



## Young Pig Program & Technologies



# Nurture™ is a young pig program that adapts to the changing needs of the swine industry.

The swine industry has changed a lot in the past decade, with amazing improvements in sow productivity and litter size, along with a decrease in the number of truly skilled laborers to take quality care of young pigs.

With wean-to-finish death loss rates reaching as high as 10 percent<sup>1</sup>, there is an increased need for supporting young pig development starting right away at weaning. This is especially true when every one percent mortality costs approximately \$1.00 per pig placed.



26% of pigs born do not make it to market<sup>1</sup>

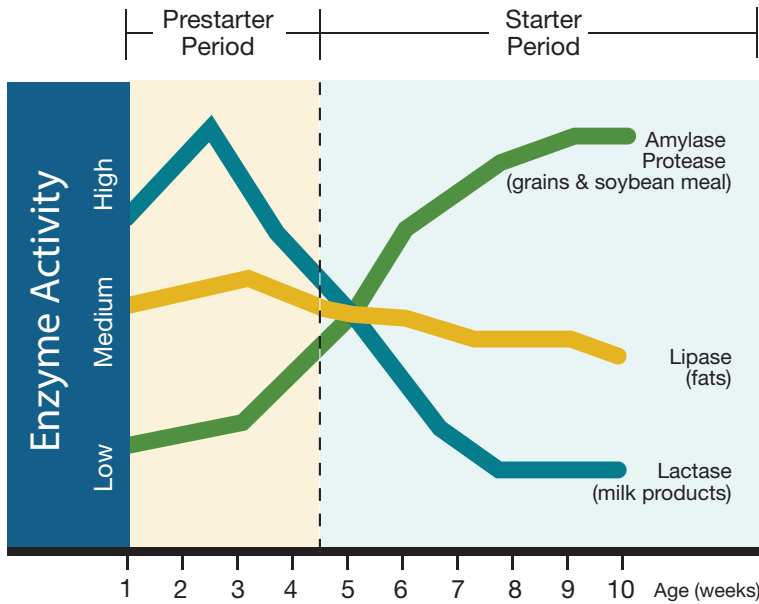


Cargill adapted our young pig nutrition program to meet these changing industry dynamics in the form of our Nurture program. Cargill's goal with our Nurture program is to help you get more live, healthier pigs through the nursery phase, setting them up for success to market.

<sup>1</sup>National Pork Board (NPB). 2018. Industry benchmarks for swine productivity. Available: <https://www.pork.org/facts/stats/industry-benchmarks/> Accessed December 4, 2018.

# Right Nutrition at the Right Time

The Nurture program is based on research that led to a focus on feeding pigs based on age rather than weight. This allows us to support the unique needs of young pigs by feeding the right nutrients at the right time to combat issues and ensure projected performance.



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.

## Digestive Enzyme Development

Tremendous changes occur in a young pig's digestive capabilities between seven and 35 days of age. During this dynamic period, diets need to be selected to match the pig's changing needs and to keep costs in balance. Weaning age and weight of the pig influence which diets are optimum after weaning.

## Nutrient Sources

Nutrient density and composition are critical during the prestarter phase as daily feed intake is low. Nutrient-dense ingredients, such as plasma proteins and lactose, are important to help 14-day to 28-day old pigs make the transition from mother's milk to dry feed.



We know how important the bottom line is to your business' success. Our goal with the Nurture offering is getting more pigs through the nursery stage, setting them up for success to market.



# The Nurture Program Includes the Latest in Swine Nutrition Technologies

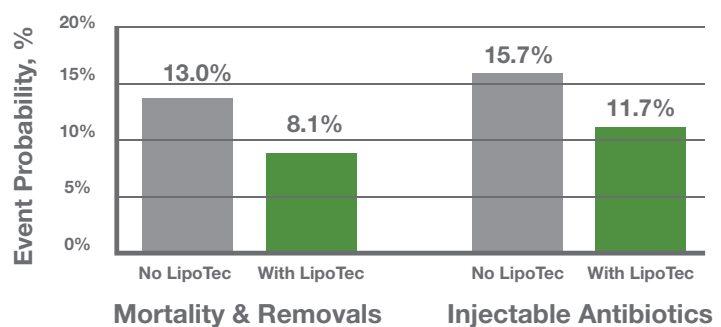
When added into Nurture diets, LipoTec™ and Promote® AOX™ SD have shown to support healthy growth and optimized profitability.

