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Guidance for researchers interacting with the food industry: the FoRK Toolkit

Martin White, Katherine Cullerton, Jean Adams, Nita Forouhi, Oliver Francis

Research team | Conflict of interests

Martin White, Nita Forouhi, Jean Adams and Oliver Francis conceived the project and secured funding. With Katherine Cullerton, they developed the methods and interpreted the data. KC undertook the fieldwork and, with MW, analysed the data.

This work has been funded by the MRC Epidemiology Unit, University of Cambridge and the Medical Research Council.

Team members have no conflict of interest to declare. In particular, they have received no direct or indirect funding from any food or beverage company.

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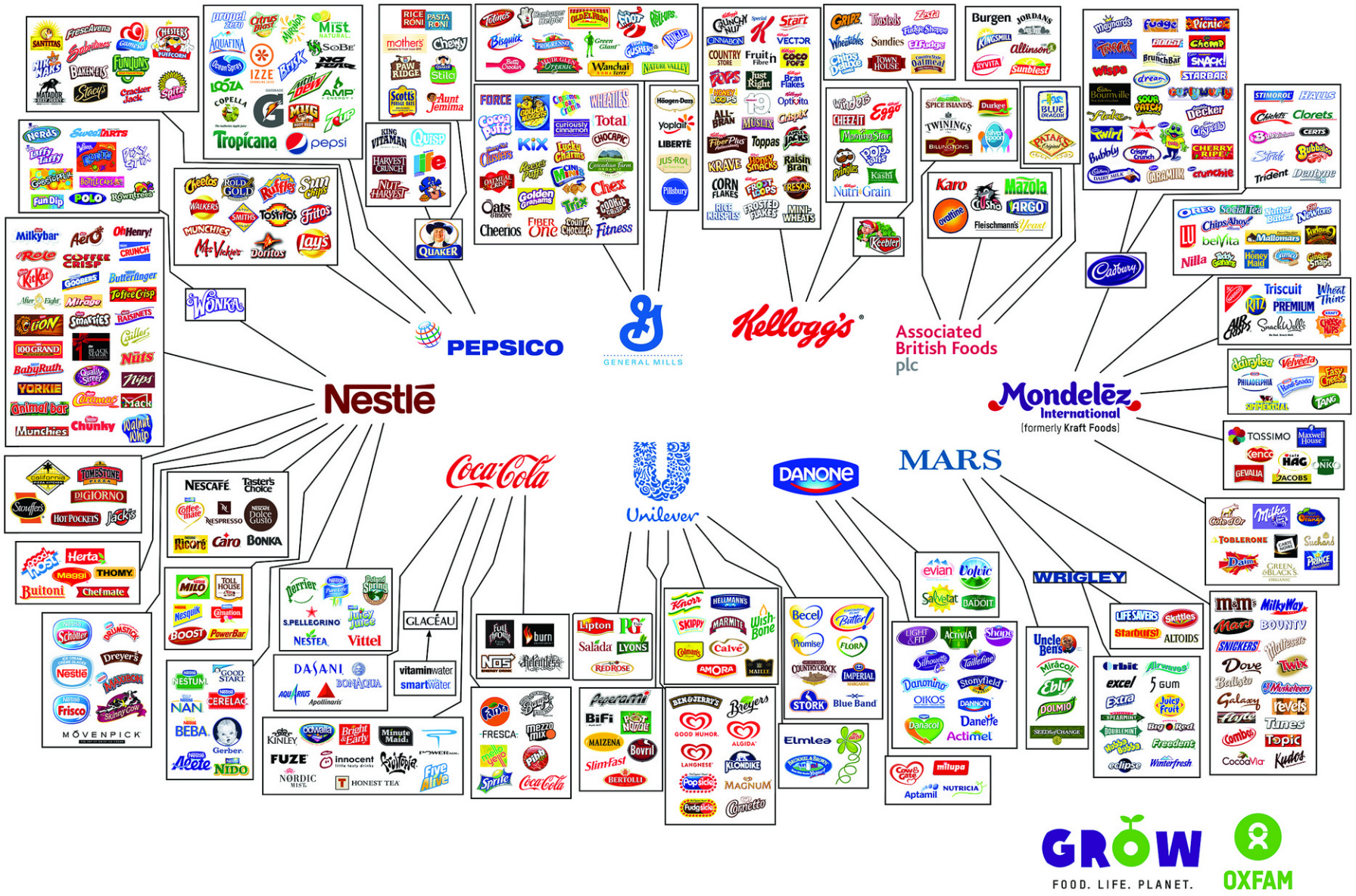
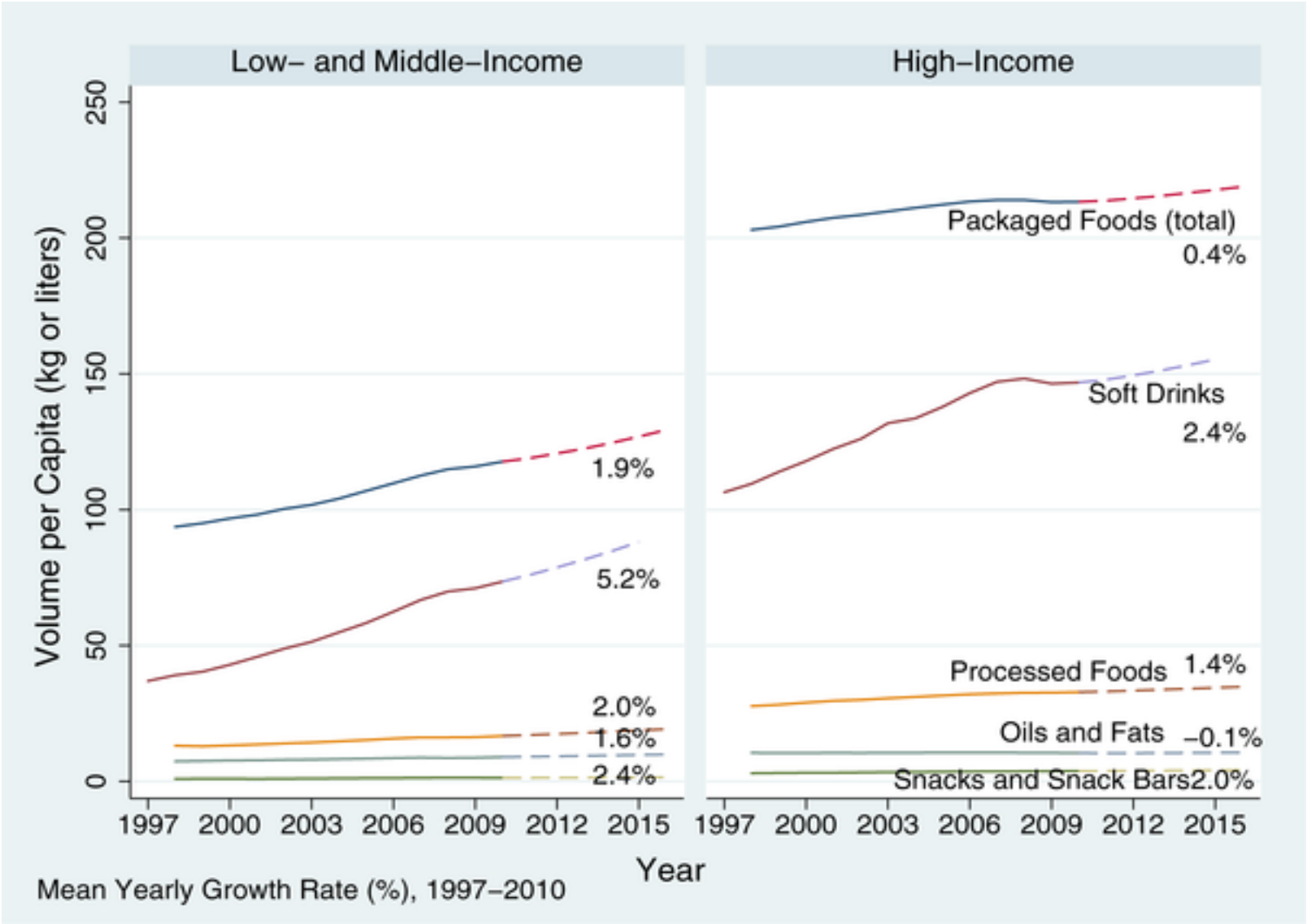
Unhealthy and less sustainable foods are cheaper to produce and consume, and increasingly dominate food environments

