



Culinary Institute
of America

Dry-Heat Cooking with Fats
& Oils
Thickening Agents
Classic and Contemporary
Sauces



Learning Objectives

- Define and execute sautéing, stir-frying, pan-frying, and deep-frying techniques
- Identify appropriate tools/equipment and ingredients that may be used for each method
- Describe various coatings that are used on fried food
- Dredge items using the standard breading procedure
- Identify various sauces that may accompany these items
- Compare and contrast various thickening agents and techniques
- Discuss the major categories of sauces and state key characteristics of each

Sauté

- Naturally tender items
- Small amounts of fat/oil
- High smoke point for fat/oil
- Rapid cooking techniques
- Items jumped around cooking vessel



Sauté Equipment



- Sauteuse
- Sautoir
- Wok

Stir-frying

- Asian cooking method
- Similar to sauté
- Constant movement
- Bite-size pieces or smaller
- Sauce not formed from cooking juices



Stir-fry Equipment



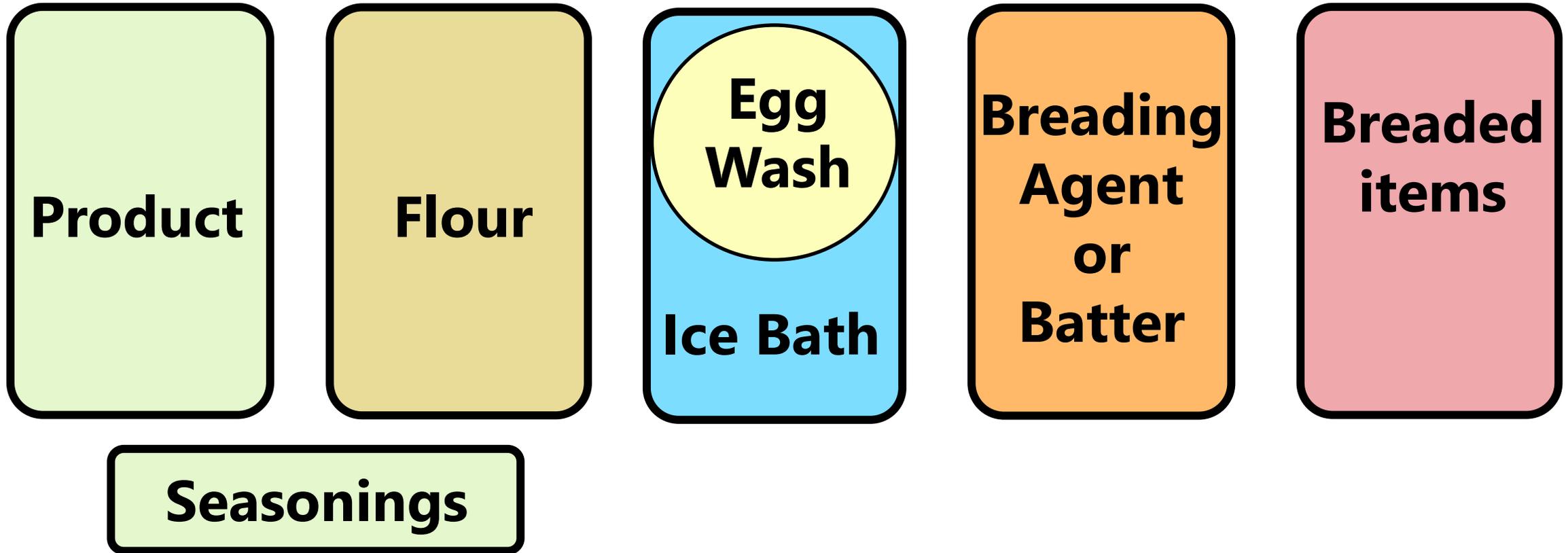
- Tilting skillet
- Steam-jacketed kettle

Pan Frying

- Items usually coated with breading or batter
- Partially submerged in fat/ oil at about 325°F
- Fat covers the bottom 1/3 to 1/2 of items
- Only exterior crust is browned
- Can be completely cooked in pan or finished in oven
- Best choice for items that warp when cooked



Breading Method: Mise en Place



Deep-Fat Frying



- Almost always coated with breading or batter
- Fully submerged in fat/ oil at about 350°F
- Fry until completely cooked
- Best served immediately

Deep-Fat Frying: Method

- **Basket:** for breaded items or food that will not stick together
- **Double Basket:** contains food that floats
- **Swimming:** For battered items or food that sticks together



