Agriculture Diversification & Development Grant Proposal

Final Report
October 2002

High Conjugated Linoleic Acid (CLA)

Grass-based cheese.

Nutrient Dense Cheese
Product Development and Niche Marketing.

Valerie Dantoin-Adamski

Wisconsin Dairy Graziers Cooperative
W2407 Hofa Park Rd.
Seymour, WI 54165
(920)833-6704

Project Summary

Five dairy farms joined together to form the Wisconsin Dairy Graziers (WDG) Cooperative in the summer of 2001. We produce milk and wanted to add value to our summer, pasture-based milk by making and selling cheese. Our overall strategy was to subcontract as much of the manufacturing and marketing of the cheese as practical, while retaining ownership of the cheese deep into the food chain through development of our own brand name "Northern Meadows".

The group shipped about 40,000 pounds of milk each week for 16 weeks from July thru October, 2001 to Cedar Grove Cheese Factory in Plain Wisconsin. A total of 72,000 pounds of white cheddar cheese was produced from this pasture-based milk. The cheese was stored in 40 pound blocks. Marketing, sales and distribution was handled by Deli & Dairy Solutions (DDS) of Green Bay, Wi. The WDG Coop spent $140,000 to manufacture & store cheese. We charged $4.00 per pound F.O.B. for the cheddar. As of June 30th 2002 we sold 2,200 lbs. of cheese, leaving about 70,000 pounds in inventory.

We accessed resources from several agencies to help get the Cooperative started. We used Wisconsin Department of Agriculture Trade & Consumer Protect (DATCAP) grants to help develop labels, marketing materials and to hire a cheese broker. We secured a $150,000 loan from N.E. Wisconsin Farm Credit Services Inc. We were part of a grant through University of Wisconsin Center for Cooperatives that helped design and execute a study on prospects for marketing cheese on the basis of its Conjugated Linoleic Acid (CLA) content. We used an expert at Dairy Council of Wisconsin to help us create a label reflecting the unique nutritional values of our grass-based cheese. We attempted to use cost share funding from the Wisconsin Milk Marketing Board (WMMB) for some printing costs – but were not successful. We were awarded a USDA-SARE grant to allow us to test the cheese and milk from our 5 farms (as well as 3 non-grazing farms) for CLA and Omega-3 fatty acids.

We sub-contracted milk hauling and cheese making to keep our capital investment costs low. Forming a legally incorporated cooperative was time consuming but helped formalize working relationships among the farms through by-laws and a membership agreement. The cooperative helped us access outside capital including a substantial loan and grant funds. Overall, forming a cooperative and manufacturing the cheese was relatively straightforward.

Marketing the cheese has been the most difficult part of the project. Sales have not been good. Market penetration is slow for a variety of reasons that are discussed in the body of the report. We have tried various marketing tools and strategies and learned a lot.

This final report takes the reader through our story, from forming a Cooperative, to making, then marketing cheese. We do not know the outcome of our work at this point; whether we will fail, or succeed – we only know that we have tried our best to add value to our milk.

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Summary from the original 2001 ADD Grant Proposal

Opportunity. The opportunity exists create a value-added product – high CLA, pasture-based cheese. There is an opportunity to differentiate and market "nutrient dense" dairy products from milk from grass-based dairies. We propose to make cheeses from milk that is high in CLA, Omega-3's, Vitamins E, K and B12 and low in cholesterol and saturated fats. Recent scientific literature identifies conjugated linoleic acid (CLA) and Omega-3 as potent anti-cancer nutritional elements. Also, studies at the US Dairy Forage research center show that dairy cows fed diets high in pasture grasses have very high concentrations of CLA and omega-3. Other research shows that dairy products from grass-fed animals are higher in Vitamins E, K, and B12 than conventional milk. Animals fed a pastured diet also have lower cholesterol and saturated fats in their nutrition profile than conventionally fed animals. The opportunity exists to make a commercial application of scientific dairy and nutritional research that been completed and provide nutrient rich cheese from pastured cows.

Goals: The broad goals of creating nutrient rich cheese are to 1) make a food available to the public which has widely researched health benefits and 2) promote the sustainable farming practice of grass-based rotational grazing. **Objectives**: Specific objectives of this project include: a) create cheese from milk expected to be high in CLA, Omega-3s, Vitamins E, K and B12; and low in cholesterol and saturated fat, b) label and market the cheese based on its nutrient content at a premium that is returned to the farmer.

Work Plan: The work plan is a continuation of last year's grant. We will again collect milk samples from our farm over the course of the grazing season. The milk will be tested for its CLA content, as it was last year. In addition, we will test for Vitamins E, K, B12, and Omega-3 fatty acids. Also, we will have a "nutrition label profile" testing done. We will make batches of cheese weekly in June, July, August, September, and October. Internet cheese sales will be continued. A retail marketing component will be included this year. We will make our own USDA approved "nutrition facts" label that is specific to pastured cheese. We plan to make FDA-acceptable health and nutrition claims. We will design and print point of purchase displays and brochures for retail sales. We will contract with a professional cheese distribution firm for marketing help.

Intended economic benefits: The largest economic benefits will be a potential for a milk price premium to Wisconsin farmers based on the nutrient content of their milk. A niche market for health-related cheese will diversify the current dairy product market. It will reach new customers that have otherwise avoided dairy products. Expanded cheese production and marketing will provide more employment as sales increase. A cheese from grazing farms also provides indirect benefits of lowered non-point pollution costs to Wisconsin taxpayers. Nutrient dense cheese may also mean lower health care costs associated with cancer and other nutritional problems in modern American diets. Because the cheese is a product of grazing, we expect to help sequester carbon (through pasturing) and lower greenhouse gas emissions.

a. Specific Objectives of the 2001 grant were to:

1. Make at least 1,000 pounds of high CLA cheese every other week from June - October.
2. Test each batch of cheese and bi-weekly milk samples for the following nutrients: Conjugated Linoleic Acid (CLA), Omega-3 fatty Acid, Vitamins A, E, K, B12.
3. Perform nutritional label panel analysis on 10 representative cheese batches.
4. Develop FDA/ Wis-DATCAP approved product labeling, including nutrition and health claims.
5. Contract with a cheese broker to take orders for cheese from 3 major grocery buyers during June '01.
6. Fill orders for cheese by producing cheese from July through October.
7. Collaborate with the newly developed grass-based dairy cooperative to produce cheese and raise CLA levels through modifications to our current pasture feeding methods.
8. Receive the "free-farmed" seal of approval, use it as a marketing tool.
9. Print at least 10,000 brochures that introduce our pasture-based CLA dairy products.
10. Speak at at least 5 conferences or trade shows in 2001-02 to inform buyers and customers.

Were the objectives met?

1. **Make at least 1,000 pounds** of high CLA cheese every other week from June through October. YES! We actually made 4,500 pounds of cheese EVERY week from 16 weeks from July 3rd through October 2001. This resulted in 72,000 pounds of white cheddar. The original objective was to make just 8,000 pounds. We exceeded this objective by 900%.

2. **Test each batch** of cheese and bi-weekly milk samples for the following nutrients: Conjugated Linoleic Acid (CLA), Omega-3 fatty Acid, Vitamins A, E, K, B12. We used part of a $9,000 USDA-SARE grant to test weekly cheese and individual farm milk samples for CLA and Omega-3 fatty acids. This involved Dr. Debra Pearson, Assistant Professor of Human Biology at the University of Wisconsin-Green Bay. She went to Madison Wis. And trained in Dr. Michael Pariza's laboratory to learn to perform the CLA/Omega-3 analysis. She then returned to Green Bay and set up a duplicate lab to test our samples. The preliminary results are available in Appendix B. We still have duplicate milk and cheese samples frozen at minus 80 degrees and will analyze them for Vitamins A & E and cholesterol and perhaps one or two other components during the next year.

3. **Perform nutritional label panel analysis** on 10 representative cheese batches. We have the samples pulled but have not submitted them to a laboratory yet for nutritional analysis. They are stored at minus 80 degrees.

4. **Develop FDA/ Wis-DATCAP approved product labeling**, including nutrition and health claims. This objective was stated as getting "approved" labeling. Well, FDA

and DATCAP don't actually approve anyone's label. They try to give guidelines to help you comply with the regulations, but they never approve or disapprove. We did develop labels that we believe follow agency rules. This was done in August, September and October of 2001. We actually developed two labels, one is a "brand name label" that does technically make a nutrition claim since it mentions CLA – although we can't say that our cheese is higher than other cheese or that CLA has been associated with shrinking cancerous tumors in mice, etc. We can only state that we have 95 mg/g CLA. This lack of being able to declare what CLA may do was a setback to our marketing efforts. It was especially dismal when comparing our great, healthy cheese to other "cheese" products that are really imitations or full of Milk Protein Concentrates (MPC).

