

## **Policies against consumer food waste**

### **REFRESH Policy Workshop: Public campaigns and other policy options for behaviour change**

### **Minutes**

19 November 2018, 9:00-16:15 Federal Ministry of Food and Agriculture, Wilhelmstraße 54, 10117 Berlin

Meeting documentation and presentations available at <a href="http://eu-refresh.org/policy-options-for-consumer-behaviour-change-workshop">http://eu-refresh.org/policy-options-for-consumer-behaviour-change-workshop</a>

#### Introduction and welcome (9.00-10.00)

#### Hilke Bos-Brouwer & Stephanie Wunder

• Presentation of work and scope of REFRESH, ambitions for the day (receiving feedback to our research, providing room to exchange experience)

#### **Dr. Klaus Heider:**

• Presentation of the national and international work of the German government and German Federal Ministry for Agriculture to reduce food losses and waste. Highlights the potential of coherent policies, responsible diets and digital communication tools in tackling food waste.

# **Presentations of REFRESH results about consumer behavior and policy options** (10.00-11.00)

#### Erica van Herpen ("Consumer behavior insights from REFRESH") &

**Stephanie Wunder** (*"*Translating REFRESH findings into requirements for effective public campaigns")

→ See presentations online

#### **Q&A/Discussion:**

- Do we need to give guidance to policymakers on difficult choices about monitoring (costs, difficulty of different methodologies, when to use which methodologies)?
  - $\circ\;$  Yes, this support should be given to policymakers
- There are high ambitions to make proper measurements and analysis of household food waste but these ambitions can hardly be met. Which methods have you used and which can be used with limited resources?
  - In REFRESH we used photographic coding, kitchen caddy analysis, and selfreporting diaries



- Survey measures weren't great, consistently underestimated, but some tweaks can be made to make them better. Can use this if you accept you will have an underestimation. Also cost efficient.
- Ask for waste in units people can better guess (e.g. spoonfuls)
- The retail sector has a role to play in reducing consumer food waste. Public opinion is very sensitive to plastic. Options to change BOGOF promotions to make less wasteful (e.g. buy one get one later, buy one freeze one). Retailers try to promote misshaped veggies, but still get feedback that misshaped veggies are more work for consumers so less desired. Increasing food price is difficult because lower income people will be disproportionately affected.
  - Price sensitive households waste less. How much money is spent on food differs across countries
  - Important to differentiate between income and price sensitivity. High income can still be price sensitive
  - How to run campaigns is also important for retailers and not just policymakers
  - Misshapen veggies: good example from supermarket PENNY that straight and wonky vegetable sold together in one package led even to an increase in sales.
- There are no examples yet of social norm campaigns in the area of food waste, but are there learnings from norm campaigns in other areas?
  - $\circ$   $\,$  There are learnings from other areas that can be built on
  - Translating this to the topic of food waste would mean: Instead of communicating how much others are actually wasting, you could emphasize how others are changing their behaviour.
  - We also know that if messages are more concrete, they are more effective.
    E.g. "waste less" is not helpful, but if you tell them what they can do and where they can take action it is usually more effective
  - Can use the sense of how the others waste. E.g. food battle in Netherlands, where participants can compete against national averages in a contest. In a contest you want to perform better, but in a social norm you want to perform equally to the norm.
- Conflict between supermarkets reducing sales by reducing consumer waste.
  - People may spend their money in different ways, e.g. spend more on high quality. WRAP study finds moderate evidence of trading up effect. But difficult to pinpoint causality. Can use purchase data as a proxy for consumption data.
  - This would tie in on research on mental budgeting, which supports idea that people have a certain amount they want to spend on food, but not enough research to confidently say it would happen
  - Should we require retailers to monitor in-store and also consumer food waste? In store seems clear yes, but consumer more difficult
  - Done experiments that show that when people waste edible food, people will feel less positive about the brand that they are wasting (unconscious process) to



- How many resources should be dedicated to monitoring with a campaign? Complexity means difficult to measure. Need measurement methodology that won't be unaffordable for organisations doing campaign
  - Need a balance, because some insight is needed to ensure money in campaigns is spent efficiently
  - REFRESH did research into which methods are affordable and effective, available on website

•Separate collection of food waste and other waste – Is there an effect?

