Supplementary of article:

Consumer and Food Product Determinants of Food Wasting – A Case Study on Chicken Meat

(Co-)authors

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S1. Consumer survey

S1.1. Part 1: Identification of a commonly purchased chicken product

Look at these six products. Which of these products have you recently purchased at a store of Colruyt/ Bio-Planet?

Diced chicken (0.5 kg) 	Chicken breasts (1 kg) 	Chicken breasts (0.5 kg) 	Chicken escalope (0.4 kg) 
Unroasted chicken organic (1.5 kg) 	Chicken drumsticks (1 kg)[1] 	Chicken breast organic (1 kg)[1] 	

How often do you buy this product?

- More than twice a week
- Twice a week
- Once a week
- Once per 2 weeks
- Once per 3 weeks
- Once a month
- Less than once a month
- Unsure

How important were the following attributes when buying this product?

	Very important	Important	Moderately important	Slightly important	Unimportant
Price	0	0	0	0	0
Quantity	0	0	0	0	0
Brand	0	0	0	0	0
Discounted product	0	0	0	0	0
Ease of use	0	0	0	0	0
Organic	0	0	0	0	0

[1] Participants purchasing these products were excluded form the study because too little cases were obtained (drumsticks 1 kg, $n = 10$ and organic chicken breasts 1 kg, $n = 8$), see Section 3.4. in the manuscript.

How often do you buy chicken?

- More than twice a week
- Twice a week
- Once a week
- Once per 2 weeks
- Once per 3 weeks
- Once a month
- Less than once a month
- Unsure

S1.2. Part 2: Analysis of actions taken after the last routine purchase of a specific chicken product

Can you remember what you did with the product in terms of storage and preparation after buying it? (If someone else undertook the action, but you were involved, then this counts too)

- Yes
- No (=> FOOD WASTE)
- Unsure (=> FOOD WASTE)

What was the first action after purchasing the product? (*)

- Storage (=> STORAGE 1)
- Preparation (=> PREPARATION 1)
- Partially storage and partially preparation (=> STORAGE 1)

STORAGE 1

How was the product stored after the purchase?

- In one portion
- In multiple portions

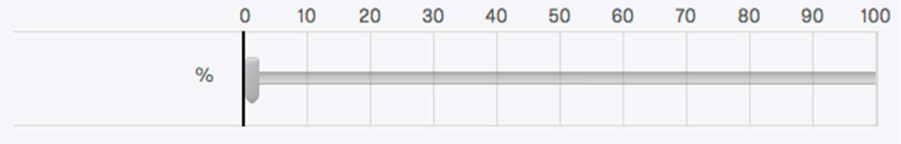
Where was the product stored?

- In the fridge
  - **How long was the product stored in the fridge?**[2]
    - 1 day
    - 2 days
    - 3 days
    - 4 days
    - 5 days
    - More than 5 days

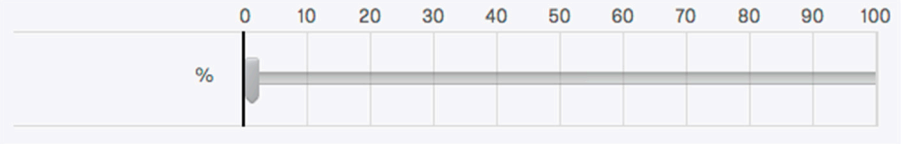
[2] This question was added after the start of the survey conduction. Therefore, it was not answered by 23 participants (n=23) of the total sample size of n=256.

- In the freezer
  - **How long was the product stored in the freezer?**[3]
    - Less than 7 days
    - 1 week
    - 2 weeks
    - 3 weeks
    - 4 weeks
    - 2 months
    - 3 months
    - 4 months
    - 5 months
    - Longer than 5 months

How much of the total content of the package was the largest stored portion?



Only if 'Partially storage and partially preparation' was the first action of (*):
How much of the total content of the package was immediately prepared?



Was a part of the content not stored, or thrown out during the storage?

