



AKEY[®]

A Leader in Nutrition Solutions

Grower - Finisher Nutrition

Products & Programs

Akey Nutrition & Research Center

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Akey Grow-Finish Research... another Akey Difference!



"High-Rise" Finishing Research Facility

Akey is a leader in the research and development of nutrition programs for the swine industry. Research has been focused on determining the amino acid and calorie requirements at each specific point on the growth curve for a wide variety of genetic lines. This extensive research effort has produced valuable nutritional information, which is incorporated into all Akey feeding programs to allow animals to express their full genetic potential.

Akey conducts grow-finish research in two 1000 head facilities located near Lewisburg, Ohio. The high-rise finishing research facility has a unique waste composting system which eliminates liquid manure storage and handling, and contains 48 test pens. The wean to finish barn contains 84 test pens allowing two trials to run simultaneously. Both facilities have automated electronic feeding systems which deliver experimental diets to individual pens. The systems allow different blends of two diets to be fed which increases the number of experimental diets that can be tested. Akey also conducts large scale commercial research with cooperating producers in the midwest.

Producers have access to this nutritional technology by selecting a multi-phase feeding program that fits their operation, and then incorporating the proper grower and finisher base mix products available from Akey, and affiliated Akey manufacturers, in bag or bulk form.

All Akey formulated base mixes for the grower or grow-finish period contain added crystalline lysine to reduce the amount of soybean meal that needs to be added to the diets (this helps reduce nitrogen excretion). To reduce phosphorus use and excretion, producers can choose to utilize Akey base mixes containing phytase.



A Leader in Nutrition Solutions



Wean to Finish Research Facility



A Portion of the Akey Swine Nutrition Team



Electronic Feed Delivery System




Akey Grow-Finish Nutrition Programs

The phytase enzyme helps to improve digestibility of naturally occurring phosphorus in feedstuffs. This addition spares inorganic phosphorus needed in the diet, which is normally added as dicalcium phosphate. Inorganic phosphorus sources are expensive, making phytase an attractive option. Akey has offered phytase in its swine programs for many years, and we continue to better refine incorporation of this technology into practical feeding programs. Formulations for all Akey grow-finish base mixes and complete feeds have recently been updated by Akey nutritionists to reflect new technology and current economics.

In most cases, it will be cost effective to utilize the

phytase enzyme, with reduced phosphorus excretion as a benefit. There are, however, certain cases where producers may elect to not use phytase. This could occur when a producer puts an added value on the phosphorus content of swine manure, or if the product containing phytase has to be stored for an extended period of time.

Akey Grow/Finish Base Mix Product Options

Body Wt.	40-60 lb	60 lb - Market
W/Phytase		
Without Phytase- The activity of the phytase enzyme tends to deteriorate somewhat over time (especially in hot weather). Thus, we would not recommend utilizing phytase if storage of the original base mix and/or the mixed feed is longer than 30 days.		

Nutritional Options for the Critical Grower Phase (40-60 lb body weight)



Complete Base Mix

Gro 65 PHYTASE is a “complete” base mix that provides a unique amino acid combination required to support rapid muscle development and maximize feed efficiency during the grower period when feed intake is relatively low and the potential for muscle deposition is extremely high. Crystalline amino acids are included at ratios that optimize amino acid content of the final diet and reduce the amount of soybean meal needed in the diet. Phytase is included to reduce the amount of phosphorus in the diet.



Add Pac

GroBooster is an “add pac” designed for use with **Gro-Fin 55-45**, **Gro-Fin 46-37**, or an Akey formulated bulk base mix to provide an equivalent level of nutrition as **Gro 65 Phytase**. Producers may pick the option they find most convenient. **GroBooster** is used at a rate of 15 lb per ton in grower diets, and optimizes amino acid levels to support maximum muscle deposition and feed efficiency.

Nutritional Options for Grow-Finish Diets (60 lb - market weight)



Gro-Fin 55-45 and **Gro-Fin 46-37** include added crystalline lysine to improve lysine balance and lower the required soybean meal levels needed in finishing diets. Both provide vitamin and mineral fortification shown by Akey research to support high levels of performance cost effectively.

The major difference between the two base mix options is that **Gro-Fin 46-37** contains the phytase enzyme, allowing for a lower inclusion rate, less phosphorus in waste, and equal or better performance at less cost.

Bulk Base Mixes that supply the levels of nutrition found in **Gro-Fin 55-45** and **Gro-Fin 46-37** are available from Akey affiliated feed manufacturers.

