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Colours of Disgust – an exploratory study on the relationship between food colour and disgust

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ABSTRACT

Disgust is a disease avoidance mechanism, helping humans avoid unsuitable foods. Visual perception is usually the first interaction with food. So far, little is known about how colour, a visual feature, influences disgust perception. Thus, this exploratory study investigated how individuals' perceived disgust and attractiveness differ depending on the food colouring.

For this, 234 participants completed an online survey and rated four food items (milk, chocolate, toast, and tomatoes) for disgust and attractiveness. Participants were assigned to either a green or a red condition. In the green condition (n = 120), they were presented with two natural and two green coloured foods. Participants in the red condition (n = 114) were presented with two natural and two red coloured foods.

Individuals rated the green items as more disgusting than the red or natural items. Moreover, individuals' disgust perception was influenced by their disgust sensitivity, that is, individuals with higher levels of disgust sensitivity evaluated the foods as more disgusting than individuals with lower disgust sensitivity. Our exploratory study is among the first to show that disgust sensitivity seems to be particularly predictive of disgust perception judgments when the presented foods are coloured in green.

Video to this article can be found online at https://doi.org/10.1016/j.sctalk.2022.100124.

Figures and tables

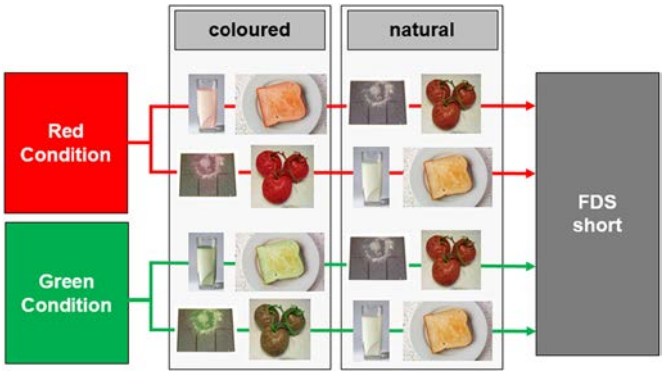

Fig. 1. Experiment design depicting the two colour conditions used for the study.

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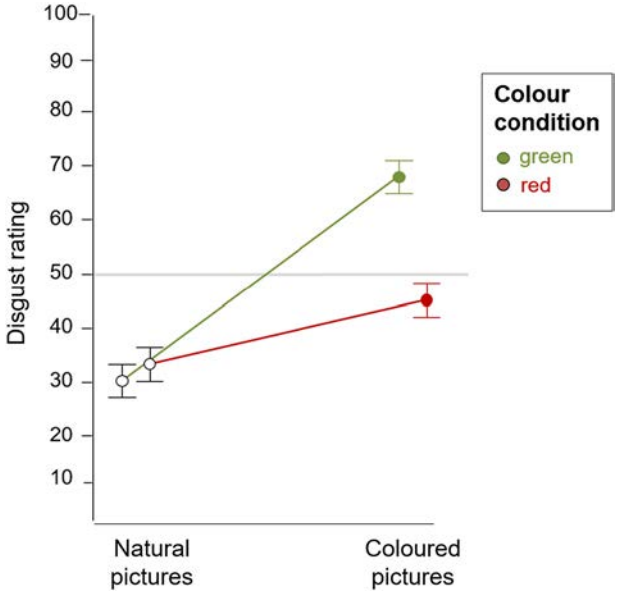

Fig. 2. Disgust ratings for the coloured and the natural pictures for both red (n = 114) and green condition (n = 120).

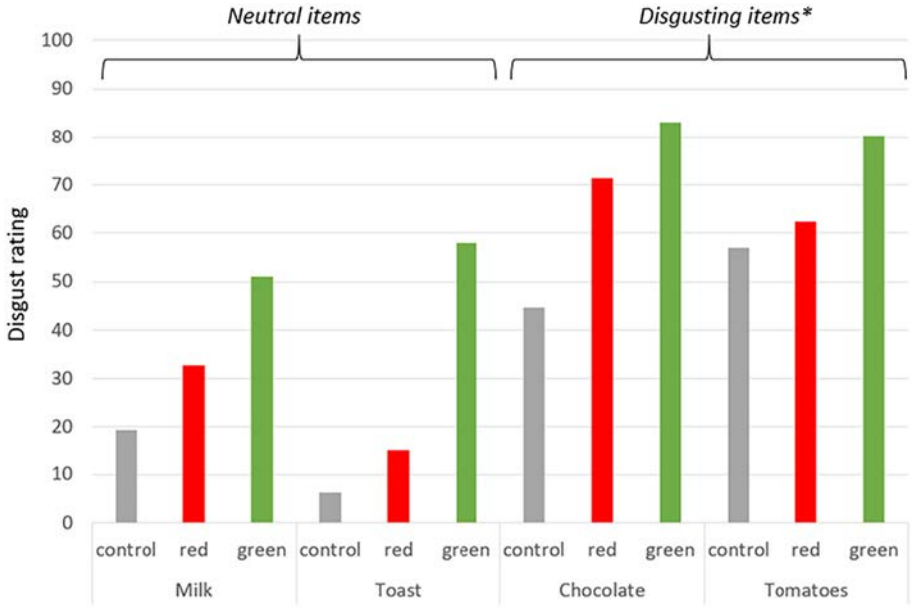

Fig. 3. Disgust ratings for the four single pictures and the three colour versions.

CRediT authorship contribution statement

Anne Berthold: Investigation, Conceptualization, Methodology, Data curation, Writing – original draft, Visualization. **Jeanine Ammann:** Visualization, Writing – original draft, Writing – review & editing.

Data availability

Data will be made available on request.

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Declaration of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Further reading

[1] J. Ammann, C. Hartmann, M. Siegrist, Development and validation of the Food Disgust Picture Scale, Appetite 125 (2018) 367–379, https://doi.org/10.1016/j.appet.2018.02.020.

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