

Hamilton County

4-H

Beef Barbecue



**HAMILTON COUNTY
4-H BEEF BARBECUE PROJECT
(COUNTY PROJECT ONLY)**

Champions will be awarded in Beginning (grades 3-5), Intermediate (grades 6-8) and Advanced (grades 9-12) barbecue. An overall Grand Champion barbecue will also be awarded.

One Grand Champion will be selected from all Champion Barbecue (beef and chicken) posters.

Barbecue style cooking and cooking on the grill are increasing in popularity. A survey by the National Barbecue Association found that Americans enjoy barbecue for a number of reasons.

Survey Says:

- #1 reason to BBQ is "great taste" (91%)
- #2 reason to BBQ is "change of pace" (67%)
- #3 reason to BBQ is "easy clean up" (61%)

Also, the glow of the coals, aroma of the sizzling beef and the conversation around the grill make barbecuing a relaxing and festive occasion.



The benefits of this Beef project are:

1. Cooking on the grill is a fun way to entertain family and friends.
2. You will learn a tasty new way to prepare your favorite foods.
3. You will learn what the most desirable cuts of beef for the grill are as well as how to shop for them.
4. You will gain valuable knowledge and experience in meal preparation.
5. No alcohol is allowed in recipes, displays or any display that makes reference to alcohol/wine, etc. No wine glasses.

Exhibit Requirements

Levels:

Beginner

Grade 3 - 5

Intermediate

Grades 6 – 8

Advanced

Grades 9 – 12

Champions will be awarded in **Beginner, Intermediate, and Advanced** Beef Barbecue (both Cook-off and Posters). An overall Grand Champion Beef Barbecue will be awarded. One Grand Champion will be selected from all Champion Barbecue (Beef & Chicken) posters.

Beginner: Grade 3

Poster Division

- Read the manual.
- Build the fire and barbecue.
- Complete the record sheet.
- Exhibit at the Fair, a poster 22" X 28" showing pictures of you barbecuing step by step. See poster rules in Handbook.

Beginner: Grades 4-5

Cook-Off Division

- Read the manual.
- Complete the record sheet.
- You must barbecue at least four (4) times for your family.
- Enter the County Fair barbecuing contest.

A cut of beef of your choosing must be barbecued on the 4-H Grounds. Bring charcoal grill, all equipment, supplies, beef and ingredients that you will need for the contest. Contestant must build his/her own fire and barbecue his/her own beef entrée. Contestant will have 1 ½ hours after they have been asked to start their fire to barbecue their beef entrees and present it to the judge. You will be judged on use of equipment, building the fire, timing, appearance, doneness and taste.

OR/BOTH

POSTER DIVISION –

You may elect to exhibit a poster instead of participating in the cook-off contest or you may do both. The rules for the poster are as follows:

- Read the manual.
- You must barbecue at least four (4) times for your family.
- Complete the record sheet.
- Exhibit at the Fair, a poster 22" x 28" on safety in beef preparation (for example, cooking, thawing, handling, use of utensils, and/or general preparation). See poster rules in Handbook.

Intermediate: Grades 6-8

Cook-Off Division

- Read the manual.
- Complete the record sheet.
- You must barbecue at least four (4) times for your family.
- Enter the County Fair barbecuing contest.

A cut of beef of your choosing must be barbecued on the 4-H Grounds. Bring charcoal grill, all equipment, supplies, beef and ingredients that you will need for the contest. Contestant must build his/her own fire and barbecue his/her own beef entrée. Contestant will have 1 ½ hours after they have been asked to start their fire to barbecue their beef entrees and present it to the judge. You will be judged on use of equipment, building the fire, timing, appearance, doneness and taste.

OR/BOTH

Poster Division -

You may elect to exhibit a poster instead of participating in the cook-off contest or you may do both. The rules for the poster are as follows:

- Read the manual.
- You must barbecue at least four (4) times for your family.
- Complete the record sheet.
- Exhibit at the Fair, a poster 22" x 28" on safety in beef preparation (for example, cooking, thawing, handling, use of utensils, and/or general preparation). See poster rules in Handbook.

