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Changing Behavior to Reduce Wasted Food in North American Homes:

Camp Waste Not

Case Study to Accompany the Guide for Practitioners

Worksheet 1

Step 1: Define the Behavioral Problem

Step 1: Define the Behavioral Problem

Before designing solutions, it is essential to be clear on what you are trying to change and who you are trying to influence. This worksheet will help you define the specific behavior(s) you want to change and identify the audience you most need to reach. Then, using an Impact/Feasibility matrix, you will explore which opportunities offer the greatest potential and are most realistic to deliver. By the end of this activity, you will know where to focus your efforts, making it easier to design interventions that really work.

Clarify the behavior and audience

Use this table to work through the steps that will help you clarify the specific behaviors and target audience for your intervention planning.

What specific behaviors are you targeting?	Using up the broccoli stalk instead of throwing it away	
	Using the egg float test as a way to test freshness rather than relying on the date on pack	
	Storing leftovers correctly to use them instead of waste them i.e. by labelling them and using within 4 days	
	Trim sprouted potatoes and use them instead of throwing them away	
	Use your senses e.g. taste and smell to check if milk is okay to consume rather than relying just on the date on pack	
	Within schools, to encourage children to only take milk when they want it (not as a standard)	
Who needs to do what? ***Think about*** *which groups of people you will need to engage with to target the behavior. Will you be working with citizens, and if so, which groups/ segments? Do you want brands or retailers to take action? Could out-of-home food outlets play a role? Might there be a need to involve product developers, resident groups, indigenous communities or religious groups, schools, local government...? And of course, you will likely also need to work with funders.*	Who Retailers	What Encourage citizens to make the most of the food they buy
	Who Citizens	What Change their behaviors to make the most of the food they buy
	Who Local government i.e municipalities	What Amplify the message
	Who Schools	What Teach students to only take food and drink they are likely to consume

The next step is to use the Impact/Feasibility matrix below to help you decide which specific behaviors you want to target

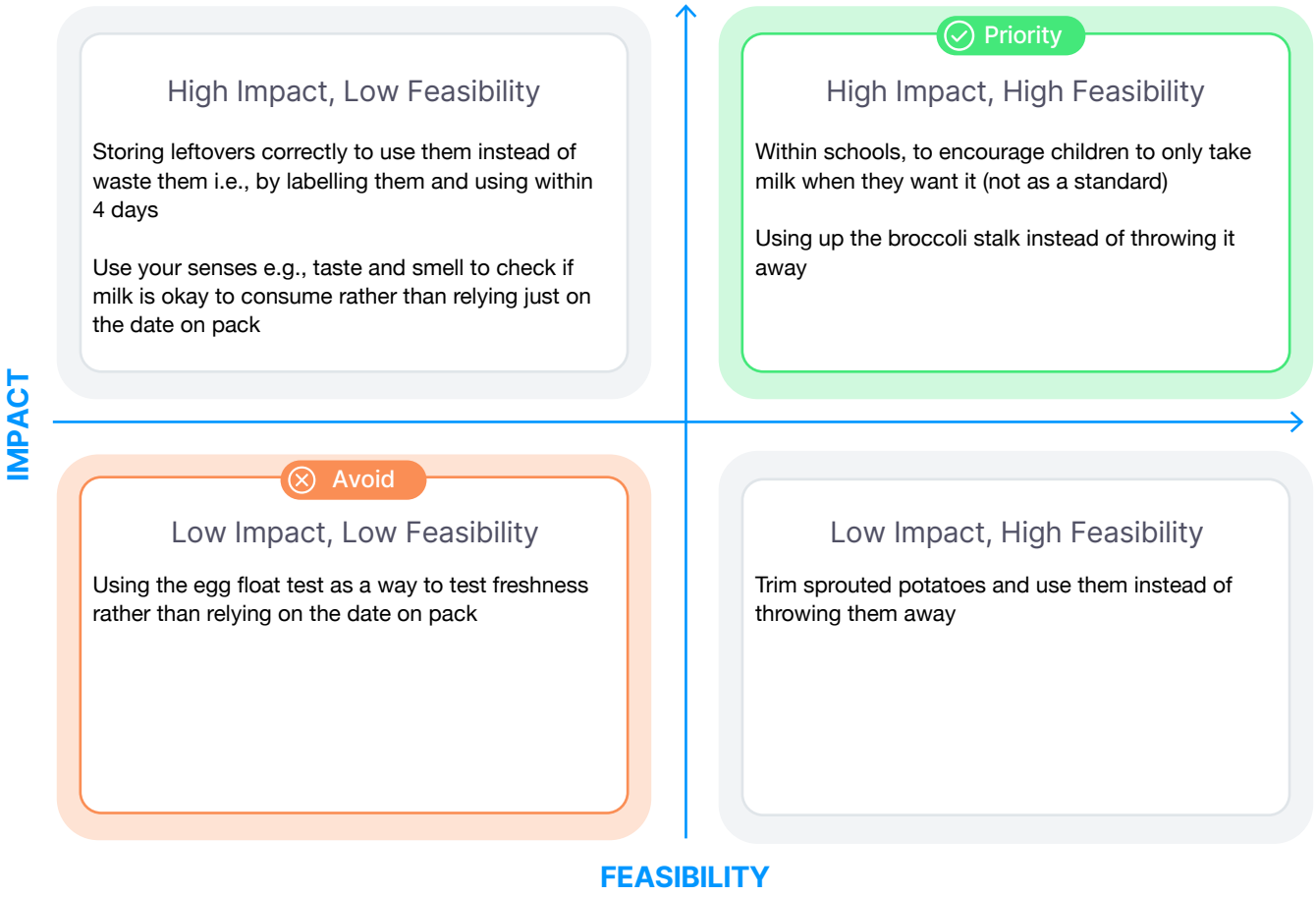
Impact/Feasibility Matrix

What behaviors are high impact and feasible to change?

An Impact/Feasibility matrix is a tool to help you prioritize actions and compare ideas based on their potential impact and ease of delivery. By mapping your ideas on the matrix, you can identify which opportunities present quick wins, which require more-detailed planning and which might not be the best use of resources.

Plot each of your specific behaviors identified in the table above onto this Impact/Feasibility matrix. Some behaviors might be hard to influence but would make a huge difference if you do influence them—plot these in the top left "High Impact, Low Feasibility" quadrant of the chart. Other behaviors might not make a big difference, but they might be very easy to influence—plot these in the bottom right "Low Impact, High Feasibility" quadrant. There might be several of these whose impact individually might be small but becomes worthwhile when you can target several of them easily. Some high-impact behavior changes might also seem very easy to target—these go in the top right quadrant and become your priority areas for intervention planning. The ones to avoid are those you put in the bottom left quadrant, because they would be hard to influence and don't make a huge difference to the overall behavioral challenge.

The completed examples might help you get started.



Next, use the chart below to think about the target audience for your interventions. The completed examples might provide inspiration.

