



UNIVERSAL · ARTISAN / TARTINE LINEAGE · STAPLE · BREAD

# Master Sourdough Loaf

Your active mother, a day of patient folding, a night in the fridge, twenty minutes in a screaming-hot Dutch oven. 75% hydration, open crumb, deep mahogany crust. The bread that makes every meal better — pa amb tomàquet, bocadillos, avocado toast, the sandwich for the rabo leftovers.

Protein None

Serves 1 large loaf (~800 g) · 8-10 servings · keeps 4-5 days

Difficulty Intermediate

Active 90 min across 2 days

Total ~22 h (levain 6-8 h + bulk 3-4 h + cold retard 8-14 h + bake 45 min + cool 1 h)

## THE STORY

### The Living Jar Earns Its Keep

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Pablo has had an active sourdough mother for as long as the workspace has been tracking him. It gets fed. It gets named in meetings. It gets mentioned when the menu calls for bread. But it has never had a recipe of its own — until now.

A sourdough loaf is the slowest fast food you will ever make. Twenty-two hours, start to finish. Of those, maybe 90 minutes are active — the rest is the microbes doing their work while you live your life. The schedule maps naturally onto a Saturday morning to Sunday brunch: feed the levain Saturday breakfast, mix the dough Saturday evening, shape and cold-retard before bed, bake Sunday morning. The bread comes out of the oven while the coffee is brewing.

The craft is in the folds and the fridge. Four sets of stretch-and-fold during bulk fermentation build gluten without kneading — wet hands, grab an edge, stretch up, fold over, rotate, repeat. The overnight cold retard is the single biggest flavor lever. Acetic acid develops at cold

temperatures; lactic acid at warm. The long cold phase after a warm bulk gives you both — complex, tangy, alive. Skip the cold retard and you get a bread. Include it and you get sourdough.

The finish is a screaming-hot Dutch oven, twenty minutes covered (the trapped steam is what makes oven spring possible), twenty minutes uncovered (the Maillard is where the crust-flavor lives). Dark crust. Open crumb. Slightly chewy. Tangy. Alive.

#### AT A GLANCE

## Specs

<b>YIELD</b> 1 loaf, ~800 g	<b>HYDRATION</b> 75% (Tartine target)	<b>BAKE TEMP</b> 250 °C → 230 °C	<b>DIFFICULTY</b> Intermediate ●●●○○
<b>ACTIVE TIME</b> 90 min across 2 days	<b>TOTAL TIME</b> 22 h (mostly passive)	<b>MAKE-AHEAD</b> Yes — schedule mapped to Sat–Sun	<b>FLOUR MIX</b> 90% bread + 10% whole wheat
<b>STORAGE</b> 4–5 days room temp, 3 mo frozen (sliced)	<b>USES</b> Everything		

#### UMAMI ADAPTATION

## What Changed & Why

The classical Tartine Country Loaf is the reference. The adaptation follows the Tartine method exactly for the bulk-ferment + shape + retard + bake steps, but adds Pablo-specific infrastructure: a ● freezer bank for sliced loaves (always have good bread), a cross-reference to Flour & Weirdoughs (the Key Biscayne bakery, for days the home bake isn't happening), and integration with the already-shipped recipe graph — pa amb tomàquet, bocadillos, the avocado toast bar, grilled bread for romesco.

CHANGE	ORIGINAL	UMAMI VERSION	WHY
<b>TECH</b>	Knead 10 minutes by hand	Stretch-and-fold every 30 min during bulk (4 sets)	Wet hands, gentle handling — preserves dough structure and open crumb
<b>ADD</b>	—	Autolyse 30–60 min before adding levain + salt	Flour hydrates fully, enzymes begin pre-digesting starch — less kneading needed, better gluten
<b>TECH</b>	Same-day bake	Overnight cold retard (8–14 h) after shaping	Cold-phase acetic acid + warm-phase lactic acid = complex flavor; skip this and it's just bread
<b>ELEV</b>	Bread flour only	90% bread flour + 10% whole wheat	Whole wheat adds fermentation-friendly enzymes + flavor complexity; 10% is threshold before texture gets dense
<b>ADD</b>	—	Freezer bank: slice half, freeze, grab-and-go toast (🔴)	One bake = 5 days of sandwiches + 3 months of emergency toast

