Cracking the Nutshell

"All vegetables, fruits, whole grains, seafood, eggs, beans and peas, unsalted nuts and seeds, fat-free and low-fat milk and milk products, and lean meats and poultry—when prepared without adding solid fats or sugars—are nutrient-dense foods."

2010 Dietary Guidelines

Cracking open a peanut shell reveals a package of beneficial nutrients. Plant-proteins, healthy unsaturated fats, fiber, and plentiful amounts of vitamins, minerals and bioactives can all be found packed into one serving of peanuts.

People who eat peanuts tend to consume more key nutrients critical to health. In a study looking at more than 15,000 people who consumed peanuts and peanut products, it was found that levels of vitamin A, vitamin E, folate, magnesium, zinc, iron, calcium, and dietary fiber were higher than those who did not consume peanuts. One serving a day of peanuts or peanut butter can bring U.S. Dietary Guidelines “nutrients of concern” (vitamin E, folate, potassium, copper, zinc, iron, fiber) to adequate levels. Blood levels of magnesium can also be brought to recommended levels with a small, daily “dose”. These nutrients are needed by our bodies daily and are integral to our growth, development, metabolism, and immunity. According to a study at Penn State University, people who eat peanuts regularly have diets with higher nutrient quality.
Peanuts contain more protein than any other nut. In fact, peanuts and peanut butter were sought after during World War II when meat was not readily available. The protein in peanuts is plant-based so it carries additional healthy components like bioactives, fiber, and healthy oils.

**Peanuts contain BIOACTIVES**

Peanut proteins bring with it numerous other bioactives (resveratrol, phytosterols, flavonoids, phenolic acids, and arginine) and fiber. Bioactives are plant substances that have been found to offer health benefits beyond those of traditional nutrients such as vitamins and minerals.

Peanuts contain a number of bioactives including phytochemicals which are compounds found in plant foods that have biological effects on the body. Phytochemicals contribute to the food’s taste, aroma, and color. They act as antioxidants, mimicking hormones, and suppressing the development of chronic diseases. Antioxidants, another type of bioactive found in peanuts, remain stable during thermal processing. In some cases, antioxidant capacities are even improved after thermal processing.

**Peanuts contain HEALTHY Fats!**

At least half of the fat in peanuts is heart-healthy monounsaturated fat and over 30% is polyunsaturated fat (another good fat) making them very low in saturated fat. Peanuts have no trans fats. Consuming healthy fats over saturated and trans fats can reduce your risk of cardiovascular disease. Peanuts are also cholesterol-free. A study shows that a diet high in monounsaturated fat, including peanuts and peanut butter or peanut oil, can lower total cholesterol and bad LDL cholesterol and maintain good HDL cholesterol.

**RESVERATROL**, the phytochemical found in red wine is thought to be beneficial to our health. Resveratrol has shown that it has anti-aging effects and can increase fat burning activity in cells. Peanuts contain resveratrol in the seed itself, as well as high amounts in the skins.

**ARGinine** is an amino acid that helps blood flow more easily through your arteries; it is a component of collagen, enzymes, and hormones. Arginine helps with the production of nitric oxide in the body which inhibits platelet aggregation, decreases blood pressure, maintains nitrogen balance, helps to remove excess ammonia, aids in liver detoxification, reduces alcohol toxicity levels, and has a role in wound healing. It may have an antioxidant property as well. The peanut protein is a rich source of arginine 13.1g/16g N, more than beef, soy, and oats which contain 6.8g, 7.7g, and 8.0 g/16 g N, respectively. Peanuts have the most protein of any “nut” and also contain the most arginine.

**PHYTOSTEROLS** block the absorption of cholesterol from your diet. Phytosterols also decrease inflammation and reduce the growth of various cancers. It has also been shown that phytosterols can reduce tumor growth. **BETA-SITOSTEROL** (A Type of Phytosterol)
Why do peanuts make me feel full?