This contributes to some of the biggest challenges for public health and the environment facing societies today

The ten biggest trans-national corporations with food brands



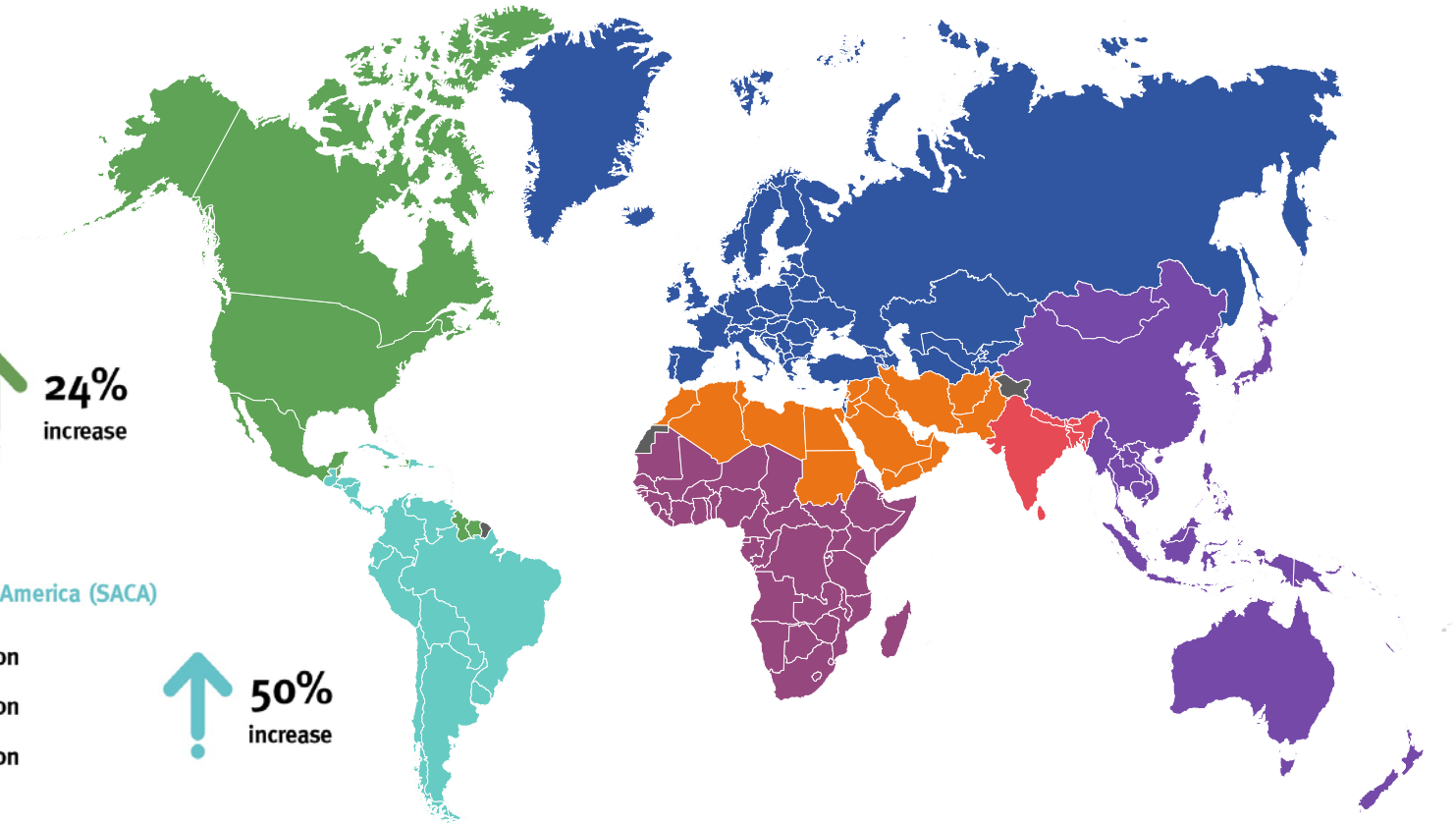
Trends in per capita sales of unhealthy food and beverage commodities, 1997–2010 and projected to 2016



Stuckler D, McKee M, Ebrahim S, Basu S. Manufacturing Epidemics: the role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol, and tobacco. PLOS Medicine, 2012; 9(6): e1001235

Number of people with diabetes

Aged 20–79 years globally and by IDF region



North America & Caribbean (NAC)

2045	63 million
2030	57 million
2021	51 million

24% increase

South & Central America (SACA)

2045	49 million
2030	40 million
2021	32 million

50% increase

Africa (AFR)

2045	55 million
2030	33 million
2021	24 million

134% increase

Middle East & North Africa (MENA)

2045	136 million
2030	95 million
2021	73 million

87% increase

Europe (EUR)

2045	69 million
2030	67 million
2021	61 million

13% increase

South-East Asia (SEA)

2045	152 million
2030	113 million
2021	90 million

68% increase

Western Pacific (WP)

2045	260 million
2030	238 million
2021	206 million

27% increase

BMJ 2020;368:m545 doi: 10.1136/bmj.m545 (Published 17 March 2020)

ANALYSIS

SCIENCE AND POLITICS OF NUTRITION

What role should the commercial food system play in promoting health through better diet?

Martin White and coauthors consider that the commercial food system has the potential to show leadership and support for dietary public health, but systemic change is needed first and this is likely to require governmental action

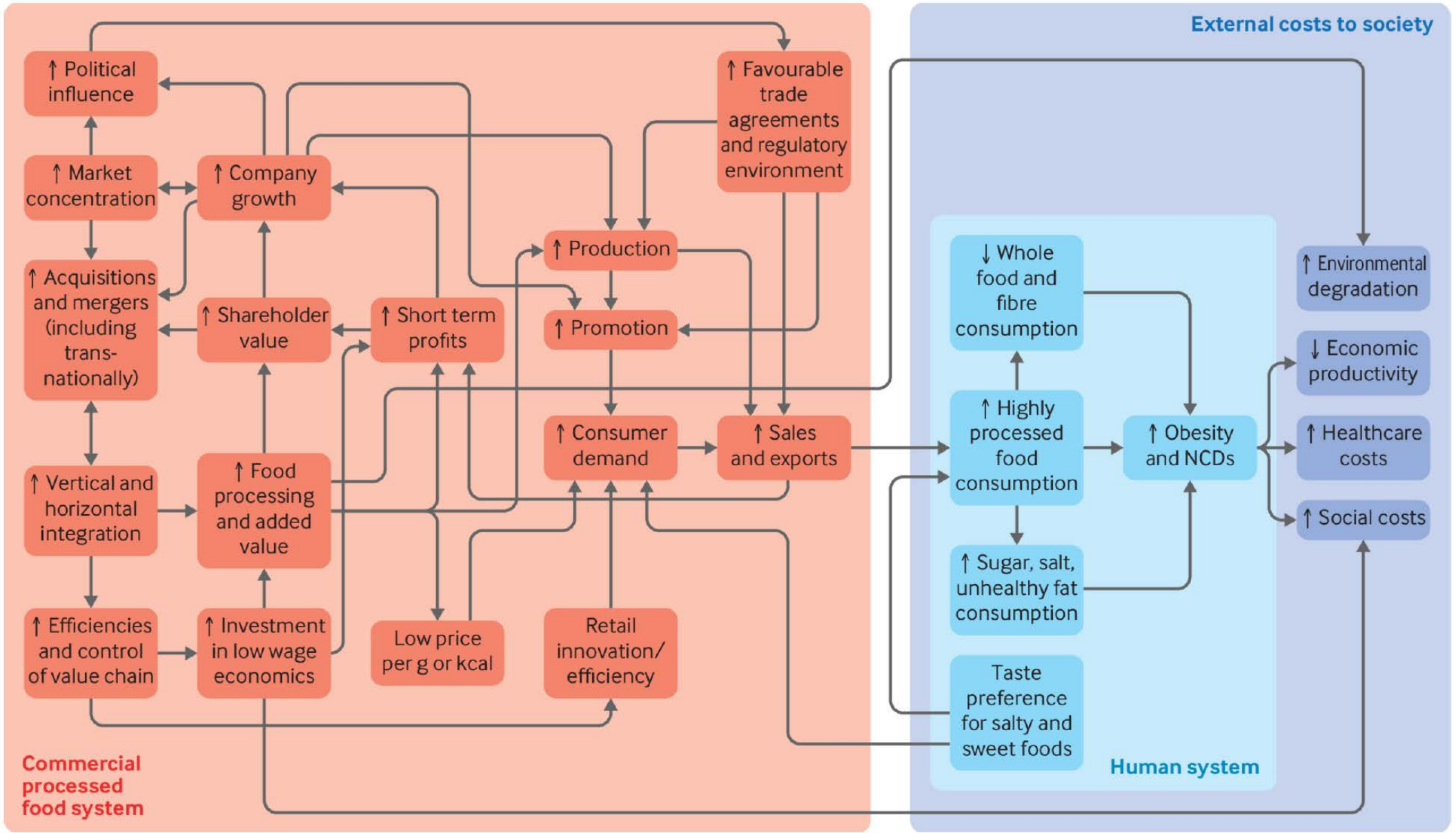
Martin White *professor of population health research*[1], Emilie Aguirre *Earl B Dickerson fellow*[2 3], Diane T Finegood *professor*[4], Chris Holmes *independent consultant*[5], Gary Sacks *associate professor*[6], Richard Smith *professor of health economics*[7]

