DEAL DAIRY FARMS. Jarming with family since 1908!

Hi Neighbors!

Winter 2021

FRESH MILK FROM

We hope this newsletter finds you well this holiday season! Lots of time has passed since our last newsletter and we have been busy making changes and improvements on the farm. Much has changed since the onset of the COVID-19 Pandemic in the Spring of 2020 as we have all experienced its long lasting impact in many areas of our lives. As a local business, we are experiencing the same challenges with increasing input costs across the dairy supply chain that seem to be a common thread in all industries. That being said, we have been extremely blessed as our team remains healthy, and the work of caring for and feeding our herd of cows to produce quality milk has continued despite the pandemic challenges whirling around us. May you and your family remain in good health as we approach the new year and pray for moderate winter weather! **A NEW PARTNERSHIP BRINGS**

At the beginning of 2020, a few short months before the onset of the COVID-19 Pandemic, Ideal Dairy Farms partnered with Argyle Cheese Farmer to purchase the former Lewis Super Grocery building in Hudson Falls. Together we renovated the building converting it into a 11,000 sq. ft. dairy processing, commercial kitchen and retail store. This renovation and equipment upgrade allowed Argyle Cheese Farmer to drastically expand their production of quality and delicious cheese, yogurt, and buttermilk as well as add several new products such as take-and-bake frozen pizzas, mac n' cheese, and a variety of baked goods and sweet treats all made in our commercial kitchen by our talented ACF staff! This partnership has also afforded us an opportunity to further develop our relationship with the community through the



PARTNERSHIP BRINGS NEW OPPORTUNITY

processing plant observation area, farm tours, and, most notably for us, offering a means for our neighbors to enjoy Ideal Dairy Milk locally for the first time since 1987! It has been a long time since we shut down our processing plant, so marketing milk under our own label again has been a fulfilling experience!

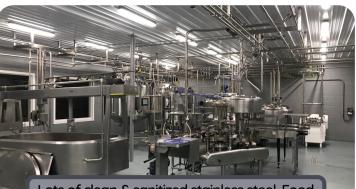
If you haven't had a chance to stop by our store, we highly recommend you come for a visit! In addition to our own products we also carry lots of other products from local farmers in our region. Three large windows provide a view into our dairy processing plant where you can view first hand what goes into crafting our quality dairy into cheese, yogurt, buttermilk, smoothies, gelato, and more! We also display a video loop featuring a variety of farming and dairy processing activities and lots of other information for anyone curious about all things food and farming! We hope you will consider visiting our store and checking out all the great things Argyle Cheese Farmer has to offer! It's a great spot to pick up quality, fresh and local nutrition to enjoy with your family or a dairy gift basket for a special person on your gift list this season. See you soon!

Have you visited our website lately? It has a new look! Click the scan code to visit our updated site to contact us and learn more about our farming activities!





In this vat we convert 500 gallons of Just A2 milk into 500 lbs. of cheese curds!



Lots of clean & sanitized stainless steel. Food safety and quality are top priorities at ACF!



more about

here to go



All the milk used in Argule Cheese Farmer's products comes from a special group of about 250 cows on our farm who produce Just the A2 protein variety in their milk. Research has found this protein easier to digest for some people who normally experience challenges when digesting traditional dairy. What's the difference? In short, genetics.



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ABOUT 5.000 YEARS AGO

About 5,000 years ago domestic dairy cows produced only the A2 variety of Beta-Casein in their milk. Then a natural genetic mutation occurred that resulted in the onset of the A1 Beta Casein protein variety. Today, the Holstein breed that produces the vast majority of the milk in the United States, predominately produces milk containing a mix of A1 and A2 Beta Casein protein. Only about 1/3 of Holstein cows today produce milk containing only the A2 Beta Casein protein. We DNA test all our calves at birth and have isolated a group of "Just A2" Cows. The Structure of Milk Protein is identified in the diagram below. The protein content in milk varies depending on the cow and her nutrition. Generally most milk is about 3.25% protein. About 80% of that protein is Casein, or solid protein, while 20% is Whey or liquid protein. There are several different types of Casein protein each with different attributes. Some common types are Alpha, Beta, and Kappa Caseins. Depending on a cow's genetic makeup, her milk will contain a variety of different combinations of these types of proteins. The two most common types of Beta Casein, are A1 and A2. While the attributes of A2 protein may be easier for some people to digest, since most milk in the US is pooled it contains a mix of both A1 and A2 proteins. Potentially it's the A1 protein causing the digestive discomfort that some associate with lactose intolerance, but may simply be digestion of the A1 protein. What makes A1 and A2 protein different, genetically? Not a lot. A very small difference in their amino acid chains. The Amino Acid Chain of A1 and A2 protein vary only slightly, but this small difference can have a significant impact on how milk proteins are digested. The difference occurs in the 67th position of the amino acid chain.

