Food addiction: controversies and evidence

Lead supervisor: <u>Dr Jordan Beaumont</u>

Co-supervisor(s): Jenny Paxman

Research Centre or Department: Food and Nutrition, Sheffield Business School

Contact for applicant queries: Dr Jordan Beaumont i.beaumont@shu.ac.uk

Project summary

Current Western diets bear little resemblance to the pre-agricultural, ancestral diets we evolved to consume¹. The Evolutionary Discordance Hypothesis suggests this mis-match presents a particular challenge in relation to overconsumption², further amplified in obesogenic environments, where 'ultra-processed' foods high in fat and sugar contribute to calorie consumption in excess of metabolic need³. Reward, motivation, memory and habit contribute to calorie-seeking behaviours, argued by some to parallel those seen in drug, tobacco or alcohol use. Whether this constitutes 'food addiction' (FA)³ (with a psychotropic component) or 'eating addiction'⁴ (a so-called behavioural addiction) is hotly debated. Work to date indicates there is a generally held perception, within community samples, that certain foods are addictive and that food addiction can cause obesity⁵.

The proposed work will look to systematically review current evidence around food addiction, with specific reference to:

- Evidence in support of 'food addiction' as a diagnosable condition;
- Review of measures exploring food addiction;
- Current demographic profile on participants in research exploring food addiction.

This is part of our wider work exploring the construct of food addiction and implications on weight management. This specific project builds on our current work looking at the perceptions of food addiction held by the general population. The intern will develop skills in systematic review methodology and research communication (e.g., through contributing to draft manuscripts), and will gain a deep understanding of eating behaviour and food choice and how these contribute to wider health. The most recent systematic review in this area was published 6 years ago⁶ yet current thinking in this area has advanced significantly since that date. An up-to-date rigorous review is warranted.

- ⁽¹⁾ Crittenden AN, Schnorr SL (2017). Current views on hunter-gatherer nutrition and the evolution of the human diet. *American Journal of Physical Anthropology 162(S63)*; 84-109.
- (2) Konner M, Eaton SB (2010). Paleolithic nutrition: twenty-five years later. *Nutrition in Clinical Practice 25 (6)*, 594-602.
- Gearhardt AN and Schulte EM (2021). Is food addictive? A review of the science. *Annual Review of Nutrition 41*), 387-410. doi.org/10.1146/annurev-nutr-110420-111710

- Hebebrand J, Albayrak Ö, Adan R, Antel J, Dieguez C, de Jong J, et al. (2014). "Eating addiction", rather than "food addiction", better captures addictive-like eating behavior. Neurosci Biobehav Rev. 47:295–306. doi:10.1016/j.neubiorev.2014.08.016.
- (5) Ruddock HK and Hardman CA (2017). Food addiction beliefs amongst the lay public: what are the consequences for eating behaviour? Curr Addict Rep 4:110-115. doi 10.1007/s40429-017-0136-0.
- Gordon EL, Ariel-Donges AH, Bauman V, Merlo LJ. What Is the Evidence for "Food Addiction?" A Systematic Review. Nutrients. 2018 Apr 12;10(4):477. doi: 10.3390/nu10040477. PMID: 29649120; PMCID: PMC5946262.

Specific skills and experience required for this project

Please also refer to the advert on our jobs pages for the person specification for these internships

A knowledge of the literature review process would be beneficial. While the project can accommodate online and remote working, ability to travel to City Campus may be required for some meetings. SHU IT access will be a requirement for the duration of the project (which can be arranged). Ideally, the successful candidate will have the ability to read, interpret and critically evaluate published literature, though training can also be provided to support the development of these skills during the internship.

Project location

City Campus

Home working may be available.

Project delivery

This project can be delivered on a full-time or part-time basis.

The project can be completed around the successful candidate's other responsibilities; meetings will be scheduled within normal working hours (09:00 to 17:00), which the intern will be required to attend.