

# Thermaware

Data & Analysis

# The Color-Changing Smart Container Built to Visually Alert Consumers

Currently, there are few ways in which consumers are able to be visually alerted of how long their food has been in their fridge. With regular food storage containers, it can easily be forgotten in the back of the fridge, and busy consumers might forget how long their leftovers have been sitting. What we need is a hassle-free device that is built to clearly show consumers the freshness of their food. A tupperware that changes color based on the amount of time it has been in the fridge. With color-changing eco-friendly plastic, the ThermaWare creates an eye-catching alert of how long it has been in the fridge. The lid-locking design allows for food to stay fresh for long, and the color-changing plastic exterior catches the eye and gives a visual cue, changing from green to red, to the user in order to remind them to use up old food, even if left in the back of the fridge. ThermaWare is now available in a set of 3 for \$19.99 at Walmart, Target, and Amazon.



**Prototype Concept:** Generated with Gemini's assistance, this image shows a potential visual representation and is not the final product.

# Smart Stickers for Safer Food

Current food storage containers are a great way to store leftover or meal prepper food. The problem is, a lot of people don't know how long until the food is unsafe or not fresh enough to eat. They end up questioning it and then throwing it away which leads to not just a waste of food, but a waste of money. Introducing Tuppersticker, the food storage bacteria sensor sticker that tells you when food is going bad - no more sniff tests, guessing games, or unnecessary waste. The Tuppersticker is a quarter-sized, color-changing sticker you place on the inside of a storage container which lets you know when your food is starting to go bad by fading from green (freshness is good) to red (time to throw it out) - taking the guesswork out of freshness. Starting at \$29.99 for a pack of 6 one-time use stickers - you can find the Tuppersticker at your local Target, Walmart, or on Amazon.



**Prototype Concept:** Generated with Gemini's assistance, this image shows a potential visual representation and is not the final product.

# ThermaWare: Purchase Intent Drivers

ThermaWare	Str. Disagree	Disagree	Neutral	Agree	Str. Agree	Mean	T2B	T1B
Purchase Intent	4%	8%	23%	3%	33%	2.66	36%	33%
Uniqueness	2%	0%	17%	33%	48%	4.25	81%	48%
Believability	0%	10%	23%	44%	23%	3.80	67%	23%
Relevance	6%	6%	17%	35%	37%	3.94	72%	37%
Liking	4%	2%	15%	38%	37%	3.90	75%	37%

## New Ideas Pull People In

- With Uniqueness at (**81% T2B, 4.25 M**), consumers feel like ThermaWare isn't just another container, it stands out.
- That early spark of curiosity is what pulls them into the rest of the experience, setting up the strong Liking (**75% T2B**) that follows.

## Building Confidence

- Believability sits lower at (**67% T2B, 3.80 M**) because consumers didn't fully understand how the color-change works.
- Clear explanations and demos can raise trust fast, helping it better align with our stronger drivers like Uniqueness and Relevance.

## Consumer Connection

- With Relevance at (**72% T2B, 3.94 M**), consumers immediately picture ThermaWare fixing real daily frustrations.
- Paired with strong Liking at (**75% T2B**), they're already emotionally bought in which should have made strong purchase intent.

## How to Grow Purchase Intent

- With Purchase Intent sitting at (**36% T2B, 2.66 M**), consumers clearly like the idea but still hesitate to commit.
- Because Relevance (**72% T2B**) and Liking (**75% T2B**) are strong, we need to sharpen the value, reinforce believability, and make the product feel like an easy, obvious upgrade to what they already own.

**Conclusion:** Overall, the results are strong, showing that people can envision using ThermaWare, which drives appreciation for its uniqueness, while adoption can be improved with better features and marketing.

# ThermaWare: Additional Questions Data

ThermaWare	Str. Disagree	Disagree	Neutral	Agree	Str. Agree	Mean	T2B	T1B
A color-change from green to red is a useful visual cue	0%	4%	15%	25%	56%	4.33	81%	56%
I often forget how long leftovers have been stored in my refrigerator	8%	8%	13%	27%	44%	3.91	71%	44%
I would replace my current food containers with smart ones if they helped reduce waste	4%	4%	19%	38%	35%	3.96	73%	35%
Having visible freshness indicators on my Tupperware would make organizing my fridge easier	2%	10%	19%	33%	37%	3.96	70%	37%
A Tupperware container that tracks freshness would encourage me to eat my stored food sooner	2%	0%	6%	35%	58%	4.50	93%	58%

## Consumer Problem

- Consumers often forget how long leftovers have been stored (**71% T2B**), creating waste and frustration.
- All the questions assess whether the problem is real and whether ThermaWare effectively addresses it, with a high **average mean of 4.13**.

## What Consumers Want

- People demanded for low-effort, high-visibility cues in gate one, with the color change rated high (**4.33 M, 81% T2B**) and how it would help them eat food sooner (**4.50 M, 93% T2B**).
- This connects directly to the first insight. If forgetting is the problem, visibility is the remedy.

## Why ThermaWare Fits

- The freshness indicator doesn't just inform people, it changes behavior, encouraging (**93% T2B**) of users to eat food sooner
- This high score also helps solve the common problem of forgotten leftovers in the fridge (**44% T1B**).

