

First Pulse D™ Provides Benefits of Colostrum

First Pulse D™, developed by Ralco Nutrition, is a milk-based, refined colostrum product designed to stimulate appetite and the immune system. Colostrum is a natural occurring substance provided to newborns by their mother's milk. But sometimes in animal litters, weaker newborns need an extra boost that First Pulse D™ can provide. The product is harvested on dairies, concentrated and then other ingredients like Ralco's Regano™ are added.

"For a pig short of colostrum, our product provides those pigs with what they need," Dr. Joe Hahn said.

It took Hahn two years of work to develop First Pulse D™, however, in the end he said the product was built by using nature's blueprint.

"Colostrum has a lot of natural fever reducers and it stimulates the immune system," Hahn said. "Mother Nature developed a wonderful process, we just refined the process and it works great. So we give Mother Nature the credit. It's just like a jumpstart for the immune system."

First Pulse D™ can be used to stimulate the immune system and reduce fever for any mammal. For swine producers there is no other product like First Pulse D™ on the market. Sue Schneider, manages a 1,500-sow farrowing operation near Owatonna, Minn., and turned to First Pulse D™ when litters began to suffer from scours.



Inside Story:

- Greenhaven Pork Sees Results with Ralco's First Pulse D™

"A lot of times we get by with giving them one dose, and it is so good for scouring pigs because baby pigs don't have very much fat, and if they are scouring they go downhill fast," Schneider said.

From the start, First Pulse D™ worked so well reviving scouring piglets Schneider now treats any questionable piglets. She also treats sows that go off their feed. At a cost of 25 cents a treatment, Hahn said spot treatment is often effective to boost struggling livestock. Hahn agrees with Schneider, that the bottom 20-30 percent of litters can greatly benefit from a single dose of First Pulse D™. Both also agree that those piglets that typically lag behind the rest of the litter are where additional profits can be added in a hog operation.

At some farms that raise breeding stock, every animal is treated. First Pulse D™ also works well as a treatment in antibiotic-free programs. First Pulse D™ is designed to be administered orally and in clinical studies, has performed exceptionally well. In some cases cutting pre-wean mortality in half and added a half pound of "wean" weight, Hahn said.



Pictured above: Dr. Joe Hahn, director of ingredient technologies for Ralco Nutrition, Inc.

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Greenhaven Pork Sees Immediate Results with Ralco's First Pulse D™



**Pictured above:
Sue Schneider of
Greenhaven Pork**



Every swine producer who farrows has seen the couple of small piglets, usually the last born, that appear weaker than the rest of the litter. Everyone hopes the piglets will get enough to eat, and start gaining, but all too often that isn't the case. When Sue Schneider sees those tail-enders, she gives them a dose of First Pulse D™ from Ralco Nutrition, because she knows it gives those pigs a fighting chance. She knows this because she has seen the results.

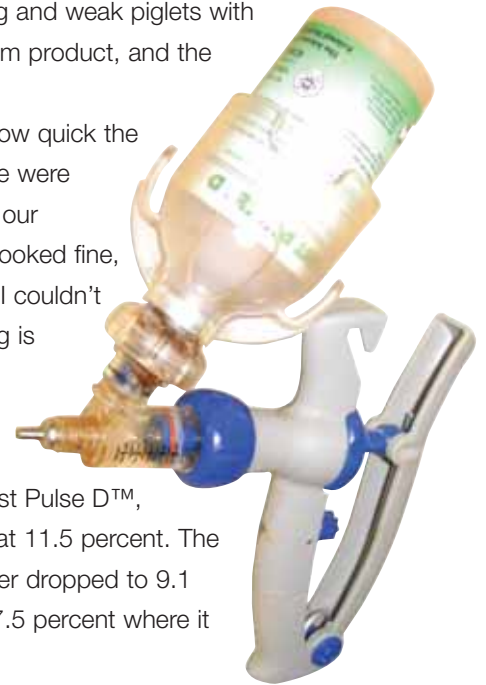
Schneider manages Greenhaven Pork, a 1,500-sow farrow-to-wean operation near Owatonna, Minn. Seventy sows farrow every week, but last year the piglets weren't doing as well as they should have. There were issues with scouring, and many piglets were just not gaining the way they should have been. Schneider ordered an E. coli vaccine, but she is still waiting for it to arrive. In December, Schneider began treating scouring and weak piglets with First Pulse D™, a refined colostrum product, and the results were dramatic.

