

AGOLIN[®]



***Rumen Efficiency
Through the Power
of Plant Extracts***



Plant Extracts and Rumen Efficiency

Essential oils are concentrated plant extracts. They provide plants with protection from disease and pest attack. Many years of research and trials with combinations of essential oil compounds has resulted in a specific blend of these powerful components with enormous benefits to ruminant animals. By changing the balance of the rumen bacterial population, efficiency of rumen fermentation is increased resulting in improved animal productivity and health.

Agolin in the Rumen

Research trials (Prof. Jamie Newbold, University of Wales, Aberystwyth, UK 2007) have produced the following rumen responses, both in vitro and in vivo (metabolism chamber), following inclusion of Agolin in diets (shown in the tables below):



Wild carrot



Common nutmeg



Cilantro

Rumen Changes

- Methane decreased by 25% to 30% —————>
- Ammonia decreased by 10% —————>
- Volatile fatty acids increased (propionate, acetate, butyrate) —————>
- Increased propionate: acetate ratio —————>

Benefits to Dairy/Beef Cows

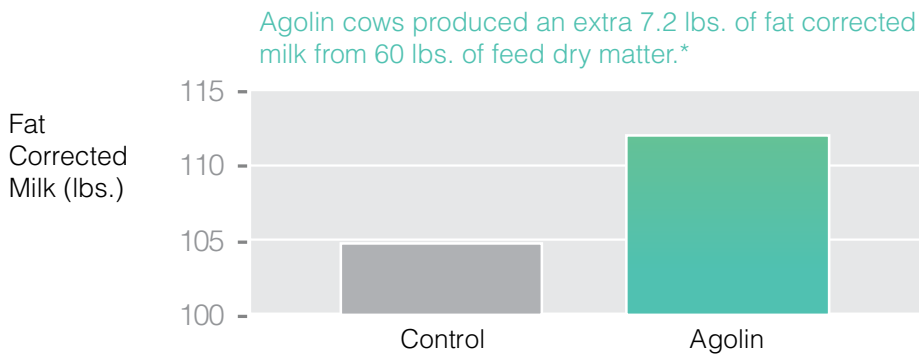
- Better feed efficiency
- More feed protein used for production, not lost in urine
- Increase in milk yield and components or daily gain
- Improve feed efficiency and yield/gain

Dairy Trials

University research and field trials around the World confirm the benefits of Agolin Ruminant on *feed efficiency*, *milk yield* and *milk components*.

University of California, Davis

A University of California, Davis research trial on a 4,800 cow dairy in Hanford produced the following benefits from inclusion of Agolin in the diets of early lactation cows. **The results produced a 15:1 payback on the cost of Agolin (\$15 return for each \$1 spent on Agolin).**

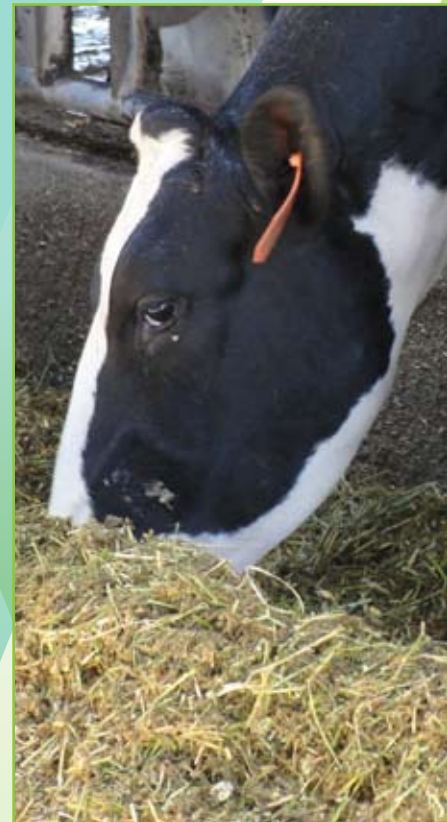
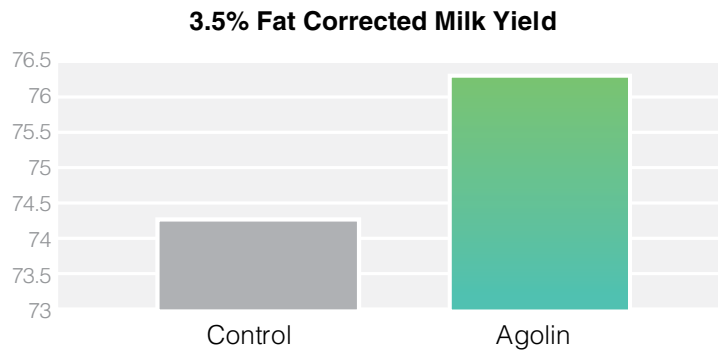


* Combination of fat corrected milk and feed efficiency response. Increase in milk fat yield - $P < 0.01$. Feed efficiency - $P < 0.17$.

Average of Field Trials - USA

Trials across a range of US dairies have produced an increase of 2 to 4 lbs. in 3.5% fat corrected milk with a feed efficiency (ECM/DMI) benefit of approximately 4%. **Together these responses are worth 46 cents/cow/day****

** Diet cost at 11c/lb of dry matter and milk at 14c/lb. Not all herds were able to measure feed intake.



Beef Trials

Improving rumen efficiency is equally as effective in beef animals as dairy. Field trials confirm excellent responses to Agolin Ruminant in beef animals. A nine month trial produced significant, and very profitable responses to Agolin (100mg per 110lb liveweight). The trial involved 125 Hungarian Simmental cattle on a 60% concentrate diet.

	Daily Gain (lbs.)			Feed Efficiency (DMI/Daily Gain)		
	Control	Agolin	% Change	Control	Agolin	% Change
April - Jan	2.31	2.56	+ 10.8%	9.90	8.85	-10.6%

Agolin Inclusion Levels

Species	Recommended Levels
Dairy Cows	0.4 - 1.0 g/head/day
Beef Cattle	100 - 200 mg/100kg liveweight/day



Agolin Benefit Summary:*

- Optimal feed intake; very palatable
- Milk yield and daily liveweight gain increased
- Improved feed utilization
- Very significant return on cost
- Environmental benefits (reduced methane and nitrates)

*The benefits expressed above have been confirmed through trials using Agolin.



Contact us for more information on Agolin Ruminant:
Advantec Associates, Inc.
info@advantecassociates.com
Peter Williams
Tel: (530) 758-6100 / Cell: (530) 304-2586

