These low-cost diets are made up of poor quality, by-product-based ingredients that can decrease animal performance. Crystal Creek® swine rations are built with a focus on the amino acid profile. Pigs do not have an actual protein requirement, but rather need specific levels of several amino acids, which are the building blocks for proteins. Unlike ruminants, pigs are monogastric and are unable to

The same mindset of high-quality ingredients applies to the formulation of minerals used by Crystal Creek® in every-day rations. Crystal Creek® Paladin® Grower/Finisher Swine Mineral utilizes industry leading technology in its macro and trace mineral ingredients. For example, phosphorus is particularly important in swine nutrition as it supports energy metabolism, bone structure, and muscle function. The source of phosphorus provided to the animal dictates the degree of phosphorus utilization. This ability to utilize phosphorus becomes critical for profitability in a swine operation when efficient reproduction and growth, both influenced by phosphorus utilization, are key. The phosphorus used in Crystal Creek® minerals is a high-quality mineral source, free of heavy metal contamination, which increases the bioavailability of the phosphorus, ultimately leading to more phosphorus being absorbed by the animal.



EXAMPLE: CRYSTAL CREEK® SWINE RATION (By Body Weight in lb.)

PHASE	1	2	3	4	5	6	7	8		
High Lean Growth Capacity	55-74	75-99	100-129	130-169	170-209	210-259	260-315			
Moderate Lean Growth Capacity	25-49	50-69	70-89	90-119	120-149	150-189	190-239	240-280		
Low Lean Growth Capacity	20-34	35-49	50-64	65-89	90-109	110-139	140-159	160-200		
									SOWS:	
Ingredients (lb.)									Gestating	Lactating
Ground Corn	1280	1360	1428	1496	1554	1606	1661.0	1701.5	1657.5	1442.5
Soybean Meal (47.5%)	650	575	515	450	395	345	290.0	250	260.0	480.0
Crystal Creek® Paladin® G/F Mineral	60	55	50	45	43	40	40.0	40	60.0	60.0
Salt	7	7	7	7	6	6	6.0	5.5	7.5	7.5
Mono-calcium Phosphorus	0	3	0	0	0	0	0.0	0	15.0	10.0
Calcium Carbonate	0	0	0	2	3	3	3.0	3	5.0	
TOTAL	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

CAUTION: Paladin® G/F Swine Mineral contains selenium. The addition to feed of higher levels of selenium is not permitted.
Do not feed Paladin® G/F Swine Mineral free-choice.

Trace minerals like zinc, copper, cobalt, manganese, and selenium also have essential functions in the overall production and health of pigs. Zinc, although a trace nutrient and required in small levels, can have huge impacts on animal health. Many of these trace minerals are required for the production of digestive enzymes that drive nutrient utilization in the diet. Trace minerals like selenium, are powerful antioxidants that support immune function and overall health. Crystal Creek® uses organic trace mineral and selenium fortification which reduces the risk of these minerals being tied up by antagonists, thereby increasing their ability to be utilized.

Mycotoxin Remediation

Mycotoxins are poisonous residues from mold found in feeds. Mycotoxins have a direct negative impact on profitability for swine producers, causing irritation in the intestinal tract and reduced nutrient utilization. Mycotoxins can have a negative impact on reproductive function, cause lower rates of gain and even cause death at high concentrations. Crystal Creek® has product options that are highly absorptive of mycotoxins and are designed to break down and

degrade the mycotoxins to help increase product toxin binding efficiency. This degradation has been shown to increase animal performance, assist in improving immune function, and help with overall health in the presence of mycotoxins.

Flexibility

Crystal Creek® works with swine producers all over the United States with varying goals and production methods. This includes large, conventional barns and operations with corn and soy-based diets to smaller, backyard operations with very specific ingredient preferences. Purchasing the Crystal Creek® Swine Grower/Finisher mineral premix from Crystal Creek® and adding it to the feed mix allows producers to work with their area feed mills or dealers to find the best choice in local feed ingredients or source feeds that meet their preferences. This flexibility, combined with the expertise to formulate diets that meet nutrient requirements, allows producers to be successful in their niche markets.

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Supportive Products

Crystal Creek® offers an array of highly effective products that can be used in a variety of situations to help provide for good animal health and increase profitability. Immune supportives, fly repellents, udder and wound care products and feed/digestive supplements are all beneficial when developing a complete health care program for swine.

Veterinary Consulting

Along with providing support and knowledge on swine nutrition and ration balancing, Crystal Creek® can help answer producer’s animal health questions. Being able to talk with a veterinary professional can assist in determining the root cause of an issue rather than just simply treating the symptoms. Our staff veterinarian and veterinary technician can help find practical solutions to health problems which can increase sustainability and profitability of an operation.

SUPPORTIVE PRODUCTS	
Crystal Creek® Aloe Vera Juice	Power Powder™
Check™	Primary Care®
Crystal Meal™	Prism™
Crystal Pellets™	Pro-Vita-Zyme™
Crystal Creek® Fly Repellent	Pul-Mate™
Fresh-n-Easy™	Replena-Lytes®
Lice & Mange Wash	Super Boost™
Pivot-FL™	Crystal Creek® Wound Spray

Crystal Creek® would like to bring their expertise to your swine operation with nutrition consulting, innovative product usage and qualified veterinary personnel. Give us a call, we are here to help and ready to join your team!

