

Cooking over a Live Fire

Barbecuing

Smoking

Grilling

Learning Objectives

- Define what is meant by "barbecuing (BBQ)"
- Describe the steps involved in barbecuing
- List the regional styles of barbecue available across the USA and state characteristics of each
- Provide examples of fuel sources that can be used for barbecuing
- Compare and contrast the cooking techniques of cold smoking, hot smoking, and smoke roasting
- List equipment needs and fuel sources that can be used for smoking



- Large cuts of meat or ribs
- Cooked in a closed pit
- Indirect heat (away from the fire)
- Low heat (225°F 250°F)
- Smoke encouraged/required
- Long cooking time
 - Varies with type and cut of meat
 - 3 hours (ribs) to 24 hours (whole pig)
- Fire made of charcoal or hardwood
 - Wood chips can be added for additional flavor

BBQ Defined

- Purpose
 - Utilize large tough inexpensive cuts of meat
 - Beef brisket
 - Pork shoulder
 - Transform meat from tough to tender
- How it happens
 - Low temperature
 - Long cooking time
 - Breaks down connective tissues

BBQ Method

- I. Pre-preparation: Rub, brine, and/or marinate meat
- 2. Prepare fire
 - Build fire using charcoal or hardwood
 - Arrange coals for indirect heat
 - Reduce to desired temperature (225°F 250°F)
- 3. Cook meat
 - Arrange meat for indirect cooking
 - Maintain fire at desired temperature
 - Add wood chips for smoke and flavor (optional)
 - Baste with sauce (optional)
- 4. Slice/Pull/Chop
- 5. Sauce (optional)

BBQ Styles

- Texas
- Kansas City
- Memphis
- North Carolina
 - East
 - West
- South Carolina
- Alabama



Texas BBQ

Usually features brisket

- Requires very long cooking time (usually overnight to 24 hours)
 - Results in brisket "bark"
- Texas BBQ sauce
 - Spicy and tangy tomato-based
 - Not put on the meat while cooking
 - Usually served on the side, if at all



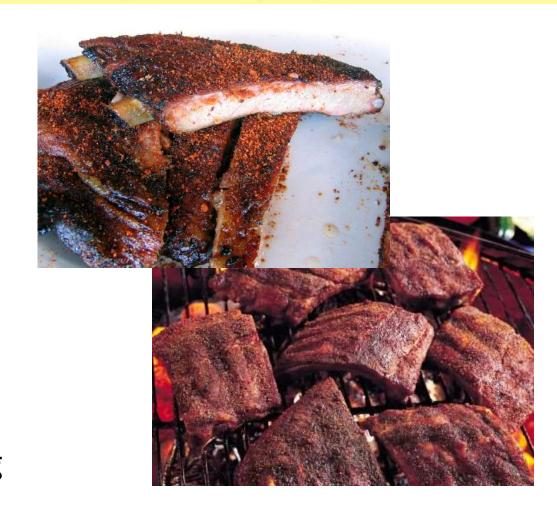
Kansas City BBQ

- Uses a variety of meats
 - Brisket, pork butt, ribs, or chicken
- Defined by the sauce
 - Very thick so it does not fall off while cooking
 - Sweet
 - Sauce often used to form a glaze in last 20 minutes of cooking
- Uses more sauce



Memphis BBQ

- Predominantly spare ribs or baby back ribs
 - Cooked dry (no glaze)
 - Can be braised before grilled
- Sauce is thinner
- Served
 - "Dry" no sauce, extra rub
 - "Wet" slathered with sauce just before serving



Carolina BBQ

- Almost exclusively pork butt or shoulder
- "Pulled pork"
 - Pork butt or shoulder
 - Cooked low and slow with smoke until able to shred or "pull" by hand
- Often served with coleslaw on a bun

Alabama BBQ

- Defined by the unique sauce
- White sauce
 - Mayonnaise based
 - Vinegar
 - Spices
- Brushed on in the last 5 minutes of cooking



Fuel for BBQ

- Hardwood
 - Hickory
 - Mesquite
 - Oak
 - Pecan
 - Maple
 - Apple
 - Cherry

...and more

- Charcoal briquettes
 - Lump charcoal
 - Wood chips
 - As flavoring addition

Smoking

- Why smoke meats
 - -Preservation
 - Traditionally
 - -Today, more about aroma and flavor
 - -Gaining momentum in food service

Smoking Methods

- Cold Smoke
 - $< 100^{\circ} F$
 - Finished product has a raw texture
 - Cure or brine required
 - Pellicle
 - Smoke to desired color and flavor

