

JULY

Pâte à Choux Two Ways

For our seventh module, it's time to take on the French classic: pâte à choux. A twice-cooked dough—first on the stovetop and again in the oven—choux is like a magic air bubble of pastry. It harnesses the power of steam, rather than leavening, to rise in the oven. While baking, the outside sets, with the fat crisping into a golden exterior. Inside, the trapped air pockets combine and expand into one perfect bubble. We're offering two ways to choux—crunchy Choux au Craquelin with Diplomat Cream and savory, cheesy White Cheddar and Chive Gougères. These two choux recipes feature Bob's Red Mill Organic All-Purpose Flour, a versatile flour that packs enough protein for the choux to hold its puffy shape. Taking you from dough to cream and everything in between, our choux primer will show you how to transform the adaptable dough into pastry perfection.



INGREDIENT BREAKDOWN

Great recipes require great ingredients. Find out how each simple ingredient helps create a stunningly versatile choux dough.

UNSALTED BUTTER: Working as both a flavorful fat component and a boost to texture, butter separates the choux from the bread category and firmly places it in the pastry field. During baking, the butter helps create a crisp, rich exterior for choux.

WATER: Water gives your dough flexibility and the ability to expand during baking. In the oven, the water in the dough becomes crucial steam, forcing the dough to shoot up and out to make a hollowed bun.

WHOLE MILK: Like water, milk provides flexibility to make your dough pop up during baking, but it also adds richness and tasty milk fat to the choux dough.

GRANULATED SUGAR: Classic, unadorned choux dough isn't intended to be very sweet. Instead, the small amount of sugar in the dough is another boon to colorization during baking, yielding an attractive golden crust.

KOSHER SALT: We bake with kosher salt because, unlike most commercial salt, it doesn't contain iodine, making it taste purer and more palatable. Also, the salt crystals are larger. Table salt is much finer, so you would use half of what a recipe with kosher salt calls for.

BOB'S RED MILL ORGANIC ALL-PURPOSE FLOUR: The structure of your choux is set by the proteins in the eggs and flour. Bob's Red Mill Organic All-Purpose Flour has a high enough protein content (10% to 12%) to help your choux dough rise and hold its shape after baking. If you use low-protein flours, like cake or pastry flour, your choux will deflate during cooling.

EGGS: The purpose of eggs in your choux dough is manifold. They inject your dough with structure-building protein, elasticity-boosting moisture, and flavorful fat. The weight and size of your eggs matter, as choux dough will only require just the right amount of excess moisture the eggs give it. We've calibrated this recipe to work with 5 large eggs (250 grams), so weigh them to make sure you have the exact amount called for—no more, no less.





INGREDIENT BREAKDOWN

Diplomat cream is the lighter, sturdier alternative to pure pastry cream. Here's how each ingredient works to make our dreamy Diplomat Cream.

WHOLE MILK: Milk is classified in grocery stores by the milk fat content. Whole milk contains 3.25% milk fat. The higher fat content provides more flavor and richness and a smoother texture for the pastry cream.

GRANULATED SUGAR: For our pastry cream, sugar offers sweetness and enhances flavor. Once we heat the sugar and the water over high heat, it becomes hygroscopic, which means it can hold and retain moisture. This also helps thicken the pastry cream to its classic creamy texture.

VANILLA BEAN: The seed pod from the orchid *Vanilla planifolia*, vanilla beans have been used as a flavoring agent for hundreds of years. Cultivation and collection are time-consuming and labor-intensive, which is why it is a more expensive ingredient. In a recipe where vanilla is the star flavor, such as our

pastry cream, vanilla bean is often used because it packs the most concentrated vanilla flavor. Plus, the seeds offer a beautiful speckled contrast to our creamy pastry cream.

KOSHER SALT: Salt is key to making any dessert three-dimensional. It enhances the sweetness of the pastry cream and makes the eggy vanilla richness pop on your taste buds.

EGG YOLKS: The fat- and nutrient-rich center of the egg, golden yolks are one of the prime thickeners in pastry cream. When heated, egg yolk proteins unfold and gel together, making a smooth emulsifier for the pastry cream base.

CORNSTARCH: A powdered starch derived from finely ground cornmeal, cornstarch is used to thicken fillings, jams, and custard. It is best to mix cornstarch with a liquid before cooking to

prevent it from clumping. It also needs to be fully cooked to make sure it does not leave a starchy taste. In pastry cream, cornstarch helps stabilize the eggs and keep them from curdling over the stove. Additionally, it gives luster and shine to the finished product.