- Yes
- No
- Unsure

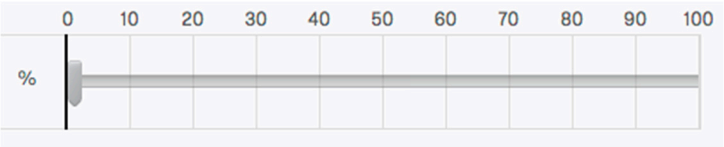
Only if 'Yes' was answered to this last question:
What happened to the part that was not stored (multiple answers possible)

- It was fed to a pet
  - **What is the reason? (multiple answers possible)**[4]
    - Bought too much
    - Package too big (or small)
    - Bought for the pet
    - Other […]

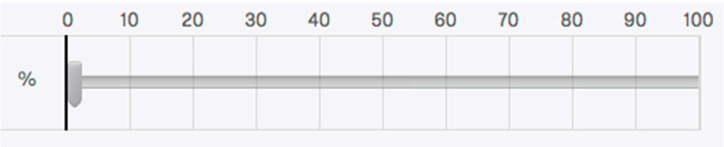
[3] This question was added after the start of the survey conduction. Therefore, it was not answered by 23 participants (n=23) of the total sample size of n=256.

[4] Based on the study of [1].

- **How much of (the largest portion of) the package did you give to a pet?**



- It was thrown away
  - **What is the reason? (multiple answers possible)**[5]
    - Bought too much
    - Package too big (or small)
    - Expiration date exceeded
    - Food expired (mold, rotten, bad smell, etc.)
    - Broken package
    - Accident (happened during storage)
    - Other […]
  - **How much of (the largest portion of) the package did you throw away?**



If 'Preparation' was the first action of (*) and the follow-up questions of 'STORAGE 1'

PREPARATION 1

How was the (largest portion of) chicken product prepared?

- The portion was prepared completely
- A portion of the chicken was prepared and a portion was not prepared
- The portion was not prepared
- Unsure

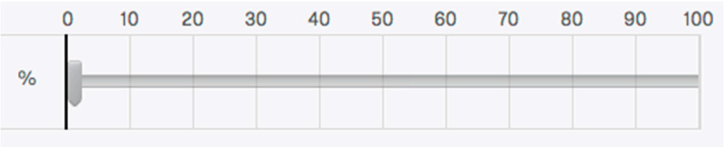
Only if 'A portion of the chicken was prepared and a portion was not prepared' or 'The portion was not prepared' was answered to this last question:

What happened to the part that was not prepared? (multiple answers possible)

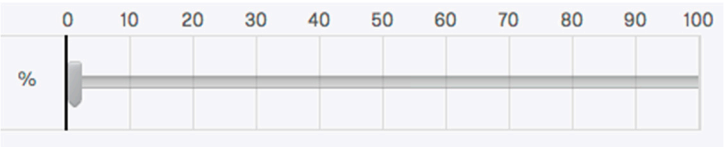
- It was fed to a pet
  - **What is the reason? (multiple answers possible)**[4]
    - Bought too much
    - Package too big (or small)
    - Bought for the pet
    - Other […]

[5] Based on the study of [1].

➢ **How much of the portion did you give to a pet?**



- It was thrown away
  - ➢ **What is the reason? (multiple answers possible)**[4]
    - Bought too much
    - Package too big (or small)
    - Expiration date exceeded
    - Food expired (mold, rotten, bad smell, etc.)
    - Broken package
    - Accident (happened during preparation)
    - Other […]
  - ➢ **How much of (the largest portion of) the package did you throw away?**



CONSUMPTION 1

After the preparation, how much of the prepared portion was consumed? (**)

- The prepared portion was completely consumed (=> FOOD WASTE)
- A part of the prepared portion was consumed, and the other part was not consumed (leftovers on the plates and leftovers that were not served)
- A part of the prepared portion was consumed, and the other part was stored (=> STORAGE 2)
- A part of the prepared portion was consumed, another part was stored and the remaining part was not stored nor consumed (=> STORAGE 2)
- The entire prepared portion was not consumed
- Unsure

Only if 'A part of the prepared portion was consumed, and the other part was not consumed', 'A part of the prepared portion was consumed, another part was stored and the remaining part was not stored and not consumed' or 'The entire prepared portion was not consumed' was answered to (**):

What happened to the part that was not consumed? (multiple answers possible)

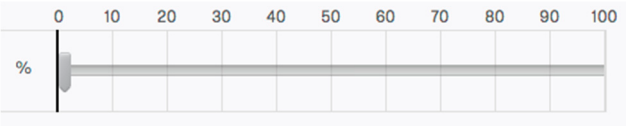
- It was fed to a pet
  - ➢ **What is the reason? (multiple answers possible)**[6]
    - Bought too much
    - Package too big (or small)
    - Bought for the pet
    - Other […]

[6] Based on the study of [1].

