

Illinois

Ag Mag

Pork

An agricultural magazine for kids

Pigs and Their Diet

A pig's diet is made up of ground corn, soybeans, wheat and sorghum. Illinois and Iowa are among the top states for corn and soybean production, and the same is true for hogs. Could there be a connection between hogs, corn and soybeans? Corn and soybeans are an important ingredient in a hog's diet, so many farmers who raise hogs also raise corn and/or soybeans too.

Feed makes up about half of the cost of raising a pig! Much research goes into making sure the hog's diet is balanced. Animal nutritionists look at many combinations of feed ingredients to find the best mix of nutrients and minerals. The hogs eat a variety of these mixes at different stages of their life so they get the nutrients they need.

Pork In Our Diet

Pork is an important part of our diet! It provides our body with protein that builds strong muscles and helps our bodies grow. Pork is also a great source of iron, zinc and B vitamins.

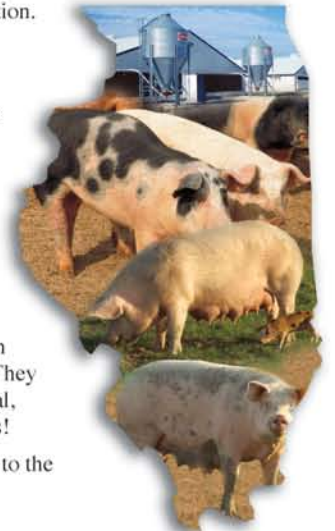
The start of the health craze in the early 1980s forced pork producers to rethink how they fed and bred their pigs. Pigs produce lard (lard is a fat used for cooking), but the demand for it was lessening as more people turned to more nutritious vegetable oils. They also wanted meat with less fat.

Modern technology has brought consumers the leanest bacon, ham, sausage and other pork products possible. Electronic equipment allows pork producers to monitor the fat content of the pig and adjust the pig's diet to produce very lean meat. This equipment, along with breeding techniques, have helped farmers choose leaner animals for breeding stock and supply consumers with lean, tasty products they want. Compared to ten years ago, pork has 30 percent less fat, 14 percent fewer calories and 10 percent less cholesterol.



Illinois Rules!

- Illinois ranks #4 in the US in pork production.
- In 2004, Illinois produced 1.83 billion pounds of pork.
- There are 3,400 farms in Illinois that raise hogs, and more than 4.1 million hogs – 430,000 breeding hogs and 3.67 million market hogs.
- DeKalb County is the number one producer of hogs in the state. There are 203,000 head of hogs in that county alone!
- Illinois hogs eat 94 million bushels of corn each year. That's 573,170 acres of corn! They also eat 1.3 billion pounds of soybean meal, made from 28 million bushels of soybeans!
- The pork industry contributes \$1.9 billion to the Illinois economy each year.



Most of the corn and soybeans grown in Illinois are used for hog production.



After The Farm

You'd be surprised at the huge number of things that are made from hogs! There are over 500 by-products. Examples of hog by-products are chewing gum, animal feeds, leather, glue, combs, buttons, plastics, paintbrushes, plywood, adhesive, insulation, upholstery, cosmetics, antifreeze, cellophane, floor waxes, cement, crayons, chalk, matches, putty and linoleum.

A number of helpful products are made from hogs. Insulin, a medicine that helps people who have diabetes comes from hogs, as well as dressings for severe burns and heart valves for human survival.



To Market... To Market

Mr. Wilkinson has loaded his semi trailer with hogs that are ready to go to market. As he pulls onto the parking lot of the processing plant where he will sell the animals, he drives his truck over a scale.

For Mr. Wilkinson, the truck scale read	77,020 lbs.
The semi truck and trailer weighs	31,960 lbs.
Mr. Wilkinson weighs	180 lbs.
How much do the animals weigh?	_____
If there are 170 pigs in the trailer, what is their average weight?	_____
If the price per pound of pigs is \$.45, and the cost for Mr. Wilkinson to raise them is \$.40 per pound, how much does Mr. Wilkinson make on each pig?	_____
How much does he make on all 170 pigs?	_____

ANSWERS: 7500 lbs., 250 lbs., \$375

Specialty Care

Just as with any newborn, pigs are easy targets for disease. Livestock producers work hard to keep their animals healthy and free from disease. They keep them clean, feed them healthy diets and control the temperature when possible. Throughout the growth period of the animals, until shortly before they go to market, livestock receive special vitamins, feed supplements, minerals and antibiotics.

Clean Means Clean All Around

Producers also take care of the environment around their farms. They are concerned about their neighbors, as well as their own families. New research is finding ways to improve the quality of the environment and reduce odor.

