



# FLORIDA 4-H TAILGATE SERIES

## Meat Selection

### Introduction

Childhood obesity is a serious public health problem in the US. Today, nearly a third of American children are overweight or obese (CDC, 2015). A contributing factor to childhood obesity is general dependency on prepared food, which is somewhat fueled by our society's dwindling cooking abilities. Many parents do not have the time, or they do not know how to cook, so they have not passed the skill on to the younger generation. The average American knows little about the safe preparation of highly palatable animal protein entrées. Additionally, nutrition research suggests that animal protein in the diet is beneficial to adolescent development (Cleghorn, 2007).

The Florida 4-H Poultry BBQ program has existed for years, and the program for red meat cookery has been a huge success in Tennessee 4-H. With sponsorship for the winners at the state level, the Florida 4-H Tailgate Contest program will be a success in Florida as well. This program will strive to promote enjoyable outdoor cooking experiences, encourage the incorporation of animal protein in the diet in order to combat childhood obesity, improve youth nutritional knowledge and cooking skills, and impart knowledge about safe handling and proper degree of doneness to produce safe and delicious meat dishes.

**Learning Activity:** Selecting Proteins for Grilling

**Learning Objective:** Youth will learn to select beef, pork, chicken, and seafood that are suitable for grilling.

**Life Skill:** Decision-Making

### Background

The palatability of muscle foods is a combination of flavor, juiciness, and tenderness. Improper cookery can adversely affect meat palatability. Combining proper cut selection

with the proper kind of cookery is one key to preparing highly palatable animal protein dishes.

Grilling is conducted by placing food within 6 inches of a high, dry heat source for a reasonably short time. Grilling generally works for tender cuts of meat, portioned approximately for one person. Cuts used for grilling should generally be at least 0.75 inches to 1 inch thick. Cuts that are 0.5 inches thick or thinner can have acceptable palatability, but they are also easy to overcook when grilled. Large pieces, roasts, and whole chickens can become overcooked on the outside but remain undercooked inside. Less tender red meat cuts and whole chickens can be smoked or grilled if placed more than 6 inches above the heat and grilled at lower temperatures for longer periods of time.

Grilling is suitable for essentially all poultry and seafood as most will be reasonably tender. Grilling is also acceptable for more tender cuts of beef and pork. See EDIS document AN229, *Fresh Meat Selection for Consumers*, for more information on beef and pork cut selection: <http://edis.ifas.ufl.edu/an229>.

Many less tender cuts of beef and pork are “non-intact” because they have been needle tenderized, enhanced, or marinated. Many fresh retail pork and poultry products and certain beef products have been marinated or enhanced, which must be noted on the label. See EDIS document AN283, *Food Processing: The Meat We Eat*, for more information on “non-intact” meat: <http://edis.ifas.ufl.edu/an283>.

Choose USDA Select, Choice, or Prime beef steaks and roasts. Most consumers prefer ground meat blended to contain between 10 and 20% fat. Do not select very pale, soft, and watery appearing pork or chicken. Choose seafood with firm muscle texture, little to no odor, and

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absolutely no off-odor. For more information on seafood selection, quality, and safety, visit <http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm077331.htm>.

Outdoor poultry cookery has a national component. One senior in chicken and one senior in turkey are eligible to compete nationally. The competition is held in November in Louisville, Kentucky. Additional rules for the National Poultry Barbeque Contest may be found at <http://www2.ca.uky.edu/national4hpoultry/>.

### Do

- Visit your grocery store and identify the cuts that are suitable for grilling.
- Purchase a less tender beef cut such as a bottom round or arm roast and a loin or rib steak. Cut the roast in half, marinate one half but not the other, and compare the eating quality of the pieces.
- Make patties from 10% and 20% fat ground meats of the same species and compare the eating quality.
- Purchase very light-colored and very dark red pork chops and compare their eating quality.

### Reflect

- Which proteins are acceptable for grilling?
- Why do less tender cuts need to be tenderized, enhanced, or marinated?
- Did you prefer the very light or very dark red pork chops? Why?

### Apply

- How will you select cuts of protein to grill in the future?

## Conclusion

Educating youth about ways to safely prepare animal protein on a grill will improve grilling safety, combat childhood obesity, improve the nutritional knowledge and cooking skills of today's youth, and impart knowledge about safe handling and proper degree of doneness in order to produce safe and palatable meat dishes.

For up-to-date information on the Florida 4-H Tailgating Contest, please visit [http://florida4h.org/programsandevents\\_/animalscience/4-h-tailgating-contest/](http://florida4h.org/programsandevents_/animalscience/4-h-tailgating-contest/).

## Additional Resources

Florida 4-H Tailgating Contest: [http://florida4h.org/programsandevents\\_/animalscience/4-h-tailgating-contest/](http://florida4h.org/programsandevents_/animalscience/4-h-tailgating-contest/)

State 4-H/FFA Meat Judging Contest: <http://animal.ifas.ufl.edu/youth/livestock/meatsJudging.shtml>

4-H Poultry Judging Event: <http://animal.ifas.ufl.edu/youth/Poultry/index.shtml>

Florida Hog & Ham Program: <http://animal.ifas.ufl.edu/youth/livestock/HogHam.shtml>

## References

Bub, E., Schneider, K., Carr, C., & Hersom, M. (2015). *Food Processing: The Meat We Eat*. AN283. Gainesville: University of Florida Institute of Food and Agricultural Sciences. <http://edis.ifas.ufl.edu/an283>

Carr, C., Jennings, E., & Eubanks, L. (2013). *Fresh Meat Selection for Consumers*. AN229. Gainesville: University of Florida Institute of Food and Agricultural Sciences. <http://edis.ifas.ufl.edu/an229>

CDC. (2015). Childhood obesity facts. Accessed on July 12, 2016. <http://www.cdc.gov/healthyschools/obesity/facts.htm>

Cleghorn, G. (2007). Role of red meat in the diet for children and adolescents. *Nutrition & Dietetics*, 64(4), S143–S146.

FDA (2015). Fresh and frozen seafood: Selecting and serving it safely. Accessed on July 12, 2016. <http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm077331.htm>