"It was amazing to me to see how quick the results were," Schneider said. "We were waiting for an E. coli vaccine, but our weights were dropping, our pigs looked fine, but their weights were down and I couldn't afford to wait any longer. Every pig is major."

Piglets at Greenhaven are weaned between 14-21 days. Before Schneider began using First Pulse D™, weekly pre-wean mortality stood at 11.5 percent. The first week of treatment that number dropped to 9.1 percent by the next week it was 7.5 percent where it has held steady.

More swine producers are looking to add profits by boosting the bottom 30 percent of a herd. Schneider said her goal is to maximize profits by improving the performance of the bottom 30 percent of each litter, and First Pulse D™ is helping her achieve that goal.

"Anyone can do well with the top 70 percent, it is easier for those pigs to do well, but it's the bottom 30 percent that need to do well in order for you to maximize profits, and the First Pulse D™ really makes a difference," she said.





Our History **Our Story**

Ralco Nutrition, Inc. is a second generation premix company beginning more than 30 years ago. Robert (Bob) and Lou Galbraith were the original owners of the company identified as RALCO. It was originally a home-based business, but rapidly grew to become Ralco-mix Products, Inc. in Marshall, MN. In 2005, the name was changed to Ralco Nutrition, Inc. to better portray our focus on supplying researched and efficient nutrition to all kinds of livestock.

Two original products were marketed when the company was chartered in 1972. These were Sila-Mix® and Suppli-Mix®. Both products remain as significant in marketing today as they did over 30 years ago. The company has added over 100 formula premixes and complete feeds to the cadre of products offered for sale to livestock producers of swine, beef and dairy cattle, sheep, goats, horses, buffalo, deer, ratites, chickens and turkeys.

The original Ralco philosophy of feeding livestock naturally remains intact with Ralco Nutrition, Inc. The company has recently added a liquid product base plant to develop feed items that possess high ingredient and nutrient density, requiring small packages or liquid containers for marketing.

Ralco Nutrition, Inc. imports high quality raw materials from all over the world and continues to open new markets in the continental U.S. We are also becoming quite active in the feed markets in Central and South America, Mexico, and Canada.



Greetings from our president

**Changing times demand
knowledge and innovation.**

This year Ralco has been celebrating its 35th year of business. We are constantly reminded of all of the changes that have faced our livestock producers and industry since our humble beginning. Thirty-five years ago we did not know much about distiller dried grains, ethanol, soy diesel, enzymes, and acids. We did not know how to feed crystalline amino acids and other feeding technologies that are such an important part of livestock feeding today. Lest we feel like the lone rangers, all we have to do is to look at Main Street, our schools and other facets of our rural economy to know that we are not the only ones affected by change. As long as the time ticks away change will continually be a part of our lives and operations. That is true whether we like it or not.

For some change will bring hardship. For others it will bring opportunity. Success will depend on one's attitude, knowledge and willingness to innovate. One thing is certain; change will force us to find different ways to survive in today's marketplace. No matter how the road toward progress twists and turns, strength of character is the strongest compass.

A principle that we all were taught at a very young age is that knowledge is power. I believe more than ever that this axiom is a key to surviving in today's competitive marketplace. As quickly as things change, we need the best information available to help manage our enterprises. Ralco Nutrition is dedicated to providing its customers with the best and most innovative nutritional programs available on the market today. We have a staff of highly trained professionals who are at the top of their field. This is our first monthly newsletter that is designed to communicate with our friends and customers in the livestock feeding industry about current topics that will affect your profitability.

We would like to thank all of you for the opportunity to earn your continued fine business!

Very sincerely,

Jon Knochenmus

Jon Knochenmus
President, Ralco Nutrition Inc.

Binding

Mycotoxins with rxb-212



Imagine another hot and dry August day. Rain has been scarce during the past months, and the corn in the field is pale green and beginning to curl. Months later, a sow eats the harvested corn. The grain smelled good and looked good, but it is quietly stealing profit from the producer's pocket. The corn that struggled through the drought contained mycotoxins that negatively impact the sow's performance. It is difficult to know if grain contains mycotoxins, but if it does, the negative impact can be easily halted with rxb-212 from Ralco. The natural substance binds harmful mycotoxins, preventing their absorption by the animals and eliminating the harmful effects of mycotoxicosis.

