

Poultry

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Educational Topics

General Industry and Terminology

- Compare and contrast the segments of broiler production: primary breeders, broiler breeders, hatchery, growout farms, processing plants.

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 provide an example of each that affects poultry species.
- Analyze a biosecurity plan and explain how it is used 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.
- 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.



Poultry Intermediate Outcomes

- Compare and contrast the blastoderm versus the blastodisc of an egg.
- 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 commercial table egg layer from a commercial broiler.
- Differentiate between genotype and phenotype and give examples of each.

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, carcass grades, WOG.

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 where youth have the opportunity to showcase what they have learned in the 4-H Poultry Project.

- Youth for the Quality Care of Animals 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.
- Tour other poultry operations in your area and talk to the owner/manager to learn how they manage their poultry flock.

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