- **How much of the prepared portion did you give to a pet?**

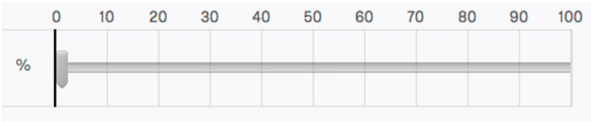


- It was thrown away
  - **What is the reason? (multiple answers possible)**[5]
    - Bought too much
    - Package too big (or small)
    - Made a mistake during preparation
    - Accident (happened during consumption)
    - Other […]
  - **How much of the prepared portion did you throw away?**



Only if 'A part of the prepared portion was consumed, and the other part was stored' or 'A part of the prepared portion was consumed, another part was stored and the remaining part was not stored and not consumed' was answered to (**):

How much of the prepared portion did you store?



STORAGE 2

Where was the product stored?

- In the fridge
  - **How long was the product stored in the fridge?**[7]
    - 1 day
    - 2 days
    - 3 days
    - 4 days
    - 5 days
    - More than 5 days

[7] This question was added after the start of the survey conduction. Therefore, it was not answered by 23 participants (n=23) of the total sample size of n=256.

- In the freezer
  - **How long was the product stored in the freezer?**[6]
    - Less than 7 days
    - 1 week
    - 2 weeks
    - 3 weeks
    - 4 weeks
    - 2 months
    - 3 months
    - 4 months
    - 5 months
    - Longer than 5 months

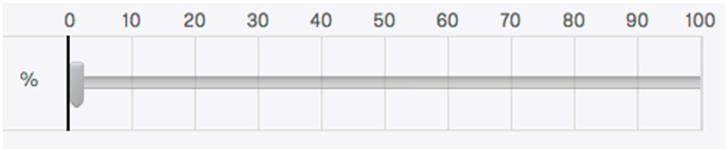
Has the entire surplus of the prepared chicken product been prepared/reheated? (***)

- The portion was prepared completely
- A part was prepared and the other part was further stored
- A part was prepared and the other part was not prepared nor consumed
- A part was prepared, a part was further stored and the other part was not prepared nor consumed
- the entire portion was not prepared
- Unsure

Only if 'A part was prepared and the other part was not prepared nor consumed', 'A part was prepared, a part was further stored and the other part was not prepared nor consumed' or 'the entire portion was not prepared' was answered to (***):

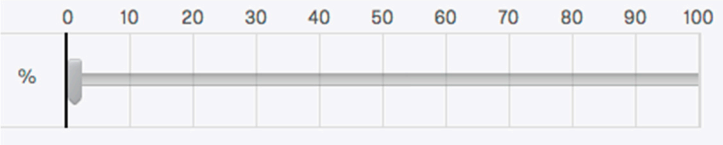
What happened to the part that was not further consumed? (multiple answers possible)

- It was fed to a pet
  - **What is the reason? (multiple answers possible)**[8]
    - Bought too much
    - Package too big (or small)
    - Bought for the pet
    - Other […]
  - **How much of the portion did you give to a pet?**



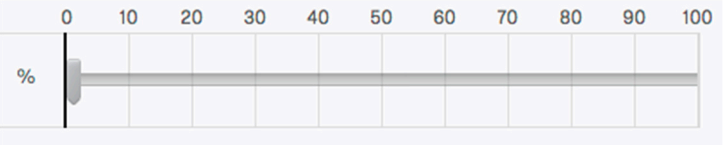
[8] Based on the study of [1].

- It was thrown away
  - **What is the reason? (multiple answers possible)**[7]
    - Bought too much
    - Package too big (or small)
    - Expiration date exceeded
    - Food expired (mould, rotten, bad smell, etc.)
    - Broken package
    - Accident (happened during storage)
    - Other […]
  - **How much of the portion did you throw away?**



Only if 'A part was prepared and the other part was further stored' or 'A part was prepared, a part was further stored and the other part was not prepared nor consumed' answered to (***):

How much of the stored portion did you store further?



