

# Poultry

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*For more information, contact:*

*Wheeler McCulloch, 4-H Extension Agent, Giles County*

*Aaron Fisher, Department of Animal Science, University of Tennessee*

*Kevin Downs, Poultry Science, Middle Tennessee State University*

*Lynne Middleton, 4-H Youth Development, University of Tennessee*

*Jennifer Richards, Department of Agricultural Leadership, Education and Communication, University of Tennessee*

## General Industry and Terminology

- Compare and contrast the segments of poultry production: primary breeders, broiler breeders, hatchery, growout farms, processing plants, table egg layers, and residential/backyard

## Health and Welfare

- Define the following terms: analgesic, anthelmintic, immunity, prevention vs. treatment of disease, drug residue, quality assurance
- Describe the symptoms of the following diseases/conditions in poultry: avian influenza, Newcastle disease, infectious bronchitis, *Salmonella*, aspergillosis, mycoplasma
- Describe the difference between internal and external parasites and explain how each affects poultry species
- Analyze and develop a biosecurity plan to use to maintain poultry health

## Nutrition and Feeding

- Define the following terms: carbohydrate, starch, fiber, lipids, amino acids, water soluble vitamins, fat soluble vitamins
- Label the major sections of the gastrointestinal tract: beak/mouth, esophagus, crop, proventriculus, gizzard, duodenal loop, pancreas, spleen, liver, lower small intestine, ceca, large intestine, cloaca
- Identify the following feedstuffs from samples: distiller's grain, corn gluten meal, dicalcium phosphate, trace mineral premix, vitamin premix
- Describe the different nutritional requirements for the changing life stages of poultry
- Analyze a feed tag for ingredients, guaranteed analysis and medicated status

## **Reproduction**

- Define the following terms: follicle, stigma, testes, vas deferens, sperm
- Label the parts of the reproductive tract and match them to gender: ovary, follicle, testes, vas deferens, epididymis, infundibulum, magnum, isthmus, uterus, vagina, cloaca, vent
- Identify components of the egg including cuticle, chalazae, germinal disc, vitelline membrane, nucleus of pander, latebra, light and dark yolk
- Define the blastodisc and describe how it becomes a blastoderm
- Evaluate eggs for exterior quality and broken-out interior quality
- Demonstrate how to candle an egg
- State the recommended temperatures and humidity levels in a hatchery setter and in a hatchery hatcher

## **Genetics and Selection**

- Describe pedigree, great grandparent, grandparent and parent flocks in the broiler industry
- Describe physical characteristics that separate a table egg layer from a broiler
- Differentiate between genotype and phenotype and give examples of each
- Differentiate between breeds used for residential production vs. commercial production

## **Carcass and Poultry Products**

- Identify the following retail cuts of a broiler carcass: breast fillet, tender, drumette, whole wing, leg, thigh, drumstick
- Define the following terms: live weight, carcass weight, dressing percentage, WOG
- Evaluate poultry carcasses to determine correct grades

## **Equipment and Record-Keeping**

- Explain why the following management practices are conducted and identify the equipment used in poultry production: chick navel temperature, vent sexing, hatchery residue analysis
- Understand the importance of proper record-keeping and how it relates to all areas of production

## **Extra Learning Opportunities**

Listed below are contests and other activities in which youth can showcase what they have learned in the 4-H Poultry Project

- Tennessee Youth Quality Assurance Certification
- Assist Younger Youth
  - Encourage other youth to participate in the 4-H Poultry Project.
  - Help other youth with showmanship or with learning Skillathon topics.
- Livestock Skillathon Contest
- Poultry Judging Contest
- Poultry Show and Showmanship
- Attend 4-H Academic Conference in poultry if in appropriate grade.
- Meet other poultry producers in your area and talk to them to learn how they manage their poultry flock



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