

MONTANA-GROWN LENTILS AND THE KALISPELL, MONTANA PUBLIC SCHOOLS

Overview

Located in rural northwestern Montana, the Kalispell Public School District has about 6,000 students, about 3,500 of which are served lunch daily.¹ The district places a strong emphasis on providing locally grown products, and its Farm to School program now involves 12 to 15 local producers. Lunch menus include more than a dozen varieties of local fruits and vegetables, as well as local whole grains, meat and dairy products. The Kalispell district prioritizes growers from very nearby areas whenever possible, followed by those located within the state and region.

Farm to School efforts are aided by the Montana Team Nutrition Program, a state arm of the USDA Food and Nutrition Service,² which provides technical training and other support to school nutrition services developing Farm to School programs.³ The program is located at Montana State University and facilitated by the Montana Office of Public Instruction.

Montana-grown lentils

In 2011, Montana surpassed North Dakota to become the largest producer of lentils in the United States.⁴ Recognizing the important role of lentils in Montana's agriculture, the Kalispell School District has made it a priority to incorporate locally grown lentils into its meal program. This has also helped the district meet the federal nutrition requirement to increase offerings of legumes.

Lentils are gluten-free, low on the glycemic index and high in fiber, iron and folic acid. Nutrition staff feel that lentils are more convenient to prepare than items like dried beans because they require only a stockpot and a range and do not require presoaking.

Their versatile flavor and texture make lentils a nutritious and inexpensive alternative or complement to meat, allowing the district to save money that can instead be used to purchase meats of higher quality.

Stage 1: The Montana Lentil Patty

With the goal of providing an “alternative, center-of-the-plate protein option” that would also support the local food system,⁵ the district began exploring locally grown lentils with the Montana Lentil Patty in 2011. The patty, developed by the nonprofit Mission Mountain Food Enterprise Center (MMFEC), consisted primarily of locally grown ingredients including oats, barley, organic eggs, flax seed, bell peppers, onions and carrots. In practice, however, the lentil patty recipe faced a number of difficulties:



A lentil patty.

- The new product was introduced to students quickly when they were still quite unfamiliar with lentils. More testing and a slower introduction might have led to better student reception.
- The patties tended to dry out and crumble when held on heat for necessary periods of time. Even with specific instructions to counter this, the patties created extra challenges for kitchen staff.⁶
- Taste-testing in five K-12 schools found that students were generally not interested in non-meat burgers. Ultimately, the patty was better received by older students and is now used at institutions such as the University of Montana at Missoula.

Stage 2: Beef-Lentil Crumble

After mixed results with the Montana Lentil Patty, the district made a second effort in 2014 focused on a new Montana Beef-Lentil Crumble, a 1:1 blend of locally raised ground beef and Montana lentils also developed by MMFEC. Testing conducted by the district's FoodCorps Service Member found that students had a very positive response to the crumble and liked that lentils tend to take on the flavor of other ingredients they are cooked with.

Its two flavors, plain and taco, can be used in many dishes in place of straight ground beef. Members of the district staff report that the crumble has become quite popular among students.

Kalispell Public Schools purchased a total of 1,260 pounds of pre-cooked Taco Beef-Lentil Crumble in March and April of 2014. School kitchens simply need to reheat the product with some water to moisten it. The crumble has now been successfully taste-tested with five school districts in western Montana, with three purchasing the product for school lunches.

The crumble is a 100-percent Montana-grown product and costs the Kalispell district 44 cents per two-ounce serving. Alternatively, in instances when the district uses commodity beef and tomatoes and combines them with Montana-grown lentils (purchased at \$1.53 per pound), the cost is approximately 19 cents less per serving than the 100-percent Montana product.

For purposes of the federal nutrition standards, the district counts lentils as a vegetable when served in the salad bar, and as a protein when served as a meat alternative. The district's central kitchen provides lentils to its high schools and middle schools two to three times per week. Satellite schools incorporate them into ground beef dishes at least once weekly.

