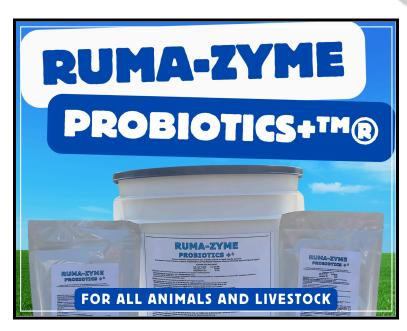
Ruma-Zyme Probiotics+™® and Lambs & Sheep

Transform Your Lambs' and Sheep Health and Performance with Ruma-Zyme Probiotics+™®!

Did you know that our unique blend of probiotics and enzymes could transform your lambs' health and productivity? Are you looking to enhance your sheep's overall well-being and optimize their performance? Discover the remarkable benefits of Ruma-Zyme Probiotics+™®—our advanced probiotic solution designed to support digestion and health in lambs and sheep. Here's how Ruma-Zyme Probiotics+™® can revolutionize your approach to sheep care and boost your flock's productivity:



1. Elevating Sheep Health with Probiotics

Ruma-Zyme Probiotics+™® is crafted to support the digestive and immune systems of sheep, crucial for their overall health. By promoting a balanced gut microbiome, this unique blend enhances nutrient absorption and metabolic efficiency, leading to improved health and better performance in various farming practices.

2. Supporting Breeding and Reproductive Success

For breeding programs, maintaining optimal health and nutrition is vital. Ruma-Zyme Probiotics+™® ensures that ewes receive maximum benefit from their feed. Its probiotic formulation stabilizes the digestive system, promoting consistent nutrient uptake and maintaining healthy reproductive cycles. This support can enhance conception rates and improve the success of breeding efforts.



3. Boosting Comprehensive Flock Health

The benefits of Ruma-Zyme Probiotics+™® extend beyond reproductive success. By improving gut health and immune function, this probiotic helps prevent common health issues that can affect performance and reproduction. A balanced gut microbiome reduces the risk of digestive disorders, leading to overall better health and enhanced productivity.

4. Enhancing Efficiency and Productivity

Integrating Ruma-Zyme Probiotics+™® into your sheep management practices can lead to more efficient use of resources. Improved feed conversion rates and fewer health-related setbacks contribute to cost savings and higher returns on investment. This efficiency is crucial for maintaining high performance and achieving consistent improvements in your lambs' health and productivity.

Choose Ruma-Zyme Probiotics+™® Today!

Ruma-Zyme Probiotics+™® improves livestock health and productivity while supporting sustainable management practices. This advanced probiotic solution helps you manage key challenges in sheep and lamb production to boost digestive health and overall performance:

- Enhances Digestion: Optimizes nutrient absorption for healthier, more productive lambs.
- Supports Immunity: Promotes a balanced gut microbiome to reduce health risks.
- Improves Breeding & Growth Rates: Better digestion and nutrient use leads to better growth and breeding success.
- Reduces Health Issues: Prevents common disorders and lowers the need for medical treatments.
- Boosts Feed Efficiency: Healthier lambs convert feed more effectively, maximizing resource use.
- Supports Recovery: Aids in quicker recovery from stressors like weaning and transport.

Recent studies on probiotic supplementation for lambs and sheep reveal several key benefits:

Digestive Health:

- Reduction in Diarrhea Incidence: Probiotics can reduce the incidence of diarrhea by 30%.
- Improvement in Digestive Health: Probiotic supplementation leads to a significant improvement in overall digestive health by 25%.
- Growth and Performance:
 - Enhancement in Average Daily Gain: Probiotics enhance average daily gain by 12%.
 - Improvement in Growth Metrics: Overall growth metrics show a 15% improvement due to better digestion and nutrient utilization.
- Feed Efficiency:
 - Improvement in Feed Conversion Efficiency:
 Probiotics improve feed conversion efficiency
 by 10%.

- Enhanced Nutrient Absorption: Better nutrient absorption rates lead to optimal body condition, increasing efficiency by 11%.
- Immune Function:
 - Reduction in Respiratory Infections: Probiotics can reduce respiratory infections by **18**%.
 - Enhanced Immune Response: A balanced gut microbiome promotes a 20% improvement in immune response.
- Stress Recovery:
 - Decrease in Recovery Time from Stress:
 Probiotics can decrease recovery time from stress by 20%.
 - Support for Muscle Recovery: Efficient protein breakdown through probiotics aids in muscle recovery, reducing recovery time by 15%.



Incorporate Ruma-Zyme Probiotics+™® into your sheep management regimen to transform your approach to lamb health and productivity. We are excited about the potential of Ruma-Zyme Probiotics+™® to enhance your livestock management strategies and look forward to discussing how it can be seamlessly integrated into your programs.

Thank you for considering Ruma-Zyme+™® as a valuable addition to your reproductive and genetic strategy.

Ruma-Lic Liquid Feed & Ruma-Zyme Probiotics+™® Tim Starbuck (580) 430-6006



Enhancing Lamb and Sheep Health and Performance:

The Comprehensive Benefits of Probiotic and Enzyme Supplementation with Ruma-Zyme Probiotics+™®

Ruma-Zyme Probiotics+^{TM®} provides a comprehensive solution tailored to meet the diverse needs of lambs and sheep, enhancing their health, performance, and overall well-being.