CONSUMPTION 2

What happened afterward with the surplus of the prepared chicken product in terms of consumption? (****)

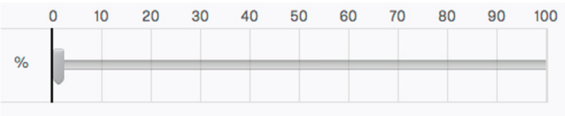
- The surplus was consumed completely
- A part of the surplus was consumed, and the other part was not consumed
- A part of the surplus was consumed, and the other part was stored (=> again STORAGE 2 and CONSUMPTION 2)
- A part of the surplus was consumed, another part was stored and the remaining part was not stored nor consumed (=> again STORAGE 2 and CONSUMPTION 2)
- The entire surplus was not consumed
- Unsure

Only if 'A part of the surplus was consumed, and the other part was not consumed', 'A part of the prepared portion was consumed, another part was stored and the remaining part was not stored nor consumed' or 'The entire surplus was not consumed' was answered to (****):

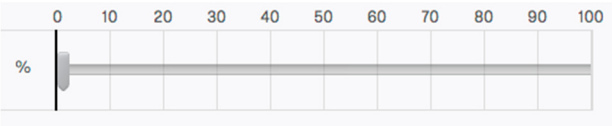
What happened to the part that was not consumed? (multiple answers possible)

- It was fed to a pet

- **What is the reason? (multiple answers possible)**[9]
    - Bought too much
    - Package too big (or small)
    - Bought for the pet
    - Other […]
- **How much of the prepared portion did you give to a pet?**

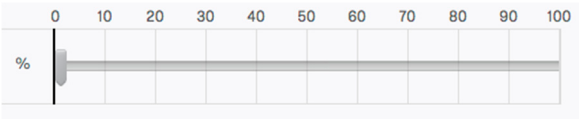


- It was thrown away
    - **What is the reason? (multiple answers possible)**[8]
        - Bought too much
        - Package too big (or small)
        - Made a mistake during preparation
        - Accident (happened during consumption)
        - Other […]
    - **How much of the prepared portion did you throw away?**



Only if 'A part of the surplus was consumed, and the other part was stored' or 'A part of the surplus was consumed, another part was stored and the remaining part was not stored nor consumed' was answered to (****):

How much of the surplus have you stored further?



[9] Based on the study of [1].

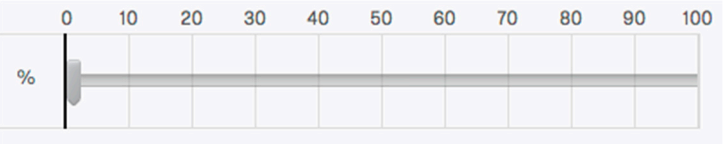
S1.3. Part 3: Quantification of self-reported chicken waste

FOOD WASTE

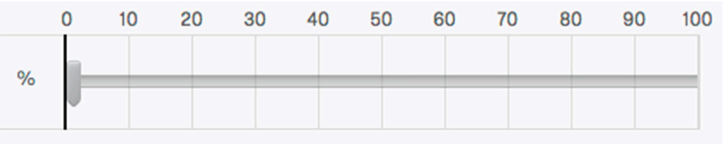
How often is a part of the package of the previously selected chicken product not consumed (during storage, preparation, or consumption)?

- Always
- 1/2 times
- 1/3 times
- 1/4 times
- 1/5 times
- 1/6 times
- 1/7 times
- 1/8 times
- 1/9 times
- 1/10 times
- 1/15 times
- 1/20 times
- Less than 1/20 times
- Never
- Unsure

How much of the total package was not consumed (= thrown away, fed to pets, etc.)?



How much of the non-consumed part is related to the package (size, expiration date)?



S1.4. Part 4: Influence of consumer determinants of household food waste

SOCIODEMOGRAPHIC CHARACTERISTICS

What is your gender?

- Male
- Female

Which age class do you belong to?

- 18-23
- 24-32
- 33-41
- 42-50
- 51-59
- 60-68
- 69 or older

What is the composition of your household/family?

- Living alone
- Couple with dependent children
  - How many children younger than 12 years?
    - 1
    - 2
    - 3
    - More than 3
- Couple without dependent children
- Single-parent family
- Other

Was the purchase of the previously selected chicken product for all members of your household?

- Yes
- No

How often are you responsible for the purchase of food in your household?

- Usually responsible for the purchase
- Equally divided responsibility between me and someone else
- Another person has more responsibility than me

In which province do you live?

- Oost-Vlaanderen
- West-Vlaanderen
- Antwerpen
- Limburg
- Vlaams Brabant
- Brussels Hoofdstedelijk Gewest
- Other

What is your highest educational degree?

- Primary education
- Secondary education
- Higher education (BSc)
- University (MSc)

What is your employment status?

- Student
- Full-time job
- Part-time job
- Housewife/ househusband
- Retired
- Jobseeker
- Other

How would you describe your financial situation?