Key messages

- Populations across the globe are highly dependent on commercial food systems for daily nourishment
- Commercial food systems rely heavily on high volume sales of foods high in unhealthy ingredients to generate profits and value for shareholders
- The commercial food system does not adequately take account of the high costs of its activities for societies, health, or the environment
- Profit could be made from a healthier and more sustainable food system, in ways that are consistent with prevention of non-communicable diseases, but whole system change will be needed
- Governments need to increase their efforts to catalyse rapid change in commercial food systems, through fiscal and regulatory policies and development of metrics for the health, environmental, and social impacts of food companies

White M, et al. BMJ 2020;368:m545 doi: 10.1136/bmj.m545

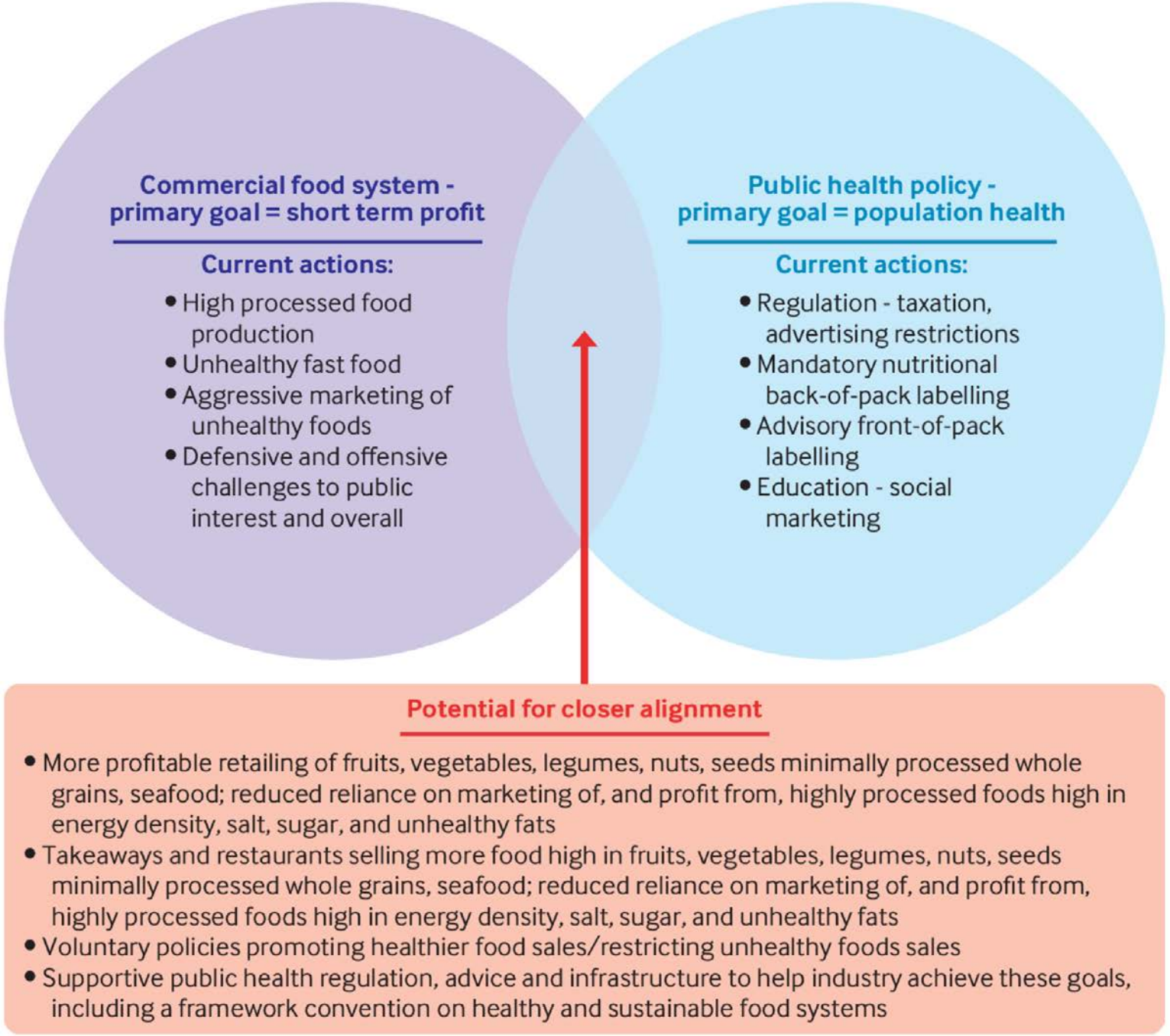
The commercial processed food system, influences on human health, and external costs to society



White M, et al. BMJ 2020;368:m545 doi: 10.1136/bmj.m545

The challenge of misaligned goals

White M, et al. BMJ 2020;368:m545 doi: 10.1136/bmj.m545



Why are interactions with the food industry problematic for population health researchers?

Key documented risks include:

- Immediate reputational risk for researchers and their institutes
- Future reputational risk: we can't control what the food industry will do with our data/names in the future
- Misdirection of the research agenda, creating a distortion of the evidence base
- Reduced trust in science

THE WORLD UNIVERSITY RANKINGS

PROFESSIONAL JOBS SUMMITS RANKINGS ST

Is industry funding undermining trust in science?

How valid are fears that financial conflicts of interest are damaging confidence in academic research?

0

ctober 29, 2015

Nutrition research has to wake up to its conflict-of-interest problem

People don't trust scientific research when companies are involved

May 8, 2017 by John Besley, Aaron M. Mccright, Joseph D. Martin, Kevin Elliott And Nagwan Zahry, The Conversation

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Sugar lobby paid scientists to blur sugar's role in heart disease – report

New report highlights battle by the industry to counter sugar's negative health effects, and the cushy relationship between food companies and researchers

Advertisemen

THIS WEEK 22 August 1998

Salt and vitriol

By Michael Day

AN ARTICLE in a leading science journal has ignited a heated debate about whether eating large amounts of salt leads to high blood pressure. The journal

Population health research and food industry interactions - aims and methods

Aims: To determine whether it is acceptable for population health researchers to interact with the food industry and if so, under what conditions

Methods:

- UK workshop (Dec 2015)
- Systematic scoping review (2017)
- International online Delphi study of dietary public health researchers (2017)
- International survey of users and funders of DPH research (2018)
- Consensus building via international workshop (Apr 2018)
- Development and piloting of guidance and toolkit for researchers (2019-22)
- Publication of FoRK guidance and toolkit (29th January 2024)

Head To Head

Should we welcome food industry funding of public health research?

