

## Sand & Sage Round-Up Jr. Market Swine Study Guide

Study the Swine Resource Handbook 4-H 134R and Sand & Sage Round-Up Fair Book

**Average Daily Gain**-The average number of pounds an animal gains in a day

**Barrow**-A male pig that has been castrated and thus has no testicles

**Boar**-An intact (uncastrated) male

**Breed**-A group of animals with similar external characteristics that are passed on from one generation to another

**Crossbred**-A pig that is from parents of different breeds

**Feeder Pig**-A young pig that has been weaned and is ready to feed out. The popular weights for feeder pigs are 40-60 pounds

**Gilt**-A young female pig that has not farrowed

**Nutrient**-A chemical compound that is needed by the body

**Ration**-The amount of feed provided to a hog for a 24-hour period

**Sow**-A female pig that has produced at least one litter of pigs

**Wean**-To start a pig on solid feed instead of liquid food from mom

**Breeds:**

**Chester White**-Large pig and pure white, known for being good mothers and have medium sized ears that droop down over the eyes

**Duroc**-Solid red, droopy ears and grow quickly and efficiently

**Hampshire**-Black body with white belt, erect ears and heavy muscled

**Poland China**-Black with 6 white points, droopy ears, lean and heavy muscled

**Yorkshire**-White with erect ears and produce large litters

Proper nutrition is essential to allow pigs to grow fast and efficiently in a short period of time.

There are 5 essential nutrients:

1. **Water**-The most essential nutrient and the cheapest of all nutrients. It helps transport nutrients throughout the body and removes wastes. A pig needs to drink two to three pounds of water for every pound of feed it eats. Your pig must have fresh, clean water that is cool in the summer and warmer in the winter.
2. **Protein**-They are composed of amino acids or building blocks that help in the formation of muscle and other body proteins. If your pig lacks amino acids it will affect its growth. The 10 essential amino acids are lysine, threonine, tryptophan, methionine, cystine, isoleucine, histidine, valine, arginine, and phenylalanine. A corn-soybean oil meal is satisfactory in quality of protein for swine feeding because soybean oil meal is rich in the amino acids that are low in corn.
3. **Carbohydrates and Fats**-Provide the main source of energy in the diet. Corn, sorghum and wheat are excellent sources of carbohydrates.
4. **Minerals**-These are needed in body tissues and to assist in some of the body's chemical reactions. Calcium is important in bone formation. Phosphorus is also involved in bone building and assists in energy utilization. Salt is important for maintaining good appetite and water consumption. Other trace minerals are iron, copper, zinc, magnesium, manganese, iodine and selenium.

5. Vitamins-There are two classes of vitamins: Water Soluble and Fat Soluble
- Water Soluble-Also called Vitamin B-complex vitamins. They assist in changes of nutrients into energy for growth, assist in maintaining the health of the digestive organs. Vitamins added to swine diets include thiamine, riboflavin, niacin, pantothenic acid, B12, and pyridoxine.
  - Fat Soluble-Vitamin A, Vitamin D, Vitamin E and Vitamin K
    - Vitamin A-carotene found in alfalfa and corn, It assists in maintaining skin cells, as well as the lining of the digestive and respiratory tracts.
    - Vitamin D-Provided through sunshine. Assists in the utilization of calcium
    - Vitamin E-Important for normal muscle activity and reproduction
    - Vitamin K-Important for blood clotting and helps calcium and Vitamin D metabolism.

Besides essential nutrients, it is important to treat parasites that cause damage to swine.

Internal Parasites are those that live in the body.

Examples: Round Worms, Stomach Worms, Lung Worms, Whip Worms, Nodular Worms, Thread Worms, and Kidney Worms

External Parasites are those that are found bothering the pig on the outside body.

Examples: Flies, Mange and Lice

When treating for parasites, it is important to follow all precautions and directions to adhere to MQA standards.

Besides meat, swine also provide by-products such as heart valves, heparin, insulin, gelatin, glue, buttons, bone china, fertilizer, water filters, paint brushes, soap, cosmetics and many more.

Know how to care for your animal

Know how to figure how many pounds your pig gained

Know how to figure a profit

Know the Parts of the Swine

## Sand & Sage Round-Up Int. Market Swine Study Guide

Study the Swine Resource Handbook 4-H 134R and Sand & Sage Round-Up Fair Book

**Average Daily Gain**-The average number of pounds an animal gains in a day

**Barrow**-A male pig that has been castrated and thus has no testicles

**Boar**-An intact (uncastrated) male

**Breed**-A group of animals with similar external characteristics that are passed on from one generation to another

**Colostrum** The first milk produced by the sow after she farrows

**Crossbred**-A pig that is from parents of different breeds

**Dung**-Animal urine and manure

**Feed Efficiency**-The number of pounds of feed required by an animal to gain one pound of body weight

**Feeder Pig**-A young pig that has been weaned and is ready to feed out. The popular weights for feeder pigs are 40-60 pounds

**Gilt**-A young female pig that has not farrowed

**Nutrient**-A chemical compound that is needed by the body

**Ration**-The amount of feed provided to a hog for a 24-hour period

**Sow**-A female pig that has produced at least one litter of pigs

**Wean**-To start a pig on solid feed instead of liquid food from mom

**Breeds:**

**Chester White**-Large pig and pure white, known for being good mothers and have medium sized ears that droop down over the eyes

**Duroc**-Solid red, droopy ears and grow quickly and efficiently

**Hampshire**-Black body with white belt, erect ears and heavy muscled

**Landrace**-White, very long body with large, floppy ears and is a good mother

**Poland China**-Black with 6 white points, droopy ears, lean and heavy muscled

**Yorkshire**-White with erect ears and produce large litters

The pig is a simple stomached or monogastric animal. Proper nutrition is essential to allow pigs to grow fast and efficiently in a short period of time.