UNSALTED BUTTER: Adding richness and flavor, unsalted butter also brings a velvety texture to the finished pastry cream.

HEAVY WHIPPING CREAM: Heavy whipping cream must contain a minimum fat content of 36% milk fat. This high fat content enables it to double in volume when whipped. The quick science of whipped cream: agitated by the friction and air incorporation, fat begins to stick together, cushioned and surrounded by pockets of air. Whipped cream should be kept cold, as heat will cause it to separate.

SWEET TAKE

CHOUX AU CRAQUELIN



CHOUX AU CRAQUELIN

Makes about 36 choux puffs

These crisp sugar cookie-capped Choux au Craquelin are the sweetest example of what choux can bring to the table. With hollow interiors generously filled with airy Diplomat Cream, these choux are a triumph of French pâtisserie.

- ½ cup (113 grams) unsalted butter, cubed**
- ½ cup (120 grams) water**
- ½ cup (120 grams) whole milk**
- 2 teaspoons (8 grams) granulated sugar**
- ½ teaspoon (1.5 grams) kosher salt**
- 1 cup (125 grams) Bob's Red Mill Organic All-Purpose Flour**
- 5 large eggs (250 grams), room temperature**

Craquelin Cookies (recipe follows)
Diplomat Cream (recipe follows)

1. Preheat oven to 375°F (190°C). Line 2 to 3 baking sheets with parchment paper.
2. Using a permanent marker and a 2-inch round cutter as a guide, draw circles at least 1½ inches apart on another sheet of parchment paper; slide template under parchment on a prepared pan.
3. In a medium saucepan, bring butter, ½ cup (120 grams) water, milk, sugar, and salt to a rolling boil over medium-high heat. Using a wooden spoon, stir in flour. Cook, stirring constantly, until a skin forms on bottom of pan and mixture pulls away from sides of pan and forms a ball, 1 to 2 minutes. Transfer mixture to the bowl of a stand mixer fitted with the paddle attachment; beat at low speed until dough cools slightly, 30 seconds to 1 minute. Add eggs, one at a time, beating until combined. (Batter will be shiny and will slowly move back together when a spatula is dragged through it.)
4. Transfer batter to a large pastry bag fitted with a ½-inch round piping tip (Wilton 1A). Place piping tip in center of a drawn circle. Hold tip perpendicular ½ inch above parchment paper. Holding tip stationary the entire time, apply even pressure until batter reaches edges of drawn circle. Stop applying pressure, and

move tip in a quick circular motion as you lift away to help prevent a point from forming on top. Repeat with remaining batter until pan is full. Wet your finger with water, and press down any points to create a smooth top, if necessary. Slide template out from under piped batter, and place under parchment on other prepared pans; pipe remaining batter. Top each piped choux puff with a frozen Craquelin Cookie right before baking.

5. Bake in batches for 10 minutes. Rotate pan, and bake until fully puffed and deep golden brown, 10 to 15 minutes more. Let choux puffs cool completely on pans.

6. Using a serrated knife, cut off top quarter of each cooled choux puff; set aside. Using a skewer or wooden pick, clear any dough strands. Place Diplomat Cream in a large pastry bag fitted with a ½-inch open star piping tip (Wilton 1M). Pipe cream into each puff, and place cut top piece on top of piped cream. Serve immediately, or refrigerate until ready to serve. Best served same day.

CRAQUELIN COOKIES

Makes about 36 (1¼-inch) disks

- 1 cup (125 grams) Bob's Red Mill Organic All-Purpose Flour**
- ⅔ cup (147 grams) firmly packed light brown sugar**
- ¼ teaspoon kosher salt**
- ½ cup (113 grams) cold unsalted butter, cubed**

1. In the work bowl of a food processor, pulse together flour, brown sugar, and salt until combined. Add cold butter, and process until mixture starts to clump together, about 30 seconds. Pulse until large clumps form and mixture sticks together when pinched, 5 to 6 pulses.
2. Turn out dough onto a clean work surface, and knead 2 to 3 times to bring together. Press into a disk. Place dough between 2 pieces of parchment paper, and roll to ⅛-inch thickness. Place on a baking sheet, and freeze until firm, 20 to 30 minutes.
3. Using a 1¾-inch round cutter, cut dough. Reroll scraps between parchment, and refreeze before cutting more disks, about 10 minutes. Freeze

disks on a baking sheet or in a resealable plastic bag until ready to use.