The second label we developed was a nutrition facts panel for the back of our cheese package. In that panel we were able to list our cheese and then regular cheddar cheese nutrients. This side by side label was for information and not to be construed are a comparison. Our label shows lower cholesterol, and lower sodium and higher vitamins A, & E and CLA in our cheese. Dr.Emerita Alcontra of the Dairy Council of Wisconsin was invaluable in helping navigate and understand the complex do's and don't of federal labeling rules. I highly recommend to anyone who is developing a dairy label to work with Dr. Alcontra , she exemplified the kind of agency person who did her best to be helpful and accurate, while not being obstructionist.

5. **Contract with a cheese broker** to take orders for cheese from 3 major deli/grocery buyers during June 2001. We hired a cheese broker, first on a retainer, then on a commission basis, to sell our cheese. We never signed a contract, we probably should have. We had no examples of how to work with a cheese broker, so we didn't really know how to do it right. This objective is the crux of our project. We have fulfilled it only part way. More is explained in the marketing section

6. **Fill orders** for cheese by producing cheese from July through October. As explained in objective #1 we did produce a substantial amount of cheese during this time. The arrangements with the cheese broker helped us fill orders, writing invoices, and track inventory in an organized way. Getting sales orders was not as smooth.

7. Collaborate within the newly developed grass-based dairy cooperative to produce cheese and **raise CLA levels through modifications to our current pasture feeding** methods. We haven't intentionally worked to raise CLA levels at this time. Partly, that is because we haven't had the time to read the research on how to raise our levels. But two other factors have kept us from completing this objective. One is that the results of the marketing study by the Center for Cooperatives concluded that CLA is not a major selling point at this time. Another factor is that the CLA test results are now first available in August of 2002. These results show differences among the five cooperative farms, but we haven't yet established why we have different CLA levels. So we are still getting a baseline

idea of how much CLA we have, before we attempt to raise the levels through special feeding practices.

8. **Receive the "free-farmed" seal** of approval, use it as a marketing tool. This is another marketing tool, but we haven't pursued it either. We do mention our humane way of raising cows on pasture in our literature and at food tasting events, etc. but we have not pursued official free-farmed status at this time because it costs $600 per farm and it is not a well recognized label by the public. We also already had so much information on our cheese package that one more additional seal would have been distracting rather than helpful.

9. **Print** at least 10,000 **brochures** that introduce our pasture-based CLA dairy products. We did fulfill this objective. A copy of this "sell sheet" is included as appendix C. We actually have a dual purpose literature piece. It is designed for retail store buyers who must be convinced to put our cheese in their store. But it also serves as an information piece we can hand out at workshops, food shows, in-store tasting demonstrations and with mail orders for just regular customers who purchase our cheese. Notice how we did not include prices with this sheet. That makes it flexible and usable in many situations. It simply tells the story of our cheese, the Cooperative, and grazing.

   It is an attractive piece that was somewhat expensive to produce. We actually had to have a professional photographer come out to the farm to take high resolution photos because we could not find pictures of grazing cows that accurately portrayed the kind of farming we do. For example, stock photos had pictures of cows with tails docked, or in dry-lots as opposed to true paddocks, or beef as opposed to dairy cows. We spent $2,000 for design work involved with making the piece attractive and professional. There are many fine details in the design that most people do not notice overtly, but they create a very beautiful sell sheet. For example, notice the fine white line that acts as a border, also the shadow effect on the titles, the gold stripe around the front photo, the textured paper look, and finally the high quality printing. It was important to convey the "quality" of our cheese through the quality of our printed material.

   The logo design also cost about $2,000 but again has many fine details not noticed, but absorbed by the person viewing it. For example, it is a woodcut style design, with very fine green lines imbedded in the black circle that says Wisconsin Dairy Graziers Cooperative. We did change our original logo because the drawing of the cow looked "lumpy". We switched to a photo of a real cow on one of our farms and we please with the outcome.

   We saved quite a bit because the copy was written by the Cooperative coordinator rather than a hired writer. But if you are not a clear, organized writer, let a professional do your piece. We talk about CLA, but not exclusively, in the informational piece. We also touch on the taste, regionality, other nutritional

components of the cheese; as well as stewardship, environmental and grazing aspects of the farms. All are selling points!

10. **Speak at** at least 5 **conferences or trade shows** in 2001-02 to inform buyers and customers. This objective was accomplished. Valerie spoke at the Farm market kitchen annual event in October, 2001; the Statewide Value Added conference in February 2002; the Wisconsin Grazing conference in February '02, and the Food For Thought Festival in Madison in September, '02. Additionally, Valerie attended the International Dairy, Deli & Bakery show in Orlando Florida in June '02, and the Chicago Fancy Food Show in March '02 Robert Eder spoke at Wisconsin Farm Progress Days in July '02 and attended the "Meet the Maker" food show in Minneapolis in September '02. Wayne & Kay Craig attended the Eurobest Food Trade show in Portland Oregon in September '02. We plan to attend the Madison Food & Thought Experience in November, '02. In addition, many of us are on various statewide boards affiliated with farming in general and grazing in particular and we've given many "mini updates" on how our project is progressing.

Expected Results of the 2001 Grant:

1. Make value-added cheeses from pastured dairy cows that can be distinguished from conventional cheeses based on their nutritional profile. **Done, Oct. '01**.

2. We expect to develop a nutritional facts panel or label that will show customers how our cheese differs from conventional cheese. We expect to make DATCAP/FDA approved nutritional claims based on product test results. Claims such as "more than double the Vitamins E, B12 and K of regular cheese" or "a good source of vitamins E, K and B12" or "contains 100 mg CLA per serving" or "1/3 the cholesterol of regular cheese", etc. We can then market the cheese based on nutritional claims. **Done, Oct. '01**

3. We expect to share our test results with other farmstead cheese operators (if they graze) who wish market on the basis of nutritional content. **Done through several media outlets, many personal phone calls, talks given at conferences and workshops and conversations at pasturewalks. Also, sharing results is ongoing as we write a peer reviewed journal article about CLA & Omega-3.**

4. We expect to merge our marketing results with the grass-based milk marketing cooperative that we are helping to form in Eastern Wisconsin. **Done, Oct. '01**

5. We expect to tap into a market that already exists but has not been served by the dairy industry. **Done beginning in Oct, '01 and ongoing**.

6. We expect to also market our cheese on the basis of "humane farming". We will apply for the "free-farmed" label generated by the American Humane Association. I believe we will be the first cheese in the country to use the label. **Not done, currently not part of the marketing plan.**

7. We expect to get the cheese marketed in 20 stores in Wisconsin and to begin test marketing around the country. We plan to produce and sell 20,000 pounds of cheese in 2001. **Done. We currently have cheese in at least 20 Wisconsin outlets. We made 72,000 pounds of cheese in 2001. We sold about 20,000 pounds thru Sept '02. We currently have the cheese in the following national markets: Minneapolis, Portland and Seattle.**

8. We expect to sell the cheese at a price that will return a pay price of $18.00 per hundred weight of milk. **We have paid ourselves $16.00 per hundred weight. We may still pay the additional $2.00 CWT. when more inventory is sold. We began selling cheese at $4.00 per pound in exact weight 8 oz. bars (10 pounds in a case), but have since brought the price down to $3.50/lb. in an effort to move more cheese**. **This still allows an adequate pay price but the co-op doesn't receive a dividend. Some cheese was sold at cost to generate cash flow enough to make cheese again in 2002.**

2. Did the project fulfill its big picture goal?

One overall goal was to **bring cheese high in conjugated linoleic acid (CLA) and grass-based nutrients to the marketplac**e. That was accomplished. It was relatively easy to manufacture the cheese and make it available to grocery stores. We have done all that we could up to this point to bring the cheese to the market. Now we let the marketplace function and see if people will buy the cheese.

Imbedded in this large objective was to **return of a premium milk price** to grass-based dairy farmers. Was the higher milk price accomplished? Not exactly. We paid ourselves $16.00/cwt. for our milk. Our cheese making occurred from July to October of 2001 when "real" milk prices paid by the dairies to which we regularly shipped milk averaged $15 - $16 cwt. We still intend to pay ourselves more dollars per CWT for as we sell the cheese inventory. We realistically will get $16.00 cwt. rather than $18.00 cwt. mainly because it appears likely that we'll have to lower the price we get for our cheese in order to get more stores to carry it.

For every $1.00/cwt. paid to the farmer for milk, the price of cheese will change by $0.10. When the farm milk prices are $16.00/cwt then there is $1.60 worth of milk in the cheese. When the price of milk paid to the farmer is $11.00/cwt then the cost of the milk in the cheese should be $1.10.