## What You Need

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### Everyday

#### Levain (Day 1 Morning)

- 1 tbsp (~15 g) mature sourdough starter from Pablo's jar — fed within the last 24 h
- 100 g bread flour
- 100 g whole wheat flour (King Arthur or Bob's Red Mill)
- 200 g warm water (28 °C / 82 °F — check by touch: should feel body-temp-ish, not hot)

#### Dough (Day 1 Evening)

- 450 g bread flour
- 50 g whole wheat flour
- 375 g water (room temp filtered — chlorinated tap water weakens the ferment)
- 100 g active levain (from morning)
- 10 g fine sea salt (not iodized — iodine inhibits yeast)

#### Substitution Notes

- *No whole wheat?* Use 500 g all bread flour. The loaf will be slightly less complex but still excellent.
- *No banneton?* Bowl lined with a clean kitchen towel, dusted heavily with rice flour (rice flour doesn't absorb moisture, so dough doesn't stick). Do NOT use all-purpose flour to dust — it gets wet and glues the dough.
- *Starter not active?* Feed twice daily for 2–3 days before baking. A sluggish starter produces a dense loaf. If the starter doesn't double in 6 hours after feeding at room temp, it needs rehab before this recipe.

## No Limits

### Levain — Flour Upgrades

- 1 tbsp mature starter (Pablo's jar ✓)
- 100 g high-protein bread flour (King Arthur Sir Galahad, 12%+ protein)
- 100 g stone-ground whole wheat (fresh-milled if possible — Flour & Weirdoughs mills their own; ask if they sell flour separately)
- 200 g filtered water, 28 °C

### Dough — High-Extraction Tier

- 450 g high-protein bread flour (King Arthur Sir Galahad or Central Milling Type 65)
- 50 g high-extraction whole wheat or Type 80 (nuttier, more enzyme activity)
- 375 g filtered or reverse-osmosis water (Miami tap chlorine weakens the ferment)
- 100 g active levain at peak
- 10 g Maldon fine sea salt or Korean cheonilyeom (trace minerals support fermentation)

### Freezer Bank Infrastructure (●)

- Bread knife or electric slicer for clean 1.5 cm slices after cooling
- Freezer bags (quart size) or vacuum sealer (Pablo has ✓)
- Label: date + "sourdough v75" (for comparison across batches as you dial in)
- Target rotation: half the loaf eaten fresh (days 1–4), half sliced + frozen (months 1–3)

### Equipment — Full Tartine Setup

- Dutch oven (Lodge enameled or Le Creuset, 4–5 qt), essential — traps steam for oven spring
- Banneton / proofing basket (9" round, rattan) — for shape support during retard
- Bench scraper (metal) — for shaping and dough handling
- Lame (scoring razor) or single-edge razor blade — NOT a kitchen knife (too dull for clean score)
- Kitchen scale (0.1 g precision for starter work) — Pablo's TM6 scale ✓
- Digital probe thermometer — to verify dough + water temps
- Parchment paper (for Dutch oven transfer)

## EQUIPMENT

### Your Kit

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- Active sourdough mother (Pablo ✓)

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- Kitchen scale — gram precision mandatory (Pablo has TM6 scale ✓)

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- Large mixing bowl (at least 3 L capacity — dough will double)

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- Bench scraper

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- Banneton OR kitchen-towel-lined bowl dusted with rice flour

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- Dutch oven (4–5 qt) — essential for steam trap

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- Lame or razor blade for scoring

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- Parchment paper

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- Wire cooling rack

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- Serrated bread knife for slicing (after full cool)

## MISE EN PLACE

### Before You Start

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- Starter fed within last 24 h, passes float test (spoonful floats in water)

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  - All flours weighed into separate bowls

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  - Water temperature verified by thermometer — 28 °C warm or room-temp room

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  - Salt weighed precisely (10 g, no more — salt slows ferment)

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  - Banneton or bowl lined and rice-floured ready

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  - Work surface clean, unfloured for final shape

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  - Dutch oven washed and dry
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- Schedule written on a note: levain start time, dough mix time, bulk end, shape time, fridge in, bake time

