Cook Pizzeria Food at Home

Recipes with love from

The Robot Book Club

Cook Pizzeria Food at Home

Mastering the Classic American Pie and All Your Favorite Sides

The Robot Book Club

Published by The Robot Book Club

Table of Contents

Preface

This book, and The Robot Book Club, is an experiment large scale AI generation. Every page, from layout to images to copy, was generated with zero human review.

The authoring and publishing teams were implemented in the Kaya scripting language. They were given only the input: American pizzeria food.

This is the only page authord by a human: Hello there!

— Ted Benson

Prologue

This is not a love letter to Naples. American pizza operates as an exact science, demanding specific equipment and a deep understanding of structural mechanics. This uncompromising cuisine emerged through immigrant hustle, establishing rigorous regional traditions that require dedicated methods, careful timing, and precise execution.

A true New York slice demands hydration percentages measured to the gram. A Detroit pan requires a blue steel automotive drip pan and a thick border of Wisconsin brick cheese to achieve the proper caramelization. New Haven apizza relies on a 72-hour cold ferment and the intense heat of a coal oven. For these preparations, approximations fail. Convenience is a dirty word. This manual serves the home cook who respects the craft enough to abandon the measuring cup for the digital scale, embracing the chemistry of cold fermentation and the direct heat of a 3/8-inch baking steel.

One sees it in the slice shops: the flour-dusted counters, the worn linoleum, the snap of the deck oven. The perfect pepperoni cup, the blistered crust, the sheer structural integrity of a slice folded just so. It is an edible history, a testament to communities and kitchens that perfected these regional rites. These traditions stand as foundational pillars built upon strict rules of hydration, flour, and fire. They are the stories of a nation, baked into a crust.

Here, within these pages, lies the code. The precise methodologies. The master doughs, formulated via baker's percentages. The sauces that sing. The assembly, the bake, the nuanced understanding of what makes each style chemically distinct. Zero out the kitchen scale, clear a shelf in the refrigerator

Chapter 1 — The Doughs

Master recipes for the five foundational American pizza doughs, utilizing baker's percentages, kitchen scales, and precise cold fermentation.

Sixty percent hydration. The soul of an honest American slice shop isn't found in the toppings bins; it's proofing quietly in the walk-in. This dough is built on the slow breakdown of high-protein flour during a twenty-four-hour cold ferment and the unglamorous, non-negotiable precision of a digital kitchen scale.

Whether you're forming the crisp, oil-fried edge of a Detroit square in a heavy steel pan, the thick, buttery crust of a Chicago deep-dish, or the high-gluten snap of a classic New York fold, these doughs are matters of fierce regional

pride. You don't eyeball this stuff. You weigh the flour, you respect the hydration percentages, and you let time do the heavy lifting. Zero out the digital scale, pick your regional style, and let the yeast go to work.

The Carmine Street Benchmark

The New York slice is a religion, and Carmine Street is the Vatican. To replicate that perfectly balanced, structurally sound, oil-glistening masterpiece at home, you must abandon the hyperbole and embrace the brutal math of baker's percentages. There is no olive oil in this dough, no cooked marinara, and no room for error. What you need is high-gluten flour, a ridiculously low fifty-eight percent hydration, a long cold fermentation fueled by a fractional amount of yeast, and the thermal violence of a baking steel. Master the mechanics, respect the ingredients, and your reward is a slice that folds cleanly down the middle without a hint of flop. Yes, this is exactly what Joe's tastes like.

INGREDIENTS

525 g	high-gluten flour
304 g	water *at 65°F to 70°F*
1/4 tsp	instant dry yeast
1/2 tsp	diastatic malt powder
13 g	fine sea salt
9 g	granulated sugar
800 g	whole peeled tomatoes
4 g	fine sea salt
10 g	granulated sugar
400 g	whole milk low-moisture mozzarella *grated coarsely from a block*
20 g	Pecorino Romano *finely grated*
2 tbsp	semolina flour *for dusting*

PREPARATION

- **Autolyse the dough to begin passive gluten development.**
  In the bowl of a stand mixer fitted with a dough hook, combine the water, yeast, 9 grams of sugar, malt powder, and flour on the lowest speed until a shaggy mass forms. Cover with a damp towel and let rest for 30 minutes.
- **Execute the final mix until the dough passes the windowpane test.**
  Add the 13 grams of salt and mix on low-medium speed for 6 to 8 minutes. The low-hydration dough will be stiff but should become smooth enough to stretch incredibly thin without tearing.
- **Bulk ferment and divide the dough.**
  Transfer the mass to a lightly floured surface, shape it into a smooth ball, and let it rest at room temperature for 1 hour. Divide the dough into two equal 420-gram portions.
- **Ball the portions and initiate the extended cold fermentation.**
  Form each portion into a taut boule and place into lightly oiled cylindrical containers. Let them sit at room temperature for 1 hour to kickstart yeast activity, then transfer to the refrigerator for 24 to 72 hours.

- **Mill the canned tomatoes to create a textured base.**
  Pass the canned tomatoes through a food mill fitted with a medium die into a large bowl. Never use a high-speed blender, which will aerate the sauce, oxidize it, and turn it pale.
- **Season the sauce and rest it under refrigeration.**
  Stir in the 10 grams of sugar and 4 grams of salt. Allow the sauce to sit in the refrigerator for at least 4 hours so the flavors can fully meld.

INSTRUCTIONS

1. **Saturate your baking steel with maximum heat.**
   Place a baking steel on the upper-middle rack of the oven and preheat to its absolute maximum temperature, ideally 500°F to 550°F, for at least 1 hour to fully charge the metal.
2. **Temper the dough to prevent elastic snapback.**
   Remove the dough balls from the refrigerator 1 1/2 to 2 hours before stretching. Attempting to manipulate cold dough will result in tearing and frustration.
3. **Stretch the dough using the parachute method.**
   Drop the dough into a bowl of flour, transfer to a clean counter, and use your fingertips to press the air from the center outward, establishing a 1-inch rim. Drape the dough over your knuckles and gently pull outward while rotating, stretching it evenly to a 16-inch diameter.
4. **Dress the pie with extreme speed and restraint.**
   Transfer the dough to a peel dusted lightly with semolina flour. Working quickly to prevent sticking, spread exactly one heaping ladle of sauce thinly to the rim, then distribute 200 grams of the mozzarella evenly, leaving deliberate negative space where the red sauce remains visible.
5. **Launch the pizza onto the steel at a shallow angle.**
   Give the peel a slight shimmy to ensure the dough is loose, open the oven, and launch the pie onto the center of the preheated steel at roughly a three-degree angle.

1. **Rotate the pizza in place for an even char.**
   Bake for about 3 minutes until the edges begin to puff and brown, then use tongs to rotate the pizza 180 degrees in the exact same spot on the steel to prevent unchecked heat from burning the undercarriage.

2. **Finish under the broiler if necessary and rest before slicing.**
   If the bottom is perfectly charred but the top requires more color, engage the broiler for 60 to 90 seconds. Transfer the finished pie to a wire cooling rack for 3 minutes before slicing so the molten cheese matrix sets and the crust remains stiff.

CHEF'S NOTES

- **Sourcing high-gluten flour is non-negotiable for structural integrity.**
  The canonical chew and folding capability of a New York slice requires a high-protein patent flour like All Trumps. If unavailable, use a premium bread flour like King Arthur, but expect a slightly softer bite.

- **Do not cook the pizza sauce under any circumstances.**
  Pre-cooking the sauce results in a dull, heavy flavor profile that clashes with the richness of the cheese. The goal is a bright, raw botanical acidity that cuts through the butterfat.

- **The cheese must be whole milk and low-moisture.**
  Fresh fior di latte holds too much water and will turn a thin slice into soup. Always grate coarsely from a block, as pre-shredded supermarket cheeses are coated in starches that inhibit proper melting and cause burning.

The Wooster Street Apizza

ah-beetz

There is pizza, and then there is Apizza. Born in the soot-stained coal ovens of New Haven, this is a working-class masterpiece defined by an unforgiving, blistering char and a resilient crumb that laughs in the face of the foldable New York slice. You don't have a thousand-degree coal fire in your kitchen, so we are cheating physics: leveraging a high-hydration dough, a baking steel to emulate violent bottom-heat conduction, and a precise dose of diastatic malt powder to force the Maillard reaction at 550°F. The cold ferment is long and the margin between perfectly charred and entirely ruined is razor-thin. Pay attention, trust your scale, and leave the rolling pin in the drawer.

INGREDIENTS

530 g	bread flour
360 g	water *at cool room temperature*
8 g	low-diastatic malt powder
11 g	fine sea salt
2 g	instant dry yeast
1 28-oz can	whole peeled tomatoes *drained of excess liquid and hand-crushed*
1/2 cup	Pecorino Romano *finely grated*
1 tsp	dried oregano
3 tbsp	extra virgin olive oil
1/2 lb	low-moisture whole-milk mozzarella *thickly sliced or cubed (optional)*
1 cup	semolina flour
1 cup	bread flour

PREPARATION

- **Mix the flour, malt, and water into a shaggy mass.**
  In a large mixing bowl, combine 530g bread flour, 8g diastatic malt powder, and 360g water until no dry pockets remain. It will look like thick, lumpy oatmeal. Cover the bowl and let it autolyse at room temperature for 30 minutes to passively jump-start gluten development.

- **Incorporate the salt and yeast.**
  Sprinkle 11g salt and 2g yeast over the rested dough. Wet your hands with cold water, pinch the ingredients into the mass, and begin the slap-and-fold method on an un-floured counter for 3 to 5 minutes until the sticky mess becomes smooth and slightly tacky.

- **Rest, divide, and ball the dough.**
  Place the dough back in the bowl, cover, and let rest for 15 minutes to relax the gluten. Divide the dough into three equal 300g portions, pulling the edges underneath themselves to form tight, smooth balls with high surface tension.

- **Ferment the dough in the refrigerator for 48 to 72 hours.**
  Lightly oil three proofing containers, place one dough ball in each seam-side down, and seal airtight. This long cold proof is strictly non-negotiable for authentic flavor depth and coal-oven blistering.

INSTRUCTIONS

1. **Temper the dough and preheat the baking steel for one hour.**
   Two hours before baking, pull the dough containers from the fridge so the dough loses its chill and becomes pliable. Place a baking steel on the middle rack and crank your oven to 550°F on the Bake setting, letting it soak up heat for a full hour after the preheat chime.

2. **Coat the dough in a flour and semolina bath.**
   Mix 1 cup each of bread flour and semolina in a wide bowl. Carefully invert one dough ball into the mixture to coat both sides, taming the 68-percent hydration before moving it to your workstation.

3. **Stretch the dough out flat, intentionally avoiding a puffy outer rim.**
   Starting from the edges and working inward, press the air out evenly with your fingertips. Turn it gently like a steering wheel to form an irregular 12-to-14-inch oval, then transfer to a peel lightly dusted with the semolina mixture.

4. **Assemble the pie with restraint.**
   Spread 1/3 cup of the raw, hand-crushed tomatoes evenly, leaving a scant half-inch border. Dust aggressively with Pecorino Romano, crush a pinch of oregano between your palms over the pie, and finish with a spiral of olive oil. Add the optional mozzarella now if you are making a Mootz pie.

5. **Launch onto the steel and bake for five to six minutes.**
   Slide the pie confidently onto the baking steel. Rotate 180 degrees at the 3-minute mark for an even bake. At 6 minutes, look for dark, leopard-spotted charring on the undercarriage.

1. **Broil to finish the char, then rest before slicing.**
   Switch the oven to Broil on High for 1 to 2 minutes until the cheese blubbers fiercely and the crust blisters black. Pull the pizza, rest it on a wire cooling rack for 60 seconds to preserve the crisp undercarriage, and cut it organically into asymmetrical slices.

CHEF'S NOTES

- **Stick to bread flour and scale your ingredients.**
  Do not substitute Italian 00 flour; it lacks the malt and structural integrity for a 6-minute domestic bake. Use your digital scale for every step—this is a baker's formula, not a suggestion.
- **The diastatic malt powder is your secret weapon.**
  At 1.5 baker's percent, the active enzymes in the malt break down starches into simple sugars during the cold ferment. This is exactly what ensures you achieve that signature 1,000°F coal-oven char at a mere 550°F.

The Conant Avenue Blue Steel

Born in 1946 from repurposed automotive drip trays, the true Detroit square is a triumph of working-class ingenuity and thermodynamic engineering. This isn't just pizza; it's a meticulously calculated fry-bake. The highly hydrated dough undergoes a rigorous twenty-four-hour cold retard to build structure and complex, malty flavor, but the real magic happens at the pan's edge. Wedged against the conductive anodized steel, the high-fat cheese undergoes a violent caramelization, forging the frico—a lacy, shattering, blackened crown that defines the Conant Avenue style. You want authenticity? Weigh your water, respect the proof, and don't flinch when the cheese goes dark.

INGREDIENTS

250 g	high-protein bread flour
182 g	filtered water *heated to 85°F*
5 1/2 g	fine sea salt
2 1/2 g	diastatic malt powder
1 g	instant dry yeast
5 g	extra virgin olive oil
3 tbsp	olive oil or vegetable shortening
12 oz	Wisconsin Brick cheese, or a 50/50 blend of low-moisture whole-milk mozzarella and Monterey Jack *cut into 1/2-inch cubes*
14 oz	crushed tomatoes
1 tbsp	tomato paste
1 tbsp	extra virgin olive oil
1/2 tsp	garlic powder
1 tsp	dried oregano
1/2 tsp	sugar
1/4 tsp	fine sea salt
5 oz	natural casing pepperoni *sliced medium-thick*
1 oz	Pecorino Romano or Parmigiano-Reggiano *freshly grated*

PREPARATION

- **In a small saucepan, combine the crushed tomatoes, tomato paste, olive oil, garlic powder, oregano, sugar, and salt.**
- **Bring to a gentle simmer over medium-low heat, leaving the lid slightly ajar to allow steam to escape.**
- **Simmer for 20 to 30 minutes until the sauce heavily coats the back of a spoon, then remove from heat and reserve for serving.**

INSTRUCTIONS

1. **Combine the warm water and yeast in a tared bowl on a digital scale and let hydrate for one minute.**
   Add the bread flour and diastatic malt powder, mixing until a shaggy, cohesive mass forms with no dry flour remaining, then cover with a damp towel to autolyse for 20 minutes.

2. **Sprinkle the salt over the autolysed dough and vigorously pinch it in using a cold, wet hand.**
   Pour in the olive oil and fold the dough over itself until fully absorbed.

3. **Turn the dough out onto an un-floured countertop and perform the slap-and-fold technique for 5 to 7 minutes.**
   The exceptionally sticky dough will eventually transition into a smooth, elastic, and glossy orb with strong structural integrity.

4. **Transfer the dough to a lightly oiled, airtight container and immediately place it in the refrigerator for 24 to 48 hours.**
   This slow cold retard is the mechanism that unlocks the dough's complex flavor and extensibility.

5. **Meticulously coat the bottom and all four side walls of a 10x14-inch hard-anodized aluminum pan with the pan oil.**

6. **Transfer the cold dough into the center of the oiled pan and gently dimple it outward toward the corners until you feel resistance.**
   Do not force or tear the cold gluten network; simply cover tightly with plastic wrap and let it rest at room temperature for 30 to 45 minutes.

7. **Uncover the relaxed dough and gently stretch it until it sits flush against all four walls and corners in an even layer.**
   Cover the pan once more and allow a double proof at room temperature for 2 to 2 1/2 hours until it inflates roughly halfway up the pan sides and displays prominent gas bubbles.

1. **Preheat your oven to 525°F with a baking steel positioned on the middle or lower-middle rack at least one hour before baking.**

2. **Lay half of the sliced pepperoni directly onto the raw, proofed dough.**
   Gently press down any massive surface bubbles first. Placing the meat under the cheese allows its spiced fats to render deeply into the crumb.

3. **Meticulously line the entire perimeter of the pan with the cubed cheese, wedging a heavy volume directly against the oiled metal walls.**
   Distribute the remaining cheese evenly over the center to completely cover the pepperoni. Absolute precision here dictates the success of the frico.

4. **Slide the heavy, assembled pan directly onto the preheated baking steel and bake for 14 to 17 minutes.**
   At the 12-minute mark, the cheese against the edges should be aggressively bubbling and turning a deep, dark mahogany brown. Rotate 180 degrees halfway through if your oven runs unevenly.

5. **Remove the pan from the oven and allow the pizza to rest in the pan for exactly 3 to 5 minutes.**
   This rest period allows the molten frico to solidify slightly and pull away from the metal walls.

6. **Run a thin, offset metal spatula meticulously around the perimeter to detach the caramelized edge, then carefully lift the pizza onto a wire cooling rack.**
   Leaving it in the pan will trap steam and render the base soggy.

7. **Ladle the steaming hot, reduced tomato sauce down the length of the resting pizza in three distinct, thick racing stripes.**
   Finish with a heavy grating of Pecorino Romano, then slice the rectangle into exactly six squares, ensuring every piece boasts a definitive frico edge.

CHEF'S NOTES

- **Flour substitutions require critical hydration adjustments.**
  If forced to use standard all-purpose flour, drop the water weight to roughly 170 g to accommodate the lower protein content's reduced absorption capacity.

- **Pan selection is strictly non-negotiable for the correct fry-bake.**
  A 10x14-inch heavy-gauge, hard-anodized aluminum pan from LloydPans perfectly mimics the thermodynamics of the original automotive blue steel and is strongly recommended.

The Gravesend Upside-Down

In the deep southern reaches of Brooklyn, Italian immigrants took the spongy, onion-heavy street food of Palermo and engineered it into a mid-century masterpiece. The upside-down square is an act of thermodynamic genius: shingling the raw dough with deli-sliced mozzarella creates an impenetrable lipid barrier, protecting the pillowy, highly-hydrated crumb while a heavy, reduced tomato sauce concentrates under the brutal ambient heat. This is a pie built for the limits of a slice-shop deck oven, now optimized for the domestic baking steel. It demands high-protein flour, a cold twenty-four-hour ferment, and the patience to let the dough tell you when it’s ready.

INGREDIENTS

522 g	bread flour
58 g	durum semolina
377 g	water *cooled to 65°F*
11.5 g	fine sea salt
3/4 tsp	instant dry yeast
9 g	diastatic malt powder
20 g	extra virgin olive oil
40 g	extra virgin olive oil
16 oz	low-moisture whole-milk mozzarella *deli-sliced 1/8-inch thick*
400 g	crushed tomatoes
150 g	double-concentrated tomato paste
2 tbsp	extra virgin olive oil
2 med cloves	garlic *finely minced*
1 1/2 tsp	dried Sicilian oregano
1 pinch	red pepper flakes
1 tsp	fine sea salt
1/2 cup	Pecorino Romano *finely grated*
1 tbsp	extra virgin olive oil

PREPARATION

- **Preheat the baking steel.**
  Place a 1/4-inch to 1/2-inch baking steel on the lower-third rack of your oven. Set the oven to its absolute maximum temperature (ideally 550°F) and let it preheat for a minimum of one full hour before baking.

INSTRUCTIONS

1. **Mix the dry dough ingredients and hydrate with cool water.**
   In the bowl of a stand mixer, whisk the bread flour, semolina, yeast, and diastatic malt powder together. Add the 377g of cool water and mix on low speed for exactly 2 minutes until a rough, shaggy mass forms.

1. **Rest the dough for a twenty-minute autolyse.**
   Cover the bowl with a damp towel. This crucial resting period allows the flour to fully hydrate and enzymes to begin breaking down starches, minimizing the mechanical kneading time required.

2. **Incorporate the salt and oil, knead to a smooth windowpane, and refrigerate.**
   Add the 11.5g of salt and 20g of olive oil. Mix on medium-low speed for 6 to 8 minutes until the dough transforms into a smooth, satiny ball that clears the sides of the bowl. Transfer to a lightly oiled, airtight container and immediately refrigerate for exactly 24 hours.

3. **Oil a heavy half-sheet pan and begin the first ambient proof.**
   Remove the dough from the refrigerator 4 to 5 hours before baking. Pour 40g of olive oil into a 13x18-inch blue steel or heavy aluminum half-sheet pan. Coat the dough in the oil, gently dimple and press it outward without tearing, then cover and rest for 45 minutes.

4. **Stretch the relaxed dough into the corners and execute the final room-temperature proof.**
   Gently stretch the now-relaxed dough into the absolute corners of the pan. Cover again and allow it to proof at room temperature for 2 to 3 hours until highly aerated, jiggly, and nearly an inch thick.

