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COW TALES

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DECEMBER 2014

A Poultry Feed For All Your Needs

Crystal Creek® is pleased to announce the launch of our NEW line of poultry feed. **Family Flock®** is available in both organic and non-organic formulations for all your poultry needs. Crystal Creek® takes great pride in providing families with a high quality nutrition program that can be tailored to meet the needs of any size flock. Flexible formulation options provide increased profitability while maintaining healthy birds. Call today to ask about which **Family Flock®** option is right for you.

IN THIS ISSUE:

Introducing the **Family Flock®** Line of Poultry Feed

By Dan Leiterman

In an effort to be more self-sufficient and provide quality nutrition, many families today are raising their own poultry flocks. The Family Flock® line of poultry feeds have been specifically formulated to an elevated standard that supports the production of high quality, safe and nutrient dense meat and eggs. The Family Flock® line of poultry feeds provide a significant upgrade in poultry nutrition when compared to what is typically available on the market today.

It is important to be a well-educated consumer, especially when dealing with matters that can directly affect your family. Many other brands of poultry feeds offer just enough nutrition to get by and use ingredients that are not the best quality. It seems their marketing effort relies on a low information consumer with lower expectations of performance. This type of consumer will typically make purchases based in large part on price per bag, rather than on value for the dollar spent, or on the quality of the end product for the family. Here are some key points that will help you to better evaluate other brands of poultry feed and clarify why the Family Flock® products are the finest line of poultry feeds on the market.

Improved Nutrient Density In Meat And Eggs With Family Flock®

It is important to note that the nutrient density of the poultry end products, like meat and eggs, can be directly influenced by the diet they eat. Birds, like us, are what they eat. Meeting higher nutrient standards in poultry diets can result in a healthier and more productive bird, as well as providing higher nutrient density in the meat and eggs.

Higher Omega 3 And DHA Levels In Meat And Eggs:
The Family Flock® Layer Ration contains a moderate level of whole fat flax meal, strong linoleic acid levels and higher Vitamin E fortification, which in turn improves the density of these nutrients in the meat and eggs. Higher levels of Omega-3 and DHA have been shown to be important in the human diet for good health, such as fighting chronic heart disease. As a result, eggs produced from the Family Flock® diet are estimated to contain 125 mg. of Omega-3 and 50 mg. of DHA per egg, versus standard eggs which only contain 50 mg. and 30 mg. respectively. The American Dietetic Association recommends a minimum daily intake for an adult of approximately 280 mg. of DHA and 220 mg of EPA (another Omega-3 fatty acid associated with DHA).

Producing even higher levels of Omega-3 and DHA in the eggs is possible, however, it would require adding higher levels of flax meal in the bird's diet. Flax seed and/or flax meal contain compounds, that when fed at higher levels, reduce digestive efficiency. The birds would eat significantly more feed and lay fewer eggs with higher flax levels in the feed. Also, higher levels of Omega-3 and DHA could be obtained by adding fish oil or fish meat to the bird's diet. However, doing so would result in the eggs and meat tasting like fish and having poor consumer acceptance. The Family Flock® program offers a good balance of significantly improved nutrition quality, but without these negative side effects.

Improved Trace Mineral Quality Supports Better Immune Function:
Trace minerals are critical to the health of the birds and to humans as well. Feeding higher quality trace minerals to the birds means the meat and eggs will likely contain higher levels of nutrient rich trace minerals, which is important to our health. All of the Family Flock® feeds are formulated using 100% chelated (protected and prepared for digestion) key trace minerals. A combination of proteinated chelates and polysaccharide chelates are used to fortify the Family Flock® feeds. Chelated trace minerals are over 95% bio-available (available for digestion) resulting in an improved uptake of trace minerals in the meat and eggs. Many other brands of poultry feeds use poor quality trace mineral sources like zinc oxide and manganese oxide which are less than 10% bio-available; or they may use zinc sulfate, copper sulfate and manganese sulfate which are less than 50% bio-available.

