

Hancock County 4-H Consumer Pork Manual

This Manual Belongs to: _____

Club: _____

Purdue Extension Hancock County
802 North Apple Street
Greenfield, IN 46140
(317)462-1113

Project Requirements

Grade 3 – Exhibit a poster showing the six major pork breeds. Include a brief explanation of the distinguishing characteristics of each breed. Give your poster a title and include a label in the lower right hand corner giving your name, club, and division.

Grade 4– Exhibit a poster illustrating the wholesale cuts of pork in relation to a picture of the live animal. Include a label in the lower right hand corner giving your name, club, and division.

Grade 5 – Exhibit a poster illustrating the wholesale cuts broken into various retail cuts in relation to a picture of a live animal. Give your poster a title and include a label in the lower right hand corner giving your name, club, and division.

Grade 6 – Exhibit a poster showing the steps involved in pork production from farm to the supermarket. If possible, visit a swine farm or processing plant to gain more information. Be sure to include photos of your visit in the exhibit. Give your poster a title and include a label in the lower right hand corner giving your name, club, and division.

Grade 7 – Exhibit an informational poster showing the nutritional aspects of pork or how it can be incorporated into a family's diet. This should be an attractive display that is both educational and motivational. Include a label in the lower right hand corner giving your name, club, and division.

Grade 8– Plan and prepare a family meal or cookout featuring pork. Exhibit a poster showing this project in action using pictures. Be sure to include your recipe(s) and a menu. Give your poster a title and include a label in the lower right hand corner giving your name, club, and division.

Grade 9– Visit several stores and research which cuts of pork are available and complete the Retail Price Check Sheet. Use this information to make a poster showing pictures of various cuts of pork, their average cost, and how they are prepared. Include a brief summary of what you discovered in your search. Include the Retail Price Check Sheet on the back of you poster.

Grade 10 – Exhibit a poster showing some of the by-products of pork. Include on the poster a complete list of all the by-products of pork you can find as well as their uses. Give your poster a title and include a label in the lower right hand corner giving your name, club, and division.

Grade 11 – Make a poster showing several pork advertisements. Include your own evaluation of the ads and whether they would motivate you to purchase the product. You may also include a summary of how you think advertising has affected our pork consumption.

Grade 12- Create an original advertisement for pork. Include a brief summary of where you think the ad should be used, what audience you are trying to reach, and why you chose this specific approach. Explain how you think this ad will motivate the consumer to purchase more pork. Include a label in the lower right hand corner giving your name, club, and division.

Consumer Pork

The consumer pork project is designed to help you understand more about the various aspects of pork that affect you as a consumer. The goal is to help you better understand the swine/pork industry by showing how the live animal becomes wholesale cuts, retail cuts, and finally food for the family to eat.

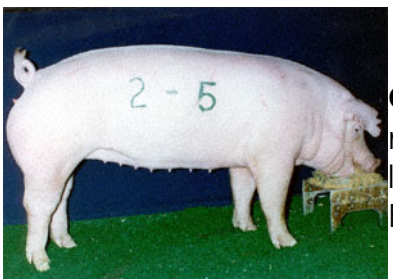
Swine producers, like other business operators, are working to produce and sell a top quality product. The goal of the swine industry is to raise lean, heavily-muscled hogs which will yield a maximum amount of edible meat.

Breeds of Swine

Eight major breeds of hogs are commonly used for breeding in the United States. In general, the five dark breeds--Berkshire, Duroc, Hampshire, Poland China, and Spot are known and used for their sireing ability and potential to pass along their durability, leanness, and meatiness to offspring. The three white breeds-- Chester White, Landrace, and Yorkshire are sought after for their reproductive and mothering abilities.



Yorkshire: The most sought after breed, Yorks are good mothers and produce large litters. They exhibit a long, big frame and are white with erect ears.



provided by National Swine Registry

Chester White: Solid white, these pigs have medium sized, droopy ears. They usually have large litters and sought for their mothering ability. Boars of this breed are usually aggressive.

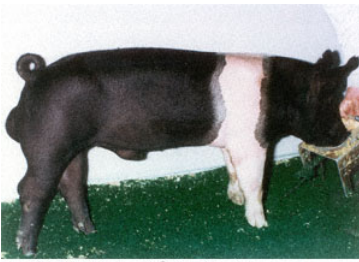


Berkshire: Black with six white points (nose, tail, and legs), these hogs have erect ears and a short, dished snout. They work well in enclosed facilities and are noted for their sireing ability.



provided by National Swine Registry

Duroc: These hogs, noted for their fast growth and good feed efficiency, are a reddish color with droopy ears. On the average, this breed needs less feed to make a pound of muscle than the other breeds.



provided by National Swine Registry

Hampshire: These hogs are black with a white belt that extends from one front leg, over the shoulder, and down the other front leg. They have erect ears and are popular for their lean, meaty carcasses.



Poland China: Like the Berkshire, this breed has six white points on a black body. They have medium sized droopy ears and produce meaty carcasses with large loin eyes.



provided by National Swine Registry

Spot: White with black spot, this breed has the same type of ears as the Poland China. These hogs are known for producing pigs with a high growth rate.