Target Audience Use the 'Who', 'When', 'Where' and 'Why' boxes below to consider your target audience for your intervention planning.			
Who do you want your intervention to target?	**When** is the best time to target them?	**Where** can you reach them?	**Why** do you want to target this group?
E.g.: Households with children	Through their children at evening meal time	Science homework tasks.	High wasting group (8.5. cups per week compared to 6.2)
Schoolchildren	Lunch time service in schools	In their canteens	Milk is highly wasted in schools
Those who rely on date labels to discard food	In the home	In their homes e.g. fridge	Those who rely on date labels were found to be higher wasters of food in WRAP primary research
Those less 'risk averse' to using up leftovers	In the home	In their homes e.g. on fridge, on their Tupperware	WRAP research found many people were throwing away leftovers (instead of eating them) within 1-2 days of being cooked

Great work on completing worksheet 1.

You will use the target behaviors and audiences you defined here when you move on to Step 2. There, you will review what you know about the behaviors and audiences, identify the knowledge gaps and then develop your **Theory of Change** and create your **Behavior Change Strategy.** Let's go!

Your progress:

Worksheet 2

Step 2: Diagnose the Behavioral Change

Step 2: Diagnose the Behavioral Challenge

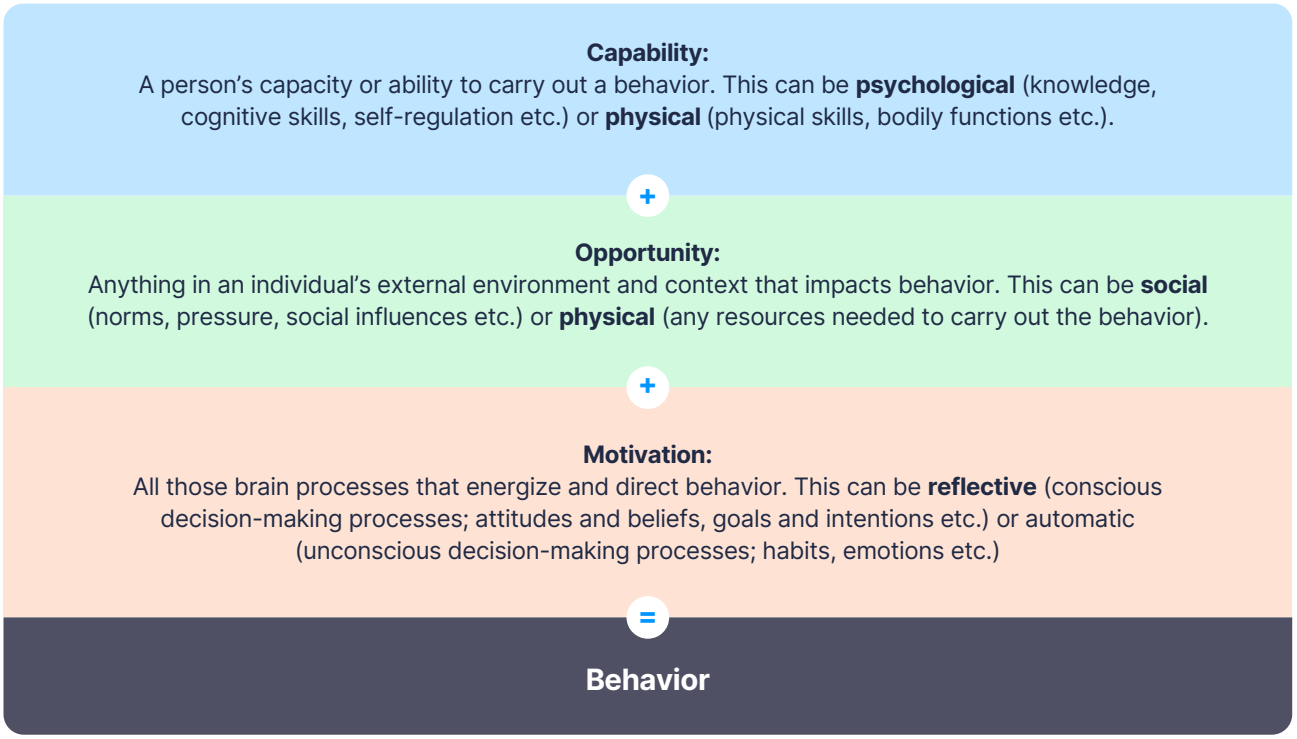
Part 1 – Review insights and identify the gaps

This worksheet is designed to help you reflect on what you already know and determine whether additional research is needed to fill any knowledge gaps. It includes a COM-B 1 table and a set of questions to help you identify barriers that prevent people from performing the target behavior. This process supports the design of interventions that focus on what is truly needed to make the behavior possible.

What is COM-B?

COM-B is an aid to understanding what needs to be in place for a behavior to occur. It explains that behavior (B) is influenced by three factors: Capability (C), Opportunity (O), Motivation (M). See the definitions below.

Applying the COM-B model



Target Behavior and Audience:
You defined these in Worksheet 1. You can use Worksheet 2 for each specific behavior/audience combination.

Answer the prompts in the table below using your existing knowledge and available research.

Capability	Opportunity	Motivation
What **interpersonal skills** do they need to perform the behavior?	Do they have the **time** and/or **space** to do the behavior?	Is any part of the behavior **habitual?**
N/A	Yes, as long as they are already using fresh, uncut broccoli.	
What **decision-making** and **judgement skills** do they need to undertake the behavior?	Do they **see others modelling** the behavior?	What role does emotion play in facilitating or preventing the behavior?
Understand that broccoli stalks are safe and nice to consume.	Not necessarily as it is more normal to not use the stalks.	
What **self-regulation skills** do they need to carry out the behavior? Do they need repeated prompts to **maintain attention?**	How do they **think others will perceive** the behavior?	Is the behavior linked to an individual **sense of identity?**
N/A	Probably strange as it is normal to throw away broccoli stalks	

Capability

What do they **need to know** in order to perform the behavior?
Do they know it?

As above, they need to understand that broccoli stalks are safe and nice to consume.

Does **conflicting information** make it hard to know what is 'right'?

It is more common to not use the stalks (and sometimes it is sold without e.g. when frozen) which normalizes not eating them.

Opportunity

Is the behavior **seen as a normal thing** to do? Is it seen as **specific to certain groups?**

Not normal. Unsure if it is specific to certain groups.

How is their behavior **influenced by the behavior of others?**

Influenced by modelling especially if younger and they are learning cooking skills from others in the household.

Do they have the **tools or other resources** required to do the behavior?

Yes, but might need recipes or cooking tips.

What in the **environment** around them **triggers the behavior?**
Or whose absence in the environment might trigger it?

Cooking for yourself or others (some may not be open to the idea).

Motivation

Does the person **want to do** the behavior?

Yes, as it's a very easy behavior, but people would need convincing to give it a try.

Does the person **believe** they can do the behavior?

As above

Struggling to answer the prompts?
If a prompt is difficult to answer, note it as an area for further research in the table below. Record how you'll gather the information. There is a column for you to add in your new insights once you've found them.

Pull out the areas for research into the table below and note down how you can obtain the research. There's a column for you to add in your new insights once you've found them.

