

WHY SHOW JUNIOR LIVESTOCK?

The junior livestock program is a unique opportunity to use live animals to develop youth. Youth learn something about agriculture and livestock production and develop an appreciation for the livestock industry. However, the main objectives are to teach life skills and help youth become productive citizens. The experience of youth owning and working with animals, being responsible for their care, health, and growth, and exhibiting them in a competitive environment is a tremendous character building process. Junior livestock projects help develop life skills such as: leadership, communication, decision making and problem-solving skills. Character building, record keeping and the development of personal responsibility are other skills youth can develop from their involvement in the broad range of programs in junior livestock.

GENETICS AND ENVIRONMENT

A pig's growth and appearance are determined by its genetics and environment. Genetics are the traits inherited from its parents. Environment includes such things as nutrition, facilities, care, exercise, health, etc. The following information describes how to provide an environment that allows the show pig to reach its genetic potential.

NUTRITION

There are five basic nutrients in pig rations. They are water, crude protein, metabolizable energy, minerals and vitamins.

Water

Water is the most important nutrient. It must be supplied in optimal amounts for proper growth, development and performance. Even with free access to automatic watering devices, low flow rates may cause the pig to consume inadequate amounts of water. Check to make sure the water barrel is functioning every feeding.

Crude Protein

Proteins supply material to build body tissues. These include hair, hooves, skin, internal organs, and muscle. If an animal takes in more protein than it needs, the nitrogen that is attached to the protein molecules is passed off through urine and the material that is left is converted to energy or body fat.

Protein levels should range between 18 percent and 22 percent. When pigs are in the growing stage they will need higher protein levels for proper growth. In the fattening stages the protein levels can drop so the pig will get fat, but not grow so fast.

Metabolizable Energy (ME)

Carbohydrates or fats are important for proper maintenance of the body, growth, movement and heat production. This nutrient needs to be at efficient concentration levels. The proper use of ME depends on the level of other nutrients, especially protein. Fat levels should range between 3.5 percent (finishing pigs) to 6.5 percent (growing pigs). Finishing pigs should be on the lower end of fat percentage and growing pigs need to be toward the higher percentage.

Fat Table

Stage	Early Wean	Start	Grow	Finish
Weight	11-25	25-100	100-200	200-240+
Fat %	6.5	5.5	5.0-4.5	3.5

Minerals

The major minerals that need to be in a pig's diet are calcium, phosphorus, salt, iron, manganese, zinc, copper, iodine and selenium. These minerals are critical for bone growth as well as other important body functions.

Vitamins

Vitamins are important for good health, performance, proper growth and body functions. The following 11 major nutrients should be in their ration: A, D, E, K, riboflavin, pantothenic acid, choline, B12, biotin, and folic acid.

Proteins and Amino Acids

Muscle is made of proteins. Protein is made up of amino acids. Muscle protein contains twenty different amino acids. Ten of these are known as essential amino acids. These cannot be manufactured by the pig and must be supplied by the feed.

Growing pigs require more Lysine than other essential amino acids. Lysine is often called the limiting amino acid. If a pig's diet does not provide the proper amount of lysine and other essential amino acids it will develop less muscle, more fat, and grow more slowly than a pig that receives the proper concentration of amino acids.

Pigs are single-stomach animals like people. Cattle and sheep are ruminant (four stomach) animals. They are able to produce essential amino acids in the ruminant, the first of the four stomachs.

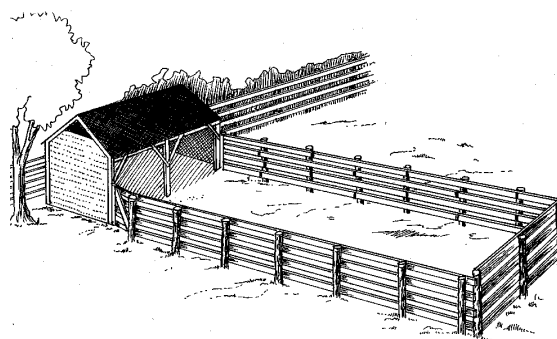
The following table gives the minimum requirements of protein and lysine levels for pigs at different weight stages. Note that barrows require more lysine than gilts.

