



AKEY[®]

A Leader in Nutrition Solutions

Prestarter - Starter Nutrition

Products & Programs

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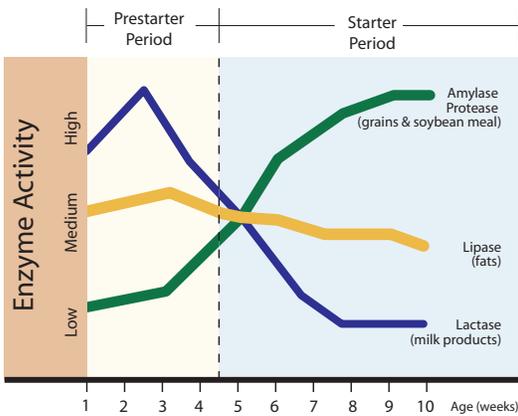
... working hard to provide you with the nutritional tools you need to optimize early pig performance.

For over 40 years, Akey has been a leader in developing feeding programs for young pigs. As the industry continues to change, we are committed to in-depth research focused on developing feeding programs that will allow producers to optimize performance with lower costs of production. Akey researchers are constantly working to develop improved diets with the flexibility needed to match the varying needs found in today's operations.



Akey Swine Research and Development results in superior swine nutrition products and programs.

Factors Affecting Post-Weaning Nutrition...



This graph illustrates the relationship between the age of the pig and its ability to digest and utilize various ingredients. The young pig's digestive system digests milk products better than corn and soybean meal. As the pig gets older, enzymes which allow corn and soybean meal to be utilized more efficiently increase in activity. Prestarter diets designed to match the pig's digestive development at each stage result in maximum performance at the lowest cost (see chart below).

Digestive Enzyme Development

Tremendous changes occur in a young pig's digestive capabilities between 7 and 35 days of age. A baby pig's nutrient requirements change more in a week during this early period than in a month while in the finishing stage. During this dynamic period diets need to be selected to match the pig's changing needs and to keep costs in balance. Also, the weaning age and weight of the pig influences what diets are optimum after weaning.

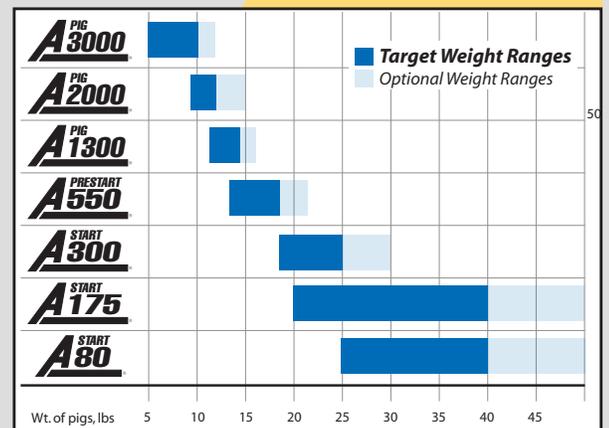
Nutrient Sources

Nutrient density and composition is critical during the prestarter phase as daily feed intake is limited. The inclusion of nutrient dense ingredients such as plasma proteins and lactose is important to help 14-28 day old pigs make the transition from mother's milk to dry feed. Required levels of these key ingredients decrease as the pig develops and can be replaced by less expensive animal and/or plant nutrient sources.

Phase Feeding Program

Akey offers a variety of prestarter and starter diets, each designed for a specific stage of maturity of the digestive system. This allows a producer to choose the correct sequence of post-weaning diets that specifically matches individual farm weaning weights and ages. A properly phased feeding program utilizing a series of prestarter and starter diets will provide a smooth transition from mother's milk to corn/soy diets in addition to optimizing performance and cost. Modifications can also be made in the overall farm nursery feeding program to fit the unique nutritional needs of lightweight and "fall-back" pigs to enhance total group uniformity.

Prestarter & Starter Diets



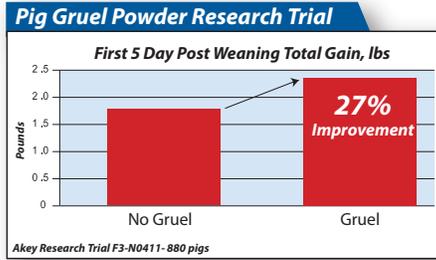
Gruel Feed to achieve better starts and save more pigs after weaning.

Gruel feeding is a management practice that can help reduce mortality and morbidity in the nursery phase. In addition to ensuring immediate post-weaning intake of nutrients, gruel feeding can be an excellent tool to greatly reduce the problems with “starve-out” pigs – morbidity, mortality, and lack of group uniformity.