Copper-Zinc & Iron PMX

Copper Zinc & Iron PMX is added to diets from 60-140 lb body weight to help support faster growth and better feed utilization cost effectively.



Akey Grow Finish Mixing Directions

6 Phase High Lean Mixing & Feeding Directions

Lysine, %	1.23		1.08		0.98		0.87		0.76		0.69		0.65	
Wt. of Mixed Sex, lb	40-60*		60-100		100-135		135-180		180-215		---		215-mkt**	
Wt. of Gilts, lb	40-60*		60-100		100-140		140-190		190-230		230-mkt**		---	
Wt. of Barrows, lb	40-60*		60-95		95-130		130-170		170-200		---		200-mkt**	
Corn, lb	1370	1379	1432	1441	1502	1511	1585	1594	1660	1668	1705	1708	1740	1743
SBM, lb (47.5%) a,b	560	560	510	510	440	440	360	360	290	290	250	255	215	220
Gro-Fin 55-45, lb	55	---	55	---	55	---	55	---	50	---	45	---	45	---
Gro-Fin 46-37, lb	---	46	---	46	---	46	---	46	---	42	---	37	---	37
GroBooster, lb	15	15	---	---	---	---	---	---	---	---	---	---	---	---
Copper, Zinc & Iron PMX	---	---	3	3	3	3	---	---	---	---	---	---	---	---
Total	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

Diets NOT containing Phytase Diets containing Phytase

Akey Grow/Finish Base Mix Product Options

With Phytase



With Phytase



Without Phytase



Copper-Zinc & Iron PMX

Copper Zinc & Iron PMX is added to diets from 60-140 lb body weight to help support faster growth and better feed utilization cost effectively.

* Gro 65 may be used to replace Gro-Fin 55-45 or Gro-Fin 46-37 and Gro Booster in diet.

** If Paylean® is used in the last diet, select a diet containing a minimum of 0.85% lysine and 16% crude protein during the period Paylean® is fed.

a = To mix diets using 46.5% SBM, multiply lb of 47.5% by 1.02 and adjust corn.

b = To mix diets using 44.0% SBM, multiply lb of 47.5% by 1.08 and adjust corn.

5 Phase High Lean Mixing & Feeding Directions

Lysine, %	1.23		1.08		0.98		0.82		0.69		0.65	
Wt. of Mixed Sex, lb	40-60*		60-100		100-150		150-210		---		210-mkt**	
Wt. of Gilts, lb	40-60*		60-100		100-150		150-220		220-mkt**		---	
Wt. of Barrows, lb	40-60*		60-95		95-140		140-190		---		190-mkt**	
Corn, lb	1370	1379	1432	1441	1502	1511	1625	1634	1705	1708	1740	1743
SBM, lb (47.5%) a,b	560	560	510	510	440	440	320	320	250	255	215	220
Gro-Fin 55-45, lb	55	---	55	---	55	---	55	---	45	---	45	---
Gro-Fin 46-37, lb	---	46	---	46	---	46	---	46	---	37	---	37
GroBooster, lb	15	15	---	---	---	---	---	---	---	---	---	---
Copper, Zinc & Iron PMX	---	---	3	3	3	3	---	---	---	---	---	---
Total	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

Diets NOT containing Phytase Diets containing Phytase

4 Phase High Lean Mixing & Feeding Directions

Lysine, %	1.23		1.02		0.84		0.72		0.69		0.67	
Wt. of Mixed Sex, lb	40-60*		60-135		135-190		---		190-mkt**		---	
Wt. of Gilts, lb	40-60*		60-140		140-200		200-mkt**		---		---	
Wt. of Barrows, lb	40-60*		60-130		130-180		---		---		180-mkt**	
Corn, lb	1370	1379	1472	1481	1605	1614	1685	1693	1705	1708	1725	1728
SBM, lb (47.5%) a,b	560	560	470	470	340	340	270	270	250	255	230	235
Gro-Fin 55-45, lb	55	---	55	---	55	---	45	---	45	---	45	---
Gro-Fin 46-37, lb	---	46	---	46	---	46	---	37	---	37	---	37
GroBooster, lb	15	15	---	---	---	---	---	---	---	---	---	---
Copper, Zinc & Iron PMX	---	---	3	3	---	---	---	---	---	---	---	---
Total	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

Diets NOT containing Phytase Diets containing Phytase

For more information contact:



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