



# Food Product: Peanut Butter

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Experimental Foods

# Original Creamy Jif Peanut Butter



## NUTRITIONAL INFORMATION

### Nutrition Facts

**Serving Size** 2 Tbsp (33g)

Amount Per Serving

**Calories** 190

% Daily Value\*

**Total Fat** 16g 21%

Saturated Fat 3.5g 17%

Trans Fat 0g

**Cholesterol** 0mg 0%

**Sodium** 140mg 6%

**Total Carbohydrate** 8g 3%

Dietary Fiber 2g 9%

Total Sugars 3g

Incl 2g of Added Sugars 4%

**Protein** 7g 7%

Vitamin D 0mcg 0%

Calcium 17mg 2%

Iron 1mg 4%

Potassium 185mg 4%

Vitamin E 2mg 10%

Niacin 5mg 30%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

### Ingredients

Made From Roasted Peanuts And Sugar, Contains 2% Or Less Of: Molasses, Fully Hydrogenated Vegetable Oils (Rapeseed And Soybean), Mono And Diglycerides, Salt.

### Product Information

- 7g Protein Per Serving\*
- \*See Nutrition Information For Fat And Saturated Fat Content
- Gluten Free
- Contains No Artificial Preservatives
- Kosher Pareve
- Non-GMO Certified by NSF

### Allergens

Contains peanuts

# Reduced Fat Creamy Jif Peanut Butter



## NUTRITIONAL INFORMATION

### Nutrition Facts

**Serving Size** 2 Tbsp (36g)

Amount Per Serving

**Calories** 190

% Daily Value\*

**Total Fat** 12g 16%

Saturated Fat 2.5g 13%

*Trans* Fat 0g

Polyunsaturated Fat 2.5g

Monounsaturated Fat 6g

**Cholesterol** 0mg 0%

**Sodium** 190mg 8%

**Total Carbohydrate** 15g 5%

Dietary Fiber 2g 7%

Total Sugars 4g

Incl 3g of Added Sugars 5%

**Protein** 7g %

Vitamin D 0mcg 0%

Calcium 16mg 2%

Iron 1mg 6%

Potassium 156mg 4%

Niacin 8mg 50%

Vitamin B<sub>6</sub> 0.1mg 8%

Folate 50mcg DFE DFE 15%

Magnesium 65mg 15%

Zinc 1mg 10%

Copper 0.2mg 20%

\*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

### Ingredients

Peanuts, Corn Syrup Solids, Sugar, Pea Protein, Contains 2% or Less of: Salt, Fully Hydrogenated Vegetable Oils (Rapeseed and Soybean), Mono and Diglycerides, Molasses, Magnesium Oxide, Niacinamide, Ferric Orthophosphate, Zinc Oxide, Copper Sulfate, Pyridoxine Hydrochloride, Folic Acid.

### Product Information

- Reduced Fat\* 25% Less Fat Than Peanut Butter. Contains 12g Fat per Serving Compared to 16g in Peanut Butter.

- \*See Nutrition Information for Fat Content

- Gluten Free
- No Artificial Preservatives
- Kosher Pareve

### Allergens

Contains peanuts

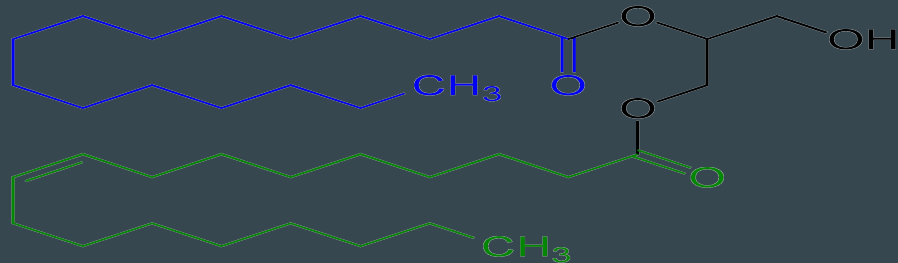
# Ingredients & Functions of Reduced Fat Peanut Butter

