

CEC
CCA
CCE

Changing Behavior to Reduce Wasted Food in North American Homes:

Guide for Practitioners to Understanding How to Design Interventions using Behavior Change Theory

Including Worksheets

Please cite as:

CEC. 2026. *Changing Behavior to Reduce Wasted Food in North American Homes – Guide for Practitioners to Understanding How to Design Interventions using Behavior Change Theory Including Worksheets.* Montreal, Canada: Commission for Environmental Cooperation. 131 pp.

This publication was prepared by WRAP for the Secretariat of the Commission for Environmental Cooperation. The information contained herein is the responsibility of the author and does not necessarily reflect the views of the CEC, or the governments of Canada, Mexico or the United States of America.

About the Author

WRAP is a global environmental action non-governmental organization transforming our product and food systems to create circular living.

Reproduction of this document in whole or in part and in any form for educational or non-profit purposes may be made without special permission from the CEC Secretariat, provided acknowledgment of the source is made. The CEC would appreciate receiving a copy of any publication or material that uses this document as a source.

Except where otherwise noted, this work is protected under a Creative Commons Attribution-Noncommercial NoDerivative Works License.



© Commission for Environmental Cooperation, 2026.

ISBN: 978-2-89700-423-1 (electronic version)

Disponible en español – ISBN: 978-2-89700-425-5 (versión electrónica)
Disponible en français – ISBN: 978-2-89700-424-8 (version électronique)

Legal deposit – *Bibliothèque et Archives nationales du Québec*, 2026
Legal deposit – Library and Archives Canada, 2026

Publication details

Document category: Project publication
Publication date: November 2026
Original language: English
Review and quality assurance procedures:
Final Party review: September 2026
QA 417

Project: Operational Plan 2024, Stimulating Behavioral Changes to Reduce Food Loss and Waste (FLW) in North America and Expanded Promotion and Uptake of Related CEC FLW Resources

Front cover image: istock.com/Hispanolistic

For more information on this and other CEC publications:

Commission for Environmental Cooperation
1001 Robert-Bourassa Boulevard, suite 1620
Montreal, Quebec, Canada, H3B 4L4
Tel.: 514.350.4300; fax: 438.701.1434
info@cec.org / www.cec.org

Table of Contents

List of Figures and Tables 6
Glossary 7
Acknowledgements 9
Preface 10

1.0 About this Guide 11

1.1 What This Guide Is For 11
1.2 Who This Guide Is For 11
1.3 How and When to Use This Guide 11

2.0 What Is Wasted Food and What Causes It? 13

2.1 What Is wasted food? 13
2.2 Prevention versus Diversion 14
2.3 Root Causes of Wasted Food in Homes 14
2.4 How the Food Environment Shapes Behavior 16
2.5 What Food Categories to Target in Interventions 18

3.0 Changing Behavior 19

3.1 What Is Behavior Change? 19
3.2 The Limits of Knowledge and Motivation 21
3.3 Intervening to Change Behavior 22
3.4 Integrating Individual and Systems Change 27
3.5 Categorizing Behaviors for Change 29
3.6 Focusing on the Right Outcomes 31

4.0 Using Behavior Change Theory in Intervention Design 32

4.1 What Is Behavior Change Theory? 32
4.2 What Are Behavior Change Models and Frameworks? 33
4.3 Why Are Behavior Change Models and Frameworks Useful? 34

4.4 How to Use Behavior Change Models and Frameworks 35
4.4.1. COM-B 35
4.4.2. MINDSPACE 38
4.4.3. EAST 40

4.5 Using Behavioral Techniques and Rules of Thumb 41
4.5.1. Decision-making Shortcuts and Biases 42
4.5.2. Social Psychology 43
4.5.3. Emotions and Self-identity 45
4.5.4. Memory Shortcuts and Biases 46
4.5.5. Conscious Behavior Change Strategies 47
4.5.6. Gamification 48

5.0 Adopting a 5-Step Behavior Change Approach 49

5.1 Step 1: Define – the Behavioral Problem 50
5.1.1. Identify Potential Behavior(s) to Target 50
5.1.2. Select the Target Behavior(s) 52
5.1.3. Identify the Target Audience(s) 52

5.2 Step 2: Diagnose – the Behavioral Challenge and Create the Behavior Change Strategy 54
5.2.1. Review Insights 54
5.2.2. Identify Knowledge Gaps 55
5.2.3. Obtain New Insights if Required 59
5.2.4. Identify Behavioral Barriers and Enablers 59
5.2.4.1. Applying the COM-B Model 59
5.2.5. Specify the Behavioral Objective 61
5.2.6. Develop a Theory of Change 62
5.2.7. Create a Behavior Change Strategy 64

5.3 Step 3: Design – the Solution 66

5.3.1. Design and Prioritize Solutions 66
5.3.2. Create Insight-led Intervention Ideas 69
5.3.3. Applying the EAST Framework 70
5.3.4. Applying the MINDSPACE Framework 71
5.3.5. Shortlist Interventions Using Key Criteria 71
5.3.6. Refine Interventions 73

5.4 Step 4: Deliver – a Pilot 75

5.4.1. Develop a Pilot Delivery and Evaluation Plan 75
5.4.2. Define What Success Looks Like 76
5.4.2.1. Ensure the Approach Can Obtain Suitable Data for Evaluation 77
5.4.2.2. Logistical and Methodological Considerations 81
5.4.3. Deploy the Intervention(s) 82
5.4.4. Key Evaluation Principles to Consider 82
5.4.5. Evaluate the Effectiveness of the Intervention(s) 83
5.4.5.1. Does the Intervention Work? 83
5.4.5.2. How or Why Does it Work? 83
5.4.5.3. Identify Opportunities for Further Refinement 84

5.5 Step 5: Adapt and Scale 85

5.5.1. Adapt the Intervention for Deploying at Scale 85
5.5.2. Refine the Intervention 86
5.5.2.1. Refine the Deployment Approach 87
5.5.2.2. Maintaining Behavior Change 87
5.5.2.3. Approach to Monitoring Sustained Impact 88
5.5.2.4. Strategy for Maintaining Impact 89
5.5.3. Disseminating Impact 89
5.5.4. Recap 91

Bibliography 92

Worksheets 93

List of Figures and Tables

Figures

Figure 1: Examples of thoughts and feelings that affect our decisions about food 15

Figure 2: Intervention types and examples 23

Figure 3: Intervention types and how they compare 24

Figure 4: People, systems and policy 27

Figure 5: Workshopping food behaviors to map them along the food journey 30

Figure 6: The COM-B model 35

Figure 7: Composting campaign using the EAST principles 41

Figure 8: Example of an Impact/Feasibility Matrix 51

Figure 9: Example questions to help evaluate success of your interventions 76

Tables

Table 1: How MADD used a mix of intervention types 26

Table 2: Example of a completed Knowledge Matrix to map existing knowledge about behaviors we want to change 56

Table 3: Example of an Assumptions Audit to map existing insights about who is wasting fresh fruit and why 58

Table 4: Example of Theory of Change 63

Table 5: Intervention design: Framing the change 66

Table 6: Example of how COM-B barriers can be reframed as creative prompts for intervention design 69

Table 7: Measurement methods for household food waste behavior change interventions 79

Term	Description
Assumptions Audit	A team exercise to review key beliefs underlying a project, identifying risks, gaps, or weak evidence and determining where further validation or research is needed.
Behavior Change Intervention	A coordinated approach to change specific behavior patterns.
Behavior Change Strategy	A clear plan for helping people make positive changes in what they do by understanding what makes those changes easier or harder.
Behavioral Barriers	Psychological, social, or environmental obstacles like, habits, misinformation, costs, or limited access, that prevent individuals from adopting desired behaviors, even when they recognize the potential benefits.
Behavioral Journey Mapping	A tool that visualizes the steps, decisions, and barriers people encounter around a behavior, helping identify intervention points to support positive change.
Behavioral Objective	A clear, measurable statement defining the specific action a program seeks to influence, outlining who will act, what they'll do, and the expected change.
Behavioral Problem	A gap between current and desired actions, where psychological, social, or environmental factors hinder people from making choices that align with optimal outcomes or goals.
Choice Architecture	The design of how options are presented, influencing decisions by shaping context, defaults, framing, or order, helping guide behavior without restricting freedom of choice.
Food Loss	Refers to the decrease in edible food along the supply chain, during production, post-harvest, and processing, caused by inefficiencies, spoilage, or damage before reaching retailers or consumers.
Food Waste / Wasted Food	Food waste / wasted food is food *produced for human consumption* that is not eaten.
Intervention	A structured action, program, or strategy designed to influence behavior, address barriers, and create positive change, often through education, incentives, policies, or environmental adjustments.
Key Performance Indicator (KPI)	A measurable value used to track and assess the performance of specific objectives or goals.
Knowledge Matrix	A tool to map knowledge / evidence (and gaps) about aspects of specific behaviors, using prompts such as who, what, where, when, how and why.

Term	Description
Monitoring and Evaluation (M&E)	The systematic process of tracking progress, measuring outcomes, and assessing effectiveness of programs or policies to inform decisions, ensure accountability, and improve future interventions.
Practitioner	An individual tasked with designing and implementing public-facing behavior change interventions to reduce wasted food at the household and consumer-level, which could include governments, communities, educators, influencers, business and others.
Prototype Swap	A behavior change technique where an initial model, product, or concept is replaced with an improved version to test, refine, and encourage adoption of desired behaviors.
Return on Investment (ROI)	A way of assessing how much value a food waste reduction intervention delivers compared to what it costs to implement. It considers the financial savings and wider benefits generated, including reduced food purchasing costs, avoided disposal costs, environmental benefits, or social value, relative to the investment of time, money, and resources.
Psychographic	The classification of people based on psychological traits, such as values, attitudes, interests, lifestyles, and motivations, used to understand behavior and tailor messages or interventions effectively.
Segmentation Model	This divides a population into distinct groups based on shared traits, such as demographics, behaviors, or psychographics, to tailor interventions, messaging, or services for greater effectiveness.
Smart	Refers to a product or system that uses digital technology to collect data, process information, and respond in an intelligent or automated way.
Social Norms	The shared rules and expectations that guide behavior within a group; interventions leverage them by showing desired actions as common, acceptable, and socially reinforced.
Sustainable	Able to be maintained over time without depletion.
Target Audience/ Segmentation	The process of identifying and grouping people with shared traits or behaviors to tailor messages, interventions, or services for maximum relevance, engagement, and effectiveness.
Target Behaviors	The specific, observable actions an intervention seeks to influence or change, chosen because they directly affect desired outcomes and can be measured to track progress.
Theory of Change	A structured framework that maps how activities and resources lead to outputs, outcomes, and long-term impact. It clarifies assumptions, highlights necessary conditions, and illustrates the causal pathways explaining why and how a program or initiative is expected to achieve change.

Acknowledgements

This guide was developed by WRAP under the auspices of the CEC project Steering Committee members and the CEC Secretariat, and in consultation with practitioners and behavior change experts from across North America, including representatives from municipalities, academia, NGOs, and community organizations. Their contributions helped ensure that the contents reflect both the latest behavioral science and the realities of designing and delivering interventions on the ground. We are grateful to all those who provided input and peer review.

Canada Contributors

- **Bitz, Carla** – Alternate Root Calgary, Calgary, AB
- **Blair, Melissa** – Dharmarketing Strategic Social Impact, Kelowna, BC
- **Gauci, Joanne** – Metro Vancouver, Vancouver, BC
- **Hordowick, Julie** – Regional Municipality of York, Newmarket, ON
- **Kaddour, Siham** – RÉCYC-QUÉBEC, Québec, QC
- **Lucar Diaz, Cynthia** – Regional Municipality of Peel, Brampton, ON
- **Maltais-Guilbault, Mariane** – Ville de Montréal, Montreal, QC
- **Soma, Tammara** – Simon Fraser University, Burnaby, BC

United States of America Contributors

- **Baesens, Lesly** – City and County of Denver, CO
- **Blatt, Elaine** – Oregon Department of Environmental Quality, OR
- **Campbell, Catherine** – University of Florida, Florida
- **Collins, Andrea** – Natural Resources Defense Council, CA
- **Gunders, Dana** – ReFED, CA
- **Hardison, Jeanette** – Corvalis Sustainability Coalition, Corvalis, OR
- **Kedward, Jenny** – Hennepin County (and formerly Dakota County), Minnesota
- **Monroe, Jade** – Washington State Department of Ecology
- **Neff, Roni** – John Hopkins Bloomberg School of Public Health, Maryland
- **Nichols-Vinueza, Alex** – World Wildlife Fund, MD
- **Roe, Brian** – Ohio State University, Ohio

Mexico Contributors

- **Alencastro, Selene** – SIPRA (Soluciones Integrales para la Problemática Ambiental)
- **De la Torre Saavedra, Ana Laura** – Iniciativa Climática de México
- **Menéndez, Cynthia** – Alianza para la Seguridad Alimentaria
- **Morales-Castro, Juliana** – Red 12.3, para Reducir y Valorizar PDA; TecNM/Instituto Tecnológico de Durango, Dgo
- **Orozco, Mariana** – Arca, Monterrey
- **Sánchez, Claudia** – BAMX, Red de Banco de Alimentos de México
- **Vázquez Acevedo, José Antonio** – Gobierno de Nuevo León

Preface

This guide has been created to provide help on how to bring the benefits of behavioral science into designing, implementing, and evaluating public-facing interventions that can help people reduce wasted food in the home. It offers a 5-Step Behavior Change Approach, showing how to apply theory in real-world settings. Alongside the guide, the supplementary material provides worksheets to take users through each step. In addition, the Workbook includes completed examples of worksheets from real projects that illustrate their use, while tips from experts provide inspiration.

Photo credits: cover: istock.com/ Hispanolistic; p.13 istock.com/ Faiz Dila; p.16 istock.com/ AscentXmedia; p.19 istock.com/ José Araújo; p.23 (top row left to right) Pacto por la Comida, BAMX, Mexico, Love Food Hate Waste Canada, Pacto por la Comida, BAMX, Mexico (bottom row left to right) Washington State University Cougar Food Pantry, WRAP, WRAP; p.29 istock.com/ DragonImages; p.32 istock.com/ andresr; p.37 istock.com/ Hispanolistic; p.39 WRAP; p.41 Ville de Montréal; p.53 istock.com/ skynesher; p.65 istock.com/ Antonio_Diaz; p.73 (clockwise from top left to bottom right) Pacto por la Comida, BAMX, Mexico, WRAP, Pacto por la Comida, BAMX, Mexico, WRAP; p.78 Pacto por la Comida, BAMX, Mexico; p.84 WRAP; p.90 istock.com/ Cecilie_Arcurs.

1.1 What This Guide Is For

> Changing behavior is difficult, especially when it comes to reducing wasted food at home.

The aim of this guide is to provide help on how to bring the benefits of behavioral science into designing, implementing, and evaluating public-facing interventions that can help people reduce wasted food in the home.

It offers a practical, streamlined, and jargon-free approach, focusing on how to apply behavior change theory in real-world settings, giving clear tools and strategies you can use immediately.

1.2 Who This Guide Is For

This guide is for you if... you design, deliver or evaluate public-facing behavior change interventions to reduce food waste at the household level and:

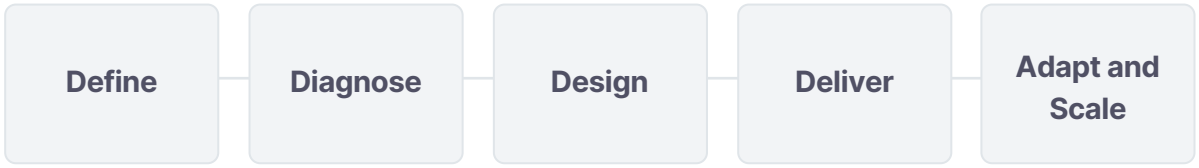
- you want to make these interventions more effective.
- you want a structured process with practical tools that connect insight, design, and impact.
- you are looking for a clear, evidence-based approach to change real behaviors, not just awareness-raising.

1.3 How and When to Use This Guide

This guide is organized into six sections that move from foundational knowledge setting to practical application. You can work through it sequentially or navigate to specific sections as needed.

- **Section 1** introduces the guide's purpose and target audience.
- **Section 2** explains key terms and explores the root causes of wasted food in the home, highlighting how behaviors and the food environment interact.
- **Section 3** introduces how behavior change works. It outlines intervention types and why they matter. It offers a framework to help categorize and prioritize behaviors to target in your intervention work, and explains how to set meaningful goals and outcomes.
- **Section 4** presents behavior change models, frameworks, and techniques, showing how to use them when designing your interventions.

- **Section 5** brings theory into action through a 5-Step Behavior Change Approach. Each step includes worksheets and real-world examples to guide your intervention planning.



- **Section 6** provides a recap of the process and key actions.

How to Navigate the Guide

Use the tabs at the top of the digital version to jump between sections.

Main Menu - Back to Table of Contents

Previous page

Next page

Ten worksheets are provided throughout this guide (see final section) to help you work through the process. An accompanying Workbook containing all ten worksheets, along with two sets of completed examples from real projects, is also available:

Download the workbook

2.1 What Is wasted food?

Wasted food is commonly defined as food produced for human consumption that is not eaten.

Many types of foods consist of both edible and inedible parts. For example, the edible part of a peach includes its fuzzy outer skin and fleshy portion, while its stem and peach pit are generally considered to be inedible parts.

The edible parts of wasted food are sometimes called **avoidable food waste**. This may include food we intended to eat, such as forgotten and spoiled food, burnt or bad-tasting food, or spillage, or food that we choose to waste, such as leftovers resulting from over-catering, overly trimmed food during meal preparation, or food that is not eaten before it spoils due to over-buying.

Unavoidable food waste generally refers to inedible food parts that are rarely consumed by people, if at all. However, definitions for inedible food parts may vary widely, in part due to cultural, social and geographic variations.



2.2 Prevention versus Diversion

There is an important distinction between preventing wasted food and diverting it.

Prevention means stopping food from becoming waste in the first place by buying, storing, preparing, and consuming food more efficiently so that it is eaten rather than discarded. It focuses on tackling the root causes of waste before it happens.

Diversion means redirecting food that would otherwise be thrown away toward better ends, such as composting, animal feed, or energy recovery.

While some discarded food may no longer be edible at the point of disposal, the focus of this guide is the actions that can keep food edible and ensure it is consumed.

