



Building blocks of the Dutch approach on household food waste prevention

Netherlands Nutrition Centre / Voedingscentrum, The Hague
July 2025 – working paper

FOOD WASTE FREE
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Table of contents

About this document.....	3
Building blocks.....	4
Step 1. Create a scientific framework	
Step 2. Focus on high-impact strategies	
Step 3. Design an intervention	
Step 4. Encourage joint implementation	
Step 5. Evaluate to optimise	
Best practices from the Netherlands.....	12
National Food Waste Free week	
Kitchen tools	
Use It Up tape	
Campaign on bread waste and nudge sticker	
Campaign on date labelling	
Online storage tool	
School challenge	
Future opportunities.....	19

About this document

This document (version June 2024) shows the building blocks that are used in the joint approach of the Netherlands Nutrition Centre (Voedingscentrum) and Food Waste Free United (Samen Tegen Voedselverspilling) on household food waste prevention in the Netherlands. In it, we present examples of best practices that we have realised with this approach and identify future opportunities. This document is primarily intended for use by policymakers, campaigners and consumer organisations. Feel free to use and adapt our insights and we look forward to connect and learn from your experiences. You can contact us via food-waste@voedingscentrum.nl.

Key condition: long-term governmental commitment

It is essential that those in government feel a sense of urgency and develop policies to prevent food loss and waste and support related long-term initiatives. The Dutch government has committed to Sustainable Development Goal 12.3 of the UN: by 2030, halve food waste at the consumer and retail levels compared to 2015 and reduce food losses along production and supply chains.

A significant part of the food loss and waste throughout the food chain occurs at consumer level. Thus, the Dutch Ministry of Agriculture, Nature and Food quality has been supporting the consumer approach of the Netherlands Nutrition Centre and Food Waste Free United financially for several years. Through this consumer approach, we contribute to government policies and the achievement of Sustainable Development Goal 12.3.

The **Netherlands Nutrition Centre** is an independent foundation that seeks to explain the relevance of scientific knowledge and translate it into easily understandable, balanced and practical guidelines, tools and advice. The Centre encourages consumers to develop and maintain healthy and more sustainable eating habits.

The reduction of household food waste has been a key focus of the Netherlands Nutrition Centre since 2007. In the first decade, prevention of household food waste was unexplored and the Netherlands Nutrition Centre mainly pioneering. In recent years, more and more parties have been working on the topic, sharing insights on these specific behaviour and possible solutions are emerging.

The **foundation Food Waste Free United** is a public-private movement in the Netherlands.

Committed to Sustainable Development Goal 12.3, the foundation combines and aims to accelerate all the important initiatives and expertise against food loss and waste.

Food Waste Free United and the Netherlands Nutrition Centre have followed a joint approach on the prevention of consumer food waste since the start of the foundation in 2018.

The Dutch approach consists of 5 steps:

1. Create a scientific framework
2. Focus on high-impact strategies
3. Design an intervention respecting a diversity of factors
4. Encourage joint implementation
5. Evaluate to optimise

A detailed description of each of these steps can be found in this document.

Building blocks

Step 1: Create a scientific framework

Consumer food waste does not depend on any single behaviour, nor will the mere intention to prevent it suffice to solve the problem. There are multiple factors that potentially play a role in the generation of household food waste. Our factsheet [Consumer Food Waste](#) provides an overview and relevant literature on current household food waste in the Netherlands, factors that influence consumer food waste behaviour as well as possible solutions to change the food waste behaviour. We have created this scientific framework to identify priorities based on the following pillars described below:

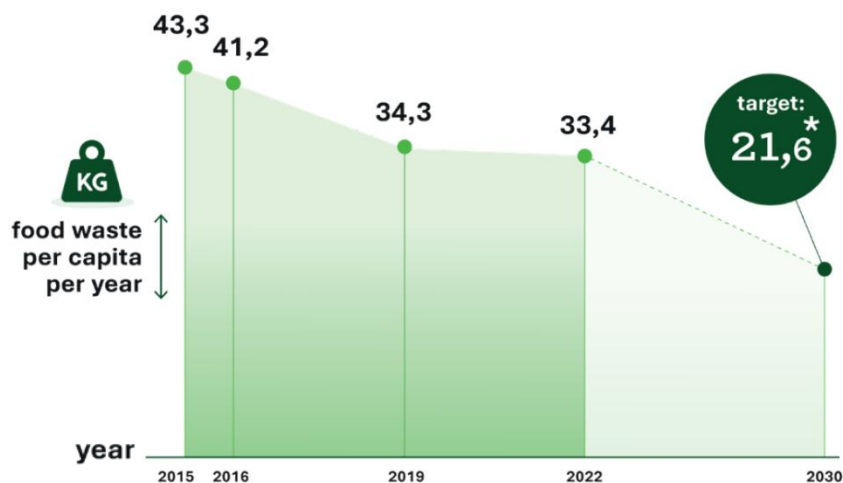
- A. Monitoring food waste in Dutch households:** Once every 3 years we monitor the average amounts and types of household food waste in the Netherlands by conducting a sorting analysis and consumer survey. The sorting analysis is done since 2010.
- B. Identifying knowledge gaps:** When we identify knowledge gaps, we try to fill these with our own research on specific factors typical of the Dutch situation, such as consumer surveys on bread waste or fruit and vegetable waste. Or we run a quick scan on a specific target group, such as families with young children, or a specific behaviour, such as the use of leftovers.

In 2022, Dutch consumers wasted 33.4kg of solid food per person per year. This only concerns food waste that we generally regard as edible in Dutch culture. We have seen a 23% decrease in households food waste since 2015, but the figure seems to have stabilised since 2022. Mainly bread, fruit, vegetables, potatoes and dairy products are wasted. When looking at the environmental impact of Dutch food waste, we also see a considerable contribution from meat products.

The 2022 consumer survey showed that almost all Dutch citizens find it important to prevent food waste. The survey also provides insight into several behaviours and determinants that are linked to food waste.

As regards demographics, our research shows that households with children and single-person households waste the most food, and that young people tend to waste more food than older people. However, the differences are small.

Reference: [Netherlands Nutrition Centre 2023, Van Lieshout and Knüppe](#)



As mentioned above, in recent years, more parties have been working on consumer food waste prevention and insights and effective strategies are shared. Through the following pillars, we collect new insights and our best practices are shared:

- C. Behavioural insights from scientific literature:** The [Consumer Food Waste Model](#) of Wageningen University is an important element of the framework. The model shows that consumers are more likely to reduce food waste when they are motivated and have the ability and the opportunity to perform the desired behaviour. Additionally, we found that unconscious factors are important, such as routines and competing motivations (for example being a good provider and buying more than you need, instead of buying enough and wasting less). Moreover, wasteful behaviour can occur in different steps of the customer's journey, for example during behaviours related to buying, cooking or storing food.
- D. Publications in grey literature on effective interventions:** We use grey literature in the process of intervention design. Important papers, that include our best practices, are:
- [The compendium of the European Consumer Food Waste Forum](#)
 - [The playbook of the Champions 12.3](#)

Relevant literature references used to shape our scientific framework:

The impact of demographics on food waste

- Kramers, R. and P. Aardening, Voedselverspilling: Hoe gaan Nederlanders om met voedselverspilling? 2022, Flycatcher Internet Research: Maastricht.
- Karunasena, G.G., J. Ananda, and D. Pearson, Generational differences in food management skills and their impact on food waste in households. *Resources, Conservation and Recycling*, 2021. 175: p. 105890.

Behavioural change (such as Motivation, Ability and Opportunity)

