

YOUR FREE READER'S COMPANION

The No-Fail Cheese Companion Pack

A companion to The No-Fail Cheese Making Bible · by Greta Halvorsen

Thanks for picking up the book. This companion is the part you keep in the kitchen: tape it inside a cabinet door, prop it against the backsplash, and cook from it with cheese on your hands. It's the chart you flip to when a pot won't behave, the dosage cards so you stop second-guessing the rennet, a first-month shopping list that keeps you out of the wrong aisle, and a blank make-log to print. Real numbers, no filler.

Almost nothing that goes wrong means you ruined the cheese. Most "failures" are just the milk or the rennet telling you something, and they'll tell you the same thing next time so you can fix it. Keep this near the stove and check it before you panic. — Greta

The "Why My Cheese Failed" Troubleshooting Chart

Find your symptom, read the likely cause, try the fix. When two causes look possible, the fastest way to tell them apart is almost always your milk and your rennet, so start there.

Symptom	Likely cause	Fix
No curd at all, milk stays liquid past full set time	Ultra-pasteurized (UP / UHT) milk	Nothing saves this batch. Check the carton and buy standard pasteurized or low-temp/cream-line milk next time.
Milk barely thickens, weak or no clean break	Dead or old rennet	Fresh rennet should set milk in about 15 min at 90 degF (32 degC). Buy fresh, keep liquid rennet in the fridge, tablets in the freezer.
No set, and you diluted rennet in tap water	Chlorine killed the rennet	Dilute rennet and cultures only in cool non-chlorinated water (filtered, distilled, or bottled). Redo with fresh rennet.
Weak set with store-bought pasteurized milk	Calcium lost in pasteurization	Add 1/4 tsp calcium chloride per gallon (3.8 L), diluted in 1/4 cup cool water, stirred in before the rennet.
No set and the milk felt cool	Temperature too low, rennet sluggish	Hold milk at the recipe temperature, usually 86 to 90 degF (30 to 32 degC), and verify with a thermometer, not a guess.
No set and the milk was hot	Temperature too high, rennet denatured	Keep rennet-set milk below 95 degF (35 degC) unless the recipe says otherwise.
Curd set, then broke back to liquid when stirred	Cut or stirred before a true clean break	Wait for the clean break (a clean knife lifts and the curd splits, whey welling into the crack) before you cut.
Curd is set but mushy, splits raggedly	Not enough set time	Cover and give it another 15 to 30 min before testing again.
Curd is rubbery, tough, or squeaky	Too much rennet, or set too long before cutting	Reduce the rennet dose next time, and cut nearer the clean break, not an hour past it. More rennet is not better.
Curd shrank hard, fast, and dry	Cooked too hot or too fast	Raise the cook temperature slowly, a couple degrees every few minutes, stirring gently.
Bitter cheese, worse as it ages	Too much rennet, or aged too warm	Cut the rennet dose. Age at 50 to 55 degF (10 to 13 degC); warm aging breeds bitterness.
Sour, too acidic, sharp and tangy	Culture ripened too long, or too much culture	Shorten the ripening/acidification time, or use a little less culture next time.
Bland, flat, no flavor	Underdeveloped acidity, or under-salted	Give the culture its full ripening time before rennet. For fresh cheese, add salt and taste as you go.
Metallic or chemical taste	Too much calcium chloride	Use only 1/4 tsp per gallon (3.8 L). More adds a bitter, mineral edge.

Soapy or off note	Poor sanitation, stray bacteria	Sanitize every tool and surface. Off-flavors usually mean something else grew.
Cheese too wet or pasty, won't firm up	Under-drained, or weak acid/rennet	Drain longer, press with more weight, or cut curd smaller. Check culture ripening and rennet dose.
Bright pink, red, or fuzzy black mold on a wheel	Unwanted mold	Toss the affected cheese. Do not trim and eat around bright pink or red spots.
White or blue-gray powdery mold on a hard aged wheel	Common surface mold	Trim at least 1 in (2.5 cm) around and below the spot, or wipe with a vinegar/brine cloth. The rest of a hard cheese is fine.
Mozzarella tears instead of stretching	Not acidic enough, or curd too cool	Use the full citric acid amount; get curd to about 135 degF (57 degC) internal before pulling.

Rescue move: if you have weak or no set and suspect an under-dose or cool temperature, gently rewarm to 90 degF (32 degC), add a fresh, correctly diluted rennet dose, and give it another 45 min undisturbed before you give up.

Dosage Quick Cards

Numbers here are typical single-strength amounts per gallon (3.8 L) of milk. Always trust the strength printed on your own bottle or box first, since brands vary.