There are 5 essential nutrients:

1. **Water**-The most essential nutrient and the cheapest of all nutrients. It helps transport nutrients throughout the body and removes wastes. A pig needs to drink two to three pounds of water for every pound of feed it eats. Your pig must have fresh, clean water that is cool in the summer and warmer in the winter.
2. **Protein**-They are composed of amino acids or building blocks that help in the formation of muscle and other body proteins. If your pig lacks amino acids it will affect its growth. The 10 essential amino acids are lysine, threonine, tryptophan methionine, cystine, isoleucine, histidine, valine, arginine, and phenylalanine  
A corn-soybean oil meal is satisfactory in quality of protein for swine feeding because soybean oil meal is rich in the amino acids that are low in corn
3. **Carbohydrates and Fats**-Provide the main source of energy in the diet

- Corn, sorghum and wheat are excellent sources of carbohydrates.
4. Minerals-These are needed in body tissues and to assist in some of the body's chemical reactions. Calcium is important in bone formation. Phosphorus is also involved in bone building and assists in energy utilization. Salt is important for maintaining good appetite and water consumption. Other trace minerals are iron, copper, zinc, magnesium, manganese, iodine and selenium.
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Fat Soluble-Vitamin A, Vitamin D, Vitamin E and Vitamin K  
Vitamin A-carotene found in alfalfa and corn, It assists in maintaining skin cells, as well as the lining of the digestive and respiratory tracts.  
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Vitamin E-Important for normal muscle activity and reproduction  
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Besides essential nutrients, it is important to treat parasites that cause damage to swine.

Internal Parasites are those that live in the body.

Examples: Round Worms, Stomach Worms, Lung Worms, Whip Worms, Nodular Worms, Thread Worms, and Kidney Worms

External Parasites are those that are found bothering the pig on the outside body.

Examples: Flies, Mange and Lice

When treating for parasites, it is important to follow all precautions and directions to adhere to MQA standards.

To treat for parasites and prevent and treat for diseases, it is important to know the proper ways to administer medication.

Subcutaneous Injections (SQ)-administered under the skin

Intramuscular Injections (IM)-administered into the muscle. The neck area should be used for IM injections.

Intravenous Injections (IV)-administered into the blood stream

Some pork meat cuts include sausage, bacon, pork roast, spareribs, ham, ground pork, and pork chops. Besides meat, swine also provide by-products such as heart valves, heparin, insulin, gelatin, glue, buttons, bone china, fertilizer, water filters, paint brushes, soap, cosmetics and many more.

Know how to care for your animal including identifying your animal.

Know how to figure how many pounds your pig gained

Know how to figure Average Daily Gain

Know how to figure a profit

Know the parts of the swine

## Sand & Sage Round-Up Sr. Market Swine Study Guide

Study the Swine Resource Handbook 4-H 134R and Sand & Sage Round-Up Fair Book

Average Daily Gain-The average number of pounds an animal gains in a day

Backfat-A layer of fat located between the skin and muscle along the back of the hog

Balanced Ration-The required amount of essential nutrients supplied to a hog during a 24 hour period

Barrow-A male pig that has been castrated and thus has no testicles

Boar-An intact (uncastrated) male

Breed-A group of animals with similar external characteristics that are passed on from one generation to another

Colostrum The first milk produced by the sow after she farrows

Conformation-The general shape of the pig determined by his framework or skeleton and muscle structure

Crossbred-A pig that is from parents of different breeds

Dressing Percentage-The carcass weight divided by the live weight

Dung-Animal urine and manure

Feed Efficiency-The number of pounds of feed required by an animal to gain one pound of body weight

Feeder Pig-A young pig that has been weaned and is ready to feed out. The popular weights for feeder pigs are 40-60 pounds

Gilt-A young female pig that has not farrowed

Hormone-Special chemicals made by the body that cause changes in the body

Nutrient-A chemical compound that is needed by the body

Ration-The amount of feed provided to a hog for a 24-hour period

Residue-The medication that remains in the animal's body after it is given  
Sow-A female pig that has produced at least one litter of pigs  
Wean-To start a pig on solid feed instead of liquid food from mom

#### Breeds:

Berkshire-Black with white feet, tail and usually has a splash of white on the face  
Chester White-Large pig and pure white, known for being good mothers and have medium sized ears that droop down over the eyes  
Duroc-Solid red, droopy ears and grow quickly and efficiently  
Hampshire-Black body with white belt, erect ears and heavy muscled  
Landrace-White, very long body with large, floppy ears and is a good mother  
Poland China-Black with 6 white points, droopy ears, lean and heavy muscled  
Spotted Poland China-Black and white spots, droopy ears, gains weight well and known for being an aggressive breeder  
Yorkshire-White with erect ears and produce large litters

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#### There are 5 essential nutrients:

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Know how to care for your animal including identifying your animal.

Know what is required by law to be included in a feed tag

Know how to figure how many pounds your pig gained

Know how to figure feed efficiency

Know how to figure Average Daily Gain

Know how to figure a profit

Know the parts of the swine



