



OPEN LETTER

# Time for complete transparency about conflicts of interest in public health nutrition research [version 1; referees: awaiting peer review]

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## Abstract

We are a group of researchers and academics with decades of experience in the protection and promotion of public health. We are writing to raise our concerns about how conflicts of interest are reported in public health nutrition research. We highlight examples of why it is important to accurately declare such conflicts, as well as providing examples of situations in which conflicts of interest have been inadequately reported. We call on researchers, and others, to be transparent about conflicts of interest in research. Journal editors in particular have an important responsibility in fully understanding how conflicts of interest can impact on research findings. They need to agree and adopt clear guidelines on conflicts of interest and ensure that authors abide by these to facilitate trust in the scientific process and the credibility of published articles.

## Keywords

Breastfeeding, commercial determinants of health, complementary feeding, conflict of interest, infant feeding, nutrition, public health, research funding

## Open Peer Review

**Referee Status:** AWAITING PEER

REVIEW

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Interactions between commercial food and drink companies<sup>1</sup> and professionals and bodies responsible for improving public health and health promotion have generated concerns for decades<sup>1-3</sup>. These interactions are often hailed as unique opportunities to make a difference to the public's health that would otherwise not be possible without industry involvement<sup>3</sup>. In late 2018, a series of events attracted considerable media attention in the United Kingdom and beyond. In September, [Public Health England announced their partnership with the alcohol industry-funded body DrinkAware on a campaign called 'Drink Free Days'](#), which has the stated aim of helping people cut down on the amount of alcohol they are regularly drinking. This partnership was met with much criticism – with Public Health England's alcohol adviser, Sir Ian Gilmore, resigning from this role because of concerns that such interactions with alcohol industry actors and related industry-funded organisations come at the expense of public health<sup>4</sup>. Then, in late November, [Diabetes UK announced that it had joined forces with sugar-sweetened beverage manufacturer Britvic in a three-year partnership](#). Again, this interaction was met with much public criticism, which [Diabetes UK has rejected](#)<sup>5</sup>. On a more positive note, in October 2018 the Dieticians Association of Australia terminated partnerships with food manufacturers and industry associations following long-standing criticism and internal member advocacy<sup>6</sup>.

Such interactions with industry are also common among individual researchers. In a recent article published in the *British Medical Journal*, van Tulcken reported that cow's milk allergy may be acting as a Trojan horse for the €44bn global breastmilk substitute industry to forge relationships with healthcare professionals in the UK and around the world<sup>7</sup>. He further highlighted that many of those involved in producing milk allergy guidelines declared interests with breastmilk substitute manufacturers either at the time of writing or subsequently. A series of recent studies have highlighted links between nutrition researchers and Coca Cola<sup>8,9</sup>, contributing to a narrative that pushes policy towards measures to increase exercise by children, which is of course a good thing, while deflecting attention from the role of sugar-sweetened beverages in obesity and poor nutrition. Such interactions between public health, paediatric and nutrition experts and commercial food and drink companies can undermine trust in researchers and their scientific integrity<sup>10,11</sup>.

Concerns about interactions between researchers and commercial food and drink companies are well-founded as corporate interests typically prioritise investing in research that supports their policy and legal positions, and this can divert research attention away from questions that are more pressing for public health<sup>12,13</sup>. Such interactions are also more likely to lead to findings that confirm the benefits or lack of harm of the sponsor's products<sup>14</sup>, even when independently sponsored research comes to differing conclusions. As early as 1965 the US sugar industry began funding research to downplay the role of sugar as a

dietary risk factor for coronary heart disease, shifting the focus towards cholesterol and fat instead, with decades-long implications for nutrition guidance and policy<sup>15</sup>. A Cochrane review concluded that industry sponsored studies more often report findings in a direction that favours the sponsor<sup>16</sup>. Similarly, in a systematic review of the effects of soft drink consumption on nutrition and health, the authors found that studies funded by the food industry reported significantly smaller effects than did non-industry-funded studies<sup>17</sup>. Such industry-funded research generates doubt among scientists, policy-makers and the public by generating conflicting or confusing results<sup>18</sup>. In the light of these and other revelations, members of the public are increasingly sceptical about research that is supported by commercial funding<sup>19</sup>, as are members of the research community<sup>20</sup>.