- Difficult
- Rather difficult
- Neither easy nor difficult
- Rather easy
- Easy
- I don't want to say

HOUSEHOLD ROUTINES AND SKILLS

	Completely disagree	Disagree	Neutral	Agree	Completely agree
Planning routines					
The shopping trips are usually planned in advance (shopping lists are made, inventories are checked, etc.)[10]	0	0	0	0	0
Shopping routines					
We often buy unintended food products when shopping[9]	0	0	0	0	0
Leftover reuse routine					
The leftovers are stored in appropriate conditions so they will last longer[9]	0	0	0	0	0
	Very weak	**Weak**	**Okay**	**Good**	**Very good**
Household skills					
Thinking about the activities related to food within your home, how would you rate your household's skills, in terms of planning of meals[9]	0	0	0	0	0

[10] Based on the study of [2].

MOTIVATIONS AND ATTITUDES

	Completely disagree	Disagree	Neutral	Agree	Completely agree
Intention not to waste food					
I try not to throw food away[11]	0	0	0	0	0
Injunctive norm					
One should never waste food, not burden the environment with food waste[10]	0	0	0	0	0
Perceived consumer effectiveness					
I believe that every small effort by consumers helps to reduce food waste	0	0	0	0	0
Packaging perception					
Packaging is a waste of raw materials, it must be minimised	0	0	0	0	0
	Very small	**Small**	**Okay**	**High**	**Way too high**
Self-evaluated ecological footprint					
The ecological footprint is the estimated surface area that a person or group of people needs to produce what is consumed and to absorb what is discarded. How would you estimate your own ecological footprint?	0	0	0	0	0
	Completely disagree	**Disagree**	**Neutral**	**Agree**	**Completely agree**
Compare chicken – vegetables					
In comparison with vegetables…					
… I try to throw away less chicken	0	0	0	0	0
… I buy chicken less often unplanned	0	0	0	0	0
… I reuse chicken surpluses more often	0	0	0	0	0
… I plan the purchase of chicken more	0	0	0	0	0
… I think throwing away chicken is more negative	0	0	0	0	0

[11] Based on the study of [2].

S2. Segmentation into household waster segments

In this section, the two household waster segment (HWS) options are presented: division with an equal number of participants and division with the 25th and 75th percentile as thresholds. An HWS is a segment of participants with a similar percentage of household chicken meat that has not been consumed. A first segment, of which participants claimed never to waste any chicken, was separated from the remaining sample. This segment was defined as HWS 0%, with 0.0% indicating that no chicken meat was discarded. The remaining households were divided into three segments. The reason to introduce three segments was twofold: a sufficient number of segments were preferred and each segment should have a substantial size for statistical comparison in order to draw a meaningful conclusion.

We have investigated two options on how to classify the remaining households into these segments: a division with an equal number of households per segment and a division with the 25th and 75th percentile as thresholds. The segment names and number of participants of each option can be found in Table S1.The threshold values for the first option were 0.0, 1.0, and 3.0% (w/w) of food wasted and 0.0, 0.6, and 5.0% of the second option. Both options seemed valuable because a similar trend was discovered related to significant differences between the segments (Table S2.).

These differences were based on reported household actions up to first consumption (partially part 2), self-reported food waste (part 3) and consumer determinants (part 4). A similar number of responses differed statistically significantly between the two HWS options. In addition, one response on planning behaviour was statistically significantly different for the option with the 25th and 75th percentiles as thresholds. Cross tabulation analyses were tested for categorical variables and Kruskal-Wallis analyses for i.e. Likert-scale variables and continuous variables. These significant results did not lead to a preference for one option over the other. Therefore, the option with an equal number of households per segment was selected to ensure a straightforward interpretation of the threshold values (0.0, 1.0 and 3.0%).

Table S1. Segment names and the number of participants per segment of the two household waster segment (HWS) options.

	Name	Number of participants (n)
Division with an equal number of participants		
	HWS 0%	93
	HWS]0-1[%	53
	HWS [1-3]%	56
	HWS >3%	54
Division with the 25th and 75th percentile as thresholds		
	HWS 0%	93
	HWS]0-0.6[%	41
	HWS [0.6-5[%	79
	HWS ≥5%	43

Table S2. p-values of the cross tabulation analysis of the two HWS options: a division with an equal number of participants per segment or a division with the 25th and 75th percentile as thresholds. Significant p-values (<0.05) are indicated in bold.

