LET'S GET Crusty

MEMBER PROFILE: Montana Wheat & Barley Committee

FNCE 2017

INTRODUCING Food Quest
Message from the President

It is the time of year when home baking becomes a centerpiece of many families’ holiday traditions. Our feature on piecrust will help you be an expert, use it with your family, friends or clients and show them you know your crust! We also feature recipes for pumpkin yeast rolls and cranberry apple pie, in case piecrusts are just not enough holiday baking for you. We think 50 years of promoting Montana wheat is a big deal, catch our WFC member profile of the Montana Wheat and Barley Committee. WFC was excited to help sponsor Food Quest with hosts Robin Leach and Kim Alexis as they explore the secrets behind wheat and other food staples. You can watch the program using the link in this issue of Kernels.

Tim O’Connor
President, Wheat Foods Council

Let’s Get Crusty

In Crust We Trust.

This time of year, everybody wants pie. There’s nothing more homey and holiday-feeling than serving up a slice of homemade apple, cherry or pumpkin pie, fresh from your kitchen. The one thing every great pie is built upon, of course, is a great crust. So let’s take a look at what goes into making a truly terrific one.
Nearly all pie crust recipes have just four ingredients: flour, fat, salt and water. Flour is the foundation — so which one is right to put into your pie crust? That depends on your tastes and your baking style. In general, the more finely ground, lower-protein flours yield a more tender crust. Let’s take a look at the most common types of flour used in pie-making:

**Pastry flour.** With 8% protein, pastry flour is very finely ground and yields a fork-tender crust. However, dough made using pastry flour is delicate and takes an experienced hand to roll out.

**All-purpose flour.** It didn’t get its name by accident, all-purpose flour really is made to handle nearly any baking job you throw its way. While a crust made with it won’t be quite as fork-tender as a pastry flour one, you’ll still get a light and fluffy crust with a soft texture that can be the basis for nearly any pie filling.

**Whole wheat flour.** Some recipes (and some people’s tastes) call for a crust with a little more oomph to it. Whole wheat flour makes a crust that is more grainy, due to the bran in the flour. It will be less tender than either of the previous options — but that’s by design. Whole wheat flour-based crusts can give a slightly nutty flavor to hearty pies.

**Whole wheat pastry flour.** If you want the taste of whole wheat in a more tender and delicate crust, you can always choose the finer ground version. Just keep in mind, like its enriched flour cousin, whole wheat pastry flour is just a little trickier to master.

Which fat should you add to your flour? Tender, flaky crusts can be made with shortening, butter, or lard. Butter tends to make the flakiest, most flavorful and beautifully browned crust. However, some home bakers find butter-based pie doughs a little tricky to work with. Lard (the choice of grandmothers and classic roadside diners everywhere) also makes a tender and tasty crust, and is simpler to roll out than butter. But it’s not for everyone. Shortening is a breeze to work with as dough, but it lacks flavor as a crust.

A great compromise is substituting half shortening with half butter (or lard) for great-tasting crust that’s more manageable to work with. But whichever option you choose, make sure your fats are very cold as you cut them into pats and work into your dough.

**Flour Power.** A pinch of salt adds flavor to your crust. Don’t skip it, or you’ll be disappointed. Ice water, meanwhile, provides the binding power to hold all your ingredients together. You just have to use precisely the right amount — too little water and the crust won’t hold together. Too much and you’ve got a gloopy mess. Once you’ve got your fats cut into your flour and salt, add water little by little until you can squeeze everything together and the dough holds its shape. Form a ball, flatten, and then refrigerate.

**Pinch, Splash, Chill.** Roll your dough once it’s done chilling and you’re ready to finish up your fabulous pie. Filled with anything from apple to pumpkin to southern-style pecans, there’s nothing you (and your crust) can’t handle.
When it comes to pie, the United States are more divided than ever.

The United States of Pie!

Key:
- Apple
- Cherry
- Chocolate Cream
- Key Lime
- Strawberry
- Banana Cream
- Rhubarb
- Meringue
- Shepherd’s Pie
- Pecan
- Mississippi Mud
- Coconut Cream
- Chicken Pot Pie
- Pumpkin

Source: Martha Stewart.com; https://www.marthastewart.com/1106537/pies-pi-day-what-is-americas-favorite

Montana Wheat and Barley

Celebrating 50 Years
Promoting Farmers and Products

Fifty years ago, the Montana state legislature established a program at the request of the state’s wheat farmers to help promote their products for sale in foreign countries and to pursue research to aid crop quality and production. Originally known as the Montana Wheat Research and Marketing Committee, a refundable barley check-off was added in 1973, and the name was changed to the Montana Wheat and Barley Committee.