An important element of maintaining public trust in the scientific process and the credibility of published articles is whether conflicts of interest are transparently disclosed during the planning, implementation, writing, peer review, editing, and publication of scientific work. Determining what constitutes a conflict of interest can be difficult for researchers and editors as there is limited guidance available. However, when researchers receive funding from a commercial company to undertake research related to their products, brand or area of interest, a conflict of interest exists<sup>21</sup>. Although this seems obvious, a number of corporations have supported positions that seek to dismiss concerns about such conflicts by arguing that everyone has some interest, for example, in progressing their scientific reputation to attract further funding, so commercial sponsorship should not raise particular concerns<sup>22</sup>.

Procedures for the reporting of conflicts of interest are covered within the [International Committee of Medical Journal Editors \(ICJME\) guidelines](#). Where authors do not conform to ICJME guidelines, journal editors must take responsibility for encouraging full disclosure. A common sentiment within the research community is that transparency is the key to appropriately managing and avoiding conflicts of interest; that is, as long as the authors are fully transparent, then readers can make up their own minds about conflicts of interest. However, this sentiment fails to acknowledge the limited understanding both academic and clinical researchers have on this issue<sup>23,24</sup>. Of particular concern is the limited awareness of how research funding and unconscious bias work together. This relationship can result in researchers being influenced by funding even when they think they are being unbiased<sup>25</sup>. Further limitations of disclosure are apparent from research showing that it may give licence to researchers to exaggerate their findings, while reviewers often fail to take adequate account of its significance<sup>26</sup>.

Recently in a scientific article published ahead of print in *Annals of Nutrition and Metabolism*, the authors of the article stated that they had “no conflicts of interest or financial ties to disclose” despite declaring that the writing of the article was supported by Nestlé Nutrition Institute<sup>27</sup>. This Institute has clear links with Nestlé<sup>28</sup>, the world's biggest breast-milk substitute and complementary baby food manufacturer<sup>29</sup>, and therefore it has a clear financial interest in the study<sup>30</sup>. We wrote a Letter to the Editor of the journal to raise our concerns about how conflicts of

<sup>1</sup>Those involved in the primary production, manufacturing, wholesaling, retailing of fresh, packaged, or hot or cold ready-to-eat foods and/or drinks, as well as third parties working for such companies, including trade associations and research bodies.

interest were reported therein. The Editor declined to accept our letter for publication asserting that the authors had disclosed their funding source and that readers could apply their own interpretation. The Editor further stated that the Editorial Board would critically review and question conflict of interest (COI) statements where questions may arise, but added that COI declaration remains the responsibility of the authors (personal communications). While COI is the responsibility of the authors to declare, it is the responsibility of the journal to have robust policies and to clearly explain them in a way that leaves no room for ambiguity.

The practice of declaring no conflicts of interest while also reporting financial support from vested interests is not uncommon in early life nutrition research. This occurs despite the World Health Organisation highlighting the need to avoid conflicts of interest in all areas relating to infant and young child feeding in [at least eight World Health Assembly resolutions](#). In a paper outlining the recommendations of an International Expert Group around follow-up formula for infants, several authors reported financial ties with breast-milk substitute companies yet declared that “none of the authors reports a conflict of interest”<sup>31</sup>. Shortcomings in editorial policies toward conflicts of interest (financial and nonfinancial) of editors and other staff involved in manuscript decisions have previously been highlighted<sup>32</sup>. Indeed, the ICJME guidelines that that all those involved in the peer-review and publication process, including authors, peer reviewers, editors, and editorial board members of journals, must consider their conflicts of interest and disclose all relationships that could be viewed as conflicts of interest.

Researchers and journals have important responsibilities regarding conflicts of interest<sup>33</sup>. It is time to for researchers, journals, funders and others involved in the research process, to engage more critically with the challenges of conflicts of interest in research. This requires clear understanding of what is, and is not, a conflict of interest, how to identify them, the impacts of conflicts of interest on scientific integrity, how to prevent them, and greater transparency in the reporting of conflicts of interest in research, something that is often lacking<sup>34</sup>. Journal editors in particular have an important responsibility in fully understanding how conflicts of interest can impact on research findings and the credibility of published articles for journals and authors.