## MAKE-AHEAD

# Timeline

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- **Day 1, 7:00 – Feed levain**  
Mix 1 tbsp starter + 100 g bread flour + 100 g whole wheat + 200 g warm water. Cover loosely. Leave on counter. 6–8 h until peak.
- **Day 1, 14:00 – Check levain float**  
Drop a spoonful in water. If it floats, ready. Bubbly, domed, slightly sour smell.
- **Day 1, 14:00 – Autolyse**  
Mix 450 g bread flour + 50 g whole wheat + 350 g water (save 25 g). Rough shaggy mass, no dry spots. Rest 30–60 min.
- **Day 1, 15:00 – Add levain**  
Squeeze 100 g levain into dough. Pinch and fold until incorporated. Rest 30 min.
- **Day 1, 15:30 – Add salt + bulk start**  
Add 10 g salt + remaining 25 g water. Squeeze to dissolve. Bulk ferment starts now.
- **Day 1, 16:00 – S&F set 1**  
First stretch-and-fold. Wet hands, grab edge, stretch up, fold over, rotate 90°, repeat x4.
- **Day 1, 16:30 – S&F set 2**  
Second set. Dough should feel stronger, holding shape better.
- **Day 1, 17:00 – S&F set 3**  
Third set. Surface getting smoother.
- **Day 1, 17:30 – S&F set 4 (final)**  
Fourth set. Dough should be smooth, domed, and jiggle when shaken.
- **Day 1, 19:00 – Bulk done**  
Total bulk 3.5 hours. Dough volume ~50% increase. Bubbles visible below surface. Smooth domed top.

● **Day 1, 19:15 – Pre-shape**

Gentle turn onto clean unfloured surface. Bench scraper to loose round. Rest 25 min uncovered.

● **Day 1, 19:40 – Final shape**

Flour top. Flip. Pull edges in: bottom up, left over, right over, roll toward self for taut surface. Seam-side UP in banneton.

● **Day 1, 20:00 – Into fridge**

Cover banneton with plastic bag. Refrigerate 8–14 h. Sleep.

● **Day 2, 7:00 – Preheat**

Dutch oven + lid, middle rack, oven to 250 °C. 45–60 min preheat — thermal mass must fully heat.

● **Day 2, 7:45 – Score + load**

Invert banneton onto parchment. Score 1 cm deep at 30° angle. Lift parchment into hot Dutch oven. Lid on.

● **Day 2, 7:45 – Bake covered**

250 °C, 20 minutes. Do not lift lid.

● **Day 2, 8:05 – Uncover + reduce**

Remove lid. Drop oven to 230 °C. Bake uncovered 20–25 min until DEEPLY brown — darker than you think.

● **Day 2, 8:30 – Cool**

To wire rack. Do not slice for at least 1 hour. Cutting too early = gummy.

● **Day 2, 9:30 – Eat**

Slice with serrated knife. Butter, or EVOO + Maldon, or top with ripe tomato and garlic for pa amb tomàquet.

## METHOD

# The Cook

### 1 Day 1 Morning — Feed the Levain

1. Check your starter. It should have been fed within the last 24 hours and show signs of activity (bubbles, risen, slightly domed). If it has been more than 48 hours since the last feed, feed it the day before and wait for full activity before starting this recipe.
2. In a clean 1-quart jar or bowl: combine 1 tbsp (~15 g) mature starter with 100 g bread flour + 100 g whole wheat flour + 200 g water at 28 °C. Mix with a spoon until no dry flour remains.
3. Cover loosely (plastic wrap with a hole poked in, or a coffee filter with a rubber band). Do not seal airtight — CO<sub>2</sub> needs to escape.
4. Mark the side of the jar with a rubber band at the current dough level. This lets you track the rise.
5. Leave at room temperature (ideally 24–26 °C) for 6–8 hours.
6. When ready: levain should have roughly doubled, be visibly bubbly throughout, smell pleasantly yeasty-sour, and pass the float test — drop a small spoonful into a glass of water. If it floats, it's ready. If it sinks, wait another hour and test again.