100% Selenium Yeast For Additional Immune Support:
The Family Flock® feeds are formulated using selenium yeast as the sole selenium source. Research shows that selenium yeast is over 90% bio-available, where as sodium selenite (a commonly used source of selenium in the feed industry) is under 25% bio-available. Using selenium yeast results in more nutrient dense meat and eggs.

Strong Formulation Standards For Better Meat And Eggs:
The Family Flock® products are formulated with many key nutrients to meet high performance standards. Take one nutrient like Vitamin E for an example. Rather than only providing the minimum required level of Vitamin E at 3 I.U./lb. of feed, the Family Flock® program provides 45 I.U. of Vitamin E per pound of feed to facilitate improved bird performance and nutrient density of the meat and eggs.

Safer, High Quality Meat And Eggs

Protection Against Critical Pathogens:
All of the Family Flock® feeds contain a highly effective, natural pathogen blocker that reduces the risk of serious pathogens in the birds digestive tract, such as *Salmonella* and *E. coli*.

Rich Colored Yolks and Excellent Egg Quality:
The Family Flock® Layer program is designed to provide high quality, richly colored yolks with sound nutrition. Family Flock® feeds do not contain marigold, or other undesirable ingredients to color the yolk.

Available In Certified Organic And Non-Organic Options

The Family Flock® program is available in both certified organic and non-organic formulas. The certified organic Family Flock® line of poultry feeds are formulated to meet the National Organic Program (NOP) standards set by the USDA.

Certified Organic

Family Flock® Organic Chick Starter, Grower
Family Flock® Organic Layer Ration
Family Flock® Organic Broiler Ration
Family Flock® Organic Turkey Starter, Grower

Non-Organic

Family Flock® Chick Starter, Grower
Family Flock® Layer Ration
Family Flock® Broiler Ration
Family Flock® Turkey Starter, Grower

Crumblized Poultry Feed For Better Intake: The Family Flock® feeds are crumblized in texture to support appropriate and consistent daily feed intake.

The Family Flock® Feeding Chart

Choose Either Organic Or Non-Organic	LAYERS	BROILERS & ROASTERS (meat)	DUCKS & GEESE (meat)	TURKEYS (meat)	PHEASANTS & QUAIL
Family Flock® Chick Starter, Grower	1 to 15 weeks				
Pre-Lay Blend: 1/2 Chick Starter, Grower 1/2 Layer Ration	16 to 17 weeks				
Family Flock® Layer Ration	18 to 70 weeks				
Family Flock® Turkey Starter, Grower				1 to 13 weeks	1 to 4 weeks
Family Flock® Broiler Ration		1 to 42 days	Day 1 to Market	14 to 17 weeks	5 weeks to Market

The Family Flock® line of poultry feeds have been designed specifically for the small flock producer who cares about the quality of the food their family eats. The Family Flock® line of poultry feeds are the finest small flock poultry feeds on the market and are an excellent value. Feed Family Flock® to your birds and see the difference excellent nutrition can make. Feel free to call Crystal Creek® if you have any questions!

Paladin™: Your Knight in the Battle for Feed Efficiency

By Julie Wadzinski, B.S.

From King Arthur's Knights of the Round Table to Charlemagne's Paladin Knights, defending the vulnerable and weak was one of the Knights' many duties. In modern times, Crystal Creek's® Paladin™ line of swine nutrition protects like a strong knight. Paladin™ G/F Swine Mineral encourages healthy and profitable swine production. What makes Paladin™ different from the typical commercial swine mineral is its strong formulation and bio-availability. Crystal Creek® Paladin™ was designed to meet every gamut of swine production while protecting your stock from the most challenging conditions with sound nutrition.

Strong Mineral Formulation is the Foundation of Crystal Creek's® Paladin™ G/F Swine Mineral

Cleaned Phosphorus Sourcing:
Phosphorus is required by all animals for energy metabolism. In most commercial minerals the phosphorus has a number of contaminates that reduces the bio-availability. These contaminants can reduce energy utilization and nutrient absorption which can directly reduce feed efficiency. Crystal Creek® cleans the phosphorus and significantly reduces the level of contaminants to better support feed efficiency thus improving profitability.