- Visschers, V.H., N. Wickli, and M. Siegrist, Sorting out food waste behaviour: A survey on the motivators and barriers of self-reported amounts of food waste in households. *Journal of Environmental Psychology*, 2016. 45: p. 66-78.
- Cecere, G., S. Mancinelli, and M. Mazzanti, Waste prevention and social preferences: the role of intrinsic and extrinsic motivations. *Ecological Economics*, 2014. 107: p. 163-176.
- van Herpen, E., van Geffen, L., and H. van Trijp, Causes & Determinants of Consumers Food Waste.: Project Report, EU Horizon 2020 REFRESH. 2016, Wageningen University & Research.
- Quested, T.E., et al., Spaghetti soup: The complex world of food waste behaviours. *Resources, Conservation and Recycling*, 2013. 79: p. 43-51.
- Bandura, A., Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 1977. 84(2): p. 191.
- Stancu, V., Haugaard, P., and L. Lähteenmäki, Determinants of consumer food waste behaviour: Two routes to food waste. *Appetite*, 2016. 96: p. 7-17.
- Graham-Rowe, E., D.C. Jessop, and P. Sparks, Predicting household food waste reduction using an extended theory of planned behaviour. *Resources, Conservation and Recycling*, 2015. 101: p. 194-202.
- van Herpen, E., et al., Quantified consumer insights on food waste. REFRESH, 2017.
- Luiting-Drijfhout, M., Consumer Food Waste: Understanding Why Consumers Do Not Eat the Food They Acquire. 2020, University of Groningen: Groningen.
- Sheeran, P. and T.L. Webb, The intention-behavior gap. *Social and personality psychology compass*, 2016. 10(9): p. 503-518.
- Van Geffen, L., Van Herpen, E., Sijtsema, S., & Van Trijp, H. (2019). Food waste as the consequence of competing motivations, lack of opportunities, and insufficient abilities. *Resources Conservation & Recycling X*, 5, 100026.

<https://doi.org/10.1016/j.rcrx.2019.100026>

- Hebrok, M., & Boks, C. (2017). Household food waste: Drivers and potential intervention points for design – An extensive review. *Journal Of Cleaner Production*, 151, 380–392.
<https://doi.org/10.1016/j.jclepro.2017.03.069>

Step 2: Focus on high-impact strategies

Based on this scientific framework, we draw up a plan per year in which we address:

- A. Where high impact can be achieved:** We use the scientific framework to identify where the problem arises: in which food products, behaviours or target groups. Next, we set priorities that are likely to have a lot of impact, based on the amount of food waste, the environmental impact and opportunities to change consumer behaviour.
- B. Which determinants are relevant:** We choose a determinant for intervening and define targets on related determinants.
- C. How to change:** We look for strategies that are expected to be effective as described in step 1, C. For example, by promoting small steps (start using a shopping list or cook the right amount of food instead of resolving to waste no food for a whole month), making it the easy option in the kitchen to waste less or by making waste reduction the accepted social norm. Define whether we want to inform, motivate or activate our target group. We use publications on effective interventions on food waste reduction and on other sustainable and lifestyle changing topics, and we use our own experience to provide consumers with effective strategies and interventions. If needed, we do a preliminary study to improve our insights on the chosen route.

In the Netherlands, in recent years we have focused on the following priorities:

- *Consumer awareness of the scale of food waste and awareness of their own contribution (81% of the Dutch consumers think they waste less than average).*
- *Prevention of bread waste. Bread is the most wasted product in the Netherlands. While consumers are willing to waste less bread, they underestimate their own bread waste and are happy with tips on how to use older bread. We also focused on prevention of fruit and vegetable waste (which come second and third in the list of wasted products).*
- *Prevention of wasting dairy and meat products (with high environmental impact).*
- *The knowledge gap on date marking (10% of food waste is related to date marking and only 50% of consumers know the difference between the 'best before' date and the 'use by' date).*
- *Preparing more pasta and rice than we consume (about a third of the pasta and rice we buy ends up as food waste)*
- *Reorganising the fridge and the use of leftovers (people who waste less food are often in households that use leftovers or are flexible with the use of packs, cartons etc. that have already been opened).*
- *Families with young children (they waste more food compared to other households).*

And we have focused on the following determinants:

- *In 2007, we started intervening and focused on raising awareness of the problem to get consumers motivated. We have continued these efforts ever since.*
- *In subsequent years, to encourage people to take action we added efforts to increase knowledge on optimal food storage, correct handling of date labels, cooking skills and action perspectives on the most wasted products.*

- *In parallel with those efforts, we focused on communicating waste reduction as a social norm to make the issue more visible and highlight the positive momentum. In this way we supported consumers by assuring them they are not alone in wasting less food and set a new norm.*
- *In 2022 we shifted our focus to a different target group. Initially, we focused on families with young children, because they self-report the most food waste. However, since the food consumption and behaviour of children is very unpredictable, the opportunities for behaviour change might be limited. Currently we focus on ‘light green’ consumers: consumers who are interested in solutions to fight climate change but need tips and tools to get started. This may still include families with young children.*
- *We used insights which show that people underestimate their own food waste to increase awareness of own wasteful behaviour, as well as to promote overall awareness, a new social norm, and relevant knowledge and skills.*
- *And because behaviour is often unconscious we more and more encourage food producers, retailers and government to create an environment in which it is easier to waste less. This is an area that offers major future opportunities.*

