

How to Cook Turkey

THAWING A TURKEY

What is the best way to thaw a turkey? There are three ways to safely thaw a turkey, but refrigerator thawing is recommended. Defrost the turkey in its original wrapper on a tray in the refrigerator 24 hours for every 5 pounds. Never thaw a turkey at room temperature.

You may also place the wrapped turkey in the sink and cover it completely with cold water. This method requires about 30 minutes per pound. If the wrapping is torn, place the turkey in another plastic bag, close securely, and then place in water.

For thawing in the microwave, check the manufacturer's instructions for the size of turkey that will fit into your oven, the minutes per pound and the power level to use for thawing. Cook immediately after thawing. See Table 1 for a more detailed outline of proper thawing times.

Turkey Size (lbs.)	Refrigerator (Days)	Cold Water (Hours)
8-12	1-2	4-6
12-16	2-3	6-8
16-20	3-4	8-10
20-24	4-5	10-12

PREPARATION

After thawing, get the turkey ready for cooking by following these steps:

- Remove original plastic wrapper from thawed or fresh turkey.
- Remove the neck and giblets from the body and neck cavities.
- Thoroughly rinse turkey and inside cavity.
- Drain juices and blot turkey dry with paper towels.

- Stuff the turkey (optional) just before roasting.
- Return legs to tucked position, if untucked.
- If using an oven-safe meat thermometer, insert into the deepest part of the thigh. (If using an instant-read thermometer, it will be inserted when it is time to check for doneness.)
- Brush with oil to prevent drying of the skin.

WASH HANDS, UTENSILS, SINK AND EVERYTHING ELSE THAT HAS BEEN IN CONTACT WITH RAW TURKEY.

STUFFING A TURKEY

To stuff or not to stuff? This is an important question to ask because cooking a home-stuffed turkey can be somewhat riskier than cooking one not stuffed. If the stuffing is not cooked and handled properly, foodborne illness could occur. However, with careful preparation and the use of a meat thermometer to ensure that safe temperatures are reached, consumers can safely enjoy the traditional stuffing, inside or outside the bird. Follow these safe stuffing tips:

Prepare Stuffing Safely: Mix the stuffing just before it goes into the turkey. Use only cooked ingredients in stuffing such as sautéed vegetables, cooked meats and seafood (oysters), and pasteurized egg products instead of raw eggs. If more convenient, the wet and dry ingredients can be prepared separately ahead of time and chilled. Mix the ingredients just before placing the stuffing inside the turkey or in a casserole.

Stuff The Bird Properly: Stuff both neck and body cavities. The turkey should be stuffed loosely, about three-quarters cup of stuffing per pound of turkey. This will help allow the stuffing to reach

the proper 165 °F internal temperature whether the stuffing is in the bird or in a casserole. Use a meat thermometer to be sure of the temperature. The stuffing should be moist, not dry, since heat destroys bacteria more rapidly in a moist environment.

Cook At The Proper Temperature: The stuffed turkey should be placed immediately in a preheated oven set no lower than 325 °F. Cooking overnight in a “slow” oven is not recommended for stuffed or unstuffed turkey, since foodborne bacteria can form under these conditions.

Use A Meat Thermometer: Checking the stuffing temperature with a thermometer is essential. That is because even if the turkey itself has reached the proper internal temperature of 180 °F in the innermost part of the thigh, the stuffing may not have reached the correct temperature of 165 °F in its center. It is important to reach this temperature in all parts of the stuffing to be sure that foodborne bacteria are destroyed.

Prestuffed Poultry: Buying retail-stuffed whole poultry is not recommended because of the highly perishable nature of a previously stuffed item. Some USDA-inspected frozen stuffed poultry **MUST** be cooked from the frozen state to ensure a safely cooked product.

COOKING A TURKEY

Safety and Preparation Notes for All Methods:

- Never brown or partially cook turkey to refrigerate and finish cooking later. It is safe to partially cook or microwave turkey if it is immediately transferred to a hot grill or oven to finish cooking.
- It is not necessary to baste a turkey. Basting throughout the roasting process is unnecessary. Pouring juices over a turkey’s surface while it roasts will not make the meat juicier. The liquid penetrates only about 1/8 to 1/4 of an inch beneath the skin and most of the juice will run off into the pan. Opening the oven door periodically to baste a turkey can cool the oven and possibly lengthen the roasting time.

Roasting Method: The open pan roasting method will consistently create a juicy, tender, golden brown, picture-perfect turkey.

