

AGP® *new*

AGP Reprint Series - Vol. I

AMINOPLUS Benefits Dairy, Soybean Producers

Since introducing AMINOPLUS® into his herd's dairy ration about 8 months ago, Arizona dairyman Ross Tappan's milk check has gotten bigger. "We're producing more milk than we ever have, and I attribute a lot of our success to the switch we've made to AMINOPLUS," said Tappan, a highly regarded dairy producer near Mesa, Arizona. "We've had a good winter, consistent forage and other things that have helped out but AMINOPLUS is probably the most important factor in boosting our production."

AMINOPLUS is a high-performance soy by-pass protein product patented, produced and marketed by AGP. It improves milk production and adds value to soybeans, a win-win situation for agriculture. With an increasing number of dairy producers like Tappan discovering the benefits of using AMINOPLUS in their operation, the future looks very bright. Midway through Fiscal 2002, AMINOPLUS volume is running 40 percent ahead of last year, on track to continue a remarkable trend of at least 15 percent annual



Since adding AMINOPLUS in his herd's dairy operation, Arizona dairyman Ross Tappan (above) has experienced increased milk yields and decreased storage, handling and mixing expense of his by-pass ingredients. "We've had good success with AMINOPLUS," said Tappan, who heads up a family-owned dairy operation near Mesa, Arizona.

growth since AGP began commercial sales of the product six years ago.

What's driving this growth? At Arizona Dairy, the family-owned operation headed up by Tappan, milk production has increased to about 86 lbs. per cow per day after AMINOPLUS replaced other by-pass ingredi-

ents in the company's feed rations.

"For our herd size of about 6000 cows, that's pretty darn good," said Tappan. "Additionally, we've always had a hard time staying at 3 on protein levels, and now we're consistently ranging from 3 to 3.2." This is important as Tappan's local market, United Dairyman of Arizona (a large dairy cooperative), pays a premium for milk with protein levels over 3.1.

Besides greater returns on milk production, Tappan said there are additional benefits of using AMINO-

AMINOPLUS

PLUS over other by-pass products such as fish meal and cottonseed meal. "We feel real good about the quality of AMINOPLUS and that wasn't always the case with some of these other products," said Tappan.

The dairy has phased out using competing by-pass ingredients while boosting feeding levels of AMINOPLUS to about 4 lbs. per cow daily. As such, there is less expense in ingredient storage and handling, and reduced TMR costs (total mixed ration).

"AMINOPLUS is competitively priced and delivery service is excellent," said Tappan. "We usually get a full rail car and work with other dairyman in this area who are starting to use the product to coordinate shipments and volume. Also, we don't see the shrinkage in AMINOPLUS like we did when unloading rail cars of fish meal and cottonseed



Dr. Wayne Stockland
Vice President
Nutrition and Technical Services

meal."

AGP's Processing Group has initiated an aggressive marketing strategy and assembled a technical and marketing team to get the word out about the advantages of AMINOPLUS to

more dairy producers in the U.S. and around the world.

For AGP members and their farmer owners, the benefits of AMINOPLUS are twofold:

*** New demand for soy products, replacing other non-soy by-pass sources such as fish, canola and cottonseed.**

*** Greater returns by marketing a higher-valued branded product.**

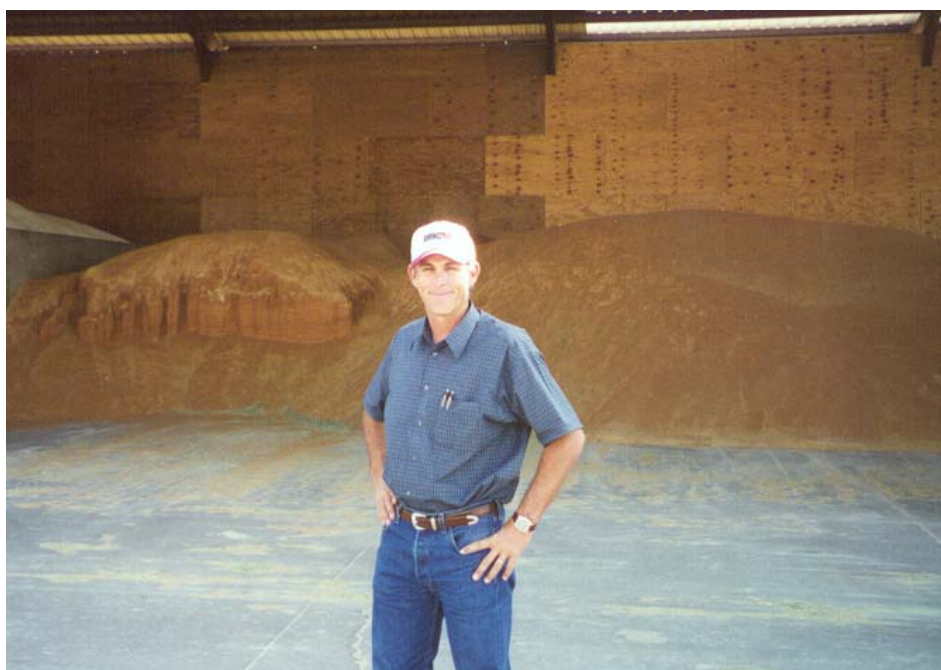
"No one else has AMINOPLUS, which is a unique value-added natural product made from AGP soybean meal," explained Dr. Wayne Stockland, Vice President, Nutrition and Technical Services. "Expanding sales of AMINOPLUS benefits our members and dairy producers who use this product."

