

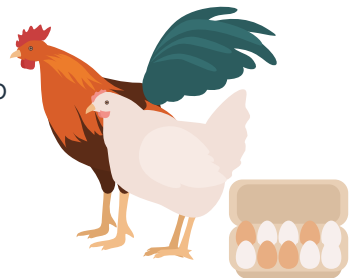


# Poultry - Chickens

**Theme Overview:** Poultry refers to the domestication of birds such as chickens, turkeys and ducks that are later harvested for food. Hens produce eggs, while broilers are chickens raised exclusively for meat production. Beginning in the nineteenth century, domesticated chickens have been a staple commodity in Oklahoma agriculture. Poultry production is dominant in the eastern part of the state.

Did you know that counting all the chickens in the world, there would be four chickens to every human? That is a lot of birds! Chicken is a great source of lean protein and is simple to prepare. When the meat reaches an internal temperature of 165°F, it is ready to eat.

**Food allergies:** Recipes can be modified to accommodate food allergies and preferences. The recipes included in Food, Fun, 4-H are intended to introduce new recipes and food combinations to participants.



## Recommended Cooking Order:

1. Cucumber Limeade 2. Fruit Pizza 3. Corn & Edamame Succotash Salad 4. BBQ Chicken Pizza 5. Bruschetta

**Reporting:** To receive the July Food, Fun, 4-H utensil kit, we need you to report back about your June experience. Reporting is easy and takes less than 5 minutes. Reporting is due by July 10. To report, email the following to [healthyliving@okstate.edu](mailto:healthyliving@okstate.edu):

- 1 photo preparing one of the Food, Fun, 4-H dishes
- 1 photo of family meal

Complete and include in the email the following statements about this month's theme, activities and recipes:

- "I like..."
- "I wish..."
- "I wonder..."


## Dinner Conversation Topics:

- If you could go anywhere in the world, where would you go?
- What was the hardest part of today?
- Would you rather travel back in time or travel into the future?
- What is your favorite thing about summer?

## Family Challenge:

- Have a hula hoop competition!
- Visit your local animal shelter
- No phones during dinner
- Try at least one bite of everything





**Fair Entry Idea:** Corn is an important crop in Oklahoma. Learn about additional Oklahoma crops by making a Crops in Our Lives poster. The Crops in Our Lives poster is category 4320. Use the appropriate grade: grades 3-5 is class 21, grades 6-8 is class 22, grades 9-12 is class 23.

**Oklahoma Fun Fact:** Oklahoma has its highs and lows. The highest point in our state is Black Mesa in the Oklahoma panhandle reaching 4,978 feet and the lowest point in Oklahoma is in McCurtain County which sits 324 feet above sea level. That is a difference of 4,474 feet!

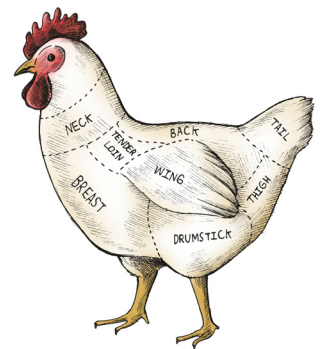
## Let's Learn About Chickens!

**Number of Chickens:** Oklahoma's 2020 broiler production totaled more than 204 million broilers. That is 7 million more than the total from 2018! Oklahoma's broiler production was valued at more than \$545 million in 2020.

**About Chickens:** Archaeologists discovered evidence revealing that chickens were domesticated over 8,000 years ago. Chickens are omnivores, meaning they consume both plants and meat, specifically insects. Their weight prohibits them from flying very high, but they can run up to 9 miles per hour. Males are called roosters and females are called pullets until they are old enough to lay eggs and become hens. Prime egg laying time is between 7 to 11 a.m. Eggs do not have chicks in them unless a rooster is present. If eggs are fertilized, they are incubated for three weeks before hatching.

**Raising Chickens:** The goal of poultry production is to raise broilers in the fastest, most efficient way. Large poultry operations raise broilers in barns. Broilers roam freely within the barn and are protected from external factors such as predators. Operations receive chicks from hatcheries and feed them until they reach market weight, which takes approximately six weeks. Broilers are then sold to meat processing facilities and the process restarts. If you want to raise your own chickens, check your city's Chicken Ordinance first.

