Turkey

What is a turkey and how is it raised?
The turkey is a large, domesticated North American bird. It has white feathers and a bare head with a wattled neck.

What is the difference between a “hen” turkey and a “tom” turkey?
The distinguishing factor between a “hen” and a “tom” is the gender of the bird. The “hen” (female) is smaller than the “tom” (male), but both are equally tender.

What does it mean when a turkey is labeled “free range” or “free roaming”?
In order for a turkey to be labeled “free range” or “free roaming” the producer must be able to show the USDA’s Food Safety and Inspection Service that the turkey has had access to the outside.

Are all turkeys inspected?
All turkeys that you buy in a retail store should be inspected by the USDA or by a state agency with equivalent standards. The inspector checks the turkey and its internal organs for signs of disease. A turkey with the label “Inspected for wholesomeness by the U.S. Department of Agriculture” means that the turkey is wholesome, has been properly labeled, and is unadulterated. Inspection is mandatory.

What does the grade on a turkey mean?
Grading is a voluntary process and it determines the quality of a turkey. Grading is based largely on the appearance of the flesh. Nearly all turkeys found in retail stores are Grade A, which is the highest quality grade.

Are there dates on turkey products?
There are no federal regulations requiring the dating of turkeys. Many processors and stores voluntarily date turkeys either with a “sell-by” date, “best if used by” date, or a “use-by” date. A “sell-by” date indicates how long the turkey should be displayed in the store. The turkey should be purchased before the “sell-by” date expires. The “best if used by” date is only a quality measure and is not related to the safety of the food. The “use-by” date indicates the last day that the turkey should be used. This is also a quality measure and not necessarily an indication of safety.

Are there labeling requirements on turkeys?
All raw or partially cooked turkeys are required by the USDA’s Food Safety and Inspection Service to have safe handling instructions on the packaging. Nutrition labeling is required for most multi-ingredient turkey products.
What is the nutritional value of a turkey?
Three ounce serving of baked turkey breast with skin:
160 calories
6 grams fat
65 milligrams cholesterol
24 grams protein
Three ounce serving of baked turkey breast without skin:
120 calories
1 gram fat
55 milligrams cholesterol
26 grams protein

What does the “fresh” or “frozen” label mean?
Turkeys that are labeled “fresh” are birds that have never been below 26°F. “Frozen” or “previously frozen” turkeys have been held at or below 0°F.

What foodborne bacteria are associated with turkey?
The foodborne bacteria that are most often associated with turkey are *Salmonella*, *Campylobacter jejuni*, *Staphylococcus aureus*, and *Listeria monocytogenes*.

How long can you keep a turkey in the freezer? In the refrigerator?
It is recommended that whole turkey be kept in the freezer no longer than twelve months. While there is no safety risk in holding a turkey in the freezer for longer than twelve months, the quality of the turkey may be less than desirable. Fresh whole turkeys can safely stay in the refrigerator for one to two days, or according to the date on the manufacturer’s packaging.

How should I thaw my turkey? How long will it take?
There are three ways to safely thaw your turkey: in the refrigerator, in cold water, and in the microwave. The most recommended way to thaw a turkey is in the refrigerator. While thawing in the refrigerator, the turkey will not reach an internal temperature above 40°F, so harmful bacteria will not have the chance to grow. Thawing a turkey in the refrigerator requires planning. If the refrigerator temperature is set at 40°F it will take about 24 hours for every 5 pounds of turkey to thaw.

If you don’t have enough time to thaw the turkey in the refrigerator, you can try to thaw it in cold water. Make sure the turkey is wrapped well in leak-proof packaging, as the flesh can absorb water and make a watery product. Submerge the turkey completely in cold water. The water should be changed every thirty minutes until the turkey is completely thawed. It should take about thirty minutes per pound of turkey to thaw. Since temperature conditions are not controlled using the cold water method of thawing, the turkey should be cooked immediately after thawing.

The third method of thawing is in the microwave. You should follow the oven manufacturer’s instructions for thawing turkey in the microwave. Always cook the turkey immediately after thawing in the microwave, as some parts of the turkey may have reached temperatures where harmful bacteria can grow.
What about basting, brining, and marinating?
There are many methods for preparing turkey so that a more flavorful end product is reached. Three of the more popular methods are basting, brining, and marinating. Basting is a process of moistening the turkey with butter, meat drippings, stock or some other type of liquid during the cooking process. Basting helps to prevent the poultry from drying out, while adding color and flavor.