5. **Reduce the tomato paste and aromatics to build the sauce base.**
   In a medium saucepan, gently heat 2 tablespoons of olive oil over medium-low. Sauté the minced garlic and red pepper flakes for 60 seconds. Add the tomato paste and dried oregano, cooking for 3 minutes to bloom the herbs and toast the paste.

6. **Simmer the crushed tomatoes into a highly viscous, spreadable sauce.**
   Stir in the crushed tomatoes and 1 teaspoon of salt. Reduce the heat to low and simmer for 20 minutes to evaporate excess water, creating a thick consistency that won't bleed into the pizza. Allow the sauce to cool completely to room temperature.

1. **Shingle the proofed dough with an impenetrable barrier of sliced mozzarella.**
   Lay the 1/8-inch deli slices evenly over the raw, fully proofed dough. You must cover the dough entirely, leaving only a microscopic 1/4-inch border at the edges to protect the delicate crumb from the wet sauce.

2. **Spread the cooled sauce over the cheese and dust with Pecorino Romano.**
   Spoon the room-temperature tomato sauce over the cheese and gently spread it outward using the back of a ladle. Do not press down forcefully, or you will degas the dough. Sprinkle half of the grated Pecorino Romano evenly over the wet sauce.

3. **Bake the pie on a preheated baking steel until the undercarriage is fried and rigid.**
   Slide the heavy pan directly onto the 550°F baking steel. Bake for 12 to 15 minutes, rotating the pan 180 degrees at the 10-minute mark. Use a metal spatula to inspect the bottom; it should be a deeply mottled, mahogany brown.

4. **Rest the pizza in the pan, extract to a wire rack, and finish with oil and cheese.**
   Allow the molten cheese to stabilize in the pan for 3 minutes. Run a knife around the perimeter, then confidently lift the entire pizza out onto a wire rack to prevent a soggy crust. Dust aggressively with the remaining Pecorino and finish with a cross-hatch of extra virgin olive oil before slicing into squares.

CHEF'S NOTES

- **Respect the baker's percentages.**
  Reproducibility relies entirely on math. This dough requires a 65% hydration rate and exactly 0.4% instant dry yeast to properly ferment for 24 hours in a cold refrigerator without blowing out.
- **A baking steel is non-negotiable for domestic deck-oven emulation.**
  A standard home oven lacks the intense thermal mass to fry the bottom of a heavy Sicilian square without a highly conductive baking steel preheated at 550°F for a full hour.

- **Diastatic malt powder chemically forces a pizzeria-quality crust.**
  Its active amylase enzymes continuously break down starches into simple sugars during the cold ferment, guaranteeing an aggressive, dark Maillard browning that home ovens normally fail to produce.
- **Do not substitute fresh mozzarella or pre-shredded cheese.**
  Fresh mozzarella will flood the dough with boiling water, and shredded cheese contains anti-caking agents that ruin the melt and break the lipid barrier. Deli-sliced low-moisture whole-milk is mandatory.

The Elmont Matrix

This is not the fluffy, bready Sicilian of your youth, nor the hyper-hydrated Roman teglia. Born in the immigrant kitchens of Long Island and refined at neighborhood slice shops, the Elmont Matrix is a beautifully brutal piece of culinary engineering. It is a masterclass in controlled suppression: a dense, rigorously under-proofed dough, stretched directly into a pool of olive oil, then blasted on a baking steel to violently fry the undercarriage. Precise baker's math and a ruthless cold ferment yield a snap and chew that tastes exactly like a heritage pizzeria.

INGREDIENTS

465 g	bread flour	297 g	water *chilled*

9 g	fine sea salt
16 g	extra virgin olive oil
7 g	diastatic malt powder
2 g	instant dry yeast
45 g	extra virgin olive oil
350 g	whole-milk low-moisture mozzarella *thickly sliced*
28 oz	whole peeled plum tomatoes *hand-crushed and thoroughly drained*
30 g	extra virgin olive oil
2 med	garlic cloves *finely grated*
1 tsp	dried Sicilian oregano
15 g	Pecorino Romano *finely grated*

PREPARATION

- **Drain the tomatoes aggressively.**
  A watery sauce will destroy this thin dough matrix. Hand-crush the plum tomatoes and leave them in a fine-mesh sieve for 30 minutes before assembly.

INSTRUCTIONS

1. **Disperse the water, yeast, and diastatic malt in a mixing bowl and let hydrate for one minute.**
   Add the bread flour and mix on low speed until a shaggy mass forms with no dry spots, then cover the bowl and walk away for 20 minutes to let the autolyse passively jumpstart the gluten network.

2. **Incorporate the salt and 16 grams of olive oil, kneading on medium-low for five to seven minutes.**
   The dough will become remarkably smooth, elastic, and clear the sides of the bowl. Form it into a tight ball, lightly oil the surface, seal it in an airtight container, and immediately banish it to the refrigerator.

3. **Allow the dough to cold-ferment at 38°F for a minimum of 24 hours and up to 72 hours.**
   This agonizing retard is non-negotiable. It allows enzymes to dismantle complex starches, dramatically enhancing the crust's flavor and building the biochemical architecture required for serious Maillard browning.

1. **Preheat the oven to its absolute maximum temperature with a baking steel positioned on the lowest rack for at least one hour.**
   We are simulating the brutal bottom-heat of a commercial deck oven. The thermal mass of the steel is essential to shock the pan and violently fry the dough upon contact.

2. **Pour 45 grams of olive oil into a heavy-duty baking pan and stretch the cold dough out to the corners.**
   Turn the dough ball over once to coat it in oil, then gently press and dimple outward. If the dough fights back, do not force it; cover it, let the gluten relax for 20 minutes, and resume. Use a 13x18-inch dark anodized aluminum or blue steel pan; glass or light pans will reflect heat and leave you with a flabby, pale undercarriage.

3. **Assemble the pie immediately after stretching, strictly observing the eight-minute window.**
   Do not let this dough proof in the pan. The defining trait of the Elmont matrix is its deliberately suppressed vertical spring. Shingle the thick slices of mozzarella directly over the raw dough to form a moisture barrier, protecting the delicate crust from the wet tomatoes.

4. **Distribute the drained tomatoes in diagonal stripes across the cheese and drizzle with the garlic oil.**
   Do not spread the sauce flat. The uneven landscape allows the cheese to blister through, creating a complex textural map of molten fat and concentrated pockets of jammy tomato.

5. **Slide the pan directly onto the preheated steel and bake for 12 to 15 minutes.**
   At the ten-minute mark, lift a corner with a spatula to inspect the undercarriage. It should be frying violently in the oil and taking on a deep, mottled mahogany brown.

1. **Remove the pan from the oven, dust heavily with oregano and Pecorino Romano, and immediately transfer the pie to a wire rack.**
   If you leave the pizza in the pan, it will steam in its own residual heat, instantly destroying the crisp bottom matrix you just spent two days engineering. Slice into squares and serve.

CHEF'S NOTES

- **Baker's percentages matter.**
  This formula utilizes 100% bread flour, 64% hydration, 2% salt, 3.4% oil, 1.5% diastatic malt, and 0.4% yeast to yield exactly one 800-gram dough mass, perfectly scaled for a half-sheet pan. Use your digital scale.
- **Do not skip the diastatic malt.**
  Home ovens cap out around 550°F. The malt provides active amylase enzymes that break down starches into simple sugars during the cold ferment, ensuring aggressive browning and that authentic slice-shop flavor even without a commercial deck oven.

The Magnificent Mile Short Dough

Let's kill the myth right now: there is no cornmeal in a real Chicago deep-dish crust. That gritty yellow lie was peddled by outsiders trying to reverse-engineer a dough that is, essentially, shallow-fried in its own pan. To support a colossal architecture of raw sausage, sliced mozzarella, and crushed tomatoes without dissolving into a soggy mess, you don't need cornmeal. You need fat. This is a short dough. We are intentionally crippling gluten development by encapsulating the flour in heavy corn oil, yielding the tender, biscuit-like crumb that built the Magnificent Mile. Treat it like pastry, leave the rolling pin in the drawer, and let a cold ferment tease out those crucial buttery notes.

INGREDIENTS

237 g	all-purpose flour	**10 g**	olive oil
13 g	semolina flour	**1 1/4 g**	instant dry yeast
117 g	water *heated to lukewarm, roughly 95°F*	**1 1/4 g**	fine sea salt
42 g	corn oil	**1 1/4 g**	granulated sugar

INSTRUCTIONS

1. **Wake up the yeast.**
   In a small bowl, whisk together the water, yeast, and sugar to dissolve.

2. **Build the lipid barrier.**
   In a separate, larger bowl, whisk the all-purpose flour, semolina, and salt. Pour the corn oil and olive oil directly into the dry ingredients. Using your fingers, work the fat into the flour until the mixture resembles wet sand. This physical barrier prevents water from reaching the glutenin proteins, guaranteeing a tender, biscuity crumb.

3. **Mix with absolute restraint.**
   Pour the yeast mixture into the fat-coated flour. Mix only until a cohesive, slightly shaggy ball forms—about 2 to 3 minutes by hand, or 60 to 90 seconds in a stand mixer. The dough will feel exceptionally heavy and greasy. Do not knead it any further; if you develop a windowpane here, you have already ruined the texture.

4. **Let the cold ferment do the heavy lifting.**
   Place the dough in a lightly oiled, airtight container. Let it sit at room temperature for 1 hour to kickstart yeast activity, then move it to the refrigerator for 24 to 48 hours. In this high-fat environment, the slow cold fermentation forces the yeast to produce diacetyl, an organic compound that gives the crust a profound butter flavor without the scorching risks of actual butter.

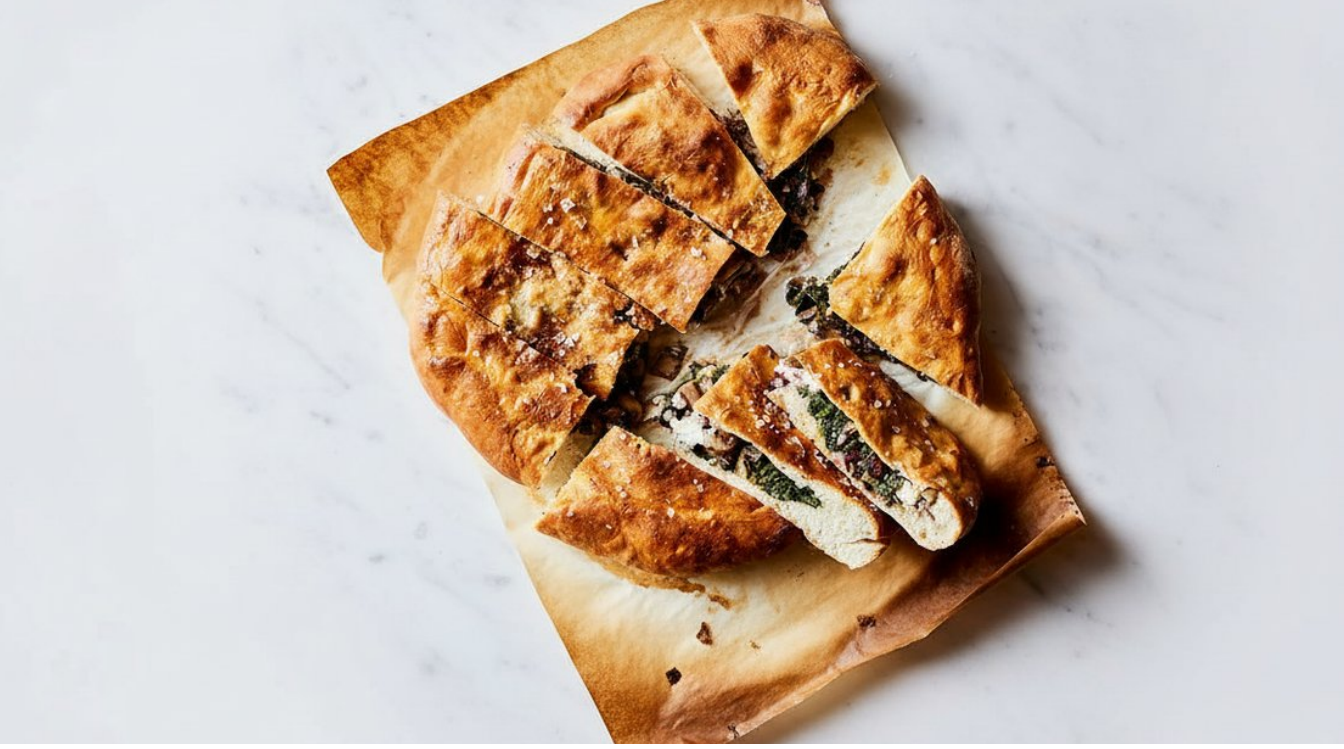
1. **Press it out, never roll.**
   Remove the dough from the fridge 2 hours before baking. Grease a 12-inch or 14-inch heavy-gauge aluminum deep-dish pan heavily with solid shortening or corn oil. Drop the dough ball into the center. Using only your fingertips, press it outward until it covers the bottom, then push it firmly up the vertical sides to form a 2-inch high rim. The bottom must remain thin—no thicker than a quarter inch.

2. **Assemble upside-down and bake on steel.**
   Layer thick slices of low-moisture mozzarella directly onto the raw dough as a moisture barrier. Follow with a solid, edge-to-edge patty of raw bulk Italian sausage, and finish with a heavy layer of drained, crushed tomatoes to act as an evaporative heat shield. Bake at 450°F on a preheated baking steel for 35 to 45 minutes, using a foil heat deflector on the rack above if the sauce threatens to scorch.

CHEF'S NOTES

- **A warning on diastatic malt.**
  Do not add diastatic malt powder to this dough. While essential for browning a 6-minute New York slice in a home oven, a deep-dish pie is subjected to heat for 40 minutes. Malt will incinerate this crust long before the internal layers of meat and cheese are properly cooked.

- **Baker's Percentages.**
  For those scaling up to multiple pans: 100% Total Flour (95% AP, 5% Semolina), 47% Water, 17% Corn Oil, 4% Olive Oil, 0.5% Instant Dry Yeast, 0.5% Salt, 0.5% Sugar.



The Boglio Brothers Double Crust

Chicago stuffed pizza is an architectural marvel masquerading as a pie, a heavy, unapologetic monument of molten dairy and rendered pork born from a southern Italian Easter pastry. To get this right—to build a flaky, larded crust that holds a literal pound of cheese without collapsing—you have to unlearn everything you know about pizza dough. This isn't about massive gluten networks; it's about engineering a short, high-fat crust, a hermetic seal, and trusting your baking steel to fry the bottom while the oven slowly simmers the interior. Take your time, weigh your flour, and respect the thermodynamics.

INGREDIENTS

500 g	unbleached all-purpose flour
25 g	fine yellow cornmeal
240 g	water *chilled to 40°F*
65 g	corn oil
45 g	unsalted butter *cut into 1/4-inch cubes and kept cold*
8 g	kosher salt
5 g	granulated sugar
7.5 g	instant dry yeast
800 g	canned crushed tomatoes *drained in a fine-mesh sieve for 30 minutes*
10 g	granulated sugar
5 g	kosher salt
2 g	dried oregano *crushed between fingers*
2 g	dried basil
2 g	garlic powder
15 g	extra virgin olive oil
450 g	whole-milk low-moisture mozzarella *shredded by hand and brought to room temp*
340 g	mild Italian sausage *removed from casing*
1 tbsp	unsalted butter *softened*
2 tbsp	Pecorino Romano *grated*

INSTRUCTIONS

1. **Combine the dry dough ingredients.**
   In a stand mixer fitted with the paddle attachment, briefly pulse the flour, cornmeal, 8 g kosher salt, 5 g sugar, and instant dry yeast to integrate.

2. **Incorporate the solid fat to create a short crust.**
   Add the cold cubed butter and mix on the lowest speed until the butter forms small, pebble-like pieces; do not allow it to melt or form a paste.

3. **Hydrate the dough matrix.**
   With the mixer running on low, stream in the cold water followed immediately by the corn oil.

1. **Knead minimally to restrict gluten development.**
   Switch to a dough hook and knead on low for exactly 1 to 2 minutes until a shaggy mass forms. Overmixing will develop the gluten network excessively, yielding a tough, unpalatable shell.

2. **Divide and cold ferment the dough.**
   Turn the dough out, divide it into a 600-gram portion for the base and a 295-gram portion for the top, form into smooth disks, and refrigerate in oiled containers for 24 to 48 hours.

3. **Preheat the baking steel.**
   Place a baking steel or stone on the lowest oven rack and preheat the oven to 425°F for at least one hour to maximize thermal capacity.

4. **Temper the dough and prepare the pan.**
   Remove the dough from the refrigerator 90 minutes before baking to reach about 60°F. Generously coat the interior of a 12x2-inch anodized aluminum deep-dish pan with the softened butter.

5. **Roll and seat the bottom crust.**
   Roll the larger dough piece into a 15-inch circle and gently press it into the bottom and up the walls of the pan, leaving a slight overhang.

6. **Build the interior meat and cheese strata.**
   Press the raw sausage into a single, flat layer directly on the bottom crust, then dump the shredded mozzarella over the meat, compressing it into an even, dense core.

7. **Seal the architectural top crust.**
   Roll the smaller dough piece into a 12.5-inch circle, drape it over the cheese, and pinch the edges tightly against the bottom crust to form a hermetic seal, trimming any excess.

8. **Vent the crust to prevent catastrophic rupture.**
   Using a sharp paring knife, cut three to four slit-like vents in the center of the top crust to allow steam from the rendering sausage and melting cheese to escape.

1. **Insulate with the tomato sauce.**
   Mix the drained tomatoes with the 10 g sugar, 5 g salt, oregano, basil, garlic powder, and olive oil. Ladle this sauce over the top crust edge-to-edge, then dust generously with Pecorino Romano.

2. **Execute the frying bake.**
   Place the pan directly onto the preheated baking steel. Bake for 35 to 45 minutes, tenting the outer crust with foil if it browns too rapidly.

3. **Rest the pie to set the structural starches.**
   Remove the pizza using heavy-duty pan grippers and let it rest in the pan for 10 to 15 minutes before transferring to a board to slice.

The Jersey City Sourdough

Forget everything you think you know about high-heat pizza ovens. The secret to the Jersey City style—a structural marvel that folds cleanly like a classic New York slice but sings with the floral, acidic depth of world-class artisan bread—lies in the hydration paradox. In a standard 550°F home oven, water is your thermal conductor. You push the hydration to a perilous 76 percent, rely on diastatic malt for browning, and let a baking steel do the violent work of oven spring. Surrender your volumetric cups, respect the baker's math, and give the dough the seventy-two hours of cold fermentation it deserves. This is how you build a masterpiece.

INGREDIENTS

540 g	bread flour	**127 g**	active sourdough starter *fed at 100 percent hydration 4 to 6 hours prior*
95 g	high-extraction spring wheat or whole spelt flour	**13 g**	fine sea salt
482 g	water *calculated to achieve a 78°F final dough temperature*	**9 1/2 g**	diastatic malt powder
		13 g	extra virgin olive oil *optional*

PREPARATION

- **Calculate the target water temperature.**
  Multiply your target dough temperature (78°F) by 3. Subtract your ambient room temperature, the flour temperature, and your friction factor (roughly 4°F for hand mixing). The result is the temperature your water must be before mixing.
- **Activate the sourdough starter.**
  Ensure your starter has at least doubled in volume and is highly active before beginning the autolyse phase.

INSTRUCTIONS

1. **Autolyse the dough.**
   In a large bowl, combine the bread flour, high-extraction flour, and diastatic malt powder. Add the targeted-temperature water and active sourdough starter. Mix by hand just until no dry spots remain, cover with a damp towel, and let rest for 30 to 45 minutes to hydrate the flour and jumpstart gluten development.

2. **Incorporate the salt and oil using the Rubaud method.**
   Sprinkle the salt and drizzle the olive oil over the shaggy dough. Wet your dominant hand, scoop under the dough, stretch it upward, and slap it back down onto itself. Continue this rhythmic scooping and folding for 5 to 7 minutes until the dough transforms into a smooth, extensible mass that passes the windowpane test.

1. **Execute the bulk fermentation with stretch and folds.**
   Cover the bowl and let the dough rest at room temperature for 2 to 2 1/2 hours. During the first hour, perform a stretch and fold every 20 minutes by grabbing the underside, stretching upward until you feel resistance, and folding it over the top. Switch to every 30 minutes for the second hour.