## LipoTec

LipoTec is a novel fatty acid blend that helps pigs get a better start via two mechanisms:

- LipoTec supports feed intake and maintains fat reserves to help improve energy status
- LipoTec supports health under challenging conditions

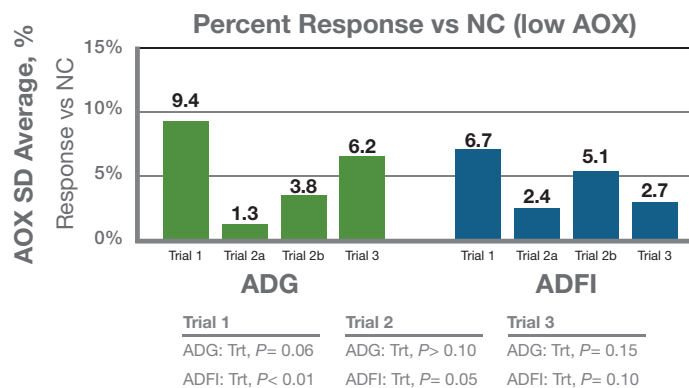
## LipoTec Significantly Improved Health Measures (Trial 1)



## Promote AOX SD

Promote AOX SD is a blend of plant-based polyphenols carefully chosen to ensure bioavailability and to support antioxidant status.

## Nurture Technology Promote AOX SD



## Product Overview: Nurture Standard Program

Nurture is designed to match the nutritional needs of young pigs with highly digestible and palatable ingredients, functional proteins, and Nurture technologies that focus on supporting livability and improving the energy status of young pigs.

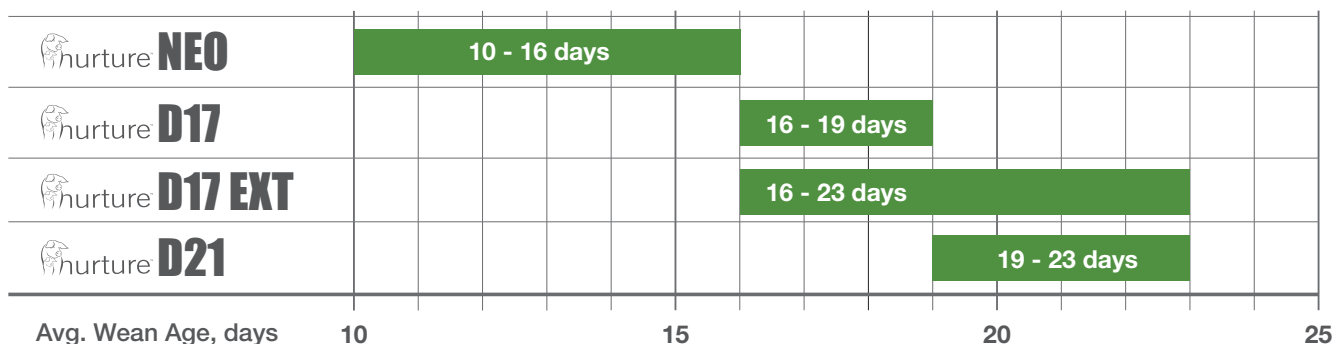
- Maintains feed intake and well-being
- Supports healthy stool condition
- Optimizes protein level of the diets while decreasing undigested protein
- Contains polyphenols that support antioxidant status
- Supports beneficial intestinal microflora and intestinal functionality
- Optimizes fiber sources and levels

# Cargill's Nurture Program Feeding Recommendations

Our Nurture program is designed to fit most needs of normal pig flows. See our recommendations for feeding our Nurture program options below:

