



Dietary public health research and the food industry: towards a consensus

Report of a Centre for Diet and Activity Research (CEDAR) meeting

Robinson College, Cambridge, 11 December 2015

www.cedar.iph.cam.ac.uk/diet-research-industry-2015

Contents

1.	Executive Summary	3
2.	Introduction	5
	2.1. An urgently needed debate	5
3.	The meeting	5
	3.1. Objectives	6
	3.2. Format	6
	3.3. Definitions	6
4.	Debate presentations	6
	4.1. The case against engagement	7
	4.2. The case for engagement	9
5.	Floor debate – accepting the need for consensus	11
	5.1. Conflict or confluence	11
	5.2. Principles of engagement	12
6.	<u>Table discussions – key statements</u>	12
7.	Second plenary: summary of discussions	13
	7.1. Building consensus – ideas and key challenges	13
	7.2. A framework for engagement – agreeing ground rules	13
	7.3. The food industry – are there good guys and bad guys?	15
	7.4. Industry funding of research – a question of money?	16
	7.5. Consumers – the "elephant in the room?"	18
	7.6. Public health policy and long-term goals	19
8.	Taking action	20
9.	Next steps	21
<u>A</u>	Appendix A: Tally of card sort statements	
A	Appendix B: Card sorting instructrions shared on the day	

1. Executive Summary

Poor diet is a growing global health challenge that requires food industry action, but voluntary agreements with industry are widely seen to have failed. Researchers who study diet and public health need to understand the industry, but face real and perceived conflicts of interest if they engage with these companies.

Responding to the lack of explicit consensus in dietary public health research about what constitutes acceptable or effective engagement, the Centre for Diet and Activity Research (CEDAR) convened a major discussion on this issue – *Dietary public health research and the food industry – towards a consensus?* –on 11 December 2015. It brought together around 70 leading figures in dietary public health, including researchers, experts with insights into the food industry and policymakers.

Opening debate presentations (Section 4)

The meeting opened with a debate between those who opposed and those who supported industry engagement. The argument **against engagement with industry** focused on the ultra-processed food and sugary drinks industries. It proposed that:

- corporate funding corrupts and undermines credibility in science
- this undermines efforts to progress policy and improve public health
- science and policy deserve protection from corporate interests, but current protection measures are inadequate
- there is a need to work collectively towards independent funding solutions that protects science and policy.

The case **for engagement** proposed that:

- cooperation between industry and researchers had yielded great gains to human health
- ongoing cooperation with industry promises fresh insights on our food and diets
- researchers should seek to find areas where industry and health interests are aligned
- collaboration is not in itself corrupting if it is well regulated, and academia is capable of creating necessary protections and oversight for collaboration.

A number of themes and questions emerged in the first open discussion that followed (<u>Section 5</u>), including:

- There is a **need for consensus** in this area. The current polarisation of debate is weakening the public health research community's efforts to respond to the challenges posed.
- There is a need to find agreement on what constitutes conflicts of interest and define boundaries of acceptable conduct. Any new approach should be transparent, constructive and pragmatic, with a clear set of 'rules.'
- Is it possible to identify where **health and industry interests might align?** e.g. the area of product reformulation.
- Are there differences between the **many elements of the food industry** for example are food retailers in a different bracket from food producers?
- Both short term 'tactical' and longer term 'strategic' responses were required to approach this issue.

Table discussions and card sort (Section 6)

Participants worked in groups in a "card sorting" task, involving discussing 30 statements about the food industry and dietary public health. Statements were sorted into "most agree", "most disagree" and "no consensus." Results are summarised in section 6 and full results are in Appendix A.