Advanced: Grades 9-12

Cook-Off Division

- Read the manual.
- Complete the record sheet.
- Barbecue beef at least four (4) times for your family, using at least 2 different cuts of beef overall.
- Enter the County Fair barbecuing contest.

A cut of beef of your choosing must be barbecued on the 4-H Grounds. Bring charcoal grill, all equipment, supplies, beef and ingredients that you will need for the contest. Exhibitor must build his/her own fire and barbecue his/her own beef entrée. Contestant will have 1 ½ hours after they have been asked to start their fire to barbecue their beef entrees and present it to the judge. You will be judged on equipment, building the fire, timing, appearance, doneness and taste.

OR/BOTH

Poster Division –

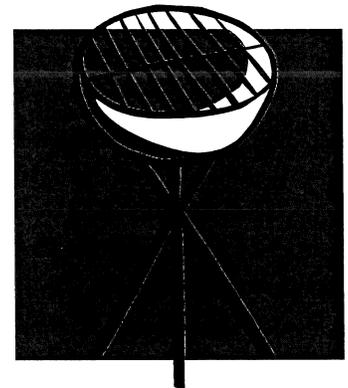
You may elect to exhibit a poster instead of participating in the cook-off contest or you may do both. The rules for the posters are as follows:

- Read the manual.
- You must barbecue at least four (4) times for your family using at least 2 different cuts of beef overall.
- Complete the record sheet.
- Exhibit at the fair, a poster 22" x 28" on safety in beef preparation (for example, cooking, thawing, handling, use of utensils, and/or general preparation). See poster rules in Handbook.

Each spring a workshop is held at the 4-H grounds to assist the 4-H'ers and their families with education on grilling techniques, fire safety, using the proper cuts, grades of beef, rubs, marinades, etc.

THE BARBECUE GRILL

The kind of grill you choose will depend upon how much money you want to spend and the size of the grill you wish to purchase. The most inexpensive and basic grill is the brazier. It is a round or square firebowl set on legs. Some of these have a draft control and some do not. Some braziers have a crank or lever that regulates the distance between the grate and the coals. Another kind of grill is the kettle grill. These grills have air dampers in the top and bottom to control ventilation. Another kind of grill is the smoker. It is open at the bottom, providing good air circulation. A tray of coals sits on metal pegs and heats the meat. A pan of water can be placed between the coals for a smokier flavor. Smokers cook the meat slower and longer than the other two.



EASY GRILING/GETTING STARTED

Steaks, burgers and kabobs that cook in under 30 minutes are grilled using the direct method of grilling. In this method, food is placed on the cooking grid directly over the coals. The first step is building the fire and maintaining the correct temperature.

STARTING THE FIRE

Before you start the fire, if your grill has vents in the bottom, open them. For more even burning, use high-quality charcoal. To determine the number of briquettes needed, spread briquettes one layer deep on the fire grate extending them one to two inches beyond the area the food will cover on the cooking grid. Arrange and ignite the briquettes using one of the following methods. Whichever method you choose, when the coals are ash-covered (about 30 minutes), carefully spread them in a single layer, set the cooking grid in place and check for proper cooking temperature.

Chimney Starter:

A chimney starter is a heavy cylinder with holes in the side for ventilation. Briquettes can be ignited in this type of starter by using newspaper or solid fuel blocks in the center of fire grate. To light the chimney starter using newspaper, turn the starter upside down. Crumple 2-3 sheets of newspaper and stuff them into the bottom of the chimney. Turn chimney right side up, place it on fire grate and fill with briquettes. Ignite newspaper through bottom air vents.

Electric Starter:

Follow instructions included with your model. Basically the electric starter coil is placed on a few briquettes on the fire grate and a few briquettes are then placed on top.

Liquid Starter:

Arrange briquettes in pyramid shape on fire grate. Add liquid starter according to the manufacturer's directions and carefully light. If briquettes are slow to start, DO NOT add more starter directly to them. Instead, place several briquettes in metal can and apply starter. With long handled tongs, add briquettes to pyramid and light.