2.3 Root Causes of Wasted Food in Homes

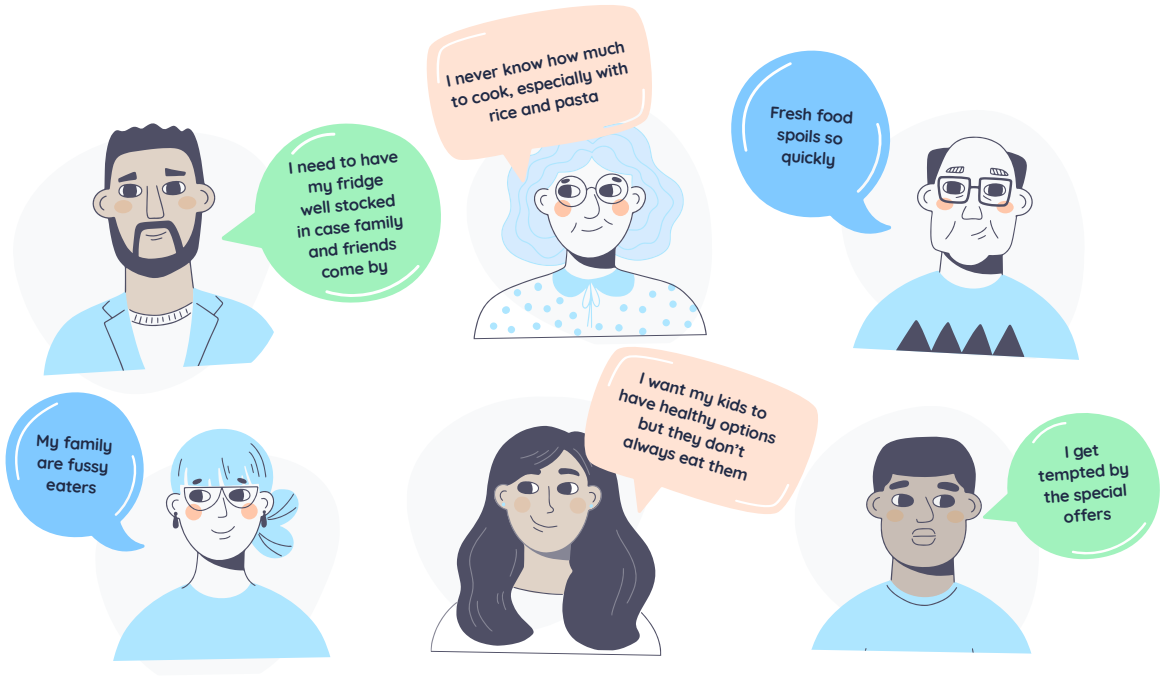
Wasted food is an outcome, not a behavior.

People do not generally intend to waste food. Instead, waste is the result of things like:

- Social and cultural norms and habits
- Product marketing, pricing and packaging
- Shopping and storage practices
- Social (and other) media influencing around food purchase and consumption
- Emotional factors such as fear of scarcity or impulse buying
- Safety considerations, e.g. lack of knowledge/confidence about food spoiling
- Busy lifestyles
- Lack of skills

Figure 1 shows some examples of the thoughts and feelings that shape our relationship with food. These result in multiple issues and attitudes as well as a complex mix of behaviors.

Figure 1: Examples of thoughts and feelings that affect our decisions about food



Preventing wasted food in the home involves a chain of decisions and constraints across the whole food journey of buying, storing, preparing/cooking and eating food.



Understanding the specific causes leading to wasted food at home and identifying impactful ways of intervening is crucial to helping people to reduce the amount of food they are wasting. This will be discussed in Section 3.



2.4 How the Food Environment Shapes Behavior

What we eat and how we handle food is not just about personal choice, it is influenced by an entire ecosystem of factors that shape our decisions. The way food is packaged, marketed, displayed on shelves, and priced all play a role in our food-related behaviors. Cultural forces add another layer, including how the media portray food and wasted food, alongside the policies that govern our food systems. Many intertwining cultural issues have normalized and continue to normalize the wasting of food.

Ana Laura De la Torre Saavedra, from Iniciativa Climática de México, says: "Waste is continually reinforced as something 'normal'. Both brands and media/influencers contribute to this by promoting a culture of waste that also includes food. In other words, it is a notion embedded in the entire system: production is geared toward waste (vastogenesis) where obsolescence and poor-quality production is encouraged."

While each individual has a role and responsibility to reduce wasted food, we cannot overlook the bigger picture. The businesses, organizations, and systems that shape our food environment play a major role in creating conditions that either make wasting food more likely or help prevent it.

Who's shaping our food behaviors and how?

Food manufacturers, brands, and retailers influence waste through packaging design, portion sizes, promotional strategies, and date labeling practices. Bulk pricing incentives, unclear date labels, and packaging that fails to preserve food optimally all contribute to household waste patterns.

Policy-makers establish regulatory frameworks governing food labeling, safety standards, and waste management systems. Date labeling policies, food safety regulations, and waste diversion targets all influence household practices.



Media and cultural influences shape perceptions about food, waste, and consumption. Media portrayals of wasted food, social norms around abundance, and cultural attitudes toward leftovers all impact household behavior.

Hospitality and food service providers establish portion size norms and consumption expectations. Oversized restaurant portions often translate to similar expectations at home, leading to overproduction and waste.

Waste collection systems may affect household behavior via organics collection programs, schedules, and sorting requirements. However, while programs to collect source-separated organics can increase awareness and motivation to address food waste, sometimes the way that they are communicated can perpetuate the problem of wasted food as an unintended consequence—e.g., by making people feel good about diverting food waste and less "guilty" about wasting that food.

Brian Roe, from Ohio State University, USA, points out that access to composting can unintentionally increase food discards for some households. This "moral licensing" effect arises when composting is perceived as an acceptable alternative to preventing waste in the first place.

Julie Hordowick from the Regional Municipality of York, Canada, says: "Our survey work and interviews with municipal staff found that people feel good about using the green bin program for their wasted food and it may reduce impact of environmental messaging because they know that their waste is getting composted/digested instead of being landfilled."

2.5 What Food Categories to Target in Interventions

Wasted food represents a significant economic and environmental burden across North America. When looking at which food categories to target in our food waste prevention work, it makes sense to tackle foods that contribute to the highest environmental impact and/or are most wasted. The United Nations (UN) states that animal-based foods, especially red meat, dairy, and farmed shrimp, are generally associated with the highest greenhouse gas emissions from a food life-cycle perspective.[1] According to UN and country-specific research, fresh produce is consistently the highest-wasted category by weight, due to its perishability and short shelf life.

The food categories most wasted typically vary regionally, by community and by household as well as over time, so local waste composition studies, surveys and other insights are a useful starting point to better understand which food categories to prioritize in your behavior change interventions. In addition, you may wish to undertake your own research to help guide any specific food types to be targeted via community and household interventions.

[1] UN, n.d., "Food and Climate Change: Healthy diets for a healthier planet," https://www.un.org/en/climatechange/science/climate-issues/food. Consulted 18 December 2025

3.1 What Is Behavior Change?

Behavior change means one of three things is happening:

A new behavior has been initiated

(e.g., starting to plan meals before going shopping)

An existing behavior has now stopped

(e.g., no longer buying more perishable goods than needed because they are on special offer only for them to spoil before they could be eaten)

The way an existing behavior is carried out or performed has changed

(e.g., leftovers are now stored in a clear container so they're easy to see and be identified)



When we look at what behavior change means in this way, it seems easy enough to ask or tell people to stop, start or change something they are doing, especially if we break down our overall aim of reducing food waste into tackling specific causes of food waste and particular food categories as discussed in Section 2.

However, human behavior is a funny thing. We might intend to behave in a certain way, supported by our knowledge and understanding of what makes up desirable behavior, but our intentions do not always carry through to our actions.



Most of us know what foods are healthy, but that doesn't always make us choose the healthy option.

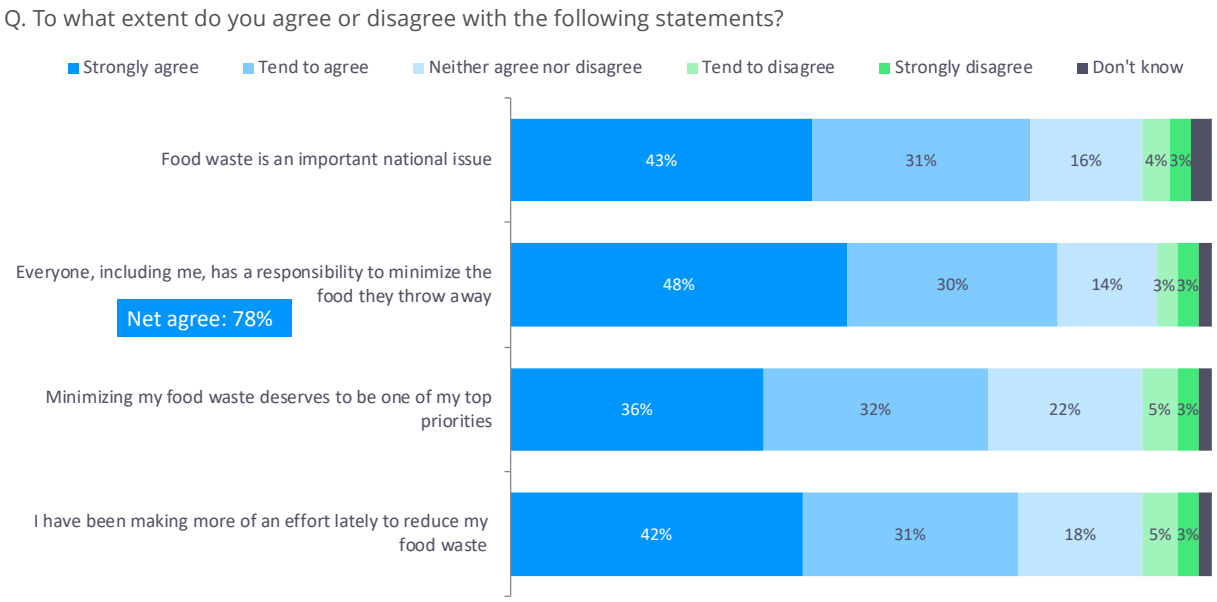
Hence, it is necessary to recognize that providing information and raising awareness, while important and helpful, will not always succeed in changing behavior. This is where we use behavioral science–backed interventions to push change.

3.2 The Limits of Knowledge and Motivation

As discussed in Section 2, people do not intend to waste food. Waste is an unintended consequence of social norms, habits, product packaging or labelling design, and emotional factors, like wanting to provide abundance for family and friends or fear of running out of food. Simply knowing what to do, or caring about the issue, rarely translates into sustained behavior change.

Case Study: Seeing Ourselves Clearly

Research in the USA shows that most people feel responsible for reducing food waste yet underestimate how much they personally waste. The survey found that while 78% of respondents agreed that "everyone, including me, has a responsibility to reduce food waste," only 13% believed they waste more than average, and 64% thought they waste less.



Note: Percentages reflect base of 8,010 US adults with any responsibility for food shopping and/or preparation in the home.
Source: Data drawn from WRAP unpublished survey of 8010 adults, "Food Waste Attitudes and Behaviors in the US," conducted in May 2024.

Knowledge alone does not overcome ingrained habits or emotional drivers such as guilt, pride, or fear of running out of food. For behavior to change, interventions must make sustainable actions not only *known* but also *easy, rewarding, and normal*.

3.3 Intervening to Change Behavior

An intervention is a planned action or set of actions designed to influence behavior in a desired direction, to achieve one (or a combination) of three things: to start, stop, or change a behavior.

Interventions can take many forms, offering different ways to influence behavior, from shaping awareness and motivation to redesigning the environments and structures that make sustainable choices easier. Used together, these approaches create the conditions for lasting cultural change.

Reducing wasted food at scale requires a mix of interventions that address different aspects of behavior, including what people know, feel, and are able to do within the systems in which they live.

This section presents a range of intervention types grouped into six broad categories to help you find the right mix of interventions to work with for the behavior you are aiming to influence.

1. **Education and Training:** providing information to improve knowledge/ understanding and empower individuals to make informed decisions by enhancing skills and capabilities through demonstrations, courses and feedback.
2. **Communications and Messaging:** telling and showing people how to behave by raising awareness or framing a narrative.
3. **Engagement, Modeling and Social Norms:** engaging citizens within a campaign or program to encourage belonging—e.g., community participation in a shared reduction target, or increasing visibility and demonstrating popularity through, e.g., influencer demonstrations, classes and forums.
4. **Service and Process Design:** targeting system enablers such as logistics, infrastructure, convenience or cost; changing the physical or social environment to make the desirable action the more accessible or obvious choice (sometimes described as changing the default).
5. **Product and Packaging Design:** changing physical enablers of behavior by altering designs to remove friction of a desired choice.
6. **Policy and Legislation:** implementing rules or regulations to limit opportunities for undesirable behaviors or increase opportunities for competing positive behaviors; using penalties, fines or taxes to deter undesirable behaviors, or using benefits, tax breaks, and other incentives to encourage desirable behaviors. Whilst legislation is usually enacted by governments, policies can be introduced by any organizations, such as businesses, educational institutions, clubs and societies. While this may not be an easy sphere of influence, many policy and legislative changes stem from grass roots activism and campaigning.

Figure 2 gives some examples of each of these intervention types and Figure 3 outlines the pros, cons, and relative costs or efforts required to develop and run different intervention types.

Figure 2: 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

Figure 3: Intervention types and how they compare

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.
$$$ **!!!**	**$$$** **!!!**	**$$$** **!!!**

Note: Cost of each intervention-type varies from low (**$**), medium (**$$**) to high (**$$$**).
Level of complexity/effort varies from low (**!**), medium (**!!**) to high (**!!!**)

In practice, a combination of techniques often works better than a single tactic. Delivering a holistic program that takes a system-wide approach for long-term change (by altering and aligning education, incentives, partnerships, and infrastructure) is generally required in order to bring about a lasting cultural shift.

Some of the **best known and most successful behavior change** programs have led to profound cultural shifts in attitudes towards that behavior. For example, drunk driving and smoking, once socially acceptable, both are now widely regarded as undesirable behaviors. This has yet to be achieved with wasted food.

The success of these movements in causing cultural shifts in attitudes towards drunk driving and smoking is due to employing a powerful combination of interventions.

Let's look at drunk driving. Mothers Against Drunk Driving (MADD[2]) is a powerful example of a public interest organization that employed multiple types of interventions to reduce drunk driving. Its success lies in its multi-pronged approach, blending grassroots activism, emotional appeals, and strategic partnerships with top-down policy change. This comprehensive strategy of interventions has helped reduce drunk-driving fatalities by over 50% since the 1980s Table 1 below shows the mix of intervention types that MADD deployed to bring about a cultural shift.

[2] Mothers Against Drunk Driving (MADD), "MADD History"— History of Mothers Against Drunk Driving (MADD). Consulted 18 December 2025

Table 1: How MADD used a mix of intervention types

Intervention Type	How MADD used it
Education and Training	• School programs (*Power of Parents, Power of Youth*) to inform and empower teens/parents. • Victim impact panels for offenders, build empathy, deterrence. • Training for police and courts on victim support and enforcement.
Communications and Messaging	• National campaigns (e.g., *Friends Don't Let Friends Drive Drunk*) reframed norms. • Emotional storytelling and media coverage of victims. • Consistent, data-backed messaging made sober driving "the only responsible choice."
Engagement, Modeling and Social Norms	• Grassroots chapters mobilized volunteers and victims locally. • Public events (e.g., Walk Like MADD, vigils) built belonging and visibility. • Influencers and leaders modeled sober behavior; created new social norms.
Service and Process Design	• Advocated for sobriety checkpoints and random breath testing. • Supported Ignition Interlock Device (IID) rollout and victim helplines. • Promoted rideshare options; made safe transport the default.
Product and Packaging Design	• Pushed for warning labels on alcohol packaging. • Supported in-car breathalyzer and impairment detection tech. • Advocated for safety-first vehicle design (e.g., alcohol detection sensors).
Policy and Legislation	• Campaigned for minimum drinking age (21) and legislation limiting blood alcohol content to 0.08%. • Advocated zero-tolerance for underage drivers, and licence suspensions. • Linked highway funding to state compliance with safety laws.

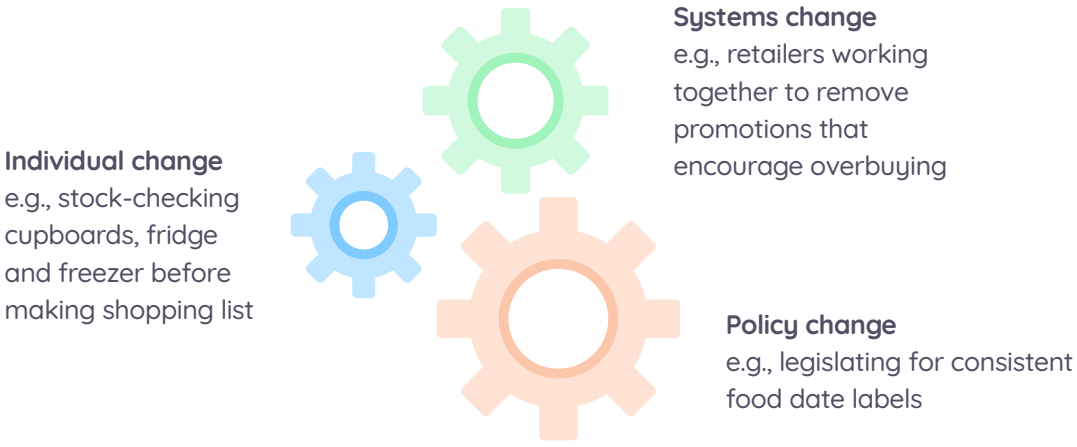
In summary, MADD's success came from orchestrating a full spectrum of intervention types in an overall behavioral change strategy. Together, these transformed drunk driving from tolerated behavior into a morally, legally, and socially unacceptable act. This is one of the clearest examples of cultural re-engineering in modern public health.

It is this level of cultural shift that needs to happen with wasted food.