Landrace: Like the other white hogs, this breed is known for the sow's mothering ability. They have very large, floppy ears, are long-bodied, and have the highest weaned average of any breed, as well as the highest average post-weaning survival rate.

No breed of swine is superior to the others. You should select pig based on its physical characteristics and the performance of its relatives (if you can get that information). Good quality feeder pigs should appear healthy, thrifty, vigorous, and alert.

Determining Hog Quality

When assessing the quality of hogs, two major areas must be considered: **production traits** and **carcass traits**. Production traits may include average daily gain, days required to reach market weight and feed efficiency, are important to the swine producer.

- **Growth rate** – Average daily gain (ADG) and days required to reach 230 pounds (day to 230) are both measures of growth rate. A greater value for ADG and a smaller value for days indicate a fast-growing pig.
- **Feed efficiency value** – This measures the amount of feed a pig requires to gain 1 pound. A feed efficiency value (sometimes called feed-to gain ration) of 3.6 means that a pig had to eat 3.6 pounds of feed to increase its body weight by 1 pound. A low feed efficiency value is more desirable.



These traits are ways to measure how fast and efficiently a pig grew. Production traits are measured on the live hog.

Carcass traits are measured after the hog has been slaughtered and is in carcass form. Some commonly measured carcass traits are back fat depth, loin eye area, carcass length, and percent muscle in carcass.

- **Dressing percentage** represents the amount (percentage) of the hog's live weight that is present in carcass form. To calculate dressing percentage, divide the chilled carcass weight by the live weight and multiply by 100. The amount of fat and the amount of fill (stomach and intestine contents) are the two factors that influence dressing percentage. Fat hogs will dress higher than lean hogs, while hogs that are full of feed and water will dress lower than shrunk hogs (those held off feed for 12 to 24 hours).
- **Backfat depth** – Backfat depth is measured at three points on the hog's topline – opposite the first rib, last rib, and last lumbar vertebra. The average of these three measurements is the average backfat depth.

- **Loineye area** – This is measurement of the size of the major muscle that is found in the loin. Loineye area is determined by cutting the loin crosswise at the 10th rib and measuring the area of the muscle face. Loineye area is a good indicator of the total amount or degree of muscling in an animal.
- **Carcass length** – This is simply a measure of the live pig's body length, but this measurement is taken from the carcass. Carcass length is measured from the aitch bon to the first rib.
- **Percent muscle** – While loineye area is used as an indicator of muscling, percent muscle describes the total amount of lean meat present in the carcass. When calculating percent muscle, the loineye area, backfat depth and carcass weight will be considered.
- **Average daily gain** – Average daily gain measures only the rate of absolute increase in a pig's body weight. That increase in weight is due to increases in lean and/or fat tissue. On the other hand, when the various carcass traits are measured, only the amount of lean and fat tissue in the end product (the market hog) are evaluated. Carcass traits say nothing about the hogs growth rate up to slaughter time.

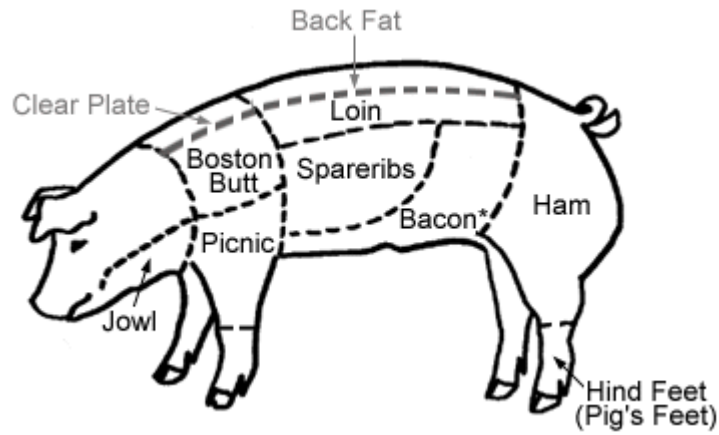


Many times producers and buyers try to predict carcass quality before the animal is killed by estimating these carcass traits. This is not always very accurate, but it can be a useful selection tool.