2. **Subject the dough to an extended cold retard.**
   Transfer the covered bowl to the refrigerator to rest at 38°F for 24 to 72 hours. This slow maturation halts yeast activity while enzymes break down starches, forging the dough's complex flavor profile and priming it for superior browning.

3. **Divide and shape the dough balls.**
   Twelve to fourteen hours before baking, turn the cold dough onto an un-floured surface. Divide it into four precise 285-gram portions using a digital scale and a bench scraper. Fold the edges of each piece into the center, flip seam-side down, and rotate gently to form tight, smooth balls. Place in lightly oiled airtight containers and return to the fridge.

4. **Preheat the baking steel to its absolute maximum.**
   Place a heavy baking steel on the upper-middle rack and preheat your oven to 550°F (or its highest possible setting) for a minimum of 60 minutes. Remove the dough balls 2 to 3 hours prior to baking so they can reach an ambient room temperature of roughly 72°F.

5. **Stretch, top, and launch with confidence.**
   Dust the dough with a half-and-half mix of 00 flour and fine semolina. Push the air toward the 1-inch perimeter with your fingertips, drape the dough over your knuckles, and let gravity stretch it to a 12-inch diameter. Transfer immediately to a semolina-dusted peel, dress lightly with crushed San Marzano tomatoes and low-moisture mozzarella, and slide it violently onto the blazing hot steel.

1. **Bake and broil for maximum oven spring.**
   Bake for 4 to 5 minutes, watching the high-hydration dough bubble and rise as it reacts to the steel. Switch the oven to its maximum broiler setting for the final 1 to 2 minutes, rotating the pizza halfway through to achieve deeply caramelized leopard spotting. Cool on a wire rack for 2 minutes before slicing so the bottom stays shattering.

CHEF'S NOTES

- **Understand the master formula.**
  This recipe scales based on a 100 percent total flour weight of 635g. The baker's percentages are 76 percent water, 20 percent starter, 2 percent salt, 1 1/2 percent malt, and 2 percent oil.
- **The commercial yeast alternative.**
  If you want the classic NY slice shop flavor profile without the tang of sourdough, omit the starter, increase the total water to 545g, and use 2 1/2 g (0.4 percent) instant yeast.
- **The hydration paradox.**
  A 900°F wood-fired oven requires a restrained 68 percent hydration, but a 550°F home oven demands 76 percent. Water is an efficient thermal conductor; in lower heat environments, you need more of it to transfer heat to the core of the dough and achieve the necessary oven spring.

Chapter 2 — The Sauces & Toppings

The strict regional conventions, chemistry, and thermal design of pizza assembly.

New York pizza sauce is raw. The great American pie—whether a foldable New York slice or a Detroit square boasting brutalist, caramelized edges—is a volatile, highly calibrated ecosystem, never a delivery vehicle for whatever happens to be rotting in the crisper drawer. The tomatoes must bring a bright, acidic slap, while the cheese must act as a calculated thermal barrier that melts without breaking into a dismal grease lagoon.

Put away the pre-shredded mozzarella, zero out the digital scale. A true slice shop runs on the strict physical mechanics of the bake, demanding a box-grated block of low-moisture mozzarella to protect the crust from turning into a sad, soggy flatbread. Every element has a specific job to do, leading us here, in strict

order of assembly: the stark purity of a can of uncooked San Marzano tomatoes, the low-moisture blocks, and the perfection of cup-and-char pepperoni curling in the heat and pooling with spicy fat.

The Carmine Street Benchmark

There is perhaps no more contested real estate in the American culinary psyche than the New York slice. This isn't about artisanal posturing; it is an exercise in thermodynamic violence and mechanical precision. A proper slice—modeled here after the gold standard of Carmine Street—demands a rigorously low-hydration dough, the brutal conductive heat of a baking steel, and the restraint to leave the tomatoes entirely raw. It folds cleanly down the center, shatters slightly at the crust, and wears a sheen of orange butterfat like a badge of honor.

INGREDIENTS

525 g	high-gluten flour or bread flour
304 g	water *at 65 to 70 degrees fahrenheit*
13 g	fine sea salt
9 g	granulated sugar
1/4 tsp	instant dry yeast
2 1/2 g	diastatic malt powder
800 g	canned whole peeled tomatoes *undrained*
10 g	granulated sugar
4 g	fine sea salt
200 g	whole milk low-moisture mozzarella *coarsely grated from a block*
10 g	pecorino romano *finely grated*

PREPARATION

- **Combine the water, yeast, 9 grams of sugar, malt powder, and flour in a stand mixer.**
  Mix on the lowest speed until a shaggy mass forms and no dry flour remains. Cover the bowl with a damp towel and let the dough rest for 30 minutes to autolyse.

- **Add 13 grams of salt and perform the final mix.**
  Mix on low-medium speed for 6 to 8 minutes until the dough is smooth, clears the sides of the bowl, and passes the windowpane test.

- **Bulk ferment the dough at room temperature for 1 hour.**
  Transfer the mass to a lightly floured surface, shape it into a single smooth mass, and cover it to prevent a skin from forming.

- **Divide and ball the dough into two equal portions.**
  Form each 420-gram portion into a tight boule with a taut skin. Place each ball into a lightly oiled cylindrical container, ensuring you oil the plastic and not the dough itself.

- **Cold ferment the dough for 24 to 72 hours.**
  Leave the containers at room temperature for 1 to 1 1/2 hours to kickstart yeast activity, then transfer them to the refrigerator. Optimal flavor development occurs at the 48-hour mark.

- **Mill the tomatoes for the sauce.**
  Empty the canned tomatoes into a food mill fitted with a medium die and mill them into a large bowl. Do not blend them. Stir in 10 grams of sugar and 4 grams of salt, then refrigerate for at least 4 hours to let the botanical flavors meld.

INSTRUCTIONS

1. **Preheat a baking steel in the oven at its absolute maximum temperature for at least 1 hour.**
   Place the steel on the upper-middle rack. The steel must be fully saturated with heat at 500 to 550 degrees Fahrenheit to mimic a commercial deck oven.

2. **Remove a dough ball from the refrigerator 1 1/2 to 2 hours before baking.**
   Attempting to stretch cold dough will result in tearing and aggressive elastic snapback.

3. **Stretch the dough using the parachute method.**
   Drop the dough into flour to coat both sides. Using the flat pads of your fingertips, gently press the air from the center outward to establish a 1-inch rim. Drape the dough over your knuckles, gently pulling outward while rotating until it reaches a 16-inch diameter.

4. **Dress the pie on a semolina-dusted peel.**
   Apply exactly one heaping ladle of sauce, spreading it thinly and evenly in concentric circles. Distribute the mozzarella evenly over the pie, leaving negative space where the red sauce remains visible.

5. **Launch the pizza onto the preheated steel.**
   Give the peel a slight shimmy to ensure the dough is loose, then slide the pie onto the center of the steel at a very low, shallow angle.

1. **Bake for 3 minutes, then rotate the pizza 180 degrees in the exact same spot on the steel.**
   Moving it to a different zone will expose the bottom to unchecked heat and cause burning. If the bottom chars before the top browns, engage the broiler for the final 60 to 90 seconds. Total bake time should be 6 to 8 minutes.

2. **Rest the pizza on a wire cooling rack for 3 minutes before slicing.**
   This prevents the crust from sweating on a flat surface and allows the molten cheese matrix to solidify slightly. Garnish with the Pecorino Romano before serving.

CHEF'S NOTES

- **Baker's percentages dictate the structural integrity of the slice.**
  This dough operates at a rigorously low 58 percent hydration with 0.15 percent yeast and 2.5 percent salt. Do not attempt to add oil to the dough; tenderness comes purely from the long cold fermentation and precise hydration.

- **Diastatic malt powder is critical for a home oven.**
  Because home ovens max out at 500 to 550 degrees, the malt's enzymatic activity continuously breaks down complex starches into simple sugars during the cold ferment, ensuring the crust browns properly before drying out into a cracker.

The Gravesend Upside-Down Square Assembly

To understand the Gravesend square, you must first respect the architectural genius of the Italian-American diaspora. Inverting the assembly isn't a gimmick; it's a calculated act of culinary engineering that protects a highly hydrated, 24-hour fermented dough from a sweet, heavily reduced tomato gravy. By shingling low-moisture mozzarella directly onto the parbaked crust, you forge an impermeable lipid barrier that allows the crumb to remain as soft as a cloud while the undercarriage aggressively fries in a blue steel pan. This is exactly what Brooklyn tastes like—a masterclass in texture and thermodynamic precision.

INGREDIENTS

680 g	high-gluten or bread flour
442 g	ice-cold water
24 g	extra-virgin olive oil
13 1/2 g	fine sea salt
10 g	granulated sugar
7 g	diastatic malt powder
3 1/2 g	instant dry yeast
28 oz	ground or crushed tomatoes
6 oz	tomato paste
3 tbsp	extra-virgin olive oil
4 med clove	garlic *minced to a paste*
1 1/2 tsp	dried Sicilian oregano
1 tsp	granulated sugar
1/4 cup	extra-virgin olive oil
16 oz	low-moisture whole milk mozzarella *sliced 1/8-inch thick*
1/2 cup	Pecorino Romano *finely grated*

PREPARATION

- **Combine water, yeast, sugar, malt, and flour for a short rest.**
  In a stand mixer, whisk the ice-cold water, yeast, sugar, and malt, then add the flour until a shaggy mass forms. Cover and autolyse for 20 minutes to hydrate.
- **Knead in the salt and oil, then cold-ferment for 24 to 48 hours.**
  Add the salt and olive oil, kneading on medium-low for 6 to 8 minutes until smooth. Transfer to an oiled, airtight container and refrigerate; this slow enzyme activity is non-negotiable for flavor and extensibility.
- **Sweat the garlic, toast the paste and oregano, then simmer the tomatoes.**
  In a saucepan over medium-low heat, sweat the garlic in 3 tablespoons of olive oil for 60 seconds. Add the tomato paste and oregano, cooking until it darkens to rust, then pour in the crushed tomatoes and 1 teaspoon of sugar. Simmer for 20 minutes until thick and jammy, then cool entirely.

- **Stretch the cold dough into a heavily oiled pan and let it proof.**
  Pour 1/4 cup of olive oil into a 12x18-inch blue steel pan, turn the dough to coat, and gently dimple it toward the corners. Let it rest covered for 45 minutes to relax the gluten, then push to the edges and proof for another 1 1/2 to 2 hours until aerated and jiggly.

INSTRUCTIONS

1. **Preheat a baking steel at your oven's maximum temperature.**
   One hour before baking, place a baking steel on a rack in the lower third of the oven and preheat to 550F.

2. **Bake the naked dough to set its structure before topping.**
   Place the pan directly onto the hot baking steel for 7 to 9 minutes until the dough rises significantly and takes on a pale blonde color.

3. **Shingle the sliced mozzarella over the hot crust to waterproof the dough.**
   Immediately lay the cheese evenly across the parbaked dough, overlapping slightly and leaving only a scant 1/4-inch border at the edges.

4. **Dollop and spread the cooled, reduced tomato sauce over the cheese.**
   Use the back of a ladle to spread about 1 1/2 cups of the thick sauce in a visible but controlled layer; do not drown the pie.

5. **Dust with Pecorino, drizzle with oil, and bake until caramelized.**
   Add the Pecorino Romano and a crosshatch of olive oil, then return the pan to the steel for 10 to 14 minutes until the cheese is molten and the edges pull away deeply browned.

6. **Transfer the pizza immediately to a wire rack to preserve the fried undercarriage.**
   Do not let the pie cool in the pan or trapped steam will destroy the crispness. Pry it up with a firm spatula, cool for 5 to 10 minutes, and cut into 8 squares.

CHEF'S NOTES

- **Carbon steel is mandatory for the correct thermal transfer.**
  A 12x18-inch blue carbon steel pan is the canonical tool, frying the dough aggressively in the oil. If unavailable, dark anodized aluminum is acceptable, but avoid glass or light aluminum.
- **The mozzarella must be sliced, never shredded.**
  Shredded cheese contains anti-caking agents and leaves microscopic gaps where sauce can penetrate and ruin the crumb.
- **The baker's percentages are engineered for a home oven.**
  The low yeast count (0.5%) allows for a slow, 24-hour cold ferment without overproofing, while diastatic malt (1%) ensures proper browning even when maxing out at 550F.

The Elmont Garlicky Grandma Pie Matrix

The landscape of American pizza isn't a monolith—it's a beautiful, fractured matrix of regional obsession. On Long Island, that obsession takes the form of the Grandma Pie. Born from southern Italian housewives baking leftover dough in oiled aluminum pans, it was commercialized by legendary Elmont slice shops into a masterful architectural inversion. You lay sliced mozzarella directly on the raw dough to armor it, followed by heavy dollops of raw, aggressively garlicked tomatoes. We’re using baker’s percentages, a twenty-four-

hour cold ferment, and the conductive shock of a baking steel to shallow-fry the bottom crust. Do this right, and it crunches audibly, folding cleanly in your hand like a proper Tuesday night on the Island.

INGREDIENTS

406 g	bread flour
276 g	cold water
9 g	fine sea salt
2 g	instant dry yeast
12 g	extra virgin olive oil
3 tbsp	extra virgin olive oil
14 oz	low-moisture whole milk mozzarella *sliced into 1/8-inch thick rectangles*
28 oz	canned whole plum tomatoes *drained and aggressively hand-crushed*
3 tbsp	extra virgin olive oil
4 med cloves	garlic *finely minced*
1 tsp	fine sea salt
2 med cloves	garlic *sliced paper-thin*
1 tsp	dried Sicilian oregano
3 tbsp	Pecorino Romano *finely grated*
8 large	fresh basil leaves *torn*

PREPARATION

- **Whisk the flour, yeast, and salt, then incorporate the cold water to form a shaggy mass.**
  Rest the shaggy dough in the bowl for 15 minutes to autolyse, allowing the flour to fully absorb the water and making the dense 68% hydration dough significantly easier to knead.

- **Knead the dough, incorporating the olive oil until smooth, then cold-ferment for twenty-four hours.**
  Turn onto a clean surface, knead for 3 minutes, then add the 12g of olive oil to the center. Keep kneading for 5 to 7 minutes until tacky and perfectly elastic. Ball tightly, place in a lightly oiled airtight container, and refrigerate. This slow, cold fermentation builds the essential acidic baseline of a canonical New York slice.

- **Drain and crush the canned tomatoes aggressively to remove excess moisture.**
  Discard the puree from the can. Place the whole tomatoes in a fine-mesh sieve set over a bowl, crush them into chunky pieces by hand, and drain for 30 minutes. Wet sauce will pool and destroy the Grandma pie's architecture.
- **Gently infuse the olive oil with the minced garlic, then combine with the drained tomatoes.**
  Heat 3 tablespoons of olive oil and the minced garlic in a small saucepan over medium-low just until fragrant and lightly blond—do not let it brown. Stir into the drained tomato pulp along with the sea salt.

INSTRUCTIONS

1. **Coat a heavy-duty aluminum half-sheet pan heavily with olive oil and begin the initial dough stretch.**
   Flip the cold dough in the pan to coat both sides in the 3 tablespoons of oil. Use the flat pads of your fingers to gently dimple the dough outward without tearing. When it begins to resist and snap back, stop and let it rest covered at room temperature for 30 minutes.
2. **Complete the stretch and proof the dough at room temperature for one hour.**
   Push the relaxed dough all the way into the corners until it perfectly hugs the 12x18 frame. Cover loosely and let it proof until noticeably puffed and airy.
3. **Preheat your oven and baking steel to 525°F for at least one hour.**
   The immense thermal mass of the steel will provide the conductive shock necessary to rapidly shallow-fry the bottom crust in the oiled pan.
4. **Armor the proofed dough with the sliced mozzarella.**
   Shingle the cheese slices slightly across the surface, leaving a half-inch border of exposed dough. Do not use grated cheese; it melts too quickly, releases butterfat, and fails to protect the dough from the wet sauce.

1. **Dollop the thick tomato matrix over the cheese and garnish with the raw garlic and oregano.**
   Do not spread the sauce edge-to-edge. Apply heavy dollops or diagonal stripes, leaving areas of exposed cheese to blister. Scatter the paper-thin garlic slices and dust evenly with the dried oregano.

2. **Bake the pie directly on the hot steel for fourteen to sixteen minutes.**
   Slide the pan onto the steel. At the 8-minute mark, rotate the pan 180 degrees. The pie is done when the edges pull away from the pan, the cheese is caramelized, and the bottom is a rigid, resonant golden-brown.

3. **Shower the hot pizza with Pecorino Romano and fresh basil, then rest before cutting.**
   The residual heat awakens the basil oils and slightly melts the Pecorino. Let the pie rest in the pan for 5 minutes so the molten cheese matrix stabilizes, then slide onto a cutting board and cut into squares.

CHEF'S NOTES

- **Sourcing the right pan and flour is critical to the structural integrity of the pie.**
  Use a heavy-gauge anodized aluminum pan (like a LloydPans 12x18) for optimal thermal conduction. If you must substitute standard all-purpose flour for 12.5% protein bread flour, drop the hydration to 63% (255g water) to prevent a soupy dough, though you will sacrifice some of the characteristic chew.

- **Baking without a steel requires a floor-bake adaptation.**
  If you lack a baking steel, place the pan directly on the floor of a gas oven for the first 5 minutes of the bake to simulate intense bottom-heat, then move it to the lowest rack to finish.

The Conant Avenue Motor City Red Top & Frico

Detroit-style pizza is the quintessential expression of American industrial terroir. Born in a 1946 speakeasy and baked in forged blue steel drip trays scavenged from automotive plants, the Motor City square is defined by its frico—a shattered, caramelized wall of cheese fried directly against the pan. Achieving this masterpiece demands specific hardware and formulaic precision. You need a highly extensible seventy-five percent hydration dough, the slow enzymatic breakdown of a 24-hour cold ferment, and the brutal conductive heat of a baking steel. This is a precise, unapologetic homage to working-class culinary engineering.

INGREDIENTS

219 g	white bread flour
12 g	whole wheat flour
173 g	water *warmed to 85°F*
5 g	fine sea salt
2 g	diastatic malt powder
1 g	instant dry yeast
2 tbsp	vegetable shortening
140 g	Monterey Jack cheese *manually grated or cubed*
140 g	Muenster cheese *manually grated or cubed*
60 g	mild white cheddar cheese *manually grated or cubed*
2 tbsp	extra-virgin olive oil
3 cloves	garlic *finely minced*
28 oz	crushed tomatoes
1 tbsp	granulated sugar
2 tsp	dried oregano
1 tsp	dried thyme
1 tbsp	Pecorino Romano *grated*

INSTRUCTIONS

1. **Mix the dough using a brief autolyse.**
   Whisk the warm water, yeast, and diastatic malt. Mix in the bread and whole wheat flours until a shaggy mass forms, cover, and rest for 20 minutes to jump-start gluten development.

2. **Incorporate the salt and knead.**
   Sprinkle the salt over the dough, wet your hands, and perform stretch-and-folds for 3 to 5 minutes until the mass becomes smooth and cohesive.

3. **Ferment the dough for twenty-four hours.**
   Let the dough rise at room temperature for an hour until increased by half, then move to the refrigerator. Using exactly 0.5% yeast ensures the perfect slow enzymatic breakdown during this overnight retard, unlike the higher-yeast same-day doughs used in commercial shops.

1. **Prepare the thick Red Top sauce.**
   Bloom the garlic, oregano, and thyme in the olive oil over medium heat. Add the tomatoes and sugar, and simmer aggressively for 30 minutes to cook off excess water until it is a concentrated, heavy paste.

2. **Prepare the pan and proof the dough.**
   Lubricate a 10x14-inch hard-anodized aluminum pan heavily with vegetable shortening and a drizzle of olive oil. Gently stretch the cold dough to the corners, cover, and proof at room temperature for 2 hours until bubbly and jiggly.

3. **Build the frico cheese architecture.**
   Distribute the blended cheeses over the dough, making a deliberate, heavy wall of cheese pushed directly against the exposed metal sides of the pan—this is what fries into the legendary frico edge.

4. **Bake on a preheated baking steel.**
   Place the pan directly onto a baking steel that has been preheated in a 550°F oven for one hour. Bake for 12 to 15 minutes until the cheese perimeter is a dark, caramelized, nearly black lace.