- Hot Smoke
 - $< 250^{\circ}F$
 - Cure, brine, rub optional
 - Smoke until tender or to desired temperature depending on product

Smoke-Roasting

- Hybrid between smoking and roasting
 - High heat
 - 350° and above
 - Used for tender items
 - Pork loin, beef tenderloin, poultry, etc.
 - Imparts smoke flavor and appearance
 - Gas and charcoal grills, ovens
 - Brines, rubs, and mops can be applied

Equipment

- Price Range:
 - \$0 to \$1000's
- Requirements
 - Box to hold smoke and product
 - Smoke source
- Possibilities
 - Stove top/aluminum pans
 - Old refrigerator
 - Charcoal water smoker
 - Electric smokers
 - BBQ pits







Grilling



Gas vs. Charcoal or Wood Grills

Gas

- Pros
 - Quick fire
 - Clean
- Cons
 - Have to fill tanks
 - Burner layout may not be good for all cooking
 - Need high BTU's
 - Less friendly to use as a smoker
 - Large, heavy bulky
 - Expensive

Charcoal/Wood

- Pros
 - · Hot as you want it
 - Can serve as a smoker
 - Lighter more portable
 - Equipment is less expensive
- Cons
 - More time to create the fire
 - Charcoal is messy
 - Must maintain the fire

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Grilling/Broiling vs. BBQ

Grilling

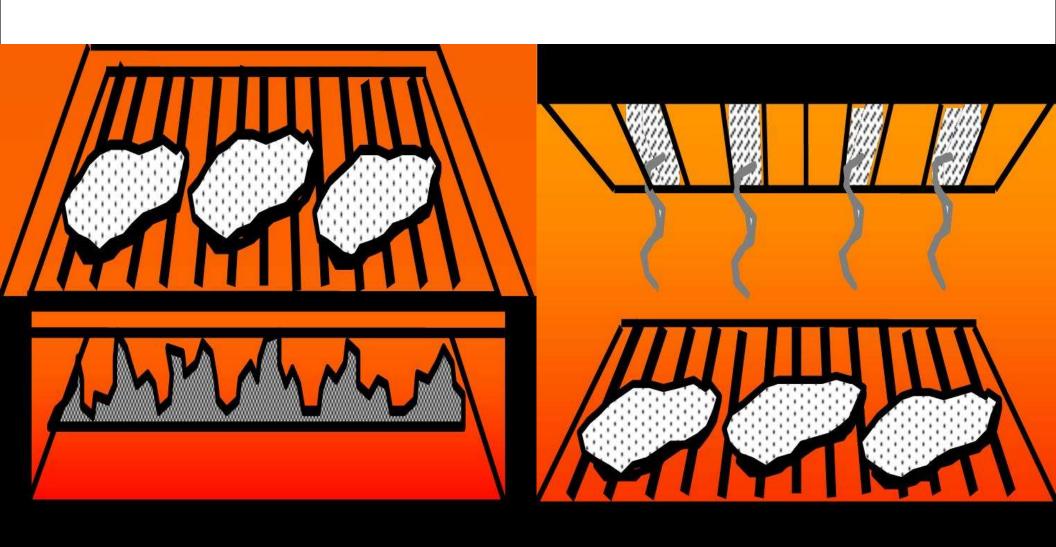
- High direct heat
- May involve smoke
- Tender items
- More expensive, more tender cuts
- Short cooking time

BBQ

- Indirect Low n Slow heat: 225°F – 250°F
- Generally involves smoke
- Less expensive, less tender items
- Longer cooking time



