

The Peanut Institute

What Is Your Health Budget?

Chronic diseases such as heart disease, diabetes, and cancer are extremely costly accounting for \$3⁰⁰ of every \$4⁰⁰ spent on healthcare.¹ Many people do not realize that making simple changes now can have a huge impact on their future health. Evidence shows that adoption of a healthier diet and lifestyle can prevent

The Nutrient Rich Food Index

The NRF9.3 is based on the sum of 9 key nutrients to encourage (protein, fiber, vitamin A, vitamin C, calcium, iron, vitamin E, potassium, magnesium) minus 3 nutrients to limit (saturated fat, added sugar, sodium).⁶ The Index helps to simplify information on the nutrients in foods and to promote getting more nutrition from the calories we eat.

Nutrient Affordability with Peanuts

the majority of chronic diseases. Keeping a healthier diet and lifestyle is associated with an over 80% reduction in risk of coronary events and incidence of type 2 diabetes is about 90% lower in women with healthier diets and lifestyles.^{2,3}

But Healthy Foods Cost More...

How can we choose healthy foods and not break the bank? This can seem challenging since there is data to show that certain nutrient-rich, lower-calorie foods like fruits and vegetables sold at supermarkets are priced higher than some energy-dense foods lower in nutrients like snack chips and cookies.⁴

New research published in the *American Journal of Clinical Nutrition*, however, helps to identify foods that are both nutritious and affordable that can contribute to creating healthful diets.⁵ In the study, foods were scored and ranked on the basis

of their nutrient content and cost using the Nutrient Rich Food Index (NRF9.3) and US Department of Agriculture data. One of the foods that stood out as providing exceptional nutritional value for the money: Peanuts!

American families have recognized peanuts for years as an affordable protein source and this research supports that. In addition, peanuts were one of the lowest-cost sources of fiber.

The Women, Infants, and Children (WIC) program, a Special Supplemental Nutrition Program, has been providing peanut butter to families for years as a means to safeguarding the health of low-income women, infants, and children up to age five who are at nutritional risk. According to WIC, peanut butter helps improve the intake of several priority nutrients, including iron, folate, vitamin E, and fiber.⁷

Natural Nutritional Value

To keep expenses low, stay filled up, and keep it quick, it is easy to drive through the nearest fast food window. Although these meals are more cost effective than some other options, additional savings and health benefits can be added when choosing foods that offer natural nutrition.

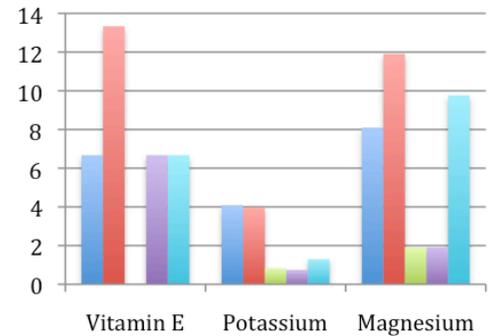
Peanuts and peanut butter have been recognized for their natural nutritional value, but also for their enjoyable flavor and ability to keep you full compared to high carbohydrate foods.¹¹ When a peanut butter sandwich meal is compared to a typical dollar value meal from a fast food restaurant, the benefits are clearly evident not only to our health, but to our wallets. Over the course of a year, eating a peanut butter sandwich on multi-grain bread with 1% low-fat milk compared to a cheeseburger, small fry, and small cola equates to over \$800 and

26 pounds in savings. When an apple is included, the peanut butter meal remains more affordable than the drive-through dollar value meal and adds additional nutrition.

Snacking on Peanuts

Americans are spending more money on snack foods. Snacking has increased over the past 30 years and has become a major contributor to calories.¹² Unfortunately, many of the snacks that people are choosing are nutrient-poor and high in calories. Eating peanuts and peanut butter as snacks and with snacks can benefit nutrient intake, adding essential nutrition that could easily be otherwise overlooked. Take a look at how snack choice contributes to key nutrient intake in the chart shown right.

Percent Contribution to Recommended Dietary Allowance (RDA)



- Tbsp PB + 1/2 apple
- 1 oz. Peanuts
- 1 oz. Pretzels (17)
- 2 Chocolate chip cookie
- 1 oz. Tortilla chips



Eat Out or Eat Peanuts?	Cheeseburger with small French fry and small cola	Peanut butter sandwich on multi-grain with 1 cup 1% milk	Peanut butter sandwich on multi-grain with 1 apple and 1 cup 1% milk
Calories (kcal)	687	433	528
Protein (g)	18	22	23
Total fat (g)	25	20	20
Saturated fat (g)	7	5	5
Carbohydrate (g)	101	42	67
Fiber (g)	4	6	10
Sodium (mg)	920	479	481
Cost	\$3.00	\$0.75	\$1.74
Cost savings per year	-	\$821.25	\$460
Calorie savings per year	-	Equal to 26 pounds	Equal to 16 pounds

Note: All values calculated from US Department of Agriculture, Agricultural Research Service, 2009. USDA National Nutrient Database for Standard Reference, Release 22. Nutrient Data Laboratory Home Page, <http://www.ars.usda.gov/ba/bhnrc/ndl>. Cost data from www.peapod.com, 2010.

