

Steps to Reducing Trans Fat and Saturated Fat in Recipes

Let's practice our heart-healthy fat knowledge by modifying a brownie recipe.

Original Brownie Recipe

60 servings

→ *Per serving: 2.5 grams trans fat and 2.5 grams saturated fat*

- 26 ounces eggs (about 15 total)
- 36 ounces granulated sugar
- 10 ounces shortening, melted
- 8 ounces stick margarine, melted
- 2 tablespoons vanilla
- 14 ounces cake flour
- 10 ounces cocoa
- 2 teaspoons baking powder
- ½ teaspoon salt
- 12 ounces nuts, chopped finely

Step 1. Identify ingredients that likely would contain trans or saturated fat. Keep an eye out for margarine, vegetable shortening or high-fat dairy products.

- If you guessed the margarine and shortening, you are correct.

Step 2. Substitute one type of fat for another. You have a couple of options:

- a. Substitute liquid vegetable oil for margarine: stick margarine and butter contain about 80 percent fat and 20 percent water. When substituting oil for margarine and butter, you need to make up for the water, too. Another option would be to choose a recipe that already calls for vegetable oil instead of margarine or shortening. These recipes already have been formulated and tested using oil and most likely would require the least amount of trial and error.
- b. Substitute liquid vegetable oil for shortening; shortening is made up of almost all fat with little or no water. You can substitute liquid vegetable oil for the shortening in a 1-to-1 ratio without having to add water.

Step 3. Mix and bake, then enjoy a heart-healthy brownie!

Revised Brownie Recipe

60 servings

→ *Per serving: 0 grams trans fat and 1.5 grams saturated fat*

- 26 ounces eggs (about 15 total)
- 36 ounces granulated sugar
- 16 ounces canola oil
- 2 tablespoons water
- 2 tablespoons vanilla
- 14 ounces cake flour
- 10 ounces cocoa
- 2 teaspoons baking powder
- ½ teaspoon salt
- 12 ounces nuts, chopped, fine

In our example, we were able to completely eliminate trans fat and reduce the saturated fat content by 1 gram per serving.

To learn more about sodium, visit:
www.ag.ndsu.edu/food

Julie Garden-Robinson, Ph.D., R.D., L.R.D.
Food and Nutrition Specialist
Tanya Lillehoff, Program Assistant (former)

NDSU | EXTENSION

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost for Title IX/ADA Coordinator, Old Main 201, NDSU Main Campus, 701-231-7708, ndsueoaa@ndsu.edu. This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881.

Reviewed 8-19