

# **DON'T TOUCH**

### FACT:

Salmonella causes one million foodborne illnesses in the United States each year. with 19,000 hospitalizations and 380 deaths.2 Even one drop of raw poultry juice could contain enough Campylobactera common food-related germ-to cause illness.3

### SCIENCE:

Poultry cross-contamination can occur from two major pathways:

- 1. Directly from raw poultry to products that will not receive further heat treatment (ready-to-eat foods).
- 2. Indirectly via work surfaces, hands, or other objects. Rinsing poultry increases the chances of spreading raw juices around the kitchen.

## **HIGH-RISK GROUPS**



Children: Children under 4 are nearly 5x times more likely than adults to get 5x times more likely than adults to get bacterial infections from food 4



**Seniors**: After the age of 75, many adults have weakened immune systems, increasing the risk of of contracting foodborne illness from germs like Salmonella and Campylobacter.5

## SCIENCE BEHIND THE MESSAGES

In 2014, chicken was linked to 23 outbreaks, and is the food category responsible for the second-largest number of foodborne illnesses. Contaminated food sickens nearly 48 million people in the United States every year—that's 1 in 6.1

There is a great deal of research behind the Don't Wing It Campaign (see page 2).

Refer to this information to help you discuss with consumers and the media the "why" behind the important safe handling behaviors of Don't Wing It.

## IN STORE:



## DISINFECT YOUR SHOPPING CART HANDI.E.

Use disinfectant wipes on surfaces, especially handlebar and child seat.

Why: 85% of people touch the shopping cart handle directly after handling raw poultry.6

Why: 49% had poultry juice on their hands when they touched the cart handle.7



### PLACE POULTRY IN PLASTIC BAG

Use plastic bags provided at meat counter to help avoid contamination in the cart.

Why: Placing raw poultry in a plastic bag reduces the risk of pathogens coming into contact with produce and other grocery items or spreading to your hands and shopping cart.

Why: 23% of chicken packages had high bacteria counts. 7% had campylobacter.8



#### **USE HAND SANITIZER**

Use hand sanitizer after touching raw and packaged poultry if soap and water are not available

Why: Using hand sanitizer in the store reduces your risk of cross-contamination through touch.

## AT HOME:



### PLACE IN THE FRIDGE OR FREEZER

Keep poultry in plastic bag and place on a low shelf to prevent leakage from contaminating other foods.

Whu: 59% of grocery store customers stored poultry without placing in a plastic bag. This common behavior could potentially contaminate any surface poultry touches in the home.

Why: Bacteria can live for days to weeks on refrigerator surfaces that are contaminated with poultry juice.9



### WASH HANDS BEFORE AND AFTER **HANDLING**

Use warm water and soap to clean hands and surfaces that have potentially come in contact with poultry or its juices.

Why: 90% of consumers crosscontaminated foods during meal preparation.10



For safety and quality it's best to buy poultry products before the "sell by" date marked on the package.

# **CHECK TEMP**

### FACT:

Bacteria grows rapidly in the temperature danger zone between  $40\,^{\circ}\text{F}-140\,^{\circ}\text{F}.$ 

### SCIENCE:

Poultry must remain below 40 °F in the refrigerator and reach an internal temperature of 165 °F when cooked to kill harmful bacteria that can cause foodborne illness

## AT HOME:



### THAW IN THE FRIDGE

Keep poultry at or below 40 F when thawing.

**Why:** Refrigerate fresh poultry at 40 °F (4.4 °C) or below for a maximum of 2 days. Refrigerate cooked poultry at 40 °F (4.4 °C) or below for a maximum of 4 days.<sup>11</sup>



### **USE A FOOD THERMOMETER**

Cook poultry to a safe temperature of 165 F to kill harmful bacteria.

Why: 50% of consumers were "likely to eat" a turkey patty that was cooked at a lower-than-safe temperature when they viewed it under LED lighting. Observational research showed that consumers perceived turkey patties as "more done" when viewed under new energy efficient lights.<sup>12</sup>

Why: In a nationwide survey, only 57% of consumers reported using a food thermometer for whole chickens; only 12—26% used one for smaller pieces.<sup>13</sup>

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- "Estimates of Foodborne Illness in the United States." Centers for Disease Control and Prevention. 15 July 2016.
- "Salmonella." Centers for Disease Control and Prevention. 30 Dec. 2016
- "Campylobacter." Centers for Disease Control and Prevention. 03 June 2014.
- CDC. Foodborne Diseases Active Surveillance Network (FoodNet): FoodNet Surveillance Report for 2012 (Final Report). Atlanta, Georgia: U.S.
- Center for Food Safety and Applied Nutrition. "People at Risk of Foodborne Illness - Food Safety for Older Adults." U.S. Food and Drug Administration Home Page. Center for Food Safety and Applied Nutrition. Sept. 2011.
- Donelan, A., Chambers, D.H., Chambers, E IV, Godwin, S., and Cates, S. 2016. Consumer poultry handling behaviors in the grocery store and in-home storage. Journal of Food Protection 79(4):584-588
- Chen, F., Godwin, S., Stone, R., Chambers, D., Donelan, A., Chambers, E IV., and Cates, S. 2014. Evaluation of chicken meat juice on hands, chicken packages, and contact surfaces during and after grocery shopping. Journal of Food Protection. 77(A):65.
- 8. Chen, F., Godwin, S., Green, A., Chowdhury, A., and Stone, R., 2014. Microbiological evaluation of poultry product packages from grocery stores in Nashville, TN. Journal of Food Protection 78(A):181.
- Chen, F., Godwin, S., Frederick, A., Wakefield, M. and Gagula, H. 2015. Survival of salmonella on the kitchen and food packages surfaces contaminated with raw meat juice. Journal of Food Protection 78(A):181.
- Maughan, C., Chambers, E IV, Godwin, S., Chambers, D., Cates, S., and Koppel, K. 2016. Food handling behaviors observed in consumers when cooking poultry and eggs. Journal of Food Protection 79(4):970-977.
- 11. Chicken from Farm to Table." USDA Food Safety and Inspection Service. 24 Mar. 2015.
- Chambers, E IV, Godwin, S. and Maughan, C. 2016. Changes in lighting conditions may negatively impact perception of doneness of cooked turkey patties. Journal of Food Protection. 79(A):123.
- Kosa, K., Cates, SC., Bradley, S., Chambers, E IV. And Godwin S. 2014. Consumer handling of raw poultry products at home. Journal of Food Protection 78(1):180-186.