New insights			
COM-B area	**What do you need to know?**	**How to find this information?**	**What did you learn?** Add in your new insights once you've carried out your research.
Capability			
Psychological Capability	N/A		
Physical Capability	Whether people have cooking skills.	Asking the campaign target group through surveying.	
Opportunity			
Social Opportunity			
Physical Opportunity	Recipes	Working with external contractors.	
Motivation			
Reflective Motivation			
Automatic Motivation	How many people use/throw away the stalk habitually.	Asking the campaign target group through surveying.	

Great work on completing worksheets 1 and 2.

Once you have gathered your new insights you can come back to this worksheet and add in what you've learned. You will then use the information in the first two worksheets (including your new insights) in Worksheet 3 where you will finish Step 2 to develop a Theory of Change and create a Behavior Change Strategy.

Your progress:



Worksheet 3

Step 2: Diagnose the Behavioral Change

Step 2: Diagnose the Behavioral Challenge

Part 2 – Develop a Theory of Change and Create the Behavior Change Strategy

Continuing through Step 2, you will diagnose the behavioral challenge so you can design the right solution. In this worksheet, you will explore your behavioral objective in depth, break it down, and use a Theory of Change to map how and why your intervention will work. By the end, you will have a clear, evidence-based understanding of what needs to change, why it matters, and some strategic ways to make that change happen.

Use the content from Worksheets 1 and 2 to help you complete the tables below.

Behavioral Objective
What is the overall change you need to see?
Influence people's ability and confidence to assess edibility (and act on their assessment) to avoid throwing away wasted food. Specifically, using up the broccoli stalk instead of throwing it away.

What specific behaviors make up the problem?			
Who needs to...?	Do what differently?	When?	Where?
Citizens (cooking)	Use/cook with the stalks instead of throwing them away	When cooking	At home
Citizens (eating)	Eat the stalks instead of discarding them	When eating	At home
Retailers/ manufacturers/ grocery outlets/farmers' markets	Encourage citizens to use the stalk e.g. through on-pack labelling	When citizens are looking at the pack, or purchasing the broccoli	When displaying / preparing produce for sale

Theory of Change

- In Box 1 of the Theory of Change table below, describe the behavioral problem.
- Next, in Box 4, outline the impact you are aiming to achieve.
- Using the list of priority behaviors from Worksheet 1, complete Box 3 and any additional boxes below it, to state the medium-term outcomes that you expect will lead to the overall impact.
- Finally, in Box 2 and the boxes below, identify the interventions that will contribute to each outcome.
- You may find that sometimes you list the interventions in Box 2, before adding the outcomes in Box 3. That's fine, just ensure that Box 2 leads to Box 3, which leads to Box 4, ultimately addressing the problem defined in Box 1.

Behavioral problem	**Box 1:** Define the problem Citizens throwing away broccoli stalks instead of using/eating them

Intervention	**Outcome**	**Impact**
Box 2: Describe your intervention:	**Box 3:** What change do you want to see as a result of the intervention? For example, what do you want people to do differently?	**Box 4:** What is the overall impact of successful outcomes of the combined interventions? Stalks are used instead of being thrown away –meaning all parts of the broccoli are used and there is less food wasted as a result. People may be motivated to start using other seemingly inedible parts such as potato skins, carrot tops, etc.
Intervention: Fridge magnet which prompts people to use up the stalks.	People are reminded at the time of cooking to use their broccoli stalks.	
Intervention: Recipe cards for the following foods using broccoli stalks: coleslaw, pesto and soup	People are inspired by the recipes to use their broccoli stalks	

Worked example:

Behavioral problem	People often prepare vegetables so that only part is consumed, while the rest, though edible, is thrown away.

Intervention	Outcome	Impact
E.g., Display information/recipes at point of sale, telling people that vegetable stalks, leaves and stems, like broccoli stalks, cauliflower leaves, and cilantro stems, are edible and nutritious	More people learn that vegetable stalks, leaves and stems, like broccoli stalks, cauliflower leaves and cilantro stems, are edible and nutritious.	People start to use edible parts of vegetables, like broccoli stalks, cauliflower leaves and cilantro stems, rather than throw them away.
E.g., Work with food service providers/chefs to create and serve recipes that use edible parts of vegetables, like broccoli stalks, cauliflower leaves and cilantro stems, that people often throw away.	More people get to see and taste edible parts of vegetables, like broccoli stalks, cauliflower leaves and cilantro stems, that people often throw away in trendy recipes.	
E.g., Provide cooking demo videos of celebrity chefs using edible parts of vegetables, like broccoli stalks, cauliflower leaves and cilantro stems, in their recipes.	People are motivated to try recipes that use edible parts of vegetables, like broccoli stalks, cauliflower leaves and cilantro stems.	

Behavior Change Strategy

A Behavior Change Strategy is a clear plan for helping people make positive changes in what they do by understanding what makes those changes easier or harder.

1. Behavioral Objective	What exactly should people be doing differently? This gives you a specific description of the behavior(s) to be changed (copy this in from Worksheet 1).	Using/cooking with/eating broccoli stalks instead of throwing them away.
2. Target Audience	Which people should do something differently? Include information, if available, such as understanding how and where to engage with and reach specific groups or segments (copy this in from Worksheet 1).	Anyone who regularly eats broccoli and does not already use the stalks.
3. Summarize Insights and Implications	What do you know about the behaviors and audiences? What are the behavioral barriers and enablers. Describe what you know and what this means for your intervention design and your delivery plans.	We already know that it is more normal to not use the stalk.
4. Theory of Change	Summarize the theory of change you developed above to keep this in mind throughout the next steps in the process. This could include a summary of any key assumptions and risks.	People are provided with visual prompts and recipe inspiration to use up their broccoli.They use these interventions and less broccoli is wasted as a result.
5. Techniques and Principles	Which types of behavioral techniques could be useful? Keep to those that are feasible within your project (but you might want to make a note of others that are outside your control—e.g., policy change or legislation—for future reference). See section 4.4 of the guide for inspiration.	Memory short cuts/ Salience: having the fridge magnets at the point of food prep/ cooking captures people's attention.
6. The Delivery Approach	Ideas for delivery partners, channels you might use, budget allocations, timelines, etc.	Municipalities, community events, NGO partners and retailers can hand out the interventions.
7. Monitoring and Evaluation Plan	Ask "what does success look like?" (your Key Performance Indicators, or KPIs) and think about how you can measure this.	Ideally measured waste. If not possible, surveys before and after asking about knowledge and behavior around the edibility of broccoli stalks. Success is if more people know the stalks are edible and use/eat them.

Great work on completing Worksheet 3.

You have identified the challenge, through Step 1 and Step 2. Now you are ready to start creating the solution, in Step 3.

Your progress:



Worksheet 4

Step 3: Design the Solution

Step 3: Design the Solution

Part 1 – Intervention Ideation

Let's get creative! This worksheet helps you think about which types of interventions you might want to choose from as possible solutions to your behavioral challenge. Different intervention types are included below as well as the pros and cons of each type and the key considerations for how to make the best of them.

By the end of this worksheet, you will have worked out what types of intervention best suit your challenge and you will have gathered some inspiration from which you can adapt and create your own interventions. Then you will be ready to stress-test your ideas and create your shortlist.

