

Pork&OurDiet

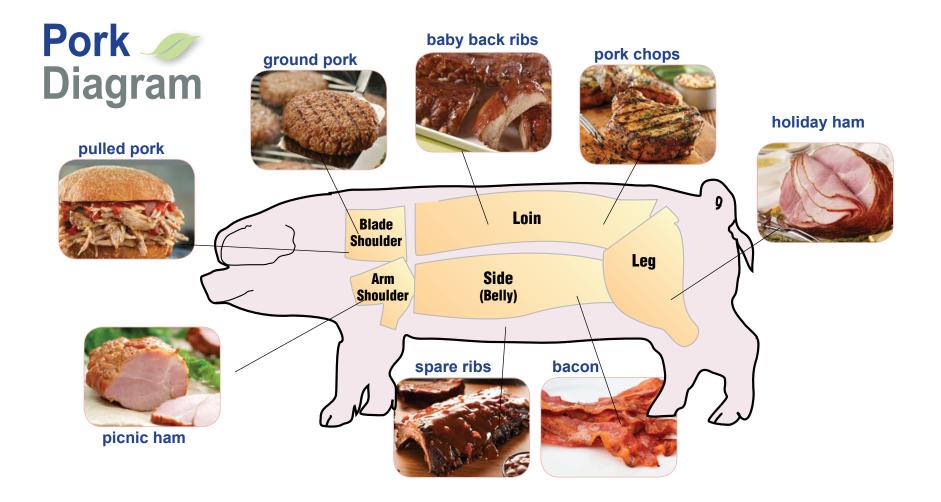
Pork is an important part of our diet. It provides our body with protein that builds strong muscles. Pork is also a great source of iron, zinc and B-vitamins.

Modern technology, along with the work of farmers, have brought consumers the leanest bacon, ham, sausage and other pork products possible. Electronic equipment allows farmers to monitor the fat content of a pig and adjust the pig's diet to produce very lean meat. This equipment, along with breeding techniques, allows farmers to choose leaner animals for breeding stock and to supply consumers with lean, tasty products they want.



ByTheNumbers

- Illinois currently ranks 4th in the U.S. for the number of pigs raised.
- Illinois pig farmers produce nearly 2 BILLION pounds of pork each year. That's more than 6 BILLION pork chops!
- There are 2,000 farms in Illinois that raise more than 4.75 million pigs 500,000 breeding pigs (sows and boars) and 4.25 million market pigs.
- The pork industry contributes \$1.8 billion to the Illinois economy annually, and it is directly connected to over 10,500 Illinois jobs.
- Illinois pigs eat 155 million bushels of corn each year. Which equals about 911,000 acres of corn.
- Pigs in Illinois also consume 1.55 million pounds of soybean meal each year, made from 28 million bushels of soybeans.



FarmerTalk

There are many different terms farmers use to talk about pigs. Here are just a few:

- Boar is a male used for breeding.
- Barrow is a male pig that is not used for breeding.
- Farrow means to give birth to piglets.
- · Gilt is a female pig that has not given birth.

- Litter means a group of piglets born at the same time. Litter sizes are usually between 8-12 piglets.
- Piglet is a baby pig.
- Pork is the food and products that come from pigs. Pork chops, bacon, ham, sausage, and pork roast are some examples of pork.
- Sow is a female pig that has given birth. Pigs are pregnant for three months, three weeks, and three days.
- Wean means the piglet is big enough to eat on its own and doesn't nurse anymore.

FarrowToFinish



- Farrowing Barn

The Farrowing Barn is where piglets are born. A mother pig, or sow, is put into a special area called a farrowing stall. This stall has adjustable rails to separate the sow from her piglets. This way she won't hurt the piglets when she lies down or turns over, but she can still nurse (provide the piglets with milk).



- Nursery

Once the piglets reach the right age and weight, they are weaned from the sow and moved to the nursery. Here the pigs get a specially mixed starter diet of corn, soybeans and supplements of vitamins and minerals to help them stay healthy and grow quickly. The pigs will stay in the nursery until they reach around 50-60 pounds. At this point some gilts, female pigs that have not given birth, are selected and sent for breeding.