Clear guidelines on managing interactions with commercial food and drink companies, including avoidance of damaging conflicts of interest, are urgently needed. Journals will need to play an important role in implementing such guidance. To aid

in this process, a project funded by the UK’s Medical Research Council has reviewed evidence and built international consensus on the principles that underpin governance of interactions between researchers and commercial food and drink companies. Guidance for researchers, journals and funders will be published in 2019<sup>35</sup>. It will enable researchers to identify and assess conflicts of interest at different stages of the research process and suggests governance strategies to manage these.

Journals – as well as research institutions, professional bodies and funders – should use this forthcoming guidance to formulate or update their own conflict of interest policies and ensure that authors, peer reviewers, editors, and editorial board members abide by these to promote trust in the scientific process and the credibility of published articles.

### Disclaimer

The views expressed in this article are those of the author(s). Publication in HRB Open Research does not imply endorsement by the Health Research Board of Ireland.

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No data is associated with this article.

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## References

- Durand MA, Petticrew M, Goulding L, *et al.*: **An evaluation of the Public Health Responsibility Deal: Informants’ experiences and views of the development, implementation and achievements of a pledge-based, public-private partnership to improve population health in England.** *Health Policy.* 2015; **119**(11): 1506–14. [PubMed Abstract](#) | [Publisher Full Text](#)
- Galea G, McKee M: **Public-private partnerships with large corporations: setting the ground rules for better health.** *Health Policy.* 2014; **115**(2–3): 138–40. [PubMed Abstract](#) | [Publisher Full Text](#)
- Nestle M: **Food company sponsorship of nutrition research and professional activities: a conflict of interest?** *Public Health Nutr.* 2001; **4**(5): 1015–22. [PubMed Abstract](#) | [Publisher Full Text](#)
- Petticrew M, McKee M, Marteau TM: **Partnerships with the alcohol industry at**