Grilling vs. Broiling

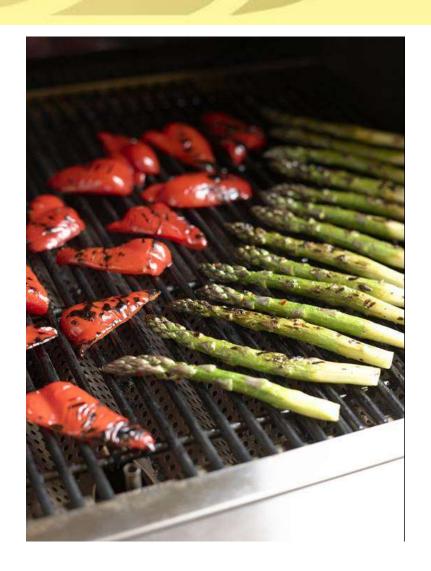


Grilling and Broiling

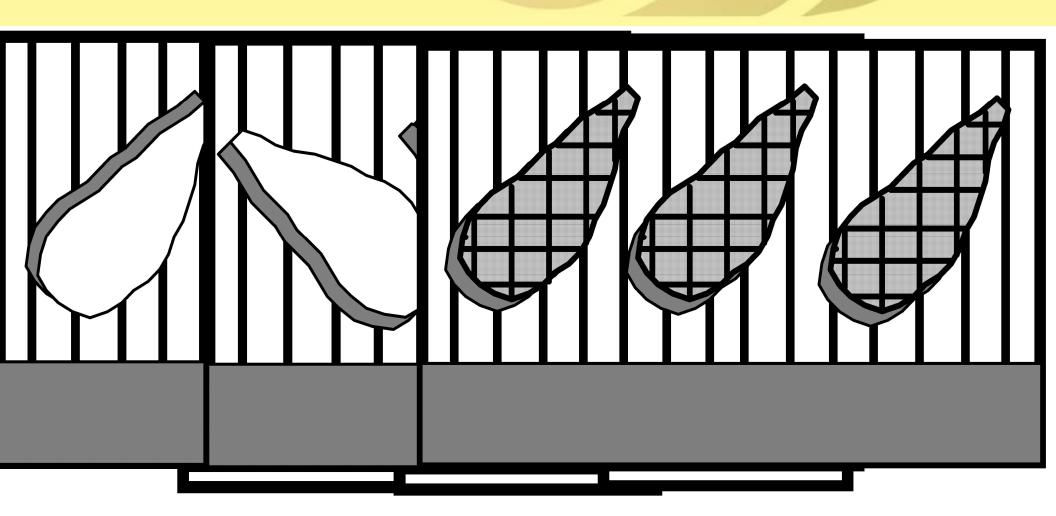
- Lightly charred exterior, moist interior, slightly smoky flavor
- Characteristics of items to be grilled/broiled
 - Tender
 - Have intramuscular fat content (if possible)
 - Portion size
- Foods suitable for grilling/broiling
 - Meats
 - Seafood
 - Vegetables (tender, high moisture content)
- Sauces are made separately; very versatile

Grilling Method

- I. Thoroughly clean and preheat grill; oil grids
- Season and/or marinate main item; brush with oil if necessary to prevent sticking
- 3. Place main item on the grill; use a hand grill for delicate foods such as fish
- 4. Rotate item 90° to produce crosshatch marks, if desired
- Turn item over and continue cooking to desired doneness



How to Mark an Item



- Gather all equipment and ingredients before starting
- Clean grill
 - While grill is hot, scour grates with wire brush
- Season grill
 - No, not salt and pepper
 - Wipe the grates with a towel dipped in oil to finish cleaning the grates and provide lubrication
 - Proper seasoning will
 - Prevent food from sticking
 - Enhance caramelization
 - Produce a cleaner end product
 - Eliminate transfer of flavors from previous meal

- Create temperature zones on the grill
 - Leave a burner on low, or medium on a gas grill
 - Do NOT distribute charcoal in an even layer on a charcoal grill
 - Create temperature zones by mounding more charcoal on one side of the grill
 - Hot, medium, and low cooking zones

- Appropriately apply heat
 - Use high heat to sear product
 - Searing does not seal in juices, but DOES result in caramelization which equals BIG flavor
 - Results in better appearance
 - For thin items
 - Cook quickly at high heat
 - For medium-thick items
 - Start at high heat
 - Finish on cooler area of grill/broiler
 - For thick items
 - Start on high heat
 - Finish on sizzle platter in oven

While grilling

- Foods should be grilled/broiled at the last possible moment
- Let food sit on grill until it releases do not try to turn or move the food too quickly
- Never pierce items after cooking

Using sauces

- If used, baste at end of cooking process to create a glaze
- Do not baste with sauce over direct heat
- Sauce is often better served on the side

Marinades, Brines, and Rubs

Marinades

- Contain oils, acids, and aromatics
- Why use marinades?
 - Flavor
 - Moisture
 - Color

Brines

- Comprised of water, salt, sugar, and aromatics
- Add moisture to naturally dry meats

Rubs (dry or wet)

- Dry
 - Mixture of salt, sugar, herbs, spices, etc.
- Wet
 - Dry rub mixed with a little oil, vinegar, wine, citrus juice, etc. to form a paste

Determining Doneness

- Internal Temperatures
 - Fish I45°F
 - Poultry 165°F(What about duck breast?)
 - Pork 145°F
 - Veal 140°F
 - Beef | 120°-140°F

Other Methods

- Time
- Experience
- Finger pressure

Any Questions?