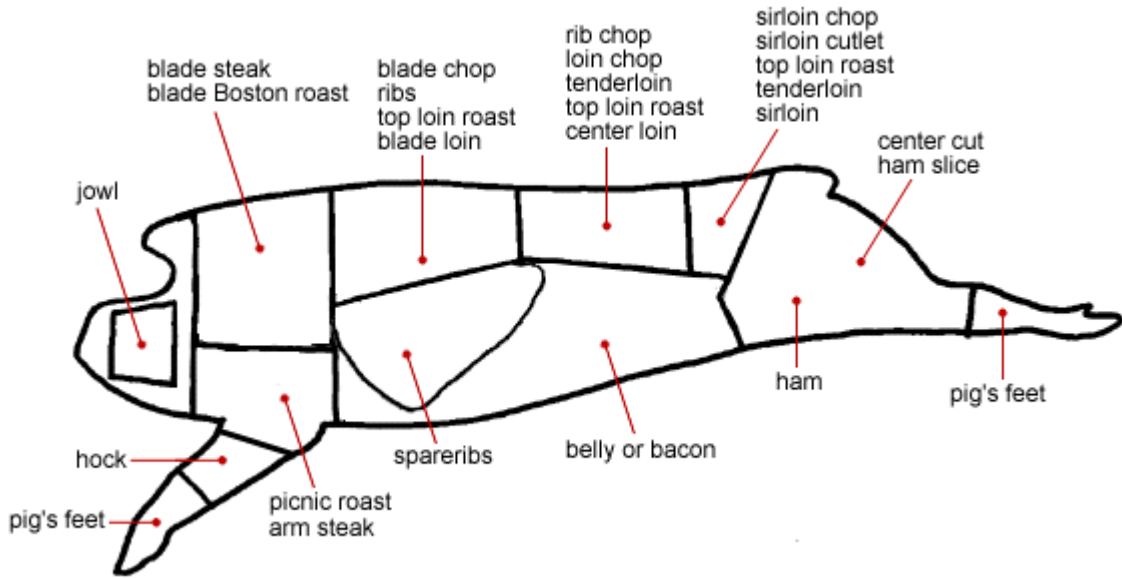
Because evaluating just production or just carcass traits have serious limitations, hog producers measure average daily lean gain (ADLG). Growth rate, leanness and muscling are all looked at when measuring. ADLG represents the amount of lean tissue growth per day. ADG values are higher than ADLG values because ADG measures lean and fat tissue growth while ADLG measures only the lean tissue growth.

This information taken from *Your Market Hog Project*, 4-H 1064, pp. 21-22.

Wholesale Cuts of Pork



Retail Cuts of Pork



Retail Cuts of Pork



Blade Boston

Sirloin Roast

Center Loin Roast

Center Rib Roast



Blade Loin Roast

Butterfly Chop

Fresh Side (Belly)

Spare Rib



Pictures taken from University of Kentucky Agripedia Website. You can also find games and quizzes to help you learn more about this cuts. The address is: www.ca.uky.edu/agripedia/AGMANIA/meatid/pork.htm

Pork Nutrition

Pork producers have listened to consumers' preferences and concerns. Since the 1980s, the fat content of pork has been dramatically reduced. For example, the most popular selection of pork, the tenderloin is now 42% lower in fat. This was achieved through: improved breeding and feeding practices and better trimming of fat, both at the processors and in the stores.

Today's lean pork means pork plays a vital part in a healthy diet. The key is to achieve a nutritional balance and practice moderation. Each food group (grains, vegetables & fruit, milk products, and meat & alternatives) provides part, but not all, of the daily nutrient needs. So choose foods from all four-food groups, and eat as wide a variety as possible



from within each group.

When it comes to good health and good eating, pork gets top marks. Pork contains many of the nutrients recommended by many health organizations to build and maintain a healthy body, including six essential vitamins, four important minerals, protein and energy.

America's perception of pork is changing and consumers are beginning to realize that pork is a desirable lean meat choice. Pork is showing up in many dietary plans, including those of the American Heart Association, American Dietetic Association, American Diabetic Association, and other public health opinion leaders.

Pork Nutrition Facts

- Pork provides protein, which is important for children to grow well and build strong muscles.
- Pork is a source of protein, iron, zinc and B-vitamins.
- Several years ago, serum cholesterol was pinpointed as a factor in heart disease risk, today nutrition professionals agree that dietary cholesterol is not the only culprit in raising serum cholesterol; rather, total dietary fat and other lifestyle factors are also at work.
- Numerous pork cuts today are equivalent in fat content and calories to lean poultry cuts.
- Most public health organizations rely on the USDA Food Guide Pyramid, which shows Americans how to build a balanced diet. Lean pork fits well into this pyramid.
- The USDA, American Dietetic Association, and American Heart Association, in their respective dietary advice to the public, consistently recommend meat as an important source of complete protein and essential vitamins and minerals.

This information taken from The National Pork Producers Council Website.

<http://www.nppc.org/resources/nutrition.html>

Fun Websites to Visit:

<http://www.pork4kids.com>

www.ca.uky.edu/agripedia/AGMANIA

Consumer Pork Retail Price Check Sheet

Name _____

Division _____

Club _____

Research prices of different lamb cuts for three weeks at two different retailers. Report your findings here.

Pork Cut: _____

Retailer's Name	Week 1 Price	Week 2 Price	Week 3 Price

Pork Cut: _____

Retailer's Name	Week 1 Price	Week 2 Price	Week 3 Price

Pork Cut: _____

Retailer's Name	Week 1 Price	Week 2 Price	Week 3 Price

Pork Cut: _____

Retailer's Name	Week 1 Price	Week 2 Price	Week 3 Price

Pork Cut: _____

Retailer's Name	Week 1 Price	Week 2 Price	Week 3 Price

Consumer Pork Record Sheet

Name _____ Division _____

Name of Club _____ Year _____

Year in Consumer Pork _____

Signature of Leader _____

What activities did you complete for your project?

What did you learn about consumer pork this year?

How much time did you spend on this project this year?

What things will you do differently as a pork consumer as a result of this project?