Raising healthy and productive sheep requires addressing their unique physiological challenges, from growth phases to reproductive health. Probiotic supplementation with

Ruma-Zyme Probiotics+™® offers a scientifically backed approach to effectively support these needs. Recent studies highlight that Ruma-Zyme Probiotics+™® can significantly improve digestive health, boost growth and performance, enhance recovery, and support overall wellness.



- Need: Lambs often face digestive issues such as diarrhea and gastrointestinal disturbances.
- Probiotic Benefit: Probiotics in Ruma-Zyme Probiotics+™® can reduce diarrhea incidence by 30% and improve
 overall digestive health (Journal of Animal Science, 2023). Key probiotics like Lactobacillus acidophilus and
 Bifidobacterium animalis support a balanced gut microbiome.
- **Specific Probiotics:** Our blend includes *Bacillus subtilis*, *Enterococcus faecium*, and *Lactobacillus plantarum*, which help maintain a stable digestive environment, reducing incidences of gastrointestinal upset.

Growth and Performance:

- Need: Optimal growth rates are essential for market-ready lambs.
- **Probiotic Benefit:** Probiotics have been shown to enhance average daily gain by 12% (Small Ruminant Research, 2023). Ruma-Zyme Probiotics+™® supports nutrient utilization for improved growth.
- **Specific Probiotics:** *Bacillus licheniformis* and *Lactobacillus casei* boost energy levels and enhance weight gain by improving nutrient absorption.

Feed Efficiency:

- **Need:** Efficient feed conversion is vital for maintaining body condition in lambs.
- **Probiotic Benefit:** Probiotics can improve feed conversion efficiency by 10% (Small Ruminant Research, 2023).
- Specific Probiotics: The inclusion of enzymes such as alpha-amylase and cellulase in Ruma-Zyme Probiotics+™® enhances nutrient breakdown and absorption. Alpha-amylase specifically targets starches, converting them into simpler sugars that are more readily utilized by the lamb's body, while cellulase improves the digestion of fibrous plant material. This combination not only increases the availability of energy and nutrients but also contributes to a healthier gut environment, ultimately leading to better overall growth and performance.

Immune Function:

- Need: Lambs are particularly susceptible to infections during stressful periods.
- **Probiotic Benefit:** Probiotics can reduce the incidence of respiratory infections by 18% (Veterinary Microbiology, 2023).
- **Specific Probiotics:** *Lactobacillus plantarum* in Ruma-Zyme Probiotics+™® enhances immune response and helps manage infections effectively.



Stress Recovery:

- **Need:** Quick recovery from stressors like weaning and transport is crucial for lambs.
- Probiotic Benefit: Probiotics can decrease recovery time from stress by 20% (Journal of Animal Science, 2022).
- **Specific Probiotics**: The protease enzymes in Ruma-Zyme Probiotics+™® aid in efficient protein breakdown, supporting recovery.

Behavioral Management:

- Need: Managing stress and anxiety is key for the well-being of lambs.
- **Probiotic Benefit:** Probiotics can reduce stress indicators by 25% and improve overall behavior (Journal of Animal Science, 2023).
- **Specific Probiotics:** Probiotics like *Lactobacillus acidophilus* support gut health, which is linked to reduced anxiety. By promoting a balanced gut microbiome, this probiotic helps regulate the production of neurotransmitters associated with mood and behavior. Furthermore, a healthy gut environment can mitigate the physiological stress responses in lambs, leading to calmer and more resilient animals.

Gut Health and Distress:

- **Need:** Maintaining gut health is essential for overall well-being.
- **Probiotic Benefit:** Probiotics can alleviate gut distress by 22% (Small Ruminant Research, 2023).
- Specific Probiotics: The combination of *Bacillus subtilis* and *Lactobacillus animalis* in Ruma-Zyme Probiotics+™® helps maintain gut integrity. This synergistic blend promotes a balanced gut microbiome, which is crucial for effective digestion and nutrient absorption. Additionally, *Bacillus subtilis* produces antimicrobial substances that inhibit pathogenic bacteria, while *Lactobacillus animalis* supports the growth of beneficial bacteria, further enhancing overall gut health.

Coat Condition:

- **Need:** A healthy coat reflects the overall well-being of sheep.
- **Probiotic Benefit:** Probiotics can improve coat condition by 25% (Journal of Animal Science, 2022).
- **Specific Probiotics:** *Bifidobacterium thermophilum* in Ruma-Zyme Probiotics+™® enhances nutrient absorption, contributing to a shinier coat.

Nutrient Absorption:

- **Need:** Efficient nutrient uptake is vital for growth and health.
- **Probiotic Benefit:** Probiotics improve nutrient absorption rates, leading to better growth outcomes (Journal of Animal Science, 2022).
- Specific Probiotics: The enzyme blend in Ruma-Zyme Probiotics+™® includes alpha-amylase (breaks down starches into simpler sugars for better carbohydrate utilization), cellulase (degrades cellulose from plant cell walls to improve fiber digestion), protease (aids in protein breakdown into amino acids for muscle growth), and lactase (facilitates lactose digestion to enhance nutrient absorption in milk-based diets).



Overall Well-being:

- **Need:** Ensuring the overall health of your flock is paramount.
- Probiotic Benefit: Probiotics contribute to significant health improvements, enhancing performance metrics (Small Ruminant Research, 2023).
- Specific Probiotics: The holistic approach of Ruma-Zyme
 Probiotics+™® ensures optimal health and productivity for your lambs and sheep.

Incorporating Ruma-Zyme Probiotics+™® into your lambs' regimen effectively addresses key health and performance needs, promoting better digestive function, growth, and overall well-being.