#### WHY THIS WORKS

The levain is an expanded, fresh population of yeast and Lactobacillus bacteria taken from your mother starter. You are not using the mother directly for two reasons: (1) you want a specific fresh peak of activity for the dough, and (2) you do not want to deplete the mother. The float test works because a bubbly dough has trapped CO<sub>2</sub> and becomes less dense than water. A dough with no gas production sinks. 6–8 hours at 24–26 °C is the window where most sourdough cultures hit peak rise; slightly longer at cooler temps, slightly shorter at warmer. Reference: Bread and Baking, chapter 2, sourdough maintenance.

## 2 Day 1 Evening — Autolyse + Mix

1. In a large mixing bowl, combine 450 g bread flour + 50 g whole wheat flour + 350 g water (save the remaining 25 g for later). Mix by hand until no dry flour remains — should look like a shaggy wet mass, not a smooth dough. 2–3 minutes of rough mixing.
2. Cover the bowl with a plate or damp towel. Rest 30–60 minutes. This is the autolyse. During this rest, the flour fully hydrates, enzymes begin breaking down starches into simpler sugars, and gluten structures begin forming passively — reducing the kneading required.
3. After autolyse: dough should feel softer, smoother. Add 100 g of active levain to the bowl. Using wet fingers, pinch and fold the levain into the dough until fully incorporated — 2 to 3 minutes. No visible streaks.
4. Cover. Rest 30 minutes — lets the levain start its work before salt.
5. Add 10 g salt + remaining 25 g water. Squeeze and fold until salt is fully dissolved into the dough. The water makes salt distribution easier. 1 to 2 minutes.

### WHY THIS WORKS

Autolyse, discovered by French baker Raymond Calvel, is the single highest-leverage bread technique. During the rest, water penetrates flour particles fully, activating amylase enzymes that convert starch into maltose — yeast food. It also lets gluten proteins begin hydrating and aligning passively, which means less kneading is needed to develop structure. The salt is added AFTER the autolyse and AFTER the levain because salt slows both enzyme activity and yeast reproduction — adding it too early reduces the autolyse's benefit. Reference: Bread and Baking chapter 2 (Autolyse), chapter 1 (Gluten Development).

## 3

**Day 1 Evening — Bulk Fermentation with Stretch and Folds**

1. Bulk fermentation starts NOW, the moment salt is incorporated. Total target: 3–4 hours at 24–26 °C room temp. In Miami with AC at 22–24 °C, expect 3.5–4 hours.
2. Stretch and fold set 1 (at T+30 min from salt). Wet your hand with water. Reach down one side of the bowl, grab a corner of dough, stretch it UP, fold it OVER the center. Rotate the bowl 90 degrees. Repeat. 4 total stretches per set.
3. S&F set 2 at T+60 min. Dough should feel slightly stronger, holding its shape better after each fold.
4. S&F set 3 at T+90 min. Surface getting smoother, dough more elastic.
5. S&F set 4 at T+120 min (final set). Dough should be smooth, domed, jiggle like Jell-O when you shake the bowl. If it still feels slack, add one more S&F at T+150.
6. After final S&F: let dough rest undisturbed for the remaining 60–90 minutes of bulk. Do not touch it again until pre-shape.
7. Bulk is DONE when: (1) volume has increased roughly 50% from start, (2) surface is smooth and slightly domed, (3) bubbles are visible below the surface, (4) the dough feels airy and jiggly rather than dense. If in doubt at 3.5 hours, check again at 4 hours. Over-fermented dough (past peak) goes flat and sour — under-fermented produces a dense loaf with tight crumb.

**WHY THIS WORKS**

Stretch-and-fold replaces kneading. Each fold aligns gluten strands without tearing them, building strength while maintaining the air pockets that produce open crumb. Wet hands prevent sticking. The 30-minute intervals give the dough time to relax between stretches — trying to S&F a tight dough tears it. The 50 percent volume increase target is the single best bulk doneness signal; time is secondary. Temperature matters hugely: at 28 °C bulk takes 2.5 hours; at 22 °C it takes 5 hours. Miami summer AC kitchens around 23–24 °C hit the 3.5 hour mark consistently. Reference: Bread and Baking chapter 2, Bulk Fermentation.