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PROTEIN STRUCTURE While A2 has proline in the 67th position resulting in a well bound chain, A1 has histidine which is more likely to allow for a break in the chain as the protein is digested and amino acids are absorbed. A small difference with the potential for a great impact. Traditional pooled milk in the the United States naturally contains a mixture of both A1 and A2 proteins. On our farm we have DNA tested and isolated a special group of about 250 of our cows that naturally produce milk with Just the A2 protein. From them we bring you Just A2 Milk, Yogurt and Cheese, Protein for Simple Digestion, and we hope our products will bring you back to dairy!!

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Have you tried our products made with Just A2 milk? Do they work for you? We'd love your feedback! Click on the code to the left to share your thoughts!



LAND IMPROVEMENT Investing in our land to PROJECTS do more with less and conserve our natural resources.

Some of you may have noted the work we have been doing the last couple of years in our fields and along their borders. Many have heard the old adage noting land is a finite resource, "they aren't making any more of it." Recognizing this reality, it is important we are always intentional about taking care of the land, and using this valuable resource as efficiently and effectively as possible. While we are blessed to have the land we do to feed our cows, much of it is of the heavy clay variety - poorly drained and not innately fertile. With this in mind we strive to improve it where and when we can. We might not be able to make more land, but we can certainly improve and maintain the land we have.

Tile Drainage is a technology we have invested heavily in over the last several years. Installing subterranean tile drainage involves burying a series of perforated pipes in a pattern that works with the natural landscape to provide a pathway for surface water to drain out of the soil. As we saw in a really wet growing season like this year, plants submerged in water for an extended period of time do not grow. The natural structure of clay holds water on the surface rather than allowing it to permeate - great for holding water in a clay pot, terrible for providing a seed bed conducive to plant life. The tile lines provide a pathway in the soil for the water to drain from the field into an existing and appropriate clean waterway, or road ditch, leaving behind a level of soil moisture that is much improved for plant growth. Installing tile drainage in our fields is a significant investment, but we have found it improves our yields by 30-40%, depending on the season. The input costs associated with raising and harvesting every kernel of corn are significant regardless of the size of the plant that results. To be sustainable and use our natural resources wisely, we need to optimize our crop yields whenever possible. Tile drainage is one of the most effective tools in our toolbox and we will continue installing it in the years ahead.

Hedgerow removal and border maintenance is another best practice we utilize to ensure we are using as much of our fields for crop production as possible. Over time weeds and brush grow and expand around the fields borders and hedgerows taking over valuable plant growing space and robbing plants of much needed sunlight by shading them. In order to keep from losing tillable acres and suffering reduced yields, we must cut down and push back the border foliage on a regular basis. We also find larger fields, generally, to be advantageous due to the efficiencies we can capture by more easily maneuvering our large equipment, and dragline system during manure application. When possible we remove hedgerows entirely and combine smaller fields into one large field as long as it can be done without negatively impacting field drainage. Typically we tackle these projects in the winter months to mitigate interference with our growing crops, so you may start to see some of this activity in our fields soon. As always, if you have questions about what we are doing in our fields, or why, please do not hesitate to contact us!



HARVEST UPDATE

Crop Season is a Wrap! After a very frustrating crop season, with lots of uncooperative weather, we have finally put the close on our 2021 harvest. We are grateful for the many members of our team that put in the extra hours throughout the Spring, Summer and Fall to ensure a quality harvest to feed our cows throughout the year!



This year we planted 2,200 acres of corn, harvesting about 36,450 tons of Corn Silage (corn ears and stalks chopped into lots of little pieces) to store in our bunks for cow feed. The vast majority we harvested ourselves, but since we had such a poor and variable yield due to the wet weather this season, we also purchased some from neighboring farms. Also stored in our bunks are about 28,200 tons of haylage (mostly grass chopped into tiny pieces) that will also be included in our cows' meals in the year to come. We pack our harvest into large horizontal bunkers driving heavy tractors back and forth over the piles 1,000s of times to push out all the air. Then we cover them with plastic and tires so the feed will keep, unspoiled, until we are ready to feed it to our cows.

Manure spreading typically follows corn harvest if the weather cooperates. For us manure is a valuable resource to replenish the nutrients in our soil. We work with a custom manure applicator, Loose Moose, that specializes in applying manure nutrients safely and effectively. Roger and his team use a tool that is able to inject the manure



directly into the soil. This is effective because it ensures the manure gets incorporated into the soil where the plants will need it in the spring, without causing compaction from additional tillage, and also mitigating the odor. We are a bit behind schedule this year due to the continued wet weather, but the last few weeks Roger and his team have been busy spreading as much manure as possible so we will have lots of storage to get us through until Spring. We are praying for a dryer spring that will allow us to fertilize our soil with manure, and prep our fields for a nice early corn planting and a great start to the 2022 crop season!

If you haven't visited our Hudson Falls Store yet and tried our Just A2 Products we hope to see you in 2022!







Hayley, Aiden and all of us at Ideal Dairy are hopeful you had a wonderful Christmas with your family and are wishing you all a happy and healthy 2022!!