	Division with an equal number of participants	Division with the 25th and 75th percentile as thresholds
Part 2: Analysis of actions taken after the last routine purchase of a specific chicken product		
What was the first action after purchasing the product?	0.545	0.817
Where was the product stored?	0.515	0.448
How long was the product stored in the fridge?	0.971	0.604
How long was the product stored in the freezer?	0.786	0.774
After the preparation, how much of the prepared portion was consumed?	**<0.001**	**<0.001**
Part 3: Quantification of self-reported chicken waste		
How often is a part of the package of the previously selected chicken product not consumed (during storage, preparation or consumption)?	**<0.001**	**<0.001**
How much of the total package was not consumed (= thrown away, fed to pets, etc.)?	**<0.001**	**0.004**
Part 4: Influence of consumer determinants of household food waste		
Sociodemographic characteristics		
Age class (18-32, 33-50, 51-59, ≥60)	**<0.001**	**<0.00**

Household composition (with children vs. without children)	**0.010**	**0.023**
Employment status (employed vs. unemployed)	**0.021**	**0.004**
Gender (male vs. female)	0.225	0.747
Children younger than 12 yr (yes vs. no)	0.341	0.244
Highest educational level (education after 18 yr vs. no education after 18 yr)	0.810	0.994
Financial status ((rather) difficult, neither easy nor difficult, (rather) easy)*	0.899	0.852
Household routines & skills		
Planning routines - The shopping trips are usually planned in advance (shopping lists are made, inventories are checked, etc.)	**0.002**	0.071
Shopping routines - We often buy unintended food products when shopping	**0.007**	**0.006**
Leftover reuse routine - The leftovers are stored in appropriate conditions so they will last longer	**0.010**	**0.032**
Household skills - Thinking about the activities related to food within your home, how would you rate your household's skills, in terms of planning meals	**0.023**	**0.011**
Motivation and attitudes		
Intention not to waste food - I try not to throw away food	**<0.001**	**<0.001**
Injunctive norm - One should never waste food, not burden the environment with food waste	**<0.001**	**<0.001**
Perceived consumer effectiveness - I believe that every small effort by consumers helps to reduce food waste	**0.012**	**0.004**
Self-evaluated ecological footprint - *The ecological footprint is the estimated surface area that a person or group of people needs to produce what is consumed and to absorb what is discarded.* How would you estimate your own ecological footprint?	0.184	0.063
Packaging perception - Packaging is a waste of raw materials, it must be minimised	0.077	0.115
Compare chicken with vegetables - In comparison with vegetables…		

… I try to throw away less chicken	0.776	0.968
… I buy chicken less often unplanned	0.867	0.745
… I reuse chicken surpluses more often	0.055	0.067
… I plan the purchase of chicken more	0.316	0.407
… I think throwing away chicken is more negative	0.151	0.958

* Participants answering 'I do not want to tell' were excluded from the statistical analysis on the finacial status (n=6).

S3. The relation between consumer determinants and household waster segments

Cross tabulation analyses and Pearson's chi-square tests (for categorical variables) were next to the non-parametric Kruskal-Wallis test(for i.a. Likert-scale variables and continuous variables) performed on the final data set. Significance values of Kruskal-Wallis were adjusted by the Bonferroni correction for multiple tests. Statistical prominence was considered at the significance level of 0.05. SPSS version 26 was made use of to examine the data. The sociodemographic characteristics of the complete sample are presented in Table S3. Statistical results between the four HWS on the sociodemographic characteristics, household routines and skills, and motivations and attitudes can be found in Table S4., Table S5., and Table S6., respectively.

Table S3. Sociodemographic characteristics of the complete sample (n=256).

	%		%
Gender		**Household composition**	
Male	30.9	Living alone	10.5
Female	69.1	Couple with dependent children	46.9
		No children < 12 years old	*55.4*
Age		*1 child < 12 years old*	*23.7*
18-32	20.7	*2 children < 12 years old*	*15.8*
33-50	35.5	*≥ 3 children < 12 years old*	*5.0*
51-59	23.0	Couple without dependent children	31.3
≥ 60	20.7	Single-parent family	7.4
		Other	3.9
Highest education level			
Primary education	2.0	**Working status**	
Secondary education	35.9	Student	4.3
Higher education (Bsc)	40.2	Full-time job	50.4
University (Msc)	21.9	Part-time job	20.3
		Housewife/ househusband	5.1
Financial status		Retired	16.4
Difficult	0.0	Job seeker	1.2
Rather difficult	1.6	Other	2.3
Neither easy, nor difficult	21.5		
Rather easy	29.3		
Easy	45.3		
I don't want to tell	2.3		

Table S4. Sociodemographic characteristics: differences between household waster segments (HWS). Significant p-values (<0.05) are indicated in bold.

