

Growth: Doubled Revenue 1 Year; 100% Processing Now in Montana

MMEC, GTA Help Jump Start Oat-based, Gluten-free Food Processing Dream

By Deborah Nash, MMEC

“We never dreamed it was possible to have our own food processing facility,” said Deb Wheaton, co-owner of [Gluten Free Prairie](#), along with her husband Rick and son Jeremy.

Gluten-Free Prairie is a family owned and operated gluten-free oat-based business in Manhattan, Mont. Its gluten free oats are grown in Southwest Montana and are a hull-less variety, higher in protein than many other varieties on the market.

Its products include award-winning Gluten-Free Granola Bites, Gluten-Free Hunger Buster Cookie, gluten-free groats, gluten-free oats, and gluten-free toasted oat flour. Always innovating, Gluten-Free Prairie will soon introduce a new dark fudge brownie mix, granola, and all-purpose baking mix along with great new recipes and fun videos on its website. Its “field to fork” products are now sold nationwide with major distributors and through its Amazon Store.



Figure 1 Upbeat Owners: Deb Wheaton (center window); husband Rick (right window); Jeremy with wife Jennifer (left window). [Jeremy Wheaton photo](#)

“We were able to get a start through Montana’s [Growth Through Agriculture](#) (GTA) program which in part provided funding to use Montana Manufacturing Extension Center (MMEC) services



(L) Tasty Montana snack wins national GF taste recognition.



(R) Deb poses at door of the floor-to-ceiling oven. [J Wheaton photo](#)

to set up a functional bakery space.” GTA also provided matching funds for equipment. It was from that organization, she first learned of MMEC and the expertise it could provide. “Through MMEC, we gained efficiencies and improved flow for our workspace through a series of meetings,” she said. And because the building they chose on Manhattan’s Main Street is more than 100 years old, MMEC collaborated with the owners about tradeoffs and wish list items to develop the efficient, effective

design. A costing model, equipment research and useful business tips were also provided.

“We haven’t really made any changes since the final layout,” Deb said. “It’s working very well for us and now we process 100 percent of our product here, all Montana.”

Prior to GTA and MMEC assistance, the business had been using a co-packer in California to provide quality healthy alternative food products to people with Celiac Disorder and others with gluten sensitivity in their diets. GTA is a Montana Department of Commerce program offering a mini grant/loan program for technical assistance, equipment purchases, and other growth needs for food producers across Montana. It was established by the Montana Legislature to strengthen and diversify Montana's agricultural industry.

Collaboration with Business Owners

When entrepreneurs consider manufacturing, the benefits of enlisting the services of the MMEC early in the process are many. Lean Manufacturing concepts are applied when designing layout, production flow, and transport which helps avoid costly mistakes.

“In collaboration with the client, we researched equipment and process options for the right mix of ovens, mixers, racks, refrigeration, and packaging and made recommendations for the near term and several years into the future,” MMEC Field Engineer Mark Shyne, who worked on the project, said. Labor requirements and inventory planning, based on consumption, lead times and supplier reliability, were part of the planning process. Other guidance such as product costing, supplier development, and a building evaluation to accommodate compressed air, 3-phase power, forklift access, clearances and ceiling height were provided.

“We worked so well with Mark and the UTAP Student Brittani Nikol,” Rick Wheaton said. “We had a great feedback loop on all the design ideas. All meetings were productive and kept us moving forward.”

Advantages with MMEC

By using MMEC, Gluten Free Prairie received a layout design that incorporated

- Knowledge of and design for food safety compliance, including sealed floors, washable walls, and many other things for a viable bakery;
- Optimum use of limited space in the operations, with an eye on growth plans;
- Overall lower cost of production due to elimination of wastes and reduced materials handling;
- Need for fewer management hours to watch over the project, freeing up time to focus on the other business initiatives, including finding customers;
- Tips on available HACCP Food Safety training along with a recommendation to build a solid resource relationship with the county sanitarian’s office from the start.

The design also included pushing the former retail space divider wall forward to add production space while retaining storefront appeal for retail sales; that space was recently completed.

“What I recall about the project is the very good team effort,” Shyne said. The Wheatons knew a lot about the equipment they wanted and provided solid input on the evaluation aspect of the facility and how it would suit their needs. “They have considerable capacity now to grow sales without too much capital investment.”



Mark Shyne & Jeremy Wheaton review design

Materials Handling Discussions

One of the key issues was storage, Shyne said.

Discussion covered material handling, reviewing the size/weight of raw materials and reconfiguring rear door access to fit the planned pallet size to move raw materials in and out. It also included use of a dumbwaiter to move materials to the basement or to a second level. Shyne recommended against the basement, and the owners decided to build up instead.

“We were very fortunate that our contractor had experience installing a dumbwaiter, so it was easily done to utilize an upper level area,” Deb said.



Product readied for shipping to distributor.

