Food Waste and Inventory

A practical system for measuring waste, counting usable stock and preparing the right amount.



PRACTICAL GUIDE / WORKED EXAMPLES / EDITABLE TEMPLATES

Tools for independent restaurant owners and managers

Start with one practical change

Replace guesswork with a small set of consistent records. Use the five guide pages and five editable sheets to identify preventable waste, tighten counts and connect expected demand to prep and ordering. Begin with a handful of costly or frequently wasted items, not the entire storeroom.

Inside this toolkit

1. Establish a useful waste baseline
2. Read the cost and the cause together
3. Count consistently before trusting the reorder
4. Link prep and replenishment to demand
5. Run one prevention experiment at a time

Make the templates your own

Read the short guide, work through the example, and choose the forms you need. The printable forms follow the guide. The companion Word file lets you change instructions, add your restaurant name, and replace every blank or bracket before use. Duplicate a clean copy for each new shift, campaign, employee, or event.

The companion Excel workbook contains editable inputs and live formulas or planning fields. Read its instructions before changing values. Its hypothetical examples may use a more detailed set of assumptions than the guide. Use consistent units and cost definitions, and never treat contribution as full accounting profit.

Edition October 2026. Examples are original and hypothetical. This is an operating resource, not legal, employment, accounting, or food-safety advice. Confirm location-specific requirements and get qualified review where needed.

Establish a useful waste baseline

Pick three to five ingredients or prepared items that matter to your operation. Track a full representative trading cycle, including quiet and busy days. EPA provides tools for measuring the amount, type and source of wasted food; use that measurement-first approach before changing purchasing or portions. (Source 1)

- Define what you will measure: edible preparation loss, overproduction, spoilage or guest plate returns. Keep unavoidable trim distinct from potentially preventable loss.
- Record item, quantity, unit, stage, reason and destination at the point of waste. Use one weight unit and subtract container weight when weighing.
- Keep donations and other recovery destinations visible. A destination change is not necessarily a reduction in food generated as surplus.
- Estimate ingredient or recipe cost, not menu selling price. Mark estimates so they are not mistaken for accounting records.
- Tell the team the purpose is better planning, not blame. Reward accurate reporting; a sudden drop caused by missing records is not improvement.

Scope: this toolkit does not authorize reuse, donation, extended storage or changed food-safety controls. The PIC and locally adopted rules determine what may be retained, served, donated or discarded. FDA’s Food Code is a model, not a substitute for those local rules. (Source 3)

First check: can two team members record the same item in the same unit and category? If not, clarify the definitions before collecting more data.

Read the cost and the cause together

Calculate waste ingredient cost as recorded quantity × ingredient cost per matching unit. For prepared food, use the standard recipe cost per portion or weight. Do not multiply by selling price and call the result lost profit; an unsold portion does not prove a sale would have occurred.

Illustrative record	Calculation	Ingredient cost
Spoiled produce	3 kg × $4/kg	$12
Extra soup portions	8 portions × $1.50	$12
Total recorded loss	Two records	$24

Rank the recurring causes, not just the biggest single incident. “Overproduction at the end of lunch” is actionable. “Kitchen waste” is not. Keep short reason codes such as prep error, overproduction, deterioration, order error and unknown; investigate unknown rather than inventing a cause.

- Compare like periods using waste per cover or per order, alongside total weight and cost. Use one denominator consistently.
- Example: 12 lb across 200 covers is 0.060 lb per cover. Nine lb across 180 covers is 0.050 lb per cover, a 16.7% reduction per cover, not the 25% suggested by weight alone.
- Separate menu or service-format changes from process changes. A buffet and a plated lunch can produce different patterns.
- Choose one cause and a test: smaller final batch, revised portion tool or a better demand estimate. Assign a review date.

Keep the baseline intact. Do not change units, omit a waste category or switch from weighed to guessed quantities without marking the change.

