Green Disgust –
The influence of food color on disgust

Anne Berthold[1], Jeanine Ammann[2]
[1] ETH Zürich, Department of Health Science and Technology (D-HEST), Zürich, Switzerland
[2] Agroscope, Research Group Economic Modelling and Policy Analysis, Ettenhausen, Switzerland

Motivation & Method

Visual appearance of food is a key element in disgust perception. In this exploratory study, we investigated the relationship between food disgust perception and color.

Sample & Design

Online survey with 234 participants (176♀/52♂) ∅ 27yrs old
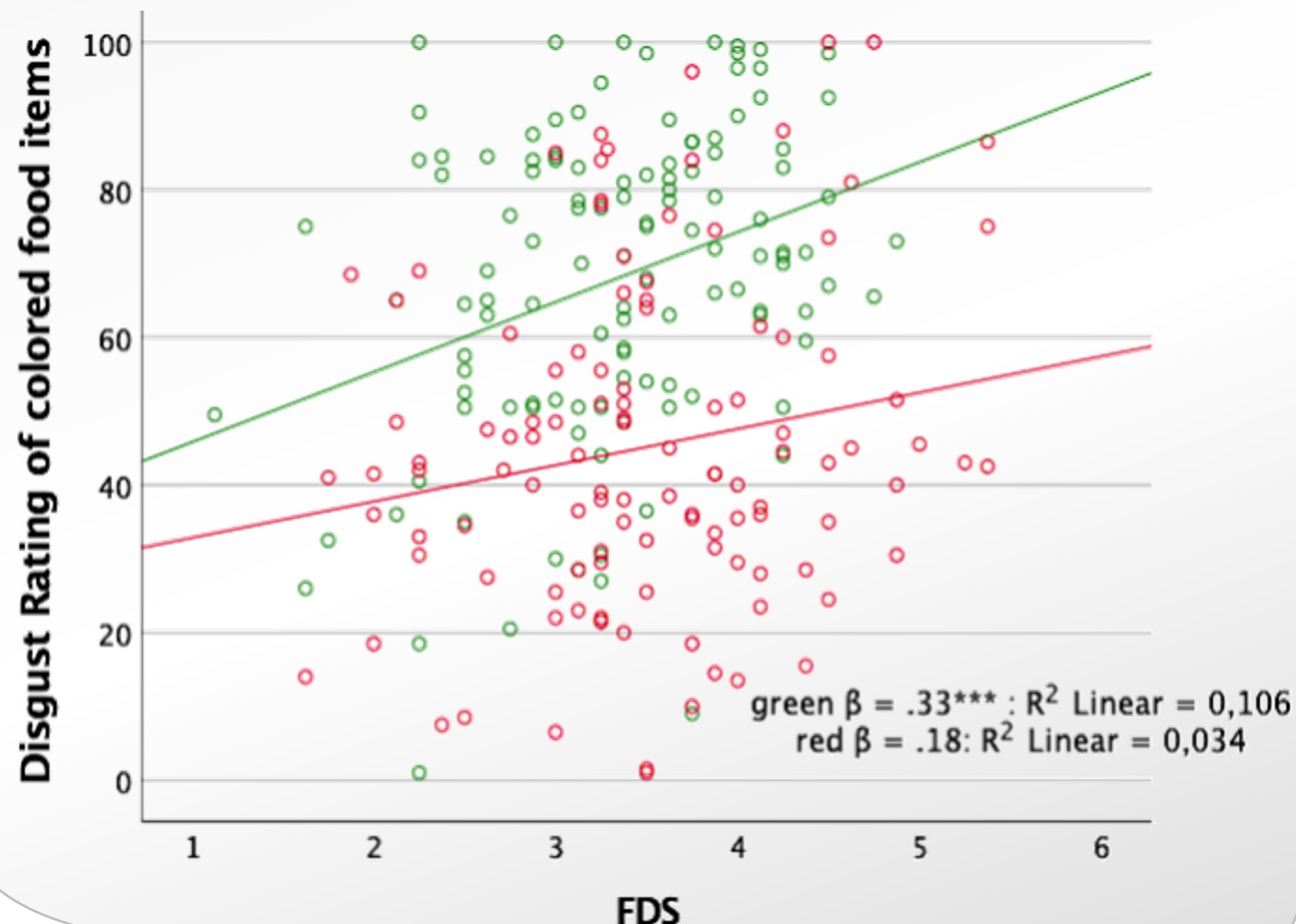Participants evaluated food items in randomized order:
- Two 🤢 foods (from the Food Disgust Picture Scale, Ammann et al. 2018)
- Two 😐/🙂 foods
→ Half of the items were naturally colored, the other half was tinted
→ The color of the tinted food was green for participants in the green condition (n=120) and red in the red condition (n=114).

Variables

Perceived disgust rated from 1 (*not at all*) - 100 (*very much*)
Food Disgust Sensitivity – FDS short version (Hartmann & Siegrist, 2018)

Results I

The green food items were rated as significantly more disgusting than the red items (M_{green}=68, SD=21; M_{red}=45, SD=22, F = 64, p<.01, η_p^2=.22).

Red & green items were both perceived as more disgusting than the naturally colored food items ($M_{natural}$=32, SD=16, both Fs > 27, p<.01).

Results II

Individuals' level of disgust sensitivity (FDS) is predicting the perceived disgust towards green food items.

green β = .33*** : R^2 Linear = 0,106
red β = .18: R^2 Linear = 0,034

Conclusion

- **Green food coloring** leads to foods being perceived as more disgusting than red coloring or natural appearance.

- **Food disgust sensitivity** is a stronger predictor for green colored food items

References:
Ammann, J., Hartmann, C., & Siegrist, M. (2018). Development and validation of the Food Disgust Picture Scale. *Appetite, 125*, 367-379. doi:10.1016/j.appet.2018.02.020

Hartmann, C., & Siegrist, M. (2018). Development and validation of the food disgust scale. *Food Quality and Preference*, *63*, 38–50. doi:10.1016/j.foodqual.2017.07.013

For questions or comments please contact:
aberthold@ethz.ch or jeanine.ammann@agroscope.admin.ch