Product Development and Supply Chain

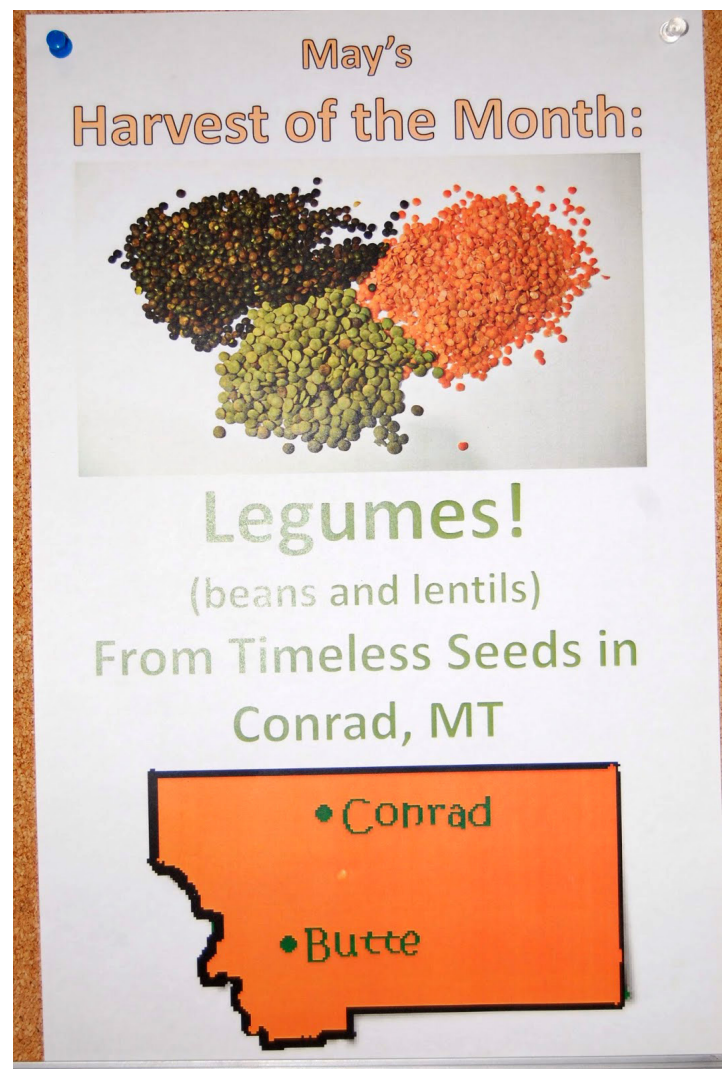
Several partner organizations have played critical roles in the district's efforts to use locally grown lentils.

- **Grower/Aggregator/Processor:** At its processing facility about 200 miles away from Kalispell, Timeless Seeds, Inc. processes and distributes lentils from as many as 16 growers within a range of about 500 miles.⁷ The company is able to provide traceability back to individual farms of origin, enabling interested buyers to know where the product is coming from. Lentils are sold and delivered to the district in 25-pound bags.
- **Distributor:** The Western Montana Growers Cooperative (WMGC), a coalition of over 40 local producers, handles distribution. The co-op distributes a large variety of local products to the Kalispell School District, other districts in western Montana and a range of other institutional and retail accounts. The K-12 market presently accounts for about five percent of WMGC's sales and is growing.⁸
- **Product Developer:** Mission Mountain Food Enterprise Center (MMFEC)⁹ is a food processing, research and development organization that has been key to

developing products that use Montana-grown foods. MMFEC connects local food producers and processors with buyers, trains food entrepreneurs, provides food processing facilities to "incubate" new food products, and develops products to suit the needs of its clients while expanding market opportunities for Montana products and food businesses.¹⁰ The Enterprise Center processes the pre-cooked lentil-beef burger for sale to the Kalispell schools, with distribution provided by the Western Montana Growers Cooperative.

Education and Promotion

FoodCorps Montana has also been a key player in supporting Kalispell's work with Montana-grown lentils and other Farm to School foods.¹¹ Among other roles, members of FoodCorps Montana and the Montana State University Dietetic Internship feature a Montana crop on a monthly basis as part of the Montana Harvest of the Month series.¹² They create lesson plans and visual materials to be displayed in schools as promotional and educational resources. They have also supported taste-testing, among other activities.





Poster promoting lentils.

Best Practices

- Tenacity and a willingness to experiment with creative applications of lesser-known products can increase the rate of acceptance among students. Kalispell students were more likely to try and like lentils when the new ingredient was slowly incorporated into other dishes that they already enjoyed. This was more effective than introduce an unfamiliar all-lentil product “cold.”
- The Kalispell Food Service staff brought a strong interest in and commitment to their area’s agricultural system and local economy, which helped them weather initial challenges with new product introductions.
- Recognizing the offerings and limitations of one’s local food supply can help districts determine a definition of “Farm to School” or “local” foods that is appropriate to a district’s unique circumstances. In Kalispell’s case, they prioritize sources that are quite close to their district but reach out statewide or regionally as needed given product availability.
- External partners like Mission Mountain Food Enterprise Center, FoodCorps Montana and the Western Montana Growers Cooperative can be key to making district efforts successful. Working with a product developer (like the Mission Mountain Food Enterprise Center) meant much less legwork for the school district as the district explored

applications for locally grown lentils and was key in finding suppliers and working out distribution.

- Particularly where a supply chain involves several players working in coordination, taking the time for all players to develop a mutual understanding of each other’s aspirations, priorities and limitations is key to bringing new local foods into a school district effectively.
- As with the other case studies, the Kalispell example highlights the importance of having a food processor in the region that has the technical capacity to process legumes into a form that can work for schools, the ability to provide an appropriate level of supply chain transparency, and the ability to provide product in needed quantities. Without the needed processing and distribution capacity, it can be very challenging to bring products like local legumes and grains into K-12 environments even if they are grown plentifully in a school district’s region.

Endnotes

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