AGP's continued focus on value-added processing led to the development of AMINOPLUS. Stockland leads AGP's technical team, while marketing efforts are directed through the Ag Products Division of the Processing Group. AMINOPLUS is produced at Mason City, Iowa and Hastings, Nebraska.

What is By-Pass Protein and How Does it Work?

Normal protein, when fed to a ruminant animal such as a dairy cow or a beef animal, is largely broken down to ammonia in the rumen (first stomach), explained Stockland. Bacteria then use this ammonia and energy to synthesize microbial protein, which is subsequently broken down to amino acids in the intestine which sustain the animal.

By developing superior by-pass technology, a much larger percentage of the feed protein is able to "pass" through the rumen without being broken down into ammonia. The protein goes directly into the "true"



Using AMINOPLUS in a dairy ration has several economic advantages over competing by-pass products such as fish meal and cottonseed meal. In addition to increased milk production, dairy producers such as Ross Tappan (above, with AMINOPLUS being stored in the background) can save on storage, handling and mixing expense.

stomach and small intestine, where it is broken down to amino acids which are absorbed by the animal.

The value of by-pass proteins have been understood for several years, noted Stockland, and there are many different ingredients such as blood meal, corn gluten meal, fish meal, and meat and bone meal that have high by-pass values.

"However, not all proteins are created equal and each is best suited to particular uses," said Stockland. "By-pass soybean meal, in my estimation, has a big advantage over any other sources since it supplies an excellent balance of amino acids to meet the requirements of dairy cows. While other by-pass proteins have high levels of some amino acids, they are deficient in others. Soybean meal has a good balance of amino acids relative to the animal's requirements." AMINOPLUS has a minimum 72 percent by-pass and a minimum 90 percent intestinal digestibility.

Although by-pass protein is formulated into some growing rations



AGP manufactures AMINOPLUS at plant locations in Hastings, Nebraska (pictured above) and Mason City, Iowa. All major dairy production areas in the U.S. are accessible from these locations, as are export markets through the Gulf and the Pacific Northwest.

for beef, its primary usage currently is in the dairy industry due to its ability to increase milk production. "As dairy cows move to higher production levels, microbial protein is not able to meet the amino acid require-

ments, and by-pass protein sources become more critical," said Stockland.

All Natural Product

AMINOPLUS is produced through an all natural process with no chemical additives or other additives. Soybean meal and soy hulls are blended at a certain moisture level and placed in a cooker at a high temperature. It is dried and cooled before being ready for shipment.

"While the process might seem fairly simple, there are a lot of steps that are critical to make the quality of product that ensures optimum performance of the dairy animal," said Stockland. "If the product is either too high or too low on by-pass, milk production will be negatively affected. There has to be proper balance between degradable protein and by-pass protein." AGP has standardized

Leading Dairy States

<u>Total Milk Cows</u>			<u>Total Milk Production</u>	
1	California	1,523,000	California	32.240 billion
2	Wisconsin	1,344,000	Wisconsin	23.259 billion
3	New York	686,000	New York	11.920 billion
4	Pennsylvania	617,000	Pennsylvania	11.516 billion
5	Minnesota	534,000	Minnesota	9.493 billion
6	Texas	348,000	Idaho	7.223 billion
7	Idaho	347,000	Texas	5.735 billion
8	Michigan	300,000	Michigan	5.705 billion
9	Ohio	262,000	Washington	5.593 billion
10	New Mexico	250,000	New Mexico	5.236 billion

Source: USDA (For Year 2000)



Incorporating AMINOPLUS into a feed ration boosts milk production approximately 10 percent over a commodity soybean meal ration. In addition to a bigger milk check, dairy producers save on bin space by using a more concentrated by-pass than competing products.

processing procedures and conducts extensive quality control measures for manufacturing AMINOPLUS, similar to the programs followed in its soybean and corn processing.

In fact, AGP's reputation as a supplier of quality soybean meal has paved the way for AMINOPLUS sales. "Customers who are familiar with the integrity and quality of AGP soybean meal know our by-pass product falls under the same parameters," said Chris Schaffer, Senior Merchandiser of Exports and Value Added Products. "That's what has given us growth in the market to this point."

AGP currently ships AMINOPLUS into 18 of the 20 largest dairy producing states in the U.S. Technical presentations to dairy nutritionists and feed managers, and marketing efforts have been stepped up to gain even greater market share.