BMJ 2016 ; 353 doi: https://doi.org/10.1136/bmj.i2161 (Published 20 April 2016)
Cite this as: *BMJ* 2016;353:i2161

Paul Aveyard, professor of behavioural medicine1,Derek Yach, executive director2,Anna B Gilmore, professor of public health3, Simon Capewell, professor of public health and policy4

Author affiliations

Correspondence to: P Aveyard paul.aveyard@phc.ox.ac.uk, A B Gilmore A.gilmore@bath.ac.uk

Researchers should accept research grants from the food industry, write **Paul Aveyard** and **Derek Yach**, but **Anna B Gilmore** and **Simon Capewell** say that it biases science

Yes—Paul Aveyard, Derek Yach

The food industry consists of farmers, manufacturers, wholesalers, retailers, distributors, and the catering industry. If it disappeared tomorrow, most people in the developed world would die within months. It is a major employer; more people are employed in the food industry in the UK, for example, than any other manufacturing sector.[1] For these reasons, government policies seek to support the industry. From this perspective, it would be absurd for health policy researchers to shun collaborating with the food industry.

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DOI: 10.1111/obr.12851

PUBLIC HEALTH/OBESITY RESEARCH

WILEY obesityreviews

What principles should guide interactions between population health researchers and the food industry? Systematic scoping review of peer-reviewed and grey literature

Katherine Cullerton[1,2] | Jean Adams[1] | Nita Forouhi[1] | Oliver Francis[1] | Martin White[1]

[1] Centre for Diet and Activity Research, MRC Epidemiology Unit, University of Cambridge, Cambridge, UK

[2] School of Public Health, University of Queensland, Herston, Australia

Correspondence
Dr Katherine Cullerton, Centre for Diet and Activity Research, MRC Epidemiology Unit, Institute of Metabolic Sciences, University of Cambridge, Cambridge, UK, CB2 0QQ.
Email: katherine.cullerton@mrc-epid.cam.ac.uk

Funding information
Centre for Diet and Activity Research (CEDAR); MRC Epidemiology Unit, Cambridge University

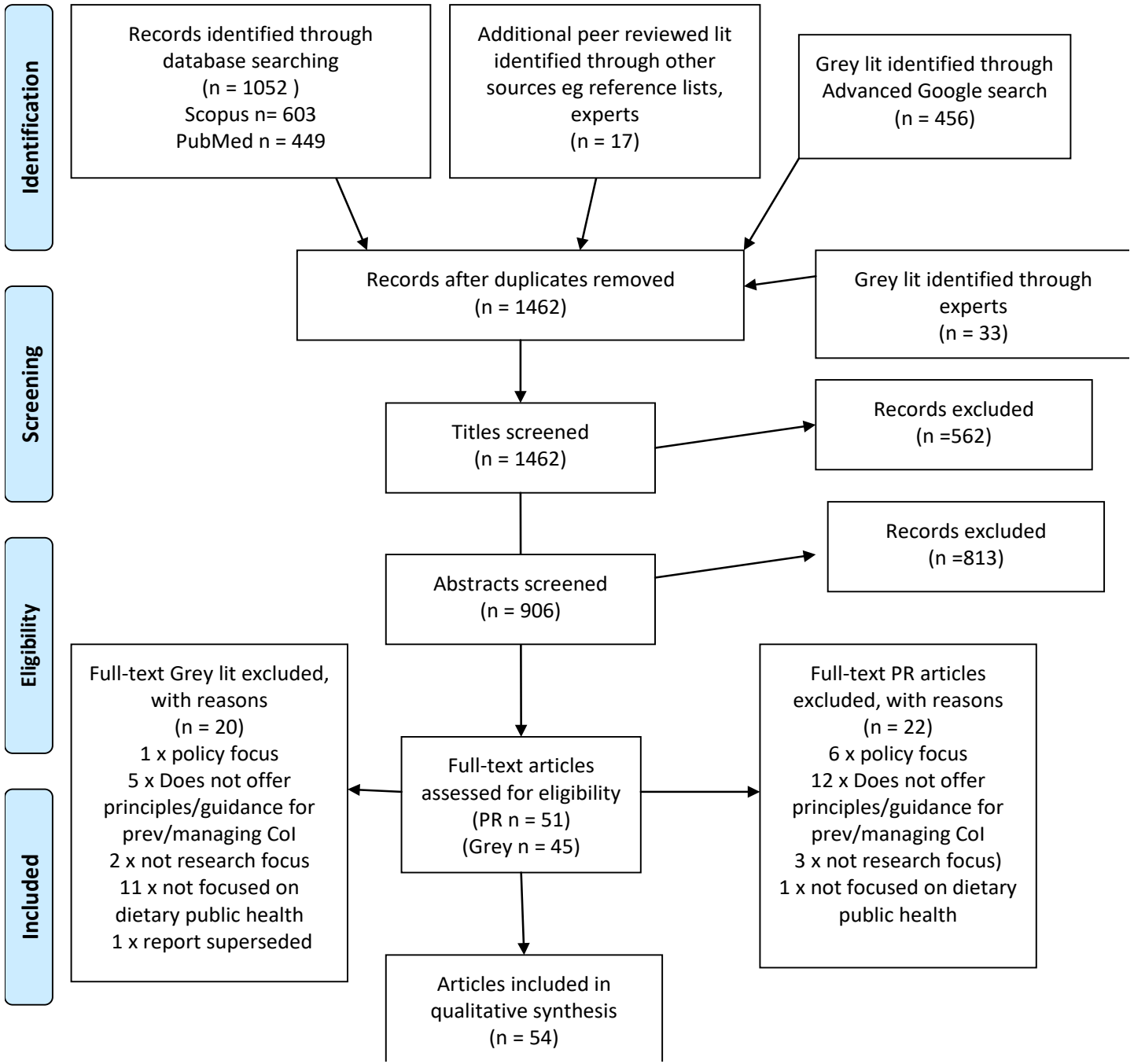
Summary

There is no explicit consensus amongst population health researchers regarding what constitutes acceptable or effective interactions with the food industry. This has led to confusion and disagreements over conflicts of interest, which can undermine the integrity of science. To clarify this issue, we aimed to systematically identify the key principles developed by population health researchers to prevent or minimize conflicts of interest when interacting with the food industry. Databases of peer-reviewed literature were searched. In addition, an advanced Google search, a request to experts seeking related documents, and hand searching of references were undertaken. Thematic analysis of the extracted data was undertaken. We examined 54 eligible documents describing guidelines for population health researchers when interacting with the food industry. Fifty-six principles were identified and synthesized in five themes. There were high levels of agreement in themes relating to research governance, transparency, and publication but less agreement and guidance on how principles should be applied in relation to funding and risk assessment. There is agreement on some of the general principles for preventing and minimizing conflicts of interests for population health researchers when interacting with the food industry. However, for issues such as assessing the appropriateness of an industry partner, greater clarity and consensus are required.

Systematic scoping review

Question: What principles/guidelines exist for preventing or managing conflicts of interest between dietary public health researchers and the food industry?

