

## Handling Flour Safely: *What You Need to Know*



*Protect yourself and your family by following these safety tips when preparing foods that contain flour.*

Flour is a raw food. It may not look like a raw food, but it usually is, just like fresh tomatoes or carrots. The grains from which flour is ground are grown in fields and, like all foods grown outdoors, they may be exposed to a variety of harmful bacteria like *Salmonella* and pathogenic *E. coli*. The important things to know are:

- Flours most commonly used in home baking and cooking are made directly from raw grains.
- Processing these grains into flour does not kill harmful bacteria.
- Many foods made with flour also contain raw eggs, which may contain harmful bacteria.
- Cooking is the only way to be sure that foods made with flour and raw eggs are safe.
- **Never eat or taste raw flour, dough, or batter.**

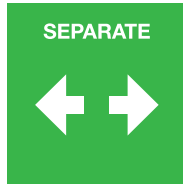
### OUTBREAK

Since 2009 there have been several outbreaks of foodborne illness involving raw flour or raw flour-containing products like cake mixes and cookie dough. These have resulted in 168 known illnesses and 20 hospitalizations.

## Dos and Don'ts for Consumers






- Don't eat or allow children to eat or play with raw dough products made with any brand of flour or baking mix before cooking.
- Do follow package directions on baking mixes and other flour-containing products for correct cooking temperatures and specified times.
- If you have any recalled flour at home, throw it away.
- Don't let children use raw dough for crafts/play clay.
- Do keep all raw foods like flour and eggs separate from ready-to-eat foods. Remember, flour is a powder and spreads easily.
- Don't use products that contain raw flour, like cake mix to make milkshakes.
- Don't try to heat treat flour in your own home.
- Don't use raw cookie dough in ice cream (the cookie dough in ice cream sold in stores has been treated to kill harmful bacteria).
- Do refrigerate cookie and pastry dough according to package directions. Use a refrigerator thermometer to be sure your refrigerator is at a safe 40°F.
- Do clean up carefully after working with flour or raw dough and eggs:
  - o Wash hands thoroughly with soap and running water, and,
  - o Wash utensils, bowls, baking pans, cutting boards, and countertops with warm, soapy water.

## Safe Food Handling: Four Simple Steps







### CLEAN

#### Wash hands and surfaces often

-  Wash your hands with warm water and soap for at least 20 seconds before and after handling food and after using the bathroom, changing diapers, and handling pets.
-  Wash your cutting boards, dishes, utensils, and counter tops with hot soapy water after preparing each food item.
-  Consider using paper towels to clean up kitchen surfaces. If you use cloth towels, launder them often in the hot cycle.
-  Rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten. Scrub firm produce with a clean produce brush.
-  With canned goods, remember to clean lids before opening.





### COOK

#### Cook to the right temperature

-  Color and texture are unreliable indicators of safety. Using a food thermometer is the only way to ensure the safety of meat, poultry, seafood, and egg products for all cooking methods. These foods must be cooked to a safe minimum internal temperature to destroy any harmful bacteria.
-  Cook eggs until the yolk and white are firm. Only use recipes in which eggs are cooked or heated thoroughly.
-  When cooking in a microwave oven, cover food, stir, and rotate for even cooking. If there is no turntable, rotate the dish by hand once or twice during cooking. Always allow standing time, which completes the cooking, before checking the internal temperature with a food thermometer.
-  Bring sauces, soups and gravy to a boil when reheating.






### SEPARATE

#### Separate raw meats from other foods

-  Separate raw meat, poultry, seafood, and eggs from other foods in your grocery shopping cart, grocery bags, and refrigerator.
-  Use one cutting board for fresh produce and a separate one for raw meat, poultry, and seafood.
-  Never place cooked food on a plate that previously held raw meat, poultry, seafood, or eggs unless the plate has been washed in hot, soapy water.
-  Don't reuse marinades used on raw foods unless you bring them to a boil first.

### CHILL

#### Refrigerate foods promptly

-  Use an appliance thermometer to be sure the temperature is consistently 40° F or below and the freezer temperature is 0° F or below.
-  Refrigerate or freeze meat, poultry, eggs, seafood, and other perishables within 2 hours of cooking or purchasing. Refrigerate within 1 hour if the temperature outside is above 90° F.
-  Never thaw food at room temperature, such as on the counter top. There are three safe ways to defrost food: in the refrigerator, in cold water, and in the microwave. Food thawed in cold water or in the microwave should be cooked immediately.
-  Always marinate food in the refrigerator.
-  Divide large amounts of leftovers into shallow containers for quicker cooling in the refrigerator.