Relevant literature references on effective interventions and strategies:

- Schanes, K., Dobernig, K. and Gözet, B., Food waste matters - A systematic review of household food waste practices and their policy implications. *Journal of cleaner production*, 2018. 182: p. 978-991.
- Quested, T.E., et al., Spaghetti soup: The complex world of food waste behaviours. *Resources, Conservation and Recycling*, 2013. 79: p. 43-51.
- Bandura, A., Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 1977. 84(2): p. 191.
- MWM2, Ben je uitgegeten? Onderzoek naar groente- en fruitverspilling. 2021, Voedingscentrum: Niet gepubliceerd onderzoek.
- Zeinstra, G.G., et al, The influence of date marking related visual cues on consumers' interpretation and choices to discard or use food : two consumer studies in The Netherlands. 2021, Wageningen Food & Biobased Research: Wageningen.
- Zeinstra, G.G., et al., Does extra on-pack information impact consumers' understanding of expiry dates and food waste behaviour?: Insights from a real-life experiment in The Netherlands. 2023, Wageningen Food & Biobased Research.
- van Dooren, C., et al., Development and Evaluation of the Eetmaatje Measuring Cup for Rice and Pasta as an Intervention to Reduce Food Waste. *Frontiers in Nutrition*, 2020. 6(197).
- Cooper, A., et al., Use-up day and flexible recipes: Reducing household food waste by helping families prepare food they already have. *Resources, Conservation and Recycling*, 2023. 194: p. 106986.
- Rodrigues, T.C., and Keuchenius, C., Effectmeting Eerst op tape. 2024, Motivaction.
- Barker, H., Shaw, P. J., Richards, B., Clegg, Z., & Smith, D. (2021). What Nudge Techniques Work for Food Waste Behaviour Change at the Consumer Level? A Systematic Review. *Sustainability*, 13(19), 11099. <https://doi.org/10.3390/su131911099>

Step 3: Design an intervention

We start the design phase based on the collected insights from the framework and the chosen focus. During brainstorm sessions we translate the insights on the ‘high-impact’ topics into practical interventions, such as a campaign or tool. A wide range of factors play a role during the design phase:

- A. Independence:** A key aspect of this process is that we are an independent foundation without any commercial objective, because we are funded by the government. However, we do have to account for the effectiveness of our activities and their impact on food waste reduction towards the funding ministry.
- B. Integrated approach:** We operate from an integrated view on food safety and healthy and more sustainable food consumption. And we adhere to the national dietary guidelines in our work. We add expertise on communication, behaviour and situational awareness. Examples: healthy recipes for leftovers, taking food safety into account while explaining date labels, and developing a measuring cup based on dietary guidelines to help people eat their daily portions and waste less.
- C. Long-term effect:** We always consider the long-term effect and an upscaling vision. Examples: affordable tools, sustainable materials and embedding the intervention.
- D. Collaboration:** We collaborate with consumers and partners to optimise interventions. This could be prior to the implementation phase with pilots, during implementation or post-implementation. And we often collaborate with agencies on creative campaign ideas, advice on material use or product design.
- E. Resources:** The available resources are a strong determinant of what kind of intervention can be developed. This includes financial resources, for instance to purchase media advertising or produce tools, as well as manpower to develop and implement the intervention, manage the process or maintain the network and knowledge.