DIPLOMAT CREAM

Makes about 8½ cups

- 2½ cups (600 grams) whole milk**
- ⅔ cup (134 grams) granulated sugar, divided**
- 1 vanilla bean, split lengthwise, seeds scraped and reserved**
- ¼ teaspoon kosher salt**
- 6 large egg yolks (112 grams), room temperature**
- ⅓ cup (40 grams) cornstarch**
- 2 tablespoons (28 grams) unsalted butter, cubed**
- 3 cups (720 grams) cold heavy whipping cream**

1. In a medium saucepan, heat milk, ⅓ cup (67 grams) sugar, vanilla bean and reserved seeds, and salt over medium heat, stirring occasionally, until steaming. (Do not boil.) Discard vanilla bean.
2. In a medium bowl, whisk together egg yolks, cornstarch, and remaining ⅓ cup (67 grams) sugar. Whisk hot milk mixture into egg yolk mixture. Return mixture to saucepan, and bring to a boil over medium-low heat, whisking constantly. Cook, whisking constantly, until cornstarch flavor has cooked out and custard has thickened, 2 to 3 minutes. Remove from heat, and strain through a fine-mesh sieve into a medium heatproof bowl. Stir in butter until melted and completely combined. Cover with a piece of plastic wrap, pressing wrap directly onto surface of pastry cream to prevent a skin from forming. Refrigerate until completely cooled, about 4 hours.
3. In a large chilled bowl, using a chilled balloon whisk, whisk cold cream until stiff peaks form. (See Note.)
4. Transfer chilled pastry cream to a large bowl, and whisk until smooth. Fold in whipped cream in two additions. Use immediately, or refrigerate until ready to use. Best used same day.

Note: We prefer whisking by hand here, but you can use a mixer if needed. Using the whisk attachment, beat at medium speed until stiff peaks form.

A CLOSER LOOK

CRACK ON WITH CRAQUELIN

Learn how to pull together a flawless craquelin, the irresistibly crunchy wafer top of your choux



1. In the work bowl of a food processor, pulse together flour, brown sugar, and salt until combined. Add cold butter, and process until mixture starts to clump together, about 30 seconds.

2. Pulse until large clumps form and mixture sticks together when pinched, 5 to 6 pulses.

3. Turn out dough onto a clean work surface, and knead 2 to 3 times to bring together. Press into a disk.





4. Place dough between 2 pieces of parchment paper, and roll to $\frac{1}{8}$ -inch thickness. Place on a baking sheet, and freeze until firm, 20 to 30 minutes.

5. Using a $1\frac{3}{4}$ -inch round cutter, cut dough.

6. Reroll scraps between parchment, and refreeze before cutting more disks, about 10 minutes. Freeze on a baking sheet or in a resealable plastic bag until ready to use.



EXPERT TIP

Always work with frozen craquelin when topping your choux. Defrosted craquelin is harder to work with and easier to tear.

MAKE AHEAD

The craquelin can be made ahead of time. Freeze in a resealable plastic bag for up to 1 month.



CHOUX DOUGH

We take you through the steps of creating excellent pâte à choux, from stovetop to stand mixer



1. Preheat oven to 375°F (190°C). Line 2 to 3 baking sheets with parchment paper. You'll want to bake the choux in individual batches so they can bake evenly.

2. Using a permanent marker and a 2-inch round cutter as a guide, draw circles at least 1½ inches apart on another sheet of parchment paper; slide template under parchment on a prepared pan. This parchment paper template will work as your guide when you are piping your choux dough.

3. In a medium saucepan, bring butter, ½ cup (120 grams) water, milk, sugar, and salt to a rolling boil over medium-high heat. Be sure to cube the butter

before adding the other ingredients. If you add whole sticks of butter and try to bring to a boil, the butter will take too long to melt and too much water will evaporate.

4. Using a wooden spoon, stir in flour. Cook, stirring constantly, until a skin forms on bottom of pan and mixture pulls away from sides of pan and forms a ball, 1 to 2 minutes. As you stir, make sure to remove lingering flour pockets. You're essentially cooking off the excess moisture and removing the raw flour flavor. It should go from looking like mashed potatoes to congealing into a roux-like dough.

