

Farm animals: We need them!

Animals and humans have helped each other for centuries. Animals provide us with milk, eggs, meat, fiber, work power and recreation. They give us improved nutrition and better health. Thanks to animals, we have better lives. In return, humans give farm animals things they need: food and water, attention, health care and shelter to protect them from harsh weather and predators.

Good Stuff!

Every time you bite into a burger, munch on cheese or drink some milk, you know it tastes good. But animal products are also good for you. The nutrients are terrific!

What builds and repairs tissues and helps you grow strong? It's protein, and animal products are a great source of protein. White and red meat, eggs, milk and other foods from animals also provide Vitamin B-12, a vitamin humans need and can not get from plants. Animal products give us calcium, phosphorous and iron plus other vitamins and minerals. A daily diet of both animal and plant products adds up to power-packed nutrition!

Ho! Land Rovers!

Only about one-fifth of the land in the United States is suitable for growing crops. The rest has poor soil, gets too little rainfall or is too rocky and rough for farm machinery. Millions of acres are covered by forests. Even though we can't grow food crops on these lands, livestock can often graze there. As livestock eat grass, they turn it into food and fiber we can use. They build the steaks, roasts and burgers that give us protein. They produce the wool and leather we use to make clothes and leather goods.

Soil Builders

It's a fact! Where there are animals, there is also **manure**. Manure is the waste that passes out of an animal's digestive system after most of the nutrients have been absorbed by the intestines. Cow pies are an example.

But even manure has its value. It **fertilizes** the soil, making it richer for growing crops.

That's why farmers spread manure and mix it into the soils of their fields. They are careful not to put it on growing food crops or let it get into water systems, though, because bacteria from manure can make people sick.



This tank holds liquid manure that is being mixed into the soil.

Photo Courtesy Balzer, Inc.



Cooking Fuels

In some energy-poor countries like India and Pakistan, families burn manure to cook their foods.

Did you know?

- Have you ever wondered what happens to the left-overs when we process grains, vegetables and other foods for human use? Farm animals help us recycle them! They eat things we don't, like soybean meal, beet and citrus pulp, corn stalks, pea vines and wastes from canning factories. They consume food products that are rejected because they don't meet quality standards (less than perfect sizes, jagged edges, faded colors, etc.). Animals even eat left-overs from some school lunches and restaurants at the Mall of America! Without animals, these wastes would end up in our landfills.
- Farm animals provide jobs and income for many people, both on and off the farm. How many different jobs can you list that depend on farm animals? Here are a few examples: school cook, rancher, milk hauler, veterinarian, meat inspector.



a. hewria

b. clier

c. rocn

d. soettaop

The world is home to about 380,000 kinds of plants. About a hundred kinds are regularly grown and eaten as human food. More than half of the world's food from plants comes from only four crops. Unscramble the letters and name them!

More than one-third of the world's people depend on hewria as a main food and another one-third on clier.

Did you know? Pigs can't sweat. In hot weather, outdoor pigs wallow in mud to cool themselves. Indoor pigs cool off with sprinklers and fans.

To market, to market to buy a lean pig!

Where do those pigs come from? Did you say hog farms?

Some hog farmers raise **piglets** from birth until they're full-grown and sold. This is called a **farrow-to-finish** operation. Other hog farmers handle just one part of raising pigs. On some farms, **sows** are bred and the piglets kept only until they are **weaned** or cared for in a **nursery**. The piglets (called **feeder pigs** when they reach 30 - 60 pounds) are then sold to a different farmer. That farmer raises the feeder pigs to **market weights**.

1

Sows carry the piglets for about 114 days before birth. A newborn piglet weighs about 3 lbs. and is about 11 in. long. Each baby pig will usually have eight or more brothers and sisters as **littermates**.



Baby pigs are carefully watched and cared for so they stay healthy and grow quickly.

Photo Courtesy MN Extension Service

3

Hogs are usually sent to market when they reach a market weight of 250 pounds. Most are sold to **meat processing plants**. The hogs are hauled by truck from the farm to the meat processing plant. They are checked for quality and health as they come from the farm.

Photo Courtesy Minnesota Agriculture in the Classroom



2

On Minnesota farms, pigs live in modern buildings that protect them from weather, predators and other dangers.

Photo Courtesy Minnesota Board of Animal Health



Sows rest in crates while their new babies nurse. The crate protects piglets from being accidentally rolled on or trampled by the sow.

Photos Courtesy Farmweld, Inc.



Did you know? Pigs are intelligent, clean and one of the few animals that won't overeat.

4

Take away the fat, bones and waste and a 250-pound hog ends up a carcass of 180 pounds. From this, about 140 pounds of pork will reach the meat counter. The rest ends up as **by-products**.



Here the meat is cut, inspected and wrapped.

Photos Courtesy Ellison Meat Company



Pork is inspected many times as part of the the processing cycle. Food safety and healthy meat are the number one concerns. Pork is sometimes made into things like frankfurters, sausages or lunchmeat. A frankfurter machine can make 36,000 links an hour!

Photo Courtesy Hormel Foods



Did you know? A 3-lb. piglet born on Christmas Day will go to market about May 25 or earlier. It needs 4 1/2 to 6 1/2 months to reach market weight.

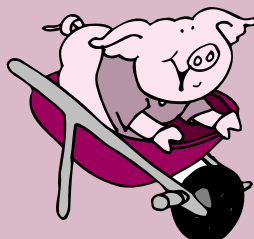
Makin' Bacon... and More!

The parts of an agricultural product that can't be used as food go from trash to treasure as by-products. A by-product is something of value that's made in addition to the main product.

A hog is not all chops, ham and bacon, but nothing is wasted. The parts of a hog not sold at the meat counter are important in our lives. You may be surprised to learn insulin from hog pancreases has been used to treat people with diabetes. That's not all. Hog heart valves are used to replace damaged human heart valves, and skin from hogs is used to treat victims of serious burns. You may enjoy other hog by-products each time you brush your hair, pass a football, beat a drum or speed down the sidewalk on your skateboard. How can that be? Make the matches below.

1. Blood
2. Bones
Horns
Hooves
3. Hair
4. Hide
5. Fats
Oils
Glycerol

- A. Antifreeze, chewing gum, lard, paints, candles, cellophane, weedkillers, crayons, putty, cosmetics, floor wax
- B. Animal feed, adhesives, plastics, fabric inks and dyes, leather finishes
- C. Gelatin, combs, umbrella handles, bone china, glue, buttons
- D. Air filters, bristle brushes, felt padding, upholstery
- E. Drum heads, footballs, wallets, harnesses, shoes, luggage, gloves



Answers on page 8.

No Hogwash!

Pigs don't have to be rounded up like other livestock. Back in the days when they were raised in large fields, they came running at a special call from the farmer. Some common pig calls are Soo-ee, Hy-yee-aaa, Who-o-eeey, P-eee-agg. Check out a hog-calling contest for great fun!

Hog Odor—Not!

If you've visited a hog farm or live near one, you know swine manure has an odor that can carry on winds for hundreds of feet from the barn. Modern hog farmers and researchers are working hard to find new ways of odor control.



Careful management, planting trees, adding deodorants to manure pits, adding materials to foods to cut odors in the pig's digestive tract and using absorbents to soak up odors all look promising. They're even filtering odors through compost. How would you like to be a sniff tester on this job?

5

Pork chops, bacon, ham, sausage, ribs and pork steaks are just some of the things that come from hogs. Hog products from Minnesota are exported to countries all over the world. Our biggest customer is Japan.

