

Commodity Fact Sheet

Pork

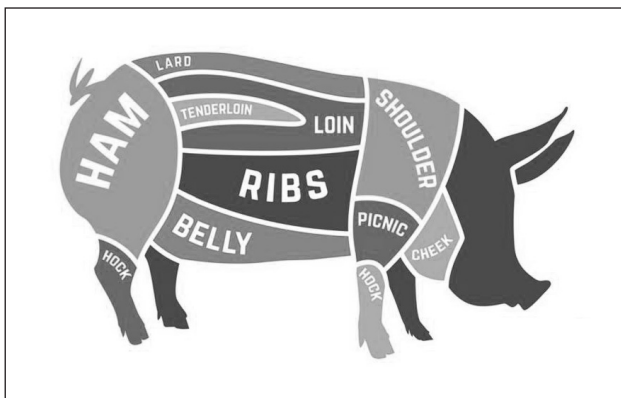
Information compiled by California Pork Producers Association

How Produced – While a majority of California farms use modern farming practices, some farms are specific niche markets. Today's farming combines the best of traditional farming practices with the benefits of modern technology. Many California farmers believe that raising pigs in barns helps them to better care for their animals by controlling their environment. Many California pigs are raised in barns that use technology like fans and heaters to keep them comfortable all year long. Pigs are kept in clean living conditions and provided fresh feed and water. Most pigs eat a diet that consists of corn and soybeans and is called a ration. Nutritionists carefully develop pig rations based on the age, size, and nutrient requirements that changes throughout their lifetime. Pigs have stages of growth from birth to market; farrowing – weaning –growing –finishing. Baby pigs are raised by their mother or sows, for the first month, then they are weaned. Weighing between 12-15 pounds, they go to a nursery where they are fed solid food, provided fresh water, and kept warm. They stay there for 4-6 weeks and are fed a grower ration. They will complete their growth cycle at an average market weight of 270 pounds around six months of age.

History – There are fossils indicating wild pig-like animals roamed the earth 40 million years ago! Pigs were domesticated in China around 4900 BC and were raised in Europe by 1500 BC. Columbus took pigs on his trip to Cuba in 1493. Spanish explorer Hernando de Soto, the “father of the American pork industry” was the first person to bring pigs to America in 1539. With just 13 pigs he settled in Florida. Once in America, de Soto's pig herd grew to 700. Explorers used the pigs not only for eating as fresh meat but for salt pork and preserved pork. When de Soto died, some pigs ran off and became ancestors to today's feral or razorback pigs and some were given to the Native Americans to keep the peace. The pork industry in America had begun. Pig production spread quickly through the colonies. Hernán Cortés brought hogs to New Mexico in 1600 and Sir Walter Raleigh brought sows to Jamestown Colony in 1607. As pioneers moved west, they took their pigs with them in crates that hung from covered wagons. Pork processing facilities started popping up in major cities. Pigs were first processed in Cincinnati, which became known as “Porkopolis.”

Varieties – There are two major forms of domestic pigs, European (*Sus scrofa*) and Asian (*Sus indicus*). Chinese

pigs were bred for superior meat quality and adaptability. In European pigs, fatness was selected for. The genetic crossbreeding of these two varieties in the 18th and 19th centuries formed a broad genetic basis for today's domestic pig. There are over 180 species found in every continent of the world except Antarctica. The top eight breeds are Yorkshire, Hampshire, Berkshire, Landrace, Duroc, Chester White, Poland China and Spot. In California, crossbreeds are the most desirable animal in weight, conditioning, and carcass quality.



Commodity Value – In 2017 California ranked 27th in the United States in pork production with an inventory of 177,000 pigs valued at over \$15 million dollars and cash receipts over \$23 million annually. Although California makes up less than 1% of the total US pork production, it accounts for 13% of the national pork consumption. The US is the third largest producer and consumer of pork and pork products globally, exporting over 5 billion pounds of pork annually. Pork production and pig prices vary in a predictable manner during the calendar year. Such variation is called seasonality or seasonal variation.

Top Producing Counties – There are 4 top processing plants that are located in the counties of Los Angeles, Stanislaus, Glenn and Merced providing more than 11,000 animals per day. Many swine operations provide breeding pigs, project pigs, roaster pigs, and/or products and services for sale. Pigs are raised in the Central Valley, along the coastal regions and in Northern and Southern California encompassing every county in the state. Many agriculture colleges like CSU Fresno, CSU Chico, UC Davis, Modesto Junior College, and Reedley College breed, raise and sell pigs.