Certainly the grants we obtained helped offset some costs and therefore will allow us to still pay out $16.00cwt. For example, the ADD grant was $20,500 and a USDA-Sustainable Agriculture grant of about $5,500 offset nutritional label testing marketing expenses. So $26,000 in grants spent over 72,000 pounds of cheese means that approximately $0.35 per pound of cheese costs was offset by grant money in 2001. So even though we dropped the price of cheese by $0.50 the loss to the Cooperative was $0.15 which can be absorbed by the $2.00 per cwt. milk price difference between the original goal and the actual pay-out. Still, $16.00 cwt. is a good price for our milk.

Because sales were slow, we opted to sell some of our inventory as 40 pound blocks to generate cash flow. We sold this as 1-year old aged cheddar, back to the original cheese-maker so that he could fill orders. He left our Northern Meadows brand name attached to the sale. We were able to break-even on costs, including paying ourselves $16.00 cwt. We used the income to make cheese in 2002. We did this so that we would have some "young" or mild cheese in inventory.

Other long term objectives were as follows: encouragement of grass-based farming in Wisconsin, as a result of the price premium; cleaner rivers and lakes due to less non-point source pollution and stronger local economies due to the sustainable, grass-based farms. Healthier consumers, healthier farm families, healthy land and healthy animals are also objectives of this program. These are long range goals and we won't know if they've been accomplished for several years, until pasture-based dairy product sales take off and more farmers can enter the Cooperative. We are pleased, however, to be at the forefront of the "back to grass" movement at the food consumption link in the food chain.

3. Forming the Wisconsin Dairy Graziers Cooperative.

Choosing members. Forming the Cooperative was relatively easy. Rick and Valerie were the original members who obtained the grants to begin the grass-based cheese project and they simply selected new members based on the following criteria: 1) must graze cows using intensive rotational grazing methods, 2) location of the farm, 3) number of cows (pounds of milk), and 4) personal assets.

The last category, personal assets, was the most interesting. We chose people who are creative, who like challenges, who believe grazing is a great way to farm, who are critical thinkers, who respect each other, who have integrity, who have experience in several areas, who run good farms, who can follow through on tasks, who are easy to work with, flexible, who make each other laugh, and who are enjoyable. We chose people who we wanted to see every 6 weeks or so. We all also had about the same equity position, that is, most of us are well established farmers who can afford to take a bit of risk and who have good working relationships with lenders.

One younger couple (in their late 20's) started out with the group but dropped out early in the process before the Cooperative actually formed. They did not have enough cash flow in their farm to be able to skip a milk check while it was diverted into cheese.

Benefits of a co-op. An advantage of having a strong core group is that it was relatively easy to obtain a $150,000 loan. Our farms were not used as collateral. The cheese inventory covered the loan. Also, as a co-op we were in a stronger position in grant applications – probably because agencies like to see the talents of the many people in the co-op and because the grant benefits are spread among more producers. A large loan for cheese making is a risky venture for one farm, but is reasonable spread among five farms.

Another benefit of being a co-op was that the University Center for Cooperatives was interested in working with us. The gave us a small grant to help offset some admin costs and the also they provided a researcher who conducted a valuable market study for us. Some marketing Cooperatives, the Willy Street Market, (which is a food co-op) for example, was more willing to carry our product because we too are a Co-op. Being a co-op means having more members among which to spread out the many tasks associated with our cheese project. Of course, forming a co-op was a new task itself.

Another benefit of forming a Cooperative was that we attained an economy of scale by cooperating and pooling our assets rather than expanding an individual herd. **We have 5 herds of 100 cows, rather than 1 herd of 500 cows. This is an alternative model to the current expansion mindset in the industry which is often in conflict with other land uses (especially residential and environmental) in a community.** Each farm adds value to their local community. We share the risk of taking out a loan, we share the income from our value-added project, we contribute experience and talents that are impossible to hire.

By-Laws. One task in forming a co-op is writing by-laws. Two members took on this task and used a format that they obtained from the UW Center for Cooperatives. Another task the Co-op should have done earlier in the year was to write a business plan. We started once, using a resource person from the USDA in Stevens Point who helps co-ops – but we did not follow through on writing the plan. It is still on the list of tasks to be accomplished.

Membership agreement. A membership agreement was drafted early in October of '01 by one or two co-op farmers, again using a model agreement. Members then gave some feedback and a final agreement was written and adopted. It appears in Appendix A. The main points of the agreement that needed consensus concerned how we would set our pay price, and how much somatic cell count (SCC) we would accept. A sub-committee was actually formed to address the pay price formula. We wondered, for example, if we should pay on the basis of CLA content of the milk, since that was to be a key marketing point. However, we decided that would be impractical because testing for CLA would not be done until a later time, and it is relatively expensive to do on a routine basis such as for setting milk pay price.

Our co-op decision making method has been to operate by consensus. That is, we all have to be reasonably comfortable with an idea before we move forward with it. This has at times been slow – since much of our communication is via e-mail and not everyone reads their e-mail everyday – but it has worked well. We really think through all ideas and work hard to respect each others choices.

The Cooperative did use a good number of outside agencies to help us actually become a Cooperative. The University of Wisconsin Center for Cooperatives gave us valuable tools like a staff person to be a resource on the "how to's" of writing by-laws and membership agreements. They also helped us by providing a small grant of $4,500 to help offset costs like meetings, travel, office supplies etc. associated with Co-op formation. In addition, they provided us with a research person to conduct a marketing study of the viability of using CLA as a main means of entering the market. The study can be obtained by contacting the UW-Center for Cooperatives at 427 Lorch St., Madison, WI 53706 or find it online at:

www.farmprofitability.org/research/cla/index.htm

Section #4. Manufacturing product.

Shipping the milk. We ship milk from our five dairy farms using a custom hire hauler. Don Olmstead trucking picks up milk and runs an 800 mile loop from the farms into the cheese plant, then to back to his home. His original estimate of costs was $500. Upon completion of the route, figuring in actual time spent on the road, his costs were $800. We are able to put about 40,000 pounds of milk on the truck so the costs are $0.20 per pound of cheese. This is quite high.

We have other truckers who have offered to bid on the route. One reason we continue with current arrangement are that Olmstead trucking has been very flexible in working with us. They know we are a start up business and will have to adjust our schedule of cheese making as the seasons and sales go on. Good communication with them is a must so that there are hopefully no, or few, misunderstandings about exactly which days are picked up, when we skip weeks, time of pick up etc.

Another reason we continue with this somewhat expensive arrangement is that we want all the participants in our project to earn a living wage. We probably could get lower bids, but why use competition to get the last cent out of a co-participant's pocket? We want to work with capable, satisfied sub-contractors.

One other note on milk hauling, we could have cut our route down substantially (by 300 miles) by leaving out our farthest away farmer and by going to a more centrally located cheese maker, but we felt that the quality of the cheese and the personal attributes of the "far-away" farm couple significantly outweighed the cost of a shorter milk route. We would've saved $60 per load but lost a great deal more in skills and personal resources.

Cheese making. We hauled our milk to Cedar Grove Cheese Company in Plain, Wi. The first criteria for choosing Bob Wills' company to make our cheese was the quality of the product. If you don't have a quality product and great taste it doesn't matter what other attributes your product has – people will buy it once, but never again. So if you custom hire cheese-making, make sure the company has a good reputation and also, try the products and get "expert" opinions about their products.

We also liked Bob Wills' commitment to small Wisconsin dairy farms. Several co-op members knew Bob from his work at the University of Wisconsin Center for Integrated Agricultural Systems. Bob understands grazing and the difference it can make in the milk quality and in a farmer's quality of life. Make sure your cheese-maker is on the same page with you as far as what the important attributes are for your product. Cedar Grove's price for making cheese was competitive. We did take several bids, but the flexibility and personal attributes of this sub-contractor made Cedar Grove Cheese an easy choice. Again, one of the Co-op philosophies is that cheapest is not necessarily best.

The cheese we make is simply a white cheddar. We chose cheddar because it is among the most popular and versatile cheeses in the U.S. We needed a cheese that would age well so that we wouldn't be forced to move inventory at fire sale prices if the cheese was

getting too old and spoiling. What a nightmare we would have if we'd made a mozzarella or a soft cheese that only lasts a few months before spoiling.

We did not want to make a unique or different variety of cheese like gruyere or asiago mainly because we wanted to market the cheese on the benefits of grazing and CLA rather than compete in the specialty cheese arena. If we threw cheese variety in as a variable we would not know what percent of sales was attributed to the unique milk vs. the unique cheese. Also, cheddar has the potential for more volume than specialty cheeses and therefore could allow the co-op to expand more quickly.

We did not do market research BEFORE we started making cheese. This is probably the recommended thing to do – find out what kind of cheese buyers want, get a sense of how much cheese can be sold and to what accounts. See if you can make it at a cost that leaves something leftover for profit. I believe good marketing studies cost in the tens of thousands of dollars. We decided to make cheese first, and try to sell it – that IS our marketing research. If this approach doesn't work then we are no worse off than if we had just commissioned a $50,000 feasibility study and never made a pound of cheese. This is a clear advantage of custom hiring all our cheesemaking rather that investing capital in vats, buildings, trucks, etc.