- **Peanuts**- contains functional compounds such as proteins, fibers, antioxidants, vitamins, minerals (Arya, S. et al., 2016)
- **Corn Syrup Solids**- Nutritive Sweetener
- **Sugar**- Nutritive Sweetener
- **Pea Protein**- Nutritional benefits, water-binding capacity, oil-binding capacity, foam expansion, foam stability, whippability, gelation, emulsion stability and emulsion ability ratio (*Pea Protein*, 2011)
- Contains 2% or Less of:
  - **Salt**- Functions as a preservative; prevents microbial growth (*Pea Protein*, 2011)
  - **Fully Hydrogenated Vegetable Oils** (Rapeseed and Soybean)- improve taste and texture, expand shelf life (Link, 2019)
    - Concerns: Forms trans fats (effects on insulin resistance, blood sugar levels, risk of type 2 diabetes)
  - **Mono and Diglycerides**- emulsifying agent
  - **Molasses**- essential oil
  - **Magnesium Oxide**- Anti-caking agent, firming agent, pH control agent, Nutrient Fortification (Arya, S. et al., 2016)
  - **Niacinamide**- Nutrient/Dietary Supplement
  - **Ferric Orthophosphate**- used as a source of iron (nutrition) (Fairweather-Tait, S, et al.)
  - **Zinc Oxide**- Nutrient/Dietary Supplement
  - **Copper Sulfate**- Nutritive, dietary supplement, processing aid (*Food Additive Status list*)
  - **Pyridoxine Hydrochloride**- Reinforces nutrition within a product, food fortification (Marketing, 2019)
  - **Folic Acid**- Added to reduce the risk of neural tube defects (*Folate*, 2019)



# Additive: Mono and Diglycerides

- Natural Sources of Mono and Diglycerides include:
- Plant Oils: Soybean, grapeseed, canola, sunflower, cottonseed, coconut, and palm oil
  - Plant pomace such as grape pomace or tomato pomace
  - Some animal fats
- Functions:
  - Typically used as an emulsifying agent– allow for smooth mixing of ingredients, prevent separation, reduce stickiness, control crystallization, keep ingredients dispersed, help products dissolve more easily, and contribute to overall product stability)
  - Sometimes used as edible coatings– applied directly to the surface of foods, including fresh fruits and vegetables, to protect against spoilage and decay.
- Typically Found in: infant formula, salad dressings, peanut butter, chocolate, frozen foods, confectionary products
- Safety?
  - Considered GRAS

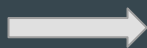


(Sources of food ingredients: Mono- and Diglycerides, 2021)

# Nutrient Content Claim & Intended Population



“Reduced Fat”



The product must have 25% less than the regular product.



16 total grams of fat vs. 12 total grams of fat



The reduced fat peanut butter has less saturated fat than the original peanut butter. Therefore, the reduced fat peanut butter contains unsaturated fats which is beneficial for people who need to lower their cholesterol

## What is the benefit of the unsaturated fats?

- Polyunsaturated fats include omega-3 and omega-6 fats.

## What are the benefits of omega-3 and omega-6 fats?

- Reduce triglycerides, a type of fat in your blood
- Reduce the risk of developing an irregular heartbeat (arrhythmia)
- Slow the buildup of plaque, a substance comprising fat, cholesterol, and calcium, which can harden and clog your arteries
- Slightly lower your blood pressure
- Control your blood sugar
- Reduce your risk for diabetes
- Lower your blood pressure

# Current Food Trend

High Protein Plant-Based Snacks with Peanut Butter!



Homemade Peanut Butter Protein Shakes



Peanut Butter, Sliced Apples, Nuts & Granola Nachos



No bake Oatmeal Peanut Butter Energy Balls

# Personal Opinions & Recommendations

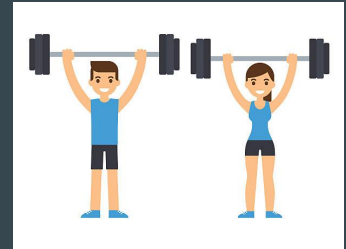
## Yes! Try it!

- Good taste
- Good alternative if one is trying to reduce fat intake.
- Good for people who want to consume protein easily
  - Easy to eat
  - Can be added to many recipes
  - Good consistency for recipes—creamy



## My Experience:

- I get full very easily so it is hard for me to get all of my protein needs in during the day. Adding a scoop of peanut butter along side a sliced apple, or within a smoothie is a perfect way to incorporate extra protein in the diet. This was extremely helpful when I started weight lifting.





# References

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