



Culinary Institute
of America

Butchery, Grilling, & BBQ Boot Camp

Day Two



Learning Objectives

- Identify appropriate tools/equipment used for grilling and barbecuing.
- Compare and contrast grilling, broiling, and barbecuing.
- Describe the steps involved in the grilling process and “marking” an item.
- List and apply various methods to test for doneness.
- Compare and contrast brines, marinades, and rubs.
- Discuss a variety of tips for achieving superior result and troubleshooting.

Grilling & BBQ: Safety

- Do not let foods set out (unrefrigerated) for more than 2 hours
- Use long-handled equipment
- Use sturdy, safe equipment
- Follow the manufacture's operating and safety instructions
- Grill outside in a well-ventilated area



Equipment

- Gas grills
- Charcoal grills
- Smokers
- Grills
- Broilers



Handheld Tools



- Tongs
- Spatula
- Sheet pans
- Grill brush
- Mops
- Hand rack

Gas vs. Charcoal Grills

	Pros	Cons
Gas	<ul style="list-style-type: none">▪ Quick fire▪ Clean	<ul style="list-style-type: none">▪ Must fill tanks▪ Burner layout not ideal for some cooking▪ Need high BTUs▪ Not ideal as a smoker▪ Large, heavy▪ Expensive
Charcoal	<ul style="list-style-type: none">▪ Hot as you want it▪ Can serve as a smoker▪ Lighter, portable▪ Less expensive	<ul style="list-style-type: none">▪ More time to create fire▪ Messy▪ Must maintain fire

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



What's the difference?

