

Peanuts and Cereal: A Nutritious Way to Make the Familiar Exotic and the Exotic Familiar

S. Coleman Collins
National Peanut Board
Atlanta, GA, U.S.A.

Peanuts and peanut butter are iconic American foods. In fact, market research has shown that more than 90% of American pantries are stocked with at least one jar of peanut butter. The average child in the United States will eat ≈1,500 peanut butter and jelly sandwiches before they graduate from high school. Enjoyed in many different ways—out of the hand as part of a crunchy, roasted snack; smeared across toasted bread; or mixed into a hot bowl of oatmeal—the flavor, texture, and nutrition of peanuts can be added to any meal.

According to a recent survey conducted by the International Food Information Council, taste is the ultimate driving factor for food purchasing decisions, followed by cost and nutrition (1). When considering innovation and product development, peanuts hold the key because they hit the mark on all three of these consumer concerns. Peanuts have a craveable flavor that makes people want to come back for more; they are affordable and widely available; and they pack nutrition in every bite.

When it comes to taste, peanuts can also make the familiar exotic and the exotic familiar for consumers. Because peanuts have long been a staple food item in the diets of many Americans, their flavor is familiar and accessible and can easily evoke warm, happy childhood memories. For many Americans, the peanut butter and jelly sandwich is synonymous with the brown bag lunch. Peanuts are also a staple ingredient in ethnic foods from around the globe—from Asia to Indonesia to



South and Central America to Africa. Pad thai is a widely popular dish containing peanuts and is a great example of the marriage of the familiar and exotic.

While peanut butter has been a familiar flavor in children's cereals for decades, it has recently seen a resurgence in popularity in the adult cereal category. For example, earlier this year a major manufacturer premiered a peanut butter-flavored version of its popular multigrain cereal with resounding success. More and more manufacturers are catering to the tastes of adult peanut butter lovers. This summer a well-known peanut company launched an "energy mix" line of peanut butters at grocery stores nationwide. Created for adult tastes, the products include mix-ins such as cinnamon raisin and banana granola nut. The market is ripe for innovative cereal applications incorporating peanut products.

The Nutrition Nut

Peanuts and peanut butter are versatile and nutritious, making them easy to incorporate in breakfast food applications. Many consumers are already enjoying crushed peanuts on their cereals, a spread of peanut butter on a whole grain bagel, or

a spoonful of peanut butter swirled into oatmeal. In foodservice and manufacturing, 2 oz CPUs of peanut butter sold with yogurt, apple slices, muffins, granola bars, etc. give traditional breakfast and snack foods extra staying power.

In addition to their flavor and versatility, peanuts can be added to improve the nutrient density of food products: 1 oz of peanuts contains 7 g of protein, 14 g of fat (12 g of which are unsaturated), and 2 g of fiber. Peanuts are a good source of magnesium, vitamin E, folate, copper, and phosphorus and are an excellent source of niacin and manganese. As a result, incorporating peanuts in cereal grain applications can help consumers boost their intake of certain nutrients, including protein.

Another reason peanuts and grains are a good match is that eating them together creates a complete protein source. As with other legumes, the amino acid lysine is limited in peanuts, so they are best paired with foods that contain lysine, and whole grains are ideal. This is one of the many things that make a peanut butter and jelly sandwich with whole grain bread not only delicious, but nutritionally complete.



Scan to view Farro and Mushroom Burger recipe incorporating whole grain and peanuts.

Pairing foods with peanuts or peanut butter can help consumers create more balance in their diet while providing good flavor.

Faced with increasing rates of heart disease, diabetes, and obesity, many consumers are looking for foods and food ingredients that can positively impact their lives. According to the U.S. FDA, scientific evidence suggests, but does not prove, that eating 1.5 oz of most nuts per day, including peanuts, as part of a diet low in saturated fat and cholesterol may reduce the risk of heart disease. Peanuts are also naturally low in sodium, which is beneficial for those following a low-sodium diet to help keep their blood pressure levels in check. Peanuts and peanut butter are often a mainstay in diabetic diets because they rank relatively low on the glycemic index, meaning they have a minimal impact on blood sugar levels. With regard to weight loss and management, peanuts contain protein, fiber, and unsaturated fats, which researchers believe may help control hunger and promote feelings of fullness.

Increased interest in preventing chronic diseases is leading many consumers to explore more plant-based diets. Vegetarian, vegan, pesceterian, flexitarian, and other variations of plant-based diets are on the rise. The USDA *Dietary Guidelines for Americans* highlight vegetarian, Mediterranean, and DASH diets as examples of nutritious plant-based diets, and all incorporate eating nuts as part of the diet (3). Peanuts are a great nutritional fit in plant-based diets, providing a tasty plant-based source of protein, vitamins, and minerals.

Peanuts can not only play a part in addressing diseases and other health conditions, peanuts and peanut butter also meet consumer desires for more natural and “whole” foods. Hundreds of grocery stores and college dining operations are now offering peanut butter grinders that allow customers to create their own freshly ground peanut butter—everything from traditional peanut butter to varieties ground with chocolate chips or honey-roasted peanuts. Peanuts also appeal to consumers who wish to purchase locally grown foods from small, family-owned farms.

Food Allergies

Food allergies are an increasing concern for consumers and manufacturers. Allergies to egg and milk products are more common than peanut allergies, and

knowing the facts can help put concerns about peanut allergies in perspective. According to the National Institute of Allergy and Infectious Disease, only 0.6% of Americans have a peanut allergy (2). This means that more than 99% of American consumers can enjoy peanuts without any negative health issues.