It is the mission of the MWBC to protect and promote the health and prosperity of the Montana wheat and barley industry by encouraging scientific research to improve production and quality; maintaining current markets; stimulating new market development; and serving as an educational and informational resource.

We recently caught up with Cassidy Marn, Trade & Marketing Manager, and Steve Becker, Outreach Coordinator for MWBC, to learn more about the Committee.
What are the most successful wheat varieties grown in Montana?

We primarily grow hard red winter and hard red spring. We also grow durum and some soft white and hard white varieties in parts of the state. Montana is known as a “blending state.” Producers grow a large quantity of the highest quality hard red winter and hard red spring. Buyers use smaller amounts of this premium product and blend it with other varieties to produce products at a lower price for consumers. Montana wheat is typically used in baked products like bagels, pan breads and noodles that yield a “chewier” bite.

Montana breeders have developed a hard white wheat variety from a very popular hard red winter. While the flavor is different from non-wheat flours, the color is more acceptable to some consumers looking for whole grains, without the whole grain color and texture. Color and texture are almost more important than flavor, especially for our foreign consumers that desire the white, creamy color for their noodles and baked goods.

How does choosing certain wheat varieties affect yields and contribute to the quality and quantity of wheat crops year to year?

Source genetics from all over the world are put into yield tests. Montana State University (MSU) facilitates collaboration with producers and breeders to work with hard red winter and hard red spring varietals. The plantings undergo several steps where weather, pests, disease and other variables are altered and yield is measured. This process occurs over 9-11 years with hope of continuing to develop wheat varieties that are useful for future crops. MSU hosts field days to bring researchers and farmers together to discuss findings and make decisions.

What is the wheat industry’s most significant challenges and where is the industry getting it right?

A significant challenge is the depressed price for producers at the initial point of sale. At the same time, farmers get a higher price for premium quality wheat, so this challenge is also an opportunity for producers to grow more premium wheat crops with better overall protein and quality.

The Committee also provides other education and information services, such as Montana Agriculture in the Classroom. Why do you think this is important?

Education efforts across the board are vital to agriculture and the wheat industry. Research institutions like MSU are developing resources and technology to help producers do their jobs. Collaboration between producers, breeders and buyers creates stability and growth at the same time.

Consumer education is important and diverse. While some consumers need to consider end use performance of wheat and wheat products; the average consumer considers ingredients, nutrition, taste and cost when purchasing wheat foods. The Wheat Foods Council does a great job with education about wheat foods, and people want to learn about their food and where it comes from.

Looking back over the last 50 years, what would you say is the Committee’s greatest achievements with regard to the promotion of Montana wheat, research and the wheat industry?

We will definitely be celebrating the achievements of the MWBC, as we’ve accomplished so much. For example, the Committee has progressed from hosting one overseas visitor per year to having 18-20 groups each year. However, the most rewarding part of working with MWBC is the long-term involvement of many throughout the years. For example, one member of the trade teams made his first visit in 1967, and he visited again this year – he’s 92. That’s quite a legacy.

Finally, what does MWBC enjoy most about its association with the Wheat Foods Council?

The Wheat Foods Council helps us to successfully counter the misinformation about wheat and wheat products. The WFC is wonderful source of information and plays a vital role in getting the facts out to the public.

For more information on the Montana Wheat and Barley Committee, please visit their website: http://wbc.agr.mt.gov/
### Cranberry Apple Pie

**INGREDIENT LIST:**

**Pie Crust:**
- 2 cups Unbleached All-Purpose Flour
- 1 cup Unbleached White Whole Wheat Flour
- 1 teaspoon salt
- 2 teaspoons sugar (optional)
- 1/2 cup vegetable shortening
- 1/2 cup cold butter
- 6 to 9 tablespoons ice water

**Pie Filling:**
- 1 1/2 cups chopped cranberries, fresh or frozen
- 1 cup sugar
- 1/4 teaspoon orange oil or 1/2 teaspoon grated orange peel (zest)
- 1 tablespoon Unbleached All-Purpose Flour
- 1/3 cup orange or cranberry juice
- 6 tablespoons chopped pecans
- 3 large, firm, tart apples, peeled, cored and sliced
- 1/2 teaspoon cinnamon
- 1 tablespoon butter

**DIRECTIONS:**

**For the crust:** In a large bowl whisk together the flours, salt, and sugar if using. With a pastry blender, two knives, or your fingertips, cut the shortening into the flour mixture until it resembles cornmeal.

Dice the butter into 1/2” cubes, toss them in the flour mixture to coat, and cut them in until the largest pieces are the size of a dime.

Sprinkle the ice water over the flour/fat mixture, tossing with a fork, using 2 tablespoons at a time. Continue until the dough is just moist enough to hold together. Gather it into a ball, cut it in half and flatten the halves into two disks. Wrap the pieces of dough and refrigerate to give them a rest for 30 minutes or more before rolling them out.