5. **Release the frico and rest the pizza.**
   Remove from the oven and immediately run a thin metal spatula around the edge to release the molten cheese before it welds to the pan, then carefully lift the pizza onto a wire rack.

6. **Apply the Red Top sauce and finish.**
   Ladle two or three continuous, thick vertical stripes of hot sauce down the length of the pie, dust with Pecorino Romano, and cut into eight squares.

CHEF'S NOTES

- **Mastering baker's percentages is non-negotiable.**
  This 75% hydration formula requires strict precision: 95% bread flour, 5% whole wheat, 75% water, 2% salt, 1% malt, and 0.5% yeast. It is the only way to reproduce this exact airy crumb structure consistently at home.

- **Hardware dictates the final crust.**
  A hard-anodized aluminum pan mimics the conductive heat of historical blue steel without the rust. A baking steel is strictly mandatory to push enough thermal energy into the bottom of the pan to fry the crust before the top burns.
- **Never use pre-shredded bagged cheese.**
  Pre-shredded cheeses are coated in anti-caking starches that inhibit fat from rendering. The cheese will burn and dry out rather than fry into a cohesive frico.

The Wooster Street White Clam Emulsion

Frank Pepe's masterpiece is an uncompromising study in Italian-American minimalism. There is no heavy sauce, and absolutely no mozzarella to mute the sea. Instead, it relies on a volatile, kinetic emulsion of briny clam liquor and olive oil, brushed directly onto a dough cold-fermented for twenty-four hours. To replicate that fiercely charred Wooster Street snap at home, you need patience, fresh littlenecks, and the brutal, conductive heat of a baking steel to mimic a century-old coal hearth.

INGREDIENTS

400 g	bread flour

268 g	water *cooled to 65°F*
10 g	fine sea salt
8 g	extra virgin olive oil
6 g	diastatic malt powder
2 g	instant dry yeast
24 large	fresh littleneck clams *purged, shucked, meat coarsely chopped, and liquor reserved*
2 tbsp	reserved fresh clam liquor *strained through a fine mesh*
6 tbsp	extra virgin olive oil
4 large cloves	garlic *finely minced with a knife*
1 1/2 tsp	dried Sicilian oregano
1/2 cup	Pecorino Romano PDO *freshly grated*

PREPARATION

- **Mix the water, yeast, bread flour, and diastatic malt into a shaggy mass.**
  In a stand mixer fitted with a dough hook, hydrate the yeast in the water for one minute before adding the dry ingredients and mixing on low until no dry flour remains.
- **Autolyse for 15 minutes, then add the sea salt and 8 grams of extra virgin olive oil.**
  Knead on medium-low speed for 6 to 8 minutes until the dough is smooth, supple, and registers approximately 78°F.
- **Bulk ferment at room temperature for one hour after a single stretch-and-fold.**
  Divide the dough into two equal 347-gram boules, place into lightly oiled airtight containers, and transfer to the refrigerator for a strict 24-hour cold retard.
- **Purge the live clams in heavily salted cold water for one hour.**
  Submerge them in the refrigerator to encourage them to expel any sand or grit before shucking.

INSTRUCTIONS

1. **Vigorously whisk the reserved clam liquor, six tablespoons of olive oil, and the minced garlic to create a kinetic emulsion.**
   Whisk in a small bowl until the mixture turns slightly opaque and thickens.

1. **Preheat the oven to its absolute maximum with a baking steel positioned on the upper-middle rack.**
   Saturate the steel with heat for at least one full hour at 550°F before launching a pizza.

2. **Stretch the tempered dough into an asymmetrical oblong shape on a semolina-dusted peel.**
   Using your fingertips, gently press the air outward from the center, leaving a slightly raised rim, aiming for a 12x14 inch oval approximately 1/8-inch thick in the center.

3. **Generously coat the surface of the raw dough with half of the prepared clam and garlic emulsion.**
   Spread it evenly to the edges to protect the delicate crust and generate essential micro-blistering steam.

4. **Scatter half of the chopped clams, grated Pecorino Romano, and crushed dried oregano across the pie.**
   Do not add salt; the clams and cheese provide all the necessary salinity. Never under any circumstances add mozzarella.

5. **Launch the pie onto the steel and immediately switch the oven to broil.**
   Bake for 6 to 8 minutes, watching closely as the intense infrared heat boils the emulsion and cooks the clams in their own juices while the steel sears the undercarriage.

6. **Retrieve the pizza and rest on a wire rack for one minute before serving.**
   The crust should hold straight out without sagging. Slice into irregular, asymmetrical pieces.

CHEF'S NOTES

- **Canned clams are a strictly compromised alternative.**
  If fresh littlenecks are entirely unavailable, drain high-quality canned clams and reserve the juice for the emulsion, but only scatter the clam meat on the pie during the final 60 seconds of the bake to prevent a rubbery texture.

- **Diastatic malt is non-negotiable for a 550°F home oven.**
  Without the 900°F heat of a coal oven, the 1.5% malt addition is the only way to accelerate browning and achieve the authentic, deeply charred Wooster Street undercarriage.

The Magnificent Mile Sausage Shield

A Chicago deep-dish pizza is not a casserole; it is a masterpiece of thermodynamic engineering. The dough is a short, pastry-like crust fortified with corn oil and butter, built strictly to hold back a flood of molten dairy and crushed tomatoes. Suspended between them is the shield: a raw web of seventy-thirty pork butt that renders its fat straight into the crumb while venting steam through intentional gaps. Treat these baker's percentages with absolute reverence, respect the conduction heat of your baking steel, and you will understand exactly why this magnificent beast commands the respect of the Second City.

INGREDIENTS

440 g	all-purpose flour
220 g	warm water
55 g	corn oil
55 g	unsalted butter *melted and slightly cooled*
3 g	active dry yeast
3 g	kosher salt
450 g	ground pork butt *chilled*
35 g	ice water
7 g	kosher salt
1 g	black pepper *freshly ground*
1 1/2 g	garlic powder
1 g	sugar
1 1/2 g	fennel seed *lightly toasted and crushed*
450 g	low-moisture part-skim mozzarella *sliced*
150 g	mild provolone *sliced*
400 g	crushed tomatoes *drained of excess liquid in a fine-mesh strainer*
1 tsp	dried oregano
30 g	Pecorino Romano *grated*

PREPARATION

- **Begin the dough twenty-four hours in advance.**
  This cold ferment is non-negotiable for proper starch hydration and authentic flavor development.

INSTRUCTIONS

1. **Mix the short dough and initiate the cold ferment.**
   In a stand mixer, dissolve the yeast in the warm water until frothy, then add the corn oil and melted butter. Add the flour and three grams of salt, mixing on low just until combined, then knead for exactly two minutes—no more—to prevent gluten formation. Form into a ball, place in an oiled bowl, cover tightly, and refrigerate for 24 hours.

1. **Establish the primary bind for the sausage shield.**
Whisk the remaining seven grams of salt, black pepper, garlic powder, sugar, and fennel seed into the ice water. Pour this over the extremely cold ground pork and knead vigorously by hand for two to three minutes until the meat transitions from crumbly to a sticky, cohesive mass. Refrigerate for at least two hours to cure.

2. **Calibrate the oven and prepare the baking matrix.**
Place a baking steel on the lowest rack of your oven and preheat to 450°F for at least one hour to replicate the intense bottom-conduction heat of a professional deck oven. Generously grease a 14-inch deep-dish pan with corn oil or solid shortening.

3. **Shape the dough and construct the cheese foundation.**
Remove the dough from the fridge ninety minutes prior to baking. Press it evenly across the bottom and one and a half inches up the sides of the pan, pinching the top edge to create a thin rim. Shingle the sliced provolone and mozzarella directly onto the raw dough, pressing tightly into the corners to form an impermeable seal.

4. **Apply the raw sausage web.**
Take small, quarter-sized pinches of the cold, cured sausage and flatten them between your fingers, laying them over the cheese. Connect the pieces into a loose web, ensuring you leave tiny gaps to allow steam to vent; do not create a solid, impenetrable puck.

5. **Crown with tomatoes and bake.**
Spread the drained crushed tomatoes evenly over the sausage shield and dust generously with dried oregano and Pecorino Romano. Bake on the preheated steel for 35 to 40 minutes, tenting loosely with foil at the 25-minute mark if the tomatoes begin to char.

6. **Rest the pizza to set the internal structure.**
Remove the pan from the oven and let it sit undisturbed for ten minutes so the cheese sets and the rendered pork fat reabsorbs. Carefully lift the pie out with a spatula, cut into wedges, and serve immediately.

CHEF'S NOTES

- **Do not pre-cook the sausage.**
  Applying the meat raw ensures it bastes the pie from the inside out. The forty-minute bake will easily bring it well past food-safety temperatures.
- **Drain your tomatoes relentlessly.**
  Failing to remove the excess liquid from the crushed tomatoes will compromise the structural integrity of the sausage shield and turn the pastry crust into a swamp.

Chapter 3 — The Pies

The strict architectural assembly and baking specifications for America's regional pizza styles.

An American pie is a strict architectural blueprint. A proper build isn't born of handfuls of cheese slapped onto raw dough; you weigh the flour and wait out the cold ferment. To get that shatteringly crisp undercarriage of a New York slice, or the lacy, caramelized black-lace borders of an edge-to-edge frico in a blue steel Detroit pan, you let a 3/8-inch baking steel do the brutal work of mimicking a 500-degree oven floor.

This is the grease-stained lineage of the American slice shop, stripped of the red-checkered bullshit. From the coal-charred brutality of a New Haven white clam packed with littleneck clams to the sausage-laden heft of a Chicago deep-dish, these are the blueprints. They demand a kitchen scale. These are the exact assembly parameters for the country's defining styles, ending with the sound of the crust cracking as it is pulled from the oven.


ENTER
CANCEL

The Bleecker Street Bianca

In Greenwich Village, a few blocks away from the neon lights of the modern slice shops, sits the historic heart of New York pizza. Since 1929, the coal-fired brick ovens of Bleecker Street have turned out pies with a crisp, char-kissed undercarriage and a chewy, structurally flawless crumb. A true Bianca strips away the tomato sauce, leaving nowhere to hide. It is a decadent, masterfully balanced architecture of whole-milk mozzarella, rich ricotta, garlic, and fresh basil. To replicate that aggressive coal-oven blister in a home kitchen, we respect thermodynamics, deploying a kitchen scale, diastatic malt powder, and a 24-hour cold ferment to push the crust to a dark, beautiful char.

INGREDIENTS

600 g	high-gluten flour
378 g	ice-cold water
15 g	fine sea salt
12 g	olive oil
9 g	diastatic malt powder
2 1/2 g	instant dry yeast
170 g	whole-milk low-moisture mozzarella *grated fresh from the block*
125 g	whole-milk ricotta *drained in a fine-mesh sieve for 2 hours*
15 g	Pecorino Romano *finely grated*
15 g	extra-virgin olive oil
1 large clove	garlic *microplaned or crushed into a paste*
1/4 tsp	garlic powder
1/4 tsp	dried oregano
1 pinch	flaky sea salt
1 pinch	black pepper *freshly cracked*
6 leaves	fresh basil
1 tbsp	semolina flour

PREPARATION

- **Whisk the ice-cold water and fine sea salt in a stand mixer bowl until the salt dissolves.**
  Add the high-gluten flour, diastatic malt powder, and instant dry yeast. Mix on the lowest speed until a shaggy dough forms, then let it rest for 15 minutes to autolyse and jumpstart gluten development.
- **Knead on medium-low speed for 5 minutes, then slowly drizzle in the olive oil.**
  Continue kneading for another 3 to 4 minutes until the oil is fully incorporated and the dough is smooth, elastic, and clears the sides of the bowl.
- **Rest the dough for 30 minutes at room temperature, then divide into three equal portions.**
  Using a bench scraper and a scale, portion the dough out at roughly 340 grams each. Fold the edges into the center, flip seam-side down, and drag in tight circles to build a taut surface tension.

- **Place each dough ball into a lightly oiled, airtight container and cold-ferment in the refrigerator for 24 to 72 hours.**
  A 24-hour ferment yields excellent texture, while pushing it to 72 hours unlocks maximum sourdough-like flavor complexity.
- **Remove the dough from the refrigerator 2 hours before baking to temper.**
  The dough must reach room temperature to stretch easily; cold dough will aggressively snap back.
- **Drain the ricotta and steep the garlic oil.**
  Drain the ricotta in a fine-mesh sieve for 2 hours prior to assembly to prevent a soggy pie. In a small bowl, whisk the microplaned garlic into the extra-virgin olive oil and let it steep.

INSTRUCTIONS

1. **Position a baking steel on the upper-middle rack and preheat the oven to 550 degrees for at least one full hour.**
   The ambient air heats quickly, but the steel requires a full hour to absorb the thermal mass needed to emulate a coal-oven floor.
2. **Dust a work surface with bread flour and gently stretch the room-temperature dough outward to a 14-inch diameter.**
   Press the center flat to expel the gas, then drape the dough over your knuckles and let gravity do the work, leaving a half-inch border untouched to form the cornicione.
3. **Transfer the stretched dough to a semolina-dusted peel and dress the pizza.**
   Brush the entire surface with the garlic-infused extra-virgin olive oil, dust with garlic powder and oregano, scatter the mozzarella, and drop quarter-sized dollops of the drained ricotta evenly over the top.
4. **Launch the pizza onto the hot steel and bake for 6 to 8 minutes.**
   Give the peel one final shake to ensure mobility, then use a swift pull-back motion to slide the pizza onto the steel. Rotate the pie 180 degrees at the 4-minute mark for an even bake.

1. **Switch your oven to broil for the final 60 to 90 seconds.**
   The intense top-down radiant heat mimics the dome of a coal oven, aggressively blistering the cheese and charring the edges of the crust.

2. **Transfer to a wire cooling rack and finish with Pecorino Romano and fresh basil.**
   The rack prevents steam from condensing under the crust and ruining the crispy undercarriage. Let the pie rest for 3 minutes before slicing and folding.

CHEF'S NOTES

- **Respect the baker's percentages.**
  This dough relies on a highly specific 63 percent hydration and 1 1/2 percent diastatic malt powder to properly emulate a coal-oven bake at lower temperatures. Always weigh your flour and water in grams.

- **Cheese selection is absolutely non-negotiable.**
  Never use pre-shredded mozzarella. It is coated in cellulose to prevent clumping, which actively ruins the cohesive, stretchy melt required for a proper New York slice.

The Greenpoint Sweet-Heat

There is a persistent, romantic lie that authentic pizza must remain frozen in some mythical Neapolitan amber. The reality of the New York slice has always been one of constant, messy evolution. Born from a Brooklyn wood-fired joint and seamlessly adapted for the classic deck-oven slice shop, this pie introduces a post-bake shower of chili-infused honey to the salty, rendered fat of spicy soppressata. It sounds like transgressive novelty until you take a bite and realize the biochemical balance of sweet, heat, fat, and acid is undeniably brilliant. Armed with a baking steel, a kitchen scale, and a few days of patience, this is how you replicate the most vital American pizza innovation of the century.

INGREDIENTS

650 g	bread flour
410 g	water *ice cold*
14 g	fine sea salt
2 1/2 g	instant dry yeast
10 g	diastatic malt powder
13 g	extra virgin olive oil
28 oz	crushed California tomatoes
15 oz	fresh mozzarella *patted thoroughly dry and torn into 1-inch pieces*
9 oz	soppressata piccante *sliced 1/8-inch thick*
6 tbsp	Parmigiano-Reggiano *freshly grated*
6 tbsp	chili-infused honey
1/2 cup	semolina flour

PREPARATION

- **Extract excess whey from the fresh mozzarella.**
  Supermarket fresh mozzarella holds disastrous amounts of water. Tear the cheese two hours before assembly, lay it on paper towels, and lightly press it to extract the moisture.
- **Prepare the raw tomato sauce.**
  If using whole peeled tomatoes, pulse them gently in a food processor or crush by hand until they resemble coarse sand. Do not cook the sauce.

INSTRUCTIONS

1. **Whisk the flour, instant dry yeast, and diastatic malt powder in the bowl of a stand mixer.**
   Do not add the salt yet; direct contact can cause osmotic stress to the yeast cells.
2. **Stream the ice-cold water into the dry mixture on low speed until a shaggy mass forms, then rest for 20 minutes.**
   This autolyse phase allows the flour to fully hydrate and initiates passive gluten development without mechanical oxidation.

1. **Sprinkle the salt over the dough, mix for three minutes, then slowly drizzle in the olive oil.**
   Increase the speed to medium-low and knead for 5 to 7 minutes until the dough is perfectly smooth, slightly tacky, and passes the windowpane test. Target a final dough temperature of 76°F to 78°F.

2. **Divide the dough into three 365-gram portions and form each into a perfectly taut sphere.**
   Fold the edges inward, flip the mass over, and drag it in tight circles against an unfloured workbench to seal the bottom seam.

3. **Place each dough ball into an oiled, airtight container and cold ferment in the refrigerator for 24 to 72 hours.**
   This extended cold retardation drastically slows yeast metabolism while amylase and protease enzymes unlock complex sugars and tenderize the gluten network.

4. **Position a baking steel on the top-third rack of your oven and preheat to 550°F for at least one hour.**
   The steel must be fully saturated with thermal energy to generate the explosive oven spring required for a foldable New York slice.

5. **Remove a dough ball from the refrigerator 90 minutes before baking to reach room temperature.**
   Stretching cold dough guarantees rapid gluten snap-back, tearing, and a dense, lifeless crust.

6. **Stretch the relaxed dough on a floured surface into a 14-inch circle, preserving a 3/4-inch perimeter for the cornicione.**
   Transfer the stretched dough to a wooden peel lightly dusted with equal parts flour and fine semolina.

7. **Ladle a half cup of the raw tomato sauce onto the dough and distribute the mozzarella and soppressata.**
   Spread the sauce in concentric circles. Scatter the torn mozzarella sparingly so moisture can escape, then lay the soppressata evenly across the top.

1. **Slide the pizza onto the preheated steel and bake undisturbed for four minutes.**
   Give the peel a quick shake to ensure mobility, then use a swift, confident jerk to launch the pie.

2. **Rotate the pizza 180 degrees, switch the oven to high broil, and bake for two to three more minutes.**
   The intense radiant heat mimics a professional deck oven, curling the meat into crispy, rendered fat cups and creating leopard spotting on the crust.

3. **Extract the pizza to a wire cooling rack and immediately apply the final garnishes.**
   Grate the Parmigiano-Reggiano over the bubbling cheese, then aggressively drizzle the hot honey across the pie so it pools in the rendered soppressata cups. Slice into eight triangles and serve.

CHEF'S NOTES

- **Master the baker's percentages.**
  This dough formulation relies on absolute precision: 100% bread flour, 63% water, 2.2% salt, 0.4% yeast, 1.5% diastatic malt powder, and 2% olive oil. Use a digital scale and weigh everything.

- **Never bake the honey.**
  Fructose caramelizes at roughly 230°F. Exposing honey to a 550°F baking steel will trigger rapid pyrolysis, carbonizing the sugars and ruining the pie with acrid bitterness.

- **Respect the diastatic malt powder.**
  Home ovens top out at 550°F. Without the 1.5% diastatic malt accelerating the breakdown of starches into simple sugars during the cold ferment, your crust will dry out before it ever achieves proper browning.

The Wooster Street Purist

ah-beetz

Before the foldable New York slice and the ubiquitous blanket of heavy mozzarella, there was the tomato pie. Born in 1925 out of the Neapolitan diaspora in New Haven, Frank Pepe’s original creation is an exercise in austere perfection: blistered, coal-charred bread dough acting as a canvas for crushed summer tomatoes, a heavy hand of pungent Pecorino Romano, and good olive oil. It is the ultimate litmus test of a pizzeria's worth, demanding an appreciation for high-hydration doughs, the patience of a three-day cold ferment, and a willingness to push a home oven to its absolute thermodynamic limits.

INGREDIENTS

585 g	bread flour
398 g	water *at room temperature*
13 g	fine sea salt
2 g	instant dry yeast
28 oz	whole peeled tomatoes *drained of juices and crushed aggressively by hand into small irregular pieces*
1/2 tsp	fine sea salt
1 tsp	dried oregano *rubbed vigorously between palms to release essential oils*
1/4 cup	Pecorino Romano *freshly and finely grated*
1 large clove	garlic *shaved paper-thin on a mandoline*
2 tbsp	extra virgin olive oil
1 pinch	dried oregano
1/4 cup	semolina flour *for dusting the peel*

PREPARATION

- **Combine the bread flour and most of the water to initiate the autolyse.**
  In a large mixing bowl, combine the flour with 380 g of the water, mixing vigorously until a shaggy mass forms with no dry pockets. Cover tightly and rest at room temperature for 45 minutes to let the flour fully hydrate and passively develop a gluten network.