**Cuts of Poultry:** Poultry birds have four primal cuts of meat: breast, thigh, drumstick, and wing. Chicken breast is one of the most versatile cuts. The white meat contains little fat and can be prepared in a variety of ways. Tenderloin, a cut attached to the underside of the breast, is slightly more tender than the rest of the breast. These two cuts are normally detached during processing and sold separately. Thighs are a dark meat that contains more fat and flavor compared to the breast. They are sold as either fillets or cutlets. Fillets had the skin and bone removed during processing, and cutlets have the skin and bone still attached. Drumsticks and wings are typically cheaper cuts, and often enjoyed for barbecuing. Drumsticks come from the lower part of the leg, taken from the knee down. The meat is dark, juicy and very flavorful. Drumsticks can be deboned, but you typically see them with the bone-in. Wings are a white meat and can be broken down into three smaller cuts. Poultry birds can be cooked whole or divided into these cuts.





# Cooking Chicken Safely

## Avoiding Cross-Contamination

- Safe handling raw meat, especially chicken, is crucial to avoid an illness from cross-contamination.
- When purchasing raw chicken, it should be cold to the touch. Place packaged chicken into the plastic bags available in the meat section. This keeps chicken juices off other foods and prevents contamination.
- If raw meat packaging appears bloated or swollen, DO NOT purchase or use that meat. Bloating indicates bacteria is present. The bacteria produces gas that cannot escape the package, which causes it to expand.
- Clean surfaces and tools that came in contact with raw chicken immediately after use.
- Do not rinse poultry before cooking. Rinsing raw poultry spreads tiny droplets of contamination around the kitchen and sink area. It can also cause the meat to lose some of its flavor.

## How to Store

- Promptly place raw chicken in the refrigerator on a plate when returning home from the store. Use within one to two days in the refrigerator, or freeze. A whole chicken can be frozen for up to 12 months. Chicken cuts can be frozen for up to nine months.
- Refrigerate cooked chicken within two hours. If you have a whole cooked chicken, cut into smaller pieces then refrigerate. Eat within three to four days. If freezing cooked chicken, consume within four months for best texture and flavor.
- If freezing for more than two months, place in a freezer bag to prevent freezer burn.

## How to Thaw

- The three safe thawing methods for chicken are in the refrigerator, microwave, or using cold water.
- The refrigerator method requires planning ahead. It may take one to two days to thaw, depending on the cut and size of chicken.
- Chicken thawed using the microwave needs to be cooked immediately. The microwave starts to warm or cook chicken, which can lead to bacteria growth.
- Place chicken in an airtight, leak-proof bag and submerge completely in cold water. Drain and replace water every 30 minutes. Cook immediately after thawing.



## Cooking Safely

- When cooking chicken, use a meat thermometer to ensure the internal temperature reaches at least 165°F.
- Chicken can be cooked from frozen state in the oven or on a stove-top. It is recommended to thaw chicken before cooking in a slow cooker or microwave.

### Source:

McGarry, Joyce. (2013). Michigan State University Extension. Chicken Safety. Retrieved from [https://www.canr.msu.edu/news/chicken\\_safety](https://www.canr.msu.edu/news/chicken_safety)



# Cooking with Herbs and Spices

Using fresh herbs is a quick way to transform your meals into exceptional. Herbs add flavor to dishes and can help cut back on salt, fat and sugar. Herbs may also offer additional health benefits. Researchers have found many herbs, fresh and dried, contain antioxidants that may protect against cancer and heart disease.

## Substituting Fresh Herbs for Dried

A general guideline for using fresh herbs is to use three times the amount you would use for dried herbs.



## Storing Fresh Herbs

- Store in an open or perforated plastic bag in your refrigerator crisper drawer. If you do not have perforated bags, take a regular plastic bag and use a sharp object to poke several small holes in it. Herbs can stay fresh for a few days with this method.
- To extend the herbs' freshness, snip the stem ends off in a diagonal direction. Place herbs in a glass filled with an inch of water. Cover loosely with perforated plastic bag to allow air circulation. Place in refrigerator and change water daily. Herbs may last a week or more if stored this way.
- Note: Flavor of herbs may lessen the longer they are stored.

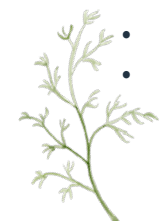
## Herb or Spice?