Rennet

Form	Per 1 gallon (3.8 L)	Notes
Liquid animal rennet (single strength)	1/4 tsp	Dilute in 1/4 cup cool non-chlorinated water, stir in with an up-and-down motion for 30 seconds, then stop moving the milk.
Liquid vegetable rennet	1/4 tsp	Same as above; some brands run slightly stronger, so start here.
Rennet tablet	1/4 tablet	Crush and dissolve fully in 1/4 cup cool water before adding.
Test for live rennet	1/4 tsp in 1 gal at 90 degF (32 degC)	Should give a clean break in about 15 min. If it takes far longer, the rennet is weak.

Cultures: mesophilic vs thermophilic

Mesophilic likes cooler make temps; thermophilic likes hot. Use the one the recipe calls for.

Culture	Works best around	Dose per 1 gallon (3.8 L)	Common cheeses
Mesophilic	68 to 90 degF (20 to 32 degC)	1/8 tsp (a small pinch) direct-set	Chevre, cheddar, gouda, feta, cream cheese, cottage cheese
Thermophilic	100 to 122 degF (38 to 50 degC)	1/8 tsp (a small pinch) direct-set	Mozzarella (cultured), parmesan, Swiss, provolone, romano

Sprinkle the powder over the warm milk, let it rehydrate on the surface 2 to 3 min, then stir gently up and down. A "pinch" is roughly 1/8 tsp; when in doubt, follow the packet.

Acids (for direct-acid cheeses)

Acid	Cheese	Amount per 1 gallon (3.8 L)	How
Citric acid	30-minute mozzarella	1 1/2 tsp	Dissolve in 1/4 cup cool water, stir into cold milk before heating.
White vinegar	Ricotta / paneer	1/4 to 1/3 cup	Heat milk to 185 to 195 degF (85 to 90 degC), add gradually until the whey runs clear-yellow.
Lemon juice	Ricotta / paneer (softer flavor)	1/4 to 1/2 cup	Same as vinegar; add a little at a time, stir once, then leave it alone.

For acid-set cheeses, the whey turning from milky-white to clear-yellow is your signal that you added enough. Add slowly and watch for it rather than dumping it all in at once.

Your First-Month Shopping List

You need less than the internet tells you. Buy the short list, make a few fresh cheeses, and only then decide what else is worth it.

Equipment you actually need

- ☐ A large heavy-bottomed stainless steel pot, 6 to 8 quart (uncoated, no aluminum)
- ☐ A good instant-read or dairy thermometer that reads 0 to 220 degF
- ☐ A long knife or offset spatula to cut curd (something that reaches the bottom of the pot)
- ☐ A slotted spoon or ladle
- ☐ Butter muslin or fine cheesecloth (not the loose-weave grocery kind)
- ☐ A colander
- ☐ Measuring spoons, down to 1/8 tsp
- ☐ Basic sanitizer (unscented bleach solution, or a food-safe sanitizer) for every tool

Equipment you can skip for now

- ☐ A cheese press (drape and hang or use a jar of water for the first month)
- ☐ Cheese wax and aging supplies (start with fresh cheeses, not aged)
- ☐ Molds and followers (a clean yogurt tub with holes poked in works to start)
- ☐ A dedicated cheese cave / wine fridge

Ingredients and where to find them

- ☐ Whole milk, standard pasteurized, from the regular grocery dairy case
- ☐ AVOID anything labeled ultra-pasteurized, ultra-filtered, or UHT (it will not set)
- ☐ Low-temp / "cream-line" / local creamery milk if you can find it (sets beautifully)
- ☐ Heavy cream (unlabeled UP if possible) for richer fresh cheeses
- ☐ Non-chlorinated water (filtered, distilled, or bottled) for diluting rennet and culture
- ☐ Plain cheese/pickling salt or kosher salt, non-iodized (iodine can slow cultures)

Cultures and rennet sources

- ☐ Liquid animal or vegetable rennet, single strength (online cheesemaking suppliers, some health stores)
- ☐ Mesophilic culture (direct-set packets) for chevre, feta, cheddar
- ☐ Thermophilic culture (direct-set packets) for cultured mozzarella and hard cheeses
- ☐ Citric acid for 30-minute mozzarella (spice aisle, canning aisle, or online)
- ☐ Calcium chloride (30% solution) if your store milk sets weakly
- ☐ Store rennet in the fridge, tablets and culture packets in the freezer

Printable Make-Log Sheet

Print a few of these. Write down what you did while it's fresh in your memory. When a batch goes wrong the log tells you what changed, and when a batch goes right it tells you how to do it again. That single habit is worth more than any gadget in your kitchen.

Date	Cheese	Milk (type / amount)	Culture & dose	Rennet & dose	Temps	Times	Yield	What I'd change
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Fill in temps as you hit them (ripen temp, set temp, cook temp) and times as they happen (ripen time, set time, drain time). The "what I'd change" column is the most valuable one on the page, so write in it even when the cheese was good.

That's the pack. Print it, tape it up, and keep the log going. When you're ready for the aged cheeses, the brines, and the full recipes, they're waiting in the book.

— Greta Halvorsen