- **Incorporate the yeast, salt, and remaining water into the dough.**
  Sprinkle the yeast and salt evenly over the rested dough, pouring the reserved 18 g of water over the top to help dissolve the granules. Drive your wet fingers into the dough and pinch it repeatedly to incorporate the additions.

- **Slap and fold the dough continuously until it transforms from a sticky mass into a smooth ball.**
  Lift the dough from the bowl, slap it violently back down onto itself, and fold it over. Repeat this uninterrupted for 5 to 7 minutes without adding any extra flour until the dough becomes highly elastic and slightly tacky.

- **Divide the rested dough into three equal portions and form each into a tight sphere.**
  Cover and rest the dough for 20 minutes, then turn it out onto a clean, unfloured surface. Use a bench scraper and kitchen scale to divide the mass into three 330 g portions, pulling the edges down and pinching them at the bottom to form seamless balls.
- **Cold ferment the dough in airtight containers for up to three days.**
  Place each dough ball into a lightly oiled container, seal tightly, and park it in the coldest part of your refrigerator for a minimum of 24 hours, though 72 hours is heavily advised to develop the signature Wooster Street sourness.
- **Prepare the uncooked sauce by tossing the crushed tomatoes with salt and crushed oregano.**
  Combine the hand-crushed tomatoes with the sea salt and the oregano. Stir gently to combine, then cover and refrigerate until needed.

INSTRUCTIONS

1. **Preheat a baking steel on the upper-middle rack to the absolute maximum oven temperature.**
   Place your steel about 6 inches below the broiler element and crank the oven to 550°F. Allow the steel to heat saturate for at least one full hour.
2. **Bring the dough completely to room temperature before stretching.**
   Remove the dough containers from the refrigerator 2 hours before baking. Cold dough will bubble unevenly and stubbornly snap back like a rubber band when you attempt to shape it.
3. **Stretch the dough in a mix of flour and semolina into a thin asymmetrical oblong.**
   Drop the dough into the flour mixture, then transfer to a work surface. Using the pads of your fingers, press gently to define a small rim, then lift and let gravity stretch it into a rustic 12-to-14-inch shape that is extremely thin in the center.

1. **Assemble the pie on a semolina-dusted peel with the tomato sauce, shaved garlic, and a heavy hand of Pecorino Romano.**
   Transfer the dough to the peel and give it a shake to ensure it slides freely. Ladle on the crushed tomatoes leaving a half-inch border, scatter the shaved garlic across the surface, and dust the entire pie—including the crust edges—vigorously with the cheese and a final pinch of oregano.

2. **Finish the assembly with a generous spiral of high quality extra virgin olive oil.**
   Drizzle the oil continuously starting from the center and moving outward.

3. **Launch the pizza onto the steel and bake undisturbed until the bottom is dark and firm.**
   Give the peel one last shake for mobility, launch the pie, and bake for 4 to 5 minutes. Check the undercarriage with a metal peel; it should exhibit dark brown to black leopard spotting.

4. **Engage the broiler to scorch the exposed edges and aggressively reduce the tomato sauce.**
   Turn the broiler to high for the final 1 to 2 minutes, watching it like a hawk. The edges will puff and take on localized black char—this is not burnt, this is flavor—and the sauce will sizzle violently.

5. **Rest the pie briefly on a wire rack before executing the classic non-symmetrical New Haven cut.**
   Pull the pie with a metal peel and rest it on a wire rack for 60 seconds to let steam escape the bottom crust. Move to a board, cut into irregular slices, and serve immediately.

CHEF'S NOTES

- **Do not substitute the carbon steel.**
  A 68% hydration dough requires the aggressive thermal shock of carbon steel; a standard ceramic stone will not transfer heat fast enough to achieve the necessary oven spring before the dough dries out.

- **Respect the absence of mozzarella.**
  Pecorino Romano must carry the entire umami load of this pizza. Buy a wedge and grate it fresh rather than relying on pre-grated domestic varieties coated in anti-caking agents that inhibit proper melting.
- **Master the high-hydration baker's matrix for proper coal-oven texture.**
  This dough relies strictly on 100% bread flour, 68% water, 2.2% fine sea salt, and 0.4% instant dry yeast to endure a long cold ferment without over-proofing. Do not add malt or sugar; the steel handles the browning.
- **Mind your water chemistry.**
  Hard or heavily chlorinated tap water can over-tighten gluten networks and stall fermentation. If your tap water is suspect, use filtered spring water to ensure a supple dough.

The Conant Avenue Under-Cover Supreme

Detroit pizza wasn't born in a culinary institute; it was forged in repurposed blue-steel automotive drip trays at a Six Mile speakeasy in 1946. This pie is a working-class miracle of thermodynamics. We're talking a high-hydration dough hitting the hot steel of a hard-anodized pan to deep-fry the undercarriage, with a heavy payload of pepperoni and vegetables trapped securely under a matrix of molten Wisconsin Brick cheese. You bake it hard, pry the blackened frico edges from the pan, and hit it with thick racing stripes of red sauce last. It's a heavy, gorgeous thing, and you have to respect the architecture.

INGREDIENTS

231 g	high-protein bread flour
173 g	water *warmed to 90°F*
4.6 g	fine sea salt
2.3 g	diastatic malt powder
1.15 g	instant dry yeast
3 tbsp	olive oil *for the pan*
80 g	natural casing pepperoni *sliced*
60 g	ham *diced*
40 g	green bell pepper *thinly sliced into short strips*
40 g	white onion *thinly sliced*
40 g	cremini mushrooms *thinly sliced*
280 g	Wisconsin Brick cheese *cut into 1/2-inch cubes*
200 g	crushed tomatoes
10 g	olive oil
1/2 tsp	garlic powder
1/2 tsp	dried oregano
1/4 tsp	dried thyme
1/2 tsp	sugar
2 g	salt

INSTRUCTIONS

1. **Whisk the bread flour, diastatic malt powder, and yeast with the warm water until a shaggy, wet dough forms.**
   Do not knead yet. Cover the bowl with a damp towel and let it rest to autolyse for 30 minutes. At 75 percent hydration, this dough will be highly sticky—this is entirely normal and essential for achieving an open, focaccia-like crumb.

2. **Sprinkle the fine sea salt evenly over the rested dough and pinch it in with wet hands.**
   Perform a series of 4 to 6 stretch-and-folds by grabbing the underside of the dough, pulling it upward, and folding it over itself. Cover and let sit at room temperature for 1 to 2 hours, performing one more stretch-and-fold halfway through, until the volume increases by 50 percent.

1. **Transfer the dough to a lightly oiled, airtight container and immediately move it to the coldest part of your refrigerator for 18 to 24 hours.**
   This cold retardation unlocks the enzymatic benefits of the diastatic malt, creating complex flavor profiles and relaxing the gluten network so the dough won't aggressively shrink when stretched.

2. **Coat a 10x14-inch hard-anodized aluminum Detroit pan heavily with 3 tablespoons of olive oil, drop the cold dough in, and gently dimple it outward.**
   The cold dough will likely spring back and refuse to reach the corners. Do not force it. Cover tightly with plastic wrap, let it sit at room temperature for 45 minutes to relax, then gently stretch it completely into the four corners. Cover again and proof in a warm spot for 1.5 to 2.5 hours until the dough is profoundly bubbly and climbing the greased walls.

3. **Combine the crushed tomatoes, 10g olive oil, garlic powder, oregano, thyme, sugar, and salt in a small saucepan over medium-low heat.**
   Simmer for 15 to 20 minutes until the sauce reduces into a thick paste. A watery sauce will seep into the bread and compromise the structural integrity of the final bake. Set aside and keep warm.

4. **At least 45 minutes before baking, position a baking steel on your lowest oven rack and preheat the oven to 525°F or 550°F.**
   You need the intense conductive heat of that steel driving into the heavy-gauge aluminum pan to effectively fry the bottom crust in its own oil, perfectly mimicking a commercial deck oven.

5. **Gently press the fully proofed dough to deflate any massive air pockets, then lay down an edge-to-edge blanket of sliced pepperoni directly onto the raw dough.**
   Scatter the diced ham, green peppers, onions, and mushrooms evenly over the pepperoni. Trapping the vegetables under the cheese prevents them from incinerating at high heat while allowing the pork fat to render directly into the porous bread beneath.

1. **Distribute the cubed cheese over the toppings, aggressively packing an excess of cubes against the metal perimeter of the pan.**
   This technique is non-negotiable. The perimeter cheese must physically touch the metal sidewalls so it can melt down the sides, fry in the hot oil, and forge the blackened, caramelized frico crown that defines the Detroit style.

2. **Slide the pan directly onto the blazing hot baking steel and bake for 12 to 16 minutes.**
   Watch closely. Pull the pizza when the center cheese bubbles golden and the frico edges are visibly dark brown to almost black, pulling slightly away from the pan.

3. **Run a thin metal spatula around the edges immediately upon removal, then lift the entire pizza out of the pan and onto a wire cooling rack.**
   Do not leave it in the pan; trapped steam will instantly destroy the fried undercarriage you just worked so hard to build. Let it rest for 5 minutes, ladle the warm, reduced tomato sauce in three thick vertical racing stripes over the top, cut into 8 squares, and serve.

CHEF'S NOTES

- **Sourcing Wisconsin Brick Cheese.**
  Authentic Detroit pizza requires Wisconsin Brick, a high-fat, semi-hard, smear-ripened cheese. If you cannot source it, a 50/50 blend by weight of whole-milk low-moisture mozzarella and Monterey Jack replicates the exact fat-to-moisture ratio needed to melt properly without burning before the thick crust cooks.

- **Baker's Percentages.**
  For the technical baker scaling this formula up or down: Bread Flour (100%), Water (75%), Fine Sea Salt (2%), Diastatic Malt Powder (1%), Instant Dry Yeast (0.5%).

The Magnificent Mile Desiccated Spinach

Deep-dish is perhaps the most misunderstood pie in America—dismissed by the uninitiated as a casserole, but revered by the dedicated technician as a masterclass in moisture management and thermal engineering. This isn't a New York foldable; it’s an indigenous architectural marvel demanding a short, fat-heavy crust and a 24-hour cold retard to build flavor. The secret to the magnificent spinach pie of Michigan Avenue isn't just the buttercrust—it's the brutal, absolute desiccation of the greens. Respect the baker's percentages, heat the steel, and witness the monumental glory of a true Chicago slice.

INGREDIENTS

300 g	unbleached all-purpose flour
15 g	fine yellow cornmeal
144 g	cold water
36 g	corn oil
18 g	unsalted butter *melted and slightly cooled*
6 g	extra virgin olive oil
4 1/2 g	fine sea salt
4 1/2 g	sugar
1 1/2 g	instant dry yeast
16 oz	fresh baby spinach
15 g	extra virgin olive oil
50 g	yellow onion *finely minced*
3 large	garlic *smashed and minced*
10 g	fresh basil *roughly chopped*
3 g	kosher salt
1 g	black pepper
16 oz	low-moisture whole-milk mozzarella *sliced 1/4-inch thick from a block*
30 g	Parmesan or Pecorino Romano *finely grated*
28 oz	whole peeled plum tomatoes *hand-crushed*
1 tsp	dried oregano
1/2 tsp	garlic powder
1/2 tsp	salt
1 tsp	extra virgin olive oil

PREPARATION

- **Dry hydrate the dough ingredients.**
  In a large mixing bowl, whisk together the all-purpose flour, fine yellow cornmeal, fine sea salt, sugar, and instant dry yeast.
- **Integrate the lipids and mix sparingly.**
  Combine the cold water, corn oil, melted butter, and olive oil in a separate vessel. Pour the wet ingredients into the dry and mix for a maximum of 2 to 3 minutes until a shaggy, cohesive mass forms; do not over-knead.

- **Execute a cold retardation.**
  Form the dough into a rough ball, place it inside a lightly oiled container, cover airtight, and refrigerate for 24 to 48 hours to suppress yeast activity and build lactic acid.
- **Wilt and flavor the spinach matrix.**
  Heat the olive oil in a skillet, sauté the minced onion until translucent, add the garlic, then wilt the fresh spinach in handfuls. Season with kosher salt, black pepper, and fresh basil, then let cool to room temperature.
- **Mechanically desiccate the greens.**
  Transfer the cooled spinach mixture into a potato ricer or clean kitchen towel and wring it aggressively until not a single drop of water remains, resulting in a dense, dry puck.
- **Drain and season the tomatoes.**
  Place the hand-crushed plum tomatoes in a fine-mesh sieve over a bowl for 15 minutes to drain the watery serum. Discard the liquid, then gently fold the dried oregano, garlic powder, salt, and olive oil into the pulpy tomatoes without applying heat.

INSTRUCTIONS

1. **Calibrate the oven and prepare the pan.**
   Place a baking steel on the lowest rack of your oven and preheat to 450°F for at least 45 minutes. Generously grease the bottom and sides of a 12-inch cast iron skillet or deep-dish pan with softened butter or solid vegetable shortening.
2. **Temper and press the dough.**
   Remove the dough from the refrigerator 60 to 90 minutes before baking. Place it into the center of the greased pan and use your fingers and the heel of your hand to press it evenly across the bottom, pushing it exactly 1 1/2 to 2 inches up the sides.

1. **Construct the basal cheese barrier.**
   Tile the slices of mozzarella evenly over the entire bottom of the dough, overlapping slightly, and run them slightly up the walls to form a hydrophobic seal.

2. **Crumble the desiccated spinach stratum.**
   Evenly distribute the deeply flavored, bone-dry spinach mixture across the mozzarella layer so it can rehydrate purely with ambient fats.

3. **Encapsulate with the tomato layer.**
   Spoon the drained, seasoned tomato sauce edge-to-edge over the spinach, encapsulating the ingredients below, then crown generously with the grated Parmesan or Pecorino Romano.

4. **Execute a conductive bake.**
   Place the heavy skillet directly onto the preheated baking steel. Bake at 450°F for 15 minutes to aggressively set the bottom crust, then carefully reduce the oven to 425°F and bake for another 15 to 20 minutes until caramelized.

5. **Rest to secure structural integrity.**
   Remove the pizza from the oven and let it rest in the pan for 10 to 15 minutes. This allows the molten cheese to re-solidify slightly and the crust to set, ensuring a clean slice.

CHEF'S NOTES

- **The dough architecture relies on high fat and low protein to inhibit gluten.**
  A true deep-dish dough utilizes nearly 20% fat in baker's percentages to physically coat the flour proteins, creating a short, tender, biscuit-like crumb rather than the chewy elasticity of a New York slice.

- **Pre-shredded cheese will ruin the pie.**
  Always buy a block of whole-milk, low-moisture mozzarella and slice it yourself. Pre-shredded cheese is coated in anti-caking agents that inhibit smooth melting and cause the fats to separate into oily pools during a long bake.

- **Conductive heat transfer is non-negotiable.**
  Baking a 2-inch thick, ingredient-dense pie in a home oven requires a baking steel. Placing a heavy room-temperature cast iron pan directly onto superheated steel is the only way to fry the bottom crust before the toppings turn it to mush.

The Gravesend Bitter-Pork Matrix

South Brooklyn isn't just a place; it's a structural philosophy. Down in Gravesend, the Sicilian square slice evolved from a humble pan bread into a highly engineered marvel. We're talking an inverted matrix: a high-hydration dough, fortified with semolina, cold-fermented for days, and fried crisp in a blue steel pan. The cheese goes down first—a crucial lipid barrier—before the bitter, olive-oil-soaked broccoli rabe and fennel-spiked sausage get locked in under a heavily reduced tomato crown. It's a peasant classic elevated to a pizzeria masterpiece, demanding precision, a baking steel, and the patience to let the yeast do its holy work.

INGREDIENTS

400 g	bread flour
100 g	fine semolina flour
350 g	ice water
12 g	fine sea salt
4 g	instant dry yeast
5 g	diastatic malt powder
5 g	granulated sugar
15 g	extra virgin olive oil
30 g	extra virgin olive oil *reserved for the pan*
15 g	vegetable shortening *reserved for the pan*
800 g	whole peeled tomatoes *drained of thin juices and passed through a food mill*
50 g	double-concentrated tomato paste
20 g	extra virgin olive oil
2 small cloves	garlic *minced to a paste*
5 g	granulated sugar
3 g	dried oregano
350 g	low-moisture whole-milk mozzarella *sliced 1/8-inch thick*
400 g	fresh broccoli rabe *woody stems discarded*
300 g	sweet or hot Italian sausage *casings removed*
2 med cloves	garlic *thinly sliced*
2 g	crushed red pepper flakes
40 g	Pecorino Romano *finely grated*

PREPARATION

- **Mix the high-hydration Sicilian dough.**
  In a stand mixer, combine the bread flour, semolina, yeast, diastatic malt, and 5 g of sugar. Add the ice water on low speed until a shaggy mass forms, resting for 15 minutes to hydrate the semolina. Add the sea salt, mix for 5 minutes, then stream in 15 g of olive oil until the dough is smooth and clears the bowl.

- **Retard the dough for at least 24 hours.**
  Perform a few slap-and-folds on a floured surface to build tension, form into a tight boule, and place in an oiled container. Refrigerate immediately for 24 to 48 hours to develop the complex organic acids crucial for that unmistakable pizzeria aroma.

- **Reduce the thick Sicilian tomato crown.**
  Heat 20 g of olive oil in a saucepan over medium-low. Toast the minced garlic and tomato paste for a minute to build depth. Pour in the milled tomatoes, the remaining 5 g of sugar, and the oregano, simmering for 20 to 30 minutes until heavily reduced and thick. Set aside to cool.

- **Process the bitter greens and pork.**
  Blanch the trimmed broccoli rabe in heavily salted boiling water for exactly two minutes, shock in ice water, and aggressively squeeze out all moisture before roughly chopping. Brown the crumbled sausage in a wide skillet for 3 minutes, then remove it and bloom the sliced garlic and red pepper flakes in the rendered fat. Toss the dried rabe in that spiced pork fat for two minutes, then set aside to cool.

INSTRUCTIONS

1. **Lubricate the pan and proof the dough.**
   Five hours before baking, smear the shortening evenly across a 13x18-inch blue steel or hard-anodized pan, then pour the reserved 30 g of olive oil over it. Gently transfer the cold dough to the pan, dimpling it outward. Let it rest covered for 45 minutes to relax the gluten, stretch it fully into the corners, and proof in a warm spot for 3 to 4 hours.

2. **Preheat the thermal mass.**
   One hour before baking, place a baking steel on the lower-middle rack and preheat the oven to 550°F. The steel is non-negotiable; it acts as a thermal battery to simulate the fierce bottom heat of a commercial deck oven.

3. **Construct the inverted matrix.**
   Shingle the proofed dough completely with the sliced mozzarella to create an impenetrable lipid barrier. Distribute the sauteed rabe and sausage evenly over the cheese. Spoon the thick tomato sauce in heavy racing stripes, and dust the entire pie aggressively with Pecorino Romano.

1. **Bake on the steel and extract immediately.**
   Place the heavy pan directly on the preheated steel for 12 to 15 minutes, until the bottom crust is frying in the oil and achieves a dark mahogany crunch. Remove from the oven and immediately slide the pizza out of the pan onto a wire rack so trapped steam doesn't destroy the base. Cool for 15 minutes before slicing into squares.

CHEF'S NOTES

- **Master the baker's percentages.**
  This dough operates at 70% hydration with a flour base that is 80% high-protein bread flour and 20% fine semolina. We push the yeast to 0.8%—higher than a standard New York slice—to guarantee an explosive vertical lift during the cold pan-proof.
- **Harness the diastatic malt.**
  At 1% of the total flour weight, diastatic malt provides the active amylase enzymes needed to break down complex starches into simple sugars during the 48-hour cold ferment. In a home oven maxing out at 550°F, those extra sugars are the only way to achieve deep Maillard browning before the crumb dries out.

Chapter 4 — Slice Shop Specials

The quintessential secondary menu items that define the American slice shop ecosystem, utilizing dough scraps, dedicated fryers, and tubs of marinara.