Polysaccaharide Chelated Trace Minerals and Selenium Yeast:
Different types of trace minerals have varying levels of absorption. For example, less than 50% of trace minerals from sulfate sources can be absorbed by an animal and less than 10% of oxide trace minerals are absorbed. Maximize your return on feed investment by using a mineral with polysaccaharide chelated trace minerals like Crystal Creek® Paladin™ G/F Swine Mineral. The same principle can be applied to selenium sources. The most commercially used selenium source is sodium selenite, which is less than 25% available to the animal. Crystal Creek® uses only selenium yeast which is over 90% available.

Figure 1 - CRYSTAL CREEK® PHASE FEEDING SWINE RATIONS WITH SOYBEAN MEAL

Phase	**Pre-Wean**	**1**	**1**	**1**	**2**
High Lean Growth (lbs.)	Creep Feed	25 - 40	40 - 55	55 - 75	75 - 100
Moderate Lean Growth (lbs.)	Creep Feed	15 - 20	20 - 25	25 - 50	50 - 70
Low Lean Growth (lbs.)	Creep Feed		15 - 20	20 - 35	35 - 50
Grain Mixes (lbs.)					
Ground Corn	1,188	1,280	1.280	1,280	1,360
Soybean Meal, 47.5%	745	650	650	650	575
Crystal Creek® Swine G/F Mineral	60	60	60	60	55
Salt	7	7	7	7	7
Calcium Carbonate					
Mono-calcium phosphate				3	3
Total	2,000	2,000	2,000	2,000	2,000
Option: Bran in lactating ration					

Trace minerals and selenium are important for immune function, reproduction and feed efficiency, which are all important facets of swine production. This means that adequate amounts of efficient nutrition, absorbed by the animal, are crucial to performance such as boar fertility, sow and gilt conception rates and maintaining feed intake on recently weaned or processed piglets.

Crystal Creek® Paladin™ G/F Swine Mineral Offers Flexibility:
Crystal Creek® Nutritionists make phase feeding your pigs easy with one mineral premix. Whether raising feeder pigs, breeding stock, or finishing market hogs, Crystal Creek® Paladin™ G/F Swine mineral offers the flexibility to use the same premix for all stages of production. See Figure 1.

Supportive Products:

Even with a solid nutritional foundation, pigs may still be susceptible to different challenges throughout the production period. Crystal Creek® has a comprehensive, supportive swine health program to help protect your bottom line. For example:

- Crystal Pellets™ or Aloe Juice fed during times of stress (i.e. piglet processing, weaning, farrowing and breeding) can minimize the negative effects of stress and help maintain production efficiency.
- Super Boost™ Powder is effective at enhancing appetite in lactating sows during the critical post-farrowing days by supporting milk production and preventing downer sows.
- Paladin™ Spike can be used in your post-wean nursery pigs to manage digestive upset.
- No-Fly™ and Lice and Mange Wash are good tools for managing external parasites.

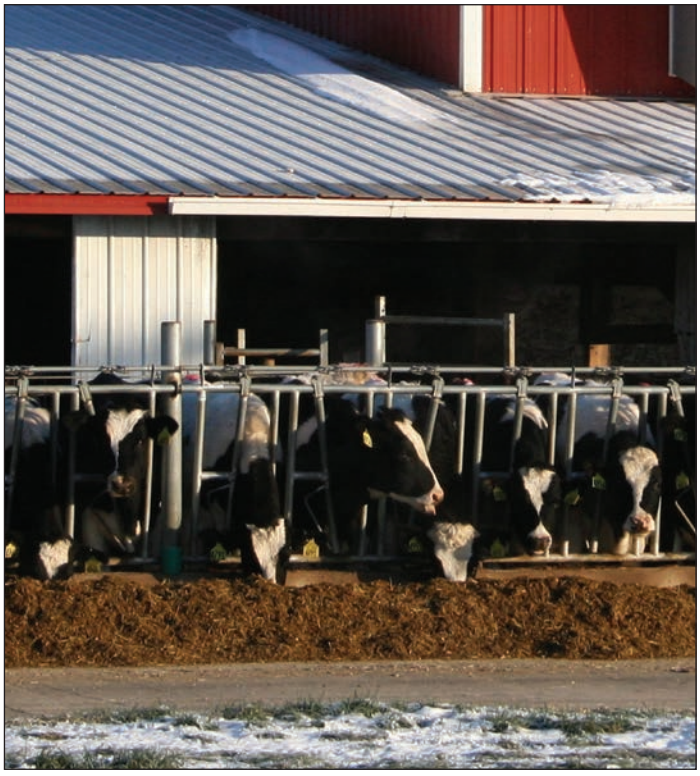
Call and visit with Crystal Creek's® knowledgeable staff about which Crystal Creek® products would best serve and protect your swine. Let the Crystal Creek® Paladin™ Swine Nutrition Program be the Knight on your side in the battle for hog performance and improved profitability.