5. Transfer mixture to the bowl of a stand mixer fitted with the paddle attachment; beat at low speed until dough cools slightly, 30 seconds to 1 minute. This helps cool down the dough a bit before adding in your eggs.

6. Add eggs, one at a time, beating until combined. (Batter will be shiny and will slowly move back together when a spatula is dragged through it.) When beating in the eggs, your dough might look broken at first, but it will eventually come together. For the savory gougères, you will add the cheese and chives after the batter is shiny and slowly moves back together when a spatula is dragged through it.

TIP-TOP PIPING

See how to masterfully pipe and bake your pâte à choux

1. Transfer batter to a large pastry bag fitted with a ½-inch round piping tip (Wilton 1A). For a mess-free batter transfer, place pastry bag in a large jar or glass and fold the bag edges over the lip of the glass before spooning in the batter.



2. Place piping tip in center of a drawn circle. Hold tip perpendicular ½ inch above parchment paper.



3. Holding tip stationary the entire time, apply even pressure until batter reaches edges of drawn circle. Stop applying pressure, and move tip in a quick circular motion as you lift away to help prevent a point from forming on top.



4. Repeat with remaining batter until pan is full. Wet your finger with water, and press down any points to create a smooth top, if necessary.



5. Slide template out from under piped batter, and place under parchment on other prepared pans; pipe remaining batter.



6. Top each piped choux puff with a frozen Craquelin Cookie right before baking.

7. Bake in batches for 10 minutes. Rotate pan, and bake until fully puffed and deep golden brown, 10 to 15 minutes more. Let choux puffs cool completely on pans. The choux must look dark; if too pale, they will deflate during cooling.



DIPLOMAT CREAM DYNAMITE

Diplomat cream is a light blend of pastry cream and whipped cream. Classically flavored with vanilla, it holds its shape better than pastry cream when piping. Learn how to make your own with the following tutorial.

1. In a medium saucepan, heat milk, $\frac{1}{3}$ cup (67 grams) sugar, vanilla bean and reserved seeds, and salt over medium heat, stirring occasionally, until steaming. (Do not boil.) Discard vanilla bean. Make sure your mixture is steaming, not boiling. If it's too hot, it'll cook the yolk mixture made in the next step.

2. In a medium bowl, whisk together egg yolks, cornstarch, and remaining $\frac{1}{3}$ cup (67 grams) sugar. Whisk hot milk mixture into egg yolk mixture. This is tempering and lightening up the yolks, ensuring the mixture won't turn into scrambled egg when cooked on the stove.

3. Return mixture to saucepan, and bring to a boil over medium-low heat, whisking constantly. Cook, whisking constantly, until cornstarch flavor has cooked out and custard has thickened, 2 to 3 minutes. Your pastry cream will thicken considerably during this second round of heating. Do not step away from the stove during this time, as constant whisking is key to keeping your pastry cream from curdling.

4. Remove from heat, and strain through a fine-mesh sieve into a medium heatproof bowl. Thanks to a quick press through your fine-mesh sieve, any tiny curdled bits of egg will be held back from the finished creamy product.





5. Stir in butter until melted and completely combined. Cover with a piece of plastic wrap, pressing wrap directly onto surface of pastry cream to prevent a skin from forming. Refrigerate until completely cooled, about 4 hours. Your pastry cream must be fully chilled in order to properly incorporate your whipped cream in the next step.

6. In a large chilled bowl, using a chilled balloon whisk, whisk cold cream until stiff peaks form. (See Whip It Good for a full tutorial on hand-whipping cream.)



7. Transfer chilled pastry cream to a large bowl, and whisk until smooth. Fold in whipped cream in two additions. Folding in the whipped cream in two additions will help ensure you don't knock out that hard-won aeration.

8. Use immediately, or refrigerate until ready to use. Best used same day. Whipped cream-lightened Diplomat Cream tends to separate and weep over time, so make this the day you plan to serve your Choux au Craquelin.

VANILLA BEAN VIRTUOSO

Find out how to properly scrape every precious vanilla bean seed from its slender pod

1. Using a sharp knife, split vanilla bean pod down the middle.

2. Working with one split pod at a time, grab the tip of the vanilla bean pod and use the dull end of the knife to scrape out the seeds.

3. Use seeds and pod immediately, as their potency decreases over time exposed to air.



WHIP IT GOOD

A quick look at the old-fashioned way to hand-whip cream

TOOLS

Balloon whisk: With its large balloon-shaped end and light, flexible wires, the balloon whisk maximizes the incorporation of air. Chill your whisk before using.

