# **4-H Meat Science Project**



## **WHAT'S IT ALL ABOUT?**

The 4-H meat science project allows you to learn about the different cuts of meat along with the trimness and quality factors that affect the safety and taste of the meat products we consume.

- » Identify the various types of meat cuts.
- » Study the effects that nutrition has on meat products.
- » Learn health regulations and laws associated with meat processing.
- » Explore careers related to meat processing.

## THE BIG PICTURE

### **Starting out:**

- >> Learn how to identify the differences between species.
- ➤ Gather information about the various types of cuts.
- Understand the difference between wholesale cuts and retail cuts.
- Learn about the muscling regions and their characteristics.
- >> Learn how to identify the factors associated with the quality of the meat.
- Explore various ways to take notes while judging carcasses or cuts of meat.
- Visit your local grocery store to practice identifying cuts of meat.
- Learn about the proper clothing and equipment required to work with carcasses and cuts of meat.

### Learning more:

- >> Plan a practice program with your local 4-H group.
- Visit online resources to learn about meat judging contests.
- Sign up for the Michigan 4-H/FFA Meat Judging Contest.
- >> Learn how to give a set of reasons about the classes you judge.
- Take time to do some comparison retail cut shopping at different stores.

### **Expanding horizons:**

- Tour the Michigan State University Meat Laboratory.
- Take time to explore a local meat processor to further understand how carcasses are cut and to view multiple cuts of meat.
- Explore the various ways to package meat and find out the reason each option is used.
- Learn more about how nutrition affects the meat product.
- Expand your knowledge on kosher processing procedures.



# CURRICULA & RESOURCES

### **Michigan**

- \* 4-H/FFA Meat Judging Contest: http://msue.anr. msu.edu/events/4-h\_ffa\_meats\_ judging contest
- Livestock: http://4h.msue. msu.edu/programs/animal\_ science/livestock

### **Resources – Other States**

- » Agripedia (University of Kentucky): http://www2. ca.uky.edu/agripedia/agmania/ meatid/
- \* 4-H Meat Judging Online Training (Texas A & M): http://animalscience. tamu.edu/academics/meat-science/4h/meat-judging/
- Meat Identification (Texas A & M): http:// aggiemeat.tamu.edu/meatidentification-pictures/
- Youth Judging Classes (University of Florida): http://animal.ifas.ufl.edu/ meat\_extension/youth/retail/ retail\_indentification\_index. shtml

#### **Other Resources**

- American Meat Science Association: http://www. meatscience.org/
- ➤ Meat Science & Food Safety (CEV Multimedia): http://www.cevmultimedia.com/index.php?p=product&id=1595

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# **4-H Meat Science Project Snapshot**



# **FOCUS ON MEAT SCIENCE**

### **Science**

- >> Explore muscle biology, bone identification and anatomy.
- **»** Understand the effects on nutrition on the meat product.
- Critically evaluate carcasses and cuts of meat based on trimness, muscling and quality.

### **Communication**

Participate in a judging contest giving oral reasons defending your decision.

Prepare a poster or demonstration for your local fair on:

- » Consumer preference and selection.
- » Nutrition effects.
- **»** Selection of meat cuts at the grocery store.
- » Food safety.

### **Citizenship & Leadership**

- Write a letter for your local paper or a popular blog about the importance of meat quality.
- Publicize meat judging team activities.
- Mentor junior meat judging team members.
- Organize a meat judging team for your club or county.

### **Life Skills**

- We critical-thinking, problemsolving and decision-making skills to help you make evaluation-based decisions by comparing carcasses and cuts of meat.
- » Apply for on-the-job training.
- Practice personal resiliency through successes and challenges in meat judging.



### **HOW CAN YOU GET INVOLVED?**

- **»** Contact your local Michigan State University (MSU) Extension office for workshops, activities and events.
- **»** Job shadow at a local grocery store.
- » Explore health safety issues related to meat science and handling carcasses.
- » Learn where the local grocery store acquires meat products.
- **>>** Explore the restrictions and laws your community might have on processing plants.
- **>>** Examine Michigan and U.S. Department of Agriculture laws concerning meat processing and food safety.
- **»** Take time to become Quality Assurance certified, Pork Quality Assurance certified and Beef Quality Assurance certified.
- **»** If you are interested in a college education in animal science or veterinary medicine, visit MSU's website at www.msu.edu to explore those majors.

# **Curricula & Resources,** continued

### **Other Resources**

Meats Evaluation and Technology Career Development Events (National FFA): https://www. ffa.org/Programs/Awards/CDE/ MeatsEvaluationAndTechnology/Pages/ default.aspx

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