Since 2007 the Netherlands Nutrition Centre developed a diversity of campaigns and interventions on this topic. Some examples:

- *Campaigns on bread waste, date labelling and own wasteful behaviour.*
- *Organising the annual national Food Waste Free-Week since 2019.*
- *Interventions such as a measuring cup with portions, fridge sticker, freezer sticker, fridge tab and Use It Up tape, recipes for leftovers.*
- *Attending fairs and festivals.*
- *Online activities such as newsletters, social posts, videos.*
- *Supporting challenges and educational programmes for diverse school levels.*
- *All in collaboration with many partners.*

Step 4: Encourage joint implementation

We implement the interventions together with partners from our network. For many years, Food Waste Free United has invested in a large network of companies, organisations, schools and government authorities. Through public-private partnerships we join forces and expand our reach via customers, citizens, guests, followers and other target groups of our partners. We develop materials which partners can use for free. This ensures that we all send a uniform message, thereby improving the visibility and implementation of interventions and campaigns. For food companies it is interesting to join in order to help consumers waste less of their product. This can be a part of their plans to comply with the Corporate Sustainability Reporting Directive. We collaborate with:

- A. Retailers** by supporting them in spreading tips and tools in supermarkets, supermarket magazines and on websites, and using nudging techniques. And by supporting nationwide campaigns, such as loyalty programmes enabling people to save credits for food storage containers.
- B. Food producers** by supporting them in explaining date labels with text and visuals, using stickers or nudges on food packaging, and norm communication. Or by communicating via social media and websites.
- C. Food services** by supporting them in using signs in canteens, promoting waste-free meals and spreading tips and tools.
- D. Schools** by supporting challenges and educational programmes on food waste at all levels of primary and secondary education. And by providing Food Environment Guidelines which include tips for preventing food waste in school canteens.
- E. Local organisations and municipalities** by supporting them in spreading tips and tools in local communities and city halls, and by organising local events.

To support local authorities there are practical [building blocks, infographics](#) for municipalities and an overview of inspiring [interventions for citizens](#) published by Food Waste Free United and the Nutrition Centre (in Dutch). And Wageningen University published a [Pick & Go - guide](#) for policy makers at municipalities, cities, and urban areas to select, design, implement and evaluate household food waste reduction interventions.

- F. National organisations** by exchanging knowledge on sustainability, public health and the environment.

Step 5: Evaluate to optimise

We evaluate the reach, appreciation, areas for improvement and (if possible) the effect of food waste reduction interventions. This evaluation could be performed prior to the implementation phase in the form of a small-scale pilot, during implementation or post-implementation. We evaluate interventions in several different ways:

- A. Online consumer surveys:** We conduct qualitative or quantitative surveys among a representative sample of the Dutch population. This is useful for evaluating the reach and appreciation of interventions and their self-reported effect on determinants and behaviours. For example, we evaluate campaigns by consulting an online community of consumers. If possible, we repeat the survey after some time to measure long-term impact.
- B. Food waste questionnaires:** These are used to measure the quantitative effect of interventions on the amount of food waste, based on self-reporting.
- C. 1-on-1 interviews:** We conduct interviews with partners or consumers to collect insights on their experiences with interventions and their practical implementation.
- D. Coverage:** We use coverage figures from our media company, collect owned media coverage ourselves and distribution figures from our tools to get an idea of the reach of our interventions and campaigns.

We use the results of these various types of evaluation to optimise interventions so as to increase their effect, improve their use and stimulate wider implementation. Additionally, the results help us to formulate recommendations for promising future intervention opportunities.

Best practices from the Netherlands

National Food Waste Free week

Focus: Our aim is to make a large group of consumers more aware of the scale of food waste and of actions they can take to reduce waste, by creating momentum with many partners. We want to highlight the issue of food waste and the opportunities to reduce it in a positive way, showcase the movement against food waste and communicate a new social norm: that everyone has the intention to waste less food. Additionally, we support efforts to improve knowledge and skills by spreading perspective for action such as tips and tools to help consumers start this new food waste-preventing behaviour right away.

Design and implementation: The annual national Food Waste Free Week, developed by the Netherlands Nutrition Centre and Food Waste Free United since 2019, is engaging over 150 up to 200 partners including retailers, caterers, food companies, municipalities, schools, local organisations etc. All these partners inspired consumers to waste less and disseminated tips and tools. Success factors:

- This large cooperating partnership is a result of investing in this network for years.
- Each year we choose a new theme for the Food Waste Free week, based on the framework. We develop a range of campaign materials for the week (logo, messaging, visuals), geared each time to a specific theme (such as waste free hero's, most wasted products, left-overs, using fridge and freezer optimal and date labelling) and available to partners free of charge. This ensures that partners send a uniform message, enhancing the visibility of the Food Waste Free Week.
- By joining forces, we have managed to ensure an enormous reach for the campaign in a cost-effective manner.
- This movement inspires not only consumers, but also companies and/or municipalities that do not yet have any specific policy on this topic.