## 4

**Day 1 Late — Pre-Shape, Shape, Cold Retard**

1. Turn dough out onto a clean, unfloured work surface. Using a bench scraper, tuck the edges under to form a loose round, rotating as you go. The surface tension that develops is what gives oven spring. Do not manipulate hard — gentle is correct.
2. Rest the pre-shaped round uncovered 20–25 minutes on the counter. This is the bench rest — dough relaxes and becomes easier to final-shape.
3. Lightly flour the top of the dough. Using a bench scraper, flip the dough onto its floured top. The sticky bottom now faces up.
4. Final shape: pull the bottom edge up over the center. Pull the left edge over. Pull the right edge over. Roll the whole mass toward yourself, sealing as you go. You should end with a round, smooth ball with a taut outer surface.
5. Transfer the shaped dough SEAM-SIDE UP into a floured banneton, or into a kitchen-towel-lined bowl heavily dusted with rice flour.
6. Cover with plastic wrap or place the entire banneton inside a large plastic bag. Put into the refrigerator. Minimum 8 hours, maximum 14 hours. Overnight is the natural schedule.

**WHY THIS WORKS**

Cold retard is the single biggest flavor lever in sourdough. At fridge temperature (3–5 °C), *Lactobacillus* activity shifts — they produce more acetic acid (sharp, vinegary) and less lactic acid (mild, creamy). The resulting dough has a more complex flavor profile than same-day-baked sourdough. The cold also makes the dough firmer and easier to score cleanly when scoring direct from the fridge. 8 hours is minimum for meaningful flavor development; 12–14 hours is the sweet spot; past 16 hours the dough starts over-proofing and the crumb loses structure. Reference: Bread and Baking chapter 2 (Cold Retard).

## 5 Day 2 Morning — Bake

1. Place the Dutch oven with its lid on the middle rack of your oven. Preheat to 250 °C / 480 °F. This requires 45–60 minutes — the Dutch oven must be fully heated through, not just the oven.
2. While preheating, prepare your scoring setup: tear a sheet of parchment paper slightly larger than the dough round. Have the lame or razor blade ready.
3. Remove the banneton from the fridge. Place the parchment on top of the banneton, then flip the banneton upside down — the dough falls gently onto the parchment. Lift the banneton off. The dough is now seam-side down on parchment.
4. Score the dough with ONE decisive motion. Hold the blade at a 30 degree angle to the surface. Cut 1 cm deep. A single long slash across the top works. The angled cut creates an ear — the flap that peels up during oven spring and produces the characteristic artisan crust feature.
5. Using the parchment as a sling, lift the dough into the screaming-hot Dutch oven. Put the lid on immediately. Close oven. Do NOT lift the lid for the next 20 minutes.
6. After 20 minutes: lift the lid off. Reduce oven to 230 °C / 450 °F. Continue baking UNCOVERED for 20–25 minutes until the crust is DEEP mahogany brown — darker than you think is safe. Pale crust equals pale flavor.
7. Test doneness: internal temperature should be 95–100 °C / 205–210 °F. Or tap the bottom — a hollow thump means done.
8. Transfer to a wire cooling rack. DO NOT slice for at least 1 hour. Cutting while hot produces a gummy interior because the starches have not yet set and steam is still redistributing through the crumb.

### WHY THIS WORKS

The covered first 20 minutes trap the dough's own evaporating steam, which serves two critical functions. First, the moist environment keeps the crust pliable during the oven-spring phase — the bread can fully expand before the crust sets. Second, steam gelatinizes the surface starch into a thin glassy layer that becomes the characteristic crackling crust when dried by uncovered baking. Lifting the lid early destroys both effects. The uncovered second phase drives the Maillard reaction and pyrolysis that produce the deep brown color and complex crust flavor. The 1-hour cool is not about temperature — it is about giving the starches time to retrograde and set. Hot sourdough tastes gummy; cooled sourdough tastes right. Reference: Bread and Baking chapter 2 (Steam and Crust Development); Food Science Core chapter 4 (Maillard Reaction).