Incorporating AMINOPLUS into a feed ration can potentially net a dairy producer \$268 more per cow

annually. "The additional cost of using AMINOPLUS is about 3.5 cents per cow per day," explained Schaffer. "We found that milk gain is around 10 percent over a commodity soybean meal ration, which amounts to 7 lbs. of additional milk based on



**Chris Schaffer
Senior Merchandiser
Ag Products Division**

70 lbs. of production. With wholesale milk prices currently around 13 cents a lb., the increase in revenue is 91 cents. Subtracting the cost of the AMINOPLUS nets about 88 cents per day, or an annual return of \$268 per cow on a typical 305-day milking schedule."



Chris Riddle (left) Material Handler, AGP Hastings, Nebraska, loads a rail car with AMINOPLUS.

With AMINOPLUS being a more concentrated by-pass than competing products, dairy producers can save on bin space, noted Schaffer. "We also have an easy to understand pricing mechanism, and our two production facilities offer logistical advantages over competing suppliers."

From its Mason City location, AGP can access truck markets surrounding Iowa and has favorable rail spreads into Wisconsin and to St. Louis, Missouri, where barges are loaded for shipment to the Gulf. AMINOPLUS is transported from Hastings to large dairies in Kansas, Colorado, California, New Mexico and Arizona, as well as to the Pacific Northwest for export.

Internationally, AMINOPLUS has experienced strong sales in Hungary, Japan, Korea, Mexico, Canada and Puerto Rico. Concerns about BSE and meat and bone meal have helped boost sales of pure vegetable protein as a safe way to add by-pass to dairy rations.

Additionally, limited space for dairy production in environmentally-conscious countries such as Japan and Korea has opened doors for AMINOPLUS. "In both of these



With an increasing number of dairy producers such as Ross Tappan (left) of Arizona Dairy Company, Mesa, Arizona discovering the benefits of AMINOPLUS, the future looks bright for AGP's high performance dairy supplement.

"AMINOPLUS has been a valuable part of our feed department's products. Our usage and customer base has increased since we started using it in the early part of 1999. Our dairy producers have seen gains in milk production and are satisfied with the palatability of the product. The product is priced competitive and the service and reliability are second to none."

Eric Whalen
Commodity and Risk Manager
Bay Lakes Cooperative
Oconto Falls, Wisconsin

markets, growing the size of the herd is not an option, so what they are

doing is growing production by using AMINOPLUS," said Schaffer. He noted that the greatest sales growth for AMINOPLUS this year is in Japan, where the product is shipped to them in bagged form. "Interior freight is expensive for bulk or bag, and the additional cost of bagging the product for them is minute compared to everything else," said Schaffer. AGP, which does not have bagging capabilities at its production facilities, has contracted with one of its members, Farmers Cooperative Elevator Company, Arcadia, Iowa, to bag AMINOPLUS for the Japanese market.

AMINOPLUS Marketing Staff Availability

Wayne Stockland, PH.D
Vice President
Nutrition and Technical Services
wstockland@agp.com
800-247-1345, ext. 5132
402-431-5132

Chris Schaffer
Senior Merchandiser
Exports/Value Added Products
cschaffer@agp.com
402-498-5559

Wayne Johnson
Merchandising Manager
AGP Mason City, Iowa
641-423-4733

Mark Sandeen
Merchandising Manager
AGP Hastings, Nebraska
402-463-2446

AGP has the ability to transport AMINOPLUS from its production facilities in Hastings, Nebraska and Mason City, Iowa via truck and rail. This ensures service, quality and efficiency to domestic and global customers.

Sales into Canada and Mexico continue to grow, and with strong relationships already present in New Zealand and Venezuela, Schaffer said there is a seed for developing AMINOPLUS in these countries. Milk trials are also being conducted in Denmark, the Netherlands and Belgium.

"In the European market, we see a need for an all natural soy-based bypass product as the current political situation is very green," said Schaffer. "It's likely that European farms won't be growing in size, so they too, will be looking to grow output in other manners."

AMINOPLUS is truly a success story for dairy producers, soybean growers and AGP. The outlook for the future is extremely positive as dairy producers increasingly turn to AMINOPLUS to meet the requirements of higher-performance cows while boosting production in a highly competitive industry.

AMINOPLUS

***Farmers Working
with Farmers to
Add Value to Dairy and
Soybean Production!***

**Learn more about
AMINOPLUS on the
AGP website
www.agp.com**



Ag Processing Inc ***A Farmer-Owned Cooperative***

**Committed to serving agricultural
producers and businesses.**

Soybean meal, Soybean hulls, Soybean oil,
AMINOPLUS,
Distillers' dried grains, Lecithin,
Wheat, Corn, Oats, Barley,
Sunflowers, Soybeans, Soydiesel, Ethanol.

**For more information call:
800-247-1345**