

Focus on food

Citation for published version (APA):

Kochs, S. (2023). *Focus on food: effects of mindset, hunger and dietary restraint on attention bias, food intake and brain responses to food*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20230125sk>

Document status and date:

Published: 01/01/2023

DOI:

[10.26481/dis.20230125sk](https://doi.org/10.26481/dis.20230125sk)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Focus On Food: Effects of Mindset, Hunger and Dietary Restraint on Attention Bias, Food Intake and Brain Responses to Food

1. Brain responses to food crucially depend on the attentional focus of a person. (this thesis)
2. The term 'reward system of the brain' is a misnomer, as this system responds similarly to highly palatable and highly unpalatable food stimuli. (this thesis)
3. The *level* of brain activity in response to food likely reflects motivational salience, instead of reward value, whereas palatability and calorie content of food are represented in multi-voxel *patterns* of brain activity. (this thesis)
4. Brain activity upon viewing pictures of food is not different between restrained and unrestrained eaters. (this thesis)
5. Attention bias for food plays a minor role in instantiating and maintaining craving in restrained eaters, if it plays a role at all. (this thesis)
6. Mindset is not easy to manipulate, and a successful manipulation will likely require active-task-based involvement of the participant.
7. The interpretation of fMRI results is impossible without a clear, unambiguous, mental task for the participant. (Poldrack, 2011)
8. To fully understand how the brain represents the world, univariate fMRI analysis will not be sufficient, as some information is present in multi-voxel patterns of brain activity. (Mur, 2009)
9. Obesity research would benefit from the use of more standardized procedures, such as standardized paradigms and analysis approaches, to increase comparability and reduce inconsistency of findings.
10. How the brain reacts to food is not a fixed characteristic of a person but depends on attentional focus. So, interventions may target attentional focus to influence how the brain reacts to food. (impact addendum)
11. Failure can be a great teacher. Sometimes, we will learn more if things do not work out in the first instance.