QUICK REFERENCE

# Timing Cheat Sheet

STEP	TIME	CUE
Feed levain	Day 1, 7:00 AM	1 tbsp starter + 100+100 flour + 200 water
Levain peak	6–8 h later	Doubled, bubbly, passes float test
Autolyse	Day 1 PM, 30–60 min	Shaggy mass, no dry spots, rest undisturbed
Add levain + rest	30 min	Levain fully incorporated, no streaks
Add salt + water	5 min	Salt dissolved, dough back to uniform
S&F sets 1–4	Every 30 min, 2 h total	Dough gets smoother with each set
Bulk end	3–4 h from salt	50% volume rise, domed, jiggly, bubbles visible
Pre-shape + bench rest	25 min	Loose round on unfloured surface
Final shape	3 min	Taut surface, seam-up into banneton
Cold retard	8–14 h overnight	Fridge, covered, 3–5 °C
Preheat Dutch oven	45–60 min at 250 °C	Full thermal mass reached
Score + load	30 sec	1 cm deep, 30° angle, one decisive stroke
Bake covered	20 min at 250 °C	Do not lift lid
Bake uncovered	20–25 min at 230 °C	DEEP mahogany brown, darker than you think
Cool	Min 1 hour on rack	Do NOT slice early — gummy

## Emergency Protocols

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### **STARTER IS SLUGGISH / NOT DOUBLING**

Rehab before baking. Feed at 1:5:5 ratio (1 part starter + 5 flour + 5 water) twice daily for 2–3 days. Keep at 24–26 °C. After each feed, rise should be faster and more vigorous. If no improvement after 3 days, the culture may need recharging with fresh flour — start over with 1 tbsp existing starter + 30 g each flour and water, feed daily.

### **LEVAIN DID NOT PASS FLOAT TEST AFTER 8 H**

Two possible causes. (1) Starter was weak to begin with — see rehab above. (2) Kitchen temp too cool — levain takes longer at 20–22 °C. Wait 1–2 more hours, test again. If still not floating at 10 h, the starter needs rehab before next attempt.

### **DOUGH FEELS SLACK / RUNNY DURING S&F**

Either too much water (hydration too high for your flour) OR not enough folds. Add one extra S&F set. If still slack, next time reduce water to 70% hydration. Different flours absorb different amounts — King Arthur bread flour at 75% is stable; lower-protein supermarket bread flour may need 70%.

### **DOUGH OVER-PROOFED DURING BULK (WENT FLAT, SMELLS BOOZY)**

Damage done but recoverable. Skip pre-shape bench rest. Go straight to final shape. Cold retard immediately in fridge. Bake may still produce an acceptable loaf, just with tighter crumb. Next time: watch the 50% rise signal and pull as soon as it hits, don't rely on time alone.

### **LOAF DID NOT RISE MUCH IN THE OVEN (NO OVEN SPRING)**

Three possible causes. (1) Dutch oven not hot enough — preheat 60 min minimum, not 30. (2) Lid removed too early — 20 min covered is non-negotiable. (3) Under-proofed bulk or shape too tight. For next bake: check thermometer in Dutch oven before loading, confirm 240 °C+ on the walls.

### **CRUST IS PALE / SOFT AFTER FULL BAKE TIME**

Oven runs cool. Bake uncovered phase another 5–10 minutes. Crust should be darker than you think is acceptable — pale crust = pale flavor. For future bakes: calibrate oven with an oven thermometer; many home ovens run 10–20 °C cold.

#### **CRUMB IS GUMMY / DENSE WHEN SLICED**

Two causes. (1) Sliced too early — must cool at least 1 hour, 2 hours better. (2) Under-baked — internal temp must hit 95–100 °C. Probe-thermometer a slice-face of a cooled loaf; if <95 °C, bake longer next time. For current loaf: slice thin, toast aggressively — rescues gumminess.

#### **CRUST IS TOO HARD / CAN BARELY CUT THROUGH**

Over-baked OR baked too long uncovered. Next time: 20 min covered + 18 min uncovered instead of 25. For current loaf: wrap in a damp towel 10 min to soften slightly.

#### **SCORING DRAGS THE BLADE / TEARS DOUGH**

Blade too dull. Use a fresh razor blade or sharpened lame. Also: dough must be cold (straight from fridge) — warm dough is too slack to score cleanly. If the blade still drags: try one quick, confident slash rather than sawing motion.

