

All questions were presented in Italian

FOOD WASTE IN TIMES OF COVID-19 SURVEY

18-05-2020 FINAL

SAMPLE CRITERIA

- Age \geq 18 years
- Only respondents who are responsible for at least half of the shopping trips AND meal preparations in their household
- Representative sample of Italian household composition
- Furthermore, representative spread of: age, gender (M/F), income groups, education, region and small/large city.

AIM OF THE STUDY

The aim of this project is to gain insights on the effects of the COVID-crisis with its quarantine and social distancing restrictions on shopping, storing, preparation and discard behaviors of households, and how these differ from the pre-COVID-19 period.

QUESTIONNAIRE

INTRODUCTION SCREEN

Welcome

The corona virus had and has a substantial impact on all of our daily lives.

In this online survey we aim to investigate how the corona restrictions taken by the Italian government affect shopping routines, purchasing behavior and the way food is handled in households.

A few remarks before filling out the survey:

- Please take your household in mind when answering the questions. If the question only applies to yourself, it will be clearly stated.
- Whenever we are talking about the start of the corona crisis and the quarantine period, we talk about the **11th of March**, when the restrictions were announced by the Italian government
- The 17th of May is considered the last day of quarantine when the majority of the restrictions were officially removed by the Italian government.
- Therefore when we ask questions regarding the quarantine period we refer to the period between the 11th of March and the 17th of May. When we ask questions regarding the period prior the quarantine we refer to the period before the 11th of March
- For some questions we ask you to answer if things have changed now, as compared to before the corona crisis on 7-point scales. If the statement does not apply to your household at all (before corona, and now) – then please select zero (not applicable/never). This also applies if you do not know the answer.
- The participation is on voluntary basis. You can decide not to take the questionnaire. If you decide to take the questionnaire you can decide to withdraw at any time. The provision of data required by the questionnaire is optional and refusal to provide it will have no consequence.
- This questionnaire is carried out by Alma Mater Studiorum - Università di Bologna in partnership with MSI-ACI Europe BV

It will take about 15-20 minutes to complete the questionnaire.

We thank you very much in advance for your contribution to this study.

Privacy Policy

Answers are confidential and the survey is completely anonymous. The collection of information through the questionnaire is aimed exclusively to research and dissemination purposes. The data will be processed anonymously with the support of automated tools. Specific security measures are implemented to prevent the loss, unauthorized access and the illicit or non-correct use of data.

The data owner is Alma Mater Studiorum University of Bologna and the privacy policies fulfil the requirements laid down in Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data (the GDPR). In any case, data will not be stored for more than 24 months.

If you have any question regarding the survey you can contact us at:

matteo.vittuari@unibo.it; matteo.masotti8@unibo.it; elisa.iori5@unibo.it.

SCREENING QUESTIONS

Criteria for representative sample:

- C1. Household size** (question for representative sample); see socio-demographic questions
- C2. Gender** (question for representative sample); see socio-demographic questions
- C3. Age** (question for representative sample); see socio-demographic questions
- C4. Income groups** (question for representative sample); see socio-demographic questions
- C5. Education** (question for representative sample); see socio-demographic questions
- C6. Province/region** (question for representative sample); see socio-demographic questions
- C7. Small/large city** (question for representative sample); see socio-demographic questions

Screening:

- S1. Age** [screening question, <18 years = screen out]; see socio-demographic questions
- S2. How often do you do the groceries in your household?** [1=screen out]
 - 1. Less than half the times [screen out]
 - 2. Half of the times.
 - 3. More than half of the times
- S3. How often do you do the cooking in your household?** [screening question, 1=screen out]
 - 1. Less than half the times
 - 2. Half the times.
 - 3. More than half the times
- S4. Have you been ill since the start of the corona crisis for more than 2 weeks?** [screening question, yes=screen out]
 - Yes
 - No

SHOPPING BEHAVIOUR

The following questions are related to grocery shopping.

FREQUENCY OF SHOPPING

Q1. How often did your household (on average) do groceries before the corona crisis?

- (Almost) every day
- 4-6 times a week
- 2-3 times a week
- Once a week
- 2-3 times a month
- 1 a month or Less often

Q2. How often does you household (on average) do groceries now (during the corona crisis)?

- (Almost) every day
- 4-6 times a week
- 2-3 times a week
- Once a week
- 2-3 times a month
- 1 a month or Less often

20. Sweets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Alcoholic beer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Spirits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Other alcoholic drinks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Sweetened drinks and cola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Ready to eat meals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Frozen meals and pizzas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Pulses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Olive oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Butter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q10. In general, did you buy more food for your household during the quarantine, as compared to before the quarantine (prior 11th of March 2020)?

Much less	Less	A bit less	Just as much	A bit more	More	Much more
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q11. In general, did you eat at home more often during the quarantine, as compared to before the quarantine (prior 11th of March 2020)?

Much less	Less	A bit less	Just as much	A bit more	More	Much more
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q11a. How often did you eat out (alone or with other members of the household) before the quarantine, during the following meal moments?

Breakfast:

- Never
- Less than once a month
- Once a month
- 2-3 times a month
- 1-2 times per week
- 3-4 times per week
- More than 5 times per week

IF ≥ 5 FOR EACH OF THE ABOVE ITEMS:

Q20a. What was/were the main reason(s) your household discarded more of this product than before quarantine?