Another large dairy farm in the state did build a brand new cheese plant on their farm at a cost at least in the hundreds of thousands. They had to know going in to that investment exactly what cheese they would sell. They did their homework. We did not do much homework, however, we have much, much more flexibility to change cheese styles or to simply quit if our experiment shows the market is not quite ready for us. Our current cheese inventory is our only asset and it is easily liquidated if the need arises. This again is similar to how we run our dairy farms, minimal capital investment in machinery and buildings; and emphasis on the productive assets of cows and grass. Our farming philosophy is mirrored in our business model.

I would strongly recommend to anyone thinking of making a special product to try it first in someone else's facility before spending capital on bricks & mortar. You'll need all the capital you can muster just for marketing, why spend it on facilities? Of course this may be difficult if the "farmstead" is part of your uniqueness. In that case, the place is creates the specialness.

Conventional wisdom tells one to do a marketing study first – but we are so far ahead of the curve in using pasture-based milk that we're pretty sure a conventional marketing study would've told us not to go ahead. One of the great benefits of being intensive rotational graziers is that we are all used to being unconventional and inventing new ways of doing things. Grazing is a grass-roots farmer led movement in Wisconsin Agriculture that has changed the landscape of dairy farming. If we would've listened to conventional farming information we'd probably all be broke and out of the farming business by now.

The following thoughts are paraphrased from an article by Allan Nation, editor of the Monthly publication "The Stockman Grassfarmer". He says that too many marketers sit

back and hope someone else will pioneer a market in their area and thereby prove its existence. "Remember, in a niche market you are looking for what doesn't exist. Not what does". He goes on to say that Peter Drucker (another author) said a good judge of the validity of a niche market is to ask your neighbor what he thinks of it. If he agrees it is a good idea, it's probably not different enough to succeed as a niche market. "He said the response you are seeking is guarded skepticism not enthusiasm…. What absolutely will not work is a smaller version of a successful large business." He says to be as different as possible and to communicate that difference.

We want to market to a very small (but growing) segment of the population that is aware of the benefits of grass-fed dairy products high in CLA and Omega-3 fatty acids. It would be no surprise to **not** find these people in a market survey. A survey will show no stores planning to sell our product to an as-of-now invisible clientele. Perhaps these customers do not exist; we believe they are just under the radar screen of conventional markets. It's a chicken and an egg situation. Does the demand come first, or does the existence of the product signal the customers to come out of hiding? In either case, we believed the way to reveal the customer was to make the product, not to do a conventional marketing study to shout a question broadly to the mainstream asking if they want, or have heard of grass-milk and high CLA dairy products.

Laurie Greenberg, with the UW-Center for Cooperative's CLA study, essentially confirms this. Stores are not ready for high CLA grass-milk cheese. This market research took place for a couple of reasons, even though we knew ahead of time the likely outcome 1) it was free, 2) it in and of itself generated publicity about CLA - the thing that the conventional market says doesn't exist. Now stores will wonder "Why are they asking about THAT? What do they know about my customers that I don't know?" 3) the study results will discourage copycats, 4) we learned more about how the food distribution system works, and we can use some of the "other focused" marketing strategies uncovered by the study. You can download a copy of the study by contacting the Center for Small Farm Profitability at www.farmprofitability.org

Transportation, warehousing and inventory tracking were all handled Deli & Dairy Solutions (DDS) of Green Bay. They already move cheese for Cady Creek Cheese factory. We were a good fit with them for several reasons; one they didn't have any "natural" or "organic-type" cheeses with whom we'd be competing. Also, they were located nearby which made the frequent trips to their office as we worked out logistics relatively easy. They are a "middleman" company, yet rather than cost us money, they saved us money by doing things more efficiently than we could have done. They folded us in with their other accounts so that we could get better rates on warehouse cold storage and transportation to the cutting and wrapping facility. They handle millions of pounds of cheese each year so they had rates that cost half of what we would've paid had we independently booked cold storage and freight.

They also have an automatic system for tracking inventory and for billing customers. They charge $0.10 per pound of cheese sold, but this is less expensive than having us set up our own accounts receivable & inventory tracking system. Maybe when we get bigger

we'll handle these things on our own but for now we have a low cost inventory system by piggy-backing with DDS.

Many people have asked how to find a broker like this. Because we live in Wisconsin, one of our "unreasonable advantages" over other parts of the country is that we have a good infrastructure for "cheese support". If you live in Wisconsin, just check your local phone book, search the internet, or get on the phone and you'll probably come up with someone within 60 miles who handles moving cheese.

Cutting & wrapping. Our cheese is manufactured as 40 pound blocks at Plain Wis. Pallets of cheese (about 54 blocks per pallet) are then transported to Green Bay and put into cold storage. The year's cheese stays in 40 pound blocks and continues to age until orders come in. We then have it converted into either exact weight 8 ounce bars or random weight 5 pound blocks. The conversion is done one pallet at a time and only when needed. The idea here is that smaller packages will not continue to age and they will have a higher spoilage rate than 40lb blocks.

We searched for good rates on cutting and wrapping and decided the most cost effective method was to convert at Drangel Foods in Gillman Wi. This means shipping the cheese to the factory, converting it, then shipping it back into cold storage. We piggy-back our pallet with Deli & Dairy Solutions' shipments to save money on trucking. Still, this is a rather expensive part of our operation that will need to be streamlined in the future. It also seems contradictory to our Co-op's environment philosophy to spend so much fuel on transportation.

We chose to convert the 40 lb. blocks to 8 oz. exact weight bars on the advice of our broker. He suggested that most upscale or natural foods deli's are short of labor and that a pre-weighed (and bar coded) package would be more attractive to the stores than a package that employees had to weigh. Deli & Dairy Solutions Inc. let us "borrow" their bar code, which again saved us several hundred dollars. Drangel Foods does a nice job of packaging the cheese in a cryovac–type package rather than a Hassen package which has a looser (sloppier) look. Drangel buys all the trim from the 40 lb. block at our $2.47/lb price. This is difficult for them since most of their trim is bought at $1.20 commodity prices. We will need to renegotiate our cut & wrap price with them. Neither the Grazier's Co-op nor Drangel does very well on this expensive packaging.

We have less expense when cutting 40 lb. blocks into 5 lb. blocks. There is very little trim and less labor needed. We are currently finding that upscale deli departments like the 5 lb. blocks because they thrive on offering customer service and the cheese can be offered it at a more attractive price.

Now that there is some background on manufacturing the cheese, the costs are presented. Below is a table A. which summarizes our costs to manufacture the cheese. The marketing costs are also included in the table, marketing is actually discussed in section 5 of this paper. Milk prices are also part of the cost of making cheese and are presented in Table B. Total break-even costs are then given, based on the price we pay ourselves as farmers for milk.

Wisconsin Dairy Graziers Cooperative Costs

Costs for Manufacturing and Marketing Northern Meadows Grass Cheddar Cheese in 2001. The costs are based on a 40,000 lb. tanker of milk, which is also the vat size at most cheese-making facilities. (Actually, most tankers and vats can hold several thousand pounds more, but we used 40,000 lbs as a firm estimate.) This will yield a 4,000 lb. batch of cheese. We use a conversion factor of 10 pounds of milk into 1 pound of cheese which was accurate in the summer of 2001.

Table A. Costs of cheese-making for Wis. Dairy Graziers Cooperative

Cost	Per pound of cheese	Per 4,000 lb batch	Agent
Milk hauling	$0.20	$ 800	Don Olmstead
Cheese making	$0.38	$1,520	Cedar Grove Cheese Co.
Cut/wrap/label ±	$0.57	$2,280	Drangel Foods
Storage	$0.12	$ 480	Northland Cold Storage
Admin	$0.10	$ 400	Dairy & Deli Solutions
Freight*	$0.08	$ 320	Dairy & Deli Solutions
Broker	$0.10	$ 400	Dairy & Deli Solutions
Advertising/demo¶	$0.10	$ 400	Wis. Dairy Graziers Coop
Total	$1.65	$6,600	

± If cheese is cut into 5lb random weight blocks then this cost is $0.37 and total cost per pound drops to $1.45

* Freight includes shipping 40 lb blocks from the cheese plant into cold storage, then from cold storage to the cut/wrap/label facility, then back to cold storage as 8 oz. exact weight bars, or 5 lb. random weight blocks..

¶ This cost was paid for by the Wis DATCAP value added grant in 2001

For a 40 pound block of cheese we can subtract the cost of cut/wrap/label ($0.57), the cost of the broker ($0.10) and the advertising/demo ($0.10) for a total savings of $0.77 per pound. So manufacturing costs for a 40 pound block total $0.88/lb.