3.4 Integrating Individual and Systems Change

Lasting change happens when people's individual habits and the wider system around them both improve together. A systems change means improving the bigger structures and rules, like how food is sold, labeled, or collected, so they make it easier for everyone to waste less. Big players such as retailers, brands, policymakers, educators, and waste managers all shape the signals and routines that influence what people do every day. Figure 4 gives us a visual reminder of these, helping us to consider all three aspects of people, systems and policy in our work.

Figure 4: People, systems and policy



You can strengthen the impact of your work by partnering across these levers, wherever opportunities can be made. Some practical examples include:

- advocating for consistent date labelling and storage guidance from retailers,
- working with retailers to adjust pack sizes and remove promotions that encourage overbuying,
- collaborating with local authorities to design services that reward prevention, and
- engaging trusted community messengers, teachers, chefs, influencers, to normalize saving food.

Jade Monroe from Washington State Department of Ecology, USA, gives an example of how the wider context influenced her intervention planning. "About one in four college students experience food insecurity while pursuing their education," she explains. "Through the Food Center, we helped bring partners like Safeway and WSU's Cougar Food Pantry together to invest in the infrastructure that actually feeds students. And we made it fun, inviting the Seahawks to celebrate the pantry's ribbon-cutting brought real visibility to the issue."

She adds that this wasn't how the effort started. "At first, we were planning a friendly social media challenge between universities for Food Waste Prevention Week, but it didn't sit right once we heard what students were facing. Many campus pantries didn't even have basic equipment like refrigeration. That's when we realized we could make a bigger difference by focusing on those real, immediate needs, and by building partnerships to help meet them."

Jeanette Hardison's team from Corvalis Sustainability Coalition, USA, gives in-classroom presentations in local schools about how to prevent food waste at home. So, while activities happen at school, the intended impact is at home, when students adopt and share waste-preventing practices with their families.

The examples show the importance of building partnerships with various stakeholders to improve the effectiveness and reach of our interventions work.



3.5 Categorizing Behaviors for Change

Wasted food can feel overwhelming because it happens everywhere —in our fridges, pantries and ovens, on our cutting boards and stovetops, and on our plates.

For the purposes of planning interventions to reduce food waste, it helps to break down the complexity of daily food decisions, as outlined in Sections 2.3. and 2.4. A useful way to achieve this is to group them along the household food journey:

1. **Planning** – making lists, checking supplies, setting meal intentions.
2. **Shopping** – buying the right amounts, resisting bulk deals.
3. **Storing** – keeping food fresh, using the fridge efficiently.
4. **Preparing** – portioning accurately, cooking foods past peak freshness to make them tasty.
5. **Eating** – managing appetites and preferences.
6. **Managing Leftovers** – freezing extras, using leftovers creatively.
7. **Assessing edibility** – understanding date labels, assessing safety.

Figure 5 shows food behaviors that might typically be gathered from a citizen research exercise that asks people what helps or hinders their food management at home. The behaviors are mapped out along the food journey to help with intervention planning.

Figure 5: Workshopping food behaviors to map them along the food journey



Note: This is a slide from a workshop to gather behaviors that affect our food decisions and can either make waste more likely or less likely to occur.

Mapping behaviors this way reveals leverage points and helps align intervention types. For example, improving awareness of proper food storage practices (through communication) may have limited effect unless combined with packaging that enables resealing (packaging design) and consistent fridge temperature guidance (policy). Conversely, **interventions that tackle multiple dimensions** of the problem are more likely to succeed.

3.6 Focusing on the Right Outcomes

The gap between knowing what to do and actually doing it is where most well-intentioned efforts fall short. Simply changing what people know or how they feel rarely translates into lasting behavior change.

Achieving measurable results requires a steady focus on influencing actual behavior change, not just raising awareness or promoting good intentions.

To make the most of your work, it is helpful to consider the following:

- Knowledge IS NOT behavior. Awareness is necessary but never sufficient. Design for action as seen in Section 3.2.
- Target capability, opportunity and motivation. Use COM-B thinking to identify barriers before crafting interventions. We'll cover this in Section 4.
- Plan for a blend of intervention types as discussed in Section 3.3.
- Pair household focus with system alignment through partnerships with various stakeholders. Engage retailers, policymakers and community leaders simultaneously as seen in Section 3.4.
- Look for ways to make your desired behaviors the easiest and most obvious choice, by shifting the norm. Frame wasting food as socially outdated, saving food as modern, smart and caring. We'll cover this in detail in Section 4.
- Think about your desired outcomes in terms of what success will look like. Section 5.4.2. will help you do this.

4.1 What Is Behavior Change Theory?

Behavior change theory explains the psychological, social, and environmental factors that shape why people behave the way they do and what helps them change. It provides a structured way to move beyond assumptions, identifying the real drivers, barriers, and enablers behind everyday actions. By grounding intervention design in theory, it helps focus efforts where they'll make the biggest difference, whether that is shifting habits, norms, or systems, or a combination of these. In short, applying behavior change theory makes interventions more targeted, effective, and scalable, turning good ideas into lasting change.

It is useful to have shortcuts through the huge amount of theory behind why people behave in the way they do. The next sections will show some models and frameworks that condense the complexity of behavior change theory into clear, practical tools you can apply when designing real-world interventions.



4.2 What Are Behavior Change Models and Frameworks?

A behavior change model is a theoretical tool that can be used to help understand how people behave and to identify ways to change their behavior. The model can be used to understand why a desired behavior is not occurring, helping to identify barriers that need to be overcome, and the enablers or drivers that need to be present for a behavior to occur.

Examples of behavior change models are:

- **COM-B Model** (Capability, Opportunity, Motivation → Behavior)[3]
- **MOA Model** (Motivation-Opportunity-Ability)[4]

Think: What drives behavior?

While models help you diagnose problems, frameworks are your roadmap for solving them. They guide you through the entire journey from "What's wrong?" to "How do we fix it?" Frameworks often incorporate one or more models, along with strategies, processes, and methods for designing, implementing, and evaluating behavior change interventions.

Examples of behavior change frameworks are:

- **MINDSPACE** – a framework of behavioral influences and techniques used in policy and interventions planning[5]
- **EAST** – a framework to guide effective intervention design[6]

Think: How do I change behavior?

The essential difference between a model and a framework is that models help us to understand behaviors and frameworks help us to change them.

[3] Michie, S., M. van Stralen, and R West, 2011, "The COM-B Model for Behavior Change". The Decision Lab, https://thedecisionlab.com/reference-guide/organizational-behavior/the-com-b-model-for-behavior-change. Consulted 18 December 2025

[4] Champions 12.3, n.d., "Changing Behaviour to Help More People to Waste Less Food", Champions_12.3_Playbook_HIGH-RESOLUTION.pdf. Consulted 18 December 2025

[5] Institute for Government, n.d., "Mindspace: Influencing behaviour through public policy." UK Cabinet Office https://www.instituteforgovernment.org.uk/sites/default/files/publications/MINDSPACE.pdf. Consulted 18 December 2025

[6] Behavioural Insights Team (BIT), December 2024, "EAST Framework: Four simple ways to apply behavioural insights," https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/. Consulted 18 December 2025

4.3 Why Are Behavior Change Models and Frameworks Useful?

Behavior change models turn surface-level observations into structured, actionable insights. They help us identify a more complete understanding of what leads to a particular behavioral challenge.

Employing behavior change models can help to generate nuanced insights into people's behavior.

These insights can:

- **Reveal underlying drivers of behavior** – helping us understand not only how people behave, but also why.
- **Distinguish between different types of barriers** – helping us understand whether the cause of an undesirable behavior is due to:
    - a lack of skills or knowledge
    - an unsupportive environment
    - low (or competing) motivation.
- **Segment behavior** – analyzing differences in behavior and linking them to common group characteristics. This helps us to target interventions to different segments (or groups) of people.
- **Link behaviors to context** – helping us to look at social, cultural, and environmental factors, not just individual traits, highlighting how external context shapes behavior.
- **Prioritize intervention points** – to identify *which levers* are most likely to result in change, making strategies more effective and efficient.

Behavior change frameworks are useful because they provide a structured approach to designing, implementing, and evaluating interventions that aim to influence people's behavior. Such frameworks help by:

- **Providing a systematic process** – guiding you through *what to consider* and *when*, from identifying the problem to selecting interventions and evaluating impact. This ensures no critical step is missed.
- **Helping to define clear goals and outcomes** – by articulating *what change is needed*, for *whom*, and *why*. This clarity improves focus and alignment across teams and stakeholders.
- **Integrating evidence and theory** – combining behavioral science and real-world evidence, meaning your interventions are grounded in what has previously been proven to work.

- **Encouraging tailored solutions** – rather than a one-size-fits-all approach. Frameworks prompt you to consider context, such as cultural, environmental, and psychological factors, thereby ensuring solutions fit the audience and situation.

In summary, applying behavior change frameworks helps to turn insights into action systematically and strategically.

4.4 How to Use Behavior Change Models and Frameworks

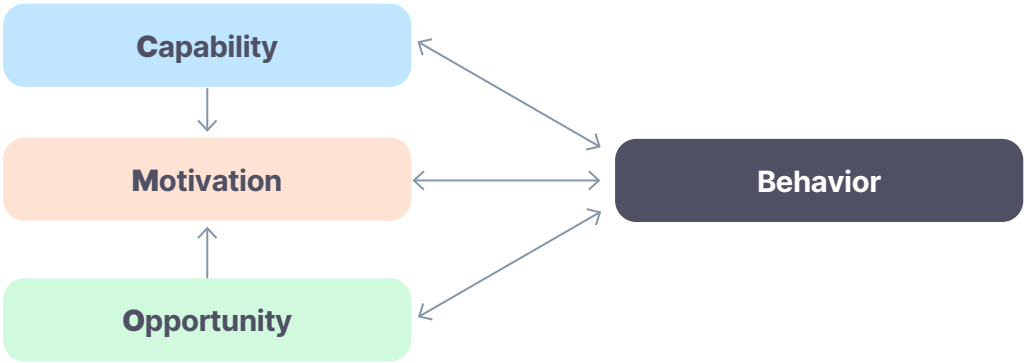
There are hundreds of behavior change models and frameworks out there, each offering a different way to explain why people do what they do. But when it comes to preventing food waste, some are more practical and ready to use than others. This guide focuses on the COM-B model and the EAST and MINDSPACE frameworks because they give you a strong, hands-on foundation for understanding and changing behavior. These approaches are trusted around the world and reflect international best practice, including recommendations from the Champions 12.3 coalition on tackling food waste.[7] Used together, they strike the right balance between theory and practicality, helping you move confidently from insight to action.

This section introduces the COM-B model and the EAST and MINDSPACE frameworks, readying you to put them to use through the step-by-step process in Section 5. If you already use other behavior change tools, you can easily adapt them to fit within this same approach; it's designed to be flexible and work with what you already know.

4.4.1. COM-B

Figure 6 represents the COM-B model, showing capability, opportunity and motivation all exerting an effect on behavior.

Figure 6: The COM-B model



[7] Champions 12.3, n.d., "Inspiring ambition and mobilizing action to reduce food loss and waste globally," https://champions123.org/. Consulted 18 December 2025

The COM-B model (as shown in Figure 6) is a practical tool that builds on and synthesizes other models and theories from across psychology, sociology, and behavioral economics. COM-B can help us understand the key influences on any behavior, making it a suitable tool for this guide.

COM-B is based on the principle that people need to have sufficient **capability**, **opportunity**, and **motivation** to enact a behavior. These can be summarized as:

Capability: Do they know how to do it?

Opportunity: Do they have the chance to do it?

Motivation: Do they want to do it?

By intervening in ways to increase people's capability, opportunity, or motivation to do something, we can make it more likely that they will do it.

The reverse is also true (i.e., intervening to reduce their capability, opportunity, or motivation to do something that you want them to stop doing).

Each of these three components can be broken down further into two sub-components, leaving six broad areas to focus on when analyzing a behavior:

Capability	Opportunity	Motivation
An individual's capacity to engage in the behavior. This can be:	Anything in an individual's external environment and context that impacts behavior. This can be:	All those brain processes that energise and direct behavior. This can be:
Psychological knowledge, cognitive skills, self-regulation, etc., or **Physical** physical skills, dexterity, mobility, strength, etc.	**Social** norms, pressure, social influences, etc., or **Physical** any resources needed to enact the behavior.	**Reflective** conscious decision-making processes; attitudes and beliefs, goals and intentions, etc.; or **Automatic** unconscious decision-making processes; habits, emotions, etc



By assessing the presence and strength of each of these components and their sub-components, we can identify the specific factors which may be preventing a behavior from occurring. This allows us to see which areas we need to focus on.

It is vital to **consider all of the components and subcomponents of the COM-B model** to ensure that all aspects of capability, opportunity, and motivation are sufficiently addressed to change behavior. In the step-by-step process in Section 5.2. you will be directed to a set of questions that helps you consider all these aspects.

It is also important to acknowledge that one single intervention does not necessarily need to influence all three components, especially if some are already being fulfilled by other influences. However, there is no point investing resources in providing people with sufficient **capability** and **motivation** to change, if they do not also have the **opportunity** to do so. For example, it would be futile to educate, motivate and prompt shoppers to buy the ideal number of individual potatoes for their household needs if the grocery store that they shop in does not sell unpackaged, loose potatoes.

Thinking in this broader, holistic way—and obtaining insights where required to clarify assumptions or fill knowledge gaps—is essential to maximizing the effectiveness of interventions.

4.4.2. MINDSPACE

The MINDSPACE behavior change framework was created to support the development of low-cost, scalable behavior change interventions in areas such as public health, the environment, and public service delivery. MINDSPACE is included in this guide because it highlights how automatic, emotional, and social cues influence behavior, rather than rely solely on conscious decision-making or rational choice models.

The mnemonic MINDSPACE consists of nine elements that influence behavior, through our subconscious judgment processes and automatic decision-making.

- **Messenger**: We are strongly influenced by who communicates information and how much we trust the messenger.
- **Incentives:** Our responses to rewards and penalties are shaped by mental forces, such as the strong desire to avoid losses.
- **Norms:** We tend to do what others are doing (or we believe to be doing).
- **Defaults:** We accept the default option when choices are pre-set.
- **Salience:** Our attention is drawn to what is new, prominent, or relevant to us.
- **Priming:** Our behavior can be influenced by cues in our environment without us consciously being aware of it.
- **Affect:** Emotional associations and feelings affect our behavior.
- **Commitments:** We strive to be consistent with public promises and commitments.
- **Ego:** We act in ways that improve our self-image and self-esteem.

While you may not cover all of these in a single intervention, the aim is to provide a checklist to help you cover as many as you can. If you are only covering one or two points, it might indicate that some areas could be improved.

The Camp Waste-Not campaign in Denver, USA,[8] applied the MINDSPACE framework to encourage people to make the most of their food.

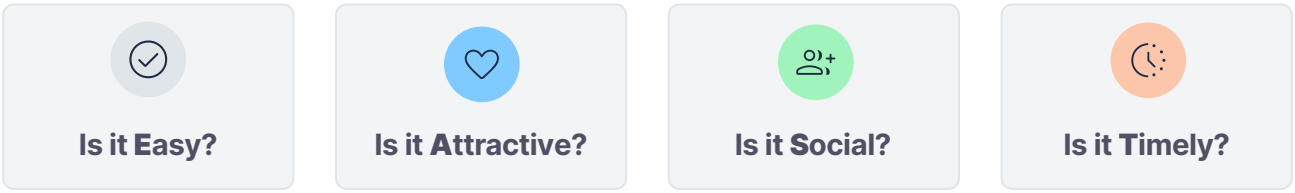
Messenger effects came from trusted voices—WRAP, the municipalities, We Don't Waste (NGO), Sprouts (grocery chain) and schools—reaching a wide range of people and enhancing credibility. **Incentives** were built around emotional rewards, through "scout badges" for people to collect, in addition to emphasizing the financial incentives—saving money by not wasting food. **Norms** were used through the club feel of "Camp Waste Not." **Defaults** and **Salience** were reinforced through simple guidance and the badges rewarding the behavior. **Priming** was achieved through strong visual branding and linking to the badge system, with fridge magnets acting as a timely prompt. **Affect** is targeted through the collectability of the badges: it feels good to add to the collection. **Commitment** is addressed by encouraging residents to: "Become a Camp Waste-Not Food Scout by collecting all five Food Scout badges! Each badge shows one practical, easy habit that can help you make the most of your food." **Ego** is addressed by setting an achievable goal of adopting each of the specific behaviors the campaign is targeting.



[8] Camp Waste Not, Denver, n.d., "Helping Denver Save Food and Save More Money!" https://www.campwastenot.com/. Consulted 18 December 2025

4.4.3. EAST

The EAST framework's power lies in its simplicity. It can be used when designing interventions from scratch or as a prompt to find easy tweaks to improve existing interventions. EAST is based on four key design principles:



At first glance, these principles seem simple and obvious. But they are grounded in behavioral science. Using them to develop and refine ideas helps ensure interventions reflect how people actually behave. For example, intervening to make a behavior **Easy** might mean providing clear, noticeable instructions or changing a system so it is more convenient, perhaps by improving the location or extending or changing the time a service is available.

Making a behavior **Attractive** could involve using eye-catching prompts or rewards to increase people's desire to do it.

We are strongly influenced by the approval, opinions, and behavior of others (both perceived and real). Ensuring that there is a **Social** component to an intervention can enable the power of social influence to be harnessed, for example, by positioning a behavior as a normal thing that everyone else is doing.

Finally, interventions are more effective when they're **Timely**—delivered at moments when people are most receptive, such as when making major lifestyle changes like moving house or going to college. Deploying interventions at the point and time where people can actually perform the desired behavior is also crucial.

Using the EAST principles at the design stage can help to increase the uptake and effectiveness of interventions, increasing the likelihood of achieving lasting behavior change.

Figure 7: Composting campaign using the EAST principles



Note: These posters were provided by Mariane Maltais-Guilbault, Ville de Montréal, Canada, and show how the EAST principals were built into communications.

4.5 Using Behavioral Techniques and Rules of Thumb

Human behavior is influenced by subtle cues, social expectations, habits, and emotions. By understanding how people really think and act, organizations can shape environments to make it easier for people to do the desired thing, such as reducing energy consumption, making healthier choices, or reducing the food they waste.

While many of us might like to think that we base our actions on rational evaluation of each and every situation, because of the sheer number of decisions we make each minute, our brains use mental shortcuts or rules of thumb to reduce how much mental effort we need to exert.

