



UNIVERSITY OF
FLORIDA

EXTENSION

Institute of Food and Agricultural Sciences

Keep Your Food Safe¹

Amy Simonne and Mark Tamplin²

Food that goes bad can make you sick. This is called **food poisoning**. Sometimes when people think they have the "flu" or a "stomach bug," they really have food poisoning.

Persons who have weak immune systems can face an even greater risk of food poisoning. Because their immune systems are injured or weak, they cannot adequately fight germs that enter the body.

What makes food go bad?

GERMS!



They get on foods and grow. You cannot see germs on food. You cannot always smell or taste them either.

These are some of the foods germs like best:

- Milk, cheese, and other dairy products
- Eggs
- Meat
- Poultry
- Seafood



This publication tells you how to safely:

- Buy food
- Store food
- Prepare food
- Eat out
- Travel abroad

1. This document is FCS8512, one of a series of the Department of Family, Youth and Community Sciences, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: March 2001. First published: March 1995. Revised: March 2001. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu> Portions of this publication were adapted from: Department of Health and Human Services, February 1991. *Keep Your Food Safe*, DHHS Publication No. (FDA) 91-2234 and from Valentin-Oquendo, I., L. Schmidt, M.L. Tamplin, L.K. Guyer, and L.B. Bobroff. 1992. *Safe Food for Persons Most Susceptible to Foodborne Disease*. University of Florida/CSREES-USDA special project no. 91-EPSQ-1-4032. Appreciation is given to the U.S. Partnership for Food Safety Education for permission to use the Fight Bac!(TM) graphics.
2. Written by Mark Tamplin, former associate professor, Food Safety; revised by Amy Simonne, assistant professor, Food Safety and Quality; and reviewed by Linda B. Bobroff, associate professor, Foods and Nutrition, Department of Family, Youth and Community Sciences, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

The Institute of Food and Agricultural Sciences is an equal opportunity/affirmative action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap, or national origin. For information on obtaining other extension publications, contact your county Cooperative Extension Service office. Florida Cooperative Extension Service / Institute of Food and Agricultural Sciences / University of Florida / Christine Taylor Waddill, Dean

Safe Food: At the Store

Buy cans, jars, and packages that look perfect.

- Do the cans have **dents**?
- Are the jars **cracked**?
- Do they have lids that are **not closed tightly**?
- Is the package **ripped**?



If so, the food may have germs that can make you sick.

- Check eggs, too. Open the carton and see if any eggs are **broken** or **cracked**.
 - Choose egg substitutes if you are using eggs to prepare a drink or food which is not cooked, (like egg nog or Caesar salad).
 - Choose only pasteurized dairy products. **Pasteurization** kills harmful germs.
- Check the food labels.
 - Do not buy foods after their expiration date, use by date, or sell-by date.
 - At home, **throw out** foods after their expiration date, use-by date, or sell-by date.
- Raw meat, poultry, and seafood sometimes drip juices on other foods.

These juices have **GERMS**. Keep these juices away from other foods.

- Put raw meat, poultry, and seafood into plastic bags before they go into your cart.
- Pick up dairy products, seafood, meat, poultry and frozen foods last. This will give them less time to warm up before you get home.
- Save hot chicken and other hot foods for last, too. This will give them less time to cool off before you get home.
- When you finish shopping, return home within **ONE hour**. If not, take a cooler with you to keep meat, poultry, seafood, and dairy products cool on the way home. Be sure to separate raw meat, poultry and seafood from pasteurized dairy products.

Safe Food: At Home

- After shopping, get home as soon as you can.
- Put food into the refrigerator or freezer right away!
- Set the temperature control and use a thermometer so that you know your refrigerator is below 40°F.
- Eggs always go into the refrigerator.



- Keep meat, poultry, and seafood in containers to make sure juices can't drip on fruits, vegetables, or leftovers.
- Make sure that you and your kitchen are clean.

- Always wash your hands before you touch food. Use warm water and soap.



- Wash everything else before and after it touches food.
- Avoid using wood cutting boards because they are very hard to clean. Germs hide in the cracks.
- Use a plastic cutting board instead. Choose one without too many scars.
- Always clean a can opener with soap and water after each use.
- Fresh fruits and vegetables also need to be cleaned. Rinse them under running water and use a vegetable brush to wash dirt away.
- Raw meat, raw poultry, and raw seafood can spread germs in your kitchen. Keep these foods and their juices away from other foods.
- Did you wipe up the juices with a dish towel? If so, wash it before you use it



again **OR** use paper towels and throw them away.