Second plenary discussion (Section 7)

The second plenary discussion focused on some of the most problematic or contentious issues that the card sort had surfaced. Discussion included the follow areas among others:

- Many spoke in support of the idea of a framework for engagement: a code of practice, and common set of ground rules, principles or guidelines to govern researchers' interaction with industry. For this to work, there would need to be broad sign-up, but it was evident that pinning down the detail would be challenging to satisfy the whole community. There was discussion of whether tobacco, alcohol or pharma provided the best models for such a framework.
- The food industry is huge and diverse. Participants debated which elements of the industry they could work with and how this would be determined. Was there a distinction between "good" and "bad" food companies? Where could the line be drawn, given that multinational brands owned many smaller companies and the industry was in constant flux? Who would decide which companies were and weren't acceptable? Better understanding of the food industry was required by researchers.
- Funding and money was a theme that was frequently returned to and discussed at length. Some argued that industry funding was much needed in research to cover shortfalls, and others that it constituted a very small amount of total funding so could be done without. Money came in many forms direct funding, gifts, and benefits in kind which created difficulties in defining what was and was not unacceptable or potentially 'corrupting' (or seen as such). There was much support for the idea that food industries should be held responsible for harms and therefore fund dietary public health research, but via a third party.
- The impact of **public perception** on this debate was highlighted, with challenges to how scientists communicate evidence, as well as how the media should cover perceived conflicts of interest.
- The relationship between researchers and industry is part of a bigger question of how
 government and the food industry interact with each other with regard to public health
 policy. Solving this issue for the research community would not alone be sufficient to protect
 public health from industry influence. This issue exists on a global scale.

Finally (see <u>Section 8</u>) participants were asked to suggest their **top suggestions** for protecting research integrity and public health. Ideas included greater transparency, a framework for engagement, an independent funding mechanism for research (potentially funded by an industry levy), better training for researchers in how the food industry operates, and wider work on regulating industry engagement with policymakers.

The meeting closed (Section 9) with the organisers pledging to share a summary of the day, and seek the wider engagement on this issue required to take a consensus building project further.

2. Introduction

Poor diet is a growing global health challenge that is putting health systems under strain and billions of people at greater risk of chronic illness.

Almost all the food that we eat passes through commercial companies, and whether it is through voluntary action, public pressure, or government legislation, little will change in the production, distribution and marketing of food without concerted industry action. Commercial enterprise's primary responsibility is to maximise profit for their shareholders (although see sections 2.3 and 6.3). Some of the actions required to improve dietary public health are likely to be profoundly at odds with this goal.

Researchers who study food choices and population diet need to understand how the food industry shapes our diets, and if and how they can work with industry, policymakers and the third sector to find solutions to pressing dietary public health problems. But voluntary agreements that aim to bring industry to work together with policymakers, professionals, and academics towards dietary public health goals are widely seen to have failed.

So researchers in dietary public health now face difficult questions:

- What, if any, engagement can take place between research and industry without harming scientific integrity and undermining the cause of public health?
- Does collaboration with industry harm public trust in science and the advice scientists give to policymakers?
- Are industry players willing to share data that could provide important public health insight?
- Are there benefits from certain types of engagement, such as conducting research in industry and retail settings to make food products or the retail offer healthier, or to change consumer behaviour?
- Is it ever right to receive industry funding for research?
- What do we in fact mean by "the food industry" in the first place?

2.1. An urgently needed debate

Currently there is no explicit consensus in dietary public health research about what constitutes acceptable or effective engagement with the food industry. This has given rise to disagreements over real and perceived conflicts of interest, which can obscure the findings and undermine the conduct of nutritional and dietary public health science.

3. The meeting

A major discussion on this issue – *Dietary public health research and the food industry* – *towards a consensus?* – was held on 11 December 2015. It brought together around 70 leading figures in dietary public health, including researchers, experts with insights into the food industry and policymakers. It was hosted by the Centre for Diet and Activity Research (CEDAR) and took place in the Crausaz Wordsworth Building in Robinson College, Cambridge. No industry funding or sponsorship was received for the event.

3.1. Objectives

The meeting aimed to:

- debate and discuss the roles of researchers, policymakers and the food industry in achieving common goals for dietary public health in the public interest
- explore the challenges, barriers and opportunities to undertaking public health research with the food industry
- identify areas of agreement and disagreement from within the public health research community.