A **conflict of interest** is defined as *"a set of circumstances that creates a risk that professional judgement or actions regarding a primary interest will be unduly influenced by a secondary interest"*


Identification
Screening
Eligibility
Included
Records identified through database searching (n = 1052) Scopus n= 603 PubMed n = 449
Additional peer reviewed lit identified through other sources eg reference lists, experts (n = 17)
Grey lit identified through Advanced Google search (n = 456)
Records after duplicates removed (n = 1462)
Grey lit identified through experts (n = 33)
Titles screened (n = 1462)
Records excluded (n =562)
Abstracts screened (n = 906)
Records excluded (n =813)
Full-text Grey lit excluded, with reasons (n = 20) 1 x policy focus 5 x Does not offer principles/guidance for prev/managing CoI 2 x not research focus 11 x not focused on dietary public health 1 x report superseded
Full-text articles assessed for eligibility (PR n = 51) (Grey n = 45)
Full-text PR articles excluded, with reasons (n = 22) 6 x policy focus 12 x Does not offer principles/guidance for prev/managing CoI 3 x not research focus) 1 x not focused on dietary public health
Articles included in qualitative synthesis (n = 54)

Systematic scoping review: findings

56 statements in **5 themes**

- Funding
- Assessing risks
- Maintain high standards of research governance
- Ensure high levels of transparency
- Improve publication standards

- 52% of papers peer-reviewed (e.g. commentaries, reviews)
- 48% grey literature (e.g. organisation/association reports & policies)

- 41% pro-engaging with industry
- 26% anti-engaging with industry

Systematic scoping review: observations

- Vague/ambiguous statements: risk assessment and transparency
- Polarised views on food industry funding
  - Many pro-industry docs did not recognise risks
  - Anti-industry docs did not recognise some research may require food industry involvement

Cullerton K, et al. What principles should guide interactions between population health researchers and the food industry? Systematic scoping review of peer reviewed and grey literature. *Obesity Reviews,* 2019; 1-12. doi: 10.1111/obr.12851

PLOS ONE

RESEARCH ARTICLE

Building consensus on interactions between population health researchers and the food industry: Two-stage, online, international Delphi study and stakeholder survey

Katherine Cullerton[1,2]*, **Jean Adams**[1], **Oliver Francis**[1], **Nita Forouhi**[1], **Martin White**[1]

1 MRC Epidemiology Unit & Centre for Diet and Activity Research, Institute of Metabolic Sciences, University of Cambridge, Cambridge, United Kingdom, 2 School of Public Health, University of Queensland, Herston, Australia

* Katherine.Cullerton@mrc-epid.cam.ac.uk

OPEN ACCESS

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Abstract

Key to scientific integrity is ensuring that research findings are considered credible by scientific peers, practitioners, policymakers and the public. Industry sponsorship of nutritional research can result in bias and raises significant professional, public and media concern. Yet, there is no international consensus on how to prevent or manage conflicts of interest for researchers considering engaging with the food industry. This study aimed to determine internationally agreed principles to guide interactions between population health researchers and the food industry to prevent or manage conflicts of interest. We used a two-stage, online Delphi study for researchers (n = 100 in 28 countries), and an online survey for stakeholders (n = 84 in 26 countries). Levels of agreement were sought with 56 principles derived from a systematic review. Respondent comments were analysed using qualitative content analysis. High levels of agreement on principles were achieved for both groups (researchers 68%; stakeholders 65%). Highest levels of agreement were with principles concerning research methods and governance. More contentious were principles that required values-based decision-making, such as determining which elements of the commercial sector are acceptable to interact with. These results provide the basis for developing internationally-agreed guidelines for population health researchers governing interactions with the food industry.

Delphi study: components

Q1) 56 statements concerning preventing or managing conflicts of interest in interactions with the food industry

Q2) Characteristics a food company influencing interactions

Q3) Specific food companies/associations influencing interactions

Delphi study: format

Question 1 *COI (v. 1_11/04/201*

Although some of the actions may seem similar, please rate each action as it is stated based on your personal opinion. You have the opportunity to suggest modifications beside each statement or add new actions in a text box at the end of the question. The statements have been generated by a systematic review of the published and grey literature on preventing and managing conflicts of interest in this area. You may need to scroll down the page to see all the statements.

Actions	Rating					Comment
	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	
Funding						
A pool of funding from the food industry which is independently administered by a third party should be created	●	○	○	○	○	
A system where industry provides funding to research institutions, not individual researchers or research units, should be created	●	○	○	○	○	
Researchers should not accept funds from the food industry	●	○	○	○	○	

Delphi study: participants

- Round 1: 100 researchers from 28 countries (59% high income, 37% middle income, 3% low income).
- Most worked in:
  - food & nutrition policy
  - behavioural change interventions
  - nutritional epidemiology
- 70% worked in field for 10+ yrs

Delphi study: findings

Round 1

- 56 statements
- Consensus achieved on 28 statements (Consensus = 80% agreement – *'agree' or 'strongly agree'*)
- Clarifications + 6 new statements for Round 2

Round 2

- 92% response rate
- Consensus on 11 more statements
- Total of 39 statements (68%) reached consensus

Funding	**Round 1** **N = 100** Number (%) agreeing with statement	**Round 2** **N = 92** Number (%) agreeing with statement
Q1) A pool of funding from the food industry which is independently administered by a publically accountable third party should be created	74%	86%
Q2) A system where industry provides funding to research institutions, not individual researchers or research units, should be created	34%	32%
Q3) Researchers should not accept funds from the food industry	47%	44%
Q4) Researchers should not accept funds from processed food companies	53%	55%
Q5) Researchers should not accept funds from any commercial organisation	24%	23%

Qualitative findings

If appropriately managed and controlled to ensure no conflict of interest,[the food industry] *can be an important source of funding.*

(Researcher, South Africa)

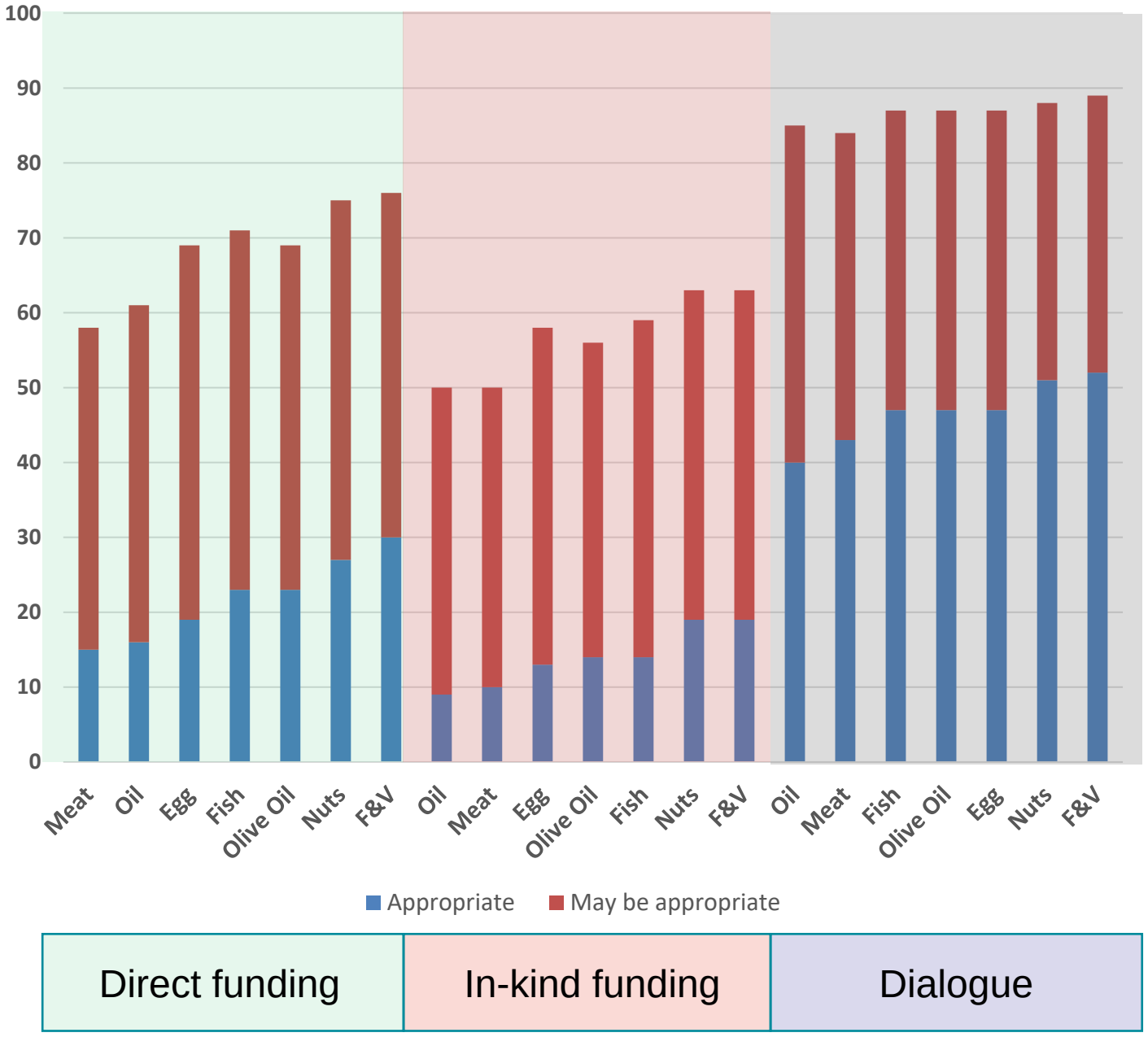
The big food multi-national corporations produce commodities which kill, and deserve to be treated like tobacco companies.

