



Culinary Institute
of America

Bistro Boot Camp

Day Four:

Classic & Contemporary Bistro
Baked Goods & Desserts



Learning Objectives

- Identify bakeshop equipment.
- State the five basic ingredients found in the bakeshop and list functions of each.
- Describe the basic mixing methods.
- Explain the difference between a dough and a batter.
- Describe distinguishing characteristics of chocolate mousse, soufflés, quiche, and pizzas.
- Discuss and prepare classical and contemporary bistro-style baked goods and desserts.

Bakeshop Equipment

Mixers: for combining, whipping, kneading ingredients

Thermometer: measures internal temperature of food, ovens

Scales: weighs ingredients for accuracy and consistency

Measuring cups: measures liquids, dry ingredients by volume

Spatulas: folding, mixing, scraping bowls

Rolling pins: rolls out dough evenly

Hand tools: for detailed tasks (zesters, peelers)



Common Baking Ingredients

The building blocks of every great bake

Fat/Oil

Sugar/Sweeteners

Eggs

Flour

Liquids

- Which ingredients are wet, and which are dry?
- Which helps a cake rise?
- What happens if you forget the eggs?

Functions of Fats

Tenderizes:

coats flour particles, inhibits gluten formation to create a softer, more tender crumb (cakes, cookies)

Enhances flavor & texture:

adds a rich flavor; provides smooth, rich mouthfeel

Creates flakiness:
solid fats help create layers (pastries, pie crust)

Helps with leavening:

traps air when creamed with sugar, helps rising (cakes)

Leavening partner:
when created with fat, it traps air and helps rise

Provides moisture & improves shelf life:

retains moisture, slows staling

Functions of Sugar

Adds sweetness:
the main purpose –
adds pleasant flavor

Provides structure:
helps with texture,
volume

Aids leavening: when
created with fat, traps
air and helps rise

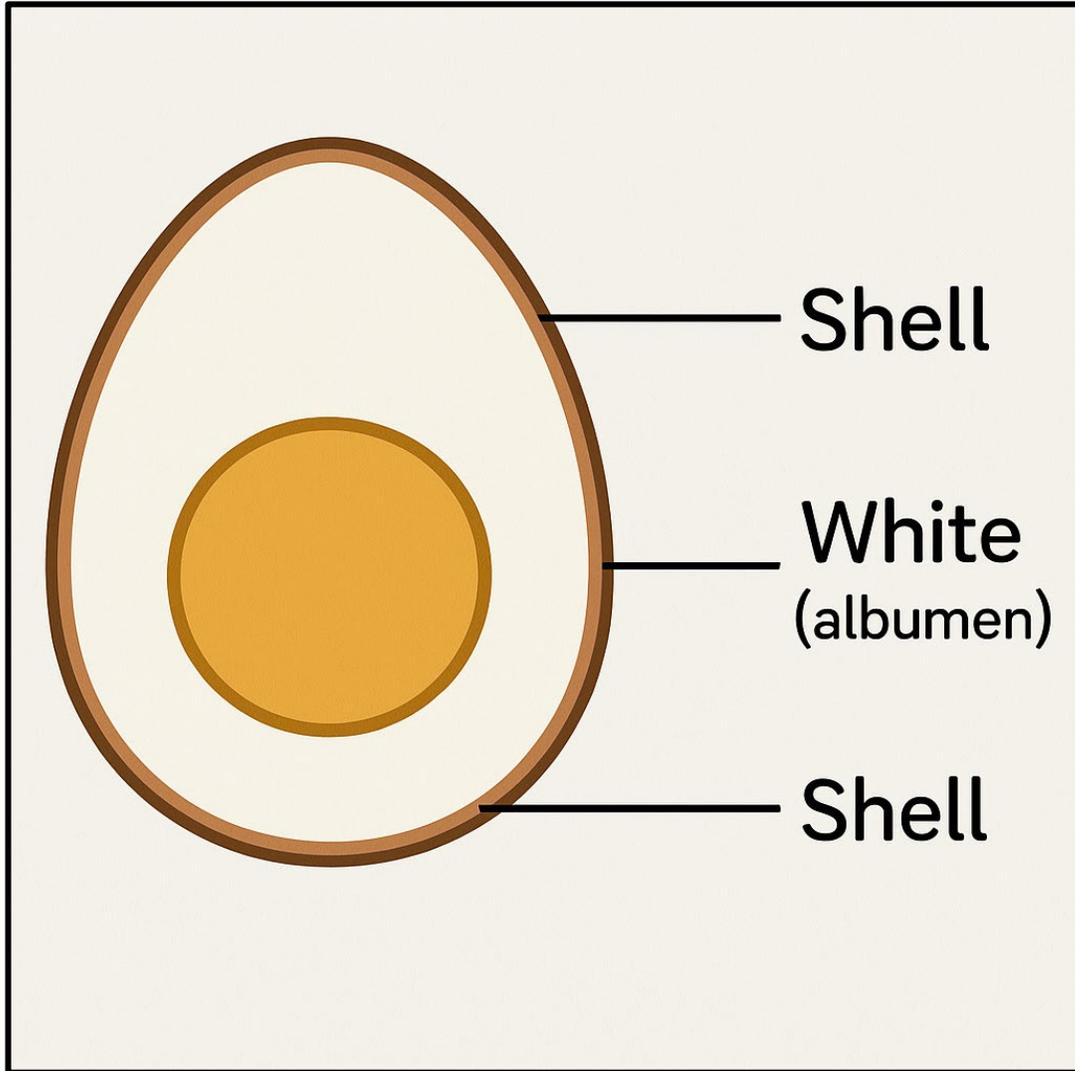
Adds moisture:
helps keep baked
goods soft and
fresh

Aids in browning:
caramelization, makes
crust golden &
flavorful

Stabilizes:
helps stabilizes egg
foams (meringues,
soufflés)



Eggs



- Eggs are a versatile ingredient that play many essential roles in baking

Parts of Eggs:

- **Yolk:** Fat and nutrient, adds richness
- **White (albumen):** Mostly protein, helps with structure and leavening
- **Shell:** Protective layer (not used in recipes, of course!)