3.2. Format

Participants observed the Chatham House Rule so they could speak freely without their names and workplace affiliations being publicly reported. (With the exception of the principal conference plenary talks, summarised below with the permission of the presenters.)

The meeting comprised:

- presentations of expert viewpoints and initial, plenary debate
- small group discussion of statements covering different aspects of dietary public health research and the food industry, designed to identify points of agreement
- plenary discussion, focused on key areas of contention or lack of consensus.

The event was facilitated by science writer and broadcaster Vivienne Parry.

This document has been shared with all meeting participants for comment to ensure that it is as fair and accurate a reflection of discussions as possible.

3.3. Definitions

For the purposes of the day, the following working definitions were presented as a starting point:

- **The food industry.** The food industry is a complex, global collective of diverse businesses that supply most of the food consumed by the world population. Only subsistence farmers, those who survive on what they grow, can be considered outside of the scope of the modern food industry. (https://en.wikipedia.org/wiki/Food_industry
- **Dietary public health research.** The study of the determinants of diet and population level interventions to improve diet, with a focus on social, behavioural and environmental factors

However, in the course of discussions it was clear that there was not necessarily a shared consensus on what constitutes the food industry, and therefore different views expressed were necessarily shaped by individuals' differing understanding and definitions. This is explored more in section 6.3.

4. Debate Presentations

Four experts debated the proposition: "Cooperation between researchers and the food industry undermines credibility in science and weakens public health efforts to make diets healthier." This brought opposing viewpoints out into the open.

4.1. The case against engagement

Speaking for the motion (i.e. against engagement with industry) were **Anna Gilmore**, professor of public health at Bath University and **Simon Capewell**, Liverpool University's Public Health and Policy Department. They focused on the ultra-processed food and sugary drinks industries. They argued that:

- · corporate funding corrupts and undermines credibility in science
- this undermines efforts to progress policy and improve public health
- science and policy deserve protection from corporate interests
- current protection measures are inadequate
- there is a need to work collectively towards independent funding solutions that protects science and policy.

How industry corrupts science

Anna Gilmore said there is longstanding evidence across diverse industries in numerous sectors that industry-funded research usually produces outcomes favourable to these industries. This is seen in tobacco, pharma, lead, vinyl chloride, silicosis, oil and gas, and it is now emerging clearly in food.

Evidence also showed:

- systematic reviews with conflicts of interest were seven times more likely to find no positive association between sugar-sweetened drinks and weight gain than studies without these conflicts
- food industry-funded primary research studies were at least ten times more likely to report results favourable to industry
- diverse industries corrupt science in similar ways some of these ways are "obvious", including the distortion or suppression of data, controls on publication, and control of research by industry lawyers
- other forms were more subtle, such as the favourable framing of research questions and "selecting" researchers already sympathetic to industry's viewpoint.

Gilmore stressed that the tobacco industry's funding of "good quality" research (where the researchers were able to control the data and had the right to publish) is often overlooked yet was as important to the industry as the funding of the more obviously "corrupt" work. Researchers did not realise that the industry only gave researchers control when it knew the studies to be "safe". These were often studies designed to "distract" – i.e. to draw attention to other risk factors. Funding such studies gave the tobacco industry access to some of the best researchers who then became "indebted" to it, and provided PR opportunities (indeed these were a criteria for funding). This good quality, well-conducted research could therefore be as "problematic" for many reasons.

Distorting the research agenda

Industry funding for research skewed the research agenda onto studies of the sector's choosing, rather than those of priority for public health. In the area of obesity, this "endless research" focused on issues to do with individual choice, lifestyle and "energy balance", and hence to support industry claims that their products are central to so-called "active balanced" lifestyles.

Researcher "indebtedness"

Companies also used studies for "PR [public relations] gain", to promote their involvement, enhance their reputations and create researcher "indebtedness" to the funder. This could in turn silence criticism and curb policy debate because "we don't bite the hand that feeds us".

Independent scientists carrying out industry-funded research mistakenly believed they were protected from bias by their training, devotion to professionalism, and ethical conduct. Even though they thought they were objective, evidence showed that they subconsciously and "unintentionally succumbed" to conflicts of interest.