(Researcher, UK)

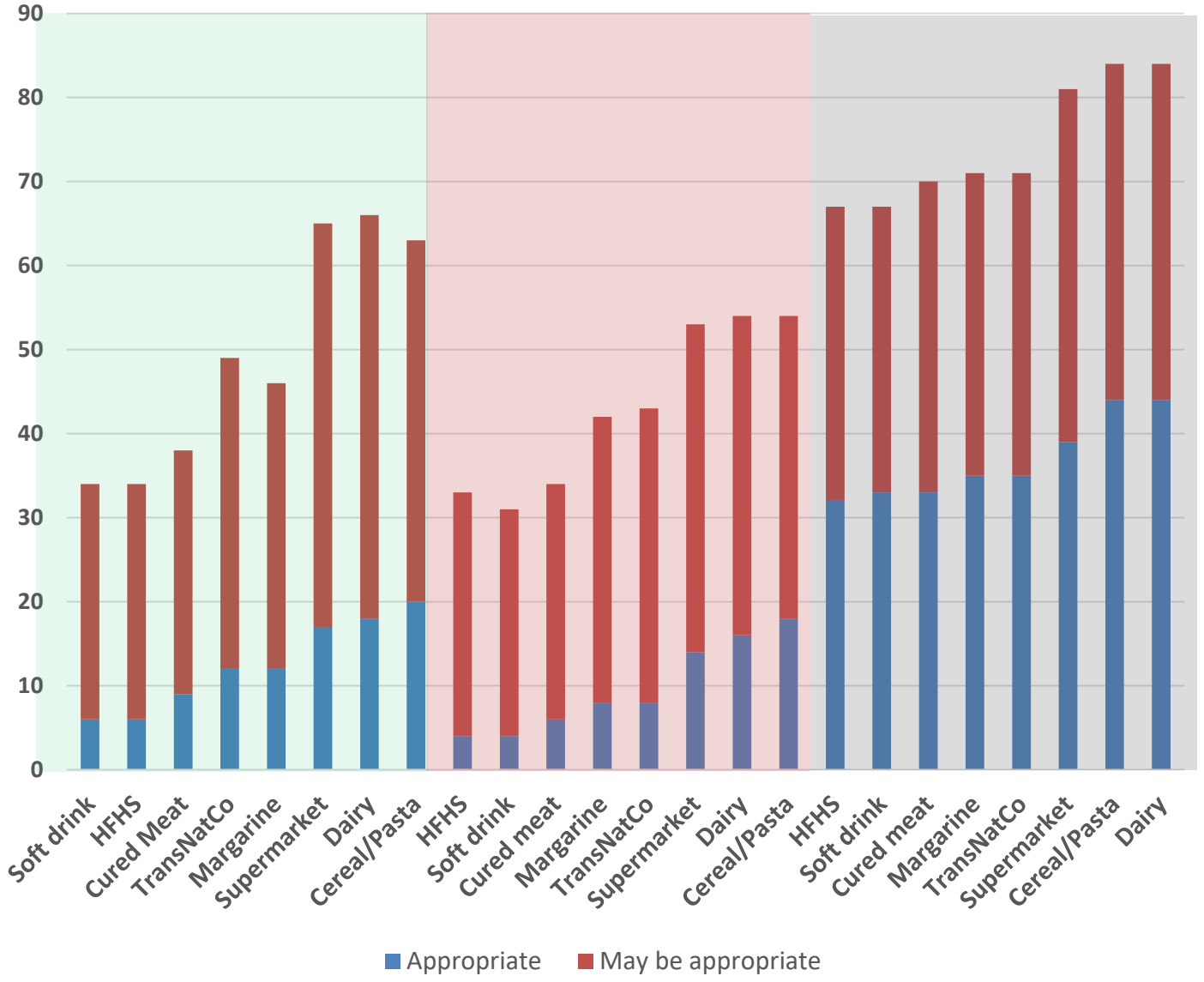
Areas of disagreement requiring greater clarity

- Assessing **which organisations** it is appropriate to interact with
- Assessing the appropriateness of the **type of interaction** with the food industry

Acceptability of interaction: primary producers



Acceptability of interaction: manufacturers & supermarkets



Survey of research stakeholders

- Findings mirrored Delphi study
- Overall, greater caution about interactions with industry than among researchers

Cullerton K, et al. Building consensus on interactions between population health researchers and the food industry: two-stage, online, international Delphi study and stakeholder survey. PLoS One (under review).

Two-day International consensus meeting, April 2018: Overview

- Attended by:
  - 31 dietary public health researchers – from low-, middle- and high-income countries
  - 10 staff from CEDAR as table facilitators and scribes
  - 1 independent facilitator
- Including some who have interacted with the food industry in a variety of ways
- Workshop vision: ***'everyone working in dietary public health research has clear guidance to navigate appropriate interactions with the food industry'.***

International consensus meeting: objectives

1. Reflect on the challenges and benefits of DPHR interaction with commercial organisations
2. Share work to date on agreeing a set of principles that could guide appropriate interaction between DPHR and the food industry
3. Build agreement on the principles to guide DPHR interaction with the food industry in relation to the following themes:
   - Publication
   - Transparency
   - Research Governance
   - Funding
   - Risk Assessment
4. Agree on:
   - the most appropriate provenance of the proposed guidance
   - a process for turning the principles into the proposed guidance
   - a process for seeking endorsement of the proposed guidance from key stakeholders
5. Identify next steps and key milestones, including determining what we should publish from the workshop, and when

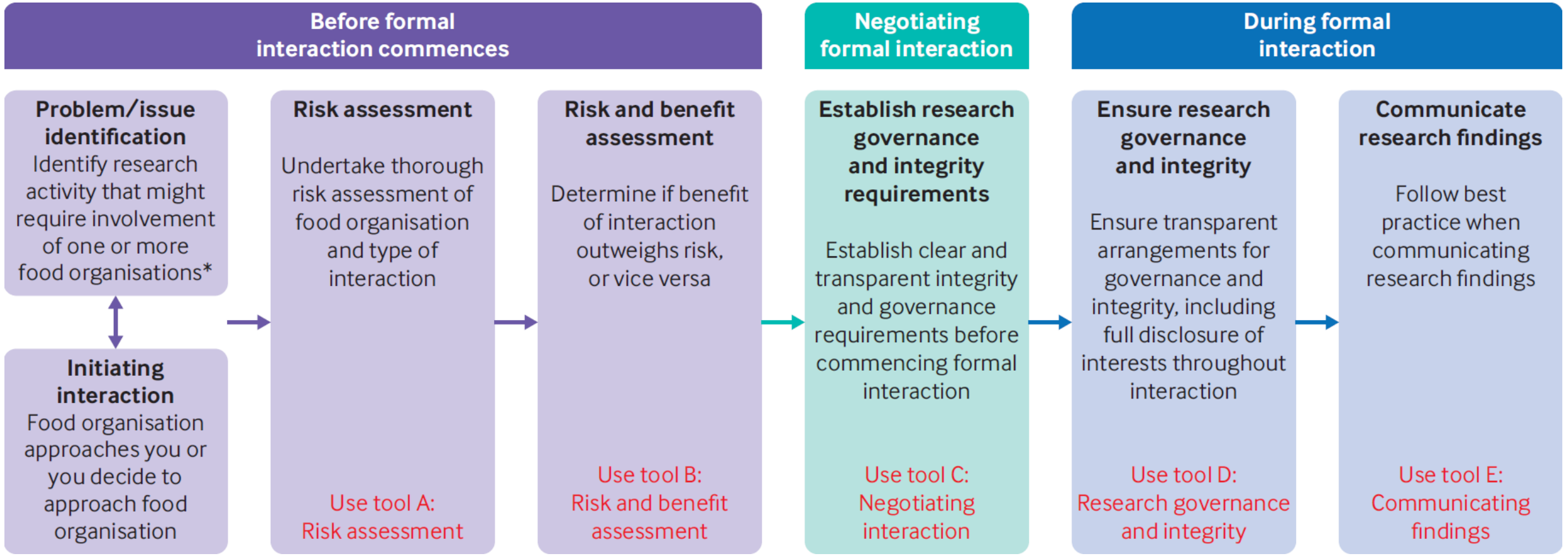
International consensus meeting: outcomes