	HWS 0% (%)	HWS]0-1[% (%)	HWS [1-3]% (%)	HWS >3% (%)	Total sample (n)	Pearson (χ^2)	df[1]	p-value
Age						31.013	9	**<0.001**
18-32	18.9	28.3	32.1	20.8	53			
33-50	28.6	18.7	26.4	26.4	91			
51-59	42.4	15.3	20.3	22.0	59			
≥ 60	60.4	22.6	5.7	11.3	53			
Household composition						11.455	3	**0.010**
Children	28.8	18.7	29.5	23.0	139			
No children	43.9	23.4	14.0	18.7	107			
Working status						9.690	3	**0.021**
Working	33.1	18.2	26.0	22.7	181			
Not working	47.8	24.6	11.6	15.9	69			
Gender						4.365	3	0.225
Male	38.0	26.6	15.2	20.3	79			
Female	35.6	18.1	24.9	21.5	177			
Children younger than 12 yr						3.345	3	0.341
Yes	21.0	21.0	32.3	25.8	62			
No	35.1	16.9	27.3	20.8	77			
Highest educational level						0.966	3	0.810
Education after 18 yr	36.5	18.9	22.6	22.0	159			
No education after 18 yr	36.1	23.7	20.6	19.6	97			
Financial status						3.608	12	0.990
Difficult	-	-	-	-	0			
Rather difficult	50.0	25.0	25.0	0.0	4			
Neither easy nor difficult	30.9	21.8	21.8	25.5	55			
Rather easy	38.7	22.7	21.3	17.3	75			
Easy	37.1	19.0	21.6	22.4	116			
I don't want to say	33.3	16.7	33.3	16.7	6			

[1] Degrees of freedom.

Table S5. Household routines and skills: differences between household waster segments (HWS). Significant p-values (<0.05) are indicated in bold.

		HWS 0%	HWS]0-1[%	HWS [1-3]%	HWS >3%	Total sample	p-value
Planning routines - The shopping trips are usually planned in advance (shopping lists are made. inventories are checked. etc.)[1]	Mean	4.00[a]	3.75[a,b]	4.09[a]	3.46[b]	3.86	**0.002**
	SD	1.00	0.94	0.92	1.09	1.01	
Shopping routines - We often buy unintended food products when shopping[1]	Mean	2.81[a]	3.21[a,b]	3.25[a,b]	3.35[b]	3.10	**0.007**
	SD	1.08	1.03	1.03	1.07	1.07	
Leftover reuse routines - The leftovers are stored in appropriate conditions so they will last longer[1]	Mean	4.33[a]	4.09[a,b]	4.13[a,b]	3.93[a]	4.15	**0.010**
	SD	0.60	0.82	0.88	0.72	0.75	
Household skills - Thinking about the activities related to food within your home. how would you rate your household's skills in terms of planning meals[2]	Mean	4.13[a]	3.75[a,b]	3.75[a,b]	3.67[b]	3.87	**0.023**
	SD	0.78	1.00	1.05	1.03	0.96	

Note: Expressed as mean; medians are often uniform and the distribution was not bimodal.

[1] 1 = completely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = completely agree.

[2] 1 = very weak, 2 = weak, 3 = okay, 4 = good, 5 = very good.

[a, b] mean values with different letters indicate significantly different means using Kruskal-Wallis tests (significance values adjusted by the Bonferroni correction) ($p < 0.05$).

Table S6. Motivations and attitudes: differences between household waster segments (HWS). Significant p-values (<0.05) are indicated in bold.