- Finishing

From the nursery, pigs are moved to the finishing barns. Here they will continue to eat grains like corn and soybeans until they reach a market weight of roughly 280 pounds. Pigs are one of the few animals that won't overeat. A pig eats about 870 pounds of corn and 120 pounds of protein and minerals to reach market weight.

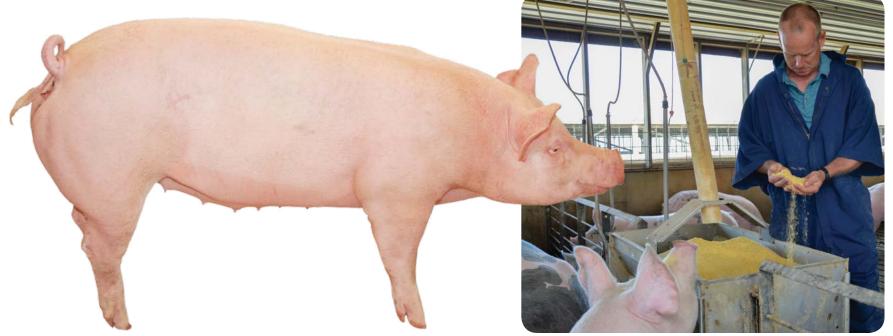




Pigs&TheirDiet

Illinois and Iowa are among the top states for producing pigs and the same is true for corn and soybeans. Could there be some connection between pigs, corn and soybeans? Corn and soybeans are important ingredients in a pig's diet. Because a pig's diet is mostly made up of corn and soybeans, many farmers who raise pigs will often grow corn and/or soybeans, too.

Feed makes up for more than half the cost of raising a pig! A lot of science and research goes into making sure the pigs get a balanced diet. Animal nutritionists look at many combinations of feed ingredients to figure out which mixture of nutrients and minerals are the best. The pigs will eat a variety of these mixes at different stages of their life so they get the nutrients they need.



FarmersKeepPigsHealthy —

Here in Illinois, we have very extreme weather! Our winters are very cold and summer heat can be very hard on the pigs. Pigs cannot sweat because they don't have sweat glands like humans do. Since they can't sweat, pigs can overheat very easily which can make them sick or even lead to death. We can't control the weather, but barns can. Keeping the pigs in the barns keeps them out of these varied conditions. Pig barns are kept at a constant comfortable temperature and humidity.

Like the temperature, the lighting and ventilation in most pig barns are now automatic. The pigs receive food and water automatically, as well. Adjusting the conditions for the pigs in this way helps to improve the health of the animals while keeping the barn workers safe.

Another way farmers and veterinarians keep pigs healthy is through responsible antibiotic use. When the pigs are most vulnerable, right after being weaned from their mothers, antibiotics prevent illnesses. As the pigs grow older, antibiotics are used to treat illnesses such as infections, just like they are used in humans. Because many pigs live together in one barn, it is important to monitor and treat the health of every pig. Once a pig becomes sick, illness can spread quickly through the entire barn. Antibiotics are the most effective way to treat these illnesses and to control the spread of disease.



Farmers& **The**Environment

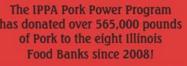
Farmers are always concerned about the environment around them. After all, their families live close to the farms. Agriculture researchers are constantly looking for new ways to improve the quality of the environment and reduce odor.

Sometimes you can smell manure on a pig farm. Manure is a very important part of the agriculture cycle. As plants grow, they pull nutrients up from the soil through their roots. Eventually, the nutrients need to be replaced. These nutrients can be replaced with fertilizers - like pig manure. Manure is a great source of nutrients that plants need to grow – like nitrogen (N) and phosphorus (P).

Farmers inject manure into the ground about six to eight inches with a machine. This machine helps increase the nutrients in the ground and reduces the runoff and odor. Before the manure is applied it is held in large underground pits, lagoons or other storage facilities. These holding areas are lined with clay, plastic or concrete to make sure that none of the manure leaks into the ground. When the farmer is ready to apply manure, it is pumped into a manure tanker and ready for application.