Count consistently before trusting the reorder

Choose a repeatable count time and route through storage. Pause movements where practical; otherwise record receipts, issues and transfers during the count so they can be reconciled. Count high-value or fast-moving items more frequently than stable low-value items, using your own risk and workload judgment.

- Create one item description and one count unit per stock item. Record pack size and conversion, such as one case = six 1 kg bags.
- Separate usable stock from quarantined, damaged or otherwise unavailable stock. Ask the PIC to decide usability; never turn a stock count into a safety judgment.
- Count open packs using the agreed method. Mark estimates; use a second count for meaningful discrepancies.
- Record each location once, including prep areas and approved off-site storage. Avoid counting a transferred container at both locations.
- Match received quantities to the inventory record. Investigate timing, units, unrecorded transfers and counting errors before assuming loss or theft.

Worked example: two full cases containing six 1 kg bags each, plus three loose 1 kg bags, equal 15 kg. If 2 kg is unavailable under the PIC’s decision, record total physical stock of 15 kg and usable stock of 13 kg separately. Do not silently erase the unavailable quantity.

Measurable check: sample five items after the count. Another trained counter should be able to reproduce the quantity and explain any differences using recorded movements and units.

Link prep and replenishment to demand

For preparation, use forecast portions + chosen operating buffer − approved usable carryover. Example: 60 forecast portions + 6 buffer − 18 usable carryover = 48 portions to prepare. Round only to a practical batch and record the decision. The buffer is a demand assumption, not permission to exceed safe storage or holding limits.

For ordering, first calculate stock position: usable on hand + confirmed receipts due in time − separately committed demand. Do not subtract an event commitment again if it is already included in the forecast.

Illustrative item, all in kg	Value
Usable on hand + incoming − separate commitment	9 + 5 − 2 = 12
Reorder trigger: 4/day × 3-day lead time + 6 buffer	18
Chosen target stock position	26
Need to reach target: 26 − 12	14
Order in 5 kg cases, if feasible	15

The 18 kg trigger tells you when to review an order. The 26 kg target is a separate choice covering the intended order cycle, lead time and buffer. Check delivery reliability, forecast, shelf life, storage capacity and cash before rounding to 15 kg. If the rounded amount cannot be used safely, change the plan or pack size rather than overbuying.

Use the workbook to expose assumptions and scenarios. It cannot decide whether stock is safe or whether a supplier will arrive on time.

Run one prevention experiment at a time

EPA identifies purchasing, menu choices and production or handling practices as opportunities for source reduction. Translate that into one controlled operational experiment, rather than an across-the-board cut that creates stockouts. (Source 2)

- Pick the recurring item with a clear cause and sufficient records. State the change precisely, for example “reduce the final prep batch from 20 to 12 portions and reassess demand before making more.”
- Compare a representative before-and-after period using waste per cover, stockouts and guest experience. Keep service format and unit definitions consistent.
- Track a balancing measure. Less waste is not a success if guests repeatedly cannot order the item.
- Ask staff what the change did to workload and service. A technically lower waste number can hide excessive last-minute prep.
- Keep, revise or stop the test. Update the prep sheet or reorder assumptions only after the result is understood.

Illustrative result: soup waste falls from eight to four portions per 100 covers, but the item sells out during three services. The next test could move a small batch later in service rather than simply restoring all previous overproduction. The PIC’s approved controls still govern preparation and service.

Weekly review: confirm record completion, inspect the top three causes, check inventory exceptions and assign one improvement. Keep a dated decision log so future managers know why a par level changed.

Next step: choose your first five items, define the units and train the team on one sample record before starting the baseline.

Waste observation log

Location: _____ Date / shift: _____ Recorder: _____ Weight unit: _____

Record at the point of waste. Subtract container weight. Reason codes: prep error / overproduction / deterioration / order error / plate return / other / unknown.