Intervention types and examples

Education and Training



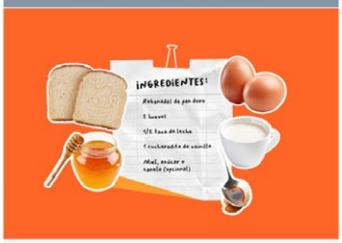
- Cooking skills classes
- School programs to highlight importance of not wasting food
- Food preparation demonstrations
- Food storage tips

Communications and Messaging



- An awareness campaign such as *Love Food Hate Waste* (Canada)
- Billboards or posters
- Newsletters or direct mail
- Magazine articles

Engagement / Modeling / Norms



- Using influencers (e.g., chefs) to show or serve recipes that reduce waste
- Showing progress of a community against a reduction target

Service and Process Design



- A community fridge or share table to share unwanted food
- Smaller plates in canteens or buffets

Product and Packaging Design



- Packs with smaller compartments and "cook half / freeze half" label
- Food sharing app
- Meal planning tool
- Fridge contents reminder chart

Policy and Legislation



- Setting food waste reduction targets
- Clarifying date labels
- Clean-plates policies in schools
- Fines for leaving plate waste at self-serve buffets

Intervention types and how they compare

$: low-cost intervention-type **$$:** medium-cost intervention-type **$$$:** high-cost intervention-type
?: low effort/complexity **??:** medium effort/complexity **???:** high effort/complexity.

Education and Training	Communications and messaging	Engagement / Modeling / Norms
Pros	**Pros**	**Pros**
Builds knowledge, confidence, practical skills; increases motivation and capability.	Useful to support general awareness-raising and education, which reinforces other actions.	Boosts awareness and social norms as motivation.
Cons	**Cons**	**Cons**
Behavior change may fade without reinforcement or supporting systems	Unlikely to cause significant and lasting behavior change shifts on its own.	Short-lived impact if not consistent or paired with other actions.
Top Tips	**Top Tips**	**Top Tips**
Make it hands-on and relevant; use trusted educators; link to real-world benefits (saving money, reducing waste).	Keep tone consistent; use emotional appeal; customize to audience; needs to be well-timed.	Use trusted messengers & influencers; highlight progress; give opportunities to highlight popularity.
$$ **??**	**$** **?**	**$$** **??**

Service and Process Design	Product and Packaging Design	Policy and Legislation
Pros	**Pros**	**Pros**
Offers practical help, improves infrastructure; can disrupt.	Creates novelty; opportunity to increase convenience.	Drives system-wide change; creates lasting impact through accountability.
Cons	**Cons**	**Cons**
Needs funding & operational support / stakeholder collaboration	May be costly, requires stakeholder collaboration.	Takes time to implement; relies on enforcement and political will.
Top Tips	**Top Tips**	**Top Tips**
Must ensure need; best with local engagement.	Must meet real needs, ensure affordability, consider if food waste framing helps or hinders uptake.	Align with national and local goals; ensure fairness and feasibility; pair with communications to support compliance.
$$$ **???**	**$$$** **???**	**$$$** **???**

Use this table to help you decide which intervention types could be helpful.

Intervention Type	✓ — or — ✗	Who, What, When?	Intervention Type	✓ — or — ✗	Who, What, When?
Education and Training: Providing information to build knowledge or skills to build capabilities.	✓	Who: retailers What: educate people that broccoli stalks are edible and show people tasty ways to use them. When: at point of purchase with a take home e.g., recipe card.	**Service and Process Design:** Adjusting the system and environment to make a desired behavior easier and more convenient.		
Communications and Messaging: Telling and showing people how to behave by raising awareness or framing a narrative.	✓	Who: Campaign team What: Messaging to remind people broccoli stalks are edible When: a timely nudge at point of preparation / cooking of broccoli stalks. E.g., on fridge.	**Product and Packaging Design:** Making changes to build in system enablers—e.g., ease, convenience, price—to make to make the desired behavior more likely.	✓	Who: campaign team What: Develop a fridge magnet that reminds people to use their broccoli stalks instead of throwing them away. When: These can be given out at a variety of events.
Engagement, Modelling and Social Norms: Engagement campaigns with shared mission; community participation; influencer demonstrations, forums.	✓	Who: Campaign team What: Online campaign, hosted on a microsite with accompanied social media shared by the campaign delivery partners.	**Policy and Legislation:** Making changes (or advocating for them) that will penalize undesirable behaviors and reward desirable ones.		

Now you've selected your intervention types, drop in your favorite examples to the table below.

Intervention Type	Education & Training	Communications and Messaging	Engagement, Modelling and Social Norms	Product Design
Who, what, when	Who: retailers What: recipe cards to educate people that broccoli stalks are edible and show people tasty ways to use them. When: at point of purchase with a take home	Who: Campaign team What: Fridge Magnet to remind people broccoli stalks are edible When: Fridge magnet gives a timely nudge at point of preparation / cooking of broccoli stalks.	Who: Campaign team What: Online campaign, hosted on a microsite with accompanied social media shared by the campaign delivery partners.	Who: campaign team What: Develop a fridge magnet that reminds people to use their broccoli stalks instead of throwing them away. When These can be given out at a variety of events.
Examples for inspiration (Add a description or a link)	Videos by Chef Mariana Orozco Recipe Cards by LFHW	M MORCART 93 Food Magnets for Fridge - Repeatable Visual Shopping List, Refrigerator Inventory Easy Tracking on Amazon https://www.amazon.co.uk/Mama- Kitchen-96PCS-Refrigerator-magnets/ dp/B08HMJ2FFX	Love Food Hate Waste Canada website - has a recipe section.	See column 2
What you like about these examples	Recipes help with social norming. Good influencer opportunity.	You see it every time you go to the fridge.	Good way to present recipe ideas.	Very visual and easy to understand. Right time and right place.
What you will change/add to adapt for your needs	Find recipes specific to broccoli stalks.	Design it up to look more visually appealing and provide more directions (via words) as prompts rather than relying just on the image.	Encourage recipe sharing and use of influencers.	Design it up to look more visually appealing and provide more directions (via words) as prompts rather than relying just on the image.

Great work on completing Worksheet 4.

You are getting to your solutions with a list of your favorite ideas. Next step is to build your ideas and then stress-test them, using Worksheet 5. Let's see how they do!

Your progress:



Worksheet 5

Step 3: Design the Solution

Step 3: Design the Solution

Part 2 - Using EAST and MINDSPACE to create impactful interventions

Well done, you are now halfway through the worksheets!

This worksheet helps you stress-test your ideas from Worksheet 4, using a checklist and guidance on how to apply the EAST and MINDSPACE frameworks to your intervention design. By the end of this worksheet, you'll have a clearer idea about how to make your intervention as impactful and effective as possible. Use this worksheet for each intervention idea developed in Worksheet 4.

EAST

The EAST framework is a helpful tool for designing behavior change interventions. Using the EAST prompts can help you assess interventions and shortlist the ones that are likely to have the most impact. This tool can also help you shape a particular intervention to improve its effectiveness.



Easy
Make the desired behavior as simple and convenient as possible.



Attractive
Grab attention and highlight the benefits clearly.