People are naturally inclined to protect their brains from over-exertion, so 80% of our decision-making is rapid and unconscious. That is, we're using mental shortcuts to make decisions quickly without having to expend too much cognitive effort (brain power). While these shortcuts often help us function efficiently in a complex world, they can also lead to unconscious biases or suboptimal decisions.

Intervention design can use knowledge of shortcuts and biases to guide behavior in desired directions—for example, by placing smaller plates near buffets to reduce wasted food or using simple, prominent prompts on packaging to encourage freezer use at home.

Armed with the awareness of these rules of thumb, we can make use of them to design targeted nudges, messages and systems that align with how people behave when operating in fast thinking mode, rather than how we assume they behave if using slower, deeper thinking. These tools can increase the effectiveness of public campaigns, services and policies by removing friction, boosting motivation and supporting long-term behavior change. When applied ethically and transparently, they can be powerful tools for driving positive social and environmental impact.

Some of the key behavioral techniques that can be applied to the prevention of wasted food in the household include the following:

- Decision-making shortcuts and biases
- Social psychology
- Emotions and self-identity
- Memory shortcuts and biases
- Conscious behavior change strategies
- Gamification

An overview of each of these with some examples is given below.

4.5.1. Decision-making Shortcuts and Biases

With 80% of our decision-making being rapid and unconscious, this can leave us open to certain mental shortcuts and biases that can cause us to act in unhelpful ways. By changing the decision-making context (known as the "choice architecture") we can leverage these to make certain behaviors easier (or harder) to do.

Examples include:

- **Loss aversion** – losing something has more significance than gaining something. Many food waste prevention campaigns leverage this, telling consumers how much money the average family is wasting if they are throwing away an average amount of food.
- **Default and status quo bias** – the tendency to go with the flow of pre-set options, as these indicate what is "normal" and it is easier than switching. For example, by making smaller portions the default, diners are less likely to over-order and waste food, while still having the freedom to choose more if needed.
- **Optimism bias** – we underestimate the likelihood that our decisions or actions will lead to negative outcomes. For example, a household may assume that they always finish their leftovers and therefore do not contribute much to food waste, yet waste audits will show they discard more than they realize. Misplaced optimism can prevent people from recognizing the need to change their habits.

4.5.2. Social Psychology

Our attitudes, beliefs and feelings are strongly influenced by those around us, which can lead to behavior change. This can occur as the result of both real and imagined interactions.

Examples include:

- **Authority bias** – we are more likely to believe and follow orders from authority figures (or someone we deem to be authoritative).

  Selene Alencastro, from SIPRA, Mexico, describes how their approach to reducing food waste in restaurants in Guadalajara, Mérida, Valle de Guadalupe and Los Cabos has been substantially strengthened through a badge system. The badge is only awarded after third-party verification (the Foundation for Innovation and Development of the Circular Economy) of specific criteria related to food waste reduction. By outsourcing evaluation to an external authority, they are leveraging authority bias to reinforce the perceived objectivity and trustworthiness of the results achieved.

- **Social norms** – we behave in ways we think align with what others are doing.

  Camp Waste Not, a food waste prevention intervention in the City of Denver, USA, uses **Food Scout Badges** to promote specific food-saving habits (like using broccoli stalks or checking egg freshness) as **achievable and desirable behaviors**. Each badge represents a **socially approved action**, and earning them reinforces the idea that these behaviors are normal, fun, and expected.

- **The Hawthorne effect** – we change our behavior if we know we are being watched or studied. We often see the Hawthorne effect in visual interventions that give us the sense of being watched— that sign that tells us there is a speed camera ahead—even when there is not; or that life-size cut-out of a police officer at the entrance to the shopping mall meant to deter shoplifting. But it can be useful in other ways too, as the example below shows.

In **Dakota County, USA, the team** ran a six-week challenge offering a suite of interventions, including meal planning tools, food storage tips, kitchen skills classes and tools to track food waste. They had more than 100 participants. People were randomly assigned to one of three groups:

1. **Tracking only:** participants recorded their wasted food each week.
2. **Tracking + resources:** participants tracked and received links to self-guided materials.
3. **Tracking + guidance:** participants tracked and received weekly email support.

All three groups reduced wasted food, including the tracking-only group. The team inferred that tracking itself increases awareness, helping people find their own solutions. This insight now informs other programs, which build in routine tracking.

4.5.3. Emotions and Self-identity

The impact of emotion on our attitudes, behaviors and memories, whether positive or negative, is often underestimated. However, it can lead us to behave in drastically different ways. Everybody has a sense of self-identity, which we are highly motivated to protect. If a behavior or attitude conflicts with this view of ourselves, it can be emotionally damaging, so we employ techniques to prevent this from happening.

Examples include:

- **Affect** – we rely on our emotions, rather than facts or logic, to make quick decisions.

  > **José Antonio Vázquez Acevedo, from Gobierno de Nuevo León, Mexico**, explains how they leverage affect in their Hero Against Hunger (Hambre Cero) campaign—an initiative that invites food retail outlets and restaurants to donate surplus food, thus reducing their food waste alongside helping the fight against hunger. It taps into pride, identity, and the desire to feel good about one's choices.

- **Warm glow effect** – we act in ways that make us feel better about ourselves.

  > **Dana Gunders from ReFED, USA**, explains the importance of aiming for the warm glow effect rather than focusing on negative aspects of wasted food. She says: "What we found is guilt is not helpful. The general rule is that people have very positive intentions with their food. They have a lot of identity wrapped into their relationship with food, and you need to respect that. That's the reason 'Save The Food' was the campaign we came up with. It felt positive; like something people could get on board with; it was not shaming."

- **Fundamental attribution error** – we believe our own strengths to be internally driven, while our weaknesses are externally driven. For example, we may take pride in using up food before it has spoiled—but blame the supermarket for selling large pack sizes if a bag of salad spoils before we get around to using it all.

4.5.4. Memory Shortcuts and Biases

As with decision-making, the brain uses mental shortcuts to encode, store and retrieve memories. However, this is not without error, which can leave us open to certain biases that cause some events to be remembered better, or worse, than others.

Examples include:

- **Chunking** – behaviors are more likely to be enacted, and information is more digestible and memorable, when broken down into small steps and presented one step at a time.

  Elaine Blatt from Oregon Department of Environmental Quality, USA, explains how she uses chunking in her behavior change work. She says: "When people are interested and motivated, that gives you an opportunity to take them through simple steps to do things that are new, but also entirely doable. These simple steps start to inculcate the new behavior that you want to see, and then people can keep adding."

- **Priming** – attitudes and behavior are unconsciously influenced by external stimuli that we cannot recall, including images, words, smells and sounds. An example of how this can be used in food waste prevention interventions is for food retailers to display a visually prominent message near bulk/bonus offers: "Buying large packs? Consider how much you'll actually use—smaller packs help avoid waste." A study found that priming customers with information about the consequences of food waste made them more likely to focus on their anticipated food waste and thereby reduce their preference for bonus packs.

- **Salience** – the extent to which something stands out or captures our attention.

  Ana Laura De la Torre Saavedra, from Iniciativa Climática de México, gives an example of where it was important to increase the salience of wasted food in their intervention program for college students. She explained that a key barrier identified early on was emotional disengagement; students showed neither positive nor negative emotions about wasting food. This lack of emotional response meant they did not perceive wasted food as a personal or pressing issue, limiting their motivation to change.

4.5.5. Conscious Behavior Change Strategies

While using mental shortcuts and making the most of the brain's unconscious quirks is important, there will also be situations where a more conscious approach to influencing decision-making and behavior is needed.

Examples include:

- **Goal setting and implementation of intentions** – setting specific, realistic goals encourages behavior change. "If-then" statements in particular encourage concrete plans to be made and maintained. For example, interventions could include encouraging people to set a goal such as "I will eat leftovers for lunch at least 3 times this week." This can be coupled with a concrete plan such as "**If** I cook dinner and have leftovers, **then** I will pack them in a container and place them in the fridge right after dinner, so I can take them to work the next day".

- **Feedback** – providing feedback (such as data on how much food a household wastes) helps to make our behavior and associated impacts more visible.

  > **Juliana Morales-Castro from TECNM/Instituto Tecnológico de Durango, Mexico**, described the use of feedback in an intervention with a food service organization providing a central canteen serving the workers of several businesses. By training staff to separate avoidable and unavoidable food waste, they were able to quantify avoidable losses and this data provided feedback enabling staff to identify areas for reducing waste.

- **Rewards and incentives** – encourage behavior change by promising something positive in exchange. This can be a financial incentive given for participation in a study or survey. Or it can be an emotional reward such as a shout-out on social media or being featured in a magazine, to make people feel their efforts are valued.

  > **Jenny Kedward from Dakota County, USA**, described how she uses emotional reward to increase engagement in her program to reduce wasted food in the home. She says: "In our communications, we're constantly showcasing what participants said each week. And so, they would read the emails in case they got quoted."

4.5.6. Gamification

Gamification is the use of game-like elements as part of delivering interventions to encourage participation, motivation, and behavior change. It draws on behavioral science principles by integrating clear goal-setting and prompting people to form implementation intentions—specific plans about when, where, and how they will act. Gamified interventions also provide timely feedback, helping people monitor their progress and stay engaged. Rewards, whether social (like recognition) or tangible (like points or prizes), reinforce positive behaviors and strengthen the motivation to continue. By making everyday actions more engaging, gamification taps into our intrinsic motivations and turns behavior change into something people want to do, not just something they should do, boosting both uptake and long-term impact.

Julie Hordowick from the Regional Municipality of York, Canada, uses gamification in The Good Food Challenge to make participation more fun and interactive, especially for families. One popular feature was a bingo card, where participants could tick off completed food-saving challenges each week. This visual, game-like format helped people track their progress and added a sense of achievement, while small prizes for children boosted motivation and family involvement. By turning behavior change into a playful experience, gamification made the challenge more accessible and enjoyable, leading to greater engagement and improved outcomes.

The MINDSPACE and EAST frameworks used in the 5-Step Behavior Change Approach described in the next section, show how to select some of these techniques in your intervention planning.

5.0 Adopting a 5-Step Behavior Change Approach

This 5-Step Behavior Change Approach provides a structured, evidence-based process for designing, testing, and scaling interventions that support sustainable behaviors such as reducing wasted food in the home.

Grounded in behavioral science, and practical delivery experience, the approach outlined here is designed to help you define a specific behavior to change, understand the barriers and drivers for that change, create targeted solutions, test and refine them in real-world settings and scale up what works. The goal is to shift behavior at a meaningful level, improving outcomes for people and the environment in a way that is cost effective, and measurable.

The key steps in this process are as follows:

Step 1	Step 2	Step 3	Step 4	Step 5
Define	**Diagnose**	**Design**	**Deliver**	**Adapt and Scale**

For larger, in-depth projects, it is often recommended to adopt this behavior change approach in its entirety by following all steps in succession. However, in certain contexts or when working on pre-defined briefs with tight timelines and budgets, including every step in the process is not always required or appropriate. Some opportunities or activities might only involve one or a few steps, in which case you pick out just the steps that best fit your needs.

Alongside the detailed guidance provided for each step in this section, you will find ten worksheets in the final section of this guide. An accompanying Workbook has been designed to help you put the steps into practice through worked examples for further guidance.
A short summary of the 5-Step Behavior Change Approach is also included as a checklist in Section 5.5.4.

Download the workbook

5.1 Step 1: Define – the Behavioral Problem

Step 1 of the 5-Step Behavior Change Approach involves clearly identifying the specific behavior that needs to change. This includes pinpointing **who** needs to do **what** differently, **when**, **where**, and **why**. There are dozens of interacting behaviors that cause people to waste food, throughout the journey of planning, buying, storing, preparing, serving, eating and discarding.

The first step therefore involves breaking down the challenge by identifying a tangible, specific behavior (or set of behaviors) that is causing people to throw away edible food. Being able to narrow down and articulate a specific challenge is crucial to informing the development of appropriate behavior change interventions.

In some contexts, the behavioral challenge can be obvious and is simple to identify and define. In others, it can be useful to undertake exercises that help to break down the food journey into specific steps to help identify where and when waste is occurring. Example activities to help define the behavioral problem include:

- A **"Weekly food diary"** – getting people to talk through their week's meals, what they bought, cooked, ate, and threw away, noting how, why and where decisions were made.
- **"Mapping a meal"** – getting people to reflect on a specific meal and tracing back the journey from the point of discard to consumption, preparation, storage, and purchase to identify spots where misjudgments or other factors that contributed to the waste occurred.

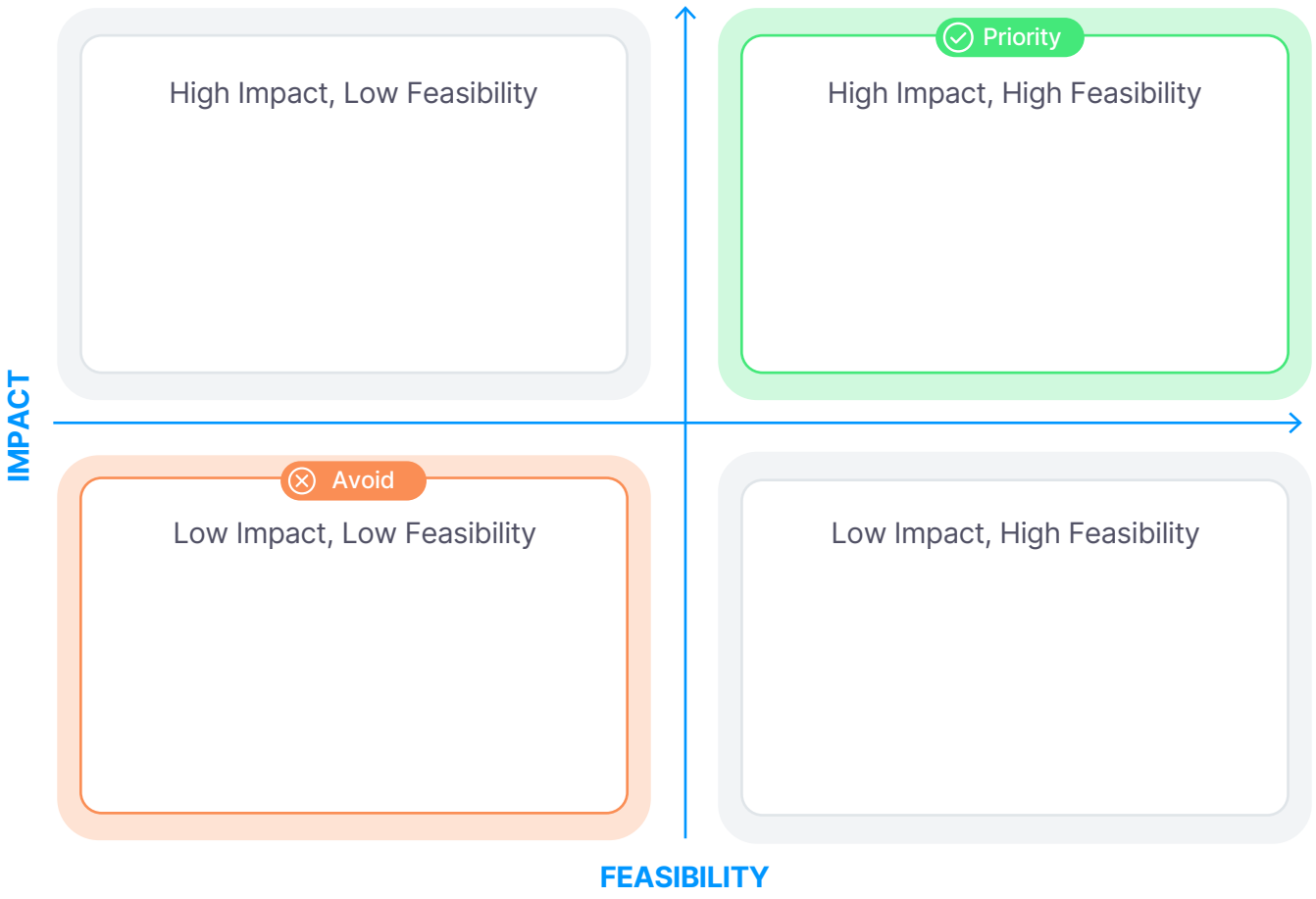
These exercises not only help to define and isolate the specific problematic behaviors but also generate nuanced insights into people's real-world challenges and habits.

5.1.1. Identify Potential Behavior(s) to Target

Once you have identified the behavioral problem and broken this down into a list of specific behaviors, you can then assess the potential impact on reducing wasted food and the feasibility of actually changing those behaviors.

A simple method for doing this is to use an Impact/Feasibility matrix (see Figure 8). Plot each behavior onto the matrix by assessing the relative impact and feasibility of each. It can be helpful to have different people do this exercise, to gather different points of view and benefit from each person's varied experience.

Figure 8: Example of an Impact/Feasibility Matrix



Different approaches will be needed for different contexts, however, some of the key feasibility considerations include the cultural and policy landscape, the anticipated level of partner interest, whether there is any existing momentum or activity that may support or hinder efforts, and the cost and complexity of possible interventions.

5.1.2. Select the Target Behavior(s)

Having plotted your list of behaviors on the Impact/Feasibility matrix, it should be relatively straightforward to identify a shortlist of which ones have the greatest potential. Generally, behaviors located in the High Impact / High Feasibility quadrant are good candidates to focus on (See Figure 8).

In some contexts, there may also be times when behaviors that fall in other quadrants are worth considering. For example, something that is Low Impact/High Feasibility may be considered a "quick win," and one that is High Impact/Low Feasibility may be something to consider as part of a longer-term strategy.

Combine this impact and feasibility lens with other practical and logistical factors that are specific to your behavioral challenge to select the most appropriate behavior to focus on.

5.1.3. Identify the Target Audience(s)

Defining your target audience is essential to planning effective interventions. Different groups within any population will have distinct attitudes, behaviors, and motivations, so understanding and defining your key audience enables more targeted interventions (and supporting communications), increases the likelihood of behavior change, and ensures that resources are used efficiently.

When defining and identifying your audience, it is useful to consider three key aspects:

- **Demographics** – such as age, gender, ethnicity, level of education, income, location, relationship status, household type and size.
- **Psychographic** – such as values, beliefs, attitudes, and interests.
- **Behavioral** – such as food purchasing and management behaviors (how people store, prepare and consume food) and wider domestic and household management behaviors (including managing household waste).