Protein Lysine Table

Stage	Early Wean	Start	Grow	Finish
Weight (pounds)	11-25	25-100	100-200	200-240+
Protein percent	22%	21%	20%	18%
Lysine Percent	1.25%	1.15%	.95%	.75%

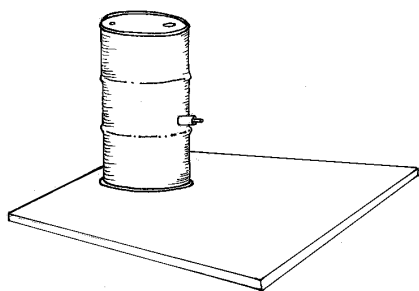
FACILITIES AND PEN PREPARATION

The ideal temperature for feeding pigs is 60 to 70 degrees F. Adequate shade and protection from extreme temperatures, whether hot or cold, should be provided. Make sure the pen is secure and safe. There should be no sharp obstacles to cut or injure the pig. About two weeks before the pigs arrive, spray all pen areas and structures with a bleach mixture of 1 part bleach to 4 parts water. This will kill any bacteria that could cause the pig to become sick.



If building the pens for the first time, pay careful attention to loading and unloading requirements. Make access easy to get pigs to their exercise area.

Keep the ground soft to enable the pigs to exercise and build muscle as they move around the pen. Sand is the best pen surface. This strengthens the pigs and helps them stay sound. You can also roto-till the ground to help break it up and keep it soft.



Be sure the water supply is always clean and plentiful. A cleaned and disinfected barrel with a water nipple attached to the bottom provides a great water supply for show pigs. It is a good idea to set the barrel on something or attach the nipple high enough so the pigs can easily access the water. A platform for drinking is one option. This decreases mud puddles and parasite infestations.

EARLY CARE OF NEW PIGS

It is important to spend time with the pig in its pen every day. If the pig is hard to tame, try offering treats like vanilla wafers. However, keep treats to a minimum as this could affect its eating habits. While spending time in the pen, keep it clean. Rake in holes the pig has dug, and pick up trash that can cause injury such as wire, broken

feeders or pieces of plastic paper. These can cause internal damage if the pig swallows them.

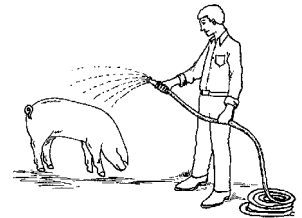
Touch the pig as often as possible. This can include brushing, scratching, rubbing, etc. Spending time with the pig helps you notice changes in its behavior and/or appearance that indicate if it is getting sick, sunburned or has other ailments that would affect its rate of gain.

FEEDING METHODS

A self feeder is the best way to feed young growing pigs. If they have never been on a self feeder, fasten the lid so they will learn where to eat. After a few days they will learn to lift the lid, and you can let it down. This allows them to feed whenever they want to, day or night. Some pigs stay on self feeders the entire time; others need to be hand fed when they start getting fat. This is noticeable when they start putting on fat in the jowl area or the elbow pocket, at approximately 170 pounds. If you have a large framed pig, you may not have to start hand feeding until it's heavier. However, if you have a smaller framed, more early maturing hog, hand feeding needs to start sooner to ensure that the pig is lean and market ready for the show.

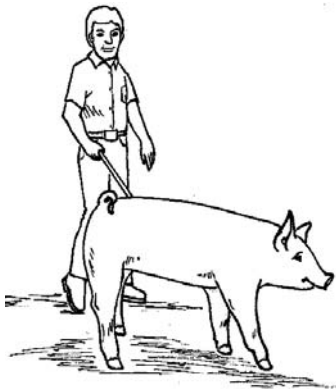


In the heat of the summer it is a good idea to wet down the pigs several times a day. This cools them off and improves their appetite.