1. Place thawed or fresh turkey, breast up, on a flat rack in a shallow pan, 2 to 2½ inches deep.
2. Insert oven-safe meat thermometer into the thickest part of the thigh. Brush or rub skin with oil to prevent drying of the skin and to enhance the golden color.
3. Place in a preheated 325 °F oven.
4. When the skin is a light golden color and the turkey is about two-thirds done, shield the breast loosely with a tent of lightweight foil to prevent overcooking of the breast.
5. Use the roasting schedule in Table 2 as a guideline; start checking for doneness a half-hour before recommended end times.
6. Turkey is done when the meat thermometer reaches the following temperatures:
180 to 185 °F deep in the thigh; also, juices should be clear, not pink when thigh muscle is pierced deeply.
170 to 175 °F in the thickest part of the breast, just above the rib bones.
160 to 165 °F in the center of the stuffing, if turkey is stuffed.
7. Let turkey stand for 15 to 20 minutes before carving to allow juices to set.

Size of Turkey (lbs.)	Unstuffed Timing	Stuffed Timing
8-12	2¾ - 3 Hours	3 - 3½ Hours
12-14	3 - 3¾ Hours	3½ - 4 Hours
14-18	3¾ - 4¼ Hours	4 - 4¼ Hours
18-20	4¼ - 4½ Hours	4¼ - 4¾ Hours
20-24	4½ - 5 Hours	4¾ - 5¼ Hours

Smoke-Cooking Method:

1. Soak hardwood chips in water for one to two hours.
2. Start with completely thawed turkey for even, safe cooking.
3. Remove giblets and neck; drain juices.
4. **DO NOT STUFF.**
5. **DO NOT USE STRING LIFTER.**
6. Insert oven-safe meat thermometer into deepest part of the thigh, not touching the bone.
7. Brush skin lightly with vegetable oil.

8. Plug in electric smoker or ignite charcoal about 30 minutes before cooking.
9. Position foil-lined water pan in smoker according to manufacturer's directions; fill pan with water.
10. Check temperature of grill at grate. Be sure temperature is between 200 to 250 °F.
11. Place turkey on grill. Cover and adjust vents according to manufacturer's directions.
12. Maintain 200 to 250 °F temperature throughout cooking. If using charcoal smoker, add additional briquettes every 1 to 1½ hours.
13. Replenish water and soaked hardwood chips as needed.
14. Cook turkey to internal temperature of 180 °F in thigh and 170 to 175 °F in breast. Turkey may take up to 12 hours.

Safety Notes For Smoking Turkey:

- Always follow equipment manufacturer's guidelines.
- Cooking times will vary depending on wind, weather, altitude and type of equipment.
- For safety, turkey must reach 140 °F in four hours or less. Check after 3½ hours, if temperature is low, finish in oven.
- Always use thermometers to monitor turkey smoker and temperatures.
- Total cooking time will be increased 10 minutes or more each time lid is lifted.
- Smoking has no preservative effect. Smoked turkey must be refrigerated.

Microwaving Method: Always check the user's manual for cooking recommendations.

- A 12 to 14 pound turkey is the maximum size most microwaves can accommodate.
- Allow 3 inches oven clearance on top and 2 to 3 inches of space around bird.
- DO NOT STUFF!
- Use an oven-cooking bag for more even cooking.
- Microwave on medium-high (50 percent) for a whole turkey, 9 to 10 minutes per pound.
- Always use a meat thermometer to determine doneness. Temperature should reach 180 °F before removing from oven.
- Let bird stand 20 minutes after removing from microwave before carving.

Deep Fat Fried Whole Turkey: Some people enjoy fried whole turkey. This method of preparation requires special equipment and extra expense. The equipment needed includes a 40- or 60-quart pot with basket, burner and propane gas tank; a candy thermometer to measure oil temperature; and a meat thermometer to determine if the turkey is done. For added safety, have a fire extinguisher and pot holders nearby. Never leave the hot oil unattended, nor allow children or pets near it. Never fry a turkey indoors or in a garage or other structure.

Avoid frying on wood decks, which could catch fire, and concrete, which can be stained by the oil.

