



Powerful Popcorn: Nutritious and Delicious

Melanie D. Jewkes, M.S., Utah State University Extension
Assistant Professor, Salt Lake County

Amanda M. Horrocks, M.S., Utah State University Extension
Assistant Professor, Morgan County

Mikella Veale, Utah State University Extension
FCS Intern, Salt Lake County

History of Popcorn

Popcorn has been used for centuries. In 1948, 4,000 year old corn ears were found in a Bat Cave located in central New Mexico.

Popcorn was highly valued in the Aztec Indian culture. It was used as a food, decoration for ceremonial headdress, necklaces and ornaments on statues of their gods.

During the Great Depression popcorn became popular because it was one luxury people could afford, costing about \$.05-\$.10.

Popcorn sparked the idea behind the invention of the microwave. In 1946 Dr. Percy Spencer was conducting an experiment with a vacuum tube called a magnetron. During the experiment he noticed that he had melted the candy bar in his pocket. Dr. Percy decided to see what would happen if he put some popcorn near the magnetron and discovered that they popped! This unexpected popcorn experiment led to the invention of the microwave.

Popcorn Facts

The average American consumes about 56 quarts of popcorn per year. That means Americans eat 18 billion quarts of popcorn every year!

Popcorn is made when a kernel is heated. The water in the kernel becomes steam creating enough pressure to break the hull and force the contents out.

Native Americans believed that spirits lived inside popcorn kernels, when heated the spirit

would jump and move around until it eventually broke free.

According to the Guinness World Records the largest popcorn ball weighed 3,423 pounds, and measured over 12 feet long.

The Benefits of Popcorn

One cup air popped contains only about 30 calories, 6 grams of carbohydrates, 1 gram of protein, and 1 gram of fiber. Popcorn has no artificial additives or preservatives, and is sugar free.

Popcorn is a whole grain; 3 cups of popcorn equal a serving of grains. The USDA recommends making half of your daily grains be whole grain (choosemyplate.gov). Added fat, salt or sugars often smother the health benefits of popcorn. The American Heart Association and the new USDA guidelines recommend to reduce sodium intake and to choose more healthy mono-unsaturated fats and less saturated fats. Try flavoring popcorn using herbs or spices and using no or small amounts of canola oil to keep the whole grain snack healthier.

Popcorn is an inexpensive snack costing less than \$0.25 for two tablespoons of un-popped kernels, or about \$1 per pound if purchased in bulk.

Popcorn can easily be grown in your home garden, can be stored for several months after harvest, and requires little preparation and maintenance.

Popcorn Preparation Tips

Whether you choose to pop popcorn in an electric popper, on the stove or over an open fire, follow these tips for perfectly popped popcorn:

- First, warm the popper, heavy pan or skillet. If oil popping your corn, add 1/4 cup of cooking oil to the pan. Allow the oil to heat. The best popping temperature is between 400 and 460 degrees Fahrenheit. Oil burns at 500 degrees. If your oil starts to smoke, it's too hot. Any cooking oil will work provided it can retain the proper temperature. The less saturated the fat in the oil (like corn or sunflower), the less calories you add to your snack.
- Don't pop popcorn in butter. Butter will burn.
- Test the heat of the oil by dropping in one or two kernels. When the kernel pops or spins in the oil, you're ready to add the remaining popcorn. Pour just enough kernels to cover the bottom of the pan. Shake the pan to be certain oil coats each kernel.
- Kernels that do not pop are known as "old maids." They do not have sufficient water contained within the starch to create the build up of pressure needed to pop the kernels.
- If your popcorn does not pop into fluffy, crunchy kernels, it may have lost some of its moisture. Rejuvenate popcorn by filling a 1-quart jar 3/4 full with popcorn. Add one tablespoon of water. Cover and shake every five to 10 minutes until all the water is absorbed. In two to four days it should be perfect for popping.

2 tablespoons or 1/8 cup of un-popped kernels equals about one quart (4 cups) popped corn (if all kernels pop).

