

Grown in Washington – Wheat

Eastern Washington is home to some of the best wheat quality grown in the world. Most wheat grown in Washington is winter wheat which is planted in the fall. Spring wheat is planted in the early spring. Both winter and spring wheat are harvested starting in July and through September, depending on where it is grown in the state.

In 2018, Washington wheat growers harvested 2.2 million acres of wheat which had an average yield of 70.8 bushels per acre. Total wheat production for 2018 was 153.2 million bushels. Washington State is one of the nation's top wheat producing states. In addition, wheat ranks third in Washington commodities based on production value, representing nearly \$691 million. Washington is one of the nation's leading wheat-exporting states, with 85 to 90 percent of its production exported each year. In 2018, 46 percent of total US wheat was exported. Wheat is one of America's largest agricultural exports, and provides a positive contribution to the agricultural trade balance.

Types of Wheat

Wheat is the principal human food grain produced in the United States. Washington is the 3rd largest wheat producing state in the nation with more than 2.3 million acres in production. What sets Washington farmer's apart is their ability to raise, or yield, more wheat on those acres than other states. On average, dryland, or non-irrigated, farmers can raise about 65 bushels per acre. Also, Washington wheat is some of the highest in quality throughout the nation and world.

There are six different wheat classes grown in the U.S.: Hard Red Winter (HRW), Hard Red Spring (HRS), Hard White (HW), Durum, Soft White (SW), and Soft Red Winter (SRW). In the U.S., wheat varieties are classified either as "winter" or "spring" depending on the season each is planted. Winter varieties are sown in the fall and are usually established before the cold weather arrives and then goes dormant over the winter. Typically about 80% of Washington's total production is winter and 20% is spring.

It is critical to know that wheat is not wheat – in other words, each class has different end-use functions.

The major class of wheat grown in Washington is soft white. Soft white wheat is used mainly for bakery products other than bread. Examples include pastries, cakes, and cookies. It is also used for cereals, flat breads and crackers. It has a lower protein content and weak gluten.

An important bread wheat, HRS, is used in pan breads, and hearth or artisan breads or rolls. It generally has high protein and strong gluten. (Gluten is the result of mixing flour with water. It's interaction with yeast and allows bread to rise — certainly a necessary factor in bread baking.) Washington farmers are growing more of this type of wheat each year.

HRW is a good wheat for Asian noodles, hard rolls, flat bread, and general purpose flour. It has medium protein and gluten content. Many Washington farmers also grow this class of wheat.

Durum is the hardest of all wheats and is used for pasta, couscous and some Mediterranean breads. This wheat is mostly grown in North Dakota and Montana.

HWW generally serves a dual purpose for Asian noodles or breads and also domestic wholegrain products. This class of wheat is popular among central states such as Nebraska and Colorado.

SRW is used for a wide range of products including pastries, crackers, pancakes, etc. SRW is grown mostly in states east of the Mississippi.

Flour 101

If you want to flex your baking muscles, think flour — there's a lot more than "all – purpose" out there. Many of the flours listed below can be found in the baking aisle of your favorite grocery store.

White flour - The finely ground endosperm of the wheat kernel.

All-purpose flour - White flour milled from hard wheats or a blend of hard and soft wheats. It gives the best results for a variety of products, including some yeast breads, quick breads, cakes, cookies, and pastries.. All-purpose flour is usually enriched and different brands will vary in performance. Protein content varies from 8-11 percent.

Bread flour - White flour that is a blend of hard, high protein wheats and has greater gluten strength and protein content than all- purpose flour. Bread flour is milled primarily for commercial bakers, but is available at most grocery stores. Protein varies from 12-14 percent.

Cake flour - Fine-textured, silky flour milled from soft wheats with low protein content. It is used to make cakes, cookies, crackers, quick breads and some types of pastry. Cake flour has a greater percentage of starch and less protein, which keeps cakes and pastries tender and delicate. Protein varies from 7-9 percent.

Self-rising flour - Self-rising flour is a convenience product made by adding salt and leavening to all-purpose flour. It is commonly used in biscuits and quick breads, but is not recommended for yeast breads. One cup of self-rising flour contains 1½ teaspoons baking powder and ½ teaspoon salt. Self-rising can be substituted for all-purpose flour by reducing salt and baking powder according to these proportions.

Pastry flour - Has properties intermediate between those of all-purpose and cake flours. It is usually milled from soft wheat for pastry-making, but can be used for cookies, cakes, crackers and similar products. It differs from hard wheat flour in that it has a finer texture and lighter consistency. Protein varies from 8-9 percent.

Whole wheat flour - This flour is milled from the entire kernel of hard red wheat either by grinding the whole-wheat kernel or recombining the white flour, germ and bran that have been separated during milling. The presence of bran reduces gluten development, therefore, items baked with whole wheat flour tend to be heavier and more dense than those made from white flour. The insoluble fiber content is higher than in white flours.

White whole wheat flour - This flour is milled exactly like whole wheat flour and is nutritionally equivalent to whole wheat flour as well. The only difference is that whole white wheat flour is made with a white, not red wheat variety. The bran of white wheat is lighter in color and has a milder flavor than red wheat and therefore the flour has these properties as well.

Gluten flour - Usually milled from spring wheat and has a high protein (40-45 percent), low-starch content. It is mixed with other non-wheat or low-protein wheat flours to produce a stronger dough structure. Gluten flour improves baking quality and produces a high-protein bread.

Health Benefits

Wheat provides 20 percent of the world's caloric consumption and for the world's poorest 50 percent, 20 percent of their protein consumption too. Flour comes in two general types. Refined flour is made up of the wheat kernel's endosperm and doesn't include the bran or germ. Whole wheat flour includes the endosperm, bran and the germ. In research studies, whole wheat is associated with a reduced risk of chronic diseases like diabetes and cancer as well as a reduced risk of obesity and better weight control.

Bacon and Cheese Breakfast Strata

Servings: 8

Ingredients

6 eggs

1¼ cup milk

¼ tsp salt

Black pepper to taste

7 cups lightly packed baguette/french stick cut into 1 inch cubes (preferably slightly stale)

10 slices of bacon, cooked

2 cups grated cheddar cheese

Parsley, finely chopped for garnish

Directions

1. Whisk the eggs, milk, salt and pepper in a large bowl.
2. Place the bread in a large bowl and pour in the egg mixture, cheese and cooked bacon. Gently fold together and set aside in the fridge for an hour or until all the egg is soaked into the bread. (I leave mine overnight in the fridge for really good soakage)
3. To Cook: Preheat oven to 350°F/180°C
4. Grease a 21cm/8" springform cake tin. Pour the bread mixture into the cake tin, pat down the bread cubes to compress and scatter over a little more bacon and cheese if you have it. Cover loosely with foil.
5. Bake for 25 minutes, then remove the foil and bake for a further 10-15 minutes or until firm to touch in the middle. Allow to rest for 5 minutes before removing the springform and cutting into slices to serve.
6. Garnish with parsley and enjoy!

Nutrition

One slice provides approximately: 216 calories, 14 g protein, 6 g carbohydrates, 16 g fat (7 g saturated), 147 mg cholesterol, 479 mg sodium.