

The Relationship between Food Disgust Sensitivity and Sustainability

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Introduction and Importance

1.3 billion tonnes of food wasted every year

To understand why food is wasted at the consumer level and how we can prevent it, we designed the present study.



Disgust is a defence mechanism that promotes the behavioural avoidance of pathogens

From that, we assumed that individuals food disgust sensitivity would be related to their willingness to eat various food products that had passed their expiration date.

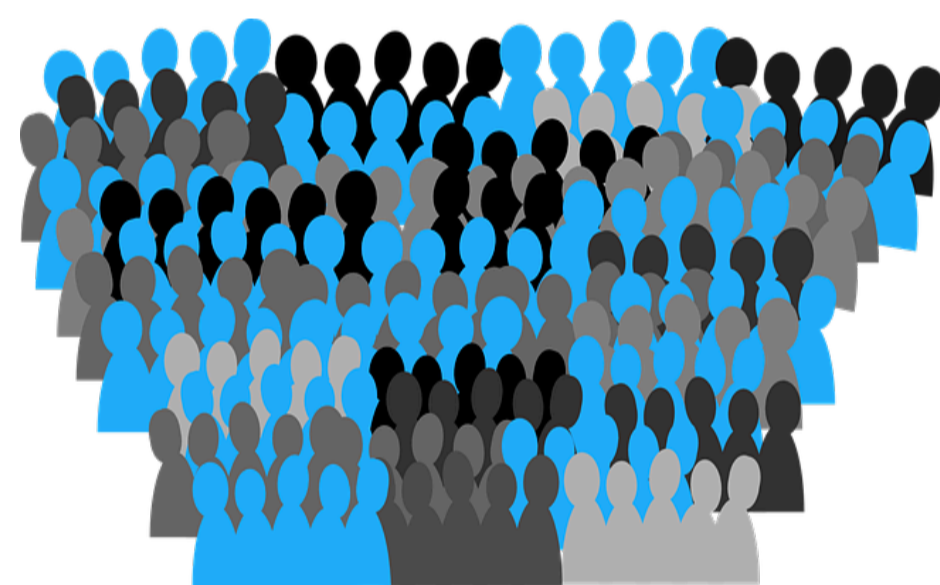
Research questions

- How are food disgust sensitivity and edibility assessments related?
- Does food disgust sensitivity influence behaviour?

Materials and Method

Participants

1066 participants
 50% female
 Age $M = 49$, $SD = 16$
 Ranging from 18-88 years



Edibility assessment

12 different food items

"How likely were you to eat this item if it had passed its expiration date but still looked and smelled normal?"
 Scale from 1 (very unlikely) to 6 (very likely)

Specific scenario

"In the morning, you realise that you have left milk in the kitchen overnight. What do you do?"

- 1) Discard the milk
- 2) Pour some milk in a glass and inspect it visually
- 3) Smell the milk
- 4) Taste the milk
- 5) Put the milk back in the refrigerator



Food disgust sensitivity

8-item Food Disgust Scale (Hartmann and Siegrist, 2018)

"To eat with dirty silverware in a restaurant"
 Scale from 1 (not disgusting at all) to 6 (extremely disgusting)

Results and Discussion

Edibility assessment

We identified two factors (also refer to Table 1):
 -Meat and fish products (lower willingness to eat)
 -Plant and dairy products (higher willingness to eat)

Table 1: Factor loadings, mean values, and standard deviations for the edibility assessment items

#	Item	Factor		M
		1	2	
Meat and fish products ($\alpha = .92$)				
3	Raw minced meat you were going to cook	.30	.86	3.79
1	Raw fish you were going to cook	.26	.87	3.66
2	Smoked salmon you were going to eat raw	.30	.79	3.53
4	Raw chicken breast you were going to cook	.27	.88	3.48
Plant and dairy products ($\alpha = .94$)				
10	Rice grains, dried	.88	.17	5.18
11	Lentils, dried	.88	.18	5.11
12	Olive oil	.80	.28	4.98
7	Yoghurt	.80	.33	4.82
6	Preserved vegetables in a glass	.77	.36	4.74
9	Soft cheese	.75	.41	4.62
8	Refrigerated pasteurised whole milk	.75	.40	4.61
5	Packed, ready-to-eat salad	.56	.49	4.35

Milk scenario

There was a significant negative association between the invasiveness of the method used to judge the milk and participants' food disgust sensitivity ($r_s = -.24$, $p < .001$).

Conclusion and Outlook

Key findings

Individuals with high food disgust sensitivity are
 -less likely to consume products past their expiration dates
 -more likely to discard food on the basis of disgust cues
 -more likely to rely their decision on the expiration date

Outlook

Campaigns: use food safety information to reduce food waste
 Policy: adapt the food labeling (use of expiration dates)