Time / item	Quantity / unit	Stage / reason	Unit cost / est.	Destination
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Covers or orders in this period, using chosen denominator: _____

Recorded ingredient-cost estimate: _____ Weighed or estimated: _____

Most useful observation / cause to investigate: _____

PIC-approved disposition record reference where applicable: _____

Never change food disposition to improve the waste metric.

Inventory count and discrepancy sheet

Location: _____ Count date / cutoff: _____ Counter: _____ Reviewer: _____

Count stock once by location. Record movements during counting. Use matching units; separate unavailable stock from usable stock.

Item / location	Count unit	Physical qty	Usable qty	Recount / variance
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Pack-size conversions used: _____

Unavailable stock / PIC record reference: _____

Receipts, issues or transfers during count: _____

Discrepancy / likely explanation / evidence: _____

Adjustment approved by: _____ Recorded on: _____

Demand-based prep planner

Service date: _____ Planner: _____ Forecast basis: _____

Formula: forecast + chosen buffer − approved usable carryover = planned prep, then review batch size and capacity. All quantities below must use portions or the stated matching unit.

Item / unit	Forecast	Buffer	Usable carryover	Planned prep
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Batch sizes / staged release plan: _____

Special demand not already counted: _____

PIC approval or procedure references for carryover and production: _____

Mid-service demand check time / owner: _____

Actual portions used: _____ Remaining disposition record: _____ Stockouts: _____

Tomorrow’s adjustment and evidence: _____

Reorder review worksheet

Item: _____ Count unit / pack size: _____ Review date: _____

Input or calculation	Quantity / assumption
Usable on-hand stock	_____
Confirmed receipts due in time	_____
Separate commitments not in forecast	_____
Stock position: on hand + receipts − commitments	_____
Expected use per day / lead time	_____
Chosen buffer / reorder trigger	_____
Target stock position / order cycle	_____
Order need / rounded pack quantity	_____

Forecast and supplier evidence: _____

Shelf-life / storage / cash / minimum-order review: _____

Committed demand counted only once: ___ Units checked: ___ PIC concerns resolved: ___

Proposed quantity: _____ Approved quantity: _____ Approver: _____

Order reference / expected arrival: _____

Weekly waste prevention test

Week: _____ Item / process: _____ Owner: _____

Observed problem and source records: _____

Specific change to test: _____

Measure	Baseline	Test period	Notes
Waste quantity / chosen unit	_____	_____	_____
Covers or orders	_____	_____	_____
Waste per cover or order	_____	_____	_____
Estimated ingredient cost	_____	_____	_____
Stockouts / service issues	_____	_____	_____

Periods comparable? Record menu, demand or format changes: _____

Staff observations: _____

Decision: keep / adjust / stop. Reason: _____

Prep or reorder assumption updated: _____

Next verification date / responsible person: _____

Sources and use notes

Official reference sources were checked during preparation in October 2026. Numbered source mentions in the guide refer to the entries below. Original worksheets, examples, and calculations are 63Labs planning tools, not material endorsed by these organizations.

EPA: Resources for Assessing Wasted Food

Measurement tools for tracking amounts, types and sources of food and packaging waste. Accessed 23 October 2026.

https://www.epa.gov/sustainable-management-food/resources-assessing-wasted-food

EPA: Prevent Wasted Food Through Source Reduction

Measurement and prevention through purchasing, menu and production practice changes. Accessed 23 October 2026.

https://www.epa.gov/sustainable-management-food/prevent-wasted-food-through-source-reduction

FDA Food Code

The Food Code is a model for adoption by jurisdictions; the establishment must verify the locally applicable rules. Accessed 23 October 2026.

https://www.fda.gov/food/retail-food-protection/fda-food-code

Before use

Replace hypothetical values with verified restaurant data. Confirm responsibilities, approval limits, dates, offer terms, and local requirements. Do not send drafts, promise prices, or change operating procedures until the appropriate owner has approved them. The pack does not include legal contracts or ongoing updates.