Broiling vs. Grilling

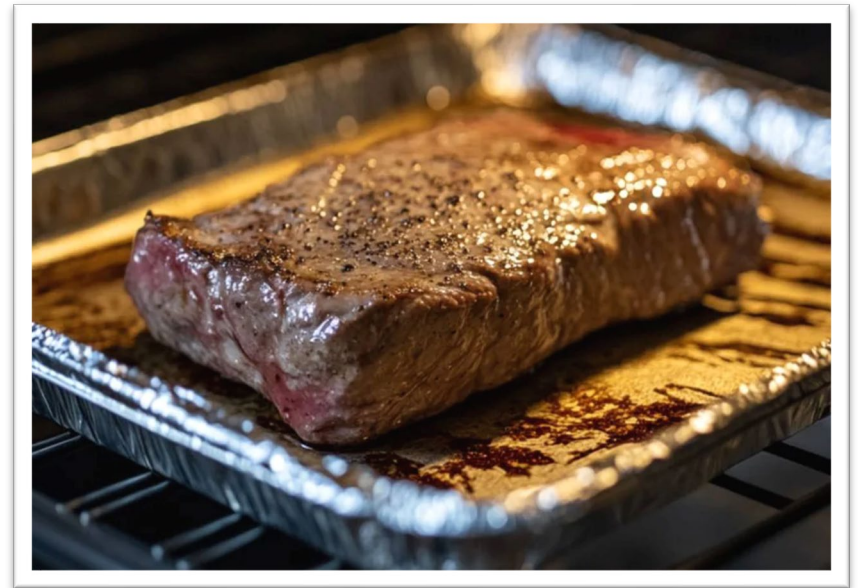
Heat located **above** food



Heat located **below** food

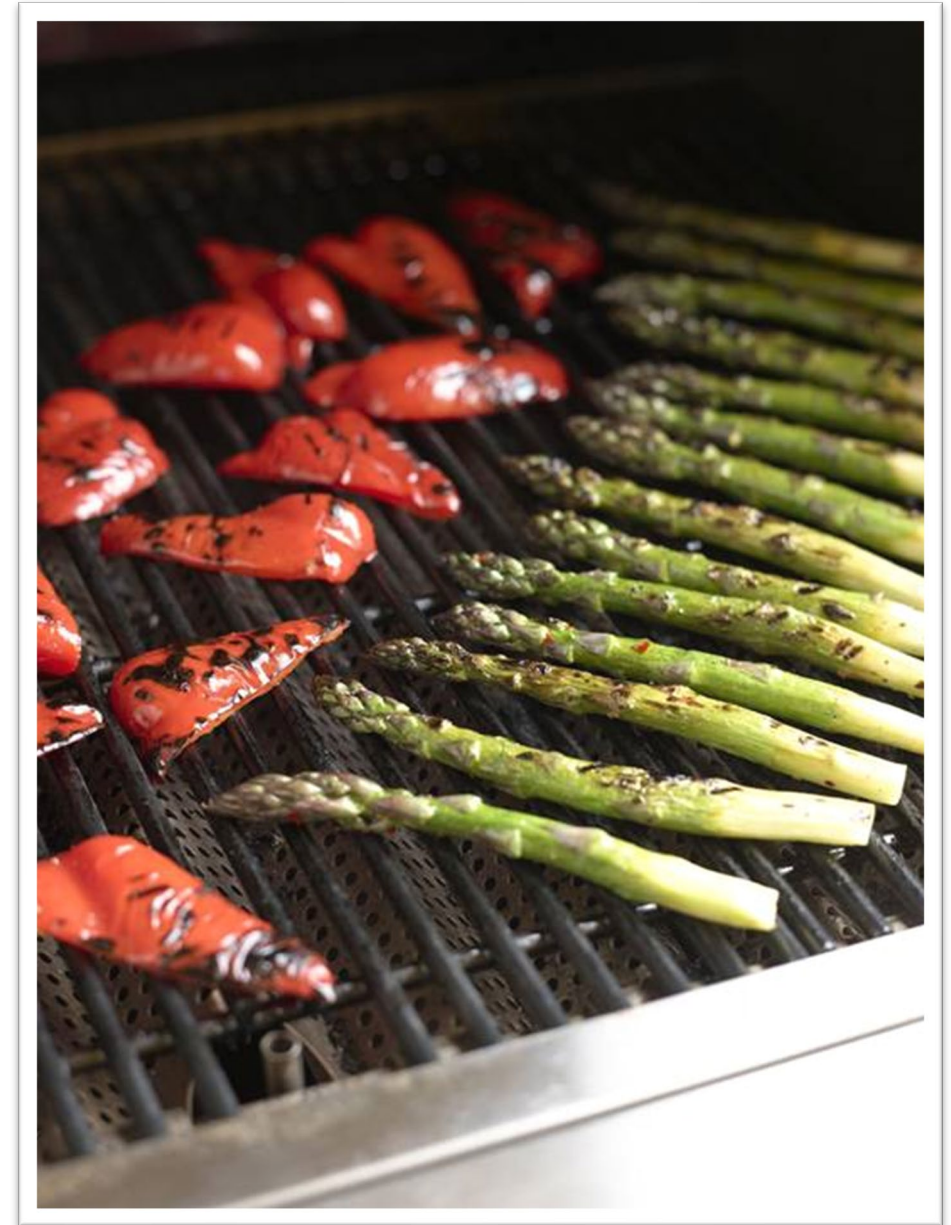
Grilling and Broiling

- **Characteristics of suitable foods:**
 - Tender
 - Have intramuscular fat content (if possible)
 - Portion size
- **Examples:** meats, seafood, vegetables (tender, high moisture content)
- Sauces are made separately; very versatile
- Gives food a lightly charred exterior, moist interior, slightly smoky flavor