Evaluation: The National Food Waste Free Week is evaluated each year. We have seen the number of partners increase from 68 in 2019 to more than 185 in 2024. The amount of media attention also grows each year, as does the reach of the campaign. In 2020, 2 million people said they did something extra to reduce food waste during the campaign week. Research in 2023 showed that this number had grown to 5 million (35% of the Dutch population), and that 50% of people in the Netherlands (6.8 million individuals) heard about preventing food waste during this week. These great results demonstrate the effectiveness of this joint effort.

Each year we evaluate the week with consumers and partners and optimise the materials and campaign where needed.

More information?

- Consumer webpage: <https://samentegenvoedselverspilling.nl/verspillingsvrijeweek>
- Partner webpage: [Verspillingsvrijeweekpartner | Samen Tegen Voedselverspilling](#)

Kitchen tools

Focus: The aim was to create a kitchen environment that makes it easier for people to waste less. Much consumer behaviour is unconscious and happens on the automatic pilot. We produce kitchen tools that are available exactly where and when the opportunity to change behaviour arises. For example, the kitchen tools help consumers cook the right amount of pasta and provide tips on how and where to store specific food products.

Design and implementation: We have developed various kitchen tools, such as a [measuring cup](#) named Eetmaatje that helps consumers portion pasta and rice, for instance, and a [fridge sticker](#) to help them store fruit and vegetables in the best place. We have implemented these tools nationwide through retailers, municipalities, caterers etc. Since 2014, over 2 million measuring cups, 2.7 million fridge stickers and 420,000 freezer stickers have been distributed.

Evaluation: [Wageningen University](#) has monitored the effect of a toolbox with several tools from the Nutrition Centre (measuring cup, fridge and freezer sticker, shopping list, leftover recipes etc.), paired with a subtle social norm intervention, under various conditions, with self-reported food waste, sorting analyses and survey questions. In the self-reported experiment, they measured 23-39% food waste reduction achieved with the toolkit.

The measuring cup was also separately [studied by the Netherlands Nutrition Centre](#). Consumers who measure off their pasta using the measuring cup self-reported that they produced less total food waste. The measured household waste of cooked rice and pasta seems to show a downward trend since the introduction of the cup. There is strong evidence that the measuring cup has increased the number of Dutch households that measure off rice and pasta, thus reducing their food waste.

Next steps: We further developed our tools, for example by using more sustainable materials, based on evaluations with consumers and our implementation.

More information?

- Order the Dutch measuring cup: [Eetmaatje - Voedingscentrum, eerlijk over eten](#)
- Develop your own measuring cup: the print on the sleeve and on the cup can be customised. The cup is made of 100% mass balance biobased PP and costs around €0.60 (minimal production 100,000 cups; exclusive of development costs).
- Order the fridge sticker: [Koelkaststicker - Voedingscentrum, eerlijk over eten](#)
- Develop your own fridge sticker. The fridge stickers are made of transparent static adhesive vinyl and cost around €0.14 each, depending on the print run.



Use It Up tape

Focus: Research indicates that regularly reorganising your fridge can help you reduce your food waste. We looked for a tool that makes it easier for people to reorganise their fridges and developed nudging functions for use in kitchens to help remind people of their good intentions to reduce food wastage. Oz Harvest in Australia has developed [Use It Up tape](#) that has been [shown to decrease](#) household food waste. The tape is used to identify products that should be eaten first or to mark a shelf in the fridge or cupboard to collect these products.

Design and implementation: We adjusted the Australian version of the tape to the Dutch market and to the look & feel of our campaign, [Eerst op tape](#). We then distributed over 20,000 rolls with the tape to consumers through various partners, such as caterers and municipalities.

Evaluation: In early 2024 we did an experiment which showed that people who used the Dutch tape in our experiment wasted 28% less food. We also found that 60% of these users said they were still using the tape even after one month.

Next steps: We use consumer responses to optimise the tape design. Positive effect measurement results help us encourage big partners to distribute the tape even more widely or to develop their own versions.

More information?