The longer cheese is held in inventory, the greater the storage and interest costs are. Interest costs of $0.15/lb. per year were not added into the manufacturing costs.

Table B. Value of the milk the farmers contributed:

Milk price per cwt.	Milk Cost per lb. of cheese	Milk Cost per 4,000 lb batch	Mnft. Cost/batch	Total cost/batch
$12.00	$1.20	$4,800	$6,200	$11,000
$16.00	$1.60	$6,400	$6,200	$12,600
$18.00	$1.80	$7,200	$6,200	$13,400

Mnft + milk = total

Breakeven costs are: $1.65/lb. + $1.20/lb. = $2.85/lb for 8 oz. bars
(for $12.00 cwt. milk) $1.45/lb. + $1.20/lb. = $2.65/lb for 5 lb. blocks
$0.88/lb. + $1.20/lb. = $2.08/lb for 40 lb. block

Breakeven costs are: $1.65/lb. + $1.60/lb. = $3.25/lb for 8 oz. bars
(for $16.00 cwt. milk) $1.45/lb. + $1.60/lb. = $3.05/lb for 5 lb. blocks
$0.88/lb. + $1.60/lb. = $2.48/lb for 40 lb. block

Breakeven costs are: $1.65/lb. + $1.80/lb. = $3.45/lb for 8 oz. bars
(for $18.00 cwt. milk) $1.45/lb. + $1.80/lb. = $3.25/lb for 5 lb. blocks
$0.88/lb. + $1.80/lb. = $2.68/lb for 40 lb. block

We started out by charging $4.00/lb. for 8 oz. bars F.O.B. (Freight On Board). This is what we charged customers who then paid freight to have the cheese shipped into their warehouses. This is also what we charged ourselves as Co-op members if we picked up cheese at the loading dock. Each Co-op member then serviced their own accounts, setting whatever retail price they wanted. One member charged $6.00/lb., internet sales charged $5.00/lb. plus shipping, and some Co-op members charged $4.50/lb.

At $4.00 per pound we charged enough to cover the manufacturing costs and return a dividend to the Cooperative. In August, 2002 we dropped the F.O.B. price to $3.50 per pound to stimulate sales. August 2002 is also when we first began sales of 5 pound blocks. We charge $3.25 per pound for these.

So what is the realistic potential profit for the co-op? If we assume 72,000 pounds of cheese was in storage and we sell ½ as 8 oz. bars and ½ as 5 pound blocks, the financials look like this:

Pckg Size	Breakeven cost ($16/cwt)	Inventory value	price	Inventory Value	Retained earnings per pound	For 36,000 pounds
8 oz	$3.25	$117,000	$3.50	$126,000	$0.25	$ 9,000
5 pound	$3.05	$109,800	$3.25	$117,000	$0.20	$ 7,200
		$226,800		$243,000		$16,200

The real value of the co-op is not that we go through all the work of making and marketing our own milk as cheese for $16,200. These retained earnings will likely be

revolved back into the co-op and used as operating funds to make cheese in the next year. Interest on our loan was approximately $10,500 in 2001, which used most of our retained earnings.

Where the real value is found in this venture is in the increased returns on our milk sales. The value we've really added is selling milk at $16.00 cwt. rather than a long-run average price of $12.00 cwt. For example, 72,000 pounds of cheese was made from 720,000 pounds of milk. That is equivalent to 7,200 hundred weights of milk. If we receive $ 4.00 more per hundred weight we will have added $28,800 of value to our milk. That works out to $5,760 more per farm for the milk that went into the cheese. That extra $5,760 is actually paid out to each farm, not retained by the co-op.

This scenario did not play out as in the above example in 2001-02 mainly because the real price our regular milk cooperatives were paying in the fall of 2001 was close to $16.00 per cwt. But on a long term basis, when the price of milk fluctuates, having our own set price for milk will help us plan our income each year and certainly add to our bottom lines. For example, in August, 2002 the pay price for milk was just $10.00 or less. In that case, our Graziers Co-op pay price of $16.00 cwt. would have added $6.00 cwt. On average, each of our farms produced about 35 cwt each day in August. An increase of $6.00 for 35 cwt would've added $210 per day to our farms' profitability.

What happens if we set the Graziers Co-op pay price at $18.00 cwt.?

Package Size	Breakeven cost ($18/cwt)	price	Retained earnings per pound	For 36,000 pounds
8 oz	$3.45	$3.50	$0.05	$1,800
5 pound	$3.25	$3.25	$0.00	$00

The Co-op's retained earnings are just $1,800. This is not enough to operate the co-op or make more cheese. On the other hand, the individual farm income goes up – but at the expense of starving the value adding cash cow (the co-op). Farm income would be $8,640 per farm, rather than $5,760 if the pay price were $16.00 cwt.

So far, for 2001 milk the Graziers co-op paid $12.00 cwt while the market price was $16.00 cwt. If we stay with this pay price then each farm will have contributed $4.00 cwt back to the co-op rather than receiving the difference as income from their regular co-op.

In general we have valued our inventory as 40 lb. blocks made with $16.00cwt. milk for a total cost of $2.48/lb. With 60,000 pounds of cheese currently in storage we have an inventory balance of $148,800. Again, we used the inventory to cover the initial loan of $150,000.

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Section 5. Marketing

General marketing ideas. We did not do as many businesses do – we did not write a business plan before we started our business. Rather, we jumped in with both feet and began making cheese. We took action before we made specific plans. We leaped before we looked. This is usually considered bad business. In fact some of our co-op members were anxious when they learned that other new cheese or specialty food products had done extensive (and expensive) research before they made their first pound of product. What's wrong with us? Why didn't we do a business plan first?

Well, our plan was to understand that we would be wrong – and we planned that we would learn to correct our errant strategies as fast as we could respond. The following paragraph is again from Allan Nation writing in the Stockman GrassFarmer, " Success can never be painless and risk free because whatever will create it can only be found through trial and error. In other words, it is not a failure when you discover that a certain tack or direction is not the correct one." He goes on to say that "No one could know whether, how, or in what quantities disruptive product can or will be used by the consumer before they experienced it."and "the majority of (business) people don't see early failures as a necessary part of the learning curve." We planned to fail "early and inexpensively" – thus our low capital investment in cheesemaking facilities, our small volume of cheese and our choice of the long-lived cheddar as our first product.

We know we have a unique product in grass-based cheese. We have learned not to try to convert the "unbelievers". For example, we got the cheese into 23 Rainbow food stores in Minneapolis. We did sampling demonstrations and got feed-back. Everyone loved the cheese but most were not willing to spend extra to buy it. Trying to sell our cheese in a store where low price (cheap) food is really valued by the customer was an early mistake.

So we have tried to develop a discipline to pursue only markets that, as Nation says, "value the existing attributes of the product". We now focus on three types of markets. One is upscale supermarkets like Lunds-Beyerly where great taste and quality are valued and price is a secondary factor. The second type of markets are new generation food co-ops or natural food stores where people take time to read labels and already have a basic understanding of the difference between grass-based and conventional dairy products. They are willing to pay more for the nutritional value, quality, and "small farm" and environment aspects of the cheese. A third kind of market is the tourist based stores that value the "Wisconsin-ness" of our product, for example airport stores or stores in Door county or on Madison's Capitol Square. They love our label with a grazing cow in a lush pasture. In all three markets great taste is what brings repeat customers.

We have gone through three variations of the size and shape of our cheese. At first we had one pound blocks, but learned that that was too large for most consumers. So we switched to exact weight 8 oz. packages, but learned that adds so much to costs that we are overpriced. Our third, very recent, try is a five pound block that that we can sell at lower cost. The store cuts smaller chunks off the 5-pounder. The customers value this service and the somewhat lower price. We have "failed" twice just on packaging, but at

relatively low cost. We have been willing to change direction because we don't have a lot invested in a market study that laid out the one-and-only-best way to package our product.

Making a label was one of the first mini-projects that needed to be done in order to market cheese. The Northern Meadows label had previously been developed for Full Circle Farm, the original member of the Graziers Cooperative, Valerie & Rick had spent about $2,000 in artwork and about $1,000 of their time to develop the Northern Meadows brand name & label. As a Cooperative, we decided it would be less expensive to build on the work already done than to go through a time consuming process of selecting a new name. Full Circle Farm was willing to let the Cooperative use the band name.