Sometimes you can smell manure on a hog farm. Manure is very



important to the agricultural cycle. As plants grow, their roots pull nutrients from the soil. These nutrients can be replaced with fertilizers – like manure. Crop farmers like to use manure on their fields.

Not only does it add nitrogen(N) and phosphorus(P) to the soil, it is inexpensive. And now livestock farmers have a good use for their animal manure.

Farmers can apply manure on the surface of fields with large irrigation units. They can also inject it into the ground with a machine, which increases the nutrients in the ground, and reduces runoff and odor.

Before it's put on the ground, the manure is in underground pits, lagoons, or a storage facility. These holding areas are lined with clay, plastic, or concrete so that none of it leaks into the ground. When it's time to spread the manure, it is pumped into the irrigation system or injector.

Pork producers may also reduce odors by planting tree buffers. Trees filter the air and reduce dust and smell. Ventilation systems in the barns help keep the air moving. Even the food the pigs eat can make a difference. Researchers have created special feed mixtures that can reduce the smell of their manure.

Farrowing House

This is where the piglets are born. A mother pig, or sow, has a special pen called a farrowing stall with rails to separate her from the piglets. This way she won't hurt the piglets when she lays down or turns over, but she can still nurse (provide them with milk). The pens have heat lamps to keep the piglets warm.

An average litter is eight to twelve piglets. Piglets weigh about two and a half pounds at birth. They stay in the farrowing house for three to four weeks, or until they reach 10-15 pounds. Most sows will give birth to two litters each year.



Nursery

Once the piglets reach the right weight, they are weaned from their mother and moved to the nursery. For the next six weeks, they are fed a special mix of corn, wheat, soybeans and other grains to help them grow.

Finishing

Then the pigs are moved to the finishing barns, where they are fed grains like corn and soybeans. Surprisingly, pigs don't overeat! One pig eats about 870 pounds of corn and 120 pounds of protein and minerals to reach a market weight of 250 pounds.

Barns Keep Pigs Comfortable

We can't control the weather, but barns can! Barns help keep pigs cool in the summer and warm in the winter. Pigs don't have sweat glands like humans do. Since they can't sweat, the heat can make them sick. They used to have to roll around in mud to keep themselves cool. The barns keep temperature and humidity constant, and they are well lit and clean. Sprinklers also spray cool water on the pigs when it is really hot.



Farmer Talk

Here are some common words farmers use when they talk about pigs.

Pork is food products from pigs, such as pork chops, bacon, ham, sausage, and pork roast.

Swine is a broad term for pigs.

Boar is a father pig.

Barrow is a male pig not used for breeding.

Gilt is a female pig that has not given birth.

Sow is a mother pig.

Farrow means to give birth to piglets.

Piglet is a baby pig.

Litter means piglets (usually 8-12) born at the same time.

Wean means the piglet quits getting milk from his mother and eats on his own.

Producer is another word for farmer. Someone who raises livestock is usually called a producer.



Pork Offers Career Connections



It takes all kinds of people to raise healthy livestock and help feed the world. Some careers in pork production include breeding, veterinary medicine, meat packing, herd management, farrowing/nursery unit management, grower/finisher management, herdsman, breeding specialist, swine service specialist, banking, hog buying, futures trading, computer programming, geneticist, food science specialist, and animal nutrition.

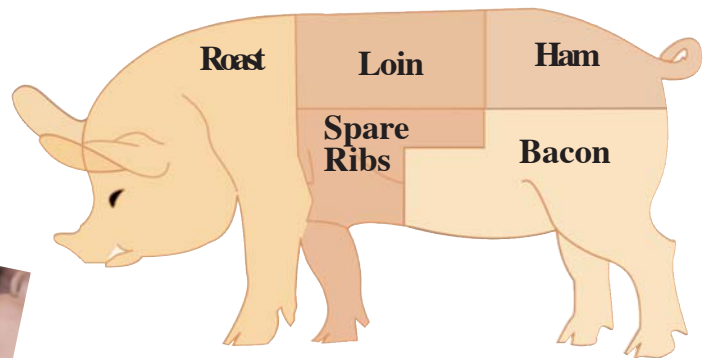
Nearly 18,500 people work in the pork industry in Illinois alone! Check out jobs in the agriculture industry at www.agriculture.purdue.edu/USDA/careers.

Cuts of Meat



Pig Points

- A pig's squeal ranges from 110-115 decibels. Compare that to the noise from a Concorde supersonic jet, which is about 112 decibels!
- Pork is the world's most widely eaten meat!
- Pigs are smart! They are the fourth smartest animal!
- Pigs are pregnant for three months, three weeks and three days.



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