The counter guy grabs a handful of scrap dough, ties it into hurried knots, and pitches them onto a half-sheet pan before the lunch rush hits. The ecosystem thrives on a dedicated fryer, bubbling vats of marinara, and the

brilliant repurposing of leftovers. Nothing goes to waste. This is the food devoured while leaning against a faux-wood laminate counter at two in the morning, dodging a puddle of bright orange oil on a paper plate.

Bringing these classics into the home kitchen requires the same precision, kitchen scales, and temperature control that built the pizza dough in the first place. These are the heavy-hitting heroes of the parlor: calzones blistering on a 500-degree baking steel, chicken parm subs armored in melted provolone, and garlic knots dripping in pungent chopped garlic and oil. Wrap those hot subs in aluminum foil. Keep the marinara simmering until it coats the back of a ladle, wait until the oil hisses at exactly 375 degrees to fry the knots, weigh the hydration of your stromboli dough, and let the twenty-four-hour cold ferment do the heavy lifting.

The Carmine Street Benchmark Garlic Knots

In the high-volume engine of a New York slice shop, nothing is wasted. The garlic knot was born of pure frugality—a post-shift hustle to repurpose leftover pizza dough into a savory, architectural marvel. This isn't a fluffy Italian brioche. It is a lean, highly hydrated, 72-hour cold-fermented dough, blistered on a 550-degree baking steel until structurally sound enough to withstand a torrential soaking of hot garlic butter and sharp Pecorino Romano. When executed correctly, the outside shatters, the inside pulls, and you are instantly transported to Carmine Street.

INGREDIENTS

500 g	high-gluten flour
325 g	ice cold water
11 g	fine sea salt
15 g	olive oil
5 g	diastatic malt powder
1/2 tsp	instant dry yeast
57 g	unsalted butter
50 g	extra virgin olive oil
20 g	fresh garlic *finely minced*
25 g	pecorino romano cheese *freshly micro-planed*
15 g	fresh flat-leaf parsley *finely minced*
1/4 tsp	crushed red pepper flakes
1/4 tsp	kosher salt
2 tbsp	semolina flour *for dusting*

PREPARATION

- **Whisk the dry ingredients together in the bowl of a stand mixer.**
  Combine the high-gluten flour, instant dry yeast, and diastatic malt powder.
- **Hydrate and knead the dough until a smooth, slightly tacky mass forms.**
  Dissolve the fine sea salt into the ice-cold water, then slowly pour it into the dry ingredients with the mixer running on low. Once a shaggy dough forms, drizzle in the olive oil and knead for 5 to 7 minutes until the dough hits an internal temperature of 75 to 80 degrees.
- **Execute the 72-hour cold ferment.**
  Let the dough rest at room temperature for 1 hour to gently awaken the yeast, then divide out a 510-gram portion. Form it into a tight boule and transfer to an airtight, lightly oiled container in the coldest part of your refrigerator for 48 to 72 hours.

INSTRUCTIONS

1. **Temper the dough and saturate your baking steel with heat.**
   Remove the dough from the refrigerator two hours before baking so it can come to room temperature, and preheat your oven and baking steel to 550 degrees for at least one hour.

1. **Cut the dough and tie the knots.**
   Dust your work surface with semolina flour and gently press the dough into a flat rectangle without fully degassing it. Cut into 12 to 16 equal strips, roll each into an 8-inch rope, tie a simple overhand knot, and tuck the loose ends underneath.

2. **Proof the knots while you prepare the garlic emulsion.**
   Place the formed knots onto a semolina-dusted pizza peel, cover lightly with plastic wrap, and let them rest for 15 to 30 minutes to relax the gluten.

3. **Sweat the garlic in the butter and olive oil without letting it brown.**
   In a skillet over medium-low heat, melt the butter into the olive oil, add the minced garlic, and cook for 1 to 2 minutes just until fragrant and pale gold, then immediately transfer the hot fat to a large mixing bowl.

4. **Bake the knots on the steel for six to eight minutes.**
   Slide the knots directly onto the preheated 550-degree steel and bake until they develop a deep golden-brown crust with distinct, charred leopard spotting on the undersides.

5. **Toss the blistering hot knots in the garlic emulsion and serve immediately.**
   Drop the knots straight from the oven into the bowl of garlic butter—the cooling dough creates a vacuum effect that draws the fat deep into the crumb. Add the parsley, Pecorino Romano, red pepper flakes, and kosher salt, toss vigorously to coat, and serve.

CHEF'S NOTES

- **Do not skip the diastatic malt powder if baking in a home oven.**
  A 72-hour cold ferment exhausts the natural sugars in the flour. The malt enzymes continuously convert complex starches into simple sugars, ensuring your crust deeply browns on the steel instead of baking up pale and blonde.

- **High-gluten flour is strictly required for the benchmark texture.**
  If commercial 14.2 percent protein flour is unavailable, substitute standard bread flour mixed with 1.5 percent vital wheat gluten. Using all-purpose flour will result in a flabby, cake-like crumb that tears under the weight of the heavy garlic butter.

The 86th Street Baked Ziti Meta-Slice

A monument to Italian-American excess, the baked ziti slice is a beautiful, carbohydrate-on-carbohydrate act of defiance born in the late-night slice shops of Brooklyn. It takes the slow-cooked, Sunday-dinner traditions of Campanian ziti al forno and slaps them unapologetically onto the flawless, foldable architecture of a New York crust. To pull this off at home without creating a soggy tragedy, you need the rigorous discipline of a serious baker: strict baker's percentages, diastatic malt for a 24-hour cold ferment, and the brutal thermodynamic reality of a 550-degree baking steel.

INGREDIENTS

500 g	bread flour
310 g	ice water
11 g	fine sea salt
7.5 g	granulated sugar
7.5 g	diastatic malt powder
2.5 g	instant dry yeast
10 g	extra virgin olive oil
8 oz	ziti *hand-broken into smaller, uneven pieces*
1 1/2 cup	crushed tomatoes *excess watery liquid drained*
1 tsp	fine sea salt
1 tsp	dried oregano
1/2 tsp	garlic powder
1 cup	whole-milk ricotta *strained if excessively wet*
3 cup	low-moisture whole-milk mozzarella *freshly grated from the block*
1/2 cup	Pecorino Romano *finely grated*
1 tbsp	semolina flour *for dusting the peel*
1 tbsp	fresh parsley *roughly chopped*

PREPARATION

- **Whisk the bread flour, yeast, and diastatic malt powder rigorously in the bowl of a stand mixer.**
- **With the mixer running on low, slowly stream in the ice water until a shaggy mass forms, then let it rest covered for 20 minutes.**
  This autolyse step allows the flour to fully hydrate and jumpstarts passive gluten development.
- **Add the 11g of salt and 7.5g of sugar, slowly drizzle in the olive oil, and knead on medium-low speed for 6 to 8 minutes.**
  Stop when the dough is smooth, elastic, and clears the sides of the bowl.
- **Divide the dough into two equal 424g portions, form each into a tight ball, and place in oiled airtight containers.**
  Immediately refrigerate for a minimum of 24 hours, extending up to 72 hours for optimal flavor and texture.

- **Remove the dough containers from the refrigerator exactly two hours before baking.**
  Cold dough will snap back and resist stretching. It must temper to room temperature.
- **Season the sauce by mixing the drained crushed tomatoes with the 1 teaspoon salt, dried oregano, and garlic powder.**
  Do not cook the sauce beforehand; it will naturally cook on the pizza without turning unpleasantly jammy.

INSTRUCTIONS

1. **Place a baking steel on the upper-middle rack and preheat the oven to 550°F for exactly one hour.**
   The steel must reach maximum thermal saturation to replicate the intense bottom-heat blast of a commercial deck oven.
2. **Boil the broken ziti in heavily salted water for exactly two minutes less than the package's instructions for al dente.**
   Drain the pasta thoroughly but do not rinse it; the residual surface starches are absolutely necessary for binding.
3. **Fold the hot pasta together with the ricotta, a half cup of the seasoned crushed tomatoes, and one cup of the shredded mozzarella.**
   The residual heat of the pasta will begin to melt the cheeses, creating a cohesive, sticky matrix that won't roll off the slice when eaten.
4. **On a floured surface, press the dough from the center outward and stretch it into a 14-inch circle, leaving a one-inch rim untouched.**
   Transfer the stretched dough to a peel dusted with a 50/50 mix of all-purpose and semolina flour. Give the peel a quick shake to ensure the dough glides freely.
5. **Apply a conservative, thin layer of the remaining crushed tomatoes and sprinkle with a half cup of mozzarella.**
   Do not over-sauce. The initial cheese layer acts as a hydrophobic barrier, preventing the wet ricotta and pasta mixture from turning your dough into a gummy disaster.

1. **Spoon the ziti mixture evenly across the pizza and cover entirely with the remaining mozzarella and a heavy dusting of Pecorino Romano.**
   Avoid piling the payload too high in the absolute center, as that is structurally the weakest point of the pie. The cheese cap will melt down over the pasta, locking it in place.

2. **Swiftly slide the pizza onto the preheated baking steel and bake for seven to nine minutes.**
   The intense heat of the steel will rapidly vaporize the moisture trapped within the dough matrix, forcing a violent oven spring in the crust.

3. **Switch the oven to broil for the final ninety seconds, watching obsessively until the cheese achieves a deep mahogany blister.**
   You are looking for a slight, crispy char on the exposed edges of the ziti.

4. **Extract the pizza onto a wire cooling rack and let it rest for exactly five minutes before cutting and garnishing with fresh parsley.**
   Do not rest it on a flat cutting board, which will trap steam and ruin the crisp undercarriage. The brief rest allows the molten cheese matrix to stabilize so the slice folds cleanly in your hand.

CHEF'S NOTES

- **If diastatic malt powder is unattainable, increase the granulated sugar in the dough formulation to 15g.**
  The browning will not be as complex, but it will ensure the yeast has enough residual sugars to properly caramelize the crust in a home oven.

- **If using Active Dry Yeast instead of Instant, increase the amount to 3.25g and dissolve it in a splash of the water first.**
  Commercial pizzerias often use fresh cake yeast. If you go that route, increase the percentage to 1.5%.

- **If you lack the confidence to slide a heavily loaded pie off a wooden peel, assemble it directly on parchment paper.**
  Slide the parchment onto the steel, then quickly yank the paper out from underneath after three minutes of baking to allow direct steel contact.

The Gravesend Pizza-Dough Panuozzo

pah-NWOT-tso

The panuozzo wasn't born in a centuries-old Neapolitan courtyard; it was engineered in the nineteen-eighties and perfected in the neon-lit slice shops of Gravesend, Brooklyn. It is, unapologetically, a pizza-dough sandwich. To make it at home requires abandoning romantic notions of imported water in favor of brutal thermodynamics: a high-hydration dough, an aggressive dose of diastatic malt, and the unrelenting thermal mass of a baking steel. When the dough hits that hot steel, it violently puffs into a hollow balloon, ready to be sliced, stuffed with heavy Italian-American artillery, and double-baked into a crispy, molten triumph.

INGREDIENTS

460 g	bread flour
115 g	high-gluten flour
414 g	water *ice-cold*
14 g	fine sea salt
2 g	instant dry yeast
11 g	extra virgin olive oil
8 g	diastatic malt powder
1/4 cup	semolina flour *for dusting*
2 med	breaded chicken cutlets *fried and kept hot*
1 cup	slice-shop tomato sauce *warmed*
8 oz	low-moisture whole-milk mozzarella *sliced*
1/4 cup	Pecorino Romano *grated*

PREPARATION

- **Prepare the chicken cutlets and slice-shop sauce in advance.**
  The panuozzo requires your full attention once the dough hits the steel. Have your hot fried cutlets and warm sauce ready to go for the second bake.

INSTRUCTIONS

1. **Whisk the bread flour, high-gluten flour, and diastatic malt powder together, then combine with the ice-cold water.**
   Mix until no dry spots remain, forming a shaggy mass, and let it rest covered for 30 minutes to build the gluten network passively.

2. **Sprinkle the yeast over the dough and knead aggressively for three minutes.**
   Add the salt and knead for two more minutes until it dissolves, then slowly drizzle in the olive oil, continuing to knead until the high-hydration dough becomes smooth, glossy, and highly elastic.

1. **Perform one set of stretch and folds before moving the dough to the refrigerator.**
   Cover the dough and let it sit at room temperature for an hour to wake the yeast, then cold-retard it in the fridge for 24 to 48 hours to develop complex lactic tang and optimal extensibility.

2. **Divide the cold dough into four equal 250-gram pieces and shape them into tight balls.**
   Tension on the outer skin is critical for trapping steam. Proof them in a covered box at room temperature for three to four hours until doubled in volume and yielding to the touch.

3. **Preheat a baking steel on the upper-middle rack at your oven's maximum temperature for one full hour.**
   The ambient air heats quickly, but the 1/4-inch steel requires a full hour to achieve the maximum thermal saturation necessary for a violent oven spring.

4. **Gently stretch one proofed ball into a 12-inch oval, brush lightly with oil, and bake on the steel for five to seven minutes.**
   Use semolina to slide it off the peel. Do not press a rim; maintain an even thickness. The dough will aggressively inflate like a balloon. Remove it before it takes on deep brown color.

5. **Cool the puffed bread for exactly three minutes before slicing it horizontally and layering your fillings.**
   Slicing immediately turns escaping steam into gummy water. Once sliced, load the bottom half with chicken cutlets, sauce, mozzarella, and Pecorino, then return it to the steel open-faced for three minutes until the cheese is bubbling and the exterior achieves a crisp, golden crunch.

CHEF'S NOTES

- **For those measuring by baker's percentages, this is a 72 percent hydration dough.**
  It uses 80 percent bread flour, 20 percent high-gluten flour, 2.5 percent salt, 2.0 percent oil, 1.5 percent diastatic malt, and 0.4 percent instant dry yeast. This precise ratio compensates for the thermal limits of a home oven.

The Old-School Pizzeria Fried Mozzarella Coins

To understand the slice shop is to respect the ecosystem that surrounds the pizza. The fried mozzarella coin is not a throwaway freezer-bag afterthought; it is a thermodynamically demanding side dish that requires as much discipline as your overnight dough. When treated with technical reverence—employing low-moisture whole-milk cheese, a mathematically precise double-dredge, and an obligatory freezing protocol to manipulate thermal lag—it yields a shattered-glass crust encasing a structural, molten pull. This is the Platonic ideal of a pizzeria classic, designed for the cook who treats their home kitchen with the rigor of a neighborhood institution.

INGREDIENTS

450 g	low-moisture whole-milk mozzarella block *chilled and cut into 1/2-inch thick coins*
100 g	all-purpose flour
30 g	cornstarch
150 g	whole eggs *beaten*
30 g	whole milk
100 g	plain panko breadcrumbs
100 g	fine Italian seasoned breadcrumbs
15 g	pecorino romano *grated*
5 g	garlic powder
3 g	dried oregano
2 g	dried parsley
3 g	kosher salt
1 g	black pepper *freshly ground*
2 l	peanut oil

PREPARATION

- **Set up the three-station breading assembly.**
  In a shallow dish, whisk the flour and cornstarch. In a second dish, beat the eggs and milk until completely homogenous. In a third dish, thoroughly mix the panko, Italian breadcrumbs, pecorino, garlic powder, oregano, parsley, salt, and pepper.

- **Execute the first pass of the double-dredge protocol.**
  Using your dry hand, toss a mozzarella coin in the starch primer, shaking off all excess. Switch to your wet hand to submerge it in the egg wash, ensuring complete hydration. Drop into the crumb blend and use your dry hand to press firmly so the panko adheres.

- **Repeat the egg wash and crumb coating a second time.**
  The second pass is non-negotiable; a single dredge cannot contain the hydrostatic pressure of melting cheese and will result in a blowout. Transfer the fully armored coin to a wire rack set in a rimmed baking sheet.

- **Freeze the breaded coins until solid.**
  Place the baking sheet in the freezer uncovered for an absolute minimum of one hour, or up to twenty-four hours. This thermodynamic safeguard widens the temperature delta, ensuring the exoskeleton browns before the core liquefies.

INSTRUCTIONS

1. **Heat the frying oil to precisely 365°F.**
   Fill a heavy-bottomed Dutch oven with at least two inches of peanut oil and attach a deep-fry thermometer. Heat over medium-high until it hits the target temperature.

2. **Fry the frozen coins in small batches.**
   Using a spider skimmer, gently lower three or four coins into the oil to avoid a severe temperature crash. Adjust the heat to maintain an environment strictly between 350°F and 365°F. If it drops below 350°F, the crust will act as a sponge for grease.

3. **Extract immediately at the first sign of a structural breach.**
   Fry for 90 to 120 seconds, flipping halfway. The objective is a deep, shattered-glass golden brown. The instant a microscopic bead of white cheese begins to escape the crust, pull them out.

4. **Drain and season while blistering hot.**
   Transfer to a wire rack or paper-towel-lined plate. Immediately hit them with a tiny pinch of kosher salt while the residual oil is hot, and allow the cooking oil to recover to 365°F before starting the next batch.

CHEF'S NOTES

- **The cheese selection is strictly non-negotiable.**
  Fresh buffalo mozzarella contains upwards of 60 percent water, which instantly turns to steam in the fryer and explodes. You must use a block of low-moisture, whole-milk mozzarella. Pre-shredded cheese contains anti-caking cellulose and will refuse to melt with the necessary elasticity.

- **Manage your pizza oven workflow with an auxiliary hold.**
  If you are baking a New York slice on a 550°F baking steel, fry the mozzarella beforehand. Keep the fried coins on a wire rack in a 200°F oven to hold them in a state of suspended molten elasticity while your pizza bakes.

The Bensonhurst Half-Moon Calzone

The American slice shop calzone is a magnificent descendant of the Neapolitan original, a dense, structural marvel built for the working class. In Brooklyn, the sauce is strictly banished to the side, making way for a fiercely guarded trinity of drained ricotta, low-moisture mozzarella, and sharp pecorino, sealed in a highly fermented dough engineered for foldability. Baking this half-moon beast on a home steel requires respect for thermodynamics: a brutal initial blast of heat to blister the crust, followed by a merciful temperature drop to melt the rich, molten core without incinerating the bottom.

INGREDIENTS

590 g	bread flour
10 g	vital wheat gluten
384 g	ice water
13 g	fine sea salt
18 g	olive oil
9 g	diastatic malt powder
2 g	instant dry yeast
340 g	whole milk ricotta *drained overnight in a cheesecloth-lined sieve*
340 g	low-moisture whole milk mozzarella *hand-shredded or cubed from a block*
40 g	Pecorino Romano *finely grated*
1 tsp	black pepper *freshly ground*
1 tbsp	extra-virgin olive oil
1 pinch	coarse salt
2 tbsp	semolina flour
1 cup	marinara sauce *warmed, for dipping*

PREPARATION

- **Drain the ricotta.**
  Place the ricotta in a cheesecloth-lined sieve over a bowl and let it drain overnight in the refrigerator.
- **Mix and cold-ferment the dough.**
  Combine the flour, gluten, ice water, salt, oil, malt, and yeast in a stand mixer, knead until smooth, then divide into four 250-gram balls, sealing them in deli containers to ferment in the refrigerator for 48 to 72 hours.

INSTRUCTIONS

1. **Temper the fermented dough.**
   Remove the dough balls from the refrigerator exactly two hours before baking to ensure the gluten relaxes and doesn't snap back during stretching.
2. **Saturate the baking steel with heat.**
   Position a baking steel on the middle-upper rack of your oven and preheat to 500°F for a minimum of 60 minutes.

1. **Stretch the canvas.**
   Dust a wooden peel generously with a mix of semolina and bread flour, then gently stretch a dough ball into a 10-inch circle, deliberately avoiding building up the thick outer rim you would normally want for a pizza.

2. **Layer the cheese filling.**
   Mound 85 grams of drained ricotta and 85 grams of shredded mozzarella onto the bottom half of the dough circle, topping with a tablespoon of pecorino and black pepper while leaving a strict 1-inch border of bare dough.

3. **Fold and execute the crimp.**
   Lightly dampen the 1-inch border with a wet fingertip, fold the top half of the dough over the cheese to meet the bottom edge, and expel any trapped air before trimming exactly 1/4-inch off the curved edge with a pizza wheel to bind the layers.

4. **Vent and glaze the crust.**
   Cut two small vertical slits into the top to act as a chimney for the steaming ricotta, then brush the exterior lightly with olive oil and sprinkle with coarse salt.

