D3 Leftovers App Market Research

1)**User Group Profile**

Demographics:

Research shows that young adults, particularly those aged **18–26**, often lack food safety knowledge and proper storage practices. College students and early-career individuals are especially at risk, as they are frequently living independently for the first time with limited budgets and shared living spaces (Azanaw et al., 2019). Studies highlight that many in this group struggle to interpret food labels correctly, confusing “best by” or “sell by” dates with safety indicators (USDA, 2023). As a result, they often rely on smell or appearance when deciding if food is still edible, which can lead either to eating unsafe leftovers or discarding food prematurely (Brown, 2025; FoodSafety.gov).

Pain Points:

The main **pain points** for this demographic are clear: they are uncertain about how long food can safely be stored, feel anxiety about eating spoiled items, and end up wasting money and food because of these gaps. Research also shows that busy lifestyles and a lack of planning contribute to poor food management—students may cook or order more food than they can realistically eat, fail to label or track storage dates, and then throw out forgotten items (ReFED, 2022). These issues create a cycle of frustration, food waste, and occasional foodborne illness risks.

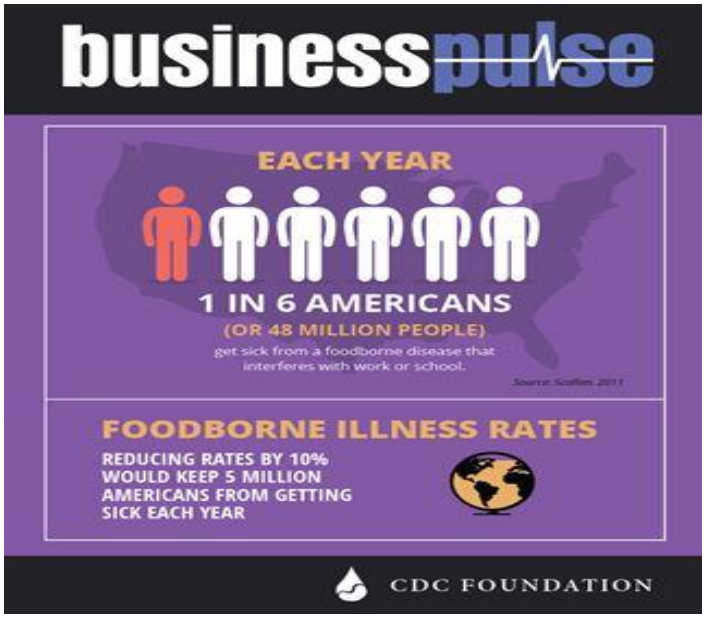
Habits:

At the same time, this demographic is highly tech-savvy. Nearly all use smartphones daily for school, entertainment, and managing aspects of their lives, including food ordering and fitness tracking (ScienceDirect, 2025). They regularly consult social media platforms like TikTok and Instagram for cooking tips and recipes, but rarely use tools designed for food safety or storage tracking. While they care about saving money and reducing waste, their behaviors lag behind their intentions; many acknowledge food waste as a problem but lack the systems to track or prevent it (Sciencedirect, 2025).

2)

Market size and Opportunity:

According to the **Centers for Disease Control and Prevention (CDC)**, foodborne illness is a widespread issue in the United States, with an estimated **48 million people becoming sick each year**, resulting in **128,000 hospitalizations** and around **3,000 deaths**. Many of these cases stem from improper food storage or handling, which highlights the need for better tools to help individuals, particularly inexperienced cooks, manage leftovers and homemade foods safely.



The market for **digital food and nutrition tracking apps** also demonstrates strong growth. Reports show that the global nutrition tracking app market was valued at over **$3.3 billion in 2024** and is projected to grow at a rate of more than **10% annually**, reaching nearly **$10 billion by 2035**. This growth indicates that consumers are increasingly willing to use mobile technology to monitor food-related behaviors, creating an opening for a more specialized app focused on food safety and spoilage tracking.

In addition, food waste remains a persistent issue, especially among young adults who often throw away food due to uncertainty about whether it is safe to eat. Studies show that a significant percentage of young adults waste **30% or more of their purchased food**, largely because of confusion around expiration and storage guidelines. This presents a clear opportunity: an app that provides reliable, easy-to-use guidance could reduce waste, save money, and help prevent foodborne illness in this demographic.