3	4	5	6	7	8		
100 - 130	130 - 170	170 - 210	210 - 260	260 - 315			
70 - 90	90 - 120	120- 150	150 - 190	190 - 240	240 - 280		
50 - 65	65 - 90	90 - 110	110 -140	140 - 160	160 - 200		
						Sows:	
						Gestating	Lactating
1,428	1,496	1,554	1,606	1,661	1,701.5	1,655	1,437
515	450	395	345	290	250	260	480
50	45	42	40	40	40	60	50
7	7	6	6	6	5.5	7	7
	2	3	3	3	3	5	12
						13	14
2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
							100

Managing Winter Dysentery in the Dairy Herd

By Teresa Marker, B.S.

The winter season is upon us! One of the most common health challenges facing dairy herds as the colder temperature sets in is Winter Dysentery. This article will explain the disease, describe the telltale signs to watch for in your herd, explain how the diagnosis is made and discuss supportive therapy options that are available to limit its negative effects on health and production.



What is Winter Dysentery?

Winter Dysentery is a highly contagious GI disorder that affects housed adult dairy cattle primarily during winter. Current research indicates that it is caused by a particular strain of Coronavirus that attacks the intestinal lining of adult dairy cattle. This disease is typically spread through fecal-oral transmission; but viral particles present in respiratory secretions of affected animals may further enhance transmission. Winter dysentery can spread throughout an entire herd within 7 to 10 days. Death is rare and most animals will recover within a week.

What are the signs?

A hallmark sign of Winter Dysentery is a sudden onset of explosive diarrhea. The diarrhea is usually dark green to black in color and may, at times, contain blood. Animals affected with Winter Dysentery could have some mild coughing, nasal discharge and general dehydration. Another sign of Winter Dysentery is a decrease in feed intake. Make sure to work with your nutritionist to keep a watchful eye on feed intakes at all times. Lowered body condition, caused by a decrease in feed intake, can have a detrimental effect on the animal. The combination of dehydration and decreased feed intake can lead to a drop in milk production. Milk production can decrease significantly (25%-95%) depending on how rapidly the disease is diagnosed and treated. This drop in milk production can take months to recover, decreasing your bottom line profit.

How is it diagnosed?

The best way to diagnose Winter Dysentery is to watch for the signs listed above. Often times it will start with one or two animals and quickly spread throughout the herd. Most veterinarians diagnose the disease by the characteristic signs of dark diarrhea that spreads from cow to cow throughout the barn. Because of the speed at which this disease spreads, it is important to catch the first one or two animals in the barn experiencing symptoms and begin an aggressive supportive treatment protocol.

There is an ELISA test available but it can take over a week to get the test results back. By that time, without implementing supportive measures for the cow, it may be too late to avoid the negative impacts of decreased milk production and dry matter intake.

How is it treated or controlled?

1. Treat with Crystal Creek® Check™. Check™ will work in two ways. First, Check™ will help tie up the toxins produced by Winter Dysentery and rid them from the body. Secondly, Check™ has compounds that have been proven to

stimulate the immune system along the length of the GI tract, where the animal needs the most help. There are two different options to treat animals. If only dealing with a couple of animals, bolus the affected animals with 2 boluses of Check™ twice a day. If the whole herd is affected, feed Check™ bulk powder at 40 grams/head/day. Check™ bulk powder can be mixed into the grain or TMR. Continue feeding Check™ for approximately two to four days, or until the diarrhea is under control.