Social
Show that others are doing it, to create positive social pressure.



Timely
Prompt people when they are most likely to act or make decisions.

List your potential interventions and note down how each one meets the four EAST requirements.

Intervention	Easy?	Attractive?	Social?	Timely?
Fridge magnet	Yes – simply asking people to use their broccoli stalks	Yes – designed around the theme of camping badges (Camp Waste Not) Collectibility.	Yes, through theme of camping badges collectibility via sticker sheet and through microsite. social posts.	Yes – on the fridge where broccoli should be stored.
Recipe Cards	Yes – as long as the recipes are simple.	Use quality images alongside recipes. Consider cookery demos / tastings.	Could use influencers and recipe sharing via microsite	Opportunity to display recipes in store by produce.
Microsite	Yes – 5 easy actions brought together	Well designed and themed with the idea of collectable badges.	Through social posts and idea that people talk about which badges they have.	Launch in time for Summer camp season.

MINDSPACE

The MINDSPACE framework is a helpful tool for designing behavior change interventions. Using the MINDSPACE prompts can help you assess interventions and shortlist the ones that are likely to have the most impact. This tool can also help you shape a particular intervention to improve its effectiveness.

Intervention	Briefly describe your intervention here: A fridge magnet that reminds people to use their broccoli stalks instead of throwing them away. These will be given out at a variety of events.

Now answer the questions below

Who is the (trusted) **Messenger?**	WRAP and the project partners — municipalities, We Don't Waste (NGO), Sprouts (grocery chain) and schools reaching a wide range of people
What **Incentives** does it offer?	The campaign emphasizes money saved by making the most of food; the campaign also offers 'scout badges' for people to collect.
What social **Norms** does it tap into?	Changes social norms, by as it is more showing the specific behaviors in the campaign as 'socially acceptable' through the club feel of 'Camp Waste Not' and the feeling of we're all doing this together.
Is the desired behavior the **Default?**	Aiming to switch the default through the badge scheme, with the award of the badges implying default behavior.
Salience: How will it grab people's attention and make the issue feel relevant to them?	The overarching campaign will be developed around the idea of a camp called Camp Waste Not. Camping is popular in Denver for both adults and children. The magnet will be designed like a summer camp badge.
Are you tapping into subconscious cues to help with **Priming?**	Through strong visual branding and linking to the Scout movement and badge system with fridge magnets acting as a timely prompt.
Affect: Are you appealing to people's emotions?	Appealing to the 'collectability' of the badge system. It feels good to add to the collection.
Are you encouraging people to make **Commitments** (pledges, goal-setting etc.)?	Other magnets/badges will be created for other behaviors around assessing edibility (e.g. using sense of smell, instead of date to check if milk can be consumed) and we are encouraging residents to "Become a Camp Waste-Not Food Scout by collecting all five Food Scout badges! Each badge shows one practical, easy habit to help you make the most of your food."
Ego: Are you using techniques to help people feel good when they interact with the intervention?	Potentially, as it is doing something unusual, fairly easy, tasty and saving food and money.

Great work on completing Worksheet 5.

You are now refining your solutions to decide which ideas to take forward to the pilot stage. Soon, you will move on to Step 4 – Deliver!

Your progress:



Worksheet 6

Step 3: Design the Solution

Step 3: Design the Solution

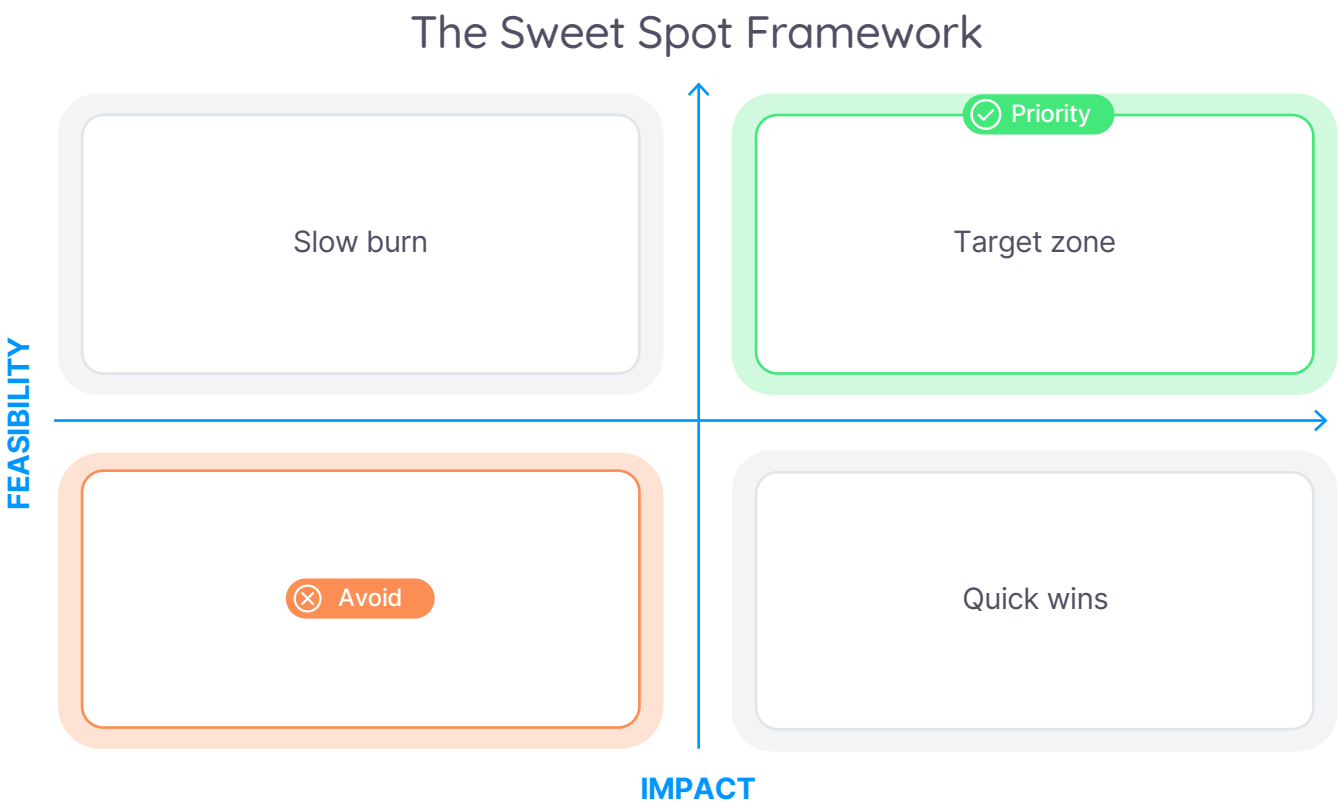
Part 3 - Intervention Shortlisting

This worksheet helps you decide which interventions to take forward to pilot stage. Building on the process in Worksheets 4 and 5, by the end of this worksheet you will have identified which ideas to pilot.

Selecting interventions is both art and science. While interventions scoring high on both impact and feasibility typically offer the best opportunities, your final choices should align with available resources, partnerships, budget constraints, and timeline requirements.