- If there is an effect of separate collection, it is very small. Also interacts with composting, if there is food waste collection people are less likely to compost
- Potential effects can also go in both directions: separate collection makes people more aware, so likely that they reduce avoidable waste. But sometimes people think that the municipality reuses food waste so its treated and used well even as a waste stream
- People still also do separate collection wrong
- To improve valorisation of discarded food, you need to put effort into people correctly using the organic waste bin, because this effort pays off. May not reduce reduction, but makes valorisation better
- How to select the intervention, what are the top 3?
  - There has been a lot of enthusiasm to get things running but not yet a strategic approach. Best thing to recommend is to see what each country's top priority is and make a strategy to achieve this. Political priorities usually already exist E.G. SDGs prioritise consumer and retail level. Can build on existing motivation/priorities and integrate monitoring.
  - Doing practice-relevant research
- Feedback from the national level: Monitoring is a huge effort without a proper baseline in the stages of food supply chain. Aiming to have that in 2 years. Also doing awareness campaigns with is unclear if they are cost effective. Nudging: separate from social norm campaigns, what can you share with us about changing choice architecture for consumers? What have you found for best practices?
  - Smaller studies showed 20-30% reductions but only small interventions. E.g. changing plate size.
  - Changing buying environment, e.g. with zoning/spatial planning requirements or incentives to developers
  - example from Milan, proposing to industry engaging in food donation to have waste management tax incentive
  - developed bright and visible tools to grab consumers attention and keep food waste present in their mind

# **Responses from three Member States regarding success factors and limitations for national campaigns (11.30-13.00)**

→ also see pdf presentations (Tom Quested and Anke Niederhaus)

Tom Quested, WRAP, UK:



- There are many reasons why food is wasted in the home
- Literature review done by Reynolds et al (2019)<sup>1</sup> reviews in and out of home food waste prevention initiatives. Hundreds of studies were found on food waste at consumption, but barely any had actual monitoring of food waste.
- Many people are unaware of how much food they waste, and an awareness raising campaign might make people more aware and report their food waste more accurately, so measures could show an increase due to better monitoring
- There is evidence that one-to-one, tailored support is very effective. Many studies in the US and UK support this. But this is unrealistic on city or country scale.
- How to do something that taps into this approach but not in a resource intense way, e.g. digitally with decision support tools?
- Recmmendation for researchers
  - Design interventions for testing
  - Measure changes in food waste
  - Measure associated changes
  - Report your findings (even if they are negative)
  - Consider systemic effects
- Recommendation for policymakers, campaigners
  - Build evaluation into programme from the outset!
    - E.g. Use logic mapping: you can look at intermediary steps between activities and goals, look at what intermediary outcomes will be, what assumptions and risks are associated with each step
  - $\circ~$  Influence research funders and research councils to take this into account
  - $\circ~$  Measure change in food waste
  - Measure associated changes
  - Report findings
  - Consider systemic effects

#### **Dr. Anke Niederhaus, Ministry of Food and Agriculture, Germany:**

- Study by Kranert et al 2012 finds that consumer level food waste is likely 55 kg pp per year
- Focused on consumer campaign to address this with
  - o Digital measures

stage\_food\_waste\_reduction\_interventions\_-

<sup>&</sup>lt;sup>1</sup> Reynolds et al. (2019): "Review: Consumption-stage food waste reduction interventions – What works and how to design better interventions",

https://www.researchgate.net/publication/330564419\_Review\_Consumption-

\_What\_works\_and\_how\_to\_design\_better\_interventions



- Dialogue events
- o Information materials
- Some examples of measures:
  - Recipe app, most successful app of german government, 800k downloads
  - Contest for initiatives
  - Doggy boxes
- Campaigns illustrates problem and getting people to feel personally concerned
- Comprised educational work
- Evokes emotions
- Encouraging action
- Found that consumer awareness of the campaign is growing
- Insights gained from campaign
  - Campaign is not guaranteed success
  - Stable network of cooperation partners helps
  - o It is beneficial to pursue a target-group focused approach
- •Relaunch is necessary, in part because of continual development of online communication platforms and social media
- Campaign will remain key element of national strategy
- Considering social norm campaigns and working now on evaluation framework
- Will continue dialogue process with round tables with food chain actors