- Thaw in the refrigerator. Meat, poultry and seafood need to stay cold while they thaw. Do it 1 or 2 days before you will cook the food.
- Thaw in the microwave. Use the "defrost" setting, then cook the food right away.
- When marinating foods:
 - Marinate food only in the refrigerator, never on the counter top.
 - Do not use leftover marinade to baste food while cooking.
 - Throw away leftover marinade; don't reuse it.
 - Cook marinated foods completely.
- Always follow the microwave cooking directions. Remember that standing time and rotating food are important for complete cooking.
- Use a temperature of 325°F or above when cooking food in a conventional oven.
- Cook foods until they are done.
 - Raw meat, raw poultry, raw seafood and raw eggs can make you sick.
 - Always use a food thermometer when you cook. See *Table 1* for specific guidelines.

- Pests (insects and rodents) can spread germs.
 - Prevent pests from getting into the house.
 - Deny pests food, water, and hiding or nesting places.
 - Work with a pest control operator to eliminate pests that do enter the household.
- Safely store leftover food. Put leftovers in the refrigerator or freezer as soon as you finish eating. Put them in shallow (4" or less) dishes so they cool faster.
- Did you put leftovers in the refrigerator?
 - Eat them in 3 days, before they go bad.
 - If food is left out of the refrigerator for **2 or more hours**, germs can grow. **THROW IT OUT!**
- If you have immuno-compromising conditions, never leave cooked food out of the refrigerator for more than **one hour** before you eat it.

Safe Food: At a Restaurant

- When eating out, do not order undercooked foods.
- In order to reduce health risks, **do not** choose dishes containing raw or undercooked eggs.



- **Do not** choose undercooked meats, poultry, or seafood.
- If you are suffering from an illness, choose **cooked**, not raw, shellfish.
- When served to you, cooked food should be very hot. If not, **return it**.
- **The Doggie Bag** — If meal portions are too big, care must be taken when handling these leftovers.
 - If you will not be arriving home within 2 hours of finishing your meal, it is safer to leave your leftovers at the restaurant.
 - Also remember that the inside of a car can get very warm. Germs can grow rapidly, so it is always safer to go home directly after eating out and put your leftovers in the refrigerator right away.

Safe Food: Traveling Abroad

Sanitation varies from place to place. So, be careful when you travel. If you are not sure that food and water are safe, take special care. Boil drinking water, or drink canned or bottled beverages. Remember to avoid ice, since it may have been made from contaminated water. Use boiled water or bottled water when you brush your teeth too.

If you eat fresh fruits, always wash with bottled water and peel them first. Eat cooked foods only if they are very hot. Avoid eating exotic foods, since you do not always know how they were prepared. If you have any

questions about traveling to another country, contact your doctor.

Keep Your Food Safe

It is hard to tell if food is or is not safe.

Foods that go bad may...

look, smell, and taste like other foods.

So be safe!

Buy safe food.

Keep food safe at home.

If you think a food might be bad, **do not taste it.**

Remember this:

**When in doubt,
THROW IT OUT!**



Do you have questions about food safety?

If so, call your County Cooperative Extension Office or the FDA (Food and Drug Administration) office near you. Look for their number in the blue pages of the phone book.

Or write a letter to:

FDA
HFE-88
Rockville, MD 20857

The U.S. Department of Agriculture (USDA) can also answer your food safety questions. You can make a FREE call to the USDA Meat and Poultry Hotline at:

1-800-535-4555

The hotline is open from
10 a.m. to 4 p.m. Eastern Time
Monday through Friday.



Table 1.

Raw Food	Internal Temperature	Raw Food	Internal Temperature
Ground Products		Poultry	
Hamburger	160°F	Ground chicken or turkey	165°F
Beef, veal, lamb, pork	160°F	Chicken, whole & pieces	180°F
Chicken, turkey	165°F	Duck	180°F
Beef, Veal, Lamb		Turkey (<i>unstuffed</i>)	
Roasts and steaks		<i>Whole</i>	180°F
<i>medium-rare</i>	145°F	<i>Breast</i>	170°F
<i>medium</i>	160°F	<i>Dark meat</i>	180°F
<i>well-done</i>	170°F	<i>Stuffing (cooked separately)</i>	165°F
Pork		Eggs	
Chops, roast, ribs		Fried, poached	<i>yolk & white are firm</i>
<i>medium</i>	160°F	Casseroles	160°F
<i>well-done</i>	170°F	Sauces, custards	160°F
Ham (fresh)	160°F	Seafood	
Sausage (fresh)	160°F	Fillets and whole fish	<i>opaque & flakes easily</i>
		Shrimp and lobster	<i>shell turns red & flesh opaque</i>
		Scallops	<i>milky white, opaque & firm</i>
This chart has been adapted for home use and is consistent with consumer guidelines from the U.S. Department of Agriculture (USDA) and U.S. Food and Drug Administration (FDA).			