

# Chapter 12

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## Understanding Poultry

# Chapter Objectives

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1. Explain the differences between light meat and dark meat, and describe how these differences affect cooking.
2. Describe four techniques that help keep chicken breast moist while roasting.
3. Define the following terms used to classify chicken: kind, class, and style.
4. Store poultry items.
6. Determine doneness in cooked chicken.
7. Truss poultry for cooking.
8. Cut up chicken into parts.

# Composition and Structure

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- The muscle tissue contains:
  - Water (Approximately 75% water)
  - Protein (20%)
  - Fat (up to 5%)
  - Small amounts of elements and carbohydrates

**Remember that muscles consist of *muscle fibers* held together by *connective tissue*.**

# Maturity and Tenderness

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- Tenderness of a piece of meat or poultry is related to connective-tissue and that connective-tissue increases with
  - Use or exercise of the muscle
  - Maturity and age of the animal or bird
- Young, tender birds are cooked by dry heat methods, such as broiling, frying, roasting and moist methods. Older tough birds are primarily cooked by moist heat.

# Free-Range and Organic Chickens

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- Allowed to move around freely and eat outdoors in a more natural environment
- No legal definition of “Free-Range” and “Organic”
- Organic = raised without chemical growth enhancers or antibiotics – but no guarantee

# “Light Meat” and “Dark Meat”

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Light Meat - Breast  
and Wings



*Less fat*

*Less connective tissue*

*Cooks faster*

Dark Meat –  
Drumsticks and  
Thighs



*More Fat*

*More connective Tissue*

*Longer cooking time*

# Grading of Poultry and Inspection

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- All poultry consumed in the U.S. is subject to USDA inspection
  - A guarantee of wholesomeness
  - Indicated by a round stamp
  - Required by law
- This ensures that products are produced under strict sanitary guidelines and are wholesome and fit for human consumption

# Grading

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- Based on Quality
- Indicated by a shield stamp and Letter Grade
- NOT Required by U.S. Law
- U.S. Grades
  - A, B, C (A = best)



# Grading

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- U.S. Grades based on
  - Shape of carcass
  - Amount of Flesh
  - Pinfeathers
  - Skin Tears, Cuts, Broken Bones
  - Blemishes and Bruises
  
- Most poultry used in food service is Grade A

# Classifications and Market Forms

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- *Kind* - Species, such as chicken, turkey, or duck
- *Class* - The subdivision of kind, depending on age and sex
- *Style* - Amount of cleaning and processing: Live, dressed, whole, in parts, and ready-to-cook
- *State of Refrigeration*: Chilled or frozen

# Chicken Classes & Ages

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- Rock Cornish Game Hen–5-6 weeks
- Broiler/Fryer–6-12 weeks
- Roaster–3-5 months
- Capon–under 8 months
- Hen/Fowl (female)–over 10 months
- Cock/rooster (male)–over 10 months

# Handling and Storing

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- Poultry can be purchased in many forms:
  - Fresh
  - Frozen
  - Cut-up
  - Portioned controlled (PC)
  - Individually quick frozen (IQF)
- Extremely perishable
- Do not cross-contaminate
- Often carries salmonella bacteria

## Handling and Storing (cont'd)

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- All poultry is a potentially hazardous food
- Fresh chickens and small birds can be stored on ice or at 32 to 34° F for no more than four days
- Frozen poultry should be held at 0° F and can be held for six months
- Frozen items should be thawed under refrigeration
- Do not refreeze poultry

# Doneness

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- Domestic poultry is almost always cooked well done (except for squab and sautéed duck breast).
- There is a difference between well done and overcooked.

# A Major Problem with Roasting

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A major problem with roasting is cooking the legs to doneness without overcooking the breasts. Consider:

- Roasting birds breast down for part of the time
- Basting with fat only
- Barding
- Roasting separately

# Dry-Heat Cooking Methods

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- Broiling
- Grilling
- Roasting
- The four methods used to determine doneness of poultry
  - Touch
  - Temperature
  - Looseness of joints
  - Color of the juices



# Chicken Facts

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- The most popular and widely eaten poultry in the world
- It contains white and dark meat
- Can be cooked by almost any cooking method
- It is readily available fresh and frozen