- Australian Use It Up tape: www.ozharvest.org/use-it-up
- Order the Dutch tape: [Eerst op tape: voor in de koelkast tegen voedselverspilling - Voedingscentrum](#)
- Develop your own tape: the tape is made of washi. The print on the tape and on the packaging can be customised. The tape plus pack costs around €1 per roll, plus licence fees to produce a co-branded version of Oz Harvest's original product.
- Contact Oz Harvest: fightfoodwaste@ozharvest.org



Campaign on bread waste and nudge sticker

Focus: Bread is the most wasted product in the Netherlands and families with young children report that they are the biggest bread wasters. Bread accounts for 19% of all household food waste in the Netherlands. We specified this as our target group. People underestimate the amount of bread that they waste, so we see awareness of own wasteful behaviour as an important determinant. Also, skills can be increased; how to make something tasty out of stale and dry bread. And we wanted to narrow the intention-behaviour gap using a nudge to remind consumers, in their kitchens, of their good waste-free intentions.

Design and implementation: We translated the insights into a campaign consisting of a motivating commercial, online information and a nudge sticker. The commercial was about a young family having breakfast (a recognizable situation for the target group). We confronted them with the average amount of bread that was wasted. And showed good examples of how to prevent this waste. Online we shared more healthy recipes for leftovers and storage tips. Additionally, we developed a green sticker with a positive social norm nudge, which translates into English as: '92% of Dutch consumers do not want to waste bread. Do you eat all your bread?'. This sticker was placed on the packaging of millions of loaves of bread, in cooperation with industrial bakeries, local bakeries and retailers. After some years we adjusted the text on the sticker to a catchier phrase: "From top to bottom. Do you also make sure not to waste a single slice of bread?".

Evaluation: Research showed that 38% of the people that saw our campaign did something extra to prevent bread waste. We also tried to study the effect of the sticker even though the effect of a nudge is hard to measure in an experimental setting. We did not observe any effect of the sticker on self-reported food waste. However, we still see the potential of the sticker as a reminder of our campaign messages in addition to other communications or interventions.

Next steps: The nudge sticker initiative has shown that not all interventions that we develop are as effective as we hoped. We learned from the evaluation insights and changed the colour of the sticker to make it more visible. We have also decided not to use the sticker on its own, but only in support of our campaigns. This is because we still hope to create a physical environment with these nudges that stimulates people to reduce food waste.

More information?

- The sticker is made of PET and can be washed off the package at 60°C, keeping plastic packaging, to which it is stuck, recyclable. The print on the sticker can be customised. The stickers cost around €0.01 each.



Campaign on date labelling

Focus: An estimated 10% of food waste at home is caused by poor understanding of expiration dates: 'best before' and 'use by'. Research of the European Commission and the Netherlands Nutrition Centre shows: About half of the Dutch population actually knows the difference between the two dates. And their behaviour does not always match the specific date either. We have focused on explaining the difference between the two dates and how to handle both dates, to stimulate them to correctly use the expiration dates.

Design and implementation: We developed a commercial, about a family with young children in the kitchen. The difference between the two dates was explained. And the family shows good examples of how to judge milk that is past the date by looking, smelling and tasting. And how to handle chicken that is on the date by freezing it.

Evaluation: Research (2020) showed that 71% of the respondents who know about the campaign self-report that they know what the two expiration dates mean. When asked to explain what the dates mean, 42% of respondents who know about the campaign gave the correct answer for 'best before' and 69% gave the correct answer for 'use by'. 78% of the target audience (67% overall) indicate that they have changed behaviours in response to the campaign (for example: started paying attention to the different expiration dates, using their senses before wasting or checking stock before going shopping).

Next steps: Studies show that icons on packaging and effective campaigns help consumers to better understand the difference between the 'best before' and 'use by date'. We are encouraging retailers and manufacturers to help consumers to clarify date marking with icons and additional text on packaging and with clarifying campaigns. And we are developing a supporting campaign.

More information?

- About the Coalition Date Labelling: [Coalitie Houdbaarheid | Samen Tegen Voedselverspilling](#)
- Webpage campaign: [Twee houdbaarheidsdatums | Samen Tegen Voedselverspilling](#)



Often good after date.
Look, smell, taste.



Use before or on date.
Do not use after date.