Cold mixing bowl: A cold bowl will help keep your cream chilled as you whip it. Heat will cause the

fat in the cream to melt and collapse air bubbles. Refrigerate it for 15 to 20 minutes before using.

Cold heavy whipping cream: Pull this essential ingredient from the refrigerator right before using. If you leave it on the counter and let it heat up, your whipped cream will be less stable.



1. Pour your cream into your chilled bowl. Whisk, moving side to side and back and forth rather than in circles.

2. Soon, bubbles will form, and your cream will start to thicken.

3. Once your whisk starts leaving visible tracks in the cream, the thickening will go much faster. Control and moderate your pace at this point so you don't overwhip.

4. To check to see if you have stiff peaks, dip your whisk into the cream and hold it vertically, handle down. If it doesn't move, you've achieved proper stiffness!

ASSEMBLE!

You have your golden baked choux and dreamy Diplomat Cream. Now it's time to bring it all together.



1. Using a serrated knife, cut off top quarter of each choux puff; set aside. Using a skewer or wooden pick, clear any dough strands, if necessary. If there isn't a neat little hollow inside your choux puff, use a skewer or wooden pick to create one.

2. Place Diplomat Cream in a large pastry bag fitted with a ½-inch open star piping tip (Wilton 1M). Pipe cream into each puff, and place cut top piece on top of piped cream. Use a swirling motion with your wrist as you pipe to create a cream design that spirals up into a point.

3. Serve immediately, or refrigerate until ready to eat. Best served same day.





SAVORY TAKE

WHITE CHEDDAR
AND CHIVE
GOUGÈRES

WHITE CHEDDAR AND CHIVE GOUGÈRES

Makes about 38 gougères

Swinging to the savory side of choux, our gougères trade the traditional Gruyère for sharp white Cheddar, and herbaceous chives bring a hint of allium charm. Serve these cheesy puffs with your favorite wine, such as Chablis, or even Champagne.

- ½ cup (113 grams) unsalted butter, cubed**
- ½ cup (120 grams) water**
- ½ cup (120 grams) whole milk**
- 2 teaspoons (8 grams) granulated sugar**
- 1 teaspoon (3 grams) kosher salt**
- 1 cup (125 grams) Bob's Red Mill Organic All-Purpose Flour**
- 5 large eggs (250 grams), room temperature**
- 1 cup (114 grams) finely shredded extra-sharp white Cheddar cheese, divided**
- ¼ cup plus 2 tablespoons (18 grams) finely chopped fresh chives, divided**

- 1.** Preheat oven to 375°F (190°C). Line 2 to 3 baking sheets with parchment paper.
- 2.** Using a permanent marker and a 2-inch round cutter as a guide, draw circles at least 1½ inches apart on another sheet of parchment paper; slide template under parchment on a prepared pan.
- 3.** In a medium saucepan, bring butter, ½ cup (120 grams) water, milk, sugar, and salt to a rolling boil over medium-high heat. Using a wooden spoon, stir in flour. Cook, stirring constantly, until a skin forms on bottom of pan and mixture pulls away from sides of pan and forms a ball, 1 to 2 minutes. Transfer mixture to the bowl of a stand mixer fitted with the paddle attachment; beat at low speed until dough cools slightly, 30 seconds to 1 minute. Add eggs, one at a time, beating until combined. (Batter will be shiny and

will slowly move back together when a spatula is dragged through it.) Add ½ cup (57 grams) cheese and ¼ cup (12 grams) chives, and beat at low speed until combined.

4. Transfer batter to a large pastry bag fitted with a ½-inch round piping tip (Wilton 1A). Place piping tip in center of a drawn circle. Hold tip perpendicular ½ inch above parchment paper. Holding tip stationary the entire time, apply even pressure until batter reaches edges of drawn circle. Stop applying pressure, and move tip in a quick circular motion as you lift away to help prevent a point from forming on top. Repeat with remaining batter until pan is full. Wet your finger with water, and press down any points to create a smooth top, if necessary. Slide template out from under piped batter, and place under parchment on other prepared pans; pipe remaining batter.

5. Bake for 10 minutes. Rotate pans, and bake until fully puffed and deep golden brown, 10 to 15 minutes more. Garnish with remaining ½ cup (57 grams) cheese and remaining 2 tablespoons (6 grams) chives. Serve warm or at room temperature.