5. **Launch and achieve oven spring.**
   Slide the calzone decisively onto the preheated baking steel and bake at 500°F for exactly 5 minutes to set the bottom crust and initiate leopard-spotting.

6. **Execute the temperature drop.**
   Immediately reduce the oven temperature to 450°F and continue baking for another 10 to 12 minutes until the calzone is a burnished golden-brown and the cheese is visibly bubbling through the steam vents.

7. **Rest the molten core before serving.**
   Transfer the calzone to a wire rack and let it rest for at least 5 to 10 minutes to prevent a localized flood of molten dairy when sliced, serving it hot with a ramekin of marinara on the side.

CHEF'S NOTES

- **Mastering the dough formula.**
  The dough utilizes precise baker's percentages to emulate the New York slice shop: 100% flour, 64% hydration, 2.2% salt, 3% oil, 1.5% diastatic malt powder, and just 0.35% instant yeast.
- **The role of diastatic malt.**
  Enzymes in the malt break down starches into complex sugars during the long cold ferment, which both feeds the yeast over 72 hours and guarantees deep caramelization in a 500°F home oven.
- **Avoiding the soggy bottom.**
  American supermarket ricotta is incredibly wet. Skipping the overnight draining process guarantees that the trapped moisture will steam the interior of the dough, creating an irreparably gummy crumb line.

The Staten Island Italian Combo Stromboli

peet-tsah ahr-roh-toh-lah-tah

The stromboli didn't cross the Atlantic; it was born in Pennsylvania and perfected in the neon-lit slice shops of Staten Island. This isn't a dumping ground for leftover deli meat. It is a meticulously engineered cylinder of cured pork fat, sharp cheese, and 72-hour cold-fermented dough, deeply scored to vent steam and plastered in sesame seeds. Respect the architecture, use a digital scale, and let the baking steel do the heavy lifting.

INGREDIENTS

500 g	high-protein bread flour

310 g	water *at 65°F*
10 g	fine sea salt
8 g	extra virgin olive oil
5 g	diastatic malt powder
2 g	instant dry yeast
1/4 lb	Genoa salami *thinly sliced*
1/4 lb	spicy soppressata *thinly sliced*
1/4 lb	capocollo *thinly sliced*
1/4 lb	deli-style pepperoni *large slices*
6 oz	low-moisture whole-milk mozzarella *freshly shredded*
4 oz	sharp provolone *thinly sliced*
1 tbsp	extra virgin olive oil
1 tsp	dried oregano
1/4 cup	pickled banana peppers *thoroughly drained and patted completely dry*
1 large	egg white *beaten with 1 tbsp water*
2 tbsp	toasted sesame seeds
1 pinch	granulated garlic
1 pinch	Italian seasoning
1 cup	marinara sauce *warmed, for dipping*

PREPARATION

- **Mix the dough matrix.**
  In the bowl of a stand mixer fitted with a dough hook, combine the flour, 65°F water, yeast, and diastatic malt. Mix on low speed for about 2 minutes until a shaggy mass forms.
- **Autolyse and develop gluten.**
  Let the dough rest for 15 minutes to hydrate. Turn the mixer to medium-low, add the salt, and knead for 3 minutes. Slowly drizzle in the olive oil and continue kneading for 4 to 5 minutes until the dough is smooth, supple, and registers 80°F to 85°F on an instant-read thermometer.
- **Divide and cold ferment.**
  Turn the dough onto an unfloured counter, divide it into two equal 417g pieces, and form each into a tight ball. Place into lightly oiled, airtight containers and refrigerate immediately for 24 to 72 hours.

- **Temper the dough.**
  Remove one dough ball from the refrigerator 2 hours prior to baking to allow it to reach room temperature. A cold dough will snap back, fight you, and tear.

INSTRUCTIONS

1. **Saturate the baking steel.**
   Place a baking steel on the middle-lower rack and preheat your oven to its absolute maximum setting (500°F to 550°F) for at least one full hour to ensure enough thermal mass to shock the dough into blistering.

2. **Stretch the canvas.**
   On a lightly floured piece of parchment paper, use your fingertips to gently stretch the tempered dough out into a 12x16-inch rectangle, maintaining an even 1/4-inch thickness. Do not use a rolling pin, which will crush the gas structure you spent days developing.

3. **Build the Italian combo layer.**
   Brush the dough interior with 1 tablespoon of olive oil, leaving a pristine 2-inch border around all edges. Lay down the provolone first to act as a lipid barrier against the meat juices, then shingle the capocollo, salami, soppressata, and pepperoni in an even, flat layer. Scatter the mozzarella, oregano, and dried banana peppers over the top.

4. **Execute the slice-shop fold.**
   Brush the exposed 2-inch border with the egg wash to act as glue. Fold one long side of the dough exactly over the middle of the ingredients, then pull the opposite long side over it to create a tight, overlapping seam. Pinch the seam aggressively, fold the short ends underneath the log, and roll the entire stromboli over so it rests seam-side down.

1. **Apply the Staten Island finish.**
   Brush the entire exterior heavily with egg wash, then coat liberally with sesame seeds, granulated garlic, and Italian seasoning. Using a razor blade or sharp knife, score 5 diagonal slits across the top, cutting just deep enough to expose the first layer of meat and vent internal steam.

2. **Bake and rest.**
   Slide the stromboli, still on its parchment, directly onto the preheated steel. Bake for 12 to 15 minutes, rotating 180 degrees halfway through, until the crust is a deep mahogany. Remove to a wire rack and mandate a 15-minute rest before slicing to prevent a catastrophic blowout of molten fat and cheese. Serve with warm marinara on the side.

CHEF'S NOTES

- **Baker's Percentages.**
  This canonical NY-style slice dough operates at 62% hydration, 2% salt, 1.5% oil, 1% malt, and 0.4% yeast. Weigh everything, including the water. The diastatic malt powder is crucial; it fuels the yeast during the long cold ferment and provides the sugars necessary to brown the crust at home-oven temperatures.

- **Moisture management is critical.**
  The single greatest point of failure for home cooks is wet filling. Dry your pickled peppers aggressively with paper towels and never, under any circumstances, put marinara sauce inside the stromboli—it will boil and rupture the dough.

- **The leftover dough.**
  The dough measurements provided yield exactly two 417g balls. Use the second ball to make a classic 14-inch NY slice pie, or double the filling ingredients above to roll two identical strombolis.

The Elmont Garlic Bread Matrix

Walk into any of the legendary slice joints on Hempstead Turnpike in Elmont, New York, and you'll find the unsung hero of the Italian-American playbook: a sturdy hero roll saturated in garlic butter and suffocated under strings of low-moisture mozzarella. This recipe treats that humble side dish with the unyielding rigor of professional bread making. By applying a structural crosshatch score to a twenty-four-hour cold-fermented filone, we maximize the surface area for the compound butter to penetrate deep into the high-hydration crumb.

You need a kitchen scale, a baking steel, and the patience to let the enzymes do their work. The payoff is an impossibly soft, garlic-soaked interior guarded by a shattering, deeply malted crust.

INGREDIENTS

75 g	high-protein bread flour
75 g	water *at room temperature*
1/8 tsp	instant dry yeast
300 g	high-protein bread flour
180 g	water *chilled to 40°F*
8 g	fine sea salt
1/2 tsp	instant dry yeast
5 g	diastatic malt powder
10 g	extra-virgin olive oil
113 g	unsalted European butter *softened to room temperature*
1 med	head garlic *roasted until jammy*
2 med	cloves garlic *microplaned*
30 g	fresh flat-leaf parsley *finely chopped*
1 tsp	dried oregano
1/2 tsp	red pepper flakes
1/2 tsp	fine sea salt
8 oz	low-moisture whole-milk mozzarella *shredded by hand from a block*
1 oz	Pecorino Romano *finely grated*

PREPARATION

- **Roast the garlic head ahead of time.**
  Slice the top off a whole head of garlic to expose the cloves, drizzle with olive oil, wrap tightly in aluminum foil, and bake at 400°F for 40 to 45 minutes until the cloves are caramelized and jammy.

INSTRUCTIONS

1. **Mix the poolish preferment twelve to eighteen hours before building the final dough.**
   Whisk the 75 g of flour, 75 g of room-temperature water, and 1/8 teaspoon of yeast in a small container. Cover loosely and leave at room temperature until aggressively bubbly and aromatic.

2. **Autolyse the dough for thirty minutes to relax the gluten before incorporating the remaining ingredients.**
   Combine the active poolish with the remaining 300 g of flour and 180 g of cold water in a large bowl. Mix by hand just until no dry flour remains, then cover and let rest.

3. **Knead in the salt, yeast, malt, and oil, then perform stretch-and-folds every thirty minutes for two hours.**
   Pinch the salt, yeast, and diastatic malt powder into the dough, then drizzle in the olive oil. Because of the high hydration, do not knead on the counter; instead, leave it in the bowl and periodically stretch the dough up and fold it over itself to build the gluten network.

4. **Cold-ferment the covered dough in the refrigerator for twenty-four to forty-eight hours to develop complex enzymatic flavors.**
   Transfer the dough to a lightly oiled, tightly lidded container. This long, cold retard allows lactic acid bacteria to multiply, resulting in the deep, savory profile characteristic of elite New York pizzerias.

5. **Shape the cold dough into an elongated filone, place it on parchment, and proof at room temperature until puffy.**
   Turn the dough onto a floured surface, gently fold the top and bottom thirds to the center like a letter, and roll into a tight cylinder. Pinch the seams closed, cover with a damp towel, and proof for one and a half to two hours.

1. **Bake the scored loaf on a preheated 475°F steel with steam for twenty-five to thirty minutes, then cool completely.**
   Preheat your oven and steel for an hour with a cast-iron skillet on the floor. Score the loaf longitudinally, slide it onto the steel, and immediately pour a half-cup of boiling water into the skillet. Once baked to a deep mahogany brown, cool on a wire rack for at least two hours.

2. **Mash the roasted garlic paste, softened butter, raw garlic, and seasonings together to form the compound butter.**
   Squeeze the sweet, caramelized paste from the roasted garlic head into a bowl. Add the European butter, raw microplaned garlic, parsley, oregano, red pepper flakes, and salt. Mash vigorously with a fork until uniform.

3. **Score the cooled loaf into a deep crosshatch grid using a serrated knife, being careful not to sever the bottom crust.**
   Make diagonal cuts one inch apart, slicing 85 percent of the way through the filone. Rotate the bread ninety degrees and make intersecting cuts to create the matrix.

4. **Slather the compound butter deep into the crevices, aggressively pack the matrix with the cheeses, and wrap tightly in foil.**
   Pry open the grid with a butter knife and force the garlic butter against the exposed walls. Pack the hand-shredded mozzarella and grated Pecorino down into the trenches.

5. **Bake the wrapped loaf at 400°F for fifteen minutes to melt the core, then expose the top and broil until the cheese is heavily blistered.**
   The foil prevents the butter and cheese from burning while the center heats through. Finish under the broiler for three to five minutes, watching closely, to achieve that signature slice-shop char.

CHEF'S NOTES

- **The final dough requires exact baker's percentages for proper hydration and fermentation.**
  In baking math, flour is 100%, water is 68%, salt is 2.1%, yeast is 0.4%, diastatic malt is 1.3%, and oil is 2.6%. You must use a kitchen scale; volume measurements will fail you.
- **Do not skip the diastatic malt powder.**
  Without the active amylase enzymes in diastatic malt, a dough subjected to a 24-hour cold ferment will exhaust its residual sugars and bake up pale. The malt guarantees an aggressively browned, slightly sweet crust.
- **Pre-shredded mozzarella is strictly forbidden.**
  Bagged mozzarella is coated in cellulose and potato starch to prevent clumping, which actively inhibits melting. You must shred a block of low-moisture whole-milk mozzarella by hand.

Chapter 5 — Drinks & Sweets

The standardized, unapologetic beverage and dessert programs of an authentic American pizzeria.

Ten p.m. beneath the buzzing lights, the booth is a wreckage of stained plates, the heavy salt and fat of the meal demanding a freezing, sharp counterweight. Think of a wax-paper cup of fountain Coke sweating onto a Formica table, the violent, fluorescent glow of a pleated cup of cherry Italian ice on a sweltering

afternoon, the sudden scrape of a plastic spoon. The drinks and desserts of the American slice shop were honed through decades of blue-collar trial and error to cut through the fat, cool the burn, and hit the pleasure centers.

The sweets follow the same strict logic, utilitarian delivery systems for sugar, ricotta, and candied citrus: a shatteringly crisp cannoli shell filled only when ordered, a dense wedge of spumoni, a grease-stained paper bag of powdered zeppole handed over a scratched glass counter. Replicating that exact slice-shop magic requires the same cold precision as a twenty-four-hour dough ferment, yet the end of the meal is pure, noisy release, the powdered sugar settling on the table, the ice melting into the syrup, the heavy salt of the pie finally washing away.

The Canonical 5:1 Fountain-Soda-in-Paper-Cup

A proper slice shop is an engineered miracle masquerading as a casual lunch. You don’t spend twenty-four hours cold-fermenting a dough only to wash down the final product with a tepid, factory-sealed can. Authentic fountain soda is a violently carbonated, live-mixed emulsion of gas, water, and syrup, specifically calibrated to cleanly cut through low-moisture mozzarella fat and high-acid tomato sauce. We are building this beverage from the ground up, utilizing commercial throw ratios, precise thermal controls, and hyper-carbonation to give you the exact, unapologetic bite of a New York corner joint.

INGREDIENTS

- **150 g** cubed ice
- **57 g** commercial bag-in-box cola syrup
  kept at room temperature
- **250 g** highly filtered water
  chilled to 35°F and hyper-carbonated

PREPARATION

- **Hyper-carbonate the filtered water.**
  To achieve true pizzeria bite (roughly 5 volumes of CO2), the water must be brutally cold. Chill it to a strict 35°F (1.6°C). If using a kegerator, set the regulator to 35 PSI for 7 days to reach equilibrium. For a SodaStream, chill the bottles overnight in the coldest part of your fridge and pulse to the absolute mechanical limit.

INSTRUCTIONS

1. **Build the ice matrix.**
   Place a 16-ounce wax-lined paper cup on a digital kitchen scale, tare it to zero, and add exactly 150 grams of cubed ice. Never use crushed ice, which melts entirely too fast and will destroy the critical Brix ratio.

2. **Dose the heavy syrup.**
   Tare the scale again and dispense 57 grams of the room-temperature commercial syrup directly over the ice.

3. **Emulsify the beverage.**
   Tare one final time. Rapidly pour 250 grams of your hyper-carbonated water over the syrup and ice. The violent collision of pressurized water hitting the dense syrup and jagged ice will naturally mix the drink. Do not stir, as agitation will off-gas the CO2 and leave you with a flat soda.

1. **Serve with the proper conduit.**
   Insert a 7.2mm wide-diameter straw, often sold commercially as a fast-food or smoothie straw. This exact gauge floods the palate, bypassing the lips to deliver the icy, carbonic bite directly to the taste buds. Drink immediately alongside a hot slice.

CHEF'S NOTES

- **The 4.75:1 throw ratio.**
  We use a precise 57g to 250g weight ratio to achieve the commercial 4.75:1 volumetric standard for iced drinks. As the ice melts, it dilutes the heavy, over-concentrated syrup into a perfect 5:1 equilibrium.
- **Vessel mechanics.**
  A wax-lined paper cup is canonically accurate. Glass and ceramic are scientifically superior for retaining carbonation, as paper offers microscopic nucleation sites that pull CO_2 out of solution, but the paper cup completes the true slice-shop tactile experience.

Bensonhurst Blistered Cannoli

cahn-NO-lee see-chee-lee-AH-nee

In the pantheon of slice-shop sides, the cannolo is undisputed king. But just as mass-market chains degraded the word 'pizza,' the cannolo has been victimized by pre-fab factory shells and grainy, hyper-sweetened spackle. We're going back to the source: Bensonhurst, Brooklyn, where Palermitan immigrants set the diaspora standard. A proper shell is defined by its bolle—shattering blisters born of an immutable triad: lard, dry Marsala, and white wine vinegar. Treat this unleavened dough with the same rigorous 24-hour cold ferment as a New York slice, and you'll get a mahogany crust that shatters cleanly against an ethereally smooth sheep's milk ricotta.

INGREDIENTS

300 g	00 flour
60 g	dry Marsala wine
30 g	lard *cold*
30 g	granulated sugar
30 g	beaten large egg *reserve the remainder for egg wash*
15 g	white wine vinegar
3 g	fine sea salt
3 g	unsweetened cocoa powder
1 1/2 g	instant espresso powder
1 g	ground cinnamon
2 qt	neutral frying oil
500 g	sheep's milk ricotta
150 g	superfine granulated sugar
40 g	mini semi-sweet chocolate chips
20 g	candied orange peel *finely diced*
1 tbsp	powdered sugar *for dusting*

PREPARATION

- **Drain the ricotta for a minimum of 12 hours.**
  Line a fine-mesh sieve with cheesecloth and set it over a bowl. Add the ricotta, cover with plastic wrap, and refrigerate for 12 to 24 hours. Skip this step, and your filling will be soup.

- **Mix the dough and initiate the cold ferment.**
  In a large bowl, rub the cold lard into the dry ingredients (flour, sugar, salt, cocoa, espresso powder, cinnamon) until it resembles damp sand. Whisk the Marsala, vinegar, and 30g beaten egg, then pour into the dry mixture. Knead aggressively on the counter for 5 to 8 minutes until a smooth, dense ball forms. Wrap tightly in plastic and refrigerate for 12 to 24 hours to fully relax the gluten.

INSTRUCTIONS

1. **Mill the drained ricotta into a silky cream.**
   Discard the extracted whey. Using a silicone spatula, press the firm, drained ricotta through a fine-mesh sieve into a clean bowl. This mechanical milling creates a perfectly silky texture without breaking the emulsion. Fold in the superfine sugar and chocolate chips, then transfer to a piping bag and refrigerate.

2. **Laminate and roll the dough paper-thin.**
   Cut the cold dough into four pieces. Flatten one and run it through a pasta machine on the widest setting. Fold it in half and roll it again, repeating twice to build microscopic layers. Roll progressively thinner until you reach 1/16th of an inch thick, which is usually setting 6 on a standard machine.

3. **Cut, wrap, and seal the shells.**
   Stamp out 4-inch circles and gently pull them into slight ovals. Lay a stainless steel cannolo tube diagonally across each. Wrap the inner flap over the metal, dab the outer flap with a tiny amount of leftover egg white, and press firmly to seal. Do not wrap too tightly or let egg wash touch the metal.

4. **Fry the shells at exactly 350°F.**
   Heat 3 inches of neutral oil in a heavy Dutch oven to 350°F. Lower 3 or 4 tubes into the oil at a time; they will violently erupt in blisters. Fry for 90 to 120 seconds, turning gently, until deep mahogany brown.

5. **Extract the tubes while warm.**
   Transfer to a paper towel-lined wire rack. Wait 45 to 60 seconds until the metal is touchable with a dry towel, then gently grip the shell and slide the tube out. Let the shells cool completely to room temperature.

6. **Fill the shells strictly a la minute.**
   Never fill a cannolo in advance. When ready to eat, pipe the chilled ricotta cream into one end until flush, then pipe into the other. Garnish with candied orange peel and a light dusting of powdered sugar. Eat immediately and listen for the shatter.

CHEF'S NOTES

- **The crucial triad of native ingredients.**
  Do not substitute butter for the lard, or water for the wine. Lard prevents tough gluten formation while maximizing flakiness; Marsala provides ethanol that vaporizes instantly in hot oil for violent blistering; and white wine vinegar relaxes the dough for extreme stretching.
- **Sourcing sheep's milk ricotta.**
  Authentic Palermitan cannoli rely on ricotta di pecora. If unavailable, source the highest-quality whole milk cow's ricotta you can find, but it must be drained regardless to prevent a watery filling.

San Gennaro High-Hydration Zeppole

A slice shop is judged by its cheese slice, but its soul is measured by its zeppole. For too long, home cooks have relied on baking powder shortcuts or choux-pastry fakes. This is the genuine article—born from the Neapolitan tradition of pasta cresciuta and perfected under the festival lights of Little Italy. Engineered with an aggressive 85 percent hydration and a 24-hour cold ferment, the dough transforms in hot oil into aria fritta, or fried air. The result is a shattered, mahogany exterior giving way to a cavernous hollow, ready to be buried in a blizzard of powdered sugar. Treat your fry thermometer with the same reverence as your baking steel.