Consider your strategic approach: Are you seeking immediate quick wins to build momentum, or are you prepared to invest more time and effort to achieve transformational results? Both approaches have merit—your choice will depend on your context and goals.

Use the scoring guide and optional deep dive questions below to inform your evaluation process and team discussions or apply the systematic score option. Either approach will help guide you to prioritize intervention ideas and determine which are most suitable to take forward.



Your Goal: Aim for interventions in the top-right quadrant (high impact + high feasibility).

List Your Intervention Ideas

Write down all the intervention ideas you want to evaluate (aim for 3–8 ideas).

Select these from the ideas you stress-tested in Worksheet 5.

Intervention ideas:

1. Fridge Magnet & Microsite	2. Recipe Cards
3.	4.
5.	6.
7.	8.

Score Each Intervention

For each intervention, rate it using:

3 = High (Very good/feasible) 2 = Medium (Okay/some concerns) 1 = Low (Poor/major concerns)

Scoring Table:

Intervention	Time	Cost	Wind Conditions	Impact	TOTAL
1. Fridge Magnet & microsite	3 / 3	3 / 3	3 / 3	2 / 3	11 / 12
2. Recipe Cards	3 / 3	3 / 3	2 / 3	2 / 3	10 / 12
3.	/ 3	/ 3	/ 3	/ 3	/ 12
4.	/ 3	/ 3	/ 3	/ 3	/ 12
5.	/ 3	/ 3	/ 3	/ 3	/ 12
6.	/ 3	/ 3	/ 3	/ 3	/ 12
7.	/ 3	/ 3	/ 3	/ 3	/ 12
8.	/ 3	/ 3	/ 3	/ 3	/ 12

Scoring Guide/ Guiding Questions

TIME
Can this be completed in your required timeframe?

- 3 = High (Definitely achievable on time)
- 2 = Medium (Tight but manageable timeline)
- 1 = Low (Not enough time available)

COST
Are the financial, human, and other resources available?

- 3 = High (All resources readily available)
- 2 = Medium (Most resources available, small gaps)
- 1 = Low (Major resource gaps or too expensive)

WIND CONDITIONS
What external factors might help or hinder this?

- 3 = High (Strong support from policies/ partners/timing)
- 2 = Medium (Some support, neutral conditions)
- 1 = Low (Significant barriers, opposition, or poor timing)

IMPACT
Will this achieve your desired outcomes?

- 3 = High (Very likely to create meaningful change)
- 2 = Medium (Moderate potential for impact)
- 1 = Low (Limited potential for impact)

Optional Deep Dive (APEASE Check)

For your top 3 scoring interventions, consider these additional factors:

Factor:	Intervention # 1 Magnet	Intervention # 2 recipes	Intervention # ___
Acceptability (Will people accept it?)	High | **Medium** | Low	High | **Medium** | Low	High | Medium | Low
Practicability (Can it be delivered?)	**High** | Medium | Low	**High** | Medium | Low	High | Medium | Low
Effectiveness (Will it actually work?)	High | **Medium** | Low	High | **Medium** | Low	High | Medium | Low
Affordability (Sustainable long-term?)	**High** | Medium | Low	**High** | Medium | Low	High | Medium | Low
Side-effects (Unintended consequences?)	Few | Some | **Many**	Few | Some | **Many**	Few | Some | Many
Equity (Fair for all groups?)	**High** | Medium | Low	**High** | Medium | Low	High | Medium | Low

Make Your Final Selection

Top 3 Interventions by Score:

1. Fridge Magnet & microsite	11 / 12
2. Recipe Cards	10 / 12
3.	/ 12

Decision Checklist:

- Which interventions scored highest overall?
- Are there any “Low” (1/3) ratings that are deal-breakers?
- What does your gut tell you about feasibility?
- Which aligns best with your Theory of Change?
- Do you have stakeholder buy-in for these options?

Final Shortlist to Move Forward:

1. Fridge Magnet & microsite
2.
3.

Document Your Decision

Why did you select these interventions?

Low risk, low cost and easy to deliver. It is a seemingly simple behavior change however unsure how ‘acceptable’ people will find it. Magnets are a good visual prompt, and maybe people will come up with their own ideas for recipes. The recipes we develop should be easy to prep and cook but there is no guarantee people will use or like them.

Document Your Decision (cont.)

What are the main risks or concerns?

Mainly that people will not use the printed recipes. But, it could prompt them to try their own recipes.

Next steps:

Design the magnets in English, and translate a smaller number to Spanish.

Pro Tips for Success:

- Include diverse voices: Get input from different stakeholders and team members
- Be brutally honest: Don't inflate scores—realistic assessment saves time later
- Trust the process: If an idea scored low, there's usually a good reason
- Quality over quantity: Better to execute fewer interventions well than spread resources thin
- Document everything: Your reasoning today will be valuable for future reviews

Remember: The "perfect" intervention rarely exists. Choose interventions that are good enough to start, with room to learn and adapt.

Great work on completing Worksheet 6.

Now you know which interventions you want to pilot, you are ready for Step 4 – Deliver!

Your progress:



Worksheet 7

Step 4: Deliver a Pilot

Step 4: Deliver a Pilot

Part 1 – Your Delivery Plan

This worksheet guides you through the key points you need to think about for successful pilot delivery, so you can feel confident about your plans and roles of responsibility and timelines.

In your delivery plan, it helps to know the following:

- **Who** is involved.
- **What** each person needs to do.
- **When and where** they need to do it.
- **Why** they need to record what happens.
- **How** the information they record will be used.

Delivery plan for intervention pilot:

Add the name and brief description of your intervention.

Influence people's ability and confidence to assess edibility (and act on their assessment) to avoid throwing away wasted food. Specifically, using up the broccoli stalk instead of throwing it away. A magnet and recipe card will be developed. The recipe will be demonstrated at cooking demos in Sprouts retailers.

Who will be involved?

Add the people or groups of people who will be involved. Include those receiving as well as delivering the intervention.

A	B	C
Sprouts Grocery Store	We Don't Waste (NGO)	Denver citizens

Task 1. Plan

What? Give out the magnets	**What?** Give out the magnets	**What?** Receive the magnets
Where? In-store	**Where?** In a Sprouts store	**Where?** In a Sprouts store
When? Across specified dates	**When?** Across specified dates	**When?** Across specified dates
Why? To engage with citizens at point of purchase	**Why?** To engage with citizens at point of purchase	**Why?** So they engage with the intervention

Important for evaluation: *

Note down anything that happened differently.

Task 2. Plan

What? Provide a space for We Don't Waste to do cooking demos of broccoli stalks	**What?** Host cooking demos	**What?** Engage with the cooking demos
Where? In-store	**Where?** In a Sprouts store	**Where?** In a Sprouts store
When? Across specified dates	**When?** Across specified dates	**When?** Across specified dates
Why? So We Don't Waste can engage with citizens at point of purchase.	**Why?** To normalize the behavior.	**Why?** To taste the broccoli stalks and begin see the behavior as normal.

Important for evaluation: *

Note down anything that happened differently.

