



A Quality Product

Quality assurance is critical for the feed industry. From special mining techniques to eliminate contamination, to rigorous inspection and cleaning procedures for our carriers, we ensure you receive a quality product. MIN-AD is also certified free of dioxins and heavy metals and has been listed by OMRI for use in production of organic food.

MIN-AD is the specialty mineral supplement backed by research and quality testing. Ask for it by name!

MIN-AD

Toll Free: 1.888.848.8178
Web Site: www.min-ad.com



Make more MILK



MIN-AD®

Adds Nutritional Advantages



Boost your milk production with MIN-AD

Backed by research, recommended by nutritionists

Manage Acidosis

MIN-AD has 61% to 75% more acid-consuming capacity than sodium-based buffers – at a lower cost. Its acid consuming capacity is nearly double that of both sodium bicarbonate and sodium sesquicarbonate. And because it is acid soluble, as opposed to water soluble like bicarbonate, MIN-AD is available when rumen pH drops for several hours post-feeding. This improves acidosis management.

Microbial Efficiency

Dairy ration fermentation studies in 2000 at the Rumen Fermentation Profiling Laboratory (RFPL) at West Virginia University showed that a MIN-AD plus sodium bicarbonate combination increased rumen microbial efficiency by up to 10% as compared to the typical magnesium oxide (MgO) and sodium bicarbonate buffer pack.

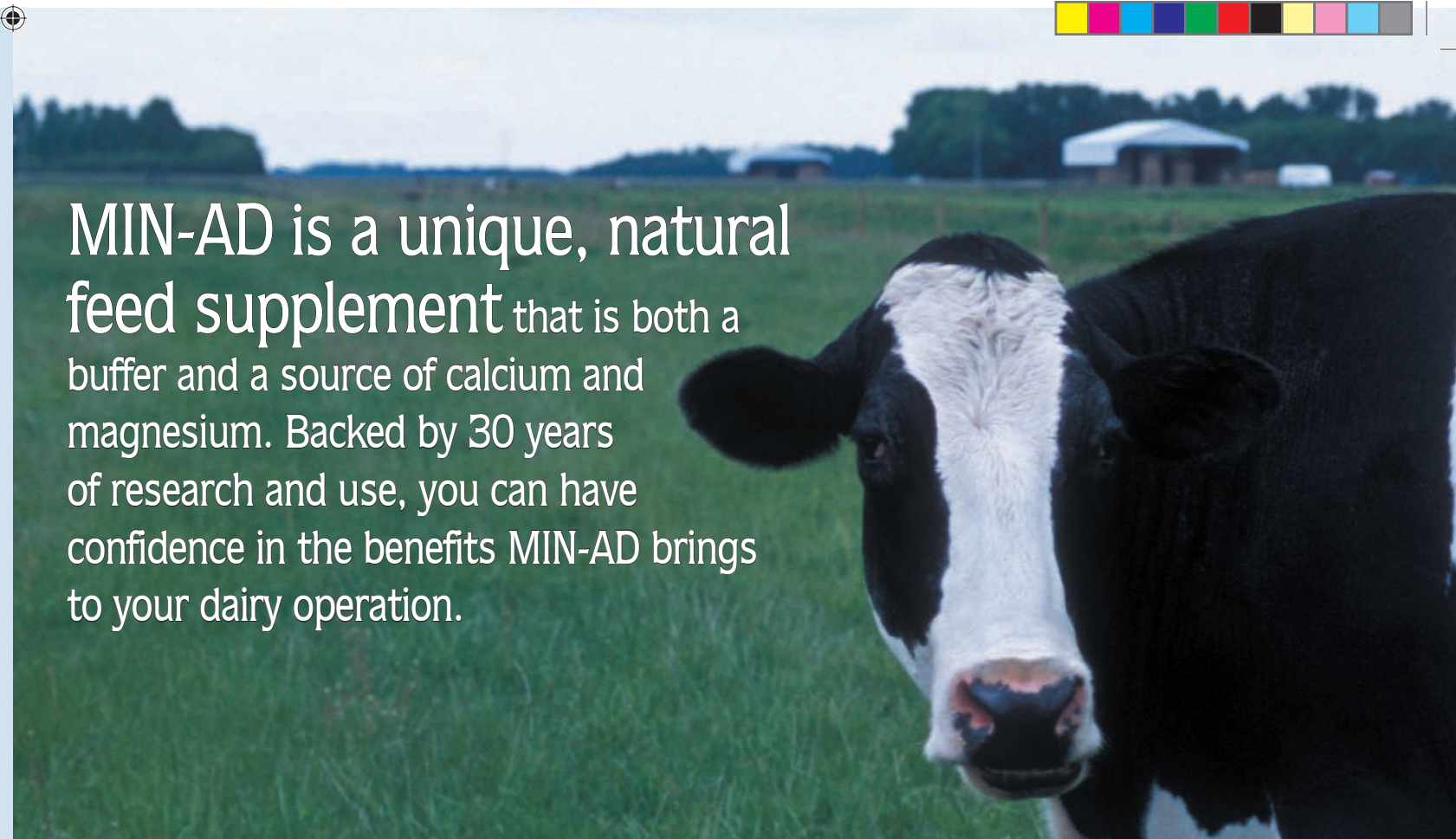
An improvement in microbial efficiency also manifests itself through the amount of protein that is actually degraded in the rumen. The combination of MIN-AD and sodium bicarbonate resulted in higher measured ruminally degraded protein. The end result was more microbial protein production.

Adds Minerals

MIN-AD is an excellent source of calcium and magnesium that contains 12% Mg and 22% Ca. Two detailed minerals studies in 2001 and 2002 showed that the mineral availability in MIN-AD was as good as that of limestone and MgO. Because MIN-AD is an effective mineral source, you can reduce the size of your supplement by 2-3 oz. when it is used in partial replacement of a sodium based buffer.



Adds Nutritional Advantages



MIN-AD is a unique, natural feed supplement that is both a buffer and a source of calcium and magnesium. Backed by 30 years of research and use, you can have confidence in the benefits MIN-AD brings to your dairy operation.

Improve Your Feed

MIN-AD has been successfully used in dairy rations for many years as a buffer and source of Mg and Ca, typically in partial replacement of sodium bicarbonate and MgO.

MIN-AD is an economical, efficient, and palatable feed supplement. When it is used to replace part of a sodium based buffer, buffering and microbial efficiency can be improved. The size of the supplement can be reduced because MIN-AD is also an effective mineral source as demonstrated in two recent minerals metabolism studies.



Get a Good Start

Transition cows entering their production cycle show a particularly strong response to MIN-AD. Two recent production studies have demonstrated that early lactation cows with a combination buffer can increase their milk yield by 3.5%. A good start in the cycle generally leads to better peak production.

Boost Milk Production

MIN-AD results in greater milk production and better herd performance. The two New York production trials and the fermentation studies have demonstrated that a MIN-AD plus sodium bicarbonate buffer can outperform straight sodium bicarbonate. In both trials, MIN-AD replaced 50% of the bicarbonate and increased both mean milk and fat production. Nutritionists often recommend a 50/50 blend of MIN-AD and bicarbonate.

	Test Results			
	Spruce Haven Research (2006)		Miner Institute (2004)	
	Milk Yield (lbs/day)	3.5% FCM (lbs/day)	Milk Yield (lbs/day)	3.5% FCM (lbs/day)
MIN-AD+Bicarb (50/50 blend)	97.1	112.6	74.6	86.7
Bicarb+MgO	93.5	110.3	72.1	82.2