1. *Useful guidance would:*
   - Protect and empower researchers
   - Be context specific and culturally sensitive
   - Maintain or enhance reputation
   - Inform judgement and action
   - Incorporate and build on existing good research practice
   - be supported (or recognised) by key stakeholders
   - Have impact with change agents
2. *Guidance as a set of 'thinking tools' to use across the research process*

Guideline and Toolkit development

- 2-year process, interrupted by Covid-19 pandemic
- 3 rounds of pilot testing, incorporating feedback at each stage
- 8 different researchers or research groups piloted the initial tool
- Then all 41 workshop participants asked to pilot the tool further using a real-life example
- 21 participants provided feedback
- Finally, 12 researchers from a range of countries, who had not been involved in the workshop, piloted the guidance
- Refinement and finalisation of guidance, followed by peer-review

Flowchart and associated thinking tools



FoRK Toolkit – Tools A-E

Tool A, part 1: assesses the risk profile of commercial food companies and associated organisations

Tool A, part 2: assesses the risks of different types of interactions with commercial food companies and associated organisations

Tool B: enables an overall risk-benefit analysis for specific interactions

Tool C: guides negotiations with commercial food companies or associated organisations concerning specific interactions

Tool D: guides research governance requirements for interactions involving commercial food companies or associated organisations

Tool E: guides the communication of findings from research involving interactions with commercial food companies or associated organisations

Title of Project:	Date:
Organisation:	**Name of person completing form:**

TOOL A: RISK ASSESSMENT

Please complete *both* Parts 1 and 2 before assessing level of risk in Part 3. For guidance on where to find answers to the risk questions, see the section at the end of Tool A for suggestions.

PART 1: RISK ASSESSMENT OF FOOD COMPANY OR RELATED ORGANISATION

If the food organisation[1] is owned or funded by another commercial organisation please answer the following questions based on the product portfolio of the parent company or organisation.

Assessment criteria	Questions to ask	Indicative Risk Rating: answer yes/no (numerical score in brackets)
1) Perform background checks* and assess food organisation profile*	a) Does the organisation: - Violate international human rights conventions or health-related international, national or regional laws or agreements (e.g. The WHO International Code of Marketing of breast-milk substitutes or the WHO Framework Convention on Tobacco Control) - Own or is owned by, or has other structural links to a tobacco or arms company.	No = low risk (1) Yes = very high risk (4)[2]
	b) Does the organisation: - Own or is it owned by, or have other structural links to a company that produces other commodities harmful to health (e.g. alcohol, gambling).	No = low risk (1) Yes = high risk (3)

PART 2: RISK ASSESSMENT OF TYPE OF INTERACTION

Not all of these will apply to your research interaction. Only assess against those criteria that are relevant

Which of the following types of interaction are you considering?	**Indicative Level of Risk**
Dialogue	
1. Formal dialogue (e.g. discussions to improve and/or change internal policy within an organisation). No funding received.	Low risk
2. Participation in an independent/government-led scientific or policy expert group with industry involved. No funding received.	Low risk
3. Participation in an industry-led or funded scientific or policy expert group. No funding received.	Medium risk
Conducting research within or with a food organisation	
4. Accessing data or information from an organisation with unrestricted access and research use	Low risk
5. Accessing data or information from an organisation with unreasonable restrictions on access and research use	Medium risk
6. Developing an intervention within or with a food organisation with involvement from the food organisation	Medium risk
7. Accepting in-kind resources to support research e.g. food products with no involvement from the food organisation in the research process	Medium risk
8. Accepting in-kind resources to support research e.g. food products with involvement from the food organisation	High risk
9. Evaluating an intervention within or with a food organisation with no involvement from the food organisation	Low risk
10. Evaluating an intervention within or with a food organisation with involvement from the food organisation	High risk
Accepting a prize and/or sponsorship	
11. Accepting a prize or award from a food organisation (e.g. at a conference)	Medium risk
12. When organising a conference or scientific meeting, accepting *unconditional or unrestricted* sponsorship for the conference or scientific meeting from a food organisation	Medium risk
13. When organising a conference or scientific meeting, accepting *conditional or restricted* sponsorship for the conference or scientific meeting (e.g. sponsorship is conditional on the organisation having a speaker in the program)	High risk
14. Endorsement of food organisation product or brand by a university or a researcher (e.g. co-branding)	High risk

PART 3: OVERALL RISK

Add the risk assessment rating from **1) Overall risk profile of the organisation** + **2) Type of interaction** risk rating in the risk matrix below

		Overall Risk Profile of Organisation		
		Low	**Medium**	**High**
Interaction Risk	**High**	**Medium**	**High**	**High**
	Medium	**Low**	**Medium**	**High**
	Low	**Low**	**Low**	**Medium**

If the overall risk is 'High' = Consider carefully the overall risk of proceeding with this interaction. Many may prefer not to proceed with a proposed interaction if any of the answers are 'high risk', unless the specific risks can be clearly mitigated.

If the overall risk is 'Medium' or 'Low' = go to **Risk and Benefit Assessment Tool B** to balance risks and benefits.

Title of Project:	Date:
Organisation:	**Name of person completing form:**

TOOL B: RISK and BENEFIT ASSESSMENT

Identify the risks and benefits of interacting with the food organisation[5] and the likelihood of these risks and benefits occurring. Some examples have been given below, but you may identify further risks and benefits. Judgements about the balance between risks and benefits can be complicated, may involve many factors, and are often subjective. If you are having trouble balancing the risks and benefits, you may find it helpful to discuss the risks and benefits critically with colleagues to reach a consensus. You may also wish to acquire an independent assessment from a professional colleague who is not a direct collaborator or a university advisory committee (e.g. ethical committee) not familiar with your research to gain a perspective from another angle.

Benefits	Will you or your organisation benefit in this way? (Yes/No/ unsure)	Likelihood* (unlikely, possible, probable)	Risks	Will this risk affect you or your organisation? (Yes/No/ unsure)	Likelihood * (unlikely, possible, probable)
1. Access to data needed to conduct your research is available from a commercial partner.			1. The organisation may not deliver on conditions agreed to for interaction.		
2. Access to sites needed to deliver interventions for the research are available from a commercial partner.			2. Your interaction may provide a food organisation with a 'health halo' (i.e. increases the perception that they produce 'healthy' food/drinks) or be perceived as endorsement of their product.		
3. Ability to influence food organisation policies and/or practices that are scalable and can lead to healthier changes to healthier food products or environments.			3. Your collaborative research could be used by a food organisation to divert attention from pressing public health issues.		

Title of Project:	Date:
Organisation:	**Name of person completing form:**

TOOL C: NEGOTIATING INTERACTION

For research projects involving *direct* or *in-kind funding* or *participation in an industry-led or funded scientific or policy expert group* use checklist 1.

