There's a story in your milk ready to be told right now.

Right now, several of your dairy farms may be supplying milk to you from cows fed a blend of scientifically selected essential oils, and more herds are starting on the product every day. A UC-Davis study with Dr. Frank Mitloehner et al (2020) showed cows consuming Agolin® Ruminant in their feed emitted less enteric methane.

You could be producing dairy products with a lower carbon footprint than before. This is a story about sustainable agriculture your customers may need to hear.

agolin® an Alltech technology

The facts behind the story

A number of your supplying dairies are likely including Agolin Ruminant in their rations. This plant-based feed additive harnesses a blend of scientifically selected essential oils and is fed to more than 1.5 million dairy cows around the world.

Your dairies are always looking to improve ROI and at the same time may want to look after the environment through reduced enteric methane. If you're interested to know what some scientists are saying about Agolin Ruminant, enteric methane reduction and feed efficiency improvements, let us know. We're happy to send you the *published, peer-reviewed research.*

The benefits of essential oils

Essential oils are the components of plants, providing them with a natural defense against disease, fungal and insect attack. Some of the well-recognized benefits of essentials oils include:

- Anti-Inflammatory
- Antioxidant
- Enzyme Secretion
- Immune Stimulation
- Anti-Microbial
- Flavoring

FeedworksUSA *performance through science*

Agolin Ruminant: 30-plus years of research

Essential oils are not all the same. Agolin products are the result of more than 30 years of research into essential oil extracts specifically developed for dairy, beef, swine and poultry. To develop Agolin, researchers tested more than 100 different plant extracts to determine their effects on the rumen microbiota, fat and protein yield, feed efficiency and ruminant enteric methane production.

Consumers need some good news

Although dairy farmers have been caring for the environment for decades – well before sustainable agriculture became a trending topic, they haven't adequately communicated this fact. With many people regularly worrying about climate change, it has become imperative – and beneficial – for agriculture to tell its story.

Two in five people within the Gen Z and Millennial generations worry about climate change on a weekly basis (Source: YPulse Sustainability Report, March 2021).

Farmers are not the only ones interested in Agolin Ruminant

Agolin SA, a Swiss company, is collaborating with Nestlé, the world's largest food company and milk buyer, and Barry Callebaut, the world's largest chocolate manufacturer. Other major consumer brands using dairy products in their manufacturing, such as Starbucks and Target, prefer milk from Agolin-fed cows to help them meet their commitments to carbon footprint reductions.

Manufactured by Agolin SA

Agolin SA researches, develops and markets innovative feed additives based on active plant ingredients. Agolin SA ensures safety and guarantees traceability through its quality management system (FAMI-QS).

Distributed by Feedworks USA

Feedworks USA distributes research-proven specialty feed ingredients. Working with our manufacturing partners, we ensure our customers receive outstanding product and technical support. Our goal is to support animal health and production efficiencies for dairy farmers, beef operators and swine and poultry producers.

Find out how we can help you tell this story

For more details on how we can help you tell a great story, please contact your Feedworks USA representative, John Clark, at 315-868-5646. Or visit FeedworksUSA.com.

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Feedworks USA
2407 Ashland Avenue, Cincinnati, Ohio 45206
FeedworksUSA.com
info@feedworksusa.com
Phone: 513.271.4120

Agolin® Ruminant

Split-Herd Trial Summary: More Milk, Less Feed

Feedworks USA recently completed nine split-herd trials measuring milk performance by cow and feed efficiency (DMI) by pen over three- to four-month periods. Only data collected from cows that remained in the test pens for the duration of the trial were used in the analyses. There were more than 6,000 cows included in the summary (half on Agolin Ruminant, half control), and seven of the nine herds had monensin in their diets. Results show an average 2.41-pound improvement in Energy Corrected Milk (ECM) with a 1.45-pound decrease in feed intake. The potential gains of more milk and less feed dwarf the $0.05 cost per day as these trials demonstrate an average of over 12:1 benefit-to-cost ratio or a profit of $0.60 per cow per day.

Split-Herd Trials Across the USA

Average Response of 9 Trials

Variable	Control	Test	Agolin Difference
Milk yield, lb	84.30	85.99	+1.69
Fat %	4.10	4.10	0.00
Protein %	3.16	3.17	+0.01
Fat yield, lb	3.34	3.44	+0.10
Protein yield, lb	2.58	2.66	+0.08
FCM, lb	90.82	92.99	+2.17
ECM, lb	89.21	91.62	+2.41
Milk yield change	-6.92	-4.41	+2.50
FCM change	-8.69	-6.37	+2.32
ECM change	-8.42	-5.87	+2.56
DMI, lb (by pen)	57.43	55.98	-1.45
ECM/DMI	1.55	1.64	+0.09 (+5.8%)

Visit TheAgolinStory.com for more product information and research.

FeedworksUSA performance through science

Determining the effectiveness of feed changes and feed additives is not an easy task

> "As dairy producers know, average milk production per cow can change by several pounds from one day to the next. Additional factors come into play over weeks and months. With a 14-month calving interval as an example, eight percent of the herd turns over every month (two percent every week). The ratio of heifers to mature cows does not remain constant. Pen changes can result in temporary slumps. Season and even day-to-day weather events impact production. Feed ingredient changes need to be made, and even simple factors, like changes in silage moisture can affect milk or component yields. These normal events create noise that makes it very difficult to determine the impact of smaller feed modifications."
>
> **– DR. ESSI EVANS, PRESIDENT OF E+E TECHNICAL ADVISORY SERVICES**

Ensuring accurate results

Feedworks USA implements side-by-side testing to generate sound information on Agolin's effect on energy corrected milk yield and feed efficiency. These results were all determined on working farms – typical operations that deal with the many daily events that impact milk production.

Parameters for the side-by-side feeding trials:

- Test and control pens are paired for production, age and days in milk.
- Test and control pens receive the same diet, with the exception of the additive.
- Only data from individual cows that have received their treatment (test or control) for the entire period are used. If a cow enters or leaves the pen during the trial, her results are not used.

Bottom line: The treated cows and the control cows are all exposed to the same conditions, the same environmental factors and the same feed ingredient changes for the exact same period. This set-up allows Feedworks USA to eliminate the noise that results in changes in the day-to-day events that are normal in the dairy industry.

"Few products can claim to help the environment and help the bottom line at the same time. Agolin can," says Dr. Essi Evans.

According to Dr. Evans, "The productive improvements that occur with Agolin are proven and cost-effective. They are also gradual and subtle. The bulk tank will not overflow immediately after the product goes into use."

Research shows that the maximum benefit from feeding Agolin is seen after about five weeks of use. "The increase in fat and protein corrected milk yield is between four to five percent," adds Dr. Evans. "Likewise, the improvement in feed efficiency will occur gradually. This amount is meaningful but subtle enough to be difficult to discern from the normal fluctuation in milk production."

FeedworksUSA
performance through science

To learn more about Agolin Ruminant and the research trials, please contact your Feedworks USA representative.

TheAgolinStory.com

Feedworks USA
2407 Ashland Avenue, Cincinnati, Ohio 45206
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Phone: 513.271.4120