A Pig Gruel Powder

Pig Gruel Powder is recommended for :

- Early Weaned pigs weighing less than 8-9 lbs.
 - Pigs weaned under 17 days of age.
 - Starve-outs and fallbacks.
- ✓ Ensures newly weaned pigs receive immediate nourishment.
 - ✓ Provides a management tool to get “starve outs” started.
 - ✓ Akey Pig Gruel Powder... A management tool to assist good managers achieve better starts and save more pigs.



Avoid “Slow Starts” & “Starve Outs” by using Akey Pig Gruel Powder



Optional Method

Gruel feeding with Akey Pig Gruel Powder is the recommendation of choice to ensure early water and feed intake after weaning. However, using a liquid gruel program does not fit every management situation. For this reason, Akey also offers Pig Savor, a highly palatable and nutrient dense powder, that can be used as a top-dress or mixed in with a pelleted prestarter to encourage early nutrient intake immediately post-weaning.



Complete Prestarter Pellets

A PIG 3000

Target Weight 5-10 lb
Optional Weight 5-12 lb

Pig 3000® is an extremely nutrient dense diet utilizing “high technology” ingredients to support both rapid growth and economic demands of early-weaning.

Benefits of Pig 3000

- is highly palatable to encourage feed intake.
- is manufactured in a small 3/32" pellet.
- enhances nutrient digestibility resulting in improved growth and efficiency.
- contains specialized ingredients for early weaning, such as plasma proteins, lactose and milk proteins.
- mixes well with water for gruel feeding.

Feeding Directions:

Feed as the sole ration to weaned pigs weighing less than 10 lb. Pigs weaned at a very young age are accustomed to nursing as a litter on a frequent basis. Feeding Pig 3000 4 to 6 times per day where all pigs in the pen can eat at once is preferable in getting pigs started. Feeding frequency can be reduced 5-7 days after weaning. Keep Pig 3000 fresh by storing it in a sealed container away from heat and nursery odors. Switch pigs to either Pig 2000 or Pig 1300 before pigs reach 12 lb.

A PIG 2000

Target Weight 9-12 lb
Optional Weight 9-15 lb

Pig 2000® is a specialized small pellet for 2-3 week weaning.

Benefits of Pig 2000

- consistently produces fast, efficient gains.
- is often used as the first diet in 3 week weaning systems for pigs weighing less than 12 lb.
- is highly palatable and encourages feed intake.
- minimizes post-weaning diarrhea.
- reduces weaning stress.
- can be used as a creep ration where milk production is inadequate.
- contains plasma proteins, lactose and milk proteins.

Feeding Directions:

Feed as the sole ration to pigs weaned at 17 to 21 days of age or pigs weighing 9 to 12 lb at weaning. The exact length of time and optimum amount of Pig 2000 to feed will vary, depending on weaning age, weight of pig, environment, and production goals. Pig 2000 is not recommended for pigs weighing more than 15 lb. Creep feeding Pig 2000 or Pig Creep is encouraged when sow milk production is insufficient and feed wastage can be minimized.

A PIG 1300

Target Weight 12-14 lb
Optional Weight 12-16 lb

Pig 1300® is designed specifically for 3 to 4 week weaning operations.

Benefits of Pig 1300

- incorporates many nutritional features of Pig 3000 and Pig 2000, but at a lower cost.
- is designed for a slightly larger pig with a more mature digestive system.
- contains plasma proteins, lactose and milk proteins and other highly digestible protein sources.
- is recommended as the second or third feed when pigs are weaned at a very young age following Pig 3000 or Pig 2000.

Feeding Directions:

Feed as the sole ration to pigs weaned at 3 to 4 weeks of age or to pigs weighing less than 14 lb. The exact length of time and optimum amount of Pig 1300 to feed will vary depending on weaning age, weight of pig, environment and production goals. Pig 1300 is not recommended for pigs weighing more than 16 lbs.

A PRESTART 550 COMPLETE

Target Weight 13-18 lb
Optional Weight 13-22 lb

Prestart 550 Complete is a highly digestible pelleted prestarter for the late prestarter period that supports rapid growth and excellent feed efficiency.

Benefits of Prestart 550 Complete

- Contains multiple animal protein sources to provide the proper balance of highly digestible amino acids for prestarter pigs.
- Provides a blend of energy sources to support the rapidly changing digestive system of the young pig. Sources include steam rolled oats and highly digestible milk products.

Feeding Directions:

Feed as the sole ration to pigs weighing between 13 and 18 lb body weight. Recommended as the second diet for pigs weaned at 18 to 21 days of age, following Pig 2000 or Pig 1300. Feed as the first feed to pigs weaned greater than 4 weeks of age. Prestart 550 is not recommended for pigs weighing more than 22 lb body weight.