Peanuts and peanut butter are a great way to reduce hunger because a handful of peanuts is an excellent source of fiber. Peanuts and peanut butter stick with you for about 2 ½ hours vs. ½ hour with high carbohydrate foods. Peanut eaters feel satisfied and naturally reduce eating other calories throughout the day because the protein and fiber in peanuts provide satiety.

Fiber consumption may reduce the risk of cardiovascular disease and diabetes by reducing total and LDL cholesterol and improving glycemic control. Eating peanuts decreases your desire to snack by stabilizing blood sugar: Peanuts have a low glycemic index keeping your blood sugar stable and providing long-lasting energy—this helps reduce cravings.

Fiber may also have a role in colon health. Dietary fiber has also been linked to the prevention of diseases such as breast cancer and ovarian cancer.

Legume or Nut?

Peanuts are actually legumes. Legumes are seeds that grow in pods. Other examples of legumes are beans, lentils, peas, and soybeans. USDA consumption data includes peanuts in the nut category.

Just a Handful

Just a handful of peanuts a day will supply your body with many hard to get nutrients. The Women, Infant’s and Children (WIC) Program chose peanut butter to include in food packages because it contributes significant levels of iron, folate, Vitamin E, and fiber.

A Perfect Pair

Milk is a natural pair with a peanut butter sandwich, which may explain why peanut and peanut butter eaters had higher intakes of calcium in a study. Survey data shows that two-thirds of peanut butter sandwiches are eaten with milk. Along with milk, peanut butter can act as a magnet for other healthy foods like whole grains and vegetables!

Rather than spreading butter on your toast, use peanut butter. The nutrients will add up!

Substituting 1 tbsp of peanut butter for 1 tbsp of butter for 1 week, 1 month, and 1 year.

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>1 week</th>
<th>1 month</th>
<th>1 year</th>
</tr>
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<tbody>
<tr>
<td>Total fat</td>
<td>23 g</td>
<td>92 g</td>
<td>1,104 g</td>
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<tr>
<td>Saturated Fat</td>
<td>39 g</td>
<td>156 g</td>
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<tr>
<td>Cholesterol</td>
<td>218 mg</td>
<td>872 mg</td>
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<td>Monounsaturated Fat</td>
<td>4 g</td>
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<td>Polyunsaturated Fat</td>
<td>12 g</td>
<td>48 g</td>
<td>576 g</td>
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<tr>
<td>Magnesium</td>
<td>176 mg</td>
<td>704 mg</td>
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<td>Potassium</td>
<td>723 mg</td>
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<td>Vitamin E</td>
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<tr>
<td>Folate</td>
<td>80 μg</td>
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<td>11,520 μg</td>
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<tr>
<td>Phytosterols</td>
<td>114 mg</td>
<td>456 mg</td>
<td>5,472 mg</td>
</tr>
</tbody>
</table>
**Peanut Lemon Granola Bombs**

**Ingredients:**
- 1/2 cup Honey, whipped (or thick and dry)
- 1/2 cup Sour Cream
- 1 cup Peanuts, unsalted, toasted and roughly chopped
- 1/4 cup Plain oatmeal (or extra granola)
- 1 ea. Lemon, zest of
- 1/4 tsp. Vanilla extract
- 1 cup Peanut granola (see note)

*Note: Combine 1/2 cup of regular granola with 1/2 cup of roasted chopped peanuts.*

**Method:**
In a large bowl over a double broiler, melt the honey until it is runny; add the sour cream and remove from the heat. Stir in the toasted peanuts, oatmeal (or granola), lemon zest, and vanilla extract; stir until cool. To cool more rapidly, place bowl over some ice while stirring.

Add enough granola to the mixture so that it can be rolled into lime or walnut-sized balls with your hand. Roll the balls in the peanut granola and chill overnight; use for school lunch or afternoon snacks.

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**Go to www.peanut-institute.org for:**
- Nutrition research on peanuts, peanut butter, and peanut oil
- Recipes
- Meal plans
- Educational materials

**The Peanut Institute** is a non-profit organization that supports nutrition research and develops educational programs to encourage healthy lifestyles.

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**References**