INGREDIENTS

400 g	high protein bread flour or premium 00 pizza flour
340 g	water *cold straight from the tap to approx 60°F*
10 g	granulated sugar
8 g	fine sea salt
4 g	diastatic malt powder
1/2 tsp	instant dry yeast
2 qt	neutral frying oil
2 cup	confectioners sugar

INSTRUCTIONS

1. **Whisk the dry ingredients until perfectly homogenous**
   In the bowl of your stand mixer, combine the flour, sugar, fine sea salt, diastatic malt powder, and instant dry yeast.

2. **Hydrate and mechanically slap the dough**
   Pour in the cold water and fit the mixer with the paddle attachment—a dough hook will simply spin uselessly through an 85 percent hydration batter. Run on low for 1 minute until a shaggy paste forms, then increase to medium-high for 5 to 8 minutes. You will hear a distinct, rhythmic slapping sound as the wet dough is thrown against the sides of the bowl.

3. **Mix until the dough reaches the windowpane stage**
   You will know the gluten matrix is fully developed when the dough transitions from a sticky sludge into a glossy, highly elastic mass that gathers around the paddle and pulls cleanly away from the sides of the bowl.

4. **Transfer to an oiled container for a 24-hour cold ferment**
   Scrape the wet dough into a large container that allows for significant expansion. Cover tightly and immediately place in the refrigerator to rest undisturbed for exactly 24 hours. This cold retard allows protease enzymes to relax the gluten while amylase generates the sugars needed for an aggressive Maillard browning in the fryer.

1. **Temper the dough and establish the oil architecture**
   Remove the dough from the refrigerator 1 hour before you intend to fry. It will be heavily aerated and visibly jiggly; do not punch it down. Place a heavy cast-iron Dutch oven on the stove with at least 3 inches of neutral oil. Attach a digital fry thermometer and heat to exactly 350°F.

2. **Execute the oil-spoon drop technique**
   Dip two spoons directly into the hot oil to create a non-stick coating. Scoop a golf-ball-sized dollop of the highly aerated dough with one spoon, being careful not to deflate it, and use the second spoon to slide it off directly into the pot.

3. **Fry until the exterior is a deep mahogany brown**
   Fry 4 to 5 zeppole at a time to avoid crashing the oil temperature. The high hydration will cause the dough to violently expand and puff up instantly. Fry for 1 1/2 to 2 minutes per side, keeping them moving with a spider skimmer. Remove to a wire rack and allow the oil to recover to exactly 350°F before dropping the next batch.

4. **Assemble the San Gennaro bag shake**
   Wait about 2 minutes after frying so the sugar does not instantly melt into a wet syrup. Drop the warm zeppole into a clean brown paper lunch bag, dump in a generous half-cup of powdered sugar, fold the top securely, and shake vigorously for 5 to 10 seconds. Eat them immediately.

CHEF'S NOTES

- **Respect the bakers percentages**
  This canonical dough relies on strict ratios: 100 percent bread flour, 85 percent water, 2.5 percent sugar, 2.0 percent fine sea salt, 1.0 percent diastatic malt powder, and 0.4 percent instant dry yeast.

- **Do not omit the diastatic malt powder**
  In a high-heat, short-duration cooking environment like deep frying at 350°F, the malt provides additional active enzymes that convert starches to sugars, ensuring an aggressive, even browning and a crispier exterior crust that resists oil penetration.

The 86th Street Tri-Color Spumoni

In the deeply entrenched Italian-American enclaves of South Brooklyn, the only proper conclusion to a heavy, sweet-sauced Sicilian square is a paper cup of spumoni. But to achieve that iconic slice-shop trinity of pistachio, chocolate, and spiced cremolata at home, you can't just scoop store-bought ice cream into a bowl. This recipe reconstructs the legendary 86th Street flavor profile using the rigorous architecture of a classical Neapolitan spumone—a hot-method sponge cake core suspended in dense, 24-hour cold-matured gelato. It demands patience and precision, but the result is a flawless slice of diaspora history.

INGREDIENTS

200 g	whole eggs *out of shell*
120 g	caster sugar
120 g	type 00 pastry flour
4 g	fine sea salt
50 g	water
230 g	granulated sugar
30 g	Amaretto, Strega, or Marsala liqueur
600 g	whole milk
400 g	heavy cream
40 g	skim milk powder
100 g	egg yolks
40 g	pure pistachio paste
3/4 tsp	almond extract
30 g	roasted pistachios *chopped*
25 g	Dutch-processed cocoa powder
40 g	dark chocolate *melted*
1 tsp	vanilla bean paste
1/2 tsp	ground cinnamon

PREPARATION

- **Line the terrine pan with plastic wrap.**
  A standard 9x5-inch loaf pan serves as a perfect vessel. Leave plenty of overhang on the sides so you can easily pull the completely frozen spumoni out for slicing.
- **Set up a proper bain-marie.**
  Ensure the water in your saucepan is gently simmering, and that the bottom of the mixing bowl suspended above it never actually touches the water. Scrambled eggs cannot hold air.

INSTRUCTIONS

1. **Whisk the whole eggs, caster sugar, and 1 g of the salt over a gently simmering water bath to exactly 113°F (45°C).**
   This precise temperature denatures the egg proteins and dissolves the sucrose, unlocking the ability to trap massive volumes of air without the crutch of chemical leaveners.

1. **Whip the warmed egg mixture in a stand mixer on high speed for 15 to 20 minutes.**
   Look for the ribbon stage: when you lift the whisk, the falling batter should rest on the surface for a full 5 seconds before sinking back in.

2. **Carefully fold in the type 00 flour in three additions, then bake at 350°F (180°C) for 12 to 15 minutes.**
   Pour the batter into a parchment-lined quarter-sheet pan. Do not tap the pan on the counter, or you will destroy the delicate air bubbles you just spent 20 minutes building. Cool completely, then cut out an 8x4-inch rectangle.

3. **Boil the water and 50 g of the granulated sugar to dissolve, cool slightly, stir in the liqueur, and soak the sponge.**
   Brush this syrup heavily over the cut rectangle of Pan di Spagna. The resilient crumb will hold the liquid without turning to mush.

4. **Whisk the milk, heavy cream, 90 g of the granulated sugar, and skim milk powder to 160°F (71°C) in a heavy saucepan.**

5. **Temper the hot dairy into the egg yolks beaten with the remaining 90 g of granulated sugar and 3 g of salt.**
   Slowly ladle half the hot dairy into the yolks while whisking constantly to avoid scrambling them, then return the entire mixture to the saucepan.

6. **Cook the custard over low heat until it reaches 170°F (77°C) and coats the back of a spoon.**

7. **Divide the hot base into three equal portions of approximately 440 g each.**
   Whisk the cocoa powder and melted chocolate into the first. Whisk the pistachio paste, 1/4 tsp of almond extract, and chopped pistachios into the second. Whisk the vanilla bean paste, 1/2 tsp of almond extract, and cinnamon into the third to create the cremolata.

8. **Chill all three bases in an ice bath, then cover and refrigerate for a mandatory 24 hours.**
   This cold rest matures the flavors and fully hydrates the milk proteins, setting you up for the dense, low-overrun texture of a true parlor scoop.

1. **Churn the pistachio base, spread it evenly into the bottom of the prepared loaf pan, and freeze for 45 minutes.**

2. **Churn the cremolata base, spread half over the firmed pistachio layer, and embed the soaked sponge cake into the center.**
   Press the cake down gently so it sits flush, then cover it completely with the remaining freshly churned cremolata and freeze for another 45 minutes.

3. **Churn the chocolate base, spread it over the top of the terrine to seal, and freeze for at least 12 hours.**
   Wrap the plastic overhang tightly. This deep freeze is non-negotiable; it allows the varying sugar densities of the layers to equilibrate. To serve, invert the pan, peel away the plastic, and slice into thick slabs with a hot knife.

CHEF'S NOTES

- **The 24-hour cold maturation is non-negotiable.**
  Just as a New York pizza dough requires a long, cold ferment to break down starches, an exceptional gelato base needs a day in the fridge for the milk proteins to fully hydrate. This restricts the overrun (the air whipped into the ice cream), giving you the dense, chewy texture of an authentic Brooklyn slice shop scoop.

- **Use a weak flour for the Pan di Spagna.**
  Type 00 pastry flour with a low W index (140-160) is strictly required to prevent elastic gluten development. You are building a tender sponge meant to absorb liqueur, not a chewy pizza crust.

The Refractometer Lemon Water Ice

Before it was a neon-hued puddle melting through a paper cup on a humid Philadelphia sidewalk, the frozen lemon matrix was a Sicilian masterpiece. But to survive the brutal mechanics of a slice-shop display case, the old-world granita needed a chemical upgrade. This isn't a rustic slush you scrape with a fork—it's a precision-engineered, hydrocolloid-stabilized marvel that demands a digital scale, a refractometer, and the patience of a twenty-four-hour cold hold. Do the math, respect the chemistry, and it will transport you straight to your favorite neighborhood joint.

INGREDIENTS

170 g	granulated sucrose
1 g	kosher salt
1/2 g	locust bean gum
1/4 g	guar gum
500 g	purified water
40 g	light corn syrup
200 g	organic lemon juice *freshly squeezed and strained*
2 med	organic lemons *zested, avoiding the bitter white pith*
12 g	vodka

PREPARATION

- **Pre-chill the storage container.**
  Ensure your final airtight storage vessel has been sitting in the freezer so the freshly churned water ice does not immediately melt upon contact with warm plastic or glass.

INSTRUCTIONS

1. **Whisk the dry ingredients violently.**
   In a small bowl, vigorously combine the granulated sugar, kosher salt, locust bean gum, and guar gum to ensure the hydrocolloids disperse evenly and do not clump upon hitting the liquid.

2. **Combine the water and corn syrup over medium heat.**
   In a saucepan, warm the purified water and light corn syrup, then vigorously whisk in your dry sugar and stabilizer blend.

3. **Heat the mixture to exactly 185°F to activate the gums.**
   Monitor the liquid with a digital thermometer and stir continuously until it reaches the thermal threshold required to fully hydrate the locust bean gum, then immediately remove from heat to cool at room temperature for fifteen minutes.

4. **Whisk the citrus and alcohol into the cooled syrup.**
   Once the base has cooled to lukewarm, whisk in the fresh lemon juice, lemon zest, and vodka to preserve the delicate, heat-sensitive volatile oils of the citrus.

1. **Test the sugar concentration with a refractometer.**
   Extract a few drops of the liquid, place them on the prism of an ATC refractometer, and verify the Brix reading sits strictly between 28 and 30 °Bx, adjusting with simple syrup or purified water if necessary.

2. **Cold-hold the base in the refrigerator for up to twenty-four hours.**
   Transfer the properly balanced liquid to a sealed container and refrigerate for a minimum of four hours, but preferably overnight, mimicking a long dough ferment to allow the hydrocolloid network to swell and bind the free water.

3. **Churn the base until it resembles melting snow.**
   Pour the chilled base into a compression ice cream machine and churn for fifteen to thirty minutes, looking for an icy slush with zero overrun or incorporated air.

4. **Harden the ice in the freezer and temper briefly before scraping.**
   Transfer the slush to an airtight container with plastic wrap pressed to the surface, freeze for at least two hours, and allow it to temper at room temperature for five to ten minutes before scraping it into a pleated paper cup.

CHEF'S NOTES

- **Sourcing untreated lemons is a non-negotiable step.**
  Because you are extracting volatile oils directly from the peel, standard supermarket citrus coated in agricultural wax will ruin the base. Seek out unwaxed, organic lemons.

- **Commercial stabilizers can be swapped in a pinch.**
  If locust bean and guar gums are entirely out of reach, substitute them with 1/2 gram of cold-hydrating xanthan gum, though the resulting texture will lack the luxurious, scoopable slice-shop body.

- **Using a digital scale is mandatory.**
  Do not attempt to use volumetric cups and spoons for this recipe; hydrocolloids require absolute metric precision, and estimating fractions of a gram will destroy the structural matrix of the ice.

Tiramisu

tee-rah-mee-SOO

The standard American slice-shop tiramisu is a tragedy of mass-produced frozen sponges and chemical stabilizers, engineered to survive the purgatory of a revolving deli case. But the genuine article from Treviso is a fleeting, ephemeral thing—an emulsion of rich fat and aerated yolk. Here, we marry the obsessive, mathematical rigor of a twenty-four hour pizza dough fermentation with Italian pastry tradition. By cold-fermenting a sourdough savoiardi and blasting it on a baking steel, then layering it with a temperature-controlled zabaglione, we achieve a precision-engineered dessert worthy of your aluminum half-hotel pan. It is a pick-me-up that demands absolute respect.

INGREDIENTS

110 g	unbleached all purpose flour
20 g	cornstarch
58 g	egg yolks *separated from large eggs*
117 g	egg whites *separated from large eggs*
98 g	granulated sugar *divided into two equal portions*
26 g	active sourdough starter *at 100 percent hydration*
1/8 tsp	instant dry yeast
1/4 tsp	diastatic malt powder
1/2 tsp	fine sea salt
1 tsp	vanilla extract
1/4 cup	powdered sugar *for dusting*
500 g	mascarpone cheese *chilled*
100 g	egg yolks *separated from fresh large eggs*
150 g	granulated sugar
1/4 tsp	sea salt
1 tbsp	dark rum
400 g	espresso *freshly brewed and cooled to room temperature*
1/4 cup	Dutch processed bitter cocoa powder *for dusting*

PREPARATION

- **Allocate forty-eight hours for the complete architectural process.**
  This precise technical execution requires a twenty-four hour cold ferment for the yeast and malt to alter the savoiardi matrix, followed by an additional twenty-four hour cold cure for the assembled dessert.

INSTRUCTIONS

1. **Combine the batter base and refrigerate for a twenty-four hour cold ferment.**
   Whisk 58g egg yolks, 49g granulated sugar, sourdough starter, yeast, 1/2 tsp sea salt, and vanilla in a sanitized bowl until lightened, then cover hermetically and refrigerate.

2. **Preheat the baking steel to 375°F.**
   Position a baking steel on the middle-lower rack and preheat the oven for at least 45 minutes to saturate the steel with thermal energy.

1. **Whip the egg whites and remaining sugar into a stiff meringue.**
   In a stand mixer on medium speed, whip the whites to soft peaks, gradually stream in the remaining 49g of sugar, and whip on high until stiff and glossy.

2. **Fold the fermented base and sifted dry ingredients into the meringue.**
   Sift the flour, cornstarch, and diastatic malt together, gently fold the fermented yolk mixture into the meringue, then fold in the dry ingredients in three stages to preserve trapped gas.

3. **Pipe the batter into savoiardi and bake directly on the preheated steel.**
   Pipe four-inch lengths onto a parchment-lined sheet pan, dust heavily with powdered sugar, and bake for 12 to 14 minutes until deeply golden brown. Cool completely and leave uncovered overnight to stale.

4. **Whisk the remaining egg yolks, sugar, salt, and rum over a simmering water bath.**
   Bring a saucier with two inches of water to a gentle simmer and set a heat-proof bowl over the water without letting the bottom touch the water.

5. **Heat the yolk mixture to exactly 160°F to pasteurize and stabilize the proteins.**
   Whisk constantly over the heat until the mixture reaches the target temperature on a digital thermometer, partially coagulating the proteins for maximum structural stability.

6. **Whip the heated zabaglione until cooled and fold in the mascarpone.**
   Transfer to a stand mixer and whip on high for up to 10 minutes until it quadruples in volume, then reduce speed to low and gently fold in the chilled mascarpone until just combined.

7. **Soak the staled savoiardi in espresso and assemble the foundational layer.**
   Submerge the biscuits for exactly two seconds per side in the cooled espresso, arranging them in a tight, uniform layer across the bottom of an aluminum half-hotel pan.

1. **Layer the mascarpone cream and an additional perpendicular layer of soaked savoiardi.**
   Spread exactly half the cream evenly over the foundation, arrange a second layer of soaked biscuits perpendicularly to the first, and top with the remaining cream.

2. **Smooth the surface and refrigerate for a twenty-four hour cold cure.**
   Use an offset spatula to create a flawlessly smooth, mirror-flat surface, then cover hermetically. This resting phase allows the moisture to reach osmotic equilibrium with the starchy crumb.

3. **Dust generously with cocoa powder immediately before serving.**
   Use a fine-mesh sieve to apply the cocoa powder until no white cream is visible, then serve directly from the pan with a square metal spatula for clean, right-angled slices.

CHEF'S NOTES

- **Manage the structural integrity of your mascarpone.**
  If authentic 70-percent fat Italian mascarpone is unavailable, simulate the lipid profile by blending 8 ounces of full-fat American cream cheese with 1/4 cup heavy cream and 2 tablespoons softened unsalted butter.

- **Extract an aggressively concentrated espresso.**
  If you lack a 9-bar espresso machine or a Moka pot, mix high-quality instant espresso powder with hot water at a 300-percent standard concentration to achieve the requisite bitterness that cuts through the fat.

The Armored Cherry Tartufo

In Calabria, the tartufo is a delicate, cocoa-dusted sphere with a molten heart. But cross the Atlantic and step into a neon-lit Brooklyn slice shop, and that fragile dessert evolves a suit of armor to survive commercial deep freezers. This is the canonical Italian-American tartufo: low-overrun gelato encasing a dark, syrupy Amarena cherry, all hermetically sealed in a brittle, fast-crystallizing chocolate shell. To get that requisite, spoon-shattering snap at home requires the exact same thermal discipline you apply to a cold-fermented pizza dough—measure by weight, manage your temperatures, and respect the deep freeze.

INGREDIENTS

250 g	premium vanilla gelato
250 g	premium chocolate gelato
4 small	Amarena cherries *drained from syrup*
20 g	Amarena cherry syrup
15 g	amaretti cookies *pulverized into a fine crumb*
200 g	dark chocolate *60-70% cacao, finely chopped*
50 g	refined coconut oil
1/8 tsp	kosher salt

PREPARATION

- **Pre-chill a heavy metal surface in your freezer.**
  Place a baking steel or heavy aluminum pan in the deepest, rear-most section of your freezer a day ahead. Resting the silicone molds directly on this metal conducts heat away from the gelato rapidly, mimicking the blast-chillers used in professional Italian gelaterias.

INSTRUCTIONS

1. **Condition the gelato in the refrigerator for 15 to 20 minutes until pliable but not fully melted.**
   If the gelato liquefies, the whey and water will separate, resulting in icy shards when it refreezes.

2. **Scale exactly 60 grams of vanilla gelato into four 2.5-inch silicone hemisphere molds, and 60 grams of chocolate gelato into another four.**
   Press a deep cavity into the exact center of each mound using a melon baller dipped in warm water, then flash-freeze the mold for at least 4 hours.

3. **Drop 5 grams of cherry syrup and a pinch of crushed amaretti cookies into the core of each chocolate hemisphere.**
   The cookie crumb acts as a hygroscopic barrier, absorbing the dense syrup so it doesn't melt the surrounding ice cream.

4. **Place one Amarena cherry into the cavity of each vanilla hemisphere.**

1. **Working with extreme urgency, invert a vanilla hemisphere onto a chocolate hemisphere and press firmly to weld them together.**
   The ambient heat from your hands will briefly melt the equator to seal them; return the spheres to the freezer for a full 24-hour deep freeze at 0°F to build maximum thermal mass.

2. **Melt the dark chocolate, coconut oil, and salt in a microwave-safe bowl in 30-second intervals until fluid, not exceeding 113°F.**
   Agitate thoroughly with a silicone spatula after each interval to preserve the emulsion, then allow the chocolate armor to cool to exactly 86°F to 95°F.

3. **Unmold the deeply frozen spheres onto a wire rack set over parchment paper and continuously pour the warm chocolate matrix directly over the top apex of each.**
   The massive thermal deficit of the gelato will immediately pull the heat from the chocolate, forcing the fats to crystallize into a matte, hard shell within ten seconds.

4. **Transfer the armored spheres to an airtight container and return them to the freezer for a final two-hour cure.**
   To replicate the perfect pizzeria texture, move the tartufo to the refrigerator for exactly 15 minutes before serving so the diner's spoon can shatter the shell with an audible crack.

CHEF'S NOTES

- **Low-overrun gelato is non-negotiable for structural integrity.**
  Standard commercial American ice cream is whipped with up to 50% air and will completely collapse under the weight and heat of the liquid chocolate. You need the density of premium gelato to provide the requisite thermal heat sink.