

# Adams Advanced Nutrition, Inc.

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## Heat Stress is Coming!

Cool spring weather can often trick us into thinking that heat and humidity are a long way off. The fact is you need to start preparing now for hot weather and its potential impact on your herd. Heat and humidity adversely affect dry matter intakes. Consequently, production and profitability are also impacted. It is vitally important to maintain quality nutrition during summer months with a diet that is designed to counter the effects of heat stress. One important way to combat heat stress in dairy cows is to ensure they are fed an energy dense - but rumen friendly ration. A ration short on energy reduces a cow's ability to manage during times of high heat and humidity. This is often evidenced by reduced dry matter intake, along with depressed milk production. I can help you evaluate rations to ensure they meet the energy and nutrient needs of your cows throughout the summer. Products such as **RENERGY**, **ENERGY BOOSTER 100®**, **MEGALAC®**, **MEGALAC-R®**, **DCAD® - Plus**, **MagNaKool** and **MagNaKool Plus** are valuable additives to counteract the potential impact of heat stress this summer. Help your cows "cool off" this summer... with Renaissance! It will make a difference.



## Rumen Function... feeding for results

A healthy, properly functioning rumen is important to productivity and profitability. The rumen is a combination of unique and complex systems that transform feedstuffs into available nutrients that body tissues use in metabolism. The rumen is actually a large fermentation organ, holding 40-50 gallons of material and populated with billions of microorganisms. These microbes, including bacteria, protozoa and yeast, ferment the feed and break it down into usable nutrients. Good nutrition is essential to good rumen function and maintenance of the microorganisms in this environment.

Inside the rumen there are projections of tissue, referred to as the rumen papillae. They greatly increase the surface area of the rumen, improving nutrient absorption. Papillae length varies depending on the location in the rumen. The more papillae surface area a cow has... the greater the absorption of nutrients. A healthy rumen is constantly in motion, contracting once or twice each minute in order to mix the contents and bringing microbes into contact with fresh feed, while moving digested feedstuffs out of the rumen and farther down the digestive tract.



Rumen conditions should favor large microbial populations. It is important that a cow maintain her rumen pH within the range of 6-7 in order to ensure optimal rumen function. Nutrients come from ingested feedstuffs and from by-products produced by the microorganisms. These microbes facilitate digestion and fermentation in the rumen. The number and types of microorganisms will vary, depending on the ration and the overall health of the rumen.

Among the most important nutritional functions of rumen microbes are: a) carbohydrate fermentation; b) utilization of non-protein nitrogen (NPN) and synthesis of amino acids; and c) synthesis of B-vitamins.

Feeding cows is more accurately termed "feeding the rumen." It is important to consider your entire ration and management program, in order to help cows function at an optimum level. Rapid changes in ration ingredients and feeding rates can cause numerous rumen-related concerns, decreasing microbial populations and rumen function. The more we know about rumen function, the better we can work toward increased productivity and improved rumen health.

## FEED & MANAGE FOR RESULTS... with RENAISSANCE NUTRITION!



### Preserving Forages for Results!

If you plan to ensile small grain or hay this season, consider a top quality preservative or inoculant. Good preservation is vital to the nutrient value of ensiled forages, helping to increase dry matter recovery by reducing heating, and decreasing the activity of molds and yeast. If unchecked, mold and yeast contribute to a more rapid deterioration of forages and a reduction in nutrient value. Renaissance offers several research-tested products. These help to stabilize forages and offer maximum results in the silo, bag or bunk... as well as at feed-out! Inoculants offer a unique combination of enzymes and technology that can help make a quality difference in your silages. Additionally, we have excellent acid products known to provide positive results. There is a preservative to fit your needs and system. Don't go another season without checking out the details. Get all the facts on **BIOTAL** and **KEMIN** products. Choose the best... and appreciate results!

### Quality Inoculants & Preservatives

**Biotal BUCHNERI™ 500 - PLUS II**  
**BIOCROP**

**Kemin FRESHCUT® - SilageSAVOR Plus®**  
**KemLAC® - TOPSavor®**

**RESULTS? We Deliver!**

*Interested in discussing topics in this newsletter, or want to do a better job feeding and managing your cows? Call me! My goal is to help you. That's Renaissance's commitment to you!*

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**RENAISSANCE... the TEAM for results**

**Solutions for Success~  
RENAISSANCE!**

# with Appreciation ~

## JUNE IS DAIRY MONTH!

*"THANK YOU!" for all your efforts in providing high quality milk and dairy products every day. You are helping to feed America and in fact... the world! This month is set aside to honor your efforts and recognize the outstanding contribution you make. Everyone at Renaissance joins me in applauding your work and saying thanks... for a job well done!*



## WHAT'S IT LIKE AROUND THE FARM?

How long do your cows stay in the holding area before milking? Depending on herd and parlor size, this will vary. It is recommended that cows spend no more than two hours per day in the holding area, with one hour or less preferable. Cows will ruminate in the parlor or holding pen if they are comfortable. If more than 20 percent of the cows defecate in the parlor, it could signal discomfort or uneasiness. If cows appear uncomfortable or uneasy in the parlor or holding area, it is advisable to check for such things as stray voltage, overcrowding, or poor ventilation. It is also important that the milking staff is calm, gentle and reassuring when they handle or milk the cows. A comfortable, stress-free environment makes a difference in how your cows perform!

## A POINT TO PONDER...

Worry... it seems to consume too many people! We seem to worry about things over which we have little or no control like weather conditions, rainfall, crop performance and much more. The problem with worrying is its impact on us personally and the fact that it never really solves anything! In spite of life's problems, concerns and frustrations, we need to take time to reflect on what we can change and learn to take the rest in stride. It may also help to share those "worries" with someone else. Take time to enjoy life. It's too short to worry away!



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*Feeding the rumen... feeding for results!  
Dealing with heat & humidity this summer  
The importance of preserving forage*

# CHECK IT OUT.