

Swine

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General Industry and Terminology

- Compare and contrast the following facilities used in swine production: breeding/gestation, farrowing, nursery, finishing barn.
- Label the following parts and regions of the body: chest, elbow pocket, knee, pastern, forerib, back, stifle, vulva, testicles, cushion of ham, dew claw.

Health and Welfare

- Define the following terms: analgesic, anthelmintic, immunity, prevention vs. treatment of disease, de-wormer, dehydration, drug residue, quality assurance.
- Be able to use medicine label in order to calculate dosage rate and withdrawal time.
- Demonstrate how to give a subcutaneous and intramuscular injection and how to properly discard of needle.
- Describe the following diseases/conditions in swine: coccidiosis, anemia, influenza, pseudorabies, heat stress, internal and external parasites.
- Understand the main parts of biosecurity and how it is used to maintain swine health.

Nutrition and Feeding

- Define the following terms: carbohydrate, starch, fat, fiber, amino acids, vitamins, minerals, phase diets.
- Label the major sections of the gastrointestinal tract: mouth, esophagus, stomach, small intestines (duodenum, jejunum, ileum), large intestines (cecum, colon, rectum).
- Identify the following feedstuffs: distiller's grain, corn gluten feed, steam-flaked corn, dried whey, blood meal, fish meal.
- Analyze a feed tag for ingredients, nutrient analysis and medicated status.

Reproduction

- Define the following terms: puberty, dystocia, ovulation, artificial insemination, natural service, cross-fostering.
- Label the following parts of a reproductive tract and match them to gender: ovary, penis, sheath, testicles, uterus, vulva, vagina, cervix.
- Outline the basic steps in and understand the benefits of artificial insemination.



Genetic and Selection

- Identify and be able to explain the purpose for the following breeds: Poland China, Spot, Hereford, Tamworth, Pietrain.
- Define the following terms: genotype, phenotype, dominant gene, recessive gene, heterozygous, homozygous, inbreeding, outcrossing.
- Understand and be able to use the following EPD and selection indexes: backfat (BF), loin eye area (LEA), pounds of leans (LBS), maternal line index (MLI), sow productivity index (SPI), terminal sire index (TSI).

Carcass and Pork Products

- Identify the following retail cuts of a pork carcass and be able to match them to their corresponding wholesale cut: pork fresh ham center slice, pork fresh ham shank portion, blade chops, butterflied chops bnl, country style ribs, loin chops, rib chops, whole tenderloin, arm picnic whole, blade steak, slab bacon, pork spareribs.
- Define the following terms: live weight, hot carcass weight, back fat thickness, loin eye area, marbling, dressing percentage, USDA grade, percent muscle, fat free lean.

Equipment and Record-Keeping

- Identify the following equipment used in swine production: ammonia sensor, nipple waterer, pig resuscitator, pig obstetrical forceps, breeding spirette, transfer needle, farrowing crate, heat lamp, heating mat.
- Maintain records of swine operation and use them to make management decisions.

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 Swine Project.

- Youth for the Quality Care of Animals Certification.
- Assist younger youth.
 - Encourage other youth to participate in the 4-H Swine project.
 - Help other youth with showmanship or with learning skillathon topics.
- Livestock Skillathon Contest.
- Livestock Judging Contest.
- Swine Show and Showmanship.
- Attend 4-H Academic Conference in Swine if in appropriate grade.
- Tour other swine operations in your area and talk to the owner/manager to learn how they manage their swine herd.

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