#### Marjolijn Schrijnen, Dutch Nutritional Center, Netherlands:

- 2 campaigns: found that consumer awareness was very low at the beginning, but now with the issue being more in the media awareness is growing, but still lack of personal awareness for own waste. Need to try to narrow gap between intention and behaviour.
- Focus on three themes: buying, cooking, storing. Developed kitchen tools to give consumers skills to change their behaviour. Shifted from awareness campaigns to skills
  - Measuring cup for pasta/rice
  - Fridge sticker on proper storage
- Implement them on large scale. Spread one million together with supermarket chain, 2 million sticker spread with supermarkets. Work with supermarket partners to reach consumers
- Social norm: try to communicate in positive and visual way
- Try to "advertise" additional benefits, like additional time, as complementary motivator
- Campaign Samen Tegen Voedselverspilling: now working on developing consumer campaign and setting norms. Will focus on families with young children since they waste the most
- Finding synergies: food safety and food waste prevention. E.g. developed fridge thermometer to help consumers keep fridge at right temperature, which supports food safety and food waste prevention



- Combining messages creates more opportunities to spread them
- If we do an intervention, try to always do consumer survey afterwards, measure selfreported effects after interventions, every 2 years we measure trends (awareness, attitude, knowledge)

#### Discussion

- Question: WRAP compared targeted vs mass campaigning. Both Germany and NL talked about segmented target group specific approaches. Targeting seems to be based on demographics. Is this the most effective segmentation? Households may differ in what type of food they waste and at what stage, so may want to approach based on practices?
  - NL: Also did segmentation based on lifestyles. Found that higher income families with children waste more. Elderly people waste less.
  - DE segmentation based on household size. Trying to build this into campaign

Other responses from the audience:

- Other German studies segmented based on behaviour and not sociodemographics. Children and guests are biggest influencer of waste. Worked to develop materials for cooking with big groups. Helpful to segment based on behaviours and waste situations. Packaging size also is a problem, need to talk to stores to not sell this way.
- Natural reflex to search out the group that wastes the most. But if you target this group, you need measures that are tailored to them. Advice on cooking and storing can be applicable to different groups. Should be sufficient amount of things within tips that are relevant to them.
- WRAP has done segmentation too. In some areas communication channels matches with behaviour/motivation type. But for more the media channels didn't correlate easily with different target groups.
- How do you target different groups?
  - Working with retailers to communicate with their consumers, or choosing to run spots during TV programmes likely watched by your target group
  - WRAP: need to subsegment any segment based on children or no children. Household size is very important. Couldn't ignore socio-demographics, behaviour, and communication channels – need to take all these into account. 3 groups align well with communication channels and also happen to be higher wasters (e.g. "aspirational discoverers")
  - Collaboration is one of key words. Asking people to do specific things can open the door to people to change their behaviour. Case needs to be made that food is valuable, this is where collaboration could be done (e.g. cooperating with farmers to value food). Overcoming barriers to cooperation is key area to work on.
  - TRIFOCAL project going into schools, offices, restaurants, home, partnering with different associations. Different steps need different solutions, e.g. kitchen vs plate waste. Hospitality is low hanging fruit. Households are harder to shift.
  - $\circ~$  NL: only a few partners joined the campaign now, but hopefully more join over the course of time.



- Lack of food policy is a problem. Have attempts been made to overlap the issues? Is it too politically unpalatable?
  - NL: different ministries working on developing food policies. Helpful that NL Nutrition Center is part of the process because they bring many issues together
  - DE: action network on healthy eating and physical activity in 2008-2020. Talking to colleagues to take up sustainability topics into action plan. Could be to make dietary guidelines more sustainable, also in discussion with society for nutrition. Next step would be to combine food waste and health campaigns. Need to discuss further with colleagues on how to make obesity campaign more sustainable. But ambitious task.
  - Response to researchers in the room: it helps to have English translation of findings to encourage mutual learnings. If you do have campaign materials, be sure to share them to help others.
  - $\circ~$  China included food waste in their national dietary guidelines
  - $\circ\;$  Flanders: food waste is incorporate in their food guidelines