- the expense of public health.** *Lancet.* 2018; **392**(10152): 992–993.  
[PubMed Abstract](#) | [Publisher Full Text](#)
5. Woodfield J: **Diabetes UK defends sponsorship deal with Britvic.** London: Diabetes UK. 2018; [cited 2018 December 17].  
[Reference Source](#)
  6. Dieticians Association of Australia: **Public announcements: Conclusion of DAA's Corporate Partnerships Program.** Sydney: Dieticians Association of Australia. 2018; [cited 2018 December 17].  
[Reference Source](#)
  7. van Tulkeken C: **Overdiagnosis and industry influence: how cow's milk protein allergy is extending the reach of infant formula manufacturers.** *BMJ.* 2018; **363**: k5056.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  8. Stuckler D, Ruskin G, McKee M: **Complexity and conflicts of interest statements: a case-study of emails exchanged between Coca-Cola and the principal investigators of the International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE).** *J Public Health Policy.* 2018; **39**(1): 49–56.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  9. Barlow P, Seródio P, Ruskin G, et al.: **Science organisations and Coca-Cola's 'war' with the public health community: insights from an internal industry document.** *J Epidemiol Community Health.* 2018; **72**(9): 761–3.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  10. Kraak V, Swinburn B, Lawrence M, et al.: **The accountability of public-private partnerships with food, beverage and quick-serve restaurant companies to address global hunger and the double burden of malnutrition.** In: Coitinho Delmuè D, Mahy L, Ionata S editors. *SCN News: Nutrition and Business: How to engage?* Rome: United Nations System Standing Committee on Nutrition; 2011; **39**: 11–24.  
[Reference Source](#)
  11. Gavin B: **A qualitative study of UNSCN Steering Committee and Working Group facilitators views on engagement with the private industry.** In: Coitinho Delmuè D, Mahy L, Ionata S, editors. *SCN News: Nutrition and Business: How to engage?* Rome: United Nations System Standing Committee on Nutrition; 2011; **39**: 66–72.
  12. Fabbri A, Lai A, Grundy Q, et al.: **The Influence of Industry Sponsorship on the Research Agenda: A Scoping Review.** *Am J Public Health.* 2018; **108**(11): e9–e16.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  13. Fabbri A, Chartres N, Scrinis G, et al.: **Study sponsorship and the nutrition research agenda: analysis of randomized controlled trials included in systematic reviews of nutrition interventions to address obesity.** *Public Health Nutr.* 2017; **20**(7): 1306–13.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  14. Nestle M: **Food Industry Funding of Nutrition Research: The Relevance of History for Current Debates.** *JAMA Intern Med.* 2016; **176**(11): 1685–6.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  15. Kearns CE, Schmidt LA, Glantz SA: **Sugar Industry and Coronary Heart Disease Research: A Historical Analysis of Internal Industry Documents.** *JAMA Intern Med.* 2016; **176**(11): 1680–5.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  16. Lundh A, Lexchin J, Mintzes B, et al.: **Industry sponsorship and research outcome.** *Cochrane Database Syst Rev.* 2017; **2**: MR000033.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  17. Vartanian LR, Schwartz MB, Brownell KD: **Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis.** *Am J Public Health.* 2007; **97**(4): 667–75.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  18. Diethelm PA, Rielle JC, McKee M: **The whole truth and nothing but the truth? The research that Philip Morris did not want you to see.** *Lancet.* 2005; **366**(9479): 86–92.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  19. Besley JC, McCright AM, Zahry NR, et al.: **Perceived conflict of interest in health science partnerships.** *PLoS One.* 2017; **12**(4): e0175643.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  20. McCambridge J, Mialon M: **Alcohol industry involvement in science: A systematic review of the perspectives of the alcohol research community.** *Drug Alcohol Rev.* 2018; **37**(5): 565–79.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  21. Lo B, Field MJ, editors. Institute of Medicine (US) Committee: **Conflict of Interest in Medical Research, Education, and Practice.** Washington (DC): National Academies Press (US); 2009.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  22. McCambridge J, Daube M, McKee M: **Brussels Declaration: a vehicle for the advancement of tobacco and alcohol industry interests at the science/policy interface?** *Tob Control.* 2019; **28**(1): 7–12.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  23. Bero LA: **Accepting commercial sponsorship. Disclosure helps—but is not a panacea.** *BMJ.* 1999; **319**(7211): 653–4.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  24. Goldberg DS: **The shadows of sunlight: Why disclosure should not be a priority in addressing conflicts of interest.** *Public Health Ethics.* 2018.  
[Publisher Full Text](#)
  25. Capps B: **Can a good tree bring forth evil fruit? The funding of medical research by industry.** *Br Med Bull.* 2016; **118**(1): 5–15.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  26. Cain D, Loewenstein G, Moore D: **The dirt on coming clean: Perverse effects of disclosing conflicts of interest.** *J Legal Stud.* 2005; **34**(1): 1–25.  
[Publisher Full Text](#)
  27. Laving AR, Hussain SR, Atieno DO: **Overnutrition: Does Complementary Feeding Play a Role?** *Ann Nutr Metab.* 2018; **73** Suppl 1: 15–8.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  28. Nestlé Nutrition Institute: **Terms and Conditions.** 2018; [cited 2018 December 17].  
[Reference Source](#)
  29. Changing Markets Foundation: **Milking It: How milk formula companies putting profits before science.** Utrecht: Changing Markets Foundation; 2017.  
[Reference Source](#)
  30. IBFAN-ICDC: **11th Global Monitoring Report, Breaking the rules, Stretching the rules.** Penang: IBFAN-ICDC; 2017.  
[Reference Source](#)
  31. Koletzko B, Bhutta ZA, Cai W, et al.: **Compositional requirements of follow-up formula for use in infancy: recommendations of an international expert group coordinated by the Early Nutrition Academy.** *Ann Nutr Metab.* 2013; **62**(1): 44–54.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  32. Haivas I, Schroter S, Waechter F, et al.: **Editors' declaration of their own conflicts of interest.** *CMAJ.* 2004; **171**(5): 475–6.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  33. Bauchner H, Fontanarosa PB, Flanagin A: **Conflicts of Interests, Authors, and Journals: New Challenges for a Persistent Problem.** *JAMA.* 2018; **320**(22): 2315–8.  
[PubMed Abstract](#) | [Publisher Full Text](#)
  34. Seródio PM, McKee M, Stuckler D: **Coca-Cola - a model of transparency in research partnerships? A network analysis of Coca-Cola's research funding (2008-2016).** *Public Health Nutr.* 2018; **21**(9): 1594–607.  
[PubMed Abstract](#) | [Publisher Full Text](#) | [Free Full Text](#)
  35. CEDAR: **Diet research food industry project.** Cambridge: CEDAR. 2018; [cited 2018 December 17].  
[Reference Source](#)