Online storage tool

Focus: Research has shown that poor understanding of date marking is responsible for 10% of household-generated food waste. Storage advice and spoilage symptoms can help consumers keep products fresher for longer and encourage them to look, smell and taste in the case of 'best before' products. Only half of all Dutch consumers are able to explain the difference between the 'best before' and 'use by' dates. This advice can also help consumers interpret the date labels more effectively.

Design and implementation: We have developed an online tool that gives advice on how best to store over 2,500 products once opened, how to interpret the date label and how to recognise spoilage. It also provides tips to improve the quality or shelf life. To make the tool more SEO-friendly, we built dedicated webpages for all products, with an automated connection to the tool. This means no extra maintenance while dramatically improving our discoverability on Google. In 2025 the tool was updated. Before 2025 the advice in the tool was on the safe side, from a food quality perspective, and too strict, from a food waste prevention perspective. We have now stretched the advice where it is safe to do so, to prevent even more food waste. We have also indicated more clearly when a given time frame is based on potential safety hazards or whether it is simply an indication for the best food quality. In case of potential safety issues, we encourage consumers to eat the product before the stated date or to freeze it on or before that date. If the time frame is for food quality rather than safety, we encourage consumers to use their senses (look, taste, smell) to determine whether a product can still be eaten.

Evaluation: We evaluate the online statistics every year. In 2024 there were almost 2 million pageviews: 1.760.000 virtual pageviews and 230.000 searches via the tool on our website.

Next steps: The advice in the tool will be continuously updated when our general advice is updated.

More information?

- Take a look at the tool via: www.voedingscentrum.nl/bewaarwijzer

The screenshot shows a web interface titled 'Hoelang kun je een geopend product bewaren?'. A search bar contains 'Appel met schil'. Below, under 'Bewaaradvies voor dit geopende product', are several storage options with icons: 'enkele weken tot maanden houdbaar in de koelkast' (refrigerator), '3-7 dagen op de fruitschaal' (fruit bowl), and '8-12 maanden in de vriezer' (freezer) with a note 'Daarna kan de kwaliteit achteruit gaan.' Below these are sections for 'Hoe herken ik bederf?' (How do I recognize spoilage?) and 'Bewaartip voor dit product' (Storage tip for this product), which includes advice on keeping apples in the refrigerator, avoiding other fruits, and freezing them in airtight bags.

School challenge

Focus: When you learn something at an early age, it will be easier to continue the habit when you get older. This is why we support education programmes for the various levels of education in the Netherlands. Several of those programmes combine information about food safety, healthy food and more sustainable food choices. We also focus on promoting knowledge and awareness of sustainable food choices from an early age.

Design and implementation: A group of regional parties have developed a special challenge for 'Technasium' schools (secondary schools that pay extra attention to their students' technological skills). In the challenge, companies and organisations are asked to formulate an assignment for students within three different subjects: communication, surplus flow and packaging. Students can then choose their own subjects of interest. They work on this topic for a few weeks in a row, assisted by one of the commissioning parties. During the challenge they learn more about food waste and working on an assignment from a real company.

Evaluation: The challenge itself is not extensively evaluated. However, we do keep in touch with the participating schools. Each year the challenge is slightly different from the previous one since we adjust it based on the evaluation and the wishes of the participating schools and teachers. Each year more than 200 students participate in the challenge. Over the past few years, we have seen schools in more and more other regions pick up the challenge.

Next steps: Our goal for the coming year is to make the Technasium challenge available for all secondary schools.

More information?

- Webpage: www.samentegenvoedselverspilling.nl/educatie

Future opportunities

The problem of household food waste has proven to be difficult to eradicate. Furthermore, following years of improvement, the reduction of household food waste in the Netherlands seems to have stabilised in 2022. This means we will need to step up our collective efforts if we are to meet the SDG 12.3 target.

Food waste prevention is a complex endeavour, as it requires a combination of numerous minor behavioural changes. That is why making these changes should be made as easy for consumers as possible. We have to create a society in which wasting less is the easy and obvious choice.

We believe this can be achieved by not placing responsibility for waste reduction entirely on consumers, but by also looking for opportunities in the food chain as a whole. Household food waste can be tackled more effectively if consumers, producers, retailers and the authorities all join forces, and if food producers, supermarkets and the social environment all help consumers to make 'food-waste free' the new norm.