2. Feed Crystal Pellets™. Animals affected with Winter Dysentery will have a weakened immune system. Help support their immune system by feeding 4oz./head/day of Crystal Pellets™ for 7-10 days or until the intake and production issues are reversed.
3. Make sure cows have plenty of fresh water. One of the easiest ways to encourage a strong feed intake is to provide access to fresh, clean water; especially when the cows are battling dehydration from diarrhea.
4. Feed a highly palatable balanced ration. Many herds affected with Winter Dysentery will have a decreased feed intake. Deliver fresh feed every day and push up often to maintain feed intake levels. Work with your nutritionist to make sure the ration is well balanced.
5. If needed, IV fluid therapy for severely affected animals is helpful. Animals with Winter Dysentery have a tendency to decrease feed intake and lower their water intake. Animals experiencing severe dehydration should be given IV fluid therapy.
6. Sanitize boots and clothing after working with animals to reduce the risk of spreading the disease. Winter Dysentery can be spread easily from farm to farm. Any person that comes in contact with infected animals should be sanitizing boots and clothing before going to the next farm.
7. At this point, there is no vaccine available for Winter Dysentery so it is best to watch for symptoms in your herd and treat/control it before it has damaging side effects.

Don't let Winter Dysentery decrease your milk production and profitability. Check™ works great to reduce the negative impact it can have on your herd. Keep Check™ on hand so you are ready to act immediately. Call Crystal Creek® today to speak with our staff on how you can protect your herd!

Resources: "Intestinal Diseases in Cattle." The Merck Veterinary Manual. N.p., n.d. Web. 15 Aug. 2014. <http%3A%2F%2Fwww.merckmanuals.com%2Fvet%2Fdigestive_system%2Fintestinal_diseases_in_ruminants%2Fintestinal_diseases_in_cattle.html%3Fqt%3Dintestinal%20diseases%26alt%3Dsh>.

Preventing Scours is Cheaper Than Treating Them

By Ryan Leiterman, D.V.M.

Calf scours have been around as long as we have had domesticated cattle and yet they continue to plague the dairy industry. When it comes to getting serious about preventing calf scours, there are four main areas to consider. They are 1) maternity pen cleanliness 2) colostrum management and dry cow vaccination 3) monitoring total solids concentration and temperature of milk or milk replacer and 4) using an intestinal stabilizer such as Calf Shield® to support the GI health of the calf.

Maternity Pen Cleanliness

Calves are infected with the agents responsible for scours (Rotavirus, Coronavirus, Cryptosporidium, *Salmonella*, *E. coli*, Coccidia, to name a few) in the maternity pen when they are exposed to fecal material from adult cows. Reduce their exposure to adult cow manure by:

1. Providing 25 lbs. of long stem straw bedding in the maternity pen between each calving.
2. If the cows calve on a group bedded pack, bed at the rate of 25 lbs. of straw/ stover for every adult cow, EVERY day.
3. Limit the calf's time in the maternity pen as these calving areas are often loaded with pathogens.

Colostrum Management + Dry Cow Vaccines

Each calf should get 4 quarts of high-quality colostrum (green on a glass colostrometer or >23% brix on a digital refractometer) within 4 hours of birth. The quality of the colostrum can be improved with the use of dry cow vaccines.

Monitor Total Solids and Temperature at Feeding

Something as simple as the total solids percentage or the temperature of the milk or milk replacer can have a huge impact on scours. Milk or milk replacer that is either too rich or too dilute will not be absorbed properly and can lead to scours. Milk or milk replacer should have a total solids range between 12-14% and be fed at a temperature between 101-103 degrees Fahrenheit. Feeding milk or milk replacer that is below 101 degrees Fahrenheit will decrease the fat and protein digestibility and can lead to poor absorption and scours.

Calf Shield® Intestinal Stabilizer

The pre-wean phase is a challenging time for every calf. Calf Shield® is a powerful, cost effective intestinal stabilizer that reduces the risk of scours in calves. It provides a unique and effective blend of ingredients designed specifically to support GI health in young calves. Calf Shield® is a powder and is designed to be fed daily, in either whole milk or milk replacer feeding programs. Calf Shield® contains natural anti-microbial immune modulators, probiotics, pH acidifiers and botanical astringents. Calf Shield® has provided effective performance in the face of challenging situations for over 14 years and continues to deliver results.