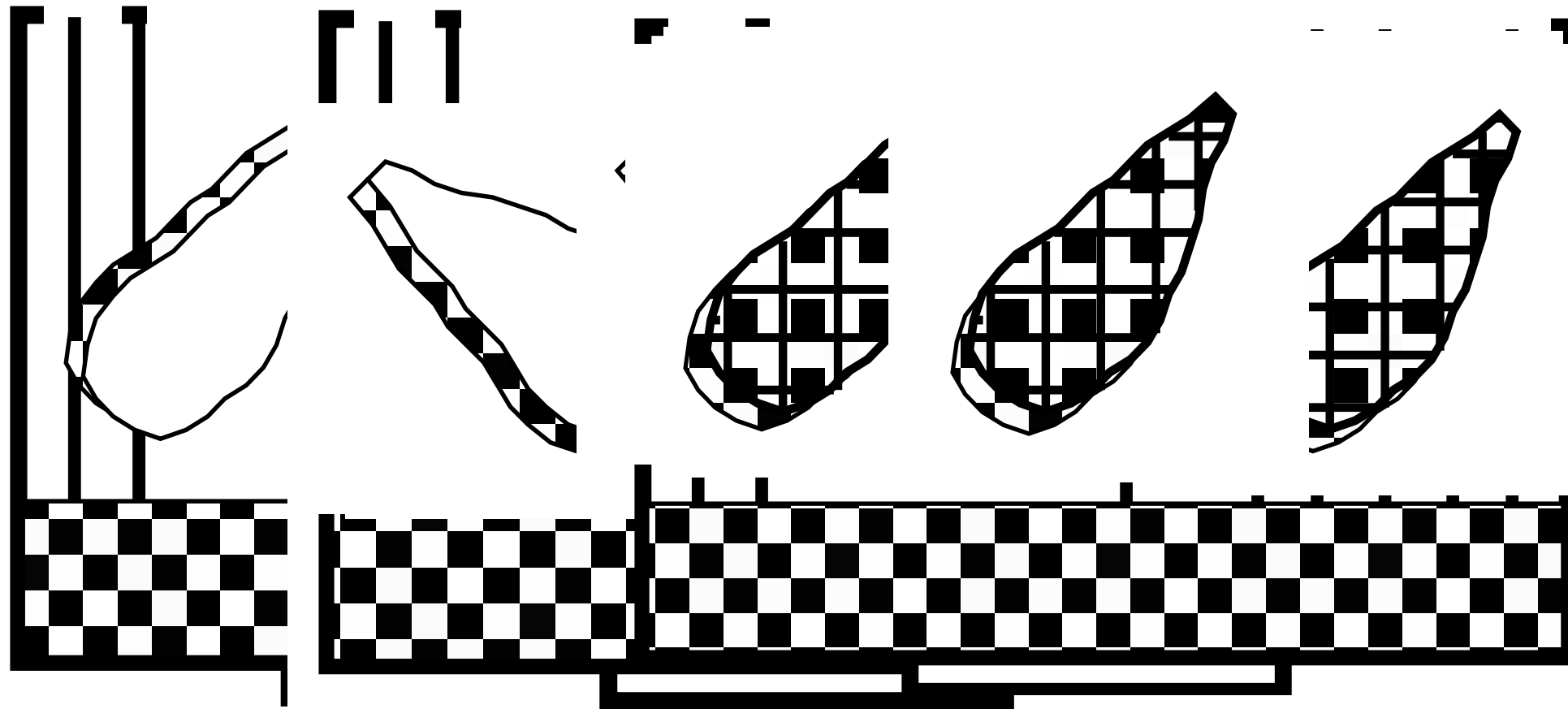


Grilling: Method

1. Thoroughly clean and preheat grill.
2. Brush grates with oil.
3. Season/ marinate main item.
4. Brush item with oil if necessary to prevent sticking.
5. Place item on grill. Use hand grill for delicate foods like fish.
6. Rotate item 90° to make crosshatch marks, if desired.
7. Turn item over and cook to desired doneness.



How to Mark an Item



Preparation

- Gather all equipment and ingredients before starting
- **Clean grill:** while grill is hot, scour grates with a wire brush
- **Season grill:** wipe grates with a towel dipped in oil
- Proper seasoning will:
 - Prevent food from sticking
 - Enhance caramelization
 - Produce a cleaner end product
 - Eliminate transfer of flavors



Preheating the Grill

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



Grilling and Broiling Tips

While grilling

- Grill/broil food at the last possible moment
- Let food sit on grill until it releases
- Do not turn or move food too quickly
- Never pierce items after cooking

Using sauces

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



Searing



- High, intense heat (500°F or higher)
- Short amount of time
- Produces golden brown color
- Caramelization results in big flavor
- Does not seal in juices

Applying Appropriate Heat

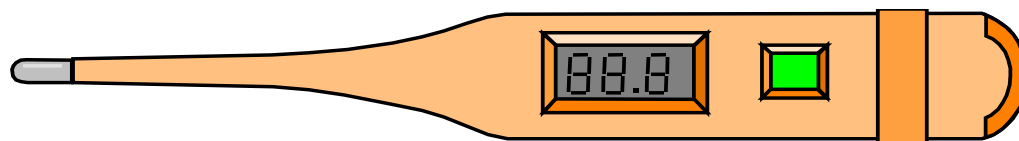
- For **thin items**: cook quickly at high heat
- For **medium-thick items**
 - Start at high heat
 - Finish on cooler area of grill/broiler
- For **thick items**
 - Start on high heat
 - Finish on sizzle platter in oven



Internal Temperatures for Cooked Foods



Food	Temp
Seafood	145°F
Poultry	165°F
Pork	145°F
Veal	145°F
Beef	145°F
Vegetables	140°F



Troubleshooting

PROBLEM	CAUSE	SOLUTION
Excessive flare-up; Dark, oily, sooty appearance	Too much fat or grease	Drain marinade well before grilling. Wipe with paper towel to remove excess oil. Use meat with lower fat content.
Dirty food surface, food surface with burnt bits or crumbs	Grill not properly seasoned or cleaned	Preheat the grill 30 minutes before use. Brush rods with wire brush and wipe with oiled cloth. Repeat throughout cooking process as needed.
Foods sticking to surface	Grill not properly seasoned or cleaned	Clean and season grill. Keep grill rods well lubricated.
	Food has minimal natural fat	Lightly coat lean food items with oil before placing on grill.

Troubleshooting

PROBLEM	CAUSE	SOLUTION
Charred/ burnt exterior, raw/ undercooked interior	Grill too hot	Lower grill temperature. Sear or mark in a hot zone. Allow to finish in a cooler spot or in an oven.
Pale, indistinct grill marks; Excessive cooking time	Grill too cold	Pre-heat grill for at least 30 minutes. Allow grills to recover temperature between batches.
Improperly formed grill marks	Poor marking technique	Follow proper marking procedures.

Marinades and Brines

Marinades

- Contain oils, acids, and aromatics
- Adds flavor, moisture, and color

Brines

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



Rubs



Dry rubs

- Mixture of salt, sugar, herbs, spices, etc.

Wet rubs

- Dry rub mixed with a little oil, vinegar, wine, citrus juice, etc. to form a paste



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Any Questions?