End conflicts of interest

Gilmore said some supposed safeguards, including disclosure could "exacerbate the impact of these conflicts". She urged colleagues to:

- eliminate conflicts of interest in research and other public-private partnerships
- reject direct industry funding from the ultra-processed food and beverage industries
- work towards a funding model that is independent from industry, as in California (tobacco) and Thailand (tobacco and alcohol).

Thailand's Health Promotion Foundation for research, funded by a 2% levy on tobacco and alcohol, was given as one example of a viable funding model. Because industry funding accounts for only a very small proportion of public health research done in UK universities, a UK version appeared eminently achievable.

Simon Capewell also condemned industry tactics. He said corporations aggressively pushed junk food and sugary drinks instead of the "dairy, fish, vegetables, bread and cereals we actually need". Industry opposed attempts to bring in "effective" mandatory measures to improve diet such as taxation and regulation to restrict the affordability and availability of junk food products.

"It's not just Big Tobacco anymore, public health must also contend with Big Food, Big Soda and Big Alcohol," he said. "They all fear regulation and protect themselves with the same tactics – front groups, law suits, industry-funded research that confuses the evidence." Their methods included undermining public health messages, "buying up" and "bullying" research experts and "cherry picking" evidence to suit their arguments and promote doubt.

Failed Responsibility Deals

Capewell said 10 giant transnational corporations controlled almost all of the food people bought. They operated a web of influence which included "deep connections" to respected scientists and institutions.

He was critical of scientific advisers who "ignored" evidence that showed the "failure" of the UK government's voluntary agreements with industry, such as the Public Health Responsibility Deal and its so-called food pledges allegedly intended to improve people's diets.

He instead commended the Framework Convention on Tobacco Control as a major piece of global public health regulation that had successfully created a "firewall" between research and industry to maintain public trust. "Why on earth can't we do that for sugary drinks and all processed foods?" he asked.

The food industry "is the problem, not the solution"

He said the food industry could not take credit for major reductions in cardiovascular disease deaths and common cancers. The salt reduction achieved in the last decade by the Food Standards Agency was achieved "in spite of the industry kicking, screaming and resisting".

Poor diet – "junk" foods high in salt, fat and sugar – was responsible for a "bigger burden of deaths and disability in UK and globally than tobacco, plus alcohol plus physical inactivity" according to Global Burden of Disease analyses.

"Let's be quite clear about where this [poor diet] is coming from, this is coming from processed food and sugary drinks. The food industry is the problem not the solution, it needs to be regulated, not tolerated."

4.2. The case for engagement

Derek Yach, senior vice president, Vitality Group, opposed the motion. He said at least a century of cooperation between industry and researchers had yielded "unprecedented gains" to human health and development. These included better medications and diagnostics, higher yielding crops and "safe and affordable food".

Cooperation benefits society

"Famine has virtually gone, stunting is in rapid decline, micronutrient deficiencies are being steadily reduced, CVD death rates are declining and life expectancy is increasing in most countries-all partly as a result of strong cooperation between researchers and industry."

Yach said cooperation could address major societal challenges and play a crucial role in "taking research discoveries to scale" so more people would benefit. Sometimes collaborations could go wrong but evidence that companies had "distorted relationships, science and public policy" was not unique to any one sector.

"Confluence" of interests, not conflict

He said universities could spell out in detail the "protections and oversight methods" required to protect research integrity and the quest for truth which he termed "paramount".

"Healthy debate is critical to assure that real or perceived conflicts of interest are minimized and controlled while areas where there is a potential for confluence of interests are maximized."

He said corporations were not just motivated by short term profits – their long term success depended upon "placing health central to their future products and services".

Fresh insights and knowledge from industry

Yach called for more cooperation, including dialogue, information and scientific exchange with food and nutrition researchers from industry to improve people's diets and public health policy.

This could bring fresh insights and perspectives on:

- food reformulation
- effective marketing and labelling
- the role of taste and flavour in food
- the importance of pricing and consumption.