Brining a turkey involves soaking it in a solution of salt and water to enhance the flavor of the meat and make a juicier, more tender product. Sometimes a sweetener such as sugar, molasses, or honey is added to the brining mixture for added flavor and help with browning. The brine should be discarded after use.

Marinating turkey is a great way to enhance its flavor and make it more tender. A marinade is an acidic sauce in which the food is soaked. The acid helps to break down the tissues of the turkey. If the marinade is to be used as a sauce, it must be boiled to kill any harmful bacteria that may be present. Marinades should never be re-used. It is best to set aside marinade that has not come in contact with raw meat for basting and sauces.

Should I stuff the turkey?
It is recommended that you cook stuffing separately from the turkey. The stuffing needs to reach an internal temperature of 165°F in order to be safe. When the stuffing is inside of the turkey it takes much longer for it to reach a safe temperature. Often, by the time the stuffing reaches 165°F, the turkey has overcooked and may be dry. By cooking the stuffing and the turkey separately you can better control the temperature that each one reaches. If you decide to go ahead and stuff the turkey, do so just before cooking. Make sure that the stuffing is moist and loosely stuffed in the turkey. Take the internal temperature of the stuffing during cooking using a calibrated food thermometer. Keep in mind that a stuffed turkey takes longer to cook than an un-stuffed one.

How do I roast a turkey?
For roasting a turkey the oven should be set at a temperature of 325°F or higher. Place the turkey on a rack in a roasting pan and into the center of the oven. Whole poultry is safe when cooked to a minimum internal temperature of 165°F as measured with a food thermometer. Check the internal temperature in the innermost part of the thigh and wing and the thickest part of the breast. For reasons of personal preference, it is still best to cook turkey to higher temperatures such as 180°F to remove pink appearance and rubbery texture.

If the turkey is stuffed it must reach a minimum temperature of 165°F in the innermost part of the thigh, and the stuffing must also be 165°F. If you are just cooking the turkey breast, it also needs to reach an internal temperature of 165°F to be safe. Use a calibrated food thermometer to check the turkey for doneness. For reasons of personal preference, it is still best to cook turkey to higher temperatures such as 180°F to remove pink appearance and rubbery texture. Even if the turkey comes equipped with a “pop-up” temperature indicator, it is important to use a food thermometer to ensure its safety. After taking the turkey out of the oven, let it stand 20 minutes before carving for best quality.
**Approximate Cooking Times**

**Unstuffed:**
- 8-12 lbs. - 2 3/4 to 3 hours
- 12-14 lbs. - 3 to 3 3/4 hours
- 14-18 lbs. - 3 3/4 to 4 1/4 hours
- 18-20 lbs. - 4 1/4 to 4 1/2 hours
- 20-24 lbs. - 4 1/2 to 5 hours

**Stuffed:**
- 8-12 lbs. - 3 to 3 1/2 hours
- 12-14 lbs. - 3 1/2 to 4 hours
- 14-18 lbs. - 4 to 4 1/2 hours
- 18-20 lbs. - 4 1/4 to 4 3/4 hours
- 20-24 lbs. - 4 3/4 to 5 1/4 hours

****These times are approximations for turkeys that are fully thawed and held in a refrigerator that is at or below 40°F. Always use a calibrated food thermometer to determine the doneness of the turkey.

**Are there other methods for cooking turkey?**

There are many alternatives to roasting the holiday turkey. Electric roaster ovens, grills, smokers, and deep fat fryers are now being used for cooking whole turkeys. They offer a different way to cook the traditional turkey, while freeing up oven space for other dishes. Electric roaster ovens are a tabletop appliance that are made specifically for cooking poultry. You should check the manufacturer’s instructions for recommended temperature settings, but generally they are the same as for conventional ovens. Whole poultry is safe when cooked to a minimum internal temperature of 165°F as measured with a food thermometer. Check the internal temperature in the innermost part of the thigh and wing and the thickest part of the breast. For reasons of personal preference, it is still best to cook turkey to higher temperatures such as 180°F to remove pink appearance and rubbery texture.