In addition to the above, practical considerations need to be factored in—including what types of households or individuals you are targeting, and which touchpoints and channels you can use to reach them. **Worksheet 1** provides a tool to do this.



The specific behavioral challenge and type of interventions being considered will influence the possibilities for intervention design and deployment. For example, a broad intervention that may resonate across multiple groups could target all households in an area or population, whereas more tailored ones may need to target specific groups or household types (e.g., detached dwellings versus multi-unit dwellings or apartments), household size (e.g., single-person households, households with children) or even specific people within households (such as those who are responsible for purchasing or cooking food).

In some circumstances you may want to obtain a detailed profile of specific groups or segments of a population, for example, to better understand the types of messages and communication channels to use. Several segmentation models exist and can be applied to different challenges.

Andrea Collins, from the Natural Resources Defense Council, USA, shares one of her top tips. She says: "Think about opportunities to narrow down the audience to find the right messaging, rather than "catch everybody" approaches. In some of our work in Portland, we found the Spanish speaking audiences were not being reached. We decided to narrow in on multifamily folks in two neighborhoods who might have a different need set and might not be seeing other city materials. This way, you can make inroads on some of the other opportunities that are lacking in city-wide distributions."

Understanding your audience is key to ensuring your interventions land well.

5.2 Step 2: Diagnose – the Behavioral Challenge and Create the Behavior Change Strategy

Step 2 of the 5-Step Behavior Change Approach involves understanding the existing situation of why a target behavior is not currently occurring, then identifying barriers to be removed or overcome to enable the desired behavior. Reviewing insights and applying behavioral models to analyze the behavior can enable a theory of change to be developed and the formation of a behavior change strategy.

5.2.1. Review Insights

Reviewing existing insights is important to ensure approaches are informed by what is already known about the target behaviors, audiences, and context. The types of resources that should be reviewed include case studies, evaluation reports, survey data, academic literature, and waste composition and waste arisings data.

There is a wealth of published information that can provide crucial insights into the reasons why people waste food, as well as the kinds of food that people waste the most.

Reviewing insights at this stage can provide early clues about the types of interventions that might be needed to prompt changes in people's capability, opportunity and motivation to do something. For example, a review may indicate that people often waste food due to confusion over date labels or poor meal planning. **Worksheet 2** provides a tool to help with this. These insights help to map out potential points of intervention, such as improving food storage knowledge, tips for meal planning, or creating visual prompts at key decision moments.



Consider the target audience when reviewing insights (**Worksheets 1 and 2** help you do this). This will ensure the behavior change strategy that gets developed is tailored, evidence-based, and embedded in the context and reality of how and why people behave the way they do.

> **Carla Bitz from Alternate Root, Canada** says: "My biggest take away, when it comes to knowing your target audience is you can't rely on education alone when 20% of your population turns over every six months. We need policy and we need convenience to back up the behavioral change."

5.2.2. Identify Knowledge Gaps

From your insights review, you may not find evidence and information to answer every research question you have. Being aware of what you do not know can be as important as what you do know. Reflecting on what is known, what is assumed, and what is missing can be a valuable step to achieve this.

Tools such as a Knowledge Matrix (see Table 2) can be used to chart existing insights against key behavioral questions—such as who does it, when, where, how often, and why. Another useful approach is to use an Assumptions Audit (see Table 3), where teams list their beliefs about the behavior and test whether these are backed by evidence or need validation.

Table 2: Example of a completed Knowledge Matrix to map existing knowledge about behaviors we want to change

What we know about ... people not storing fresh fruit and vegetables in the best way to maintain freshness				
Behavioral Question	**What We Know**	**Evidence Source(s)**	**Knowledge Gaps / Uncertainties**	**Priority for Further Research**
Who does it? (Demographics, groups, segments)	Everyone. Specific interest in young people and those with limited fridge and storage space.	Project-specific quantitative survey (unpublished).	No apparent knowledge gaps based on the identified target audience.	Low
When do they do it? (Time of day, seasonality, lifecycle moments)	At the point of unpacking groceries. Some seasonal changes (e.g., more likely to store fruit in the fridge during hot weather).	Project-specific quantitative survey (unpublished). Anecdotal evidence.	High confidence in the insights around unpacking groceries being a key time, but a knowledge gap exists around seasonal effects or other time-related influences.	Medium
Where does it happen? (At home, in-store, eating out, etc.)	At home, in the kitchen or pantry.	Project-specific quantitative survey (unpublished). Anecdotal evidence.	Good understanding of where people tend to store food, with product-specific insights from survey.	Low
How often does it happen? (Frequency, patterns, habits)	At the point and time of unpacking groceries—so the frequency of the behavior is influenced by the frequency of shopping.	Project-specific quantitative survey (unpublished). Anecdotal evidence.	No gaps identified.	Low

Table 2 *(continued)*

What we know about … people not storing fresh fruit and vegetables in the best way to maintain freshness				
Behavioral Question	**What We Know**	**Evidence Source(s)**	**Knowledge Gaps / Uncertainties**	**Priority for Further Research**
Why does it happen? (Motivations, barriers, social norms, triggers)	Lack of knowledge about optimal storage location for different products; long-held storage habits; lack of space and time to do things differently; competing motivations (e.g., preference for fruit to be at room temperature instead of chilled; or desire to display fresh produce in fruit bowls to signal health or abundance).	Project-specific quantitative survey (unpublished). Anecdotal evidence.	Detailed picture obtained of the high-level reasons that people give for storing fresh fruit and vegetables in sub-optimal conditions, but more-detailed insights on the competing influences and how to intervene in this interaction would be beneficial.	Medium
How is it done? (Methods, routines, contextual factors)	Poor knowledge is often compounded by absent, misleading or easy-to-miss storage information on-pack; misleading storage cues (e.g., how items are displayed in-store influences beliefs on how they should be stored at home); influences from childhood role models and/or other household members.	Project-specific quantitative survey (unpublished). Anecdotal evidence.	More-detailed insights on how people go about storing fresh fruit and vegetables would help to inform intervention design.	Medium

Table 3: Example of an Assumptions Audit to map existing insights about who is wasting fresh fruit and why

Assumptions about … who is wasting fresh fruit and veg and why			
Assumption (What we believe about the behavior)	**Evidence Status (Strong / Partial / None)**	**Evidence Source(s)**	**Action Needed (Validate / Gather More Data / Confirm Robustness)**
Young families waste more fresh fruit than older households.	Partial	Small survey (n=100 households).	Validate with larger dataset or segmentation analysis.
People buy more fresh fruit than they need because packaged fruit is cheaper than buying unpackaged.	Strong	National consumer survey, 2023.	Confirm robustness across demographics.
Selling more fresh fruit loose at the same or lower price than packaged reduces fresh fruit waste in the home.	None		Consumer trials with a national chain of grocery stores.

Once you've identified any knowledge gaps, you can then make an informed decision about whether you are happy to proceed based on your existing insights, or whether you need to prioritize further research to fill any knowledge gaps before proceeding.

Often, the reality of budget and time constraints means you may need to proceed with incomplete information, so acknowledging where the gaps are and if these introduce any risks or other implications can help to avoid any unintended consequences and increase the likelihood of success of your interventions.

5.2.3. Obtain New Insights if Required

If you decide you need to obtain additional insights to fill a crucial knowledge gap, then selecting the most appropriate research method is essential for gathering accurate and actionable data.

Quantitative methods – including surveys, waste composition studies, waste audit data, and waste models – are helpful for creating baselines, measuring and comparing performance, and identifying trends.

Qualitative methods – including interviews, focus groups, and observational studies, are helpful when exploring deeper motivations, understanding context, or uncovering unexpected barriers and enablers to behavior.

> **Lesly Baesens from the City and County of Denver, USA**, uses focus groups to find out the specific context and challenges people face. "For a particular group, one challenge voiced was a scarcity mindset: for fear of running out of food, participants said they keep a lot of food in the fridge and over prepare, because they want to have food on hand in case friends or family come by. This was leading to wasted food."

In short, quantitative approaches enable you to understand "what" and "how much" of something is happening, and qualitative approaches help to understand "why" it is happening.

There are pros and cons to both approaches, so when budgets permit, it is often desirable to adopt a mixed-methods approach, that is, using both quantitative and qualitative methods.

5.2.4. Identify Behavioral Barriers and Enablers

Identifying behavioral barriers and enablers helps us understand what prevents or supports people in adopting a desired behavior. This, in turn, helps us to design targeted interventions that remove obstacles and strengthen the factors that make behavior change more likely.

5.2.4.1. Applying the COM-B Model

The COM-B model can be used at this stage to examine the behaviors. It classifies behavior as the result of three interacting components: **Capability**, **Opportunity**, and **Motivation**, all of which need to be fulfilled for someone to be able to perform a behavior.

The easiest way to apply the model is to use specific prompts and questions related to the three model components, to generate ideas about the types of things that might enable or get in the way of people performing the behavior. A list of questions to consider is included in **Worksheet 2**. Here is an example of how the model can be used.

It has become a social norm in many countries around the world to prepare food in such a way that only part of the food is eaten and much of it, though edible, is thrown away. For example, cauliflower leaves, broccoli stalks, and cilantro stems are typical examples of edible parts that are often wasted.

> **Mariana Orozco from Arca, Mexico**, says: "In Mexico, it is common practice in families, to teach that the important thing about cilantro is the leaves, and that the stalks are trimmed off and thrown away".

Getting people to use the leaves, stalks, and stems would help prevent this waste. But how can we get people to actually use these edible parts of their food and not just throw them away?

By looking at the challenge through the COM-B lens, we can get into the fine detail and identify areas to tackle.

We can look at people's:

- **Psychological Capability:** Do they know which parts of foods are edible and nutritious and which are not and why? If not, can information be provided in a way that will be noticed and understood by them to increase knowledge?
- **Physical Capability:** Are they able to prepare food in a way that makes the most of the edible parts (e.g., can they peel the outer part of the broccoli stem?) Do they have the required equipment (such as a peeler) and the fine motor skills to use it?
- **Social Opportunity:** Do they see other people using leaves, stalks and stems in cooking? Does it feel normal to them to do it? Could a campaign be used to position it as an okay thing to do that others are already doing?
- **Physical Opportunity:** Can they buy vegetables and herbs with the leaves, stalks, and stems still attached? Are they available in the store that they shop in, and at a price point and packaging size that meets their needs? Do they have the time to prepare the leaves, stalks and stems in the desired way?

- **Reflective Motivation:** Do they have the confidence to use their judgment on what parts of foods are digestible and palatable? Are they risk averse? Could communications reassure people about what cues to look out for, and what is and is not safe and tasty?
- **Automatic Motivation:** Do they always buy the same vegetables/herbs, in the same habitual way (and are they sold with leaves, stalks or stems intact)? Could a marketing campaign or other intervention be targeted towards them to prompt them to try something different?

By assessing the presence and strength of each of these COM-B sub-components, we can identify the specific factors which may be preventing a behavior from occurring. Not all barriers or enablers will be things you would be able to influence. However, understanding the myriad interactions that influence the behavior can allow you to identify which areas you could influence and therefore, what to focus on.

This approach can be done individually. However, it works best when conducted in a small team workshop setting, with a facilitator inviting the group to generate ideas of the potential barriers and enablers that might exist. The example questions in **Worksheet 2** provide a structured way of working through the different components, which helps to unearth nuanced insights. Approaching this in a group setting enables people's diverse perspectives and lived experiences to help to uncover unexpected or hidden barriers.

Once the list of potential barriers and enablers has been generated, the next step is to prioritize which ones to focus on. There is no single way to approach this, but considering logistics, cost and partner interest is often important. An **Impact/Feasibility** matrix (see Figure 8) can also be used to steer decision-making here.

It is important at this stage to reflect on whether the key barriers and enablers that you identify are evidence-based, assumptions or purely anecdotal. If helpful, the assumptions audit discussed in Section 5.2.2. can be repeated here.

5.2.5. Specify the Behavioral Objective

Once key barriers or enablers have been identified, outlining the behavioral objective can be a useful linking step between analyzing (and understanding) the behavior and developing a plan to change it.

The more specific this can be, the easier it is to ensure that the thinking that underpins the theory of change and subsequent intervention design stays focused on the desired outcome. Intervention strategies can combine a number of interrelated objectives, as long as they are all still aiming for the same behavioral outcome. Being specific will also make it easier to develop a monitoring and evaluation plan later in the process.

Using the vegetable/herb leaves, stalks and stems example from the previous section, the behavioral challenge is that people trim these to remove leaves, stalks, and stems, leading to these perfectly edible, nutritious parts being thrown away. The behavioral objective therefore would be to:

'Get people to use more of the edible parts of their vegetables and herbs, to avoid throwing away parts that could be eaten'.

Barriers that might emerge from a COM-B analysis could include that: people do not know which parts of the vegetables/herbs can be eaten and which cannot; they are not used to seeing some edible parts of vegetables being included in familiar recipes; and they do not have the preparation and cooking skills to incorporate these vegetable parts into their meals.

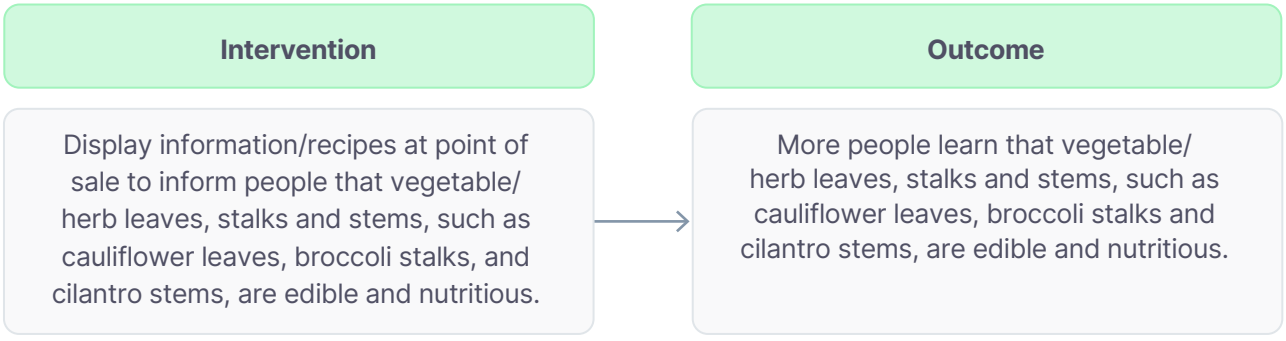
In this scenario, there could be multiple, complementary behavioral objectives that support the overarching objective. These could be, for example, the following:

- Get people to know which parts of vegetables are edible,
- Get people to use more of the edible parts of vegetables instead of throwing them away,
- Get people to share photos/recipes when they use up these vegetable parts.

5.2.6. Develop a Theory of Change

A theory of change outlines how and why a desired change is expected to occur in a specific context, linking activities (interventions) to their desired outcomes and impacts. This is a key part of building a behavior change strategy useful for informing the subsequent intervention design. It can also help to articulate what an intervention can and cannot do.

For example, using the above "Get people to know which parts of vegetables are edible"'objective, a theory of change might look like:



However, without achieving the other behavioral objectives, there is no guarantee that the desired outcome, of people eating their cauliflower leaves, broccoli stalks, and cilantro stems rather than throwing them away will be achieved.

Building these complementary approaches into the theory of change can help to show how they dovetail together to achieve the desired outcome, as shown in Table 4.

Table 4: Example of Theory of Change

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

There is no single, correct way of articulating a theory of change. It can be visual, like the diagram above, or more narrative-based. The important thing is to ensure that there is a coherent logic that flows through to demonstrate how specific interventions or activities will achieve the desired outcomes and impact.

5.2.7. Create a Behavior Change Strategy

A behavior change strategy functions as a flexible blueprint that is used to achieve a particular goal, with the capacity for adaptation and change as needed. Creating a behavior change strategy links key elements from the defined behavioral problem (from Step 1) to the diagnosis of the behavioral challenge (from Step 2). The level of detail included can vary depending on the needs of your project, ranging from simply noting down the main elements to a more formal, in-depth strategy.

Irrespective of the format and detail that you choose, the key purpose of this strategy is to translate the insights and implications from each of the preceding steps into a practical plan for change.

Referring back to this strategy at key points in Step 3 (Design) and Step 4 (Deliver) will ensure that the design and deployment of any interventions remain focused on the original objectives and helps to avoid accidentally deviating away from this due to logistical and other constraints and developments. Of course, plans and goals may evolve throughout the course of a project, so this strategy can also be used as a living document and proactively updated to reflect new plans, but proceeding without one at all can increase the risk of delivering an intervention that does not achieve the desired outcomes and impact.

Including the following elements will help you develop your strategy:

1. **Outline a clear behavioral objective**
   - Describe the desirable behavior changes (or end goals) that you hope to achieve.

2. **Highlight the target audience**
   - Include actionable insights if available, such as understanding how and where to engage with and reach specific groups or segments.

3. **Summarize insights and implications**
   - Synthesize key insights, including the prioritized behavioral barriers and enablers. Ensure to not just describe the insights but explain the relevance and what they mean for subsequent design stages and delivery plans.

4. **Theory of change**
   - Include a summary of the logic and theory of change to ensure this is reflected on throughout subsequent steps in the process. This could also include a high-level summary of any key assumptions and risks.

5. **Behavioral Techniques and Principles**
   - Reflecting on the types of behavioral techniques that could be leveraged is not an absolute necessity for the strategy (and can instead be introduced in the Step 3 – Design (see Section 5.3). However, narrowing down the list of the types of techniques that could be used (or eliminating irrelevant ones) can help inform the subsequent generation of ideas.

Incorporating the above elements should be sufficient information to proceed to Step 3 (Design) and Step 4 (Deliver). However, it can also be helpful, especially if the strategy will be used as a 'live' document that can be updated as plans are finalized, to also include an initial, high-level overview of the following elements (which will be built upon in Step 3 and Step 4).

6. **The Delivery Approach**
   - Include preliminary ideas on delivery partners, channels you might use, budget allocations, timelines etc. You can build detail in the Delivery Plan but it helps to think ahead here.

7. **Monitoring and Evaluation Plan**
   - Ask the question 'What does success look like?' This can help to inform appropriate intervention design and deployment, as well as ensure that the evaluation plan is able to obtain evidence to prove success. While the full evaluation approach will not need to be developed at this stage, the more the question of "how could we evaluate this?" is built into the design and delivery of the intervention plans, the better the evaluation will be. Early considerations could include likely key metrics, available data sources, and possible evaluation methods. Table 7 in Section 5.4.2.1. gives some ideas.