PorkFarmersGiveBack



THAT'S OVER 2.3 MILLION SERVINGS OF PORK!

Thank you Illinois Pig Farmers!









Careers...

Pam Janssen

Pig Farmer Minonk, Illinois

Tell us a little bit about your job?

I have many different jobs on the farm depending on the time of year. Some of the things I do include working in the fields, working in the pig barns taking care of the pigs and helping take care of the cattle. I also keep records and do bookkeeping for the farm.

What might a typical day on the job look like for you?

I start my day between 6:00 am and 7:00 am. I try to do a few things in the house before I head out to the pig barns to start chores. Some of those chores are watering the sows, taking care of newborn piglets, feeding and checking on the nursery pigs and feeding and checking the finisher pigs. After I get all that done, I help whoever needs an extra hand with whatever else needs to get done.

What is the best part of your job?

There are several reasons why I like my job. I love to see piglets be born, and I can set my own schedule. The best part is I am able to talk to people about our farm and how we raise our pigs.





How has education helped you in your current role?

I married a farmer. I enjoy being outside and working alongside my husband. I learned how to raise pigs by watching and helping. I do go to classes to keep up to date on the new technology, genetics and management issues needed to raise pigs.

What makes your job different from other careers?

Our farm has been here since 1874 and will be here for future generations raising pigs and farming the land. Being able to raise food to help feed the world is a very big job. I love what I do and I love being part of a very big picture.

Careers..

Dr. Aaron Lower, DVM



Veterinarian Carthage Veterinary Service Carthage, Illinois

Tell us a little bit about your job (specifically how you might work with pigs and pork producers).

I am one of nine vets here. Together, we work with pig producers across the Midwest and internationally. In total, we work with about 30 different pork producers and about 1.4 million pigs each year. I perform regular health checks and some emergency work. To maintain the health of the pigs, I design preventative plans and perform bio security audits to help keep diseases out of the farms. When a problem is found, I diagnose the issue and put together treatment plans.

What might a typical day on the job look like for you?

I usually get up early, anywhere from 4-6am. I drive directly to the farms; the pigs don't come to us. I start by reviewing production records and looking for any possible issues. If there are any issues, I work to diagnose them by taking spit, hair, or blood samples from the pigs for testing. Then I work with farm staff, training them to implement any programs we've designed so they can take care of the pigs on a day to day basis.

What first got you interested in your field?

I grew up on a feed lot in Illinois. Once I spent time with vets, I realized how integral they were to the operation. As I saw all the different ways they helped the operation, I was more and more drawn to them. I went to the University of Illinois to study animal sciences, and then went on to graduate from the vet school there as well.

What advice might you give to a young student interested in veterinary science?

Make sure you get exposure to all the different facets of veterinary science. Beyond taking care of cats and dogs, and even livestock, there is still a lot of different areas in the field. There is also research, regulations, diagnostics and other specialties and skills to consider. You must also be very persistent. It's a long road to being a veterinarian. Do what you can to set yourself up for success early.



What other positions have you held in your career, and how did they help you get to your current position?

Before professionally being a vet, I was a member of the FFA where I started to develop a helpful skillset and network of people. In college, I latched on to different internships for exposure and sought out research opportunities. These helped me develop leadership skills and taught me how to get my scientific mind in place.

Careers...

Thomas Titus

Pig Farmer & Spokesperson U.S. Farmers & Ranchers Alliance (USFRA) Elkhart, Illinois



Can you describe your farm for us?

My wife, Breann, and I are sixth generation pig farmers in Logan County, Illinois. Alongside my father-in-law and brother-in-law, Dave and Brett Conrady, I help manage Tri Pork, Inc.'s pig farm, with a primary focus on sows delivering over 16,000 baby piglets every year. In addition to marketing 12,000 pigs annually, my family also raises goats and chickens and grows corn, soybeans, and hay. Over the last 54 years, the farm has grown from a 240-acre plot supporting one family, up to 1,700 acres supporting multiple farm families, and is now cultivating the seventh generation to join the deep heritage on the family's farm.