For interactions involving *sponsorship, formal dialogue and/or conference presentations* please use checklist 2. We recognise that some activities might involve both checklist 1 and 2.

Checklist 1: For research projects involving *direct or in-kind funding* with a food organisation[6] or *participation in an industry-led or funded scientific or policy expert group, complete the checklist below before* formal interaction commences. For all cases with direct funding or where there are intellectual property issues, this will require a written contract to protect the interests of both parties. Please seek guidance from your research institute on this issue

Task	Comments	Completed
1. Have you clearly stated agreed goals, objectives, roles and responsibilities and accountability of each 'partner' in a shared, written document?		
2. Have you explained to the food organisation why they should not be involved in study design, analysing and/or interpreting scientific findings due to their conflict of interest?[7]		
3. Have you established up-front control and ownership of the research data (including all types of personal and biological data) by the researchers, irrespective of the funding source?		
4. Have you established your, and your institution's independent right to comment publicly on the food organisation's policies or practices that are unrelated to your interaction with them?		

Title of Project:	Date:
Organisation:	**Name of person completing form:**

TOOL D: RESEARCH GOVERNANCE and INTEGRITY

For research projects involving *direct* or *in-kind funding* or *participation in an industry-led or funded scientific or policy expert group* – Once the project commences you should adhere to the usual standards of research reporting as per standards published in the www.equator-network.org, and consider the additional questions below.

Task	Risks identified and action taken	Date Completed
1. Have you considered involving independent oversight in governance arrangements, which might include members of the public, to ensure ongoing critical scrutiny for your research?		
2. Have you publicly reported funding arrangements, governance structures, research frameworks and findings?		
3. Have you established mechanisms to continuously monitor for conflicts of interest among your research team? For example, establishing a conflict of interest register which needs to be updated every 3 to 6 months.		
4. Have you established the principle that stakeholders (i.e. those who might have an interest in the research findings, such as, research funders, food organisations[8]) should remove themselves from decision-making bodies in relation to the research (e.g. advisory groups), when there may be a conflict of interest?		

Title of Project:	Date:
Organisation:	**Name of person completing form:**

TOOL E: COMMUNICATING FINDINGS

Task	Risks identified and comments	Date Completed
1. Consider which journal you will publish in. Some journals receive considerable funding from food organisations or associated organisations and this may be a factor you may want to investigate. You should take into consideration the risk associated with publishing with a journal that receives food industry funding.		
2. Have you disclosed your interests relevant to the research over at least the last five years?		
3. Have you declared the role the funder played in the design, implementation, interpretation and/or reporting of the research?		
4. Have you been comprehensive when disclosing your interests? These may include: financial relationships with entities that could be perceived to influence your research activities (e.g. employment, honoraria, research support, investment interests); non-financial relationships that could be perceived to influence your research activities (e.g. member of professional or other associations, advocacy or pressure group, board memberships).		
5. When presenting findings at a conference or public talk, do you have a slide to declare your interests near the *start* of your presentation?		
6. Do you fully disclose your research funding sources and financial and non-financial interests in media releases of research findings?		
7. In all your published outputs, including journal articles, reports, policy briefings or other materials, do you list all of your potential conflicts of interests, including full affiliation as well as disclosure of all sources of funding and affiliations with commercial organisations? Where possible, are these made clear on the title page or near to the front of the report?		

Table 1 | Use of the Food Research Risk toolkit to assess risks of proceeding with an interaction with a commercial entity—illustrative examples

Example scenario	Tool A, part 1	Tool A, part 2	Tool B	Tool C	Tool D	Tool E
Example 1						
A transnational processed food corporation wishes to fund an academic post at a university	Score 17: the company represents a high risk because its products, their production, and marketing are harmful to health	Rating high risk: interaction represents a high risk because the company will provide direct funding albeit with no direct influence from the company on the appointment or role	Not completed as all risks rated high and no further interaction considered appropriate	Not completed as no further interaction considered	Not completed as no further interaction considered	Not completed as no further interaction considered
Example 2						
An invitation to independently evaluate an intervention designed to increase purchases of healthy food in a national grocery chain	Score 10: the company represents a high risk because although its overall aims and food offer are broad, it does sell a moderately high proportion of unhealthy processed foods, plus tobacco and alcohol	Rating low risk: the proposed interaction (independent evaluation of an intervention to promote sales of healthier and more sustainable foods) represents a low risk, providing key safeguards in place	Rating likely low risk-to-benefit ratio: the company will deliver the intervention, which focuses on the promotion of healthier food sales. The researchers will have control of the independent evaluation and receive unlimited access to commercial data. The research could provide a health halo* for the company, but negative results might also be damaging for the company and there are no restrictions on publication of findings without involvement of the company	Interaction resulted in agreed processes that maintain safeguards for the academic partners' reputational integrity, including rights of access to data, rights to publish, and scientific independence	Independent oversight of the research and ongoing relationship has been established. A register of interests has been established by the research team and is update biannually. Interests, including those represented by this study, will be reported by all members of the research team in all outputs of the research	A publication policy has been established by the research team and made available to the company for information. The researchers will only publish findings in journals and at conferences of organisations that are independent of commercial funding

Evaluating an intervention delivered by a commercial company

OPEN ACCESS

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[1]Faculty of Public Health & Policy, London School of Hygiene & Tropical Medicine, London, UK
[2]Centre for Diet & Activity Research & MRC Epidemiology Unit, University of Cambridge School of Clinical Medicine, Institute of Metabolic Science, Cambridge, UK

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SPECIAL PAPER

Avoiding conflicts of interest and reputational risks associated with population research on food and nutrition: the Food Research risK (FoRK) guidance and toolkit for researchers

Katherine Cullerton,[1] Jean Adams,[2] Nita G Forouhi,[2] Oliver Francis,[2] Martin White[2]

[1]School of Public Health, University of Queensland, Herston, QLD, Australia

[2]Medical Research Council Epidemiology Unit, University of Cambridge School of Clinical Medicine, Cambridge CB2 0QQ, UK

Correspondence to: M White martin.white@mrc-epid.cam.ac.uk (or @martinwhite33 on Twitter; ORCID 0000-0002-1861-6757)

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Researchers wishing to interact with the food industry can be subject to conflicts of interest and reputational risks, but new guidance from Cullerton and colleagues should help researchers navigate this tricky territory, make informed decisions, and minimise adverse outcomes.

outcomes and public policy (eg, specifying the design and conduct of research) and could include practices regarded as unethical (eg, preventing publication of unfavourable results).[8-11] Any interaction between researchers and the commercial food sector therefore needs careful consideration, because it can undermine the credibility of research and researchers, resulting in an erosion of trust among the public and policy makers, and scepticism of published research.[12 13] Furthermore, such interactions can result in biased research distorting the evidence base and might enable

SUMMARY POINTS

Interacting with commercial food companies can result in conflicts of interest for population health researchers, which can bias research findings and contribute to reputational risks

By developing consensus on established principles for clarifying and negotiating these challenges, guidance and a toolkit has been developed that support principled decision making in population health research

The FoRK guidance and toolkit is a practical tool for researchers, research funders, and academic journals; its widespread use is encouraged in everyday practice and evaluation over time to refine and improve the guidance and toolkit

Paper URL: https://www.bmj.com/content/384/bmj-2023-077908

To offer feedback: https://www.mrc-epid.cam.ac.uk/research/studies/diet-research-food-industry/

Next steps

- Publication of FoRK guidance + toolkit in BMJ – 29th January 2024
- Publicise widely via social media and existing academic networks
- Seek endorsement and adoption by key stakeholders – other journals, research funders, learned societies – in the UK and internationally (ideas?)
- Seek feedback on use of the FoRK guidance and toolkit (via form at: https://www.mrc-epid.cam.ac.uk/research/studies/diet-research-food-industry/
- Continuously improve FoRK guidance and toolkit

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Contact: martin.white@mrc-epid.cam.ac.uk
Socials: @martinwhite33

MRC Epidemiology Unit

UNIVERSITY OF CAMBRIDGE

Questions