## DEEP DIVES

# Technique Notes

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### **Universal: The Levain Float Test**

#### **SOURDOUGH FUNDAMENTALS • UNIVERSAL**

To know when your levain is ready for the dough, drop a small spoonful into a glass of room-temperature water. If it floats, the levain is at peak activity — CO<sub>2</sub> bubbles have made the dough less dense than water, and you are at the moment of maximum yeast population. If it sinks, the levain is either not yet ready (wait another hour) or past its peak (already collapsing). The float test is more reliable than time because it accounts for kitchen temperature, starter strength, and flour variations. Every sourdough bake should start with a float test. Reference: Bread and Baking chapter 2 (Starter Maintenance).

## ● Universal: Autolyse — The Passive Gluten Builder

BREAD TECHNIQUE · UNIVERSAL

Autolyse is a 30–60 minute rest of flour and water before adding salt and levain. During this rest, flour fully hydrates, amylase enzymes break starch into yeast–food sugars, and gluten bonds begin forming passively. The result is a dough that requires less kneading, handles better, and develops more complex flavor. Skip the autolyse and you need significantly more folds to build the same structure. The technique was codified by French baker Raymond Calvel in the 1970s but the principle applies to all bread doughs. For sourdough specifically, the autolyse window also lets endogenous flour enzymes begin pre-digesting — meaning the levain encounters a more hospitable substrate. 30 minutes is minimum; 60 minutes is better; past 90 minutes you risk over-relaxation. Reference: Bread and Baking chapter 2 (Autolyse).

## ● Universal: The 50% Volume Rise Signal

BULK FERMENTATION · UNIVERSAL

Bulk fermentation is done when the dough has increased roughly 50% in volume — not doubled, not tripled, 50%. Many recipes get this wrong and call for doubling, which produces over-proofed loaves with tight dense crumb after baking. The 50% target leaves enough fermentation potential for the cold retard to continue developing flavor, and for the final proof during scoring and oven loading. To judge 50%: mark the starting dough level on the side of the bowl with a rubber band or marker, then watch for the rise. When the dough is halfway between the starting line and doubled, you are done. Other confirmatory signals: (1) dough surface is smooth and slightly domed, (2) bubbles are visible through the bowl walls or just below the surface, (3) the dough jiggles when you shake the bowl, like set custard. If all four align, pull immediately regardless of elapsed time. Reference: Bread and Baking chapter 2 (Bulk Fermentation Timing).

## ● No Limits: The Freezer Bank Protocol

INFRASTRUCTURE · HOUSEHOLD ROTATION · EXTENDS STORAGE

One 800 g loaf is perfect for a family week but too much for a solo household and too little for frequent bread use. The solution: after the 1-hour cool, slice half the loaf at 1.5 cm intervals using a sharp serrated knife or electric slicer. Pack slices in pairs between parchment squares. Vacuum-seal (Pablo has a sealer) or freezer-bag. Freeze flat, then stack. To use: pull one or two slices, toast direct from frozen for 2–3 minutes. Texture is indistinguishable from fresh toasted. Keep the remaining half uncut and eat within 4–5 days — it stores best whole. With one weekly bake, you build a rotating inventory of 2–3 weeks of sliced toast supply plus fresh loaf for the current week. Pa amb tomàquet, avocado toast, bocadillos — always 2 minutes from hot bread. Reference: Bread and Baking chapter 5 (Storage).

## ● No Limits: The Flour & Weirdoughs Backup Plan

SOURCING · MIAMI-LOCAL · REFINES SCHEDULE

Not every week has 22 hours of flexibility. Flour & Weirdoughs on Key Biscayne — 19 Harbor Dr, (305) 361-9000, Tue–Sun 8 AM to 2 PM — mills its own flour and produces one of the best sourdoughs in Miami. On weeks when Pablo is not baking, their loaf is the accepted substitute for home-baked across all downstream recipes (pa amb tomàquet, bocadillos, avocado toast, romesco with grilled bread). Quality is high enough that cross-referenced recipes do not degrade. This is the insurance policy that makes the home bake optional rather than mandatory: Pablo commits to one bake per 1–2 weeks, and F&W fills the gaps. Always call ahead on busy weekends — they sell out by 11 AM most Saturdays. Reference: MEMORY.md (Flour & Weirdoughs verified supplier).