TEMPERATURE OF COALS

The temperature of the coals is important for successful grilling. If the coals are too hot, the outside of the food can become charred and overcooked before the inside is properly cooked. Most beef cuts are best grilled over medium to medium-low temperature coals. To determine the temperature of the coals, use the hand count, a visual guide or a grill thermometer.

Hand Count/Visual Guide:

- 2 second hand count = **HOT COALS** = 400°F to 450°F
(coals are barely covered with ash, not ready for cooking)
- 4 second hand count = **MED COALS** = 350°F to 375°F
(coals glow through a layer of gray ash)
- 5 second hand count = **LOW COALS** = 300°F to 325°F
(coals are covered with a thick layer of gray ash)

Cautiously hold the palm of your hand above the coals at cooking height. Count the number of seconds you can hold your hand in that position before the heat forces you to pull away.

BEEF STORAGE

Most fresh beef is prepackaged and should be stored wrapped, as purchased. It can be stored for one to four days after you purchase it. Store at refrigerator temperatures (between 36°F and 40°F). The meat compartment in some refrigerators is designed to maintain ideal temperatures.

Freeze beef as soon as possible after purchase if you will not use it in one to four days. Select proper freezer wrapping materials: freezer paper, aluminum foil, or heavy duty plastic bags. The wrap should seal out air and lock in moisture.

SMART GRILLING: FOOD SAFETY TIPS

According to the United States Department of Agriculture (USDA) food safety guidelines, beef steaks and kabobs should reach an internal temperature of 145°F or medium rare doneness. At medium rare, beef will be very pink in the center and slightly brown toward the exterior. Ground beef should be cooked to a medium doneness (160°F) or until center is no longer pink.

To avoid cross-contamination, always place cooked meats, poultry or fish on a clean serving plate or carving board, not one that has previously held raw foods. Wash platters, boards and utensils with hot, soapy water after each use; rinse well.

Charring meat, poultry or fish is not recommended. Researchers have found that some potentially carcinogenic chemicals are created within all muscle foods when they are cooked at high temperatures and/or for a long period of time. Grill over medium-low coals. Never grill while the coals are still flaming; wait until the flames subside and coals are covered with gray ash.

Flare-ups caused by fat dripping onto the coals can cause another potential carcinogen to form. To help avoid flare-ups, use well trimmed meats and poultry. If flare-ups do occur, use a water spray bottle to lightly spray the flame. Lightly spritzing also prevents ashes from scattering. Few flare-ups occur during covered grilling.



State of the Barbecue Industry Report

The Hearth, Patio & Barbecue Association (HPBA) has conducted the *HPBA State of the Barbecue Industry Report** on a biennial basis since 1983. The following is select information from the 2005 Industry Report.

The Industry is Hot

- HPBA reports that grilling and barbecuing have become increasingly popular over the last decade, with the overall industry increasing by 44 percent from 1992 to 2005.
- More than nine out of ten (96 percent) grill owners used their grill in the past year, an increase of 5 percent over 2003.
- Barbecue grill shipments from manufacturers to retailers has increased to over 17 million – a 15% increase compared to 2005.

Grill Ownership and Usage

- The 2005 report shows 81 percent of U.S. households own a grill, an increase of nearly 10 percent from 2003 at 72 percent. In fact, 22 percent of households own *more* than one grill.
- Liquid propane (LP) gas grills are still the most popular type for consumers to own at 65 percent, while 37 percent of consumers own charcoal grills, 6 percent own natural gas grills and 2 percent own electric grills.
- Most households (96 percent) are grilling 5 percent more often throughout the year than reported in 2003; average grill usage is up to 26 times per year, an increase from 22 times per year in 2003.
- A majority of grill owners use their grills year-round and 44 percent use their grill 1-2 times per week during the peak grilling season (May-August).
- The most popular summer grilling holidays are Fourth of July, Memorial Day and Labor Day.
- Most grill owners barbecue at their primary residence (64 percent). Another 17 percent of respondents barbecue at a relative's home, and 6 percent barbecue at a second/vacation home or at a campground.