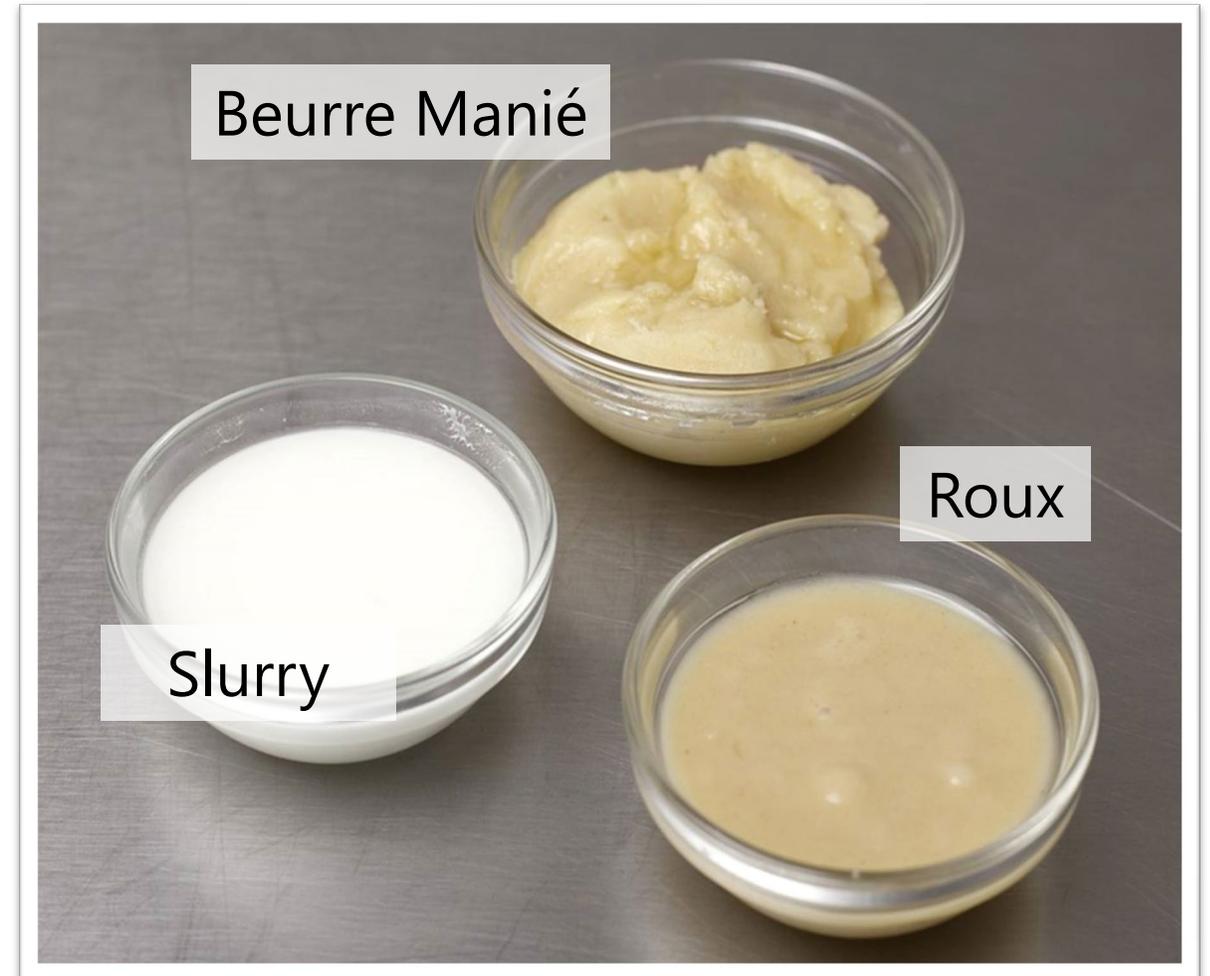
Deep Fat-Frying: Maintenance



- Use high-quality cooking fat/ oil
- Filter fat/ oil frequently to remove food particles and debris
- Avoid overloading, which causes the oil temperature to drop rapidly and affects food quality
- Maintain correct temperature for different foods
- Wipe down fryer exterior
- Deep-clean fryer at least once a month to ensure hygiene and optimum efficiency

Thickening Agents

- Beurre Manié
- Pure starches (cornstarch, arrowroot)
- Liaisons
- Grains
- Vegetables



Slurry Facts



- Pure starch = Cold liquids
- “Heavy cream” consistency
- Twice the thickening power of flour
- Added to boiling liquid at end of cooking
- Clarity, gel strength, and thickening abilities vary with starch type

