Poultry and processed poultry meat products are popular foods for many Americans. Poultry is often seen as a food that is high in protein, nutritious, economical and versatile in preparation.

Poultry is also a very safe food as long certain precautions are taken when handling poultry meat products. Consumers should be careful when handling, cooking and storing poultry to make sure it is not contaminated by harmful microorganisms. Most cases of food poisoning occur because of improper handling, cooking or storage. Follow the procedures outlined here to enjoy your poultry safely.

Issues of food safety usually involve bacteria. To understand these issues, we must first understand some basic microbiology. There are two main groups of bacteria that are typically found on poultry meat: 1) bacteria that cause the poultry to spoil, and 2) bacteria that cause foodborne illness, with symptoms such as diarrhea and stomach ache.

Bacteria that cause spoilage can grow on poultry and poultry products even if the food is refrigerated. These bacteria can survive and reproduce at low temperatures, but usually not at temperatures below the freezing point of water (32 degrees F or 0 degrees C). When spoilage bacteria increase to large numbers, they cause food to have “off odors,” “off flavors,” and sometimes an abnormal appearance, such as a slimy texture. If you notice that a food you are preparing smells or looks bad, throw it away.

Bacteria that cause illness may not cause the same effects that spoilage organisms do. Most do not cause any off odors, off flavors, slimy texture or other differences in appearance. Even if these bacteria are present in large numbers, you might not be able to tell. Therefore, it is important to handle all raw poultry products with care at all times.

Bacteria that cause foodborne illness are of two types: 1) those that must be alive and able to grow once inside the body, and 2) those that produce toxins in the food. Salmonella is an example of a bacterium that, once eaten, must survive and reproduce inside the body to cause disease. Staphylococcus and Clostridium botulinum are bacteria that produce toxins in food. Such bacteria do not cause disease, but the toxins they produce can cause serious illness. While live bacteria such as Salmonella are killed by the cooking process, the toxins produced by Staphylococcus and Clostridium botulinum are not easily destroyed by heat. This is another reason why poultry must be handled properly at all times, both before and after cooking.

At the Grocery Store
Your responsibility for food safety begins with the selection of your food. When you are out shopping, make sure to purchase your groceries last, take them home immediately, and place cold items in the refrigerator right away. Make sure the food you purchase is in good condition when you buy it. Frozen foods should be rock solid, and refrigerated foods should be cold to the touch. Also make sure foods that are to be cooked, such as poultry and other meat, are not bagged with foods that are to be eaten raw, such as vegetables or cooked deli meats. Raw meats should be bagged separately and segregated as much as possible from other foods when placed in your vehicle for the ride home.
In the Refrigerator
Refrigerator temperature should be 40 degrees F (4 degrees C) or lower, but above freezing. Fresh, raw poultry should be frozen if it is not to be used within 3 days. If you plan to hold raw poultry in the refrigerator for a day or two, place the package of poultry on a plate so that juices can not drip onto other foods in the refrigerator. Raw poultry should be thawed in the refrigerator for use the following day.

In the Kitchen
One of the simplest and most effective ways to prevent the spread of bacteria is to practice cleanliness. Be sure to wash your hands in hot, soapy water for at least 20 seconds before preparing food, and also wash your hands frequently during the preparation of food. Always wash your hands after using the bathroom, changing diapers, handling pets, or any other such activity, whether or not you are preparing food.

Keep raw poultry and its juices away from other foods. After cutting raw poultry, wash your hands, knife and cutting board in hot, soapy water. If you have two cutting boards, use one exclusively for meat and poultry products and the other for other items such as raw vegetables. Do not use the same dish cloth to clean up spills of poultry juices and to clean or wipe cutting boards and counters. To sanitize your utensils and cutting boards, you can make a solution of 1 tablespoon of bleach in 1 gallon of water.

Cooking
Whole poultry should be cooked to an internal temperature of 180 to 185 degrees F (82 to 85 degrees C). Ground poultry should be cooked to at least 165 degrees F (74 degrees C). Do not trust pop-up temperature indicators that come with the product. Measure the temperature with a meat thermometer placed in the thickest part of the meat, or in the inner thigh muscle of whole poultry. When you slice the meat, make sure it is fully cooked and that juices are clear, not pink. If you are microwaving, cover the food with a microwave-safe cover and rotate during the heating process. Make sure the correct internal temperature has been reached before serving the food. Finally, do not serve sauces that have been used to marinate raw poultry.

Serving
When serving food, use only clean dishes and utensils. Do not leave food out for more than 2 hours. If the gathering will be long, heat only what you will need for each time period. For picnics, or any time a refrigerator is not available, make sure coolers are well stocked with ice and kept in the shade, if possible. Party foods should be held at 140 degrees F (60 degrees C), but not for more than 2 hours.

Leftovers
Use shallow containers for storing leftovers so that air will circulate well around the food. When reheating foods, make sure they reach a temperature of at least 165 degrees F (74 degrees C). Sauces should be brought to a rolling boil.

Food safety is a shared responsibility. By following these guidelines, you will be able to store, handle, and prepare food safely.