5.3 Step 3: Design – the Solution

With a behavior change strategy in place, Step 3 of the 5-Step Behavior Change Approach moves on to generating and refining practical solutions.

5.3.1. Design and Prioritize Solutions

Working with your Theory of Change and Behavior Change Strategy, now is the time to start thinking of solutions. How are you going to remove barriers, strengthen enablers, and make change happen? A good place to start is to remind yourself of the possible intervention types to consider (see Section 3.3).

Some interventions change the system or environment, so people have to do things differently. Other interventions work with people's attitudes, beliefs, skills or knowledge.

What should we aim to change? Table 5 helps you work this through.

Table 5: Intervention design: Framing the change

Area of Change	Key Questions	Why Ask This?
1. The System	• What's getting in the way? • Is the system set up to make this easy?	Spot barriers or gaps in rules, design, or access.
2. Attitudes & Beliefs	• What do people think or feel? • Do they want to change?	Understand motivation and mindset.
3. How People Use the System	• Where do people get stuck? • What habits or routines shape behavior?	Find friction points and behavior patterns.
4. Target Behavior	• What exactly do we want people to do? • Who, when, how and why?	Focus the change—be specific and realistic.
5. Quick Wins & Leverage	• What's easiest to shift? • What's already working we can build on?	Builds momentum, boosts morale, and shows early success.

It is best practice, where possible, to involve those who will be delivering and/or be affected by interventions at an early stage. This upstream engagement and co-design of interventions with stakeholders and participants helps to ensure that solutions are grounded in real-world experiences, making them more relevant, acceptable, and effective. It also fosters ownership and collaboration, which can improve uptake, trust in the intervention, and sustained behavior change.

Approaches to stakeholder involvement in intervention design can include the following:

- **Community workshops**
  Bring people together to share experiences, identify challenges, and co-design solutions in a collaborative setting.
- **Behavioral journey mapping**
  Work with participants to map their current habits and pain points, helping to uncover real-life triggers and barriers.
- **"Test and tell" sessions**
  Give people early versions of tools or messages to try at home, then gather feedback on what worked and what could be improved.
- **Peer-led idea generation**
  Facilitate small-group sessions where participants generate solutions for their own community, helping to maximize relevance and buy-in.
- **Storytelling and lived experience–sharing**
  Invite people to tell stories about their everyday routines, to inspire ideas grounded in real behaviors.
- **Youth-led design activities**
  Involve children or teens in creating gamified tools, visuals, or messages. This can help to spark fresh, engaging approaches.
- **"What would make this easier?" prompts**
  Pose simple prompts in workshops or interviews to quickly surface practical solutions and design cues.
- **Prototype swap**
  Ask people to create or test low-fidelity tools (such as sketches or simple mock-up drawings), then swap and critique each other's ideas.

Top tips and principles to consider include:

Do	Don't
Keep an open mind. Explore all types of interventions, even unfamiliar ones.	**Do not default to what you've done before.** Past success doesn't guarantee future best solution.
Let the behavior guide the solution. Choose what fits the context and people.	**Do not assume education alone will change behavior.** Education and awareness-raising is rarely enough.
Start with listening. People affected by the intervention have key insights.	**Do not force-fit an intervention type.** Use what works, not what's trendy.
Include a mix of voices. Bring in diverse perspectives and experiences.	**Do not overlook system barriers.** Fix infrastructure or access issues where needed.
Be willing to be wrong. Stay open to challenge and change.	**Do not design in a vacuum.** Involve your audience in every stage.
Prototype early and cheaply. Rough versions save time and reveal flaws.	**Do not ignore small wins.** Quick successes build momentum and confidence.

Roni Neff from John Hopkins Bloomberg School of Public Health, USA, says: "Interventions are often most effective when they are co-designed with the intended audience. There's no substitute for the lived expertise and insightfulness of frontline staff and partners. Effective co-design requires creating a safe space and sufficient time for openness and creativity, and taking the time to listen, observe, and engage in the process — and also, following through on the participants' recommendations."

5.3.2. Create Insight-led Intervention Ideas

There are many ways to generate ideas, and different teams use different creative methods. What matters most is choosing a process that produces creative, impactful, and practical intervention ideas.

As part of the design process, it is useful to "go wide" when generating early ideas, before narrowing down the focus, prioritizing and refining ideas from a long list of varied and creative options.

Generating early ideas can often work best in a workshop setting, with participants encouraged to share and build upon each other's ideas. It can be useful in these sessions to prime participants with the concept that there are no bad ideas or wrong answers at this stage, and that sharing ideas that might seem unrealistic, controversial, or impossible can be a useful prompt to generate creative discussions. While more outlandish ideas might not be feasible in their own right, the underlying thinking or rationale behind them can sometimes be redefined or combined with other "safer," more conventional ideas, potentially leading to the generation of ambitious and creative ways of solving a behavioral problem that might otherwise not have been unearthed.

To ensure ideas are sufficiently focused on the behavioral problem, it can be useful to reframe the key barriers from a COM-B analysis into creative prompts.

Using the "Get people to know which parts of vegetables are edible and nutritious" scenario from earlier, this reframing of barriers (see Section 5.2.4.) into opportunities and creative prompts could include examples as shown in Table 6.

Table 6: Example of how COM-B barriers can be reframed as creative prompts for intervention design

COM-B Barrier	Creative Prompt
People do not know that vegetable/herb leaves, stalks and stems, like cauliflower leaves, broccoli stalks, and cilantro stems are edible and nutritious.	How might we get retailers to display information/ recipes so people learn that vegetable/herb leaves, stalks and stems, like cauliflower leaves, broccoli stalks and cilantro stems, are edible and nutritious?
People are used to seeing vegetables/herbs such as cauliflower, broccoli, and cilantro served with their leaves, stalks or stems trimmed off.	How might we make it more common for people to see parts of vegetables/herbs, such as leaves, stalks and stems, served in foods they see regularly?
People are risk-averse and worry that some parts of vegetables are trimmed off because they are not digestible or safe to eat.	How might we make it easier for people and make them feel confident about which parts of vegetables are edible and nutritious? How might we make it easier for people (and make them feel confident) to know how to use all the edible parts of their vegetables and herbs?

A useful approach when generating intervention ideas is to explore creative interventions from other contexts and to consider whether there are ways these could be replicated, repurposed, or built on. Including examples of innovative ideas from a range of different contexts as supporting prompts can help to stimulate creative thinking. For the same reason, including some of the behavioral techniques described in Section 4.5. as prompts can help with the creative process. **Worksheets 4 and 5** help with this.

5.3.3. Applying the EAST Framework

As you start to develop promising intervention ideas, the EAST Framework can be used as a preliminary guide to assess whether they are likely to be effective. A detailed explanation of the framework is included in Section 4.4.3.

To use the EAST framework to assess the potential effectiveness of ideas, ask the following four questions:

- **Is it EASY?** How much effort is involved in doing the desired behavior (and how does this compare to alternative options available to people)?
- **Is it ATTRACTIVE?** Is the behavior appealing or desirable? Is there a clear incentive for people to do the behavior?
- **Is it SOCIAL?** Does the behavior feel "normal"? Is there any form of social or peer pressure that might make people more or less likely to do it? Can any form of social commitment be built into the intervention?
- **Is it TIMELY?** Is the intervention delivered at the right time for people to act upon it in the desired way? Does the timing align with (or deliberately disrupt) existing routines, life events or other times when people might be most receptive to change?

If the answers to the above questions are "YES," then the intervention may be a promising contender to prioritize, refine and then deliver. If some of the answers are "NO" then the idea in its current format may not be effective at delivering your desired behavioral outcome. In this scenario the idea should either be deprioritized, or improvements and alternative ways of designing and deploying the intervention should be considered before proceeding.

5.3.4. Applying the MINDSPACE Framework

Like the EAST Framework, the MINDSPACE Framework described in Section 4.4.2. is another helpful tool to guide intervention design and maximize effectiveness. Developed originally to inform effective policy design to change behavior, MINDSPACE provides a checklist of influences on behavior that can be embedded into communications, services, products, environments, and the "choice architecture" to steer people toward desired actions. MINDSPACE is most useful when applied with the aim of refining or optimizing existing interventions or when designing light-touch nudges that work with, rather than against, natural human decision-making.

Using the MINDSPACE acronym—**Messenger**, **Incentives**, **Norms**, **Defaults**, **Salience**, **Priming**, **Affect**, **Commitments**, and **Ego**—helps you to consider a good range of behavioral influences and techniques when designing your interventions.

Note: You can use both EAST and MINDSPACE together. **Worksheet 5** helps you do this.

5.3.5. Shortlist Interventions Using Key Criteria

The next step is to assess and shortlist the interventions to take forward into Step 4 (Deliver). Systematically evaluating each intervention based on key criteria ensures the ideas that go on to be piloted are most likely to be feasible to deliver and have a high likelihood of achieving the desired outcomes.

Each project and context will have its own unique features, and the criteria used to shortlist ideas should be tailored accordingly. Reflecting on your Theory of Change and Behavior Change Strategy will enable you to identify specific criteria relevant to your challenge. However, there are some criteria that should be considered for all contexts. These are the following:

- **Time** – can the intervention be produced, deployed, and evaluated in the required timescale?
- **Cost** – what financial, human and other resources are required, and are they available? Especially relevant is the consideration of any resources that will be required by external partners or stakeholders.
- **"Wind Conditions"** – Is there any movement or momentum that might support or undermine the delivery of your intervention? Do policy or legislative developments, partner (and competitor) activities, and wider changes in the economic or societal context provide a headwind or tailwind for your plans?
- **Impact** – Based on the above and reflecting on your theory of change, does it feel like your idea could deliver the impact you are trying to achieve?

Assessments should ideally involve a range of stakeholders to ensure that all relevant insights and perspectives are considered. There will likely be many different viewpoints, depending on the range of stakeholders involved. Some stakeholders will base their prioritization on science-based principles and evidence. Others may prioritize based on their feelings, experiences in the field and anecdotal evidence. It is important to ensure all voices are heard, so stakeholders do not disengage. There may be conflicting views, and it may be time-consuming to capture this. Pre-planning opportunities for people to feedback their thoughts independently, alongside group methods, will be helpful.

The scientific rigor you choose to apply to the assessment could range from devising a table or matrix to assign scores for each criterion and inform a discussion based on the sum of scores for each idea, to a more informal judgment. The important thing is to consider all of the key criteria and assign some form of high, medium or low score to each idea to enable you to differentiate between interventions and decide which ideas to prioritize and why.

An additional tool to consider is the APEASE Criteria. The APEASE approach has lots of overlap with the criteria suggested above, with some additional considerations. The full list of criteria included in the APEASE approach is: Acceptability, Practicability, Effectiveness, Affordability, Side-effects, and Equity.

Worksheet 6 gives some tools to help with the shortlisting process.

Pro Tips for Success

- **Include diverse voices:** get input from different stakeholders and team members.
- **Be brutally honest:** do not 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.

However you decide to approach shortlisting of ideas, completing this in a systematic way should ensure you focus resources on interventions with the greatest potential to change behavior, while managing risk and complexity. This stage is essential for moving from strategy to action, ensuring ideas are grounded in evidence and well-positioned for delivery and evaluation.

5.3.6. Refine Interventions

This section has been included as a standalone point. However, refining interventions should occur as an ongoing, iterative process throughout the entire development, delivery and scaling, responding to any new insights or changes to ensure continuous improvement over time.

If budget and logistical constraints allow, it can be valuable to produce early prototypes of your interventions and conduct small-scale testing before proceeding to a large-scale pilot.

This could include low-fidelity mockups, messaging, conceptual imagery, or other prompts to test with a panel made up of your target audience or could be a micro-scale 'pre-pilot' in the real world. The closer the design and delivery of this prototype can be to the approach planned for the pilot, the more useful insights you will be able to obtain.











Conducting this small-scale testing can provide insights on how the intervention might work in practice. This can then inform potential refinements in the design or planned deployment for the larger-scale pilot. It can also help to identify any unforeseen impacts of the intervention. Taking the opportunity to test, learn, and refine the approach before deploying at a larger scale can help to minimize risk, optimize the design and save time and resources.

Alex Nichols-Vinueza, of World Wildlife Fund, USA, shared a great example of test, learn and refine: "Through our Food Waste Warriors program, we partnered with Arizona State University support a cohort of 10 public school teachers in Phoenix, Arizona. Using smart food recycler bins, schools turned food scraps into nutrient-rich food grounds (that can feed animals or be used to create compost instead of trash), with one school reducing food waste by about 30%.These efforts were paired with food waste audits in cafeterias with students, which often reveal up to 60% of discarded food items in schools are unopened or uneaten food - perfectly good for share tables or donation. This learning reinforced the importance of pairing these food recycling efforts with prioritizing edible food recovery to feed people first."

Adapting plans based on new insights and reflecting on your theory of change, like Alex did, can help ensure that what you're planning still aligns with and can deliver your behavioral objective.

Once interventions have been refined based on available feedback, testing, and alignment with your behavioral objectives it is time to proceed to pilot the intervention in a real-world setting.

Claudia Sánchez from BAMX, Mexico, explains how the Pacto por la Comida, Mexico's national voluntary agreement to reduce food loss and waste, refined its strategy through message testing and large-scale consumer surveys. Early iterations tested messaging which were found to be too negative and proved less effective than the positively framed "En México la comida no se tira" (In Mexico, food is not thrown away).

5.4 Step 4: Deliver – a Pilot

Step 4 of the 5-Step Behavior Change Approach introduces the key considerations for piloting the refined interventions to test their effectiveness. It outlines how logistical and methodological considerations should shape pilot delivery to ensure that sufficient data can be obtained to enable a rigorous evaluation to determine the success of the pilot and inform any further refinements required before scaling.

Delivering a pilot is an opportunity to test interventions at a smaller scale in a semi-controlled environment. It allows you to observe how the intervention performs in real-world conditions and to identify any unexpected challenges or opportunities that may not have been obvious during the design phase.

Piloting helps to assess the effectiveness of interventions and should be treated as a learning opportunity, where the focus is on gathering insights that can improve the intervention before scaling, rather than immediately expecting large-scale impact.

Consult with other organizations that may have attempted similar interventions to identify lessons learned. Look for opportunities to deliver and cost-share pilots in partnership with other organizations.

5.4.1. Develop a Pilot Delivery and Evaluation Plan

A well-developed Delivery and Evaluation Plan ensures that the pilot is implemented effectively and the right data are collected to enable evaluation. The plan should set out which stakeholders and delivery partners will be involved (and in what capacity), what will happen when, how the intervention will be delivered, and how success will be evaluated. **Worksheet 7** guides you through key questions to build your delivery plan.

Evaluating interventions to reduce wasted food is often more logistically complex and resource-intensive than the design and rollout of the intervention itself. For this reason, building the evaluation plan into the design and delivery plan (as opposed to developing one after other logistical and design decisions have been made) is essential, to make sure that right data can be obtained to enable evaluation to take place. There is no point deploying a well-designed intervention if there is not an equally well-thought-out evaluation plan to enable you to determine whether, how and why it has worked. **Worksheet 8** will guide you through making your evaluation plan.

5.4.2. Define What Success Looks Like

The first step for developing an evaluation plan is to define what will be deemed a success. This will enable you to then design a fit for purpose approach to obtaining and analyzing data that demonstrates whether you have succeeded. Section 3.6 introduced the concept of focusing on the right outcome. By reflecting on this and referring to your behavioral objective, you should be able to articulate what success looks like and devise key metrics to use in the evaluation.

Understanding the scope, opportunity, and limits of interventions helps you to determine whether something has been successful. For example, a campaign might use social media metrics to track reach or engagement, along with a survey to measure changes in attitudes, knowledge, or self-reported behaviors. This may be deemed sufficient evidence of impact and success for some activities. In other contexts, more-specific, objective measures of impact may be required, such as observed changes in the amount and composition of food waste.

Figure 9 guides you through some questions to ask yourself as you work out your vision of success and how you will know you've achieved it.

Figure 9: Example questions to help evaluate success of your interventions



There is no one-size-fits-all approach to evaluating behavior change interventions, so the clearer the definition of success, the easier it is to demonstrate if, how and why it has been achieved.

5.4.2.1. Ensure the Approach Can Obtain Suitable Data for Evaluation

As you design your pilot, think about how you could produce reliable and relevant data to evaluate its effectiveness. This could include surveys, waste composition analysis, purchasing, or usage data, observations, or qualitative feedback.

It is important to consider from the start what kinds of data will be most useful and how they can be practically and ethically collected. A strong data collection plan balances rigor with pragmatism, ensuring useful insights are gathered without overburdening participants or stretching resources.

Part of your pilot will be to test your data collection as well as testing your assumptions of success. You should be mindful that you may need to revisit your stated goals based on what you learn. You may also find that certain things you think you will be able to measure are too difficult or expensive to measure in practice. In your evaluation, you can be clear about what did and did not happen, and why. This is as important a part of evaluating success as data alone. Without understanding the context, i.e., what happened, data analysis can often be misleading or inaccurate. For this reason, it is good practice to consider using more than one means of collecting data and to plan in advance things like site visits and observations to ensure that contextual information is collected along with the data.

Lesly Baesens from City and County of Denver, USA, says: "People need to make sure they have a secondary mean of assessing results. This points to something fundamental that needs to be talked about more in our community of practice: we seem happy to rely on clicks, likes, surveys, and how many people visited our webpage to claim success in changing behavior, but rarely perform waste audits to measure results. So how do we know if our intervention really worked? In Denver, our campaign surveys showed positive results, but our waste audits were inconclusive. Did our intervention work and we are dealing with a methodological issue? How do we figure that out? I wish we explored all the ways to measure campaign success."



Claudia Sánchez from BAMX, Mexico, says: "How are we going to know that the people who received the intervention are really using it?" She explains how they've managed to measure success in various ways. Claudia's team relied on indicators such as **partner engagement, institutional invitations, social media response**, and **community growth** as practical indicators of positive campaign impact.

Table 7 shows evaluation methods to help you measure impact.