## Challenges to Address & How ThermaWare Helps

- People want to avoid wasting money or energy, so willingness to replace containers was low (**3.96 M, 35% T1B**). Improving quality and features makes switching simple.
- Only (**70% T2B**) saw freshness indicators as helpful, but showing the container raised this to (**93% T2B**), encouraging faster eating also helps with better fridge organization.

**Conclusion:** ThermaWare turns fridge chaos into clarity by encouraging faster food use, reducing waste, and making organization effortless, with design and marketing overcoming minor adoption barriers.

# TupperSticker: Purchase Intent Drivers

TupperSticker	Str. Disagree	Disagree	Neutral	Agree	Str.Agree	Mean	T2B	T1B
Purchase Intent	12%	8%	17%	35%	29%	3.64	64%	29%
Uniqueness	2%	6%	15%	44%	33%	4.00	77%	33%
Believability	4%	8%	15%	40%	33%	3.90	73%	33%
Relevance	6%	10%	13%	33%	38%	3.87	71%	38%
Liking	8%	2%	23%	40%	27%	3.76	67%	27%

## New Ideas Pull People In

- With Uniqueness at (**77% T2B, 4.00 M**), consumers feel like the TupperSticker is unlike something they've seen before.
- Boasting the highest T2B score out of all drivers, there is a clear likelihood of a high trial potential.

## Building Confidence

- Believability scores highly with the TupperSticker (**73% T2B, 3.90 M**) showing that consumers believe this system works accurately.
- Consumers find this concept understandable but also unique (**4.00 M, 77% T2B**)

## Consumer Connection

- With Relevance at (**71% T2B, 3.87 M**), consumers feel that TupperSticker fits into their daily usage.
- Paired with the strong Uniqueness score (**77% T2B**), consumers feel like this is an innovative solution to a real-life problem.

## Addressing Purchase Intent

- With Purchase Intent at (**64% T2B, 3.64 M**), consumers are interested, but several respondents gave us feedback and said "the product feels too expensive for their needs."
- Believability (**73% T2B**) and Uniqueness (**77% T2B**) are strong, so improving value perception will help increase overall purchase intent.

**Conclusion:** Overall, consumers find this product innovative and relevant, but concerns about price and one-time use not aligning with their goals limit purchase intent.

# TupperSticker: Additional Questions Data

TupperSticker	Str. Disagree	Disagree	Neutral	Agree	Str. Agree	Mean	T2B	T1B
A color-change from green to red is a useful visual cue	2%	0%	12%	29%	56%	4.34	85%	56%
I store leftovers in the fridge	2%	0%	6%	35%	58%	4.50	93%	58%
I often throw away food	2%	12%	8%	40%	38%	4.00	78%	38%
I want to keep track of freshness of my food	2%	0%	12%	40%	46%	4.28	86%	46%
The size of the sticker is appealing	2%	2%	33%	29%	35%	3.96	64%	35%

## Consumer Problem

- Consumers want to keep track of the freshness of their food (**86% T2B**), but find themselves throwing away food often (**78% T2B**).
- People expressed the desire to monitor their food freshness, highlighting a market opening for a feasible solution.

## What Consumers Want

- People demanded for a low-effort and visually stimulating cue to use up their leftovers, as the (**93% T2B**) of respondents noted they often store leftovers in the fridge.
- This connects with respondents noting that a color-change from green to red would be a useful visual cue (**85% T2B**).

## Why TupperSticker Fits

- Respondents noted that they want to keep track of the freshness of their food (**86% T2B**), and felt that a green to red visual cue would be useful in doing this (**56% T1B**).
- Users respond positively to clear, easy-to-understand feedback on food status.

## Challenges to Address & How TupperSticker Helps

- These scores in combination can help with food waste, as respondents noted they often throw away food sitting in their refrigerator (**78% T2B**).
- Respondents felt this visual cue was helpful (**56% T1B**), but did not think that the size of the sticker was appealing (**35% T1B**), addressing this problem might help drive purchase intent.

**Conclusion:** TupperSticker addresses the consumer problem of food-freshness tracking, but necessary changes to the size of the sticker would need to be made in order to help further leverage the visual cue.

# Lead Idea: ThermaWare

## Concept A: ThermaWare

### Key Results

- Strong scores on freshness tracking and color cue.
- Adoption concerns were neutral and fixable.

Conclusion: Relevant, reusable, and aligned with waste-reduction goals. Adoption and believability needs to be addressed.

## Concept B: TupperSticker

### Key Results

- Higher purchase intent mean, but many strong disagreements.
- Feedback: “\$30 for six one-time stickers is expensive.”

Conclusion: Visibility issues limit its ability to solve the core problem. One-time use and price conflict doesn't align with customers food waste problem.

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## Decision: Advance ThermaWare

Rationale: ThermaWare is more visible, reusable, and better aligned with the main problem of forgotten food, showing stronger fit to customers needs. TupperSticker issues are fundamental, while ThermaWare's weaknesses are fixable with design and positioning.

### Optimization Based on Test Results

- Improve clarity on containers to boost believability.
- Strengthen value perception with better materials to help adoption rate.
- Spotlight freshness tracking and color cues as key motivators when marketing.