To Safely Fry a Whole Turkey, Follow These Steps:

1. Start with a completely thawed turkey. Do not stuff the turkey to deep fry.
2. Use a pot large enough to hold the turkey and enough oil to cover it. This could be as much as five gallons of oil. Set up your turkey fryer on level dirt or a grassy area.
3. Determine the correct amount of oil by covering the turkey in the pot with water to a level 1 to 2 inches above the turkey. Remove the turkey and measure the distance from the top of the pot to the surface of the water. Pour out the water and dry the pot thoroughly. Be sure to measure for oil before breading or marinating the turkey.
4. Heat the oil to 350 °F. Depending on the amount of oil used, this takes between 45 minutes to an hour. Most people prefer peanut oil. Carefully put turkey in the oil.
5. Cook for 3 minutes per pound. Skin will be black and wings will be burned.
6. Use a meat thermometer to check for doneness. Turkey is done when the thermometer registers an internal temperature of 180 °F.
7. Carefully remove the turkey from the oil and serve.
8. Allow the oil to cool before disposing or storing it. To store oil, strain through cheese cloth or a coffee filter and refrigerate. Do not store oil that has been heated to the smoking point, has turned dark or has an off-odor. Reuse the oil within a month and discard if it foams when reheated.

LEFTOVERS

Within two hours after roasting, remove stuffing from turkey and carve the meat off the bones; then store in refrigerator or freezer. Gravy, stuffing and

meat need to be stored SEPARATELY from each other. Turkey may be stored in the refrigerator for up to three days. For longer storage, wrap in heavy foil or freezer wrap, or place in freezer container; use stuffing within one month and turkey within two months.

GIBLETS

Safe Handling: In whole, ready-to-cook poultry, giblets are located in a bag in the abdominal cavity. They will not be from the original bird. Giblets may also be purchased separately as livers, hearts, or a combination thereof, and labeled accordingly. At home, immediately place giblets in a refrigerator that maintains 40 °F or below, and use within one or two days; or freeze at 0 °F or below. If kept frozen continuously, they will be safe indefinitely. However, for best quality, use giblets within three to four months of freezing.

Defrosting: There are three safe ways to defrost giblets and poultry containing them: in the refrigerator, in cold water or in the microwave oven. Never defrost giblets on the kitchen counter.

Refrigerator Thawing: As a rule of thumb, whole poultry with giblets will take about 24 hours for every 5 pounds of weight to thaw in the refrigerator. A 1-pound carton of frozen turkey livers will take about 24 hours. Once defrosted, the giblets may be stored in the refrigerator for 1 to 2 days. During this time, if giblets are not used, they can be safely refrozen.

Cold Water Thawing: Leave the giblets or poultry containing them in the original airtight packaging or place in a leak-proof bag. Submerge the product in cold water and change the water every 30 minutes to make sure it stays cold. A 1-pound carton of livers should defrost in one or two hours.

Microwave Thawing: Cook giblets and poultry containing them immediately after microwave defrosting because some areas of the food may become warm and begin to cook. Holding partially cooked food is not recommended because any bacteria that may have been present may not have

been destroyed. Foods defrosted in the microwave or by the cold-water method should be cooked before refreezing.

Cooking: Traditionally, chicken or turkey giblets are cooked by simmering in water for use in flavoring soups, gravies or poultry stuffing. Once cooked, the liver will become crumbly and the heart and gizzard will soften and become easy to chop. Cooked giblets should have a firm texture and their juices should run clear. Casseroles containing giblets should be cooked to 160 °F. Stuffing should be cooked to 165 °F. Chicken giblets are commonly fried or broiled. Leftovers should be refrigerated within two hours.

Accidental Cooking in Packaging: Some giblets are *paper wrapped* before being inserted into the poultry body cavity. In this case, there would be no concern if the giblets were accidentally cooked inside the bird to a safe temperature. If giblets were packed in a *plastic bag*, and the bag has been altered or melted by the cooking process, do not use the giblets or the poultry because harmful chemicals may have leached into the surrounding meat. If the plastic bag was not altered, the giblets and poultry should be safe to use as long as the meat is fully cooked.

Sources:

1. USDA/FSIS (1996, July). *Safety of Giblets* [WWW document]. URL <http://www.usda.gov/fsis/giblets.htm>
2. USDA/FSIS (1997, July). *Food Safety of Turkey..from Farm to Table* [WWW document]. URL <http://www.usda.gov/fsis/focustkv.htm>
3. Butterball® Turkey Home Page, *Butterball's Top Ten*. and *Smoke-Cooking Butterball® Turkey*. [WWW document] URL <http://www.butterball.com>
4. National Turkey Federation. *Deep Frying Turkey*. [WWW document]. URL <http://www.turkeyfed.org/consumer/cookinfo/fryturk.html>

This information has been reviewed and adapted for use in South Carolina by P.H. Schmutz, HGIC Specialist, and E.H. Hoyle, Extension Food Safety Specialist, Clemson University.

This information is supplied with the understanding that no discrimination is intended and no endorsement by the Clemson University Cooperative Extension Service is implied. All recommendations are for South Carolina conditions and may not apply to other areas. (New 2/99, Rev 12/99).