# **Alternate Methods for Cooking a Turkey**

Some people may use an alternate method for cooking a turkey because of oven failure, power outage; more than one large food may need cooking or taste preference. The conventional oven — although the most-often appliance used to cook a whole turkey — is only one way to get the big bird done and beautiful. Following are some alternate routes suggested by the USDA Meat and Poultry Hotline for cooking a turkey safely.

#### **Electric Roaster Oven**

An electric roaster oven serves as an extra oven to cook a turkey or roast. Generally, the cooking time and oven temperature setting are the same as for conventional cooking. Always check the roaster's use and care manual. (NOTE: If the electric roaster oven interior is dark, food could cook faster than in a light-colored interior just as a dark pan cooks food faster than a light or shiny pan in a conventional oven.)

Preheat the oven to at least 325°F. Place the turkey on the roaster oven's rack or other meat rack so the juices will collect in the metal oven liner. Leave the lid on throughout cooking, removing it as little as possible to avoid slowing the cooking and browning process.

Cooking bags can be used in the roaster oven as long as the bag does not touch the sides, bottom or lid. Follow directions given by the cooking bag manufacturer and use a meat thermometer to be sure the internal temperature in the inner thigh reaches 180°F.

DO NOT USE BROWN PAPER BAGS for cooking. They are not sanitary, may cause a fire and can emit toxic fumes. Intense heat may cause a bag to ignite, causing a fire in the oven and possibly adulterating the turkey. The ink, glue and recycled materials in paper bags can emit toxic fumes when they are exposed to heat. Instead, use purchased oven cooking bags.

### **Smoking a Turkey**

Smoking a turkey for the holiday meal is becoming a popular cooking method. Cooking is by indirect heat and is accomplished with a covered outdoor grill or smoker. The turkey isn't placed directly over the fire as you would a steak. Over direct heat, some parts of a large bird would soon burn or overcook in the time it would take to ensure doneness in all areas. Instead, a pan of water is place beneath the grilling surface to catch the fat and juices that drip from the turkey as it cooks. This prevents a flame up which could burn the turkey. Cooking is by smoky air rather than the direct coals used when grilling a steak or chicken parts.

Turkeys 16 pounds or less are the recommended size for safe smoking. A larger turkey remains in the danger zone — between 40 and 140°F. — too long. Do not stuff the turkey. Cooking times depend on many factors: the size and shape of the turkey, the distance from the heat, temperature of the coals and the temperature of the outside air.

### **Smoking on a Grill**

To grill, start with clean equipment and good quality charcoal. Build a pyramid of charcoal to one side, ignite the charcoal and let the coals get red hot. When



the charcoal has developed white powdery ash — about 20 to 30 minutes — place a drip pan in the center of the grill beneath where the turkey will be set. Carefully push the hot coals evenly around the edge and position the grill rack above. Place the prepared turkey, breast-side up, on the grill along with an appliance thermometer to maintain safe cooking temperature; then place the cover on the grill.

Replenish with about 15 briquettes every hour, as needed, to maintain 225 to 300°F. If desired, add water-soaked wood chips for desired flavor. Estimate cooking time at 15 to 18 minutes per pound. The turkey is done when a meat thermometer in the inner thigh reaches 180°F. For gas grilling, follow the manufacturer's instructions.

## **Using a Smoker**

Cooking turkey in a smoker, a cylinder-shaped cooking device, requires heat and moisture. The turkey is placed on the food rack above hot liquid in a drip pan. Beneath the pan is a container that holds the hot coals. Start with clean equipment, light the charcoal and, when the charcoal has developed a white powdery ash — about 20 to 30 minutes — put liquid in to the drip pan. Some smokers have a built-in temperature indicator. If not, place an appliance thermometer on the food rack to monitor the air temperature inside the smoker. Then, put the cover on. When the thermometer reaches 225 to 300°F., place the prepared turkey on the rack and quickly replace the cover. It is recommended that the turkey NOT BE STUFFED. Because cooking is at a low temperature, it can take too long for heat to reach the stuffing. Generally, smoking takes longer than grilling. Follow the manufacturer's estimated cooking times. Add fresh charcoal every hour to maintain 225 to 300°F. and ensure smoke. Add liquid to the water pan as needed. Turkey is done when a meat thermometer inserted in the inner thigh reads 180°F.

Water-soaked hard wood or fruitwood, in the form of chunks or chips, is often used to add flavor to the turkey as it is cooking. A soft wood (pine, fir, cedar or spruce) SHOULD NOT be used because it gives the food a turpentine flavor and coats everything with a black pitch or resin. For additional flavor, the turkey can be brine-soaked one or two days in the refrigerator before smoking.

# Cooking an Unstuffed Turkey from the Frozen State

It is safe to cook a turkey from the frozen state; however, it will take longer than a fresh or thawed bird. To determine approximate cooking time, consult a timetable for oven cooking. Use the timing for the size turkey you are roasting, then add 50% of that time to the original time.

This timing is approximate, so check the turkey for doneness often toward the end of the cooking time. Insert a meat thermometer in the turkey's thigh when it has defrosted enough to insert one. Cook to an internal temperature of 180°F.; then check for doneness in several places. When the turkey is pierced with a fork, juices should run clear with no trace of pink.

Giblet packages and the turkey neck may be found inside the turkey cavity and/or tucked under the flap of skin at the front of the breastbone. When the turkey has sufficiently defrosted, the packages can be removed carefully with tongs and/or forks during the turkey's cooking time.

- If the giblets were paper-wrapped before being inserted into the turkey cavity at the plant
   — which is the case with most of them there is no safety concern if they cook
   completely inside the bird.
- 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 turkey because harmful chemicals may
  have leached into the surrounding meat. If the plastic bag was not altered, the giblets
  and turkey should be safe to use.

It is not recommended to cook a turkey from the frozen state in an oven cooking bag. A safety concern arises when a consumer opens the bag to remove the giblets during cooking. Scalding may occur or spilled juices and fat may cause an oven fire. Cooking a frozen turkey in the microwave is not recommended because it can cook unevenly and might not reach a safe internal temperature throughout. The turkey may, however, be thawed (using the defrost setting) in the microwave, ONLY IF IT IS TO BE COOKED IMMEDIATELY AFTER THAWING.

### Microwaving a Turkey

Turkeys can be cooked in a microwave oven. Timing can vary because of wattage differences and the owner's manual should be followed for recommendations.

A 12 to 14 pound turkey is the maximum size most microwaves can accommodate. Uneven cooking can occur. Stuffing a turkey to be microwaved is not recommended. The time for cooking a turkey in the microwave is 9 to 10 minutes per pound on medium (50% power). Allow 3 inches oven clearance on top and 2 to 3 inches of space around the bird. The use of oven cooking bags allows more even cooking. Turkey parts may be in a dish with a tight cover or a cover with a vented top. Rotate the bird during cooking to insure even cooking. DO NOT STUFF TURKEY. Stuffing may not be cooked to the proper internal temperature when the turkey itself is done.

If the bird is defrosted in the microwave, cook it immediately. Always use a meat thermometer to determine doneness. Temperature should reach 180°F. when measured in the thigh. Let the turkey stand 20 minutes after removing from the microwave.

Source: USDA, Food Safety and Inspection Service.