		HWS 0%	HWS]0-1[%	HWS [1-3]%	HWS >3%	Total sample	p-value
Intention not to waste food - I try not to throw away food[1]							**<0.001**
	Mean	4.52[a]	4.34[a,b]	4.21[b,c]	3.93[c]	4.29	
	SD	0.56	0.62	0.53	0.80	0.66	
Injunctive norm - One should never waste food, not burden the environment with food waste[1]							**<0.001**
	Mean	4.42[a]	4.21[a,b]	4.13[b]	3.89[b]	4.20	
	SD	0.67	0.60	0.63	0.63	0.67	
Perceived consumer effectiveness - I believe that every small effort by consumers helps to reduce food waste[1]							**0.012**
	Mean	4.41[a]	4.23[a,b]	4.14[a,b]	4.13[b]	4.25	
	SD	0.59	0.64	0.67	0.58	0.63	
Self-evaluated ecological footprint - *The ecological footprint is the estimated surface area that a person or group of people needs to produce what is consumed and to absorb what is discarded.* How would you estimate your own ecological footprint?[2]							0.184
	Mean	3.04	3.00	3.23	3.04	3.07	
	SD	0.74	0.83	0.60	0.78	0.74	
Packaging perception - Packaging is a waste of raw materials, it must be minimized[1]							0.077
	Mean	4.32	4.19	4.02	4.07	4.18	
	SD	0.71	0.81	0.84	0.75	0.78	
Compare chicken with vegetables - In comparison with vegetables…							
… I try to throw away less chicken[1]							0.776
	Mean	3.33	3.4	3.21	3.43	3.34	
	SD	1.22	1.03	1.04	0.94	1.08	
… I buy chicken less often unplanned[1]							0.867
	Mean	2.82	2.96	2.88	2.89	2.88	
	SD	1.21	1.16	1.11	0.98	1.13	
… I reuse chicken surpluses more often[1]							0.055
	Mean	3.37	3.25	2.88	3.04	3.16	
	SD	1.21	1.13	1.11	1.01	1.14	
… I plan the purchase of chicken more[1]							0.316
	Mean	2.96	3.3	3.16	3.13	3.11	
	SD	1.14	1.03	1.04	1.07	1.08	
… I think throwing away chicken is more negative[1]							0.151
	Mean	3.19	3.45	2.96	3.33	3.23	
	SD	1.25	1.01	1.11	1.05	1.14	

Note: Expressed as mean; medians are often uniform and the distribution was not bimodal.

[1] 1 = completely disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = completely agree.

[2] 1 = very weak, 2 = weak, 3 = okay, 4 = good, 5 = very good.

[a, b,c] mean values with different letters indicate significantly different means using Kruskal-Wallis rank-sum tests (significance values adjusted by the Bonferroni correction) ($p < 0.05$).

S4. The relation between food product determinants and household waster segments

Table S7. Food product determinants: differences between household waster segments (HWS). Significant p-values (<0.05) are indicated in bold.

	HWS 0% (%)	HWS]0-1[% (%)	HWS [1-3]% (%)	HWS >3% (%)	Total sample (n)	Pearson (χ^2)	Df[1]	p-value
Product						24.161	12	**0.019**
Diced chicken breast 0.5 kg	25.4	20.3	35.6	18.6	59			
Chicken breasts 1 kg	29.1	23.6	16.4	30.9	55			
Chicken breasts 0.5 kg	42.2	23.4	15.6	18.8	64			
Chicken escalope 0.4 kg	35.4	25.0	18.8	20.8	48			
Organic whole chicken 1.5 kg	60.0	3.3	23.3	13.3	30			
Agricultural production system						11.197	3	**0.011**
Organic	60.0	3.3	23.3	13.3	30			
Conventional	33.2	23.0	21.7	22.1	226			
Food convenience grade[2]						16.186	6	**0.013**
Ready-to-cook foods (2)	29.9	22.4	28.0	19.6	107			
Kitchen ready food (1)	36.1	23.5	16.0	24.4	119			
No-convenience food (0)	60.0	3.3	23.3	13.3	30			
Packaging size						15.146	6	**0.019**
Large	60.0	3.3	23.3	13.3	30			
Medium	29.1	23.6	16.4	30.9	55			
Small	34.5	22.8	23.4	19.3	171			
Shelf life						8.565	3	**0.036**
Long	29.6	22.8	24.1	23.5	162			
Limited	47.9	17.0	18.1	17.0	94			

[1] Degrees of freedom.

[2] Based on the study of [3].

S5. References

1. Williams, H.; Wikström, F.; Otterbring, T.; Löfgren, M.; Gustafsson, A. Reasons for household food waste with special attention to packaging. *Journal of Cleaner Production* **2012**, *24*, 141-148.
2. Stancu, V.; Haugaard, P.; Lahteenmaki, L. Determinants of consumer food waste behaviour: Two routes to food waste. *Appetite* **2016**, *96*, 7-17.
3. Goossens, Y.; Schmidt, T.G.; Kuntscher, M. Evaluation of food waste prevention measures—the use of fish products in the food service sector. *Sustainability* **2020**, *12*, 6613.