Grilling has become a popular method for cooking turkey. The turkey cooks by indirect heat in a covered grill. A pan of water is placed below the grill rack to catch the turkey drippings. It is only recommended that you grill turkeys that are 16 pounds or less. The larger turkeys stay in the danger zone too long and may cause foodborne illness. Grilled turkeys should not be stuffed, as it will take too long for the stuffing to reach 165°F and may become unsafe. As with all cooking methods, be sure to check for doneness using a calibrated food thermometer. Whole poultry is safe when cooked to a minimum internal temperature of 165°F as measured with a food thermometer. Check the internal temperature in the innermost part of the thigh and wing and the thickest part of the breast. For reasons of personal preference, it is still best to cook turkey to higher temperatures such as 180°F to remove pink appearance and rubbery texture.

Smokers are usually cylinder-shaped and can be either gas, electric, or charcoal. You should follow the manufacturer’s directions for operating and cooking with the smoker. The cooking time will vary as it depends on several factors such as the size and shape of the turkey, the temperature of the coals, and the distance from the heat source. Generally, you
can estimate that it will take about 20 to 30 minutes per pound, but always check for
doneness using a food thermometer. Whole poultry is safe when cooked to a minimum
internal temperature of 165°F as measured with a food thermometer. Check the internal
temperature in the innermost part of the thigh and wing and the thickest part of the breast.
For reasons of personal preference, it is still best to cook turkey to higher temperatures such
as 180° F to remove pink appearance and rubbery texture.

Whole turkeys can be safely cooked in a deep fat fryer as long as the turkey is not stuffed
and it is fully thawed. For frying, you should choose a pot that is large enough for the turkey
to be completely submerged in oil. Ideally a commercially made fryer that is designed for
frying whole turkeys would be used. Follow the manufacturer’s directions for heating the oil
and cooking the turkey. The oil should be 350°F and the turkey needs to be carefully lowered
into it. It should take about 3 to 5 minutes per pound to cook the turkey. Whole poultry is
safe when cooked to a minimum internal temperature of 165°F as measured with a food
thermometer. Check the internal temperature in the innermost part of the thigh and wing and
the thickest part of the breast. If the turkey is not done return it to the cooking oil and finish
cooking. For reasons of personal preference, it is still best to cook turkey to higher
temperatures such as 180° F to remove pink appearance and rubbery texture. Let the turkey
stand for 20 minutes before carving and serving.

Can I cook a frozen turkey?
Turkeys can be cooked from frozen. Keep in mind that it will take about 50% longer to
cook a frozen bird than a fresh one. It may be difficult to remove the giblets while the turkey
is still frozen. Try removing them once the turkey has been in the oven long enough to
defrost. Do not cook a frozen turkey in the microwave because it will cook unevenly and
may not reach a safe temperature.

Is pink turkey meat safe to eat?
The only way to accurately test a turkey for doneness is with a calibrated food
thermometer. The color of the turkey meat can remain pink even when cooked to safe
temperatures. Smoked turkey meat always remains pink. As long as the turkey has reached a
safe internal temperature, you do not need to worry about it being pink.

What are hock locks?
A hock lock is a device that secures together the legs of a turkey. Many turkeys that you
purchase in the grocery store will come with the legs tied together using a hock lock. The
hock locks are most often made of heat resistant materials and can be left on during the
cooking process. However, leaving the hock lock on during cooking can make it much more
difficult to cook the bird evenly.

What do I do if I left the paper- or plastic-wrapped giblets in the
turkey during cooking?
If you mistakenly left the giblets in the turkey during cooking, remove them from the
cooked turkey and carefully examine them. If they were wrapped in paper then there is no
concern about the safety of the turkey. If they were wrapped in plastic examine the plastic to
see if it has melted or been altered in any way. If there is evidence that the heat has altered
the state of the plastic, do not eat the giblets or the turkey. If the plastic bag remained unaltered, the giblets and the turkey should be safe to eat.

**What do I do if I cooked the plastic pad and absorbent paper that is packaged under the turkey?**

If you accidentally cooked the plastic pad and absorbent paper check to see if it has been altered by the cooking process. If it has you must not eat the turkey, otherwise the turkey should be safe to eat.

Sources: Accessed 11/07/06
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