



Salvaging Food After a Flood

■ Safety Measures in the Kitchen and Garden

Food that has come in contact with floodwaters is generally unsafe to eat. Floodwaters usually carry a high load of bacteria and filth with them, and may contain oil or chemical wastes as well. With the exception of canned foods and some produce, most food touched by floodwaters should be discarded. The safety of garden produce depends upon the type of flooding and type of produce. Follow the guidelines below, which also cover refrigeration and freezer concerns when the power is out. And remember: When in doubt, throw it out.

■ Flooded Items to Discard

- Fresh produce, meat, poultry, fish, and eggs.
- Opened containers and packages.
- Submerged, unopened glass jars that have cardboard lid liners, such as mayonnaise or salad dressing.
- Submerged, unopened, home-canned jars with broken seals. To check seal, remove ring and test the flat lid with fingertips. If the lid lifts off easily, discard the food.
- All food in cardboard boxes, paper, foil, cellophane, or cloth.
- Spices, seasonings and extracts, flour, sugar, and other staples in canisters.
- Cans that are dented, leaking, bulging, or rusted.

■ Flooded Items to Save

- Some fruits
- Vegetables
- Unopened canned goods
- Glass jars of food

■ Sanitizing, and in some cases, cooking is necessary for safe use. To sanitize cans and glass jars of food:

- Mark contents on can or jar lid with indelible ink.
- Remove labels. Paper can harbor dangerous bacteria.
- Wash jars and cans in a strong detergent solution with a scrub brush.
- Immerse containers for 10 minutes in a solution of 2 tablespoons chlorine bleach per gallon of room temperature water.

- Allow containers to air dry before opening.
- Citrus fruits should be washed, sanitized with a light bleach solution and peeled before eating.
- Potatoes, carrots, apples and other firm fruits should be sanitized, peeled, if possible, and cooked before eating. Do not eat raw fruit or vegetables, even if they have been sanitized.

■ **What About the Garden?**

Some garden produce may be salvaged. Sanitizing, peeling, and cooking is recommended. If it's not too late, prevent floodwater from coming into contact with food by:

- Raising refrigerators and freezers by placing cement blocks under their corners.
- Moving food from low cabinets.
- Moving canned goods and other food stored in the basement to the upstairs.
- If the floodwater contained waste from septic tanks, sewage lagoons, or a pasture, your garden will take about a month to become clean. Don't eat or preserve food during this time.
- Ask if your local health department will test the garden soil for harmful bacteria. It may be able to determine whether immature root crops are safe.
- Discard leafy greens such as lettuce, spinach, and cabbage, as well as soft berries. These are highly susceptible to bacterial contamination. Silt and other contaminants may be difficult to remove from them.
- Wash beans, peas, tomatoes, peppers and summer squash in water. Then soak in a weak chlorine solution of 2 tablespoons chlorine bleach to a gallon of water. Peel and cook them thoroughly before eating.
- For underground vegetables such as carrots and potatoes, wash in water and sanitize as above. Peel and cook them thoroughly before eating.
- Produce with a protected fruit or impervious outer skin, such as peas, melons, eggplant, sweet corn or winter squash, should be washed and disinfected before the outer shell, skin or husk is removed. Then shell, peel, or husk the produce and cook if possible.

■ **Refrigeration and Freezer Concerns**

If the electricity is off to the refrigerator or freezer, follow these guidelines:

- Discard refrigerated meats, seafood, milk, soft cheese, eggs, prepared foods and cookie doughs if they have been kept above 40 degrees F.

for over two hours. Also discard thawed items that have warmed above 40 degrees F., with the exception of breads and plain cakes.

- Discard any refrigerated items that turn moldy or have an unusual odor or appearance.
- Refreeze partially or completely frozen foods.
- Cold but fully thawed, uncooked meat, fish, or poultry should be checked for off-odor. If there is none, cook and eat or cook and refreeze.
- Discard combination dishes such as stews, casseroles, and meat pies if they are thawed.
- Refreeze thawed (but cold) juices, baked goods, and dairy items such as cream, cheese and butter.
- Do not refreeze thawed vegetables unless ice crystals remain. Cook and use them if there are no off-odors.

Source: NDSU Extension Service - <http://www.ag.ndsu.edu/disaster/flood/salvagingfoodafteraflood.html>