Managing food allergens, including peanuts, requires good manufacturing practices throughout the entire process, proper labeling, and sourcing of ingredients from trustworthy vendors. The U.S. FDA requires that each of the eight most common food allergens be clearly labeled so consumers with food allergies can make safe food purchasing choices in the marketplace (4). Resources such as the Food Allergy Research and Resource Program at the University of Nebraska-Lincoln can help manufacturers develop plans for testing, monitoring, and preventing cross contact, and more. The program provides free resources online (farrp.unl.edu) specifically developed for manufacturers.

Peanut Primer

Peanuts can be grown in a variety of regions, but most U.S. grown peanuts are produced in Alabama, Georgia, Florida, Mississippi, North Carolina, Oklahoma, South Carolina, Texas, Virginia, and New Mexico. There are four primary types of peanuts grown in the United States:

- Runner peanuts have a distinctive peanut flavor and are primarily used in peanut butter. Most runner peanuts are grown in Georgia, which produces almost 50% of the U.S. crop.
- Spanish peanuts are also called “red skin” peanuts because they usually retain the outer red skin of the peanut kernel, which contains most of the peanut’s resveratrol and fiber content. With the highest oil content of all peanut varieties, Spanish peanuts are most often used in peanut confections. They are primarily grown in the southwestern United States.
- Valencia peanuts are known for their sweet flavor. Valencia peanuts are usually sold roasted in-shell and are also used in specialty peanut butters. Valencias are grown in relatively small areas in west Texas and eastern New Mexico.
- Virginia peanuts produce the largest nut and are generally sold as gourmet snack peanuts in-shell or shelled. These peanuts are produced across the U.S. growing regions.

Peanuts are available in a variety of forms, but most often are available as

- In-Shell – Generally roasted, often salted, in-shell peanuts are most commonly sold in the United States as “ball park” peanuts.
- Shelled – Shelled peanuts are sold in tins, jars, or packets as snack peanuts alone or with other nuts and dried fruits.
- Peanut Butter – The most commonly consumed form of peanuts in the United States, peanut butter is available in creamy, crunchy, sweetened, natural (nothing added), and increasingly popular flavored (e.g., chocolate and cinnamon) varieties.
- Peanut Flour – Peanut flour is made from ground peanuts after most of the oil has been extracted. Peanut flour is great for boosting nutrition, adding body or thickness to liquids such as smoothies and soups, and as an ingredient in protein or granola bars. Peanut flour is especially important for manufacturers because it is a high-protein, gluten-free flour. Peanut flour is also easy to use in dry applications and can help with fat mitigation. In muffins and quick breads, flatbreads, cakes, cookies, and other baked goods, peanut flour can be used to add nutritional benefits with a minimal amount of fat. It also can be used to improve the nutritional value of gluten-free foods and can make traditionally indulgent foods more nutritious. As the number of people diagnosed with celiac disease and those interested in reducing gluten in their diets rises, the demand for gluten-free foods will grow, and peanut flour, along with peanuts and other peanut products, can be an integral and delicious part of gluten-free diets.
- Peanut Oil – Highly refined peanut oil is often used for frying because it is very stable at high heat, while aromatic peanut oil imparts a lovely and subtle peanut flavor as a finish to many dishes.

Whether consumers are looking for something new and different or a comforting flavor they know and love, peanuts and peanut products fit the bill. From the breakfast bowl to gluten-free snacks and globally inspired dinners, peanuts bring nutrition, flavor, affordability, and versatility to the table.

References

1. International Food Information Council Foundation. 2012 Food & Health Survey: Consumer Attitudes Toward Food Safety, Nutrition and Health. Published online at www.foodinsight.org/Content/3840/2012%20IFIC%20Food%20and%20Health%20Survey%20Report%20of%20Findings%20%28for%20website%29.pdf. IFIC, Washington, DC, 2012.
2. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010*, 7th ed. Published online at www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/PolicyDoc.pdf. U.S. Government Printing Office, Washington, DC, 2010.
3. NIAID-Sponsored Expert Panel, Boyce, J. A., Assaad, A., Burks, A. W., Jones, S. M., et al. Guidelines for the diagnosis and management of food allergy in the United States: Report of the NIAID-Sponsored Expert Panel. *J. Allergy Clin. Immunol.* 126(Suppl. 6):S1, 2010.
4. U.S. Food and Drug Administration. Food allergen labeling. In: *Ingredient Lists. Guidance for Industry: A Food Labeling Guide*. Published online at www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodLabeling-Nutrition/FoodLabelingGuide/ucm064880.htm#label. FDA, Silver Spring, MD, 2011.



With a master's degree in nutrition, **Sherry Coleman Collins** takes her role of educating people about nutrition seriously, yet continues to approach food with child-like excitement. Her experience working with groups and individuals, particularly with children in pediatric and school nutrition practices, along with her adventurous cooking style, gives her a unique perspective on food and nutrition. She has been published and quoted in online and print publications, is a sought-after speaker around the country, and has developed a variety of training programs. Sherry is active in local and national nutrition and dietetics professional associations. She is the senior marketing manager for the National Peanut Board, helping

spread the message of good nutrition and peanuts. Sherry can be reached at sccollins@nationalpeanutboard.org.

Thank You Members!

**Your support
makes AACCI
possible.
Encourage your
colleagues to
join AACCI
so that together
we can continue
to advance
cereal grain
science
worldwide.**

A paid ad appeared here
in the printed version of the journal.