Cooking a Turkey from the Frozen State

A common problem on Thanksgiving is waking up in the morning and realizing that the turkey has not been thawed, and there is not enough time to thaw the turkey in the refrigerator or in flowing water at 70°F, either of which can take hours. However, there is a very simple solution – cook the entire turkey from the frozen state. Research conducted by Dr. Peter Snyder of the University of Minnesota shows just how to do this, and the result is a safe, high quality turkey for your holiday meal.

Plan Ahead
Taking a 12- to 13-pound turkey from the frozen state to the table take 5 to 5-1/2 hours; don’t be tempted to rush the process by using oven temperatures higher than proven safe by Dr. Snyder’s research. Begin by setting the oven temperature to 325°F. It is much better that the turkey be done 30 minutes before mealtime than to rush and serve an undercooked turkey. Remove the wrapping from the turkey and put the turkey on a rack on a pan that has been covered with foil to make cleaning easy. You can also cook the turkey in a covered roasting pan if you have one. Just make sure to keep the lid on the roasting pan during cooking.

Put the turkey in the oven. Do not worry about the bag with the giblets (gizzard, liver, heart) in the neck cavity or the neck in the center of the turkey. They can be removed during cooking, after the turkey thaws. Cooking the turkey on a shallow pan on a rack assures even cooking. Cooking in a pan with sides shields the bottom of the turkey from heat, and the cooking on the bottom will be non-uniform. If you use a pan with sides, be sure to rotate the bird during cooking to ensure even heating.

Check temperature of the breast meat after 2 to 2-1/2 hours. Use a tip-sensitive digital thermometer to check temperature (it is not kept in the bird while cooking), or insert an oven-safe dial roast thermometer into the breast, because it is the slowest cooking part. After about 3-1/2 hours, remove the giblet bag, if you have not done so already. Check the temperature every 20 to 30 minutes as you near the end of the cooking time to prevent overcooking.

After 4-1/2 to 5 hours, a 12- to 13-pound turkey is nicely cooked. Check the temperature. The leg and thigh should be tender and at a temperature of 175 to 185°F, while the breast will be moist at a temperature of 160 to 170°F (it will reach the minimum 165°F temperature on standing). The pop-up timer (if there is one) should have popped. Do not rely on the pop-up timer alone to determine doneness. If the bird was purchased pre-stuffed, or you added stuffing part-way through, the stuffing must reach 165°F before the turkey is removed from the oven. By this point, the meat will easily have reached a safe internal temperature. A larger turkey of 15- to 20-pounds will take up to two additional hours to reach a safe internal temperature if cooked from the frozen state (7 hours total). Careful checking of the temperature along the way is critical to ensuring safety. Happy holidays!

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