HIGH-ALTITUDE BROWN BUTTER COOKIE SYSTEM

5,000 FT

One master dry base, three variants • Calibrated for 5,000 ft

Base recipe adapted for altitude from **Kiley Heard** · Well Made by Kiley
https://www.wellmadebykiley.com/blog/brown-butter-chocolate-chip-cookies

Master modular base guide

BAKE TEMP	BAKE TIME	DOUGH BALL	CHILL
385°F (195°C)	**11 mins**	**3 oz (~85g / #12 scoop)**	**4 hrs minimum (overnight best)**

> ***Modular prep strategy:*** Scale and mix a single large batch of dry ingredients (flour, baking soda, baking powder, salt). Divide the dry mix equally into bowls, then assemble each variant's customized wet base and fold-ins.

MASTER DRY BASE SCALING MATRIX

Ingredient	1 batch (15 cookies)	2 batches (30 cookies)	3 batches (45 cookies, all 3 flavors)
All-purpose flour	2¾ cups + 2 tbsp (356g)	5¾ cups (712g)	8½ cups + 2 tbsp (1,068g)
Baking soda	¾ tsp (3.75g)	1½ tsp (7.5g)	2¼ tsp (11.25g)
Baking powder	¾ tsp (3g)	1½ tsp (6g)	2¼ tsp (9g)
Fine sea salt	¼ tsp (2g)	½ tsp (4g)	¾ tsp (6g)
Total dry mix	**~365g**	**~730g**	**~1,095g**

WET BASE & FOLD-INS BY VARIANT (PER BATCH)

Ingredient	A: Chocolate Chip	B: Cranberry Orange	C: Caramel
Salted butter, browned & cooled	254g (1 cup + 2 tbsp)	254g (1 cup + 2 tbsp)	184g (13 tbsp)
Light brown sugar, packed	1 cup (240g)	1 cup (240g)	½ cup (120g)
Granulated sugar	⅓ cup (70g)	⅓ cup (70g)	¼ cup (50g)
Large eggs, room temp	2	2	2
Heavy cream, room temp	3 tbsp (45ml)	3 tbsp (45ml)	— (in the caramel paste)
Vanilla	2 tsp (8g) paste or extract	2 tsp (8g) paste	1 tbsp (15ml) extract
Flavoring	—	1 tbsp fresh orange zest	Caramel paste: ½ cup (100g) sugar, 3 tbsp (42g) butter, ¼ cup (60ml) cream

Ingredient	A: Chocolate Chip	B: Cranberry Orange	C: Caramel
Fold-ins	1½ cups (250g) semi-sweet chips or dark chunks	1 cup (200g) white chocolate chunks + ¾ cup (95g) dried cranberries, soaked in orange juice	1 cup (170g) dark or semi-sweet chunks
Finish	Flaky sea salt	Flaky sea salt	Extra chocolate + flaky sea salt

UNIVERSAL PREP & BAKING PROTOCOL

1. **Mix master dry base:** Whisk scaled flour, baking soda, baking powder, and salt thoroughly in a large bowl. If making all 3 variants, divide the dry mix into 3 equal portions (~365g per bowl).
2. **Brown butter protocol:** Melt the specified salted butter over medium-high heat. Stir 5–8 mins as the milk solids turn deep golden amber and smell nutty. Pour into a bowl and cool 15–20 mins until warm, not hot.
3. **Wet base emulsification:** Whisk cooled brown butter with the specified sugars for 1 full minute. Whisk in eggs one at a time, then the liquids and flavorings, until glossy and caramel-like.
4. **Combine & chill:** Fold 1 dry base portion into the wet base just until combined. Fold in mix-ins. Scoop into 3 oz (~85g) balls. Cover tightly and chill at least 4 hours (overnight recommended).
5. **Bake at 385°F:** Preheat oven to 385°F (195°C). Space chilled balls 2–3 inches apart on parchment-lined sheets. Bake 10–12 mins (aim for 11). Pull when edges are set and golden but centers look slightly underdone. Top immediately with extra mix-ins and flaky salt. Cool 5 mins on the pan.

HIGH-ALTITUDE CHEMISTRY

All three recipes use the elevated flour mass (356g/batch) and reduced leaveners (¾ tsp soda and powder) to hold structure without collapsing or spreading thin at 5,000 ft. The 385°F oven sets the edges quickly, before faster evaporation at altitude causes spread, and fully chilled fat does the rest.

