



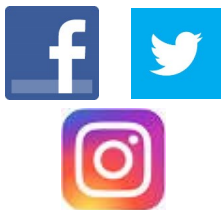
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Food Safety Education Month—Food Thermometers



A food thermometer is a great investment for safe food!

When cooking any meat, poultry, and egg products, a food thermometer is the best tool in your kitchen to determine if the food is done and safe for consumption.

What does “doneness” mean? It is when the food is cooked properly and has desirable sensory aspects of the food such as texture, appearance, and juiciness. These are subjective.

Safely cooked food is when pathogenic microorganisms, which can cause ill-

ness, are destroyed. The “doneness” temperature is the minimum internal temperature to destroy these harmful microorganisms. This temperature varies by food product. The food thermometer is the best tool to measure temperature accurately. It can also help keep from overcooking the food.

Using color to determine “doneness” is not reliable. Research has shown that using meat color is unpredictable. Hamburger patties may be brown in the middle, yet the temperature has not reached the 160°F minimum temperature. Also, the patty may be pink in the middle, yet the temperature has reached the 160°F temperature.

Remember these three temperatures:

- 145°F for steaks, roasts, chops, fish
- 160°F for ground meat; egg recipes
- 165°F for all poultry; reheating leftovers; casseroles

Source: USDA FSIS [Kitchen Thermometers](#) and [Safe Minimum Internal Temperature Chart](#)

2022 Urban Food Systems Symposium

The 2022 Urban Food Systems Symposium registration is now open! This event will be in Kansas City, MO on September 26-28, 2022.

The goal is to share knowledge on urban agri-

cultural production, local food systems distribution, urban farmer education, urban ag policy, planning and development, food access and justice, and food sovereignty.

Learn more about this event and registration at www.urbanfoodsystemssymposium.org/.

Willie and the Salad Bonanza Contest

Willie and the Salad Bonanza is a contest open to elementary, middle and high school teams, along with other K-12 community organizations such as 4-H, Scouts, FFA or other teams, interested in the scientific principles surrounding plant growth.

The challenge is to grow the largest amount of Space Hybrid spinach, Dwarf Blue kale, and Black-Seeded Simpson

lettuce in a communal container using no more than five-gallons of growing medium over a 45-day time span.

Registration is required. It is open from August 19 to September 21 and is free.

Winners will be announced on November 5th in three levels: Grade K-5, 6-8 and 9-12.



Source:

Tufts Health & Nutrition Letter, August 2022

Vegetable Prep Can Affect Flavor and Texture

The flavor and texture of vegetables can be influenced by how they are cut and prepared. The difference between a whole baked sweet potato and baked slices of sweet potato can be very different.

When more surface area is exposed to heat, this helps develop more natural sugars and caramel flavors.

Cutting vegetables to roast or sauté, can take flavor to another level because of the *Maillard*

reaction between the proteins, sugars and heat.

Experiment with different cuts and discover basic vegetables in a new way!

Preserving Summer Squash

Recommendations for canning summer squashes, including zucchini, that appeared in former editions of *So Easy to Preserve* or USDA bulletins have been withdrawn due to uncertainty about the determination of processing times.

Squashes are low-acid vegetables and require pressure canning for a known period of time that will destroy the bacteria that cause botulism. Documentation for the previous processing times cannot be found, and reports that are available do not support the old process. Slices or cubes of cooked summer squash will get quite soft and pack tightly into the jars. The amount of squash filled into a jar will affect the heating pattern in that jar. It is best to freeze summer squashes or pickle them for canning, but they may also be dried.



Try this Summer Squash Relish! It's tasty!

Photo: University of Nebraska

Source: [National Center for Home Food Preservation](#)

Can I Re-Can Commercial Food Products?

While it may seem like a good idea, this is not a recommended practice.

For example, to take a commercial salsa and re-can it into smaller jars can lead to some issues. They include:

- It is unknown what the original processing method or time was for the product.
- The original label and information is no longer there.
- If ingredients and allergens are not noted, someone could have serious health complications.
- If the original product is subject to a recall, how would these be traced?
- Re-processing will also negatively change the texture and flavor.

A better option is to contact the original company to see if they offer smaller sizes or gift options. A small business may be able to accommodate these requests.



Starting with fresh food will give the best quality and flavor after canning.



The Popularity of Mandarin Oranges

Browse the fresh fruit section of your favorite grocery store and you likely see easy-to-peel citrus fruit more available than ever.

These small mandarin fruits include clemen-

tines, tangerines, and satsumas. They are easier to peel than a standard orange and are a good source of vitamin C and beta-carotene which changes to vitamin A after consumption.

Currently, mandarin fruit consumption has been on the rise with U.S. consumers eating 7 pounds per year versus 9 pounds of oranges per year. It is projected that mandarin consumption will take over oranges in 2025.

Source:
Food Technology,
July 2022

Cooking Chicken Wings Safely



Take the temperature in the thickest part of the wing

165 F

165 F

Chicken wings are very popular. But *Salmonella* has been the spoiler due to improper cooking. Many cooks do not use a food thermometer or just use visual clues for doneness. The recommended internal temperature for all poultry products is 165°F.

A validation study, conducted at the [University of Nebraska-Lincoln](#) and published in the Journal of Food Science, was designed to determine the thermal lethality of *Salmonella* on fresh chicken wings cooked in a conventional convection oven and in an air fryer, two popular dry heat cooking methods. The goal was to validate cooking times and temperatures to guide consumers in safely cooking chicken wings.

Chicken wings were inoculated with a five-strain cocktail of *Salmonella*, then cooked in each appliance for 2, 5, 10, 15, 20, 22, or 25 minutes and at actual temperatures of 288.5°F-298.2°F in the convection oven and 340.7°F-364.5°F in the air fryer. In the end, all cooking times below 22 minutes still tested positive for *Salmonella*. Recipe sources can benefit with using this information to guide consumers to safely cook chicken wings.

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Safe Kitchen Tips in Food Preservation



Be safe in the kitchen as well as preparing safely preserved food.

Photo: KSRE

Cooking in the kitchen is a great learning experience for all ages. When it comes to food preservation, there are some potential hazards that can compromise personal safety. Here are some tips to remember:

- Stoves are hot! Turn pans with long handles away from other burners and small helping hands.

- Because of a lot of hot, wet food and liquid, keep potholders dry or use silicone rubber potholders for extra safety.
- When removing lids from hot pans and canners, tilt the lid away from your face so steam doesn't burn your skin.
- Match the size of canner to the size of the stove burner to avoid hot burner exposure.
- Knives are necessary for preparing food to preserve. Keep them sharp for safest use.
- Keep a fire extinguisher in the kitchen in case of a fire.

Learn more tips from [Penn State Extension](#).

ask
an EXPERT



Karen Blakeslee, M.S.



On the Web at
www.rrc.ksu.edu



Preserving Pears

Pears are a favorite fall fruit. There are several varieties that are suitable for canning.



Canned pears
Photo: Colorado State University
Extension Flickr

Asian pears have a lower acid content (pH >4.6) and must be acidified with lemon juice to be canned safely. For best results, use the hot pack method and process in a

water bath canner.

Other pears, such as Bartlett, Moonglow and Clapp's Favorite, are also suitable for canning. These have enough natural acid that they do not need to be acidified for safety. Pear halves can be processed in a water bath canner or pressure canner. Use these instructions from the [National Center for Home Food Preservation](#).

For more information on preserving pears, see [Michigan Fresh: Using, Storing, and Preserving Pears](#).