Time was a consideration, we needed the revised label for exact weight 8 oz. bars of cheese as soon as possible so that we could begin to fill orders for the holiday season. We made some simple changes to the label, inserting Wisconsin Dairy Graziers Cooperative for Full Circle Farm, in the black ring circling the cow (see samples below). We also included an rBGH free statement, since we knew this would be important to our customers. We decided on a new shape for our cheese (oblong rather than square), and got printing quotes from several vendors. The label is shown below:

We tried to get some financial help from the Wisconsin milk Marketing Board for developing the label, and printing the label and spread sheet. We were turned down, among several reasons, because we had already started work on our label before we met with a WMMB representative. Small companies that do not have the staff to follow up on all the rules involved with WMMB are at a disadvantage to the larger companies that already have relationships with the Board and know how to play the game.

Making Health Claims. We developed a nutrition label that included reference to 95 mg/g CLA (Conjugated Linoleic Acid). It also includes vitamin E, which is not on standard labels. We could have used standard numbers from the FDA's book values – but we did our own testing to highlight our differences. We did not need to do nutrition testing because we were below the minimum sales volume that triggers the NEL label, but because we mention CLA it was considered a "health claim" and that triggered a NEL label. Unfortunately, we could not mention anything else about CLA other than the amount the product contained, because there are only seven approved health claims that the FDA allows in labeling. Health claims are things like "a diet low in cholesterol has been show to …".

Also, our cheese has 1/3 less cholesterol than "book value" cheddar cheese, 20 mg/g rather than 30. But we could not mention this on the label because according to the rules, if a product is over 4 mg saturated fat, no claims about cholesterol can be mentioned. This is apparently because the FDA cannot imagine that some variations on cheese (which admittedly contains fat) can be more nutritious than other versions of the same type of cheese. It is a "one size fits all" mentality that will hamper differentiating grass-based dairy products in the future.

My recommendation is to get a copy of the pertinent state & Federal rules about food labeling – and actually read them. You'll be surprised at how the standard FDA interpretations or "company line" is really full of holes so big that you can drive a bulk truck through – if you're a large company and have enough lawyers to argue your case. For the rest of us, there is a valuable resource person at the Dairy Council of Wisconsin, Emerita Alcontra, Ph.D., (630) 655-6984, who can help answer just about any labeling question. Dr. Alcontra wrote a resource guide that has answers to a lot of relate questions.

By the way, point of purchase materials – anything posted near the product in the grocery store – also must abide by the health claims rules. So we cannot claim that "a diet rich in CLA will reduce cancer", or "CLA has been shown to reduce cancerous tumors in mice", even if we have the research data to back up the claim. The best we can do is to list how much CLA or how little cholesterol we have in our product.

Our label is trademarked with the Wisconsin Secretary of State Office. We filled out a simple form and a filing fee of $10.00. We plan to soon file a Federal Trademark which costs about $325.00. The Federal form can be accessed at www.uspto.gov.

Other marketing tools include a web-site (www.northernmeadows.com), a point of purchase shelf dangler, the sell sheet, and a $600 free-standing display board for food shows.

The Food Chain: Brokers, Distributors, Retailers. Unless a farmer is doing some form of direct marketing, there is a long chain that food products in this country must travel along in order to make it from farmer to store shelf. It's a narrow chain and there are fiercely protective and mysterious links at every turn. A few definitions may help. A broker is the person who represents your product to distributors. Distributors collect warehouses full of product and consolidate shipping and ordering. Retail stores of course sell products on their shelves. Generally they only buy from distributors. All three links in this chain have fees or markups which add to the final price of products.

Brokers, why do we need one? On most grass dairy farms each cow makes about 65 pound of milk each day. That boils down to about 6 pounds of cheese per cow. The five Co-op dairy farms each have "only" about 85 cows. So each farm can make about 500 pounds of cheese each day. Can we sell that much cheese through direct markets like e-mail, farmers markets, or even regional markets? No.

Also, an objective of this grant was to make a dent in the environmental landscape in eastern Wisconsin by getting more grass farms a better price for their milk so that more earth stays covered by grass, and the rivers run cleaner, the fish swim easier, the frogs reproduce more and the cycles of nature still function. That is part of the reason we formed a co-op. Can we sell five farm's worth of milk – that's 500 pounds times five farms or 2,500 pounds of cheese each day? Although as a Cooperative we have not decided for sure about this, one goal might be to eventually sell about 20 farms'-worth of milk. So a possible goal is to sell about 10,000 pounds of cheese a day. This does not seem possible without a national presence. So, in the event the co-op grows to 20 farms we need the help of brokers.

Small scale farmstead cheese is fine – for that one farm. But if the State wants to make an economic impact it must (and has) support bigger ventures like this large-scale value-added project.

How did the Cooperative **find a cheese broker**? We found Deli & Dairy Solutions (DDS) through happenstance rather than by using a methodical search. I would recommend a methodical search because its seems we could have chosen more wisely. We chanced upon DDS because one of their cheese lines, Cady Creek, comes up first in internet search engine searches of "natural" cheese. So, the logic was that they must be good marketers to get a web-site to come in first on search engines. It turns out their office is just 20 miles from Full Circle Farm where the Co-op's business is mostly done. It's a great natural advantage of living in Wisconsin – having cheese mongers nearby.

We pitched the idea of Northern Meadows cheese to DDS. We had them come out to the farm. They like the idea. It would be a lateral expansion of their product line. They said it was a "can't miss"; that Grass- based, was the best new cheese concept since Organic. **It was important that we actually had product there for them to taste**. They loved the taste and quality. They took our cheese to a food show in Minneapolis and came back with very favorable reviews from potential customers. **It was important for DDS to have product for potential customers to try.**

We linked up with DDS to get the product into grocery stores where we hoped the volume existed to make the impact we wanted. They even offered to buy product from us and then re-sell it on their own terms. We opted to keep ownership of the product all the way through the food chain and onto store shelves so that we could retain more control.

Working with DDS has its good and bad points. We have used them for inventory tracking, cutting and wrapping, cold storage warehousing and trucking. We can piggy-back with their other products to get discounts available only to these larger scale operators. This is a good natural advantage of living in cheese country. They charge us a dime per pound for administering our accounts. They save us at least that amount in the cost of other services mentioned above. This administrative "middle-man" earns his keep and is not the lamprey eel that some other middle men have proven to be.

When we first hired a broker all of us co-op members thought we had it made, that we were on easy street. The sales part of DDS as a broker has proven to be a large hurdle. To make a long story short, the broker has not delivered on his promise to "sell all the cheese we can make". He has tried, maybe not hard enough, but he has not met the sales projections that would have brought us profitability in the spring of 2002. The worst impact of low sales is that we did not have enough cash flow to make a lot of cheese in the summer of 2002. We have too much inventory – but at least its cheddar that can age out quite nicely. Again, a mistake was made by manufacturing too much cheese in year one, and not getting it sold in a timely manner. We have learned from this mistake, our costliest to date, and did not make as much cheese in 2002.

Because we cannot sit back passively and watch a broker alone sell our product, we have had to learn more about marketing and getting our product into stores than any of us ever wanted to know. But as one of our members has said " The broker brought us to the front door, but we as farmers have had to step through to really make the sales."

We are doing two new things as a result of the failure of our broker to get the job done; both things rely more on us farmers. We farmers are now attending food trade shows to make direct contacts with distributors and store buyers, and we now are participating in cheese sampling events in retail stores.

Unfortunately, we still need a broker. Many stores and distributors do not want to deal with a company that does not have a broker representing them, it seems. Somehow, this feels akin to a "good old boys" network. They make sure no riff-raff come through the door to the big dance unless accompanied by a legitimizing "date" call a sales broker. This particular sales-broker-middleman does seem more like a lamprey than the administrator-broker-middleman. We are not pleased to pay a brokerage fee just to have an escort. Another middleman is the broker for the store or distributor. Believe it or not, our broker does not always talk directly to the distributor or store, rather they talk to the store or distributor's broker. I have a bias against someone who does not create a product or perform a needed service, but who gets paid for just transferring products up the chain.

We much prefer to deal directly with a store or a distributor so we hope to hire our own sales person who will perform a wider variety of marketing tasks besides just narrow brokerage. Alternatively we will pursue stores that also have a distaste for the broker links in the food chain. This broker link is possibly the biggest barrier, the narrowest choke-hold in the chain, to getting our product placed in stores.

All this broker distributor stuff wouldn't be too bad except for the bottom line. It causes our cheese price at the retail level to rise, and therefore the customers are less likely to buy our cheese. This is really where consolidation in distribution and retail sales has made a huge impact in the success or failure of products. Generally niche products cannot ride the mainstream distribution system. Besides somewhat higher manufacture cost, distribution and retail sales markups are the big killer for most niche products.

To lower manufacturing costs, farms & cheese factories have gotten bigger. Dairy farms have expanded and added more cows. They spread their costs over more animals, they usually have a small margin on a large number of animals. The same is true for cheese manufacturers. Within two miles in each direction from our farm there used to be four cheese factories. They have merged and merged again. A generation ago our corner cheese factory became part of a co-op that grew and grew to be one of Wisconsin's largest. That cheese Co-op sold more cheese than ever last year, hundreds of millions of pounds, yet it lost money because the margins on their commodity cheese were too small.