**For the filling:** In a medium saucepan, cook the cranberries with the sugar, orange peel, flour and juice over medium heat until the mixture simmers and is slightly thickened. Remove from the heat and cool.

**To assemble the pie:** Lightly grease a 9” pie plate, and preheat the oven to 425°F. Roll out half the pie dough and fit it into the prepared plate. Sprinkle half the pecans over the dough. Place the apples on top of the nuts, then dot with butter and sprinkle with cinnamon.

Pour the cooled cranberry mixture over the apples and sprinkle on the remaining pecans. Use the other half of the dough to make a lattice crust, and place it on top of the filling. Seal and crimp the edges.

Bake the pie for 30 minutes (check after 20 and cover the edges with a pie shield or foil if necessary), until the crust is golden and the filling is bubbling in the center. Remove from the oven and cool before slicing.

**Servings:** 8

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### Pumpkin Yeast Rolls

**INGREDIENT LIST:**

- 1 large egg
- ¾ cup very warm water (approx. 120 degrees F)
- ¾ cup canned pumpkin, unsalted (or mashed, canned sweet potatoes)
- 1/3 cup vegetable oil
- ¼ cup sugar
- ¾ tsp. salt
- 3.5 cups bread flour or 3 cups plus 6 tablespoons white whole wheat flour
- 1 tablespoon gluten (optional)
- 1 package active dry yeast

**DIRECTIONS:**

Place ingredients in the bread machine in the order listed. Select the dough cycle and let the machine do its work. (Check early in the cycle to make sure the dough is not too moist or too dry and add flour or water as necessary.)

Divide dough into 18 pieces and shape into rolls.

Place in two 8” X 8” greased pans and let rise until double in size. Bake for 20 minutes at 375 degrees F. Let pans sit for 5 minutes on cooling racks before turning the rolls out onto the racks. Rolls freeze well for up to 3 weeks in a re-sealable plastic bag.

**Servings:** 18 (1 roll/serving)

**Calories/Serving:** 155

**Nutrition:** One roll provides approximately: 155 calories, 4 g protein, 23 g carbohydrates, 1 g fiber, 5 g fat (0.5 g saturated), 11 mg cholesterol, 21 mcg folate, 0.5 mg iron, 100 mg sodium.
Academy of Nutrition and Dietetic’s Food and Nutrition Conference and Exhibition (FNCE) celebrated its 100th anniversary this year. The annual conference was held in Chicago, IL from October 21-24, 2017. Although the Wheat Foods Council did not exhibit this year, Gayle Veum, RD, Michele Tuttle, MPH, RD, Nancy Piho, and Nancy Clark, MS, RD all attended FNCE and were able to provide the following insights from the meeting.

The educational sessions were plentiful and the exhibit floor also seemed full and busy. As in past years, many of the sessions dealt with a wide variety of topics including the microbiome, FODMAPS, and food allergies but it appeared that there were fewer sessions dealing with wheat and gluten than in previous years. However, there were more sessions and exhibits dealing with sugar and sweeteners.

Exhibitors trended mostly toward the special ingredient/food items with many gluten-free, vegan, dairy-free, and FODMAP “friendly” items. While some of the more traditional vendors from the food industry were not present (Coca-Cola, McDonald’s, Frito-Lay, National Cattlemen’s Beef Association), many smaller companies focused on specialty audiences were (tube feedings, protein drinks, etc). One interesting product was a home test for gluten ingestion being marketed to people who require a gluten-free diet. The test allows them to see if they are truly eliminating gluten or not.

While the presentations and exhibits at FNCE do not necessarily indicate nutritional trends, it is good news for wheat that the focus on gluten appears to be declining.

As always, monitoring the science of wheat from a food and nutrition perspective is essential. FNCE offers a great opportunity to observe what matters to nutrition professionals.
Join hosts Robin Leach and Kim Alexis as they take audiences on a global culinary adventure with epicurean lifestyle to meet the world's finest chefs, explore their restaurants, and learn the secrets behind producing the world's most exciting and delicious foods.

In this episode, Food Quest embarks on a cross-country journey, to explore the impact of agriculture on modern cuisine. Kim and Robin investigate the secrets behind food staples such as tomatoes, rice and wheat. The wheat portion begins at 16:17.

Watch the video here: [https://vimeo.com/238443708/1cf8f8bfa9](https://vimeo.com/238443708/1cf8f8bfa9)

**Recipe Videos**

- **Chicken and Black Bean Quesadilla**
- **Pasta with Tomato Kalamata Olives and Arugula**
- **Lemon Cranberry Wheat Berry Salad**

Have you check out the Wheat Foods Council’s recipe videos yet? Find them here! And keep an eye out for more to come!