Thickening Agents: Roux

- A roux ("roo") is cooked fat + flour
- Base for sauces and soups that works as a thickening agent when heated
- Added at beginning of cooking.
- Develops a darker color, deeper flavor as it cooks
- More flavorful and smoother than a slurry
- 4 oz. roux thickens 1 qt. liquid (medium consistency)



Combining Roux with Liquid



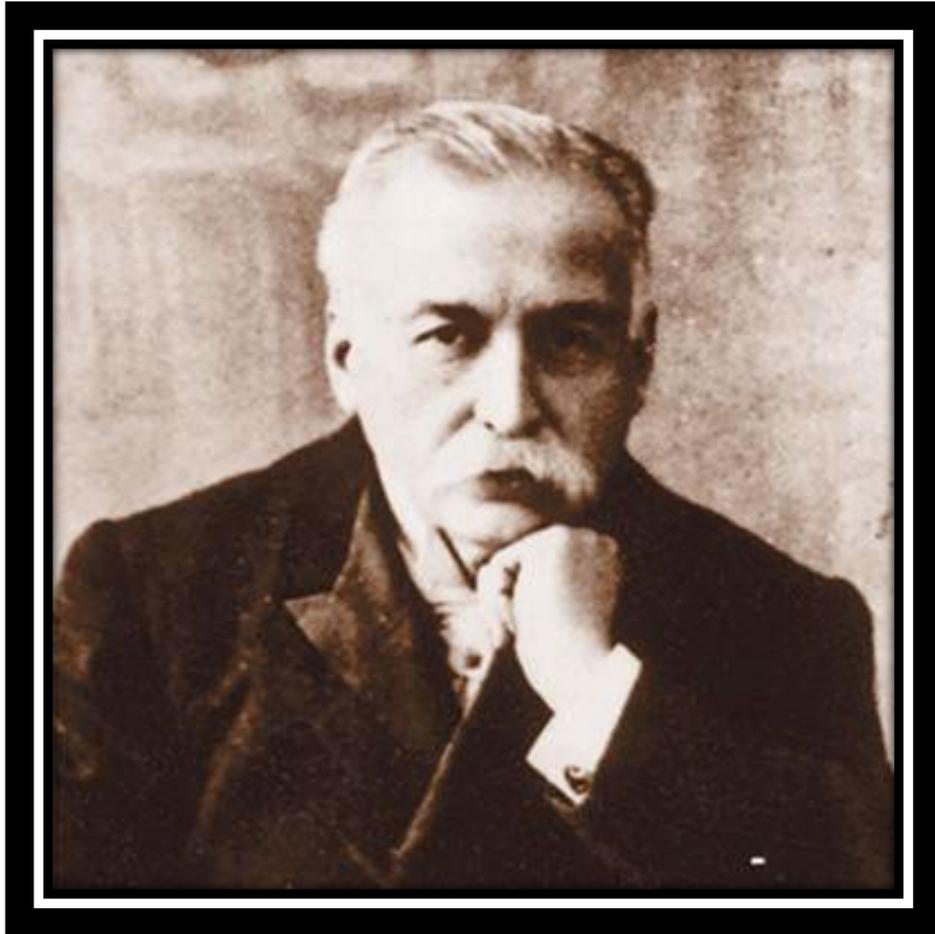
- Add **room temperature roux** into **hot liquid**, stirring vigorously.
- Add **cold liquid** into **hot roux**, stirring vigorously.
- Hot roux + hot liquid = lumps
- Cold roux + cold liquid = lumps

What is a Sauce?

A flavorful liquid served as an accompaniment to food



Escoffier's Perspective on Sauces



"Sauces represent one of the most important components of cookery... it is therefore impossible to devote too much care and attention to their preparation."

--Auguste
Escoffier

Grand/ Mother Sauces

- Old style of sauce making
- Made in large batches and stored
- Roux thickened
- Laborious, time consuming
- Not eaten "as is"
- Can create many "derivative" or "small sauces"
 - Sauces created from "mothers" to fit a specific dish
 - Created in small batches



Contemporary Sauces

- Not all based on grand sauces
- Types:
 - Emulsion sauces
 - Pan sauces
 - Broth-style sauces
 - Fruit/Vegetable based sauces



Contemporary Sauces



- Quick to produce, require less labor
- Require less skill?
- Nutritionally more sound
- Made in smaller batches
- Culturally diverse
- Often big bold flavors
- Regional and seasonal ingredients
- Not likely to contain roux
- Thickened by reduction, emulsion, purée, or pure starch



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Any Questions?