A: CHOCOLATE CHIP

5,000 FT

Variant A: Original brown butter chocolate chip • 15–16 cookies

*Adapted from **Kiley Heard's** brown butter chocolate chip cookies*

> ***Dry base needed:*** 1 portion (~365g) from the master mix

Ingredients

WET BASE & FOLD-INS

- **254g (1 cup + 2 tbsp)** salted butter, browned & cooled (yields ~213g)
- **1 cup (240g)** light brown sugar, packed
- **⅓ cup (70g)** granulated sugar
- **2 large eggs**, room temp
- **3 tbsp (45ml)** heavy cream, room temp
- **2 tsp (8g)** vanilla bean paste or extract
- **1½ cups (250g)** semi-sweet chocolate chips or dark chunks
- **Flaky sea salt** for finishing

Instructions

1. Brown the butter over medium-high heat until dark amber and nutty (5–8 mins). Cool 15–20 mins.
2. Whisk cooled brown butter, brown sugar, and granulated sugar for 1 minute until well combined.
3. Add eggs one at a time, then whisk in heavy cream and vanilla paste until thick and glossy.
4. Fold in 1 dry base portion (~365g) until just combined, then fold in chocolate.
5. Scoop into 3 oz balls and chill at least 4 hours (overnight best). Bake at 385°F for 11 mins. Top with flaky salt and cool 5 mins on the pan.

B: CRANBERRY ORANGE

5,000 FT

Variant B: White chocolate cranberry orange • 15–16 cookies

My variation on the base recipe, developed with help from Gemini

> ***Dry base needed:*** 1 portion (~365g) from the master mix

Ingredients

WET BASE & FOLD-INS

- **254g (1 cup + 2 tbsp)** salted butter, browned & cooled (yields ~213g)
- **1 cup (240g)** light brown sugar, packed
- **⅓ cup (70g)** granulated sugar
- **2 large eggs**, room temp
- **3 tbsp (45ml)** heavy cream, room temp
- **2 tsp (8g)** vanilla paste + **1 tbsp** fresh orange zest
- **1 cup (200g)** white chocolate chunks
- **¾ cup (95g)** dried cranberries *(soaked & dried)*
- **1–2 navel oranges**, juiced, for soaking
- **Flaky sea salt** for finishing

Instructions

1. Warm the orange juice 30 seconds in the microwave. Soak cranberries 15–20 mins, then strain and pat completely dry on paper towels.
2. While the cranberries soak, brown the butter until golden amber (5–8 mins). Cool 15–20 mins.
3. Whisk brown butter with both sugars. Add eggs, heavy cream, vanilla, and orange zest until emulsified.
4. Fold in 1 dry base portion (~365g), then the white chocolate and dried cranberries.
5. Portion into 3 oz balls, chill at least 4 hours (overnight best), and bake at 385°F for 11 mins. Top with flaky salt.

C: CARAMEL

5,000 FT

Variant C: Caramel-infused chocolate chip (direct caramel base) • 15–16 cookies

*Inspired by **Alix Traeger's** salted caramel cookies*

> ***Dry base needed:*** 1 portion (~365g) from the master mix

Ingredients

HOMEMADE CARAMEL PASTE

- **½ cup (100g)** granulated sugar
- **3 tbsp (42g)** salted butter
- **¼ cup (60ml)** heavy cream

WET BASE & MIX-INS

- **184g (13 tbsp)** salted butter, browned & cooled (yields ~150g; reduced to offset caramel butter)
- **½ cup (120g)** light brown sugar, packed
- **¼ cup (50g)** granulated sugar
- **2 large eggs**, room temp
- **1 tbsp (15ml)** vanilla extract
- **1 cup (170g)** dark or semi-sweet chocolate chunks
- **Flaky sea salt** for finishing

Instructions

1. **Make caramel paste:** Melt ½ cup sugar in a saucepan over medium heat until golden amber. Carefully stir in 3 tbsp butter until melted, then slowly pour in ¼ cup heavy cream while stirring. Pour into a glass bowl and cool completely (20+ mins) until it thickens into a soft paste.
2. **Brown butter:** Brown 184g salted butter for 5–8 mins until golden amber and nutty. Cool 15–20 mins.
3. **Emulsify wet base:** Whisk cooled brown butter, cooled caramel paste, brown sugar, and granulated sugar until cohesive and glossy. Whisk in eggs and vanilla until silky.
4. **Combine & chill:** Fold in 1 dry base portion (~365g), then the chocolate chunks. Scoop into 3 oz balls and chill 8+ hours (overnight is mandatory for this variant).
5. **Bake:** Preheat oven to 385°F. Space balls 2–3 inches apart on parchment. Bake 11 mins. Top immediately with extra chocolate chunks and flaky sea salt. Cool 5 mins on the pan.

CRITICAL CARAMEL SCIENCE NOTE

This variant adds liquid caramel to the wet base, so the dough fat is trimmed (184g butter instead of 254g) and the sugars are reduced. Chilling 8+ hours is required so the caramel's sugars and fats solidify fully, keeping the cookies thick at 385°F.