Functions of Eggs



Gloss & shine: egg washes on doughs give a shiny, golden-brown finish

Structure & binding: help set, hold ingredients; shape as they cook

Color & flavor: adds richness, a golden color, enhances taste

Moisture: adds liquid to batter, contributes to moisture & tenderness

Leavening: traps air during mixing, expands when heated; helps rising

Emulsifying: yolks contain lecithin, helps mix fat & water-based ingredients

Functions of Flour

Provides structure:
gluten (in wheat flours)
forms a network that
holds baked goods
together

**Helps with
absorption:**
soaks up liquids,
balancing moisture in
batters & doughs

Affects textures:
type of flour influences
whether the final
product is chewy, soft,
dense or light

Thickens mixtures:
used in sauces,
custards, and fillings



Chemical Leavening

Chemical leavening:

- Use of chemical agents to produce gas (usually carbon dioxide)
- Causes dough or batter to rise, creates light, airy textures

Chemical leavening agents:

- **Baking soda:** requires an acid (like vinegar or buttermilk) to activate and release gas
- **Baking powder:** contains an acid (cream of tartar) and a base (baking soda)
 - Works in **2 stages:** when mixed with liquids and when exposed to heat



Mixing Methods

- Creaming Method
- Muffin (Blending) Method
- Biscuit (Cutting-in) Method
- Whipping/ Foaming Method
- Kneading



Dough vs. Batter

Dough

- Main ingredient is flour (wheat)
- Ingredients are kneaded
- Usually malleable
- Generally yeast-leavened



Batter

- Main ingredients are eggs with high amount of sugar and fat
- Usually whipped, creamed, or blended
- Pourable/ spreadable
- Leavened by physical or chemical leavening

Straight Method

- All ingredients combined at once
- Features biological leavening (yeast)
- Well method variation
 - Add wet ingredients to sifted dry ingredients
 - Chemical leavener
 - Finish with melted fat
- Several other variations based on product



Straight Method



1. Sift dry ingredients together
2. Combine all liquid ingredients in a bowl
3. Add wet to the dry
4. Scale batter into appropriate pan
5. Bake or cook as indicated

Creaming Method

- Fat (usually butter) beaten with sugar
- Incorporates pockets of air into the fat around each sugar granule
- Air pockets expand in heat of oven, keeping final bake light & airy
- Used for: cookies, cakes, cupcakes



Creaming Method Steps



- 1. Soften the butter:** let it reach room temperature for optimal mixing
- 2. Mix butter & sugar:** beat together on medium speed with the paddle attachment until light and fluffy
- 3. Scrape the bowl:** stop the mixer and scrape the sides and bottom of the bowl as needed
- 4. Add liquid gradually:** slowly add the liquid, mixing for a minute after each addition

Creaming Method Steps

- 5. Scrape the bowl again:** scrape the sides and bottom of the bowl after each liquid addition
- 6. Add flour:** add all the flour at once and mix on low speed until just incorporated
- 7. Final scrape:** scrape the bowl one last time to ensure everything is mixed well



Biscuit/ Cutting-in Method



- AKA: "Rubbed Dough Method"
- Cold fat is cut into flour until crumbly before adding liquid
- Creates flakey layers and tender texture
- Used for biscuits, scones, pie crusts

Biscuit/ Cutting-in Method

1. Sift dry ingredients
2. Toss cold fat with flour mixture
3. Cut in fat
4. Add just enough ice-cold water to moisten dough so it holds together
5. Knead two or three times to pull into a ball
6. Refrigerate for 20 minutes
7. Scale and roll as appropriate



Chocolate Mousse



Mousse flavorings:

- Chocolate: one of most popular flavors; prepared with chopped, melted chocolate
- May also be flavored with puréed, sweetened, strained fruits

Quality characteristics:

- Intense, identifiable flavor
- Light, foamy texture
- Smoothness, richness from cream
- Even color throughout

Soufflés



Hot or frozen

- Hot must be served immediately

Base

- Provides structure so won't collapse when removed from oven
- Heavy béchamel (savory)
- Pastry cream (sweet)
- Additional egg yolks for richness

Soufflés



Flavoring/ Garnish

- Savory: cheese, sautéed vegetables, vegetable purées, shellfish, etc.
- Sweet: chocolate, seasonal fruit, etc.

Whipped egg whites

- Provide lift/ volume and structure

Quiche



- Savory egg dish
- Pastry shell usually blind baked before adding filling
- No top crust
- Base: eggs, milk or cream
- Garnish: meats, vegetables, cheeses, herbs



Pizza

- Traditionally associated with Naples, Italy - today everywhere!
- Dough is yeast-risen, but considered a flatbread due to flat shape
- Dough provides foundation for any number of toppings (in Italy, less is more)
- Crust traditionally thin, but modern varieties range (NY, Chicago-style, Sicilian)
- Traditionally made in wood-fired brick oven at very high temperatures





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Any Questions?