(max 3 answers possible, ranking in order of importance)

- We bought too much of the product
- There was too much of the food in one package
- We prepared/cooked too much
- We forgot it was there
- We prepared the product in the wrong way
- We disliked the taste
- The expiration date had exceeded
- The product was spoiled
- We decided to finish other products first, so this product was left
- It did not fit into my menu schedule
- There was too little left to keep it for storage and/or use it for another meal
- We ate it more often now, so we discarded more
- No specific reason
- Other: _____

IF ≤ 3 , FOR EACH OF THE ABOVE ITEMS:

Q20b. What was/were the reason(s) your household discarded less of this product than before quarantine?

(max 3 answers possible, ranking in order of importance)

- We did not buy it
- only buy exactly what I need of this product now
- We ate everything I bought
- We make us of easy-to-portion products
- We eat it less often so I throw away less
- No specific reason
- Other: _____

Q21. Do you in general feel like your household was wasting less or more food during the quarantine, compared to before quarantine (prior the 11th of March 2020)?

Much less	Less	A bit less	Just as much	A bit more	More	Much more
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IF ≤ 3

Q22a Why do you think your household was wasting less food during the quarantine?

(max 3 answers possible, ranking in order of importance)

- We cooked more precise
- We had a better overview of what we have in stock
- We did less often (unexpectedly) eat out
- We were more aware of the food supply chain
- We wanted to use all the food we had in home to avoid going out to the supermarket again
- We cooked more often at home, so we could use leftovers more easily the next day
- We more often cooked with left-overs
- We prepared better tasting meals during the quarantine, that we were usually finishing
- We paid more attention to the best-by and use-before dates
- We paid more attention to storing foods in the right way to keep them fresh as long as possible
- We felt more guilty about discarding food
- We could better estimate how much the household should eat
- We had less unexpected circumstances that led to food leftovers
- No specific reason
- Other: _____

IF ≥ 5

Q22b Why do you think your household was wasting more food during the quarantine?

(max 3 answers possible, ranking in order of importance)

- We ate at home more often, so we were discarding more
- We were buying more food per shopping trip We had a larger stock of food products
- We were cooking less precise
- We had a worse overview of what we have in stock
- We were less often cooking with left-overs
- We spent less time on our meals to make them taste good, so we did not finish them
- We paid less attention to the best-by and use-before dates
- We paid less attention to storing our foods in the right way to keep them fresh as long as possible
- We felt less guilty about discarding food
- We had other things on our minds than thinking about food waste
- We could estimate worse how much the household should eat
- We had more unexpected circumstances that led to food leftovers
- No specific reason
- Other: _____

The following questions are about all meal left-overs (hot meals and bread meals) in your household.

Q23. Did your household in general have less or more meal left-overs during the quarantine, as compared to before the quarantine (prior March 11)?

We never have leftovers	Much less	Less	A bit less	Just as much	A bit more	More	Much more
0	1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q24. How did your household mostly handle these meal left-overs before the quarantine (prior the 11th of March 2020)?

- We threw away what was left
- We saved what was left and consumed it later
- We saved what was left and (often) threw it away later
- We fed it to animals
- We never had leftovers
- Other: _____

Q25. How did your household mostly handle these meal left-overs during the quarantine?

- We threw away what is left
- We saved what was left and consumed it later
- We saved what was left and threw it away later
- We fed it to animals
- We never had leftovers during the quarantine
- Other: _____

ITEMS MOA

The following questions are related to your perceptions about food and food waste.

MOTIVATION

Q26. Please indicate if the following statements apply less or more to you during the quarantine, as compared to before the quarantine (prior the 11th of March 2020).

Compared to before the quarantine...	much less	less	a bit less	just as much	a bit more	more	much more
	1	2	3	4	5	6	7
ITEMS RANDOM							
1. I felt less/more guilty about throwing away food (M)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I was more/less aware of the food that I waste (M)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I thought people in my surroundings threw away more/less food (M)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I thought people in my surroundings found it important to waste more/less food (M)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I paid less/more attention to the expiry dates, such as use-by and best-before dates (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I paid less/more attention to storing my food in the right way to keep my food fresh as long as possible (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I found it less/more difficult to prepare leftovers into new meals (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I found it less/more difficult to estimate how much food my household should eat (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I found it less/more difficult to estimate how much food I needed to buy (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I tried less/more new recipes and cooking techniques (A)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I paid less/more attention to the amount of food I wasted (behavior)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I had meals at regular times	<input type="checkbox"/>						
11. I paid attention to the taste of what I ate							
12. I had more sustainable habits in the kitchen (less energy, less waste, less packaging)							
13. I felt good in kitchen, I took care of it.							

SOCIO-DEMOGRAPHICS

Q32. I am a:

- Male
- Female
- Other/do not want to say

Q33. I am:

____ years old

Q34. On which location did you work during the quarantine?

- I (mainly) worked on location
- I (mainly) worked from home
- I was hardly/not working
- Not applicable

Q35. How was your professional workload during the quarantine compared to before the quarantine (prior the 11th pf March 2020)?

- I work more than normal
- I work less than normal
- I am doing other work than I used to do
- I am not working (same as before corona)

Q36. How was your domestic workload during the quarantine compared to before the quarantine (prior the 11th pf March 2020)?

- I work more than normal
- I work less than normal
- I am doing other work than I used to do
- I am not working (same as before corona)

Q37. Of how many persons does your household consist?

- ... persons, of which:
- ... children (0-12 years)
- ... children (13-18 years)
- ... adults (18 years and over)

Q38. What is your highest accomplished education level?

- Elementary school degree
- Middle school degree
- High school degree
- Other/vocational diploma
- University degree
- Master Degree/PhD