Yach said researchers' work with food retailers had shown how discounting healthy food shifted consumption trends "far faster" than any individual tax on a particular product.

Retailers, like those encouraged to remove sweets from checkouts, would "do more if independent academic research showed what the benefit would be both to their long term profitability and also to the shifts in consumption by mothers and young kids". He urged more data sharing and more studies being done "in the most independent way possible".

"More cooperation would lead to healthier diets becoming available to billions through the combined reach and scale of food manufacturers, food service and retail companies."

Paul Aveyard, professor of behavioural medicine at Oxford University's Nuffield Department of Primary Care Health Sciences, also opposed the motion. He argued that he shared the same goal as its proponents, to reduce availability of certain types of food, but favoured different "tactics".

Cooperation with industry was vital, he said. "I believe we will make substantial public health progress if we can radically transform our current food environment." He gave examples of beneficial "collaborations" that were happening between industry and colleagues in public health, that risked being lost.

These included:

- a behavioural experiment on consumption of ultra-processed foods, such as ready meals and pizzas, aiming to help people make better use of "traffic light" labels
- work with the Co-op retail group to offer money-off deals and healthy recipe suggestions to frequent shoppers in a low-income neighbourhood
- a nutritional investigation into the health effect of switching from a high saturated and trans fat diet towards a low fat, low GI diet.

In the latter example, food had to be specially formulated for the study and so entailed collaboration with the food industry. Aveyard asked participants to consider if the public would have been better served had the Food Standards Agency also paid the bill for the food?

"I don't think the interpretation of the study would have been in any way different," he said. "In any case, is it the exchange of money that makes any difference or is it the fact one has to collaborate

with the food industry to do it? It is simply not possible to do studies on the effect of diet without some form of work with the food industry."

Reducing harms

Aveyard said there were other types of research, those that tested health claims made for certain foods such as pro-biotic yogurts, "where we need to work in a more regulated space". But here, protocols could ensure industry was separated from the analysis and had no veto on issues of patent.

He admitted studies in the area of "harm reduction" were among the most contentious. He cited one study funded by a US drinks industry body that had shown "high soda" drinkers, who were advised to switch to drink diet drinks or water, achieved more weight loss with diet drinks.

Clearly the best public health advice was to drink water rather than diet drinks. "But the problem is that the best public health advice runs up against the reality of imperfect human behaviour."

"I don't think funding as such is the issue. We need to understand that these collaborations are important for public health and that this sort of research is not in itself corrupting if it's done in careful ways."

5. Floor debate – accepting the need for consensus

In the initial floor debate following the presentations, it was widely felt the dietary public health research community would be in difficulty and weakened for as long as the issue of engagement remained highly polarised. Speakers indicated there was an appetite for reaching consensus and the need was urgent.

One said, "I worry if we remain in this grey space, those big industries are going to take advantage of that. There needs to be some kind of tactical response."

Participants identified key problems that would need to be tackled. These included finding agreement on what constituted conflicts of interest, resolving questions of bias and issues to do with industry funding, understanding risks of reputational damage and determining acceptable conduct when it came to engagement. One said, "All of us seem to have some sense of what collaboration is intrinsically corrupting and what isn't. We need to find a way of explicitly defining that boundary."

5.1. Conflict or confluence?

The meeting reflected on circumstances where food and industry interests might align. One example was given to show how food technologists and industry might both need to understand how to reformulate products with increased vitamin absorption.

It was suggested work by population health researchers investigating food and drink consumption would almost certainly require access to "retail spaces", where most food was purchased. However, even this sort of involvement with industry could raise "negative" perceptions.

But there was no need to rule out working with retailers if there weren't conflicts, it was argued. What mattered most was to identify as clearly as possible those circumstances in which there was a "conflict of interest". One participant said, "That is where the problem lies. We have to become more sophisticated in trying to understand these conflicts. We have to have a system for that."

5.2. Principles of engagement

There was support for the dietary research community coming together to agree a set of shared guidelines or ethical principles regarding engagement. Any new approach should be "transparent", "constructive" and "pragmatic".