What is a typical day of work like for you?

The great thing about being a farmer is there is no typical day. Every day brings on new tasks. I spend most of my time caring for pigs and helping with what we like to call our pig maternity ward. We have 750 mother pigs (sows) that will have 10 or more baby piglets per litter, 2.5 times per year. I help to ensure the piglets are born healthy and happy by making sure they are warm, dry and full of their mother's milk. During the spring and fall, all hands are on deck around the farm to help with the planting and harvest of our corn and soybeans. One of the greatest things about being a farmer is how our 'office scenery' changes each day. By working in nature, we have the opportunity to see new life each and every season as we care for our animals and land.

What is the best part of your job?

The best part of my job is also the most challenging part of my job; the people. Today, the relationship between where food comes from and where it ends up only seems to be growing more distant. So, we place a greater emphasis on reaching out to our consumers and talking about what we do on our farm to help rebuild the consumer's connection with the American

farmer. I work with the U.S. Farmers and Ranchers Alliance to speak to consumers at multiple events throughout the year. I rely heavily upon social media networks like Facebook, Twitter and Instagram to share pictures and stories about what our daily life looks like on the farm. By bringing families out to the farm, sharing our farm on social media, and talking about our farm at different events, we are able to show how hard we work to care for our animals and to grow our crops in order to provide safe and healthy food for our family and yours.

We also try to stay very involved in our local community. We really like to work with local food banks and charitable events throughout Logan County by donating our time as well as our pork.

What is one thing that you want people to know about pig farming?

At a young age, it was instilled in me, "our animals before ourselves." The care and comfort of our animals is our number one priority. Raising healthy pigs translates to safe and healthy food. To get pork from farm to table, it takes many people.

What other careers are involved in the process?

On our farm, I work alongside many people. We are an extended family that is made up of long term employees on the farm as well as family members. We have multiple Sow Farm Managers to help make sure the momma pigs, or sows, are happy and healthy. They also take care of the baby piglets when they are born. Once the piglets are weaned from their mothers and ready for more solid food, we have a Nursery Manager that ensures all the pigs know where to find their new feed and water. This person also makes sure the pigs are healthy and growing well. The pigs then transition to our next farm employee, the Grow/Finish Manager, who takes care of the pigs until they are ready for market at about 300 pounds. Feeding these pigs takes a lot of corn. My brother in-law makes sure we always grow enough corn to keep our pigs well fed. Before the corn is ready for the pigs, it is ground into smaller particles and other essential nutrients and vitamins are added. Then, our Nutritional Manager ensures that our pigs' feeders are always full.

PorkofAges

The first pigs came to the Americas aboard the ships of Christopher Columbus. However, the first real population of pigs in the Americas is a result of a later explorer, Hernando de Soto. De Soto brought a herd of about 13 pigs across the ocean from Spain. It is said that when de Soto introduced pork to the Native Americans, they enjoyed it so much they attacked de Soto's men in order to gain the prized meat. At the same time, some of de Soto's pigs ran away into the wild and became the first wild pigs, or Razorbacks, that now roam the southern United States.

During the War of 1812, a New York pork packer named Uncle Sam Wilson shipped a boatload of several hundred barrels of pork to U.S. troops. Each barrel was stamped "U.S." on the docks, and it was quickly said that the "U.S." stood for "Uncle Sam," whose large shipment seemed to be enough to feed the entire army. This is how "Uncle Sam" came to represent the U.S. Government.



To learn more about pork visit www.ilpork.com

This issue of Ag Mag has been provided by:







This Ag Mag complements and can be connected to the following Common Core and Next Generation Science Standards: Common core State Standards: ELA-Literacy. RI.4.2; RI.4.3; RI.4.4; RI.4.7; RI.4.10

Next Generation Science Standards: From Molecules to

Organisms: K-LS1; 1-LS1; Heredity: 3-LS3