## ● No Limits: Same-Schedule Second Bake

PRODUCTIVITY · PARALLEL PROCESSING · EXTENDS DAY 2 BAKE

A preheated Dutch oven at 250 °C has enough thermal mass for TWO consecutive bakes. If you made a double-batch dough Day 1 (just scale everything x2, use two bannetons), bake them in sequence on Day 2. Load loaf 1 at 8:00 AM, pull at 8:45 AM, immediately load loaf 2 — Dutch oven is still at 230 °C from the previous bake. The second loaf goes uncovered from minute 8 because the oven is already past the initial steam phase. Total incremental effort: 45 minutes of Day 2 attention for a second complete loaf. One Day 2 = two weeks of bread banked. This is how a household with weekly sourdough cadence actually works. Reference: Bread and Baking chapter 2 (Parallel Bakes).

## What to Drink

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### Wine — Everyday

Basic Rioja Crianza or Txakoli (young, bright)

*Good bread wants a wine that does not compete. Young Spanish reds or whites with moderate acidity and no heavy oak. The wine is for the meal, not the bread.*

### Companion — Always

Arbequina EVOO + Maldon salt + ripe tomato

*Pa amb tomàquet is the sourdough's natural habitat. Rub garlic, grate tomato, drizzle oil, flaky salt. If all four are at peak, this is a transcendent bite and the simplest possible test of the bread's quality. Reference: Bread and Baking chapter 5 (Pa amb Tomàquet).*

### Morning

Strong espresso or café con leche

*Fresh sourdough toast with butter, or with jamón + tomato rub, is the classical Spanish breakfast. The coffee cuts the butter richness; the bread cushions the espresso's edge.*

### Evening

Fino or Manzanilla sherry (chilled)

*For an aperitif hour: toasted sourdough + jamón ibérico + Manchego + a copa of dry sherry. The bread's tang matches the sherry's bone-dry oxidative character. A Spanish ritual that Pablo's pantry can deliver any evening.*

## Menu Ideas

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### **Pa amb Tomàquet (The Classical Use)**

Toast 2 thick slices. Rub cut side with a halved garlic clove. Grate a ripe tomato over the top, pressing the pulp into the toast. Drizzle Arbequina EVOO. Finish with Maldon. Serve with jamón ibérico alongside. The bread's entire purpose made explicit in 90 seconds.

### **Rabo de Toro Bocabillos (Leftover Alchemy)**

Per MEMORY.md April 10: leftover rabo shredded with sauce, piled on garlic-rubbed toasted sourdough, EVOO + Maldon. Three-course Spanish lunch: gazpacho → bocadillos → crema catalana. A legitimate way to stretch one dinner into two meals.

### **Avocado Toast Bar (March 25 breakfast format)**

Per MEMORY.md: sliced sourdough, avocados, Maldon, chili flakes, EVOO, pickled onions, everything bagel seasoning — all set out for guests to build their own. A reliable hosting formula for weekend brunches.

### **Grilled Bread for Romesco Service**

Cut sourdough into 1.5 cm slabs. Grill both sides over the kamado (or in a cast iron, 2 min per side) until marked and crisp edges. Serve alongside UMAMI-9 romesco for dipping. The bread's chew holds the sauce; the char of the grill marks plays against the sauce's char-and-nut depth.

### **Pablo-Specific Integration**

The sourdough unlocks or enhances: UMAMI-9 Romesco (as grilled bread for service), UMAMI-6 Secreto (tapa board anchor), UMAMI-7 Porchetta (Sunday leftover sandwich with pickled onion + alioli), UMAMI-4 Pan Sauce (bread to sop the last drops). With one bake, six+ downstream recipes get easier.

YOUR NOTES

# Cook Log

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## Session Notes

Date: \_\_\_\_\_ · Serves: \_\_\_\_\_ · Rating: \_\_ / 5

*Use this space to record what you changed, what worked, and what you'd do differently next time. Your future self will thank you.*



Stop following recipes. Start understanding food.