One participant said, "Can we come to consensus on what the rules of engagement are when we do collaborate with industry and having that as an open, debatable and evolving set of rules that can be used by everybody over time?"

Participants seemed broadly in favour of protecting integrity on two counts – not just the process of carrying out specific research projects but keeping undue influence out of public health policymaking. This indicated the need for both a tactical response and a more strategic approach towards achievable long-term goals. One participant said, "We have to keep pushing on the big issues but we also have to keep doing the research we can do now."

Another hoped it was possible to "have our cake and eat it in this debate. Why can't we have both tighter regulation and cooperation?"

There was also a warning that if researchers struck an attitude that was too "Utopian" or "pure" it could backfire and lead to "lost opportunities" for improving public health.

6. Table discussions – key statements

Participants broke into groups to undertake a "card sorting" task, involving discussing 30 statements about the food industry and dietary public health. On 15 statements there was majority agreement, on three majority disagreement and on 12 no consensus (see <u>Appendix A</u> for full findings).

They *mostly agreed* on the following statements:

- If food industries were to fund dietary public health research, it should be via a third party (e.g. a research funder) and in a way that avoids any direct link between the company and the research (i.e. by pooling industry funds).
- Researchers can effectively work with the food industry, as long as the funding, interpretation and publication of findings are all entirely independent of industry.
- Any association between a researcher and the food industry risks reputational damage that undermines their scientific credibility.
- Researchers should only work with the food industry according to an internationally agreed 'code of practice' on issues such as financial engagement, practice for meetings, co-operation and transparency.

Tables *mostly disagreed* with the following statements:

- Researchers should never engage with the food industry at any level.
- The food industry should play a role in determining national priorities for dietary public health research.
- Research should not be undertaken that has the potential to damage the profits of the food industry.

There was no consensus on:

- the food industry should fund research, as it is responsible for understanding food harms and benefits
- food industry funding for research is a conflict of interest that compromises scientific integrity
- researchers may accept funding or gifts in kind from food industry sources, provided they are declared as a conflict of interest
- researchers may receive funding or gifts in kind from the food industry for certain researchrelated activities, such as attending meetings, travel to conferences, or giving lectures
- any engagement between researchers and the food industry needs to avoid any reciprocal obligations.

There was also *no consensus* on the following statements:

- The same standards should be set for relations between the food industry and researchers as have been adopted for the tobacco industry with regard to financial sponsorship (e.g. via the Framework Convention on Tobacco Control).
- Researchers need a common set of rules and regulations for engagement with profit-making organisations, guided by the level of harm/benefit of their goods and services.

7. Second plenary: summary of discussions

7.1. Building consensus – ideas and key challenges

In the second plenary discussion, participants were asked to focus their thinking on some of the most problematic or contentious issues. This included positions groups had taken in their card sort discussions that appeared contradictory.

For example, it was mostly agreed people could work with the food industry under certain circumstances but also that "any association" risked reputational damage that undermined credibility. Participants offered thoughts on reputation and how they might "move forward".

One participant said, "Clearly there is a risk to integrity because we don't all have an agreed set of principles about what (collaboration) is okay or not. It's always down to individuals making a judgement for themselves." Rows could erupt when such judgements were questioned by others, which in turn undermined integrity and credibility.

One commented, "If we had some broad principles we could all agree on, it would make it simpler and I hope individuals would be better protected".

7.2. A framework for engagement – agreeing ground rules

The meeting took up the idea of developing an agreed stance or framework for engagement. Many spoke in support of such a proposal that was variously described as a code of practice, a common set of ground rules, principles or guidelines to govern researchers' interaction with the food industry at different levels.

The discussion was more conceptual and exploratory rather than concerned with setting out precisely what such a framework might contain. A key purpose of the idea, one said, would be "to flush out the potential for bias, unconscious bias and all the elements of it" for each piece of work being done with industry. Another suggested it would act as a "checklist" detailing the processes of engagement, transparency and governance. A note of caution was also sounded: researchers need to wary of the 'tyranny of declarations' whereby transparency becomes an impedance to progress in dietary public health research, which might be cynically fuelled by the food industry.

