Safe Food Storage App
Deliverable 3: Secondary Market Research Report

1. **User Group Profile**

Demographics

- Age: ~18-24 years (traditional undergraduates), maybe up to ~30 if including non-trad, part-time or graduate students.
- Socioeconomic: Many students on tight budgets; some may rely on financial aid, scholarships, or part-time work. Cost sensitivity is high.
- Living situation: Dorms, shared apartments, possibly small kitchens / limited storage space; often meal-plan or eating out, but many cook or store groceries to save money.

Pain Points

- Food spoilage / waste: Forgetting what is in the fridge / pantry; food going bad before being used, especially in shared food storage.
- Knowledge gap: Unclear on best ways to store different foods; confusion about expiration dates; little training or guidance in food preservation techniques.
- Time & convenience constraints: Busy schedules (classes, jobs, social); minimizing planning & upkeep; reluctance to spend time tracking or organizing food if it feels tedious.
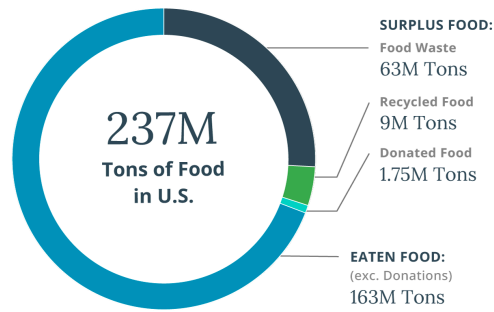
Daily Habits

- Grocery shopping: Weekly or biweekly; sometimes impulse buys; tends to buy perishables in bulk when there's a sale.
- Cooking vs eating out: Mix of both; convenience often wins (takeout / campus food) but cost pressures push them toward cooking more.
- Using tech: Heavy smartphone use; likely to use apps that send reminders / notifications; social media & peer recommendations matter; might look up recipes or shelf-life info online.

2. **Market Size & Opportunity**

Recent Data:

- There are about 19.28 million undergraduate students in the U.S. as of Fall 2024. Education Data Initiative
- The global market for food waste / food waste prevention / food waste app is projected to grow: from USD 33.6 billion in 2025 to USD 182.4 billion by 2034 at a CAGR around 25.85%. For Insights Consultancy
- Additionally, in 2023 the US wasted over 30 percent of its total food supply in 2023 alone showing that this is a very high demand and critical problem within our country.

SURPLUS FOOD:
Food Waste
63M Tons

Recycled Food
9M Tons

Donated Food
1.75M Tons

237M
Tons of Food
in U.S.

EATEN FOOD:
(exc. Donations)
163M Tons

Source: ReFED/2023 Data (Published Feb 2025)

Market Availability:

- **Total Addressable Market (TAM):** If all 19.3 million undergrads in U.S. are potential users, and one estimates that perhaps 50% would have the interest/need (≈9.6 million), and if a subscription or monetization per user is ~$10/year, TAM just in U.S. could be ~**US$96 million/year** (just for undergrads), but that's only U.S. — globally could be much larger when scaling to other countries & related audiences (e.g. young adults, etc.).
- **Serviceable Available Market (SAM):** Students who (a) have smartphones, (b) cook and store food (not entirely dependent on meal plans / dining halls), (c) are willing to pay or engage with apps. Suppose that is maybe ~30-40% of undergrads in U.S. → ~6-8 million users. Monetization might be via in-app purchases, modest subscription, or ads.
- **Serviceable Obtainable Market (SOM):** For a new entrant over initial 1-2 years focused on a few states / colleges, maybe gaining 1-5% of that SAM. So that might be ~60,000 to ~400,000 users in the U.S. initially, meaning revenues in the low millions in first years if priced modestly.

Market Segment	Estimated Users / Value	Notes / Assumptions
TAM	~9-10 million U.S. users; ~$90-110 million/year revenue potential	All undergrads with interest; assuming ~$10/user/year monetization
SAM	~6-8 million users; ~$60-80 million/year	Users with cooking / storage capacity and willingness to use app
SOM	~60,000-400,000 users initially; ~$0.6-4 million/year in early stage	Initial user base by targeting select regions / campuses, realistic penetration

3. **Competitor Analysis**

Similar App	Features	Pros & Cons	Possible Gaps
Fridgely	Suggested recipes Sorting of tracked items by location (fridge, freezer, pantry) Push notifications when item is about to expire UPC barcode scan support	+ Sends notification when food item is about to expire + Sorts items in system, putting near-expired items at the top - App is still in beta - Based on previews, there is no support for receipt scanning	Since the app's webpage lists an example from 2016, this app may not use more intelligent APIs or systems to estimate expiry dates or provide recipe ideas UPCs can help quickly add items to a list, but expiration dates can be inconsistent if based on UPC alone This app appears to lack receipt scan support
No Waste	Inventory lists Recipe suggestions for items in the app Supports UPC barcode scanning	+ Simple UI + UPC scan support + Well-regarded + Users must set expiration dates manually	This app might not be able to "smartly" predict expiration dates; users must manually enter expiration dates
USDA FoodKeeper	Storage guidelines for 400+ food/beverage items Advice for safety & shelf life Basic interface	+ From a U.S. government agency + Expansive database + Trusted info + Not interactive + No inventory tracking + No reminders + May be difficult for beginners	This app acts merely as a reference and doesn't actively alert the consumer about their specific products and needs

4. **Unique Value Proposition**

Leftover Tracker takes the guesswork out of food safety by giving young adults clear, evidence-based timelines for homemade meals and restaurant leftovers. Unlike generic food inventory apps, it combines

USDA-backed safety guidance with quick, low-friction logging so users waste less, save money, and eat with confidence.

Differentiators:

    a. **Leftovers-first design** — tailored workflows for homemade meals, takeout, and gifted food rather than just packaged goods.
    b. **Trusted safety guidance** — integrates USDA food-safety standards into personalized spoilage alerts.
    c. **Student-friendly experience** — lightweight reminders, simple logging, and recipe suggestions built for busy, budget-conscious young adults.

5. **Disclosure on Use of Generative AI**
   The team used **ChatGPT** in varying capacities to assist in locating data. Additional prompts may have been used to force the chatbot to provide source links.

   The following prompts were used, in no particular order:
   - "You are a competitive intelligence expert. Compare 2–3 apps similar to the leftover tracker. Create a table with columns for Features, Strengths, Weaknesses, and Customer Reviews. Highlight any gaps that your app could fill."
   - "Pretend you are a startup pitch coach. Write a clear and persuasive unique value proposition (UVP) for the leftover tracker in 2–3 sentences. Then, list 3 bullet points showing how it differentiates from competitors."
   - "You are a market researcher. Analyze the demographics, pain points, and daily habits of potential users for a new food expiration date tracking app. Present the findings in 3 concise bullet points per category (demographics, pain points, habits)."
   - "Act as a business analyst. Estimate the total addressable market (TAM), serviceable available market (SAM), and serviceable obtainable market (SOM) for a food expiration tracker. Use recent statistics where possible. Present the numbers in a short paragraph followed by a 3-row table (TAM, SAM, SOM)."

6. **Sources**

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