## Feeding Recommendations for Standard Nurture Products Based on Age

■ Target Age Ranges



## Nurture Standard Product Offerings

Product	Wean Age days	Budget lb/pig	Feeding Directions
Nurture <b>NEO</b>	<16	0.5 - 1	Can be fed as a complete diet and as a gruel feed. Gruel feeding is most successful when small amounts are fed multiple times per day.
Nurture <b>D17</b>	16 - 19	0.5 - 2	Can be fed as a complete diet and as a gruel feed.
Nurture <b>D17 EXT</b>	16 - 23	5	Can be fed as a complete diet and as a gruel feed. Can be used in place of Nurture D17 and D21 and should be followed immediately by Nurture 1625 after day 23.
Nurture <b>D21</b>	19 - 23	4	Can be fed as a complete diet and as a gruel feed.
Nurture <b>1625</b>	--	12	Second phase diet following Nurture D17 EXT, Nurture D21 or Nurture Boost Prestarter diet.

## Product Overview: Nurture Boost

Nurture Boost provides additional nutrients and ingredients to support the immune system and gut health in young pigs experiencing health challenges.

- Further support of gut health through enhanced amino acid ratios, phytochemicals, functional fibers, and organic acid blends
- Reduced anti-nutritional factors by utilizing easily digested protein sources and reduced levels of SBM
- Additional antioxidant support

## Nurture Boost Product Offerings

Product	Wean Age days	Budget lb/pig	Feeding Directions
Nurture <b>Boost Prestarter</b>	16 - 23	5	Complete diet and as a gruel diet for health challenged pigs.
Nurture <b>Boost Add Pack</b>	--	Variable	Add to Nurture diets for health challenged pigs. Designed to replace 150 pounds soybean meal and 50 pounds of corn.

# Swine Production and On-Farm Consulting

Our philosophy around Nurture also includes on-farm support and management practices. At Cargill, our team of production support specialists are dedicated to helping customers improve and refine management practices from the sow farm to the finishing barn.

Our team's expertise includes in-barn environmental management, site monitoring, and assessments to help improve pig comfort, health, and production. Our team also helps troubleshoot production problems such as high mortality and fallback rates and low average daily gain (ADG).

Our production support specialists are passionate and effective in bridging the gap between real-time farm observations and business goals. Our team works with farm employees, managers, and business owners to provide insights into how what's happening in the barn affects the operation and their bottom line.

## Production Management: Sow, Wean-to-Finish, Nursery, and Finisher Systems

- Best Management Practices
- Recommendations and Guidelines
- On-Farm Walk-Throughs

## Environmental Monitoring and Assessments

- Temperature Curves
- Ventilation Rates
- Controller Settings
- Site Monitoring and Assessments

## Training and Education

- New Managers
- Team Training
- Controllers and Ventilation



For more information about our team and the services featured, please reach out to your Cargill swine representative.

# Additional Nurture Support with Piranha Pig

## Get weaned pigs eating quickly with Piranha Pig

- When Piranha Pig is fed on mats or boards, pigs will quickly and aggressively eat
- Piranha Pig also works well when mixed with water and fed as a gruel
- Mash form reduces waste, unlike pellets, which roll and bounce off mats or boards



Typical early aggressive feeding with Piranha Pig

### Benefits:

- Encourages early feed intake
- Economic feeding option when compared to prestarter pellets
- Highly palatable and good for the guts of young pigs
- Options included for medication needs

### Feeding Directions:

- Feed for up to five days after weaning on mats or boards and in feed trays
- Feed in gruel feeders with water for critical care and starve-out pigs
- Piranha Pig is not to be used as a complete diet but as a complement to the Nurture program





### **About Neopigg™**

Our Nurture swine program and technologies align with Neopigg, Cargill's global swine nutrition offering.

### **About Cargill Animal Nutrition**

Cargill's animal nutrition business has more than 20,000 employees at more than 275 facilities in 40 countries. Fueled by our innovation and research, we offer a range of products and services to feed manufacturers, animal producers, and feed retailers around the world, helping put food on the plates of nearly one billion people around the world every day. Cargill's animal nutrition business offers a range of compound feed, premixes, feed additives, supply chain and risk management solutions, software tools and animal nutrition expertise that is unmatched in the industry. For more information about Cargill Animal Nutrition, visit: [cargill.com/feed](http://cargill.com/feed)



Contact your local Cargill swine representative to learn more about our Nurture program.

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