Nutritional Value – A 3-ounce portion is an excellent source of protein, thiamin, B6, phosphorus and niacin, and a good source of potassium, riboflavin, and zinc. It contributes 6% of the calories in a 2,000 calorie diet. Pork is 16% leaner and has 27% less saturated fat than 20 years ago due to improved breeding and feeding methods, as well as better meat trimming.

For additional information:
California Pork Producers
(916) 441-2249
Website: www.calpork.com



Pork Activity Sheet

PORK BY-PRODUCTS

FATTY ACIDS AND GLYCERINE

- Weed killers
- Crayons and chalk
- Make-up
- Fabric softener

HAIR

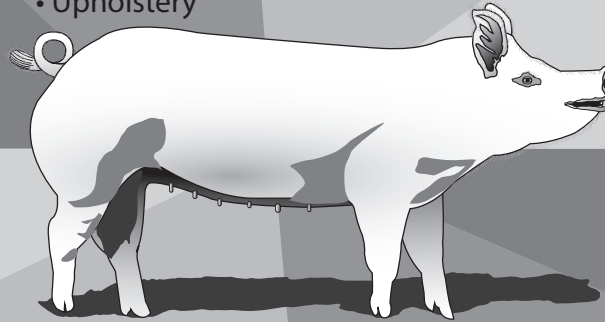
- Artist's brushes
- Upholstery

BRAIN

- Cholesterol

SKIN

- Gelatin
- Footballs
- Luggage, purses, gloves and shoes
- Drumheads



BONES

- Glue
- Buttons
- Fertilizer
- Water filters

BLOOD

- Plywood adhesive
- Fabric printing and dyeing

MEAT SCRAPS

- Commercial feeds
- Pet food

INTERNAL ORGANS

- Insulin
- Heart valves

Lesson Ideas

- Research the changes in pig production in the last 50 years and explore why pigs have larger litters, use less water, and produce less waste.
- Compare pig operations in the Midwest with California. Why are there more? Are they bigger?
- Identify and illustrate the top 8 breeds of pigs.
- Research heritage breeds of pigs and the history of their domestication. Create a timeline.
- Research marinades. Do an experimental taste test on meat that has been marinated and meat that has not been.
- Create a recipe using pork and a nutritional brochure. Share with the class.
- Study the process of ear notching and identify how to read a pig's number.
- Research the history of using pig by-products to create insulin. Research other animal/medicine connections.
- Create a cartoon panel that follows a pig's journey through their four phases of life from birth to market.

Fantastic Facts

1. A gilt is a female pig that has not given birth; a sow is a female pig that has given birth.
2. Farrowing is the act of giving birth to baby pigs.
3. Sows generally have litters of 12 and can have two litters per year.
4. Pork is the world's most widely eaten meat followed by chicken and beef.
5. Pig heart valves can be surgically implanted in humans to replace weakened heart valves.
6. When hot dogs were first sold, street vendors called them 'red hots,' and they didn't come on a bun. Instead, a pair of white cotton gloves came with each to keep fingers cool while eating.
7. Like humans, pigs are omnivores, meaning they eat both plants and animals.
8. Pigs don't have sweat glands. That is why they like to roll around in the cool, wet mud.
9. Wall Street was once a long solid wall constructed on Manhattan island to control roaming herds of wild pigs.

Lesson Plan: "Living High on the Hog" and other idioms

Introduction: Idioms are "sayings" that offer advice. They mean something different than what they "literally" mean. For example, Living High on the Hog means to be wealthy or When Pigs Fly, means never or unlikely to happen.

Objective: Students will create and illustrate an idiom book.

California Standards: CC ELA: L.4-12.5

Materials: Idiom examples, paper, pencils, crayons, blank paper.

Procedure:

1. Read and discuss different idioms and their origin.

2. The following examples are a good place to start the class discussion:

- It's raining cats and dogs.
- A penny for your thoughts.
- Barking up the wrong tree.

3. Have students brainstorm in small groups to share common idioms they have heard or used.
4. Research the history and meaning of each idiom.
5. Choose the idioms discovered by the students and create a classroom book that includes the idioms, illustrations, real meanings, and history.