Features of Calf Shield® Include:

- Easy administration - mix directly into whole milk or milk replacer at each feeding
- Flexible inclusion rates to tailor Calf Shield® dose to each calf's health status
- Non-antibiotic formulation
- Organic and Conventional formulations available
- Available in pails or larger, bulk bags to accommodate every size operation

During the month of December, Calf Shield®, along with other calf products are 10% off. Producers can take advantage of this promotion by placing orders online or with our toll free number. In conclusion, focusing on calf scour prevention with the above mentioned tips will help reduce scours incidence and result in healthier, more profitable calves. Adding a product like Calf Shield®, specifically designed to help stabilize the intestinal tract, is a cost effective tool in preventing calf scours. If you haven't used Calf Shield®, give it a try!

"Ask the Vet and Ask the Nutritionist"

"Two years ago in Wisconsin we had drought-like growing conditions and I experienced molds & mycotoxins in my feedstuffs. The 2014 growing season brought ample amounts of rain. Are my worries about mold and mycotoxins over?"
J.S. from Central Wisconsin

Anytime crops are too wet or too dry, there is a possibility of the crops growing molds and mycotoxins in the field. This can lead to ensiled forages and grains being fed that are loaded with molds, mycotoxins or butyric acid. The increase in rainfall has created issues for planting and harvesting. Symptoms that you may observe in your dairy animals affected by mycotoxins include: animals being off-feed, ketosis, displaced abomasums, pronounced milk decrease and diarrhea. Because of the wet growing season, Dairyland Labs has been testing the 2014 wheat crop for vomitoxin. The charts below summarize their findings for vomitoxin and list FDA vomitoxin guidance levels.

Vomitoxin Testing Results

Wheat Grain		
ppm	Count	% of Samples
<0.5	10	12%
0.5-1	12	14%
1-7	36	43%
7-20	24	29%
>20	2	2%
Samples	84	

Wheat Straw		
ppm	Count	% of Samples
<0.5	38	53%
0.5-1	0	0%
1-7	16	22%
7-20	18	25%
>20	0	0%
Samples	72	

FDA Guidance Levels

Class of Animal	Levels in finished feed (TMR) not to exceed
Ruminating beef and feedlot cattle older than 4 months	5 ppm
Chickens	5 ppm
Swine	1 ppm
All other animals	2 ppm

If you suspect any molds or mycotoxins in your feed or grain, make sure to get it tested. Contact the office staff at Crystal Creek® and they can send you a packet to test your feed through Dairyland Labs. If molds or mycotoxins are confirmed in your forages or grains, make sure to feed a mold and mycotoxin binder. Crystal Creek® offers two highly effective mycotoxin binders. Fuse 207™, formulated with concentrated glucans and polarized ions, is highly effective against many types of mycotoxins. However, when dealing with mycotoxins such as DON/vomitoxin, we recommend the use of Fuse 207™ in conjunction with Crystal Creek's® Mycotex™. Thank you for your question!

- Teresa Marker, B.S., Nutritionist

Sources:
Dairyland Laboratories, Inc.

Whitelow, L.W., R.L. Nebel, and W.M. Hagler, Jr. 1994. The association of deoxynivalenol in grain with milk production loss in dairy cows. Pp. 131-139. In: G.C. Llewellyn, W.V. Dashek and C.E. O'Rear, [eds.], Biodeterioration Research 4. Plenum Press, New York.

Adams, Richard S., Kenneth B. Kephart, Virginia A. Ishler, Lawrence J. Hutchinson, and Gregory W. Roth. Mold and Mycotoxin Problems in Livestock Feeding." Dairy Cattle Nutrition [Penn State Extension]. Penn State Extension, n.d. Web. 17 Sept 2013.