- **Herbs** are plants with fragrant properties that can be used for culinary purposes. Herbs are found in leaves, stems and roots. Common herbs include parsley, chives, thyme, basil, dill, rosemary, oregano, sage, celery leaves, marjoram, caraway and summer savory.
- **Spices** come from the bark, root, buds, seeds, berries, or fruit of tropical plants and trees. Cinnamon is a bark spice. Ginger, onion, and garlic are root spices. Cloves and saffron are buds. Yellow mustard, poppy, and sesames are seed spices. Black pepper is a berry, and allspice and paprika are fruit spices.
- **Dehydrated vegetable seasonings** are also available. Common examples include onion, garlic and shallots.
- **Seasoning blends** consists of a mixture of spices and herbs.

## Storing Herbs and Spices

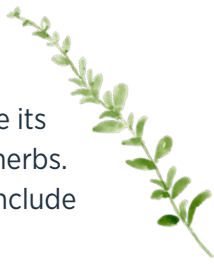
Properly storing herbs and spices helps prevent flavor and color loss. Avoid moisture, light, heat and air to maintain maximal quality. Follow these guidelines for the best herb and spice storage:

- Store in air-tight containers.
- Store in a dark place, away from sunlight.
- Avoid storage above the dishwasher, microwave, stove, refrigerator, near a sink, or heating vent.
- If using an open spice rack, store away from heat, light and moisture.
- Avoid adding dried spices and herbs directly from its container into a steaming pot. This helps prevent moisture from entering the container.
- Use a dry spoon to measure herbs and spices from its container.
- For best color retention store paprika, chili powder and red pepper flakes in the refrigerator, especially in hotter climates or during summer.





## When to Add Herbs During Food Preparation

- Unlike dried herbs, fresh herbs are typically added at the end in cooked dishes to preserve flavor.
  - Add more delicate herbs a minute or two before the end of cooking, or use to garnish the dish before its served. Basil, chives, cilantro, dill leaves, parsley, marjoram and mint are examples of more delicate herbs.
  - Less delicate herbs can be added towards the last 20 minutes of cooking. Examples of those herbs include dill seeds, oregano, rosemary, tarragon and thyme.
  - Some foods, such as breads and batters, will need herbs added at the beginning of the cooking process.
  - Fresh herbs can be added to refrigerated cold foods. Allow at least a couple hours for herbs to chill in cold foods.
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## Common Herb and Food Combinations

- Basil: in fresh pesto; pairs well with tomatoes, pasta sauce, peas and zucchini
- Chives: garnished on dips, potatoes, tomatoes and soups
- Cilantro: popular in Mexican, Asian and Caribbean dishes; pairs well with salsas and tomatoes
- Dill: carrots, cottage cheese, fish, green beans, potatoes and tomatoes
- Mint: carrots, fruit salads, parsley, peas, tabbouleh and tea
- Oregano: peppers and tomatoes
- Parsley: potato salad and tabbouleh
- Rosemary: chicken, fish, lamb, pork, roasted potatoes, soups, stews and tomatoes
- Sage: poultry seasoning and stuffings
- Tarragon: chicken, eggs and fish
- Thyme: eggs, lima beans, potatoes, poultry, summer squash and tomatoes
- Winter Savory: dried bean dishes and stews



## Tips for Reducing Fat, Sugar and Salt

**Reducing Fat:** Replace breading, batters, gravies, sauces and fried food with herbs and spices to cut down on calories. Removing a tablespoon of fat will remove about 10 grams of fat and 100 calories.

**Reducing Sugar:** Reduce or eliminate sugar by substituting for these sweet-tasting spices – allspice, anise, cardamon, cinnamon, cloves, ginger, mace and nutmeg.

### Reducing Salt:

- Savory and spicy flavors are the most effective in replacing the taste of salt. Examples of these spices include black pepper, garlic powder, curry powder, cumin, dill seeds, basil, ginger, coriander, and onion.
- When cooking pasta, skip the salt and flavor with basil, oregano, parsley and pepper, or use an Italian seasoning blend.
- Use powdered garlic and onion instead of their salt form. Use half of the amount in powdered form.



### Sources:

Hentges, Casey; Dunn, Bruce; Hillock, David (2020). Oklahoma State University Extension. Culinary Herbs for Oklahoma Gardens: Culture, Use and Preservation. Retrieved from <https://extension.okstate.edu/fact-sheets/culinary-herbs-for-oklahoma-gardens.html>

McClain County, Oklahoma State University Extension. (n.d.). Healthy Cooking with Herbs and Spices. Retrieved from <https://www.four-h.purdue.edu/foods/Cooking%20techniques.htm>