[J Wheaton photo](#)

The recommendation was especially fortuitous in early 2014 when a fast thaw sent record levels of snowmelt through the Manhattan downtown, flooding basements to the rafters, including the one at Gluten Free Prairie. Shipping containers were damaged, but fortunately no grain is stored where water threatened it.

Willful weather created an ironically positive twist when an east coast storm delayed delivery of the bakery’s new \$30,000 oven, which otherwise would have sustained damage in the flood. Castors on a newly arrived wrapping machine kept floodwaters from reaching it. Still, the business faced a setback and had to reinvest about \$50,000 to rework some improvements such as the flooring that had already been sealed, Rick and Deb said.

The couple is relieved that the flood is behind them and thankful for good neighbors who stepped in to help move things during the event. Many came from the manufacturing firm ATK BLACKHAWK! to assist. “It was amazing to watch the volunteers and how quickly they worked,” the couple said.

MSU Research and Oats

After their diagnosis with Celiac in 2005, Deb and her sister Amy embraced a gluten-free lifestyle. Symptoms can range from migraines to intestinal discomfort and long term health issues.

“Finding healthy gluten-free options was a great challenge,” Deb said. Back then, there were very few options for a gluten-free diet. And despite the fact that oats are naturally gluten free, the two

still had a problem with eating oats because oats are often cross-contaminated in the field or during harvest or processing. “So we simply didn’t eat oats...for about 7 years.”



Dr. David Sands, MSU plant pathologist, discusses oat crop variety with Deb. [J Wheaton photo](#)

Meanwhile, Deb began blogging about Celiac Disease and developed recipes to help. During that time her family was building a home in Southwest Montana. In an effort to source locally, she met with a local group of farmers who were growing a unique variety of gluten-free oats just a few miles from the family’s new home. Plant pathologist Dr. David Sands, of Montana State University, who developed the oats, explained that they are grown in designated fields that are at least five-years free of contaminants. The variety grown is shorter so taller volunteer wheat or barley can be detected and

removed before seed heads are produced that cross contaminate a harvest. They are also harvested on equipment that only harvests the oats, thereby eliminating another cross contamination contact.

“He encouraged me to try them, as he believed them to be more tolerable than other oats,” Deb recalled. “I still wasn’t convinced, but he is persistent, and I finally tried them and was able to add oats back into my diet” and into the products now manufactured here in Montana. Gluten Free Prairie has become one of the largest customers of its grain supplier.

Back at the Bakery

“Our new bakery is compact but efficient. Upstairs is where we weigh, package, and label the grains and flour; raw material comes up from the shipping area in a dumbwaiter, is packaged, boxed, and heads back down, she said.” Whole grains and flour are re-packaged in 1 and 3-lb. bags. “Our number one challenge is getting publicity now that the flood is behind us,” Deb noted. During that time, lots of media coverage of the fledgling business and historic event occurred.



Learn more about this family business and great recipes in this and related Gluten Free Prairie YouTube videos

Deb herself comes from a background of marketing and public relations in the entertainment world. Her main focus was food commercials. “Marketing today is entirely different; many channels, social, etc.,” she said. “I’ve had to reinvent myself, my business.”

Growth for Gluten Free Prairie over the last year has been 100 percent. “We’ve doubled our revenue,” Rick said. He forecasts that it will double again, and they anticipate hiring another staff member soon if all goes as planned.

Indeed, 2015 is showing signs of exciting growth ahead, when a high end distributor they had been negotiating with submitted a January purchase order for 125 cases of groats and oatmeal. Deb said this “opens fabulous chain opportunities for us.”

To make their dream happen, the family invested well over \$100K. And with the unexpected flood and no flood insurance, they had to re-do some of what had already been done toward opening the processing facility, such as the floor and electric.

Excited about the prospects for her growing business, the long-time blogger and advocate concerning Celiac issues, Deb said, “The gluten-free scene has changed dramatically from a barren desert [of information] to a bountiful oasis in just a few years.”

It is one of the most missed diagnoses as an auto-immune diagnosis, and estimates are that 1 in 133 people suffer from it; some believe 1 in 90, she said. She is the only food manufacturer on the Board of the Celiac Disease Foundation.

At Gluten Free Prairie, the family is living “the American Dream that anything is possible.” Deb is very complimentary and appreciative of all the assistance provided to get them started with a full-fledged processing and baking facility; support from the Montana Department of Agriculture, MMEC, Gallatin County Health Department, Made In Montana program; and others.

“I like to co-opt the familiar phrase, ‘Last Best Place’ to ‘*Last Best Place to Start a Small Manufacturing Business*,’” Deb said with a smile.

-mmec-

Click below to

[READ MORE ABOUT CELIAC DISEASE](#)

[READ MORE ABOUT WHY GLUTEN-FREE OATS ARE NOT CREATED EQUAL](#)

SMALL & MEDIUM-SIZE MANUFACTURERS

Innovators ♦ High Paying Job Creators ♦ Spurring Economic Growth

To learn more about how MMEC services help you to succeed, check out

<http://www.mtmanufacturingcenter.com>