Please submit your animal health or nutrition questions in writing to:

Crystal Creek®
"Ask the Vet/Nutritionist"
1600 Roundhouse Road,Spooner, WI 54801
OR
askthevet@crystalcreeknatural.com

Young Stock - The Missing Link

By Dr. John Popp, PhD.

The major focus on many dairy operations is to have high quality feeds provided to the milking herd and to produce milk in an economically effective manner. The second focus is on the dry cow program with the primary goal of having a feed program that keeps cows holding weight - a proper balance of cations of course - with the desired goal of having a smooth transition to lactation.

With all the care and emphasis placed on the lactating and dry cows, the heifer from 400 lbs. to 6 months post breeding is often the more forgotten animal on the farm. No matter how well the farm is run, there is always some feed that gets put up in poor shape. This feed is typically destined for the young stock, and often times does not even get tested. Young stock may also receive left over dry cow feed. In addition to not paying close attention to the heifers' feed needs, this group of animals often experience overcrowded conditions and generally rougher living conditions than the milking group of animals. This group is the dairy's future and there are steps, like providing a balanced ration, which can be taken to help them reach their full potential.

Younger calves and heifers under 180 days of age are not fully functional ruminants and have significant growth requirements. Development of rumen papillae at a young age is accelerated by grains. At a weight of 300 to 400 pounds calves do not have the ability to consume sufficient quantities of silage to sustain their needs for growth and development. The provision of grain and dry roughages - good quality hay - can greatly enhance the growth and healthy development of young animals.

Meeting requirements, especially for energy and protein, is very important to good heifer development. Protein requirements of young stock at 300 to 400 lbs. are greater than for older animals that are established in size and are able to consume a larger amount of feed.

If the desire is to have larger framed heifers gaining 1.8 lbs. per day, the table below can be used as a guideline. Either too much energy or too little protein can be serious limiting factors to the development of the heifer. Crossbred heifers, especially those from dual purpose genetics, would have lower nutrient demands than the guidelines shown below and can be fed a ration that is lower in energy.
In summary, it may better serve us to rethink how we raise our replacement heifers. A healthy and properly developed heifer is a big investment. Doing a better job with young stock will result in more productive, efficient animals in the lactating herd.

Table 1

FEEDING GUIDELINES

Target Body Weight Post Calving.....1200-1300 lbs

BODY WEIGHT (lb)	DRY MATTER INTAKE (lb)	CRUDE PROTEIN (%)	NET ENERGY (mcal/lb)
200	6.5	16.3	0.72
500	12.9	14.3	0.68
800	20.0	12.2	0.61
1200	32.3	12.2	0.58

** adapted from Brinton and Whitlow and Spartan ration program*

January 2015 Specials

Udder Care Products

10% OFF The Following Udder Care Products (Normal Volume Discounts Apply)

- Veterinary Dairy Liniment™
- Udder Fancy™
- Udder Velvet™
- Teat Saver II™
- Teat Saver Concentrate™
- Lini-Rub™
- Comfort Bolus™

February 2015 Specials

Oral Calcium Products

10% OFF The Following Oral Calcium Products (Normal Volume Discounts Apply)

- Fresh-N-Drink™
- Opti-Peak™
- Saf-Cal™
- Fresh-N-Easy™

March 2015 Specials

Swift Start®

Texturized Calf Feed

18% Calf Starter &

16% Calf Grower

Double the Mixed Pallet Discount
Save $2.00 per Bag When Purchased on a Pallet
(Mixed Pallet Program Qualifications Apply)

Fresh Cow Products

10% OFF in Addition to Normal Volume Discounts

- Super Boost™
- Cow Quench™
- Fresh Cow Bolus™

April 2015 Specials

Pivot FL™

1-3 boxes:	**$10/box discount**
4-9 boxes:	**$18/box discount** ($10/box discount + $8 per box existing volume discount)
10+ boxes:	**$23/box discount** ($10/box discount + $13 per box existing volume discount)
Pail:	**$2/pail discount**

AND Heifer Pride™ **$10/bag discount** & **$2/pail discount**

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- Chick Starter/Grower
- Broiler
- Layer
- Turkey Starter/Grower

Highly Palatable and an **Excellent Value**

Grow Healthier Birds With Better Profitability!