Table 7: Measurement methods for household food waste behavior change interventions

Measurement Method	Metrics	Best Suited to Intervention Types	Pros	Cons	Relative cost/effort
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	Low to Medium, depending on dataset size and whether outside services are required
Kitchen Diaries / Food Waste Logs/ Measurement Technology (e.g. 'smart'., "smart" bins)	Kg 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)	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	Low to Medium, depending on whether low tech or hi tech measurement used
Food Waste Bin Weighing / Composition Analysis	Kg of food waste collected per household per week; % avoidable vs. unavoidable food 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	High (particularly when 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	Shows digital engagement and usage patterns	No visibility of offline follow-through at home	Low (as often via free tools)
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-reporting	Medium

Table 7 *(continued)*

Measurement Method	Metrics	Best Suited to Intervention Types	Pros	Cons	Relative cost/effort
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	Medium
Social Media Interaction (likes, shares, comments)	# of impressions, likes, shares, comments; % positive sentiment in comments; reach of campaign hashtags	Influencer campaigns, awareness drives, viral content	Indicates reach and message resonance	Doesn't confirm real-life behavior change	Low (as often via free tools)
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	Low
Longitudinal Household Tracking	Kg 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	High
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	Low

Mariane Maltais-Guilbault from Ville de Montréal, Canada, says: "If data collection is well planned, the data can be combined to generate new insights (e.g., ROI, $/kg). Practitioners should be wary of the exclusive measurement of reach or engagement on social media, since this is not synonymous with behavior change. Yet, this is often what communications teams measure to assess the success of a campaign."

5.4.2.2. Logistical and Methodological Considerations

Delivery of a pilot needs careful attention to timing, location, recruitment, and resources. These practical decisions can make or break the success of an intervention. For example, if a pilot overlaps with holidays or local events, participation may be affected. Certain seasonal, religious, or cultural events are also associated with changes in the way we buy, manage, serve and waste food, so ensuring that any behavioral changes and associated waste reductions can be attributed to your intervention, and not other causes is important. Methodologically, you should consider how to isolate the impact of your intervention. This might involve comparing results with a control group or using a before and after design. Being clear about these decisions helps ensure your findings are credible and actionable.

Brian Roe from Ohio State University, USA, says: "Do your best to get a control group. Seasonality is a real thing, and so you need to have some way to have a control group. Whether it is surveying or curbside or whatever you are doing for evaluation, that is critical, otherwise you get some spurious results, or the post looks like a failure when it was not: maybe waste went up just because of seasonality and your treatment group might have gone up by less."

5.4.3. Deploy the Intervention(s)

Once all planning and preparations are complete, you can move to live delivery of the intervention. This is the phase where interventions are deployed (often via partners) to reach real users, in real settings, and are subsequently monitored.

An often overlooked task in this phase is to ensure that everyone involved in delivering any part of the intervention is properly briefed. If logistics are being fulfilled by a small project team, this task might simply be a light-touch briefing to confirm all roles and responsibilities are understood. However, for complex projects or interventions involving multiple delivery partners, it is best practice to provide detailed briefing documents explaining exactly what is required and why. Having someone with oversight of the wider objectives of the project who is present "on the ground" when deployment begins can be invaluable, to ensure delivery is occurring as planned. If the delivery is deployed incorrectly from the start, this may continue for the duration if it is not picked up early, which can then undermine the whole intervention approach.

It is also important to be flexible during deployment. Real-world complexities often bring unexpected challenges, and being responsive to them, while maintaining the integrity of your pilot, is key to gathering useful learning and setting the stage for scale-up.

In addition to instructing and guiding partners to deliver the intervention as planned, it is useful to gather their feedback and evidence about what occurs during the intervention deployment. Photographic evidence, video clips, anecdotal evidence, numeric logs of activity and general partner feedback can provide useful context to inform the evaluation and unearth valuable insights and implications for future refinement and scaling.

5.4.4. Key Evaluation Principles to Consider

Robust evaluation starts with clarity and ends with honest reflection. You should aim to understand not just whether an intervention has worked, but how and why—or why not. Evaluation should be proportionate to the scale and goals of the pilot and should ideally use a mix of qualitative and quantitative methods.

Evaluation findings should feed directly into the next stage: refining and scaling. Even if the pilot does not achieve all its goals, the lessons learned can inform decisions and next steps. The more nuanced insights you can obtain, the more informed your decision-making can be.

5.4.5. Evaluate the Effectiveness of the Intervention(s)

Evaluating effectiveness involves systematically reviewing whether your intervention achieved the desired outcomes. This can include comparing key metrics before and after delivery or between pilot and control areas. Common metrics in food waste interventions may include weight or volume of waste, bin usage rates, or self-reported behavioral shifts. Depending on your design, this might involve waste composition analysis, survey data, or observational methods (see Table 7 for more information).

The evaluation should also consider whether the intervention worked for the target audience, in the intended context, and whether it delivered value for money. It is important to consider unintended effects (positive or negative) and any variations in impact across different audiences or segments. A robust evaluation will not only demonstrate whether it worked but also provide the evidence needed to decide whether to adapt, scale, or redesign.

If you used **Worksheet 8** to create your evaluation plan, this can help you know what you will be looking for as you deliver your pilot. You can also return to **Worksheet 8** to reflect as you progress through the next steps.

5.4.5.1. Does the Intervention Work?

This question focuses on the impact of your intervention: did it lead to measurable change in the target behavior? Refer to your behavioral objective and use your evaluation data to determine if the expected outcomes were achieved.

Answering this question accurately requires ensuring the data you've collected is both relevant and reliable. While most will aim and hope to demonstrate statistically significant change as evidence of a successful intervention, even when evidence indicates small or mixed results, it can still be informative, particularly if it shows who the intervention worked for and under what circumstances. A clear, honest answer to **"does it work?"** sets the foundation for future improvements. If an intervention does not deliver the anticipated impact, it can be helpful to reflect on whether the theory of change was insufficient, the design and delivery of the intervention was ineffective, or a combination of both.

5.4.5.2. How or Why Does it Work?

Understanding how or why an intervention worked is just as important as whether it worked. For instance, if an intervention helped increase the amount of food composted, was that due to greater awareness of the benefits of compost, improved access to community compost bins, stronger social norms, or a combination?

Qualitative insights can be gathered via focus groups, interviews, and user feedback to help uncover how people felt about and interacted with the intervention. This understanding enables you to refine future interventions and replicate what worked. It can also help you to explain the intervention's success (or lack of it) to stakeholders in a robust, evidence-based way.

5.4.5.3. Identify Opportunities for Further Refinement

Pilots do not always run perfectly the first time, and that is okay. Identifying what could be improved—whether that's the design of the intervention itself, supporting communications, delivery method, timing, or audience targeting—is a valuable outcome of the pilot. Many effective interventions often contain elements that can be further improved or made more cost-effective.

Refinements should be informed by the evaluation data and practical feedback from delivery teams and intervention recipients. For example, if users found instructions to be confusing or if materials weren't accessible, those issues could be fixed before scaling. By documenting and addressing these refinement points, you ensure the intervention is stronger and more scalable when you move to Step 5 (Adapt and Scale).



5.5 Step 5: Adapt and Scale

Step 5 of the 5-Step Behavior Change Approach focuses on scaling successful interventions. Based on pilot results, interventions can be adapted as necessary for broader implementation. Scaling can be achieved via a range of mechanisms, including securing funding and partnerships for wide-scale rollout; embedding interventions and learnings in policy or industry best practice guidance; and supporting engagement with food system stakeholders to drive systemic change.

5.5.1. Adapt the Intervention for Deploying at Scale

Adapting an intervention for scale means taking what worked in a pilot and modifying it so it can be implemented across different locations, populations, or systems. Success at this broader scale might require simplifying delivery mechanisms, standardizing materials, adjusting messaging to be culturally or regionally relevant, or automating parts of the intervention to reduce manual effort.

Replicability and scaling is a challenge that behavioral intervention designers face in many sectors, including in the sustainability and environment sector. In the context of household food waste, it can be difficult to achieve the same level of impact per household when scaling across populations, when compared to delivering specific pilots to target audience groups. The key when scaling impact is to balance fidelity to the core behavior change components (that made the pilot successful) with flexibility to fit a wider range of contexts.

> **Cynthia Lucar Diaz from the Regional Municipality of Peel, Canada**, says: "There are over 90 distinct ethnic groups in Peel Region and over half of residents were born outside Canada. We are planning on doing some behavioral research with population specific groups to see how they interpret what we want to say. It's important because culturally some communities look at food waste differently. For some communities, food needs to be in abundance whether or not it gets eaten."

What works well in one area may need tailoring for another with different demographics, waste infrastructure, retail environments or language and communication requirements. By adapting with purpose, this will ensure the intervention remains effective and engaging while becoming feasible to deliver on a larger scale.

As with piloting, it is important to engage with stakeholders as you plan how you are going to adapt your intervention and as you build your delivery plan. Local knowledge is critical to success and involvement in the planning, co-creation, and deployment stages of the intervention pilot, garnering opinions and listening to concerns and suggestions are all important for gaining 'buy-in' as well as making sure you have considered appropriate adaptations.

The cost of the pilot needs to be recorded to calculate the costs of full deployment. Keeping a detailed breakdown of costs will be helpful to know where you can adapt to make cost savings. Equally there may be economies of scale in some areas. At this stage it is important to reflect on which parts of your pilot were crucial to success and which parts were "nice to have."

> **Catherine Campbell from University of Florida, USA**, says: "Given that citizen science is relatively labor intensive, it is important to reflect on the pilot project to assess which components were necessary to obtain the required data and achieve the desired outcome, and which components were not to allow the research team and citizen scientists to focus their time and energy on the most valuable data collection activities."

5.5.2. Refine the Intervention

Refining the intervention involves a careful review of all its underlying components. This includes the messaging, visual design, physical assets, delivery formats, and touchpoints to ensure they remain compelling and practical when used at scale. This may require simplifying materials for easy reproduction (including potential co-branding, depending on the type of intervention and partners), improving clarity based on feedback, or tweaking behavioral framing and prompts to reflect regional norms or other influences.

> **Julie Hordowick from the Regional Municipality of York, Canada**, says: "It is often helpful to consider if co-branding or shared use of designs is desired early on in the process. Image rights, special fonts, proprietary design elements can be considered with shareability in mind from the outset and save a lot of changes needed later."

Refining the intervention is important because, when done effectively, it ensures the intervention maintains its behavioral effectiveness while being cost-efficient and logistically viable at scale. Engaging designers, communications experts, and specific users in this process helps to preserve the intent of the intervention and deliver a consistent experience across new settings. It also helps to minimize the risk of diluting key parts of the original intervention that led to its effectiveness in the first place.

Worksheet 9 helps you reflect and refine.

5.5.2.1. Refine the Deployment Approach

Deploying interventions at scale often involves optimizing approaches to support efficient delivery and feedback. This step involves deciding who will deliver the intervention (e.g., your team, local government, community partners, private sector), how materials will be distributed or accessed, and how training and quality assurance will be managed. It may also include creating toolkits, delivery guides, or digital platforms that support implementation.

Refining the deployment approach is essential to avoid overburdening delivery teams and to maintain consistency across different sites. It also helps you anticipate potential logistical issues and set up systems for coordination, feedback collection, contextual information, and rapid problem-solving during rollout.

5.5.2.2. Maintaining Behavior Change

Sustaining behavior change is about helping people stick with the new habits formed during the intervention. This may involve reinforcement through follow-up communications, community engagement, feedback loops (e.g., by conducting waste audits or providing personalized tips), or embedding supportive cues into people's routines. Interventions that provide an initial nudge to get people to change, start or stop something are most effective when paired with cues or prompts that provide repeated exposure to the message, at a meaningful time (i.e., at a point where they can do the desired behavior there and then). It's also useful to consider how to make interventions themselves or the change that interventions bring about, become self-reinforcing, or habit-forming, where the behavior brings its own reward or fits seamlessly into daily life.

Without strategies to maintain change, there is a risk of people reverting to old habits once an intervention ends. Long-term behavior change often requires continued motivation, reminders, and a supportive environment; particularly for complex behaviors like reducing wasted food, which involves daily decisions and habits around planning, shopping, storage, and disposal, all of which are carried out mostly at speed without too much in depth thinking.

Long-standing habits take time to change – often six to twelve months or more – depending on the behavior's complexity and a person's motivation. Short-term interventions of two to six weeks can raise awareness, but lasting behavior change and measurable impact usually require much longer, especially in voluntary settings.

5.5.2.3. Approach to Monitoring Sustained Impact

Monitoring sustained impact involves setting up systems to measure how behaviors evolve over time after the intervention has been rolled out. This could include periodic food waste analysis, surveys, or digital tracking tools. Consistent data collection helps assess whether positive changes are being maintained, waning, or improving further.

This ongoing monitoring is important not only to demonstrate success but also to identify where additional support or adjustment may be needed. It allows for evidence-based decisions about whether to reinvest in certain areas, introduce booster (or follow-on) interventions, or refine the approach to maintain long-term gains.

To enable this ongoing monitoring, it is essential to plan for measuring sustained impact when designing evaluation plans earlier in the process. This helps ensure that the measurement approaches selected will be financially and logistically possible to replicate over the long term. It can also highlight key actions that need to take place during earlier phases of data acquisition. For example, if you plan to do repeat surveys with recipients, you need to secure their consent for their details to be stored and for them to be recontacted—if this step is missed, then you may severely limit your scope to do any ongoing monitoring.

Cynthia Lucar Diaz from the Regional Municipality of Peel, Canada, says: "We did see a drop in avoidable food waste shortly after initiating the food waste prevention campaign. However, the evaluation was not long enough to see if behavior change would continue well after the campaign period"

5.5.2.4. Strategy for Maintaining Impact

A strategy for maintaining impact should include planning for long-term engagement and ensuring behavior change principles are embedded in everyday systems. This could involve integrating interventions into existing waste services, delivering regular campaigns and communications (including messaging to provide updates, tell the story and bring recipients along the journey from the original deployment), or partnering with organizations like schools, retailers, or influencers to reinforce key messages over time.

Exactly what should be included in a strategy will be specific to the behavior being addressed. For instance, interventions that require a one-off action (such as setting a correct fridge temperature) may simply require semi-regular reminders to get people to check that the change they have made is still valid. More-complex behaviors will require more-complex approaches to maintaining impact.

Maintaining impact is vital to ensuring that the resources invested in changing behavior deliver sustained returns. By putting in place a maintenance strategy, you can support communities in continuing positive habits, avoiding message fatigue, and creating social norms around low-waste behaviors.

5.5.3. Disseminating Impact

Disseminating your impact is a powerful yet often undervalued tool. It helps build momentum, secure future funding, demonstrate leadership and accountability, and foster stronger stakeholder collaboration. When you actively share your findings in a transparent manner, you contribute to the growing field of behavior change for prevention of wasted food, support knowledge transfer, and enable others to build on your work. When you actively share your findings in a transparent manner, you contribute to the growing field of behavior change for prevention of wasted food, support knowledge transfer, and enable others to build on your work. Drawing from your evaluation approach, effective dissemination should tell the full story: what you delivered, the impact you achieved, and how and why you achieved it. By sharing your results, learnings, recommendations, and implications for future work, you can encourage uptake and help achieve broader impact beyond your immediate activities.

Match Your Format to Your Audience

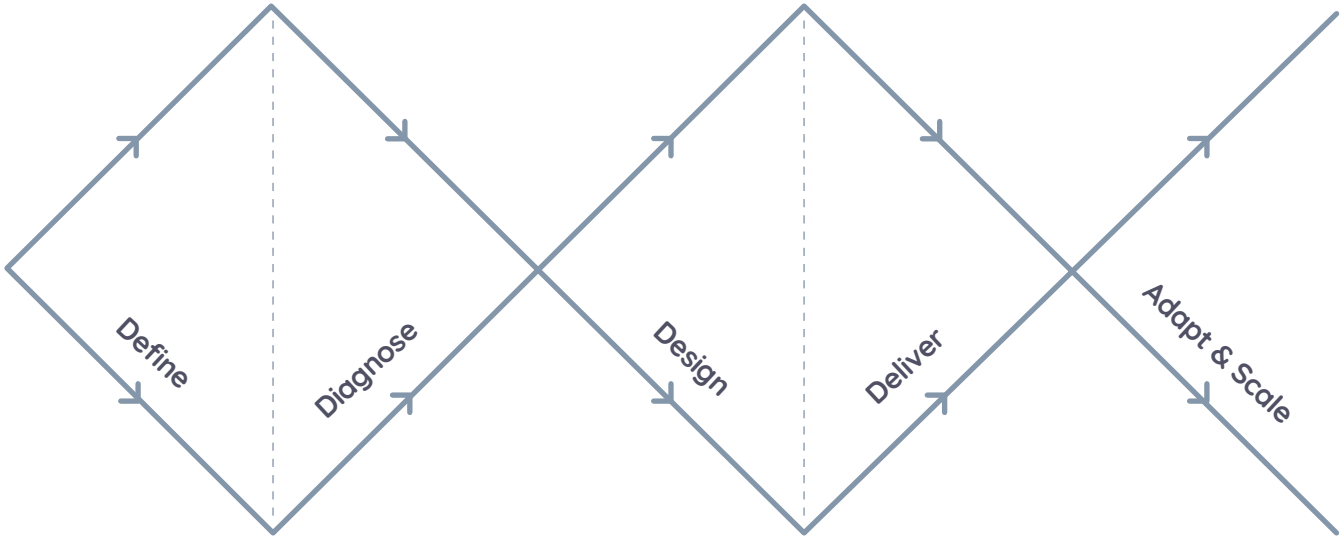
- **Technical audiences:** Use reports, infographics, and presentations to engage stakeholders who are already receptive and interested in building on your work.
- **Broader audiences:** Use storytelling-focused outputs like case studies, videos, and personal reflections to capture interest from those who might not otherwise consider the role of behavior change in tackling household food waste.

By the time you've reached this final step, you've worked hard to develop and deliver a successful intervention that is demonstrating sustained impact, so make sure you shout about it! **Worksheet 10** helps you shape your story to make the most of your work.



5.5.4. Recap

This section gives a recap of all five steps of the 5-Step Behavior Change Approach. The recap can help you see where you are in the process and guides you through which worksheets are available for each step.