Purdue University found mycotoxin levels just before the 2006 harvest were the highest Indiana had seen in 10 years. Because of a shortage of grain storage and record corn yields, a high percentage of corn spends some time piled on the ground and covered with a tarp. Proper storage is crucial to grain health. It should be dried to less than 14 percent moisture, and then cooled. Improper grain storage, which often happens when grain is stored on the ground, promotes mold, and many mycotoxins are a byproduct of mold.

Dr. Russell Fent, swine technical nutritionist for Ralco Nutrition, said every livestock producer would eventually deal with grain condition issues.

"If you don't have grain problems, you will," Fent said. "The grain looks fine because the mold dies off, but what is left behind are these mycotoxins."

Those grain problems, while microscopic, can dig unnecessarily deep into profits. The most common mycotoxin is aflatoxin that is produced from molds frequently associated with



Pictured above: Dr. Russell Fent, swine technical nutritionist for Ralco Nutrition, Inc.

corn. Aflatoxin commonly causes liver damage, and suppresses the immune system of the animals that eat it.

Damage caused by aflatoxin may be difficult to see, however if a producer notices that the herd isn't doing well over all, mycotoxins could be the culprit. Studies have demonstrated that the decreased productivity, organ damage, and disease due to immune suppression associated with mycotoxins cost producers more than acute livestock death.

"There is more of an issue out there than producers realize, because the mycotoxins are not at a level where they can visibly see them, but they are at enough of a level where the animals are more susceptible to other illnesses," Fent said.

Dairies must be especially diligent to avoid aflatoxin or add rxb-212 to their feed. If aflatoxin levels are too high in milk, that milk will be rejected. The recommended dose for a dairy cow is one to two ounces per day.

A mycotoxin that exhibits visible symptoms in the animals that ingest it is the zearalenone toxin. This mycotoxin causes conditions that



mimic the effects of estrogen like red and swollen vulva, mammary enlargement and prolapse in gilts. The conditions make it difficult for producers to effectively manage herds, especially breeding stock. Zearalenone can cause infertility and inhibit reproductive performance. Boars are also negatively impacted by this mycotoxin.

Harm from mycotoxins can be lessened and in some cases eliminated when two pounds to twelve pounds of rxb-212 from Ralco is added to a ton of feed. Fent recommends a minimum of four pounds per ton of rxb-212 be added. Fent understands the detailed reasons why rxb-212 works so well, but for livestock producers proof is in the results. Clinical studies conducted by the University of Missouri show that rxb-212 works better than the competition, because it binds mycotoxins more fully and for a longer period of time to insure that as little mycotoxin is absorbed by the animal as possible.

Fent said if two or three sows abort their pigs, producers should take a hard look at mycotoxins.

“Most of the problems you are going to see is in sows, so any sows should have rxb-212 in the gestation and lactation diet, and it should be in a boar’s diet as well,” Fent said. “It costs four dollars to feed one sow for one year. The cost of this is low enough that it is a good insurance policy.”

Livestock producers have an enormous number of factors that negatively impact their herds, but with rxb-212 from Ralco, mycotoxins do not need to be one of them.