#### Discussing further policy options for behavioural change (14.15-16.00)

# Anne-Laure Gassin: Update on EU actions on date marking and food waste prevention (see presentation online)

- Fighting FW should not impact the safety of the food & feed chain
  - Relevant work of the EU Platform on FW prevention
  - Measure and monitor FW
  - Facilitate food donations
  - Optimise safe use of food in feed
  - Promote better understanding & use of date marking!
- Date marking
  - o needs a co-ordinated, coherent approach, including all actors
  - Key objectives of policy actions:
    - Inform about differentiation of "use by" (food safety) and "best before" (food quality) - lack of knowledge in this field
- Commission study on date marking practices
  - $\circ\;$  Aim: investigate how date marking is utilised and the possible impact of practices on FW
- Market study on date marking and food waste prevention:
  - $\circ$  Main findings
    - 10% of food waste in EU is linked to date marking
    - wide variety in date marking practices
- Mystery shopping study of 10 products



- $\circ\;$  Analysis showed very mixed use of best before or use by date marks, differs from country to country
- different factors favouring "use by"/"best before" with impact on the final date marking
- authors found: avoidable food waste linked to date marking is likely to be reduced where:
  - a date mark is present
  - $\circ$  consumers have a good understanding of date labelling
  - o use by dates are used appropriately
  - the product life is consistent (safety and quality tests)
  - o consistent storage and open life guidance
  - o consistency in storage of food at retail & at home
- $\bullet$  Commission will ensure that any changes in EU date marking rules contribute to prevent FW
- Main discussion outcomes of sub-group on date marking
  - $\circ\;$  Proceed with elaboration of scientific/technical guidance
  - $\circ$  More research on functioning of supply chain needed (e.g. refrigeration)
  - Communications activities at EU-level
- Next steps: Task force established to assist in drafting EU scientific/technical guidance

#### **Discussion/Remarks by the audience:**

- Encourage members to only one date on package, different dates are confusing
- there are a lot of unnecessary date labels on food products, but consumers rely on date marking
- It would be helpful in order to reduce food waste to label products with the production date; for long-term products (pasta, rice) only year as date labelling would be necessary
- Needs to be considered if the print of the date mark still readable at the end of the product life?
- Spread the importance of smelling, looking at product in order to consider if it is still eatable

#### David Pearson: Reflections from an Australian Perspective (see presentation online)

Three ideas on how to engage stakeholders:

#### (1) Legitimacy:

- many actions going on globally, global initiative with SDG 12.3 as clear & powerful objective + support from corporations & governments in Champions 12.3
- more focus (attention & resources) put on FW in last year
- positive financial return on investment
- consumer interventions and evidence
- methods for consumer research



(2) Government Leadership

Four areas for FW reduction:

- Policy support
- business improvements
- market development
- behaviour change

(3) Action from Industry, with support from government and research community Fundings provided by governments to:

- Reduce FW
- transform inevitable FW into valuable products
- engage with consumers & employees to achieve this and be aware of FW

#### **Discussion:**

- Are there in kind contribution of industry sector to the process? Answer: Industry has the opportunity to an in kind contribution.
- How did you get the industry involved? Answer: industry had the opportunity of doubling their money, bringing the industry to transforming

#### Wrap Up of Participatory Group Work:

In this workshop slot people split up in 8 small working groups developing approaches and ideas about different challenges (in 8 topic areas)

#### 1. Education

- integrated approach for education needed, addressing healthy & sustainable diets, FW reduction, seasonal food, trying to foster interest amongst pupils
- include kindergarden, primary, secondary, high-school students & universities
- high quality of food lowers food waste, food has to be tasty  $\rightarrow$  involve chefs
- workshops for students on food harvesting, meet&greets with farmers to bring them in contact on local level
- chefs: creation of guidelines on how to deal with hygiene restrictions
- use impressive comparisons and images
- upscale: children bringing learnings home (e.g. food diaries)
- policy makers: horizontal approach health, agriculture, education, environment

#### 2. Social norm campaigns:

- Campaigns which tell you what is right or wrong
- Examples for social norm campaigns:
  - Link campaigns to creativity at home / re-framing to appeal to people (creativity, providing, minimalist fridge, positive framings)