Prestart 550 Base is also available to mix with corn and soybean meal to make a similar diet.

Prestarter & Starter Base Mix Options

The Akey commitment to swine nutritional research is allowing Akey scientists to thoroughly test and develop new technology to help improve animal performance and lower production costs. Extensive research on new ingredients and dietary nutritional profiles enables Akey to offer a line of high-technology base mixes used to manufacture pig prestarter and starter diets that will provide better daily gains and low production



Target Weight 13-18 lb
Optional Weight 13-22 lb

Prestart 550 Base is designed to make a highly digestible pelleted prestarter that supports rapid growth and excellent feed efficiency.

Benefits of Prestart 550 Base

- Contains multiple animal protein sources to provide the proper balance of highly digestible amino acids for prestarter pigs.
- Provides a blend of energy sources to support the rapidly changing digestive system of the young pig. Sources include steam rolled oats and highly digestible milk products.
- Works effectively as the first grind and mix diet following an Akey pelleted prestarter for pigs weaned at 16-21 days of age.



Target Weight 18-25 lb
Optional Weight 18-30 lb

Start 300 is a high nutrient dense base mix designed to meet the increased nutrient demand of the young starter pig.

Benefits of Start 300

- Provides a high level of amino acids properly balanced for excellent growth performance using multiple animal protein sources.
- Contains lactose and other energy sources to support rapid growth and excellent feed efficiency of starter pigs.
- Formulated to ensure a smooth transition from the Prestart 550 diet.
- Works effectively as the second grind-and-mix diet in a multiple phase nursery feeding program.



Target Weight 25-40 lb
Optional Weight 25-50 lb

Start 80 provides the nutritional link between the complex pig starter and early grower diet.

Benefits of Start 80

- Designed to match the nutritional needs of starter pigs from 25 to 40 lb.
- Provides phytase enzyme to lower phosphorus excretion and diet cost.
- Nutrient density is maximized, resulting in a low inclusion rate per ton, and significant cost savings per pound of gain.
- Provides a research proven balance of amino acids utilizing multiple protein sources, as well as crystalline amino acids.
- Designed as a late starter feed in a three or four stage nursery feeding program.
- Recommended as a receiving ration for feeder pigs less than 40 lb body weight.

Feeding the proper diet at a specific weight range is critical to achieve maximum growth performance cost-effectively. Akey research has proven that feeding the correct diet at particular stages of development optimize pig growth performance while controlling feed costs. Due to a pig's rapidly changing digestive system, a 3-phase nursery feeding program provides the best nutrition for a 13-40 lb pig. Feed should be budgeted based on performance expectations and farm production data.

3 Phase Grind & Mix Diet Program

Pig Weight Range, lb	10-13*	13-18	18-25	25-40
Lysine, %	---	1.42	1.35	1.30
Corn, lb		1090	1245	1365
SBM, lb (47.5%)		360	455	545
Prestart 550, lb		550	---	---
Start 300, lb		---	300	---
Start 80, lb		---	---	80
Medication, lb		+	+	+
Total, lb		2000	2000	2000

*Pigs weighing less than 9 lb. at weaning should be fed Pig 3000.

To mix diets using 46.5% SBM, multiply lb of 47.5% by 1.02 and adjust corn.
To mix diets using 44.0% SBM, multiply lb of 47.5% by 1.08 and adjust corn.

Optional Nursery Feeding Program For use when only 2 diets can be fed from 13-40 lbs.



Target Weight 20-40 lb
Optional Weight 20-50 lb

Start 175 is designed for producers using a single grind-and-mix diet from 20 pounds through the remainder of the nursery period.

Benefits of Start 175

- Combines multiple animal protein sources with synthetic amino acids to provide a highly digestible starter diet.
- Improved amino acid balance results in a rapid daily gain and excellent feed efficiency.
- Provides a high quality starter diet with a low base mix inclusion rate that supports excellent growth performance.
- Recommended as a single phase starter diet for 20 to 40 lb pigs.

2 Phase Grind & Mix Diet Program

Pig Weight Range, lb	10-13*	13-20	20-40
Lysine, %	---	1.42	1.34
Corn, lb		1090	1325
SBM, lb (47.5%)		360	500
Prestart 550, lb		550	---
Start 175, lb		---	175
Medication, lb			+
Total, lb		2000	2000

*Pigs weighing less than 9 lb. at weaning should be fed Pig 3000.

To mix diets using 46.5% SBM, multiply lb of 47.5% by 1.02 and adjust corn.
To mix diets using 44.0% SBM, multiply lb of 47.5% by 1.08 and adjust corn.