It was agreed that, at an early stage, it would be important to discuss and agree what success would look like, so as to provide a clear sense of direction for any consensus building activities.

A collective effort

For a framework to work it was said there would need to be very "broad sign up" at "quite a fine level of detail". Otherwise sceptics or critics including industry interests could "chip away" at it and continue to divide the research community or raise doubts over integrity.

One said it should be a "collective effort", international in scope and apply to a wide range of different actors including research funding organisations. Publishers of scientific journals could then also apply "pressure" for implementation of the framework.

Careful framing would be needed to avoid it becoming a "new tyranny" or "straitjacket" that might even "close down" debate rather than making things more transparent. Another concern was raised about how to ensure any new guidelines were adhered to: "All the talk of guidelines is a great idea but who's going to check they are followed?" "Would it be the job of ethics committees to be the 'guardian of the guardians?'"

If so, was it best if their members had never engaged with industry at all or if they could show a record of engagement that gave them a "better perspective on what we're trying to do?" It was recommended "evidence based practices" might be put in place to guide ethics committees or case studies developed to illustrate the dilemmas around engagement that researchers face.

Which model – tobacco, alcohol or pharma?

Participants discussed whether parallels could be drawn between researchers' engagement with the food industry and how they engaged with other sectors like pharmaceuticals, alcohol or tobacco.

Alcohol was suggested by one as a useful "join-up" because although the products were clearly very different corporations had "the same interests at heart, the same profit drivers".

There was discussion about whether some foods could be regarded at all like tobacco? But for many it was felt the Framework Convention on Tobacco Control would not be an appropriate model. One reason given was that it was so "stringent" it even precluded "interviewing tobacco industry representatives for research purposes".

Some saw the pharmaceutical industry as a better fit. This was because some food companies were producing products such as cholesterol-lowering agents that made specific health claims, while companies like Weightwatchers were arguably operating in the "treatment" business and so were similar in that respect to pharma.

One said, "There's another reason why food and pharma are similar. The pharma industry is for sure subverting the research agenda into treatment rather than prevention."

7.3. The food industry – are there good guys and bad guys?

Participants debated who in industry they could work with and how this would be determined. Could a distinction be made between "good" and "bad" food companies and should this affect decisions about engagement?

It was argued some researchers had an "implicit" understanding of who were the "bad guys", namely, "Big Food, Big Soda, ultra-processed food". Was it wrong to accept funding from them but acceptable to do so from yogurt producers or food retailers, for example? "Where is the list to be drawn, where are the boundaries?" one asked. And what if the yogurt company and the soda company were both owned by the same transnational corporation?

In the card sort task, participants had not been able to agree whether researchers should avoid any level of engagement with transnational food corporations that were clearly linked (financially) to tobacco or alcohol industries. It was argued such a commitment would be "difficult to police" because companies' interests were "blurred", their remit wide, and some food producers have a "stake in alcohol" as well.

A complex industry

It was argued transnational corporations had complex ownership structures that were in constant flux. They were regularly selling off subsidiary companies or buying new ones. One academic said, "Personally I wouldn't want to engage with companies involved in tobacco or alcohol but if you thought a company was 'clean' one year it might not be the next."

Another said case-by-case judgements could be made, albeit with difficulty. "It's not impossible; it requires continuously reviewing processes and checking definitions."

Ethical dilemmas – who decides?

There was debate about the rationale being used for deciding "who's good and who's bad" and several examples given of the dilemmas this raised. It was possible producers of "unhealthy or harmful" foods may be otherwise ethically structured or not driven by the profit motive that appeared to some to underpin conflicts of interest. Conversely, some producers of "healthy" food might be found to employ workers in "intolerable conditions". In which cases would it be appropriate to accept research money? Would a "good" olive oil cooperative turn "bad" if bought up by a transnational corporation?