RECIPES

Curry Popcorn Seasoning

1 teaspoon (or more to taste) curry powder

1/2 teaspoon garlic powder

1/4 teaspoon paprika

1/2 teaspoon cayenne pepper (optional)

1/2 teaspoon ground cumin (optional)

salt to taste (note: can use garlic salt in place of garlic powder and omit salt)

In a small bowl, mix together, garlic salt, paprika, cumin, curry powder, and cayenne pepper. Can be made in larger batches and stored in an airtight container. Seasoning works best popped with the kernels, but can be seasoned on top. Pop with oil in popcorn in a stovetop or microwave bag style (see below).

Microwave Popcorn adapted from Allrecipes.com

1/4 cup unpopped popcorn kernels

1/2 teaspoon vegetable oil

1/4 teaspoon salt, or to taste (or other seasoning)

In a cup or small bowl, mix together the unpopped popcorn and oil. Pour the coated corn into a brown paper lunch sack, and sprinkle in the salt. Fold the top of the bag over twice to seal in the ingredients.

Cook in the microwave at full power for 2 to 2 ½ minutes, or until you hear pauses of about 2 seconds between pops. Do not keep in microwave longer than needed. Carefully open the bag to avoid steam, and pour into a serving bowl.

Vanilla Popcorn adapted from Allrecipes.com

- 4 teaspoons corn oil
- 4 teaspoons vanilla
- 1/4 cup unpopped popcorn
- 1 teaspoon superfine sugar
- salt to taste
- 2 teaspoons butter, melted

Heat oil and 3 teaspoons vanilla in a large pot over medium-high or high heat for a minute. Add one kernel of popcorn to the oil. When the kernel pops, pour the remaining popcorn. Place a lid on the pot, and shake gently until the corn starts to pop. Shake vigorously until the popping subsides. Remove from the heat, and pour into a large bowl. Stir sugar, salt, 2 teaspoons vanilla, and melted butter into the corn until evenly coated, and serve.

Cinnamon-Apple Popcorn adapted from Allrecipes.com

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| 1 cup chopped dried apples | 1 teaspoon brown sugar |
| 5 cups popped popcorn | 1/2 teaspoon cinnamon |
| 1 cups pecan halves | 1/4 teaspoon nutmeg |
| 2 teaspoons butter, melted | 1/4 teaspoon vanilla extract |

Melt butter and brown sugar in microwave until sugar is no longer grainy. Add cinnamon, nutmeg, and vanilla extract to the melted butter. Pour mixture over popcorn. Add dried apples, and pecan halves to popcorn, mix ingredients and enjoy!

Recipe makes 14 cups Cinnamon-Apple Popcorn mix.

Dilly Lemon Munch from Utah State University Food Sense Nutrition Program

- 2 quarts popped in ¼ cup oil
- 2 tablespoons shredded lemon peel
- 1 teaspoon dill weed
- optional: ½ teaspoon low-sodium salt

Toss popcorn with lemon peel and dill weed. Flavor enhances as popcorn stands.

Nacho-Cheese Popcorn from Utah State University Food \$ense Nutrition Program

1/3 cup cooking oil	3 T. hot oil
3-4 dried chilies	1/3 cup parmesan cheese
1 large clove garlic, cut into quarters	1 tsp. paprika
1 tsp. cumin seed	½ tsp. salt
1/3 cup un-popped popcorn	

Place cooking oil, chilies, garlic and cumin seed in small saucepan. Cook over low heat for 3 minutes; let stand 10 minutes. Strain. Use 3 tablespoons of seasoned oil for popping corn; reserve the rest. This makes about 2 ½ quarts popped popcorn

Pour remaining oil over popped popcorn, tossing to coat. Mix Parmesan cheese, paprika, and salt. Sprinkle over popped popcorn, toss to mix. Yields: 2 ½ quarts.

For More Information:

Utah State University Extension, Popcorn in the Garden,
<http://extension.usu.edu/htm/publications/publication=6161>

The Popcorn Board, <http://www.popcorn.gov> , includes a section for teachers

Guinness World Records, <http://www.guinnessworldrecords.com/>