What? Point citizens into the direction of the campaign and encourage them to engage with the survey.	**What?** Point citizens into the direction of the campaign and encourage them to engage with the survey	**What?** Engage with the campaign materials online and take the pre and post survey.
Where? In-store	**Where?** In-store	**Where?** In-store initially, and then continued after.
When? Across specified dates	**When?** Across specified dates	**When?** Across specified dates, and then continued engagement after
Why? To promote the campaign and evaluation materials	**Why?** To promote the campaign and evaluation materials	**Why?** For the campaign to have lasting success and to be evaluated

Important for evaluation: *

Note down anything that happened differently.

What does each group of people need to record or measure and how will this information be used?

(Note: intervention participants may not be recording anything—which is important information in itself.)

Recording/Measurement

How many magnets given out.	How many magnets given out, how many people at the cooking demos, also asking We Don't Waste to do a "hands up" activity e.g. "put your hands up in you think broccoli stalks are edible"	WRAP is developing a survey that will be hosted online and accessed via a QR code. Citizens will be encouraged to scan this and answer questions on knowledge, attitudes and behavior, then be emailed a follow up survey a few weeks later

How this will be used

To record numbers	To assess changes to knowledge after watching the cooking demo	To assess changes to knowledge, attitudes and behavior before and after the campaign.

*Sometimes obstacles arise and plans need to change. This is perfectly normal! To evaluate intervention effectiveness, it helps to understand what varied from the original plan and why, as this provides valuable learning.

Great work on completing Worksheet 7.

You're almost ready to deliver your pilot! Just one more action before you do: think about what you want to get out of your pilot and how you will know whether it has been successful. The next worksheet will guide you through this.

Your progress:



Worksheet 8

Step 4: Deliver a Pilot

Step 4: Deliver a Pilot

Part 2 – Your Evaluation Plan

This worksheet will help you plan how to measure the success of your intervention. By thinking about the evaluation early, you can ensure you are collecting the right information, in the right way, and at the right time. By the end of this worksheet, you will have a clear plan on what data you need, how to collect it, and how to use it to track progress and learn for the future.

For your evaluation plan you need to:

- Define what success looks like (SMART objectives),
- Refine objectives into Key Performance Indicators (KPIs),
- Check if you can get suitable data,
- Understand the logistical consideration (of getting reliable data),
- Know what you are evaluating.

	Copy this in from **Worksheet 7.**
Delivery plan for intervention pilot	A magnet and recipe card will be developed. The recipe will be demonstrated at cooking demos in Sprouts retailers.

	Copy this in from **Worksheet 3.**
Behavioral problem	Influence people's ability and confidence to assess edibility (and act on their assessment) to avoid throwing away wasted food. Specifically, using up the broccoli stalk instead of throwing it away.

What does success look like?

How will you know if the behavior change has taken place?

What do you want to see? (who, what, when, where)	At least 100(?) people attend the cooking demos. At least 200 recipe cards given out in-store At least 200 magnets given out in-store At least 20 people take the survey (in-store, but over 200 take the survey overall) At least 30% of people who answer the survey say they have changed their behavior.
What is your baseline?	A baseline survey will be sent out to ask citizens what they usually do with their broccoli stalks.
How will you measure movement from the baseline?	With a follow up survey a few weeks later.
How will you attribute movement to intervention? (e.g., is there a control group)	No control group – it will be made explicit in the framing of the questions.

What data do you need to collect?

The table below shows which measurement methods suit which intervention types.

Measurement method	What will be measured	When, how and by whom
Counting	Number of people at cooking demo	At each demo by We Don't Waste
Pre and post surveys (self-reported)	Attitudes, knowledge, and behavior towards broccoli stalks	At start and end of the campaign, using online surveys (scanning QR codes on campaign materials, then emailed), answered by citizens

KPIs - Formulate your key performance indicators in the light of all the above.
At least 100 people attend the cooking demos. At least 200 recipe cards given out in-store At least 200 magnets given out in-store At least 20 people take the survey (in-store, but over 200 take the survey overall) At least 30% of people who answer the survey say they have changed their behavior

Reflections

Come back to this box after delivery of your pilot and note down what happened and what was measured, along with your findings. Keep a note of your costs here too, to help you refine, adapt and scale.

Fewer people attended the cooking demos and answered the survey. But, we were able to pivot to other delivery methods so were still able to gather survey responses and information on behavior change related to the campaign.

Measurement Methods for Household Food Waste Interventions

Measurement Method	Metrics	Best Suited to Intervention Types	Pros	Cons
Pre- and Post-Intervention Surveys	% reporting reduced food waste; % increase in knowledge of storage/meal planning; self-reported kg of waste reduction per week	School and university programs • recreation- and hospitality-sector venues • campaigns, public pledges	Shows change in self-reported attitudes, knowledge, or behavior	Self-report bias; hard to link to actual food waste
Kitchen Diaries / Food Waste Logs/ Measurement Technology (e.g., "smart" bins)	Amount of food waste per household per week; % of food wasted, by type (fruit/veg, meat, bread, etc.); reasons for disposal (e.g., expired, cooked too much)	Home-based interventions • in-home trials • behavior change pilots • community challenges	Tracks day-to-day waste, reasons, and context	Participant burden; prone to drop-off or underreporting; is arguably an intervention in its own right
Food Waste Bin Weighing / Composition Analysis	Weight of food waste collected per household per week; % avoidable vs. unavoidable waste; % food waste as share of residual waste	Home-based interventions (e.g., fridge storage tips, portion guidance)	Direct, objective measurement of food discarded	Labor-intensive; needs careful controls; not feasible at scale
Digital Platform Analytics	# of logins or downloads; time spent on tool; # of recipes/portion calculators used; # of reminders set	Online tools (e.g., portion calculators), supermarket apps, recipe sites	Online tools (e.g., portion calculators), supermarket apps, recipe sites Shows digital engagement and usage patterns	No visibility of offline follow-through at home

Measurement Method	Metrics	Best Suited to Intervention Types	Pros	Cons
Prompted Feedback (e.g., SMS check-ins, follow-up surveys)	% completing check-ins; % reporting action taken since prompt; short-term self-reported waste reduction	• retail receipt prompts • community pledges • event-based campaigns	Lightweight, scalable way to gauge short-term impact	Limited depth; relies on self-report
Semi-structured Interviews / Focus Groups	% mentioning barriers/enablers; common themes on motivators; qualitative insights into unintended impacts	• home cooking classes • food waste ambassador schemes • parent-school programs	Explores motivations, perceived barriers, unintended outcomes	Small samples; may not reflect broader population
Social Media Interaction (likes, shares, comments)	% mentioning barriers/enablers; common themes on motivators; qualitative insights into unintended impacts	• influencer campaigns • awareness drives • viral content	Indicates reach and message resonance	Doesn't confirm real-life behavior change
Proxy Indicators (e.g., food item sales, recipe downloads, meal-planning app use)	Change in sales of "waste-prone" foods (e.g., bagged salad); # of recipe/meal plan downloads; app engagement	• nudges in retail or digital settings • in-store signage	Tracks intent or shifts in purchasing/ preparation habits	May not lead to waste reduction; hard to isolate causal impact
Longitudinal Household Tracking	Amount of food waste per household tracked over, e.g., 6–12 months; % change in waste composition over time; sustained adoption of new behaviors	• deep-dive community pilots • combined education and measurement interventions	Captures sustained change in real settings	High resource demand; needs strong incentives to maintain participation

Measurement Method	Metrics	Best Suited to Intervention Types	Pros	Cons
School or Workplace Spillover Surveys	% of parents reporting child influence on home food habits; % of employees reporting changed practices at home; reported changes in meal planning / shopping	Interventions aimed at children or employees (e.g., lunchbox learning, workplace cafés)	Captures indirect influence on home behaviors	Difficult to isolate or attribute behavior changes

Great work on completing Worksheet 8.