One participant said, "How many companies would Coca Cola have to buy for it to tip the balance in favour of working with them because now they've suddenly become ethical and acceptable?"

It was pointed out most corporations had a "full portfolio" of products, including processed and "healthier" foods lower in salt, sugar and fats. One said, "What most are trying to do is to shift that portfolio from poor quality nutrient stuff to higher quality nutrient stuff and if you don't have the full portfolio approach you don't have the means to do it."

It was argued researchers who were engaged, or "on the inside" could ensure the latter became more prominent over time and this would have a big impact on public health by improving uptake of better diets.

Defining the rules

There was a suggestion that junk food companies ought to be assessed on their attitude to public health policy. "If companies are opposing the most effective public health measures, like taxation, regulation and marketing restrictions, then perhaps we shouldn't be collaborating with them."

One remarked there was no need to distinguish between good or bad, just "define the rules" by which researchers would or would not engage and apply them even-handedly.

The idea that scientists themselves were so "pure" in their own motivations they could know what's right and wrong, was challenged because it was said there were "conflicts of interest across science". It was also clear that there was no absolute standard of scientific integrity, and that this issue in itself will require some flexibility and consensus building.

In the group discussions most agreed that the food industry is "not monolithic" and that:

- researchers need to develop a framework that identifies all the elements of the food industry, from agricultural production to retailing, and their activities so that clear judgements can be made about each element on a range of agreed criteria
- researchers need to identify those elements of the industry that are open to a constructive dialogue about improving population health. Such a dialogue could lever change across the whole industry
- researchers need to develop a detailed understanding of the nature and extent of the challenges faced by the food industry in shifting to healthier products, both in terms of technical issues (e.g. reformulation) and economic issues (e.g. profit margins).

Food industry and physical activity research

At least one table discussed the issue of how the food industry relates to physical activity research: if we are to think more generally about the relationship between the food industry and *public health* research, food industry funding of physical activity research should be considered. Notable examples include industry financial and logistical support for the recently closed Global Energy Balance Network and sponsorship by food and drinks companies of international physical activity conferences.

7.4. Industry funding of research – a question of money?

The meeting heard that money had become a "touchstone" issue in judging whether dietary public health research could keep free from industry influence. Some argued that as long as public funds were in short supply there would remain a case for dietary researchers taking part in certain trials either fully or part-funded by industry. The meeting heard that difficulties academics faced in obtaining research funding solely from public sources should not be "underestimated", although others felt obtaining public funding was not problematic.

Scarce public funds

The problem was summed up by one participant: "I'd desperately like to get all my funding from Public Health England or something similar but it's just not possible. I don't know if I'd even have a job in the school I'm at if I didn't take industry funding. It may not be ideal but it is a very, very

difficult decision. If somebody comes along with a great idea... and I'm not going to get to do it if I don't take funding from this place I will do it, if it's possible to do it to a very high standard."

Speakers noted there was a range of "different" and "nuanced" relationships when it came to funding that should be defined carefully. At one level were "expensive gifts, Armani suits and skiing holidays" that researchers may be offered personally. Food companies could also pay funds directly into a unit's designated research account, provide "benefits in kind" such as products for carrying out research, or sponsorship.

There was concern about where boundaries could be drawn around different levels of engagement and again more dilemmas were highlighted. It was observed universities would overwhelmingly reject the idea of "professorships" funded by the tobacco or alcohol industries. But few may find a "Rolls Royce professor of engineering" problematic, despite the car industry's role in road traffic fatalities, a major public health hazard. "Why do we have one rule for one sector of industry but not for others?" one asked.

Does funding corrupt?

The meeting discussed the merits of food industry funding in relation to research on food products. Some argued such studies were "not intrinsically corrupting" and could be conducted in a way that protected scientific integrity. One said, "Would we want industry itself to be running these trials or independent investigators to be doing them? Would you trust research that Danone had done itself on Danone yogurts?"

It was argued that dietary researchers could conduct trials that were "properly regulated" so the analysis was separated and clearly independent of industry interests, similar to "good practice" