

Pork Production -



griculture surrounds us in California and it all starts with where water flows. Water conservation is environmentally responsible and important for the sustainability of pork production. Water contributes to every aspect of raising pork. Its helps provide the optimal environment for swine to grow. Swine producers ensure their animals receive fresh drinking water, high quality feed, and good animal care. There is much more to the story, but the water is where it all begins on the journey from **Farm to you**!

From Farm to You: PORK





FARROWING: Female pigs, known as gilts* and sows, are bred and give birth in a farrowing* crate to a litter* of 12 to 13 piglets* after a 3 month, 3 week, and 3-day gestation period. Piglets are kept with their mothers for milk containing important nutrients for 21 days until they are weaned. To prevent injury to the sow* and littermates, piglets' teeth are clipped, tails are docked, and ears are notched for identification when they are still in the farrowing crate.

NURSERY: The nursery is a holding facility also known as a "weaning" barn. Piglets are taken from the sow and placed into an ideal environment with solid food and fresh water sources. Piglets are typically kept in the nursery for six to eight weeks, or until they gain up to 50-60 pounds and achieve optimal health.



GROWING & FINISHING: Piglets are sent from the nursery to the "grow-to-finish" barn where the average starter pig" weighs 35 to 60 pounds. Providing adequate fresh water is vital in raising healthy pigs. To get pork from farm to your table, hogs require fresh water for feed, drinking and processing during the final stages of production.





FOOD SERVICE & RETAIL: Pork is ranked as the number one meat consumed worldwide with an increasing demand for pork products. Various pork products are sold and shipped across the U.S. and abroad for restaurants and grocery stores to sell to consumers.





Introduction: Swine are some of the most versatile animals in the livestock industry with the ability to use all the animal for various by-products.

Objective: Students will know and identify examples of each.

California Standards: CC ELA: SL.5.1, SL.5.4, SL.6-12.1; NGSS: 5-LS2-1, HS-LS2-7.

Materials: Examples of each by-product category AND/OR 8 pictures of different by-products (Hair, brain, skin, fatty acids and glycerin, blood, internal organs, meat scraps, and bones). Visit: *learnaboutag.org/resources/fact/pork.pdf* for a pork fact sheet.

Procedure:

Think, pair, share on the importance of utilizing all the animals' carcass. Brainstorm with a partner the importance of creating by-products and list what products can be made from swine.

Define pork by-products. Share and discuss the eight categories of pork by-products with an example of each. Hair (meant for artist's brushes and upholstery), brain (used to make medicine), skin (gelatin, footballs, luggage, clothes, and drumheads), fatty acids and glycerin (weed killers, crayons, make-up, fabric softener), blood (plywood adhesive and fabric printing/dyeing), internal organs (insulin and heart valves), meat scraps (pet food), and bones (glue, buttons, fertilizer, and water filters).

Provide samples of each by-product category. Have students touch, taste, smell, and guess which category each by-product belongs to. Have students write their observations down. Discuss observations as a class and reveal the correct answers.

Activity: Safety First

Introduction: Maintaining a safe environment for our animals being raised for food production is an important concept to analyze. In swine facilities, pigs have their snouts on the ground naturally searching for food, making the pigs more susceptible to picking up any germs that may have been brought in on the farmers shoes. To prevent the pigs from getting any germs, farmers follow safety protocol to protect their animals. This is what is referred to as biosecurity. It is an essential part of swine production to maintain overall health and protect the herd* from any biological agents that could be brought in.

Objective: Students will develop and explain the importance of biosecurity system to a "Farrow-to-Finish" swine facility by creating their own facility to protect from biological agents.

California Standards: CC ELA: WHST.6-8.6, RST.6-8.9; NGSS: MS-LS2-2, MS-LS2-4, HS-LS2-7.

Supplies: Example pictures of an "Farrow-to-Finish" facility AND/OR a tour of a swine facility (e.g. farrowing, nursery, growing, and finishing stages). Internet source, paper, markers, scissors, tape, etc.

Directions:

Have students research what biosecurity is and why it is used in swine production. Have students research historical biological agents that helped develop an "Farrow-to-Finish" facility.

In pairs, have students creatively design their own swine production facility.

In pairs, have students creatively design a way to display their research using the materials provided.

Vocabulary Key

*Farrow—To give birth *Gilt—Young female pig that has never had piglets. *Herd—A group of pigs. *Litter—Refers to the baby pigs born to a sow at one time. *Piglet—A young pig up to weaning age. *Pig—Generic term, usually applies to immature swine. *Pork—The fresh or salted flesh of swine when dressed for food. *Sow—Female pigs that has had piglets. *Swine—Generic term, interchangeable with pig.

For more information about pork, visit LearnAboutAg.org.



"Photos courtesy of National Pork Board"