Household Grilling Roles

- Of households with either gas or charcoal grills, at least 62 percent of users are men and at least 35 percent are women.
- However, in households owning outdoor electric grills, at least 55 percent of the users are women and at least 42 percent are men.
- The primary griller (male) in the majority of households considers themselves to be average or above in terms of cooking skills.

What's Cookin' on the Grill

- Burgers, steaks, hot dogs and chicken are the most commonly prepared foods on outdoor grills.
- Although burger grilling was down by 2 percent, it is still the most popular item to grill at 87 percent, followed by steak at 83 percent (down 4 percent from 2003), chicken at 78 percent (a 6 percent increase from 2003), and hot dogs remaining the same at 76 percent.
- Barbecue sauce usage remains prevalent; however, dry meat rubs are commonly used by one-third of charcoal and gas grill owners.

Products & Purchase Trends

- Multi-purpose utensils have a common appeal for all three main grill types. Long-handled tongs, forks, cleaning brushes, and long-handled spatulas are all considered essential grilling accessories.
- The 2005 report revealed a 10 percent increase in consumers who complement their patio with furniture and larger grills, at 42 percent compared to 32 percent in 2003.
- One-quarter of grill owners surveyed plan to purchase a new grill in the near future. Of these owners, more than half plan to purchase a LP grill.
- Also, the type of grill selected to purchase is influenced by their current grill. That is, charcoal owners are more likely to buy another charcoal grill than any other type of grill, while gas grill owners are more likely to buy another gas grill.

HPBA State of the Barbecue Industry Report

This research was conducted online via the TNS Interactive Panel in August 2005 with a sample size of nearly 8,200. The sample size included households assembled to be representative of the latest U.S. Census in terms of geography, age of head of household, market size, annual household income and household size. All respondents are 18+ years old.

About Hearth, Patio & Barbecue Association (HPBA)

The Hearth, Patio & Barbecue Association (HPBA), based in Arlington, VA, is the North American industry association for manufacturers, retailers, distributors, representatives, service firms and allied associates for all types of hearth, barbecue and patio appliances, fuels and accessories. The association provides professional member services and industry support in education, statistics, government relations, marketing, advertising and consumer education. There are more than 2,600 members in the HPBA.

**Use of the HPBA State of the Barbecue Industry Report findings should be credited to the Hearth, Patio & Barbecue Association. Visit www.hpba.org for additional information.*

HAMILTON COUNTY 4-H BEEF BARBECUE SCORE SHEET

Name _____

Club _____

Division _____

Grade _____

Placing _____

Equipment	Points	Comments
Safe?	(10)	
Clean?		
Laid out neatly?		
Operator skilled in use?		

The Fire	(15)	
4-H'er confident?		
Method of lighting safe?		
Fire start well?		
Coals given time to heat properly?		
Good control of fire?		
Enough time to finish?		

Timing	(15)	
Time given confidently as to when beef would be done?		
Beef done at prescribed time?		

Appearance	(20)	
Good Color?		
Uniform appearance?		
Blistered? Torn?		
Nice balance of sauce to beef?		
Burned or covered with ash?		

Doneness	(20)	
Tender, moist?		
Dry, tough?		
Overcooked, undercooked?		

Taste	(20)	
Great beef taste predominates?		
Pleasing balance of ingredients?		

Total points (100)	_____	Judge _____
---------------------------	-------	--------------------

HAMILTON COUNTY 4-H CLUB RECORD

4-H Beef Barbecue Project

Name _____ Grade _____

Age _____ Date of Birth _____ County _____

Name of Club _____

Number of years in Project _____

Name of Parent or Guardian _____

Signature of Leader _____ Date _____

Summary of Activities

1. What kind of grill did you use? _____

2. List three (3) dates beef was barbecued:

3. Total number of times beef was barbecued: _____

4. List cut(s) of beef barbecued: _____

5. List a skill or knowledge about beef barbecuing that you learned this year or thought was important:

6. How did you choose the sauce for your beef? _____