Now you are ready to deliver your pilot! Come back and tell us how it went, with the help of the final two worksheets in this series.

Your progress:



Worksheet 9

Step 5: Adapt and Scale

Step 5: Adapt and Scale

Part 1 – Time to reflect and refine

Congratulations on delivering your pilot! Welcome to Step 5, where you think about how to adapt and scale.

Firstly, it is time to reflect on what went well and what did not go as planned or did not go as well as expected. This information will give you valuable insights to inform future intervention planning and decision-making. By the end of this worksheet, you will have a practical resource for yourself and others, which will outline successes and opportunities for improvement, and show the reasoning behind it.

Intervention Pilot – Lessons Learned and Improvement Planning

Execution	
What went well?	What didn't go well?
Think about the little things as well the more obvious	Think about the little things as well the more obvious
News segment on TV! Use of a canvasser to deliver hundreds of intervention packs to Denver residents Lots of survey respondents (around 300 for pre survey and around 100 for post survey) Delivery partners were engaged	Some of the data in the survey didn't make sense or was not good quality and had to be removed (they were only answering it to receive the incentive) The self-reported food waste data in the survey was not answered very well so we could not measure any impact on food waste Could have provided training to the canvassers delivering the surveys
Resounding successes	Complete disasters
Hopefully there are some of these	Hopefully there are not too many of these, but if there are, it is a great opportunity as they often give rise to great insight and rapid learning.
Use of the canvassers to deliver the packs	Apparently, the school presentations (not mentioned on previous worksheets but were part of the campaign) were quite chaotic!

EAST reflection		MINDSPACE reflection	
Use these frameworks to note down ideas for improvement			
Could it be Easier?	No	**Messenger**	Could use bigger retailers, chefs, influencers. Aim to work with manufactures and add to pre-packed broccoli?
Could it be more Attractive?	No	**Incentives**	Keep pushing the saving money angle – and maybe health?
Could it be more Social?	Possibly	**Norms**	Using bigger 'messengers' will help to normalise the behavior
Could it be more Timely?	No	**Defaults**	As above
Considerations for scaling		**Salience**	Make the campaign relevant to each region
		Priming	Continue as is
		Affect	Make the campaign relevant to each region.
		Commitments	Continue developed magnets for different behaviors (which we have done in the Hamilton work!)
		Ego	Continue as is

Results	
Positive results	Negative results
Think about the little things as well the more obvious	Think about the little things as well the more obvious
In the surveys, the reported changes in attitudes, knowledge and behaviour were positive.	In the surveys, the questions on the reported changes to food waste levels were not answered well – the survey used a matrix question and it was clear that respondents did not see the option changing and instead skipped ahead to the next question
Surprises	Unintended consequences
none	none seen

Performance against Key Performance Indicators

At least 100 people attend the cooking demos – NOT MET At least 200 recipe cards given out in-store – PENDING RESULTS At least 200 magnets given out in-store - PENDING RESULTS At least 20 people take the survey (in-store, but over 200 take the survey overall) - MET At least 30% of people who answer survey say they changed their behavior - PENDING RESULTS, Initial analysis suggests: “In the post campaign survey, 21% of respondents reported that they had cooked with broccoli stalks for the first time since seeing the campaign, and a further 18% reported that they had not yet cooked with broccoli stalks, but they were planning to. This indicates at least a potential change in behavior for 39% of respondents in the second survey.”

Suggested revisions to Key Performance Indicators

Either fewer people at the cooking demos, or a change in how we do the demos (e.g., if it was at a larger store the KPI may have been met.

Suggested evaluation improvements

Training to the canvassers to make sure questions are asked correctly and data is collected correctly. Potentially making all questions/answers mandatory to close the survey.

Opportunities

Great work on completing Worksheet 9.

Just one more step to go!

Your progress:

Worksheet 10

Step 5: Adapt and Scale

Step 5: Adapt and Scale

Part 2 – Telling your story and getting it heard

Dissemination is about ensuring that your findings, outcomes, and lessons reach the right audiences, so that your work creates impact beyond the project itself. This worksheet will guide you in clarifying what you want to share, identifying who needs to hear it, and choosing the most effective ways to communicate it. By the end, you will have a focused, actionable plan to maximize the reach, understanding, and lasting influence of your results.

The story

The problem:
Describe the problem you have set out to solve.

People may not trust their ability to assess whether food is edible for a variety of reasons: over reliance of date labels, a lack of trust of their own senses (e.g., look/smell/taste), leaving leftovers in the fridge unlabeled and not remembering how long they have been in there, and not eating edible foods (such as broccoli stalks, and vegetable peelings) due to perceiving them as inedible. These behaviors could be influenced and changed to reduce household food waste.

The change:
Describe the specific behaviors you were targeting, the target audience and what change you wanted to see.

Influence people's ability and confidence to assess edibility (and act on their assessment) to avoid throwing away wasted food. Specifically: Using up the broccoli stalk instead of throwing it away (focus of the worksheets), Using your sense of smell to test of milk is okay to consume (instead of relying solely on the date label) Using the egg float test to test an eggs freshness (instead of relying solely on the date label), Labeling leftovers and eating them, instead of forgetting them and throwing them away Using sprouted potatoes instead of throwing them away

The intervention:
What did you do? (Include the measurement and evaluation you did.)

WRAP led the campaign and delivered it alongside We Don't Waste, the municipality in Denver, Sprouts grocery store, and Denver public schools. We created a microsite, shared social media posts, magnets related to the above behaviors, recipes cards for broccoli stalks, and Use It Up tape for leftovers. We delivered these in an intervention pack, with a one page information leaflet, to 1,500 residents across Denver (mostly through canvassing but also through our partners). The impact was evaluated through partner feedback forms as well as pre and post campaign surveys for Denver residents.

The results:
What change did you see?

Initial results from the surveys suggest that the largest behavior shifts relate to the eggs, leftovers, and broccoli. There was less reported behavior change relating to milk and potatoes. However, from the data received the impact on self-reported food waste levels was unclear.

The learning:

What did you learn?

The canvassers were great (and vital) in delivering the materials, but not as great in delivering the surveys. However, there could have been many factors at play here.

The recommendations:

What would you do differently next time.

Invest more in the evaluation stage.

The dissemination

Who do you want to tell? How can you best reach audiences and what do you want each to do to act on the information?

Who?	How?	What?
Other cities / municipalities	Networking	Be involved with another pilot
Other funders	Networking	Fund another pilot
Other retailers	Networking	Co-fund and be involved with another pilot

Well done on completing your final worksheet!

Your progress:

