It is not just moms serving peanut butter sandwiches to their children who are convinced of the benefits of peanuts; the scientific research speaks for itself. Studies have shown that peanuts and peanut butter in small amounts can have a big impact on health. Population studies, which look at large numbers of people, have consistently shown that when just a handful of peanuts or a spoonful of peanut butter is included in the diet regularly, the risk of chronic diseases, such as heart disease and diabetes, are significantly improved. When eaten daily, these small amounts (about 1 - 1 ½ ounces of peanuts or 1 tablespoon of peanut butter) can reduce the risk of heart disease by up to 50% and diabetes by 25%. These risk improvements that are not even seen by certain doctor-prescribed drugs. Who would have thought that reaching into the kitchen pantry for a favorite snack actually reaches our hearts to improve our health.

Human feeding studies also provide evidence showing that peanuts benefit health. Good HDL cholesterol remains high, while total and bad LDL cholesterol, as well as triglycerides, are improved in those fed peanuts, peanut butter, or peanut oil. These improvements not only happen on the inside, which we cannot see, but also on the outside, where we can see the benefit. People who eat peanuts and peanut butter have better bodies.

The science shows that Body Mass Index (BMI), a tool used to measure healthy body weight, is lower in people who eat peanuts. This could be due to many reasons.

Research shows that people naturally eat less at other times of the day after consuming peanuts. This is called “dietary compensation.”

In comparison to eating a high carbohydrate snack, people also feel full for a longer period of time after having eaten peanuts or peanut butter. This prolonged energy can be critical in keeping us from splurging on unhealthful choices.

The evidence also shows that eating peanuts regularly leads to an increase in resting energy expenditure. This means that when you are lying on the couch (at rest), the energy your body uses is increased. Some of the peanuts you eat, however, may simply satisfy your taste and pass through, as they might not be completely digested.
Good to the palate, but even better to our bodies, peanuts are loaded with many functional components that help our health thrive. Broken down, the variety of compounds in peanuts can be clustered into three main categories:

1. **Provide healthy energy:** Nutrients for life and growth needed in larger amounts

2. **Support metabolism:** Nutrients for life and growth needed in smaller amounts

3. **Protective:** Nutrients that preserve life and growth and defend against disease

The nutrients in peanuts, which all provide healthy energy are carbohydrates, protein, and fats, the “macronutrients.” Peanuts are not high in carbohydrate, but they do provide significant levels of fiber, even when eaten in small amounts. They also have the highest protein of all nuts and provide healthy fats (mono- and polyunsaturated) that improve cholesterol levels. Thus, peanuts have a great combination when considering health. A combination, which the research shows benefits blood sugar, cholesterol, and blood pressure.\(^4\), \(^9\), \(^10\), \(^11\), \(^12\) Fiber and protein may also contribute to reducing hunger, which is important to weight loss. In fact, weight loss diets including peanuts have been consistently successful.\(^4\), \(^13\), \(^14\), \(^15\)

Vitamins and minerals in peanuts, also called “micronutrients,” support metabolism. They are essential to human metabolism and have various roles, such as functioning as cofactors to proteins in our bodies. Despite excess energy intakes and increasing obesity rates in this country, there has been an emergence of overweight people not meeting the recommended daily allowance (RDA) for many nutrients.\(^17\) Many of the health risks associated with obesity, such as high blood pressure and insulin resistance, are also associated with deficiencies of various nutrients, such as magnesium.\(^17\) Magnesium blood levels were elevated, however, in people who ate peanuts daily for 19 weeks.\(^18\)

Adding a small amount of peanuts to our diets daily can play an important role in significantly improving nutrient status and achieving the goals set by the U.S. Dietary Guidelines for the health of Americans. Vitamin E is another nutrient of concern for the population, as many do not meet the requirements.\(^19\), \(^20\) Peanuts have high levels of vitamin E and when eaten regularly they can contribute significant natural levels to our diet. In fact, peanuts are filled with over 20 micronutrients, such that they are like a natural vitamin.

An exciting area of research is emerging relating to bioactive or protective nutrients. Numerous bioactive compounds have been identified in peanuts, such as various flavonoids, phytosterols, and polyphenols. Some of these, like resveratrol, are produced as protection to the plant itself.

Research continues to enlighten us as to the many ways in which these compounds are functioning in our bodies to protect us from disease and aging. Resveratrol, for example, has been shown to inhibit inflammation, have cardiovascular benefits, prevent oxidative stress and nerve degeneration, fight against cancer by various mechanisms, and to promote weight control, exercise endurance, and longer life.\(^21\)-\(^28\)

One of the healthy fats in peanuts is called oleic acid, a healthy monosaturated fat.\(^16\)

When it comes to protein, peanut protein is one of the richest sources of the amino acid arginine. Levels in peanuts are higher than in most other foods. Arginine is a precursor to nitric oxide, a compound that can expand blood vessels and contribute to improvements in vascular health.
<table>
<thead>
<tr>
<th></th>
<th>Non-Roasted (1 Ounce)</th>
<th>Dry Roasted (1 Ounce)</th>
<th>Oil Roasted (1 Ounce)</th>
<th>Peanut Butter (2 Tbsp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories (kcal)</td>
<td>161</td>
<td>166</td>
<td>165</td>
<td>188</td>
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<td>6.7</td>
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<td>16</td>
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<td>1.9</td>
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<tr>
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<td>Poly Unsaturated Fat (g)</td>
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<tr>
<td>Fiber (g)</td>
<td>2.4</td>
<td>2.3</td>
<td>1.9</td>
<td>6.3</td>
</tr>
</tbody>
</table>

How do you like your peanuts? You may enjoy them roasted and sprinkled on a salad, while your child cannot wait for his favorite peanut butter sandwich.

Well, any way you eat them they maintain their health benefits. When peanuts are roasted, for example, there are no significant changes in their carbohydrate, protein, and fat levels. (29)

New data presented at the Institute of Food Technologists 2008 Annual Meeting also shows that the antioxidant capacity of peanuts is retained or improved when peanuts are dry roasted or oil roasted. (30)

Based on the science, we all know that the healthy fats in peanuts improve our cholesterol levels and improve heart disease risk. But now there is more to the story! Cutting-edge data shows that fat-free peanut flour has cardioprotective effects in addition to the healthy oil component in peanuts. (31) Fat-free peanut flour contains protein and bioactives from peanuts. It was studied to determine if these components are also contributing to the significant cardiovascular benefits that are seen by eating a small amount of peanuts daily.

In the study, hamsters were fed diets similar in fat, carbohydrate, and protein, all of which were high in fat and cholesterol. The three test diets swapped out whole peanuts, peanut oil, or fat-free peanut flour. All hamsters eating peanut test diets showed a significant decrease in total and bad LDL cholesterol. Therefore, in addition to the healthy oils in peanuts, we now know that we are benefiting from other parts of the peanut. What a combination!

Do Peanuts Contain Antioxidants?

They certainly do! We have all heard of resveratrol, one antioxidant that is known for its presence in wine, but peanuts also contain many other compounds with antioxidant activity, which are beneficial to our bodies. They can scavenge free radicals that lead to aging and disease.

New data shows that peanut skins, in particular, contain very high levels of antioxidants called “proanthocyanidins.” (30) The antioxidant capacity of peanut skins is so high that they can be compared to certain dried spices.

Another recently discovered benefit of proanthocyanidins is that they are involved in blocking starch digestion. (30) These functional activities may be helpful in controlling blood sugar in situations of impaired glucose tolerance or metabolic syndrome.
References