3)

Competitor	Key Features	Strengths/weakness	Reviews

USDA FoodKeeper (FoodSafety.gov)	Storage timelines for 500+ foods (fridge/freezer/pantry) food recalls, “Ask Karen” Q&A, official guidance from USDA/Cornell. Mobile app + web.	***Strengths:*** Authoritative, science-backed timelines; recall alerts; wide food coverage — great for safety-focused users and credibility. Ideal for an app emphasizing food-safety accuracy. ***Weaknesses:*** Not an inventory manager (no barcode/receipt scan or automatic inventory). UX is informational rather than proactive; some users report recall update bugs and limited push-reminder automation. Not tailored to casual daily users tracking leftovers.	Positive signals for trustworthiness and usefulness; reviews praise accuracy but call it more of a reference tool than a “fridge manager.”
Fridgely	Add items to fridge/pantry/freezer, expiry alerts, recipe suggestions from items, receipt scanning to auto-add groceries, sharing. Mobile app with smart alerts.	***Strengths:*** Good automation (receipt scan), recipe integration helps reduce waste, push reminders keep items top-of-mind. Strong fit for busy young adults who want frictionless tracking. ***Weaknesses:*** Accuracy depends on user input/receipt parsing; limited food-safety guidance (more focused on expiry/management than scientific safety timelines). Some users report occasional OCR/scan errors. May lack authoritative safety content for ambiguous leftovers/home-cooked items	App store reviews praise convenience and alerts; some users report data entry friction or occasional parsing mistakes. Good product-market fit for waste reduction, less so for medically-safety minded users.

NoWaste (NoWasteApp)	Fridge / freezer / pantry inventory lists, barcode scanning, sync across devices, meal suggestions and shopping lists, manual expiry/dates.	***Strengths:*** Simple inventory UI, barcode scan speeds entry, multi-device sync and pantry/fridge split fit households/roommates. Focused on reducing waste and planning. ***Weaknesses:*** Primarily an inventory/organizer — lacks authoritative food safety guidance and scientific spoilage timelines; depends on users to set correct expiration dates (no built-in time/temperature safety logic). Some users find maintenance (entering items) tedious.	Reviews and community posts show strong appreciation for inventory features; common complaints are “too much manual upkeep” and lack of safety context (i.e., it tells you something expires but not whether leftovers prepared at home were handled safely).

4)**Unique Value Proposition (UVP):**

“ Focuses on Food safety for homemade food and leftovers. Targets users with busy ever changing schedules, little to moderate income, and a want for automation in regards to how to store food and which foods are even safe to store”

As can be seen above our app should be able to keep up with, if not hopefully, outcompete the other apps on the market because it, as proposed, will be able to handle all they can do and more. As with the USDA’s FoodKeeper, It is wonderful in regards to how long you should keep specific ingredients, but it offers absolutely no automation in the way that the other two do (with scanning products for their expiration dates). However the other two do not offer our main feature, the option to add in your own homemade food (or leftovers) in order to get an estimate of when to toss it out, they really only track expiration dates of store bought foods that **have** printed expiration dates.

6) **AI Use Section:**

I used **ChatGPT** as my AI of choice for research as I like its ability to link me directly to the articles it references. **I ended up asking the AI 4 prompts**:

1) I just directly gave it our whole app proposition as a starting point

2) “Pretend you are an app developer who is doing user research regarding a new food app you are looking to make. This app in specific is an app (as referenced above) to provide people with a safe timeline for keeping leftovers, home-cooked foods, or dubious store bought

consumables. please give me the demographics, the pain pains, and habits (technological, ect) of this user group.

3) “question 2: pretend you are a developer for this app and you are continuing your market analysis, your next step is to show the market size and the opportunity for the product (the app) , so please give the data to show the need and demand for the proposed app”

4) “alright, on to question 3. Continuing on with everything previous in mind regarding the app you are building as the app developer you need to stalk out the competition, and by that I mean you need to find what your competitor apps are, their strengths and their weaknesses. So you are going to make a competitor analysis with 2 - 3 competitor apps on the market that focuses on their features, strengths/weaknesses, and their reviews. I would like this in a table format”

How I fact Checked:

Since I added my original proposition to the AI language model a lot of the things it referenced (foodsafety.gov, Azanaw et al, ect..) were easier to check because I had personally already read through them, others were easy to find because, as I mentioned before, ChatGPT automatically links me to the articles it is referencing. However it did get a little bit harder when it came to something like the growth of digital food apps where the referenced material wasn’t cited, but after looking it up independently I did find it to be true; other things like the review summaries for competitor apps can from the Apple app store, so I simply just searched them up on my own device to see if the review summary matched the actual reviews.

Sources:

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