EXERCISE

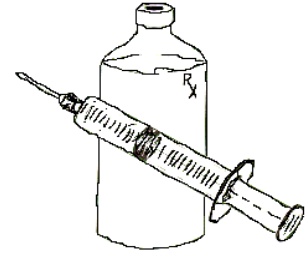
Exercise should start about two months before the show. One half mile, three times a week, is sufficient. You can increase this if your pig is getting fat and needs to be trimmed down. Pigs do not sweat so don't let them get too hot. Be sure to exercise only when it is cool, either in the early morning or late evening. If your pig does get too hot, let it cool down slowly. Do not pour cold water over the pig to cool it off. This can cause your pig to go into shock and die of a cardiac arrest (heart attack).



When walking your pig use a bat, slapper or cane. This teaches the pig to respond to commands such as turning. Don't hit it on the ham or hip because it will arch its back and look unnatural. Use gentle taps of the bat or cane around the head when getting it to turn. Never hit your pig hard. This can bruise the animal and cause damage.

HEALTH

Any questions about a pig's health program can be answered by your local veterinarian. Internal and external parasites can be controlled with products such as Ivomec and Atguard. Establish a regular schedule for worming the show pig. Pay attention to withdrawal times before the fair so your pig enters the food chain clean of residue and wholesome.



Check with your breeder or seller to make sure proper vaccinations were given. These may include vaccinations for Erysipelas, Rhinitis, Dysentery (scours) and Parvovirus.

The following may be indicators that your pig is sick:

- It goes off its feed
- It gets scours
- It does not drink
- It goes off by itself and lays down
- Other abnormal behavior

Contact your leader, breeder, Extension 4-H agent, FFA advisor or veterinarian. They can help you decide what the problem is and what to do about it. There are some antibiotics you can keep on hand to treat the pig if it gets sick.

Always follow the label instructions and only give recommended dosages. If it is not recommended for use on swine, only a veterinarian can prescribe it for use.

EQUIPMENT

Some basic items you will need:

- Whip, bat, slapper, or cane
- Brush
- Spray bottle
- Shampoo
- Hair conditioner or oil
- Rubber feed pan
- Small water bucket

PAPERS

Get a bill of sale from the seller or breeder. Ask about the appropriate Livestock Brand Inspection papers as well. For pigs coming into Utah from another state, call the Extension office for procedures, laws and regulations from the Utah Department of Agriculture Animal Industry Department for entry into Utah.

RULES AND REGULATIONS

It is your responsibility to know the rules of the shows you plan to attend. Different shows have different requirements whether it is county, state, jackpot or even national events. Call the representative for these shows to get a copy of the show premium book or rules.

REFERENCES

- “4-H Swine Project Manual.” 1985, Utah State University Extension.
- Anderson, Brandon. 1999. “My View of Market Hogs.” Feature article written for Showpig.com. September.
- Beeler, Warren. 2000. “Selecting a Pig - What a Wonderful Challenge.” Article written for Showpig.com. January
- Gillespie, James R. 1992. “Modern Livestock and Poultry Production.” Delmar Publishers.
- Goss, Danna. 1999. “How Much Hard Work Does it Take to be Successful.” Article written for Showpig.com, September.
- Grebner, Grant. 1999. “What Does a Winning Market Hog Look Like?” Feature article written for Showpig.com. September.
- Jones, Rick. 1995. “Practical Swine Feeding Ideas.” University of Georgia Cooperative Extension Service, Publication B854. Revised May 1995.
- “Livestock Judging, Members Guide.” New Mexico State University, 200 R-1, R86.
- Moran, Clay. General Manager, National Hog Farm, Kersey, Colorado. Personal communication.
- “Nutrition, Swine Rations.” In: Pork Industry Handbook. Purdue University, Cooperative Extension Service, Publication PIH-23.
- Sours, Chuck. No Date. “4-H Market Swine Project.” Unpublished paper, Desperados 4-H Club member, San Juan County, New Mexico.
- Sunglo Feeds. 1999. “Feeds and Feeding.” Nutrition article written for Showpig.com, September.
- “Swine.” Web site:
www.ics.uci.edu/~pazzani/4H/Pigs.html
- Tucker Show Feeds. 1999. “Swine Nutrition.” Feeds and Feeding article written for Showpig.com, September.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran’s status. USU’s policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions.

Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran’s status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities.

This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University.