Distributors and retailers have found greater efficiency by consolidating also. Retail grocery stores continue to have to join up with national chains or go out of business. No more independent Mom & Pop or corner grocery stores that use local products. As this distribution and retail end of the food chain grows it becomes very difficult for smaller scale products to be competitive if they can't be distributed efficiently. In my small town grocery store I can't even find a Wisconsin apple. Everything comes from out of state even though we have a quite a few in-state orchards – most of which are going broke.

We sell our cheese for $4.00/lb. F.O.B. The distributor marks it up about 30% to $5.20. Then the grocery store marks the $5.20 up by another 35% to $7.00 per pound. Typical commodity cheddar is sold for $1.30/lb. F.O.B. If the distributor marks it up 30% it is $1.69. With the 35 % retail markup the cheese cost in the store should be $2.28. Commodity cheddar should cost about 1/3 of what our cheddar commands. Fortunately the distributors and retailers are taking even larger markup so the average price consumers paid for natural cheddar in October of 2002 is $4.34. At least that makes our cheese more competitive.

When our co-op cuts out the distributor, as we do for most of our in-state sales, the usual price for the cheese is $6.00/lb at the grocery store. Without the broker & distributor we are competitive.

One thing we are concentrating on in 2002 is cheese sampling demonstration in grocery stores. We farmers have conducted several in-store demos and found that they are extremely valuable in two ways. One is that when people taste the cheese they absolutely

love it. Of five people who try a sample, one person actually buys the cheese. That's a very good success ratio. The second great reason that farmers demonstrating the cheese works well is because then we are able to tell the story of our cheese. When we say "would you like to try cheese from MY cows?" virtually every customer says yes. If we hire a demo agency, which we will probably have to rely on in many cases, the results are not nearly so good because the personal connection with the farmer is missing. Also, agency people are not able to tell our story or answer questions about our farming practices. Ideally we will be able to hire our own demo person and train them, have them come out to the farms, learn the story and be a great spokesperson.

Perhaps we need a hybrid between farmer direct sales and sales made the typical way thru the long, expensive food chain. It would be very helpful if the State of Wisconsin could start a program to give rebates or tax credits to grocery stores that seek out Wisconsin grown foods and keep low markups on these products to make them competitive.

For us, marketing is the hardest part of trying to add value to our milk. As one of our Co-op members said "if it was easy, everyone would do it." Hopefully we'll learn early and cheaply from our mistakes and be able to stay in the game. If not, it was better to have at least tried to improve our poor milk prices, than to never have given it a shot. We appreciate all the help and support we've gotten from many people around the state. The best part of marketing is getting off the farm and going into grocery stores then hearing from everyday people how much they like our cheese and how much they appreciate us.

Appendix A

Membership and Marketing Agreement of Wisconsin Dairy Graziers Cooperative

This Agreement entered into between Wisconsin Dairy Graziers Cooperative, a Wisconsin Cooperative Corporation (hereinafter "Cooperative") and the undersigned producer of milk, (hereinafter "member").

1. Member and Cooperative will cooperate by producing and marketing milk of the highest quality, in accordance with all statues, ordinances, rules and regulations applicable.

2. Member shall deliver all milk produced under his/her control for market in an amount specified by the Board of Directors each year.

3. Member agrees to provide at least 50% of the daily forage Dry Matter requirement through Management Intensive Grazing from May through October. Under severe drought conditions the Board of Directors will make a decision about deviation of this requirement on an individual basis.

4. Feeding of animal byproducts of any kind are prohibited.

5. Member agrees NOT to use bovine somatrotropin or rBGH.

6. Member agrees NOT to use any form of whole herd heat synchronization in lactating cattle.

7. The Somatic Cell Count (SCC) average shall at all times be less than 500,000 and the Plate Count be less than 50,000. Should the average for the month be above these levels, the Cooperative will not accept any milk from the member until after a full month with an average below the above stated levels.

8. Members are responsible for any milk containing Antibiotics, incl. the contamination of an entire truck load.

9. Member agrees to abide by the rules and bylaws of the Cooperative as now existing or may be amended.

10. Unless otherwise cancelled, as may be provided under bylaws, this Agreement will continue for the May - October period following its acceptance date and from year to year thereafter until notice of termination, in writing, is delivered by either party to the other by April 1.

Date: Date:

Farm name: Wisconsin Dairy Graziers Cooperative

Address:

Signature Signature

Appendix B

CLA and Omega-3 Test Results Preliminary Report

October 17, 2002

From: Debra Pearson, PhD , Assistant Professor, Human Biology , 2420 Nicolet Dr., University of Wis. Green Bay, 54311-7001. E-mail: pearsond@uwgb.edu phone (920)-465-2280

To: Wi. Dairy Graziers Cooperative, Val Adamski, www.northernmeadowscheese.com

Re: Preliminary report on the Grass-Grazers CLA Project - SARE grant

From July through October 2001, weekly milk samples from 5 grass-grazing farms and 3 conventional farms were obtained for analysis of their fatty acid profiles. In addition, for some of the farms earlier milk samples (May, and June 2001) were also obtained and cheese samples from the Grass-Grazers Coop. To date, approximately three-quarters of the milk samples have been analyzed for their fatty acid profile by gas chromatography. Our research objectives are to: 1) determine and compare the conjugated linoleic acid (CLA) and omega-3 fatty acid (ω-3) content of the grass-grazing and conventional farms' milk samples, 2) determine the variability in CLA content among the 5 grass-grazing farms, and 3) determine the seasonal variability (Jul.-Oct.) of the CLA and ω-3 content.

The complete data set and a full examination of the differences in farming practices among the 8 farms will be available at a future date. Please contact Dr. Pearson at the above e-mail address to be placed on a list to receive the final report.

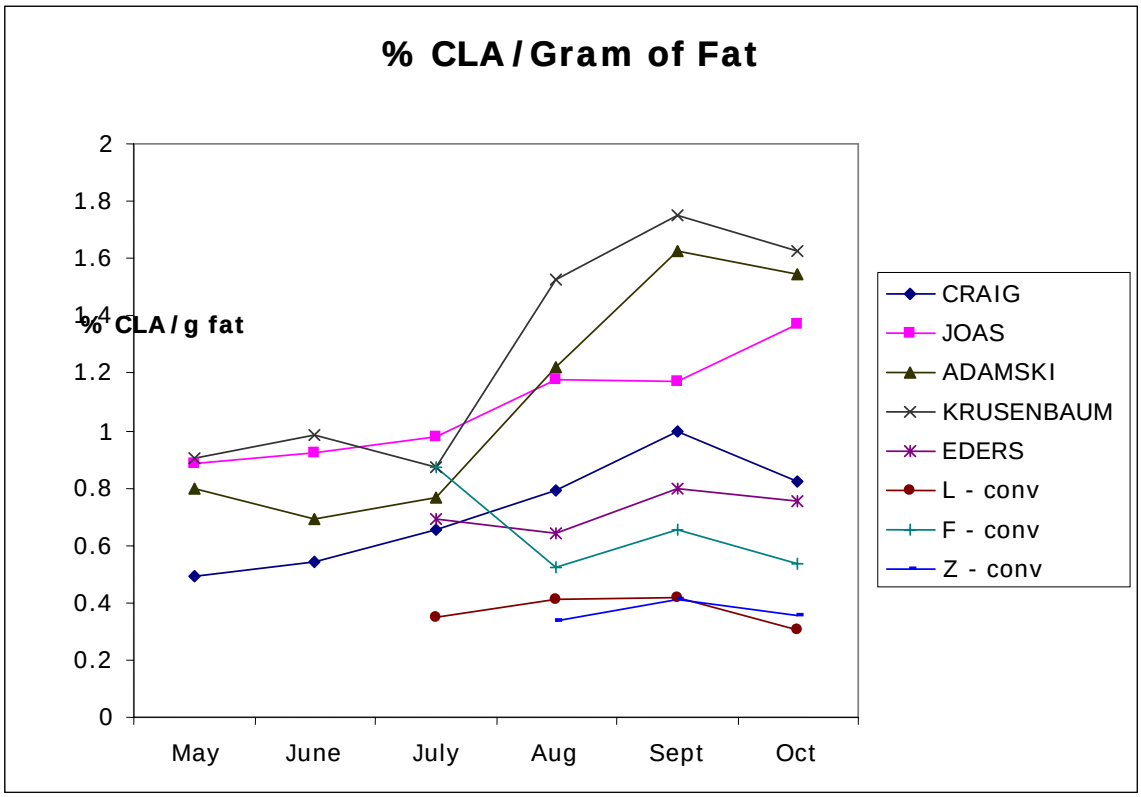
Though our data compilation is not yet complete, we are seeing consistent differences in CLA content between the grass-grazed and conventional-fed milk samples. Milk from each of the five grass-grazed farms is higher in CLA at all months (August through October) as compared to any of the 3 conventional farms (abbreviated as conv. In the graphs). The average monthly CLA content (combined monthly average of the 5 grass-grazed farms) rose steadily from July through September and leveled off in October: 0.79, 1.07, 1.27, and 1.22% CLA/g of fat, respectively for July through October.