Figure 1. Binding of Aflatoxin B1

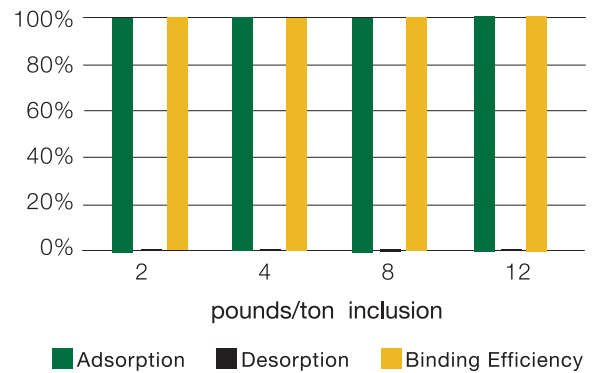


Figure 2. Binding of Zearalenone

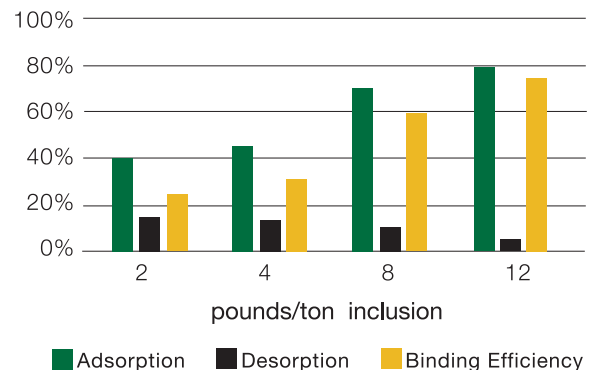
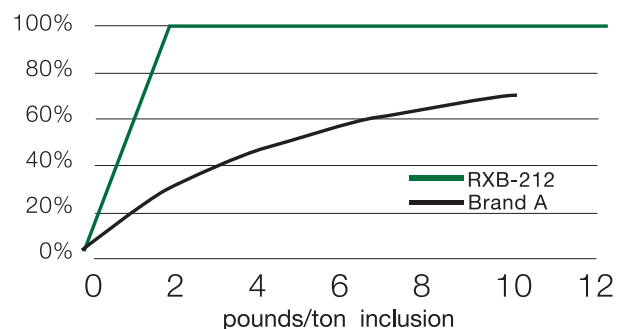
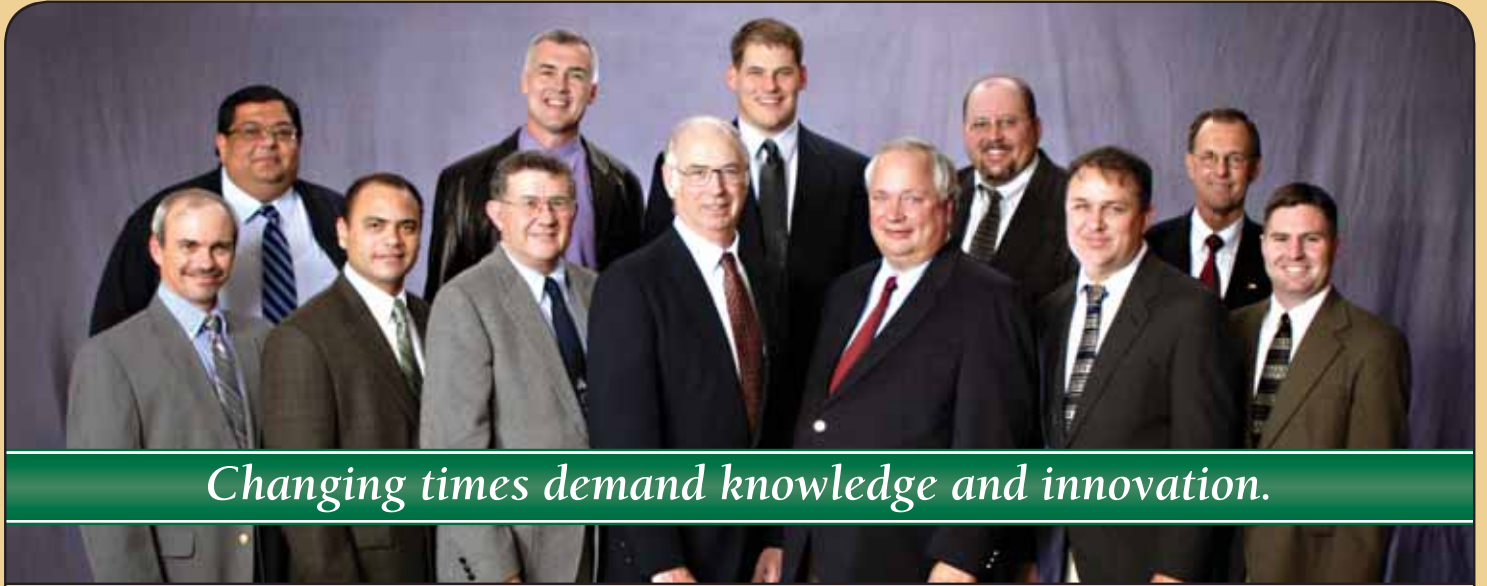


Figure 3. Binding Efficiency of Aflatoxin B1





Changing times demand knowledge and innovation.

THERE IS A DIFFERENCE.

Ralco's nutritional team is known for *knowledge* and *innovation*. Their combined experience of over 250 years brings the best, most innovative nutrition and production solutions to your farm.

Ralco Nutrition, Inc. has some of the best technical minds in the industry working on production issues you face every day. They develop our high quality nutritional programs and *implement* the power of those advances in real-world livestock operations.

Taken as a whole, our scientists account for an impressive array of credentials, but you'll probably prefer to evaluate their work based on its success in your operation. You'll discover we bring the science to your production with our team.



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