Peanut Butter First Known as Affordable Protein

Americans have enjoyed the taste of peanuts for hundreds of years. Peanut butter, which by definition is over 90% peanuts, was developed in the late 19th century. With the meat shortage caused by World War II it became an affordable protein source making the creamy spread an American favorite. Today, peanut butter is a staple pantry food for the majority of Americans.



Plentiful Nutrients in One Handful

Just a small serving of peanuts or peanut butter can provide more nutrition than many people realize. One and one half ounces, or about a handful of peanuts

Peanuts	1.5 ounces
Protein	10.5g
Carbohydrates	6.8g
Fiber	3.6g
Fat	21.0g
Monounsaturated	10.5g
Polyunsaturated	6.6g
Saturated	2.9g

Excellent source (20%+ RDA)
Good source (10-19%+ RDA)

provides 20 percent or more of the recommended dietary allowance (RDA) for protein and on food labels can be considered an “excellent source” according to the Food and Drug Administration. A handful of peanuts is considered a “good source” of fiber as well, providing 10-19 percent of the RDA.

The majority of fat in peanuts is healthy monounsaturated or polyunsaturated fat. And when it comes to vitamins and minerals, peanuts naturally provide many that we need each day, including those that are a challenge to get. In the diets of more than 15,000 children and adults in the US who consumed peanuts

and peanut products, higher RDAs for key hard-to-get nutrients were achieved over those who did not eat peanuts.⁸ “What We Eat in America,” National Health and Nutrition Examination Survey (NHANES) also showed that peanut and peanut butter eaters take in more critical nutrients.⁹

Within a handful of peanuts, you will also find arginine, an amino acid that is a precursor to nitric oxide, which helps expand blood vessels. Many other bioactive components thought to be disease preventative are present in peanuts too.¹⁰ They fall into four main categories: 1) flavonoids, 2) phenolic acids, 3) phytosterols, and 4) stilbenes.

Peanuts Help Kids Keep the Weight Off

Since peanuts and peanut butter are known to boost nutrient adequacy while being economical, they can be an important addition to school meals both in the US and internationally, since this is where children get more than half of their calories for the day. Peanuts and peanut butter have been served in US schools as an effective way to help improve the growing problem of obesity. They also have been a key component in successful feeding therapies used in malnourished children around the world.

Overweight American Schoolchildren

The Family and Lifestyle Overweight Prevention (FLOW) Program is a successful long-term weight loss study in schools that targets high-risk Mexican American adolescents. The USDA Children’s Nutrition Research Center

and the Baylor College of Medicine in Houston, Texas oversee the program. Children in the study are part of a class that teaches nutrition education one day per week and hosts activities four days per week. In addition, the children receive a “snack intervention” of peanuts daily, which is exchanged for less healthy snacks that the students bring from home or purchase at school. Peanuts were chosen since they are known to improve nutrient adequacy of the diet, they are well liked, and they promote satiety (feelings of fullness).



Data published in *Pediatrics* and in *Obesity* show that children in the treatment group that received peanuts

lost significant weight at six months and continued to lose or maintain through two years, whereas two-thirds of the control group ended up gaining weight at two years.^{13,14}

3 Peanut-licious Ideas for On-the-Go Kids

1. Spread some peanut butter on a breakfast waffle. Top it with your favorite fruit for added color, fun and vitamins.

2. Mix together popcorn, raisins, and peanuts for an on-the-go snack.

3. Take along a peanut butter cup dip to eat with your crackers or veggies.

10 Reasons Peanuts Are a Top Choice for Health

1. Peanuts are affordable!
2. Peanuts are tasty and well-liked!
3. Peanuts improve nutrient adequacy and provide bioactive components!
4. Peanuts are filling and provide lasting energy!
5. Peanuts help control weight and come in portion packs!
6. Peanuts consumed regularly in small amounts reduce chronic disease risk!
7. Peanuts can be easily combined with other foods to enhance nutrition!
8. Peanuts are convenient and transportable!
9. Peanuts come in many flavors and forms like peanut butter to offer variety!
10. Peanuts are easy to swap out for less healthy snacks without feeling deprived!

Go to www.peanut-institute.org for:

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

For Further Information:

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- Nutrition research on peanuts, peanut butter, and peanut oil
- Recipes
- Meal plans
- Educational materials



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