Conversely, the average monthly CLA content (combined monthly average of the 3 conventional farms) fell or remained steady from July through October: 0.61, 0.42, 0.49, and 0.39% CLA/g of fat, respectively for July through October. Thus, beginning in July the CLA content was on average 1.3 times higher in the grass-grazed milk and by October 3.08 times higher in the grass-grazed milk than the conventional milk. Furthermore, when the highest CLA-producing grass-grazing farms were compared to the average of the conventional farms, they had a range of 3.8 to 5.3 times more CLA.

Data for the month of May is available for 4 of the 5 grass-grazing farms and there is a significant difference in their starting CLA content, with 1 of the 4 significantly lower in May (Figure 1). This suggests possible differences in feeding practices coming into the May period of that year. From May through October, 4 of the 5 grass-grazing farms had a significant increase in their CLA content. These 4 farms had between a 60% to a 100% increase in their CLA content over this time period. The 5th farm had only a very slight increase in CLA.

Wisconsin Dairy Graziers Cooperative – SARE grant – CLA study of milk samples

From the Lab of Dr. Debra Pearson, Assistant Professor, Human Biology , 2420 Nicolet Dr., University of Wis. Green Bay, 54311-7001. E-mail: pearsond@uwgb.edu



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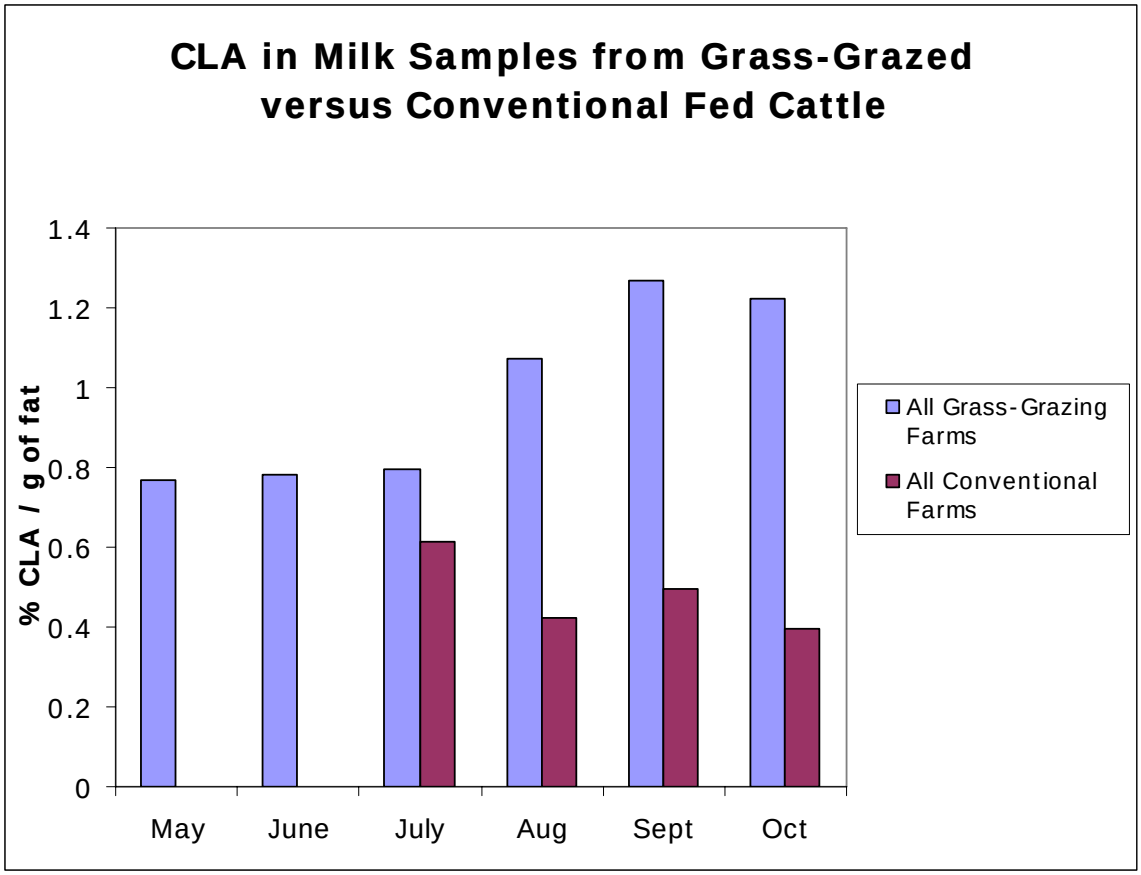

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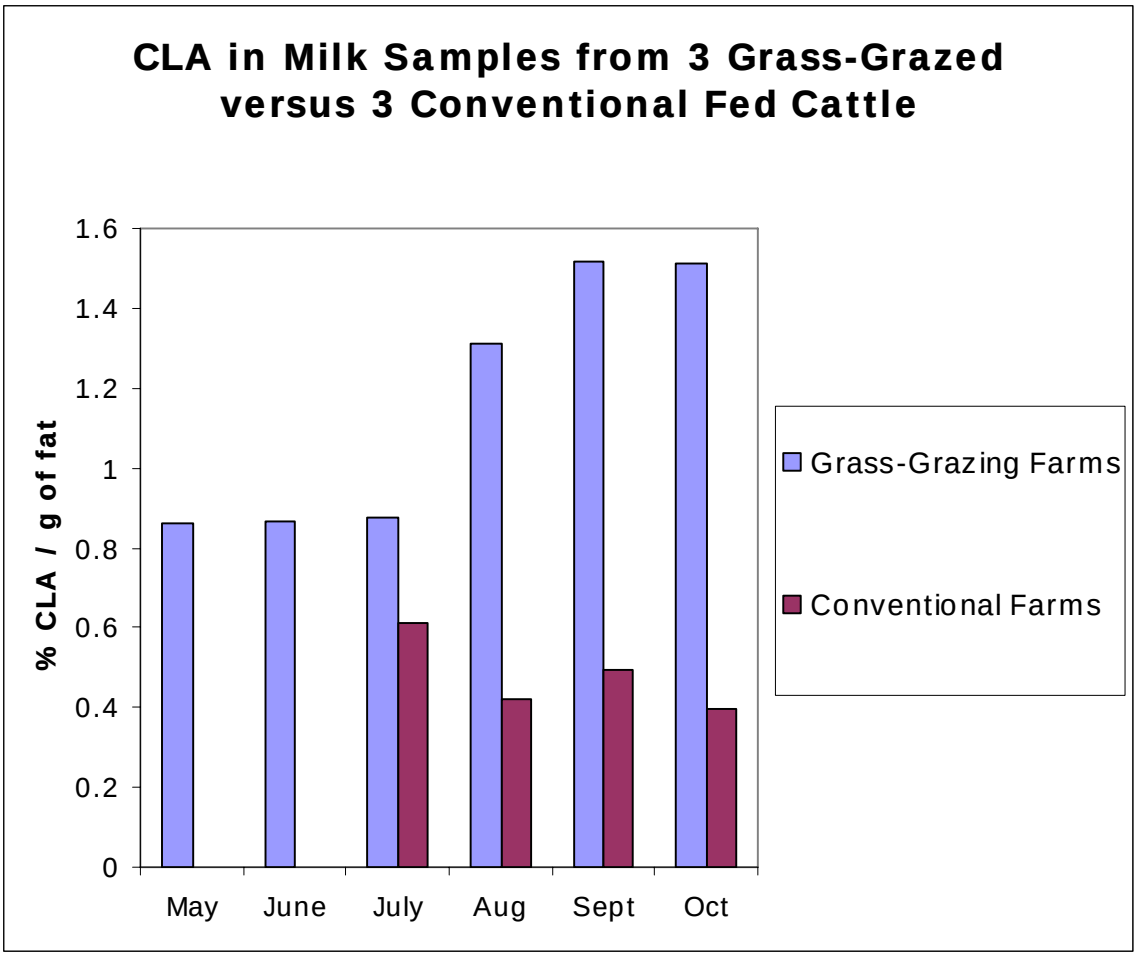

Wisconsin Dairy Graziers Cooperative – SARE grant – CLA, Omega-3 study of milk samples

From the Lab of Dr. Debra Pearson, Assistant Professor, Human Biology , 2420 Nicolet Dr., University of Wis. Green Bay, 54311-7001. E-mail: pearsond@uwgb.edu