Step 1: Define	Step 2: Diagnose	Step 3: Design	Step 4: Deliver	Step 5: Adapt & Scale
Clarify the behavior and audience	Understand barriers, enablers, and strategy	Create and refine solutions	Pilot and evaluate interventions	Refine and roll out
What specific food-related behavior are we targeting? Who needs to do what, when, and where? What behaviors are high impact and feasible to change? Who is the target audience (demographics, psychographics, behaviors)? What practical delivery considerations apply?	What does the existing evidence say? What knowledge gaps exist? Do we need new research (quant/qual)? What are the barriers and enablers (using COM-B)? What's our theory of change? What's our behavioral objective?	What types of change are we targeting (system, beliefs, habits)? How are we involving users in co-design? Which behavioral techniques or frameworks (EAST, MINDSPACE) are we using? Have we prioritized interventions (using APEASE or tick rating)? Have we prototyped or tested ideas?	What does success look like and how will we measure it? Do we have a delivery and evaluation plan? Are we collecting multiple forms of data? Are we tracking not just what happened, but why? Have we involved the right delivery partners?	How do we need to adapt the intervention for wider contexts? How can we simplify or automate delivery? How will we monitor long-term impact? What's our strategy for sustaining change? How will we share results and learnings?
Worksheet 1	Worksheets 2 and 3	Worksheets 4, 5 and 6	Worksheets 7 and 8	Worksheets 9 and 10

Bibliography

Behavioural Insights Team (BIT). 2024. “EAST Framework: Four simple ways to apply behavioural insights”. https://www.bi.team/publications/east-four-simple-ways-to-apply-behavioural-insights/. Consulted 18 December 2025.

Camp Waste Not. N.d. “Helping Denver Save Food and Save More Money!” https://www.campwastenot.com/. Consulted 18 December 2025.

Champions 12.3, N.d., “Changing Behaviour to Help More People to Waste Less Food.” Champions_12.3_Playbook_HIGH-RESOLUTION.pdf. Consulted 18 December 2025.

Champions 12.3, N.d., “Inspiring ambition and mobilizing action to reduce food loss and waste globally.” https://champions123.org/. Consulted 18 December 2025.

Institute for Government, N.d., “Mindspace: Influencing behaviour through public policy.” UK UK Cabinet Office https://www.instituteforgovernment.org.uk/sites/default/files/publications/MINDSPACE.pdf. Consulted 18 December 2025.

Michie, S., M. van Stralen, and R. West. 2011. “The COM-B Model for Behavior Change.” The Decision Lab. https://thedecisionlab.com/reference-guide/organizational-behavior/the-com-b-model-for-behavior-change. Consulted 18 December 2025.

Mothers Against Drunk Driving (MADD). N.d. “MADD History.” History of Mothers Against Drunk Driving (MADD). Consulted 18 December 2025.

United Nations (UN). N.d. “Food and Climate Change: Healthy diets for a healthier planet.” https://www.un.org/en/climatechange/science/climate-issues/food. Consulted 18 December 2025.

Worksheets

Worksheet 1: Step 1: Define the Behavioral Problem 94

Worksheet 2: Step 2: Diagnose the Behavioral Challenge 97

Worksheet 3: Step 2: Diagnose the Behavioral Challenge 101

Worksheet 4: Step 3: Design the Solution 105

Worksheet 5: Step 3: Design the Solution 109

Worksheet 6: Step 3: Design the Solution 112

Worksheet 7: Step 4: Deliver a Pilot 117

Worksheet 8: Step 4: Deliver a Pilot 120

Worksheet 9: Step 5: Adapt and Scale 126

Worksheet 10: Step 5: Adapt and Scale 129

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?		
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	What
	Who	What
	Who	What
	Who	What

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

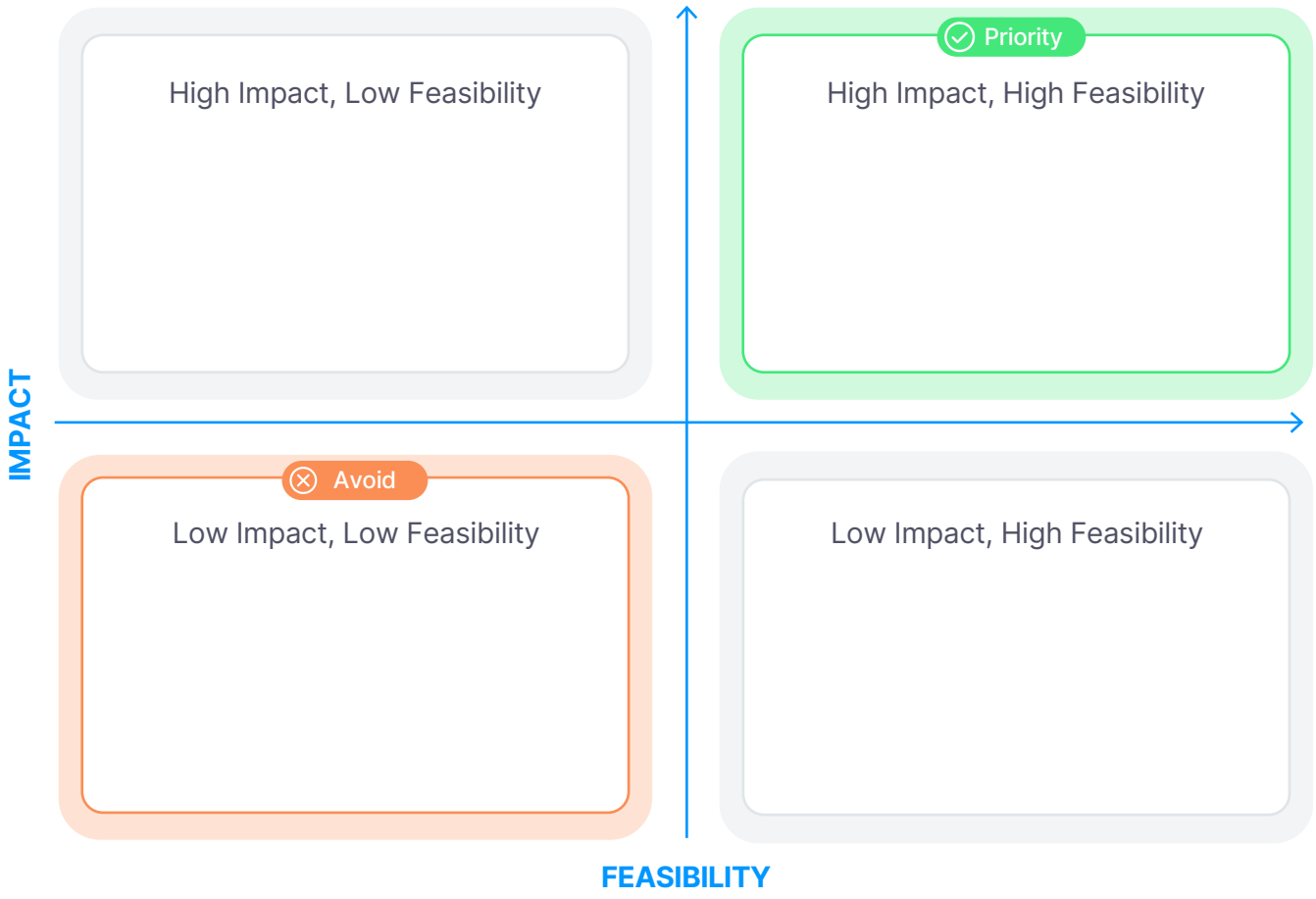
Impact/Feasibility Matrix

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)

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:

Step 2: Diagnose the Behavioral Challenge

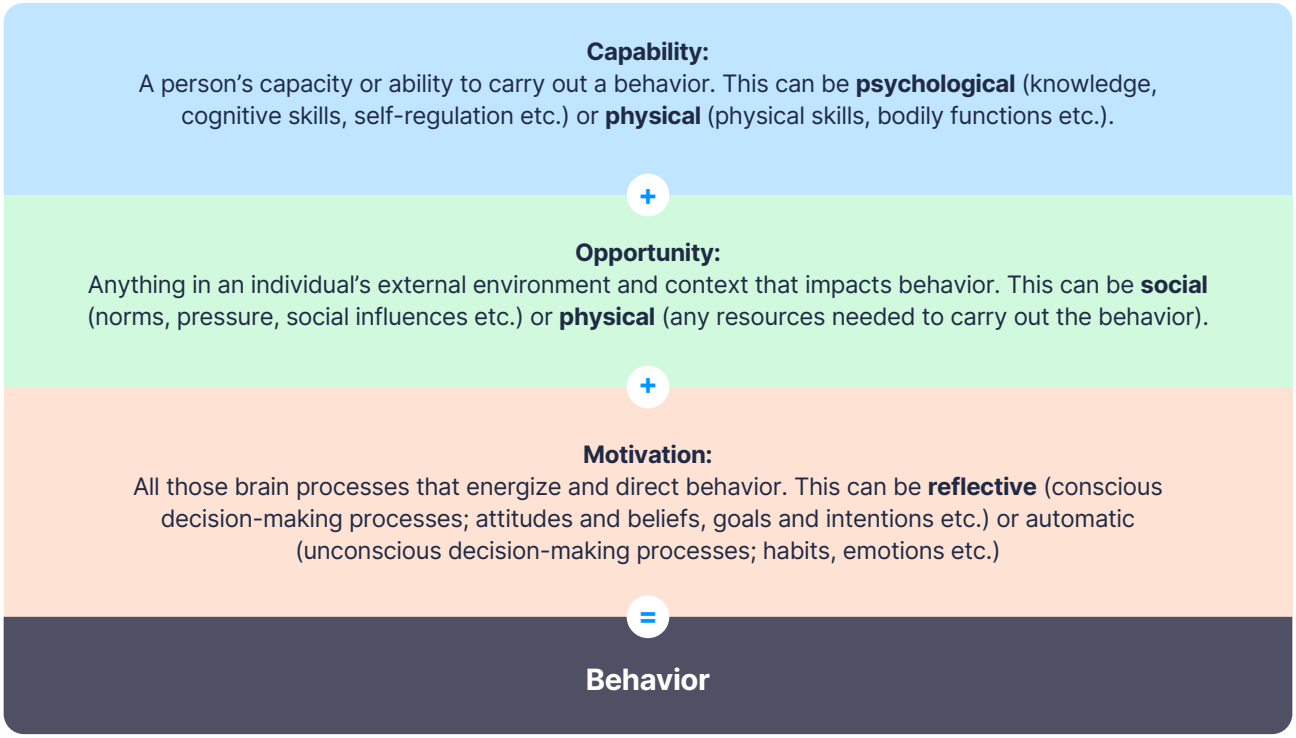
Part 1 – Review insights and identify the gaps

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?**
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?
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?**

Capability	Opportunity	Motivation
What do they **need to know** in order to perform the behavior? **Do they know it?**	Is the behavior **seen as a normal thing** to do? Is it seen as **specific to certain groups?**	Does the person **want to do** the behavior?
Does **conflicting information** make it hard to know what is 'right'?	How is their behavior **influenced by the behavior of others?**	Does the person **believe** they can do the behavior?
	Do they have the **tools or other resources** required to do the behavior?	
	What in the **environment** around them **triggers the behavior?** Or whose absence in the environment might trigger it?	

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			
Physical Capability			
Opportunity			
Social Opportunity			
Physical Opportunity			
Motivation			
Reflective Motivation			
Automatic Motivation			

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:

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?			
What specific behaviors make up the problem?			
Who needs to...?	Do what differently?	When?	Where?

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

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?
Intervention:		
Intervention:		

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).	
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).	
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.	
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.	
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.	
6. The Delivery Approach	Ideas for delivery partners, channels you might use, budget allocations, timelines, etc.	
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.	

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:



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.	☐		**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.	☐		**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.	☐	
Engagement, Modelling and Social Norms: Engagement campaigns with shared mission; community participation; influencer demonstrations, forums.	☐		**Policy and Legislation:** Making changes (or advocating for them) that will penalize undesirable behaviors and reward desirable ones.	☐	

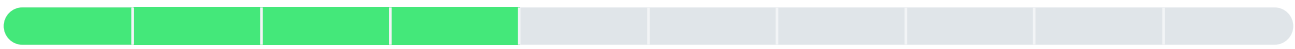
Now you've selected your intervention types, drop in your favorite examples to the table below.

Intervention Type				
Who, what, when				
Examples for inspiration (Add a description or a link)				
What you like about these examples				
What you will change/add to adapt for your needs				

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:



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?

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:

Now answer the questions below

Who is the (trusted) **Messenger?**	
What **Incentives** does it offer?	
What social **Norms** does it tap into?	
Is the desired behavior the **Default?**	
Salience: How will it grab people's attention and make the issue feel relevant to them?	
Are you tapping into subconscious cues to help with **Priming?**	
Affect: Are you appealing to people's emotions?	
Are you encouraging people to make **Commitments** (pledges, goal-setting etc.)?	
Ego: Are you using techniques to help people feel good when they interact with the intervention?	

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:



Step 3: Design the Solution

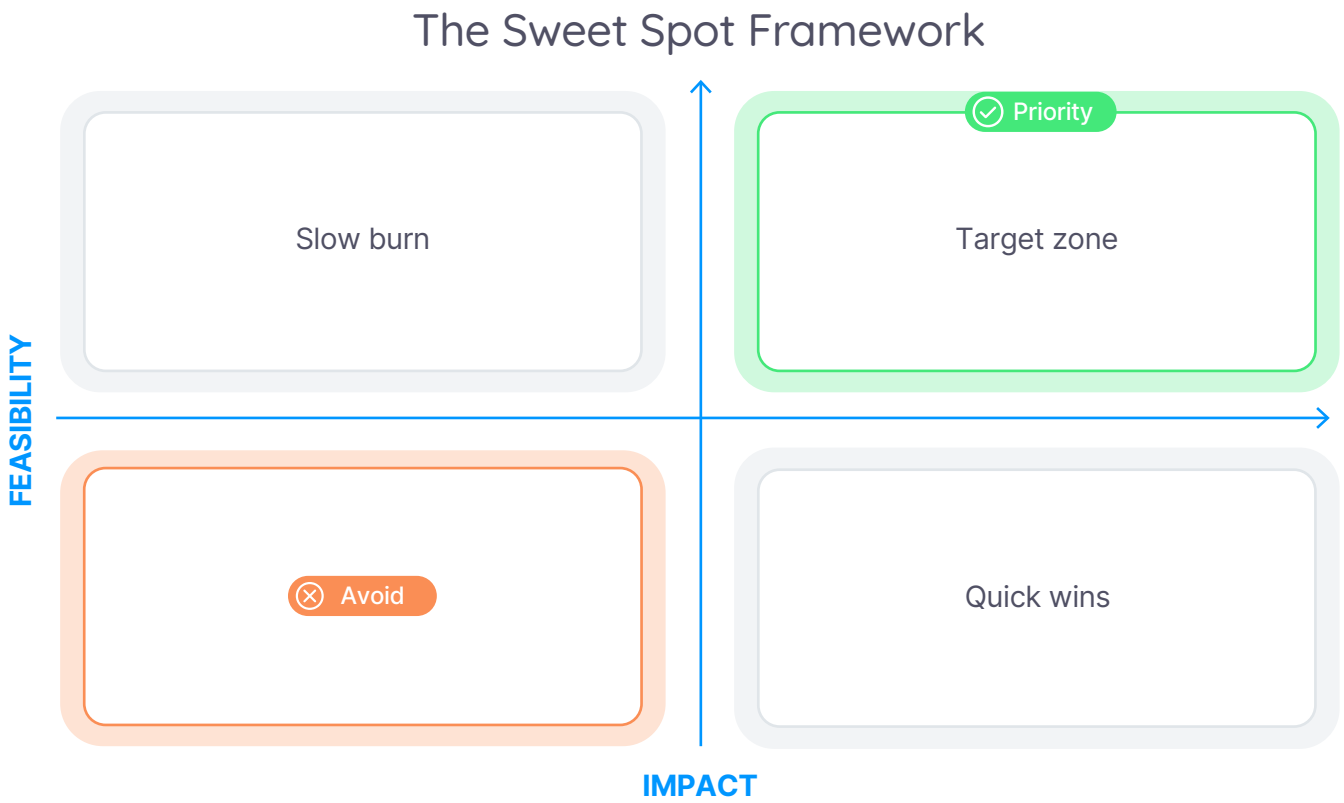
Part 3 - Intervention Shortlisting

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.	2.
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.	/ 3	/ 3	/ 3	/ 3	/ 12
2.	/ 3	/ 3	/ 3	/ 3	/ 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 # ___	Intervention # ___	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.	/ 12
2.	/ 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.

2.

3.

Document Your Decision

Why did you select these interventions?

Document Your Decision (cont.)

What are the main risks or concerns?

Next steps:

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:



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.

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

What does each person/group need to do?

Task 1. Plan

What?	**What?**	**What?**
Where?	**Where?**	**Where?**
When?	**When?**	**When?**
Why?	**Why?**	**Why?**

Important for evaluation: *

Note down anything that happened differently.

Task 2. Plan

What?	**What?**	**What?**
Where?	**Where?**	**Where?**
When?	**When?**	**When?**
Why?	**Why?**	**Why?**

Important for evaluation: *

Note down anything that happened differently.

Task 3. Plan

What?	What?	What?
Where?	**Where?**	**Where?**
When?	**When?**	**When?**
Why?	**Why?**	**Why?**

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 this will be used

*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:



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.

Delivery plan for intervention pilot	Copy this in from **Worksheet 7.**
Behavioral problem	Copy this in from **Worksheet 3.**

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)	
What is your baseline?	
How will you measure movement from the baseline?	
How will you attribute movement to intervention? (e.g., is there a control group)	

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

KPIs - Formulate your key performance indicators in the light of all the above.

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.

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:



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
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

EAST reflection		MINDSPACE reflection	
Use these frameworks to note down ideas for improvement			
Could it be Easier?		Messenger	
Could it be more Attractive?		Incentives	
Could it be more Social?		Norms	
Could it be more Timely?		Defaults	
Considerations for scaling		Salience	
		Priming	
		Affect	
		Commitments	
		Ego	

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
Surprises	Unintended consequences

Performance against Key Performance Indicators

Suggested revisions to Key Performance Indicators

Suggested evaluation improvements

Opportunities

Great work on completing Worksheet 9.

Just one more step to go!

Your progress:



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.

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

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

The results:
What change did you see?

The learning:
What did you learn?

The recommendations:
What would you do differently next time.

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?

Well done on completing your final worksheet!

Your progress:



CEC
CCA
CCE

cec.org