

Chocolate Brownies - Control vs. Reduced Sodium

In addition to improving surface browning and crumb texture, delactosed permeate adds a naturally salty flavor. Chocolate brownies made with delactosed permeate contain 62% less sodium than similar brownies made with salt — a reduction from 240mg sodium per serving to just 90mg.



INGREDIENTS

	Usage Levels (%)	Reduced Sodium (%)
Sucrose	34.00	28.90
Butter, salted	20.05	20.20
Egg, whole, liquid	19.00	19.05
Flour, all-purpose	16.00	16.00
Baking Chocolate, unsweetened	10.00	10.10
Delactosed Permeate	—	5.10
Vanilla Extract	0.40	0.50
Salt	0.50	0.10
Potassium Sorbate, powder	0.05	0.05
Total	100.00	100.00

NUTRITIONAL CONTENT

Control

Nutrition Facts

Serving Size (40g)
Servings Per Container

Amount Per Serving

Calories 180 **Calories from Fat 90**

% Daily Value*

Total Fat 10g **15%**

Saturated Fat 6g **30%**

Trans Fat 0g

Cholesterol 55mg **18%**

Sodium 240mg **10%**

Total Carbohydrate 22g **7%**

Dietary Fiber 1g **4%**

Sugars 15g

Protein 2g

Vitamin A 6% • Vitamin C 0%

Calcium 2% • Iron 2%

*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 (40g)
Servings Per Container

Amount Per Serving

Calories 170 **Calories from Fat 80**

% Daily Value*

Total Fat 9g **14%**

Saturated Fat 6g **30%**

Trans Fat 0g

Cholesterol 50mg **17%**

Sodium 90mg **4%**

Total Carbohydrate 18g **6%**

Dietary Fiber 1g **4%**

Sugars 12g

Protein 2g

Vitamin A 4% • Vitamin C 0%

Calcium 0% • Iron 4%

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		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. **Melt the chocolate and butter together. Set aside.**
2. **Mix together the dry ingredients.**
3. **Combine the egg and vanilla extract. Add this to the dry ingredients and mix well.***
4. **Blend in the chocolate/butter mixture and mix well.**
5. **Pour the batter into the baking dish. Bake at 350°F for 35 minutes.**

*For a moister texture, water may be added at 5%.

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.