- Descriptive norms & comparing your behaviour with your neighbors / towns' average (like smart meters or towels in hotel sign – "you are below your neighborhoods' average") -> making private public
- Injunctive norms: drink/driving campaigns, no smoking generation
- Use of positive language in campaigns: saving food, not wasting
- Local activities (sharing within communities (Olio), involve role models (celebrities, chefs using left overs)
- Click-a-pidea / recipe sharing for food waste
- Spread doggy bags in restaurants

41 drink driving COMAN 10 smoking eneration Example Social Norm cople Campaigns elebrite Click-a- oidea ricipe shart local activities. sharing within communities Lachees using Scling left ours. Onio Jun

#### 3. Regulations

- enforcement of legal standards -> is that the right legal tool? Some definitions are quite loose and are not enforced (like food waste hierarchy)
- political issues: maximum portion size in restaurants?
- tax regulation: cheaper to donate than throw it away
- conceptual/practical/political problems to "banning" food waste for consumer
- cosmetic standards ways to stop retailers having higher standards
- waste/safety laws on dumpster diving
- (re-) allow feeding surplus food/catering leftover to pigs (along with strict hygienic standards)
- landfill tax: make it illegal to dump food



- include school curricula & education
- mandatory FW collection
- Food waste management plans
- Difficulties to establish regulations on consumer level. More on retailer level
- •

#### 4. Economic Instruments

- Useful to include "Pay as you throw" schemes (What price? Time effects? Social justice?)
- Taxes: e.g. resources tax, point of sale tax (measure all food products in a supermarket)
- How to consider/target emotional value of food & valorization? Is food self grown or bought on a farmers market considered more valuable?)
- Tariffs on food imports?
- Pack size as subsiding the tax and the product price (no price advantage for big packages)

#### 5. Nudging – Changing the choice architecture

Ideas:

- Working with online shops to make default quantity the right portion size for households
- Make doggy bags in restaurants the default (restaurant guests do not have to ask for it)
- make the behaviour you want as easy as possible (reduce barriers)
- serve side dish on the same plate as main dish -> people rather eat it
- pilot: measuring cups / cooler bags to take leftovers home (e.g. in vacation homes)
- in restaurants: start with the small portion size and offer to take more later
- Success factors:
  - $\circ~$  focus on behaviour in a specific context
  - $\circ~$  small steps can be a good start
  - $\circ\;$  before you start an intervention, do research to make sure what kind of behaviour you want/want to change

#### 6. Cooperation with business/retail

- multi stakeholder involvement is important
- influence areas:
  - $\circ\;$  date marking: understanding and right use of best before/use by labels
  - discounts on near-by-date-products
  - o portion sizes: does it fit with needs?
  - Donation (incl. more transparency on amounts)



- these are examples where you do not need the consumers right in this moment (as not all want to directly communicate with consumer)
- voluntary agreements are a helpful process/tool to copy/imitate/share other organizations' actions and activities; success: creating atmosphere, sitting on one table & common purpose, beneficial, involving government (convincing & informing about the importance of FW prevention)
- donations: food waste prevention can help to tackle poverty
- monitoring of the waste amounts
- comparison with other restaurants/retailers

### 7. Integrative Strategies

- Learning from successful interventions in energy / climate change policies (as FW is highly linked to climate change)
- Sustainable/healthy diets and habits lead to less FW -> needs to be integrated into school curricula tigether
- Land use: reconnect to where food came from, so it is less likely to waste food when link to the land exists (regional food supply)
- Deal with packaging dilemma (packaging extends shelf life but often a waste of packaging resources): Special packaging can help: e.g. modified atmosphere packaging, smaller packaging or consumer can take what he needs from bulk, biodegradable packaging?
- Needs scenario/foresight analysis: What happens in global food chain / food distribution around the world if food surplus/food waste is reduced (effects on land/trade patterns etc.)?

#### 8. Monitoring impacts

- difficulty of creating baseline data and separating out the functions to do with monitoring and the functions to do with evaluating
- monitoring in area of food waste can be difficult to do retrospectively
- timeframe: people prefer interventions & results at a specific date, but long-term evaluations are more important
- Start pilot studies make them comparative & consistent, independent reporting & evaluation
- avoid biases evaluations should not be done by the same that are running the campaigns
- MS pressure to estimate FW using proxy data: ok for a start, but not as a baseline estimate
- Every 4 years: proxy data a good compromise
- Still challenge to get baseline for 2020/21