

Almond & Apricot Muffins - Control vs. Reduced Sodium

In addition to improving surface browning and crumb texture, permeate adds a naturally salty flavor. In fact, almond and apricot muffins made with permeate contain 61% less sodium than the muffins made with salt — a reduction from 220mg sodium per serving to just 85mg.



INGREDIENTS

	Usage Levels (%)	Reduced Sodium (%)
Flour, all-purpose	34.68	34.68
Water	21.27	23.12
Whole Fresh Eggs	12.72	6.43
Dried Apricots, diced	7.63	7.63
Unsalted Butter, melted (or vegetable oil)	6.59	6.59
Sugar	5.78	5.78
Sliced Almonds	5.20	5.20
Permeate* (milk or whey)	—	4.96
Almond Paste, crumbled	4.45	4.45
Baking Powder	1.16	1.16
Salt	0.52	—
No-Stick Baking Spray	—	—
Total	100.00	100.00

*Can also use delactosed permeate at 1.20% as an option. Reduces sodium by 52% to 105mg.

NUTRITIONAL CONTENT

Control

Nutrition Facts

Serving Size (65g)
Servings Per Container

Amount Per Serving		
Calories	190	Calories from Fat 60
% Daily Value*		
Total Fat	7g	11%
Saturated Fat	2.5g	14%
Trans Fat	0g	
Cholesterol	45mg	15%
Sodium	220mg	9%
Total Carbohydrate	27g	9%
Dietary Fiber	2g	7%
Sugars	7g	
Protein	5g	
Vitamin A	8%	Vitamin C 0%
Calcium	8%	Iron 8%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Saturated Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

Reduced Sodium

Nutrition Facts

Serving Size (65g)
Servings Per Container

Amount Per Serving		
Calories	190	Calories from Fat 60
% Daily Value*		
Total Fat	7g	10%
Saturated Fat	2.5g	13%
Trans Fat	0g	
Cholesterol	25mg	9%
Sodium	85mg	3%
Total Carbohydrate	29g	10%
Dietary Fiber	2g	7%
Sugars	10g	
Protein	4g	
Vitamin A	8%	Vitamin C 0%
Calcium	10%	Iron 8%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Saturated Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

PREPARATION

1. Mix butter, sugar and almond paste in mixer until well-blended.
2. Add water and eggs, and mix 3 minutes on medium speed.
3. Add dry ingredients (flour, baking powder and salt [control] or permeate [reduced sodium]) to wet ingredients, and mix 1 minute on low.
4. Gently fold in apricots and almonds.
5. Place approximately 68g of batter into muffin pan treated with nonstick spray.
6. Bake at 375°F for 14 minutes.

Rely on the dynamic lineup of U.S. dairy to meet consumer demands for global product development. The U.S. Dairy Export Council (USDEC) offers resources on ThinkUSADairy.org including a dairy ingredient supplier search, consumer, nutrition and product research, technical insights and prototype assistance to help develop and launch your next successful product. [@ThinkUSADairy](https://twitter.com/ThinkUSADairy)

This formula serves as a reference. Product developers are encouraged to modify the formula to meet manufacturing and finished product specification needs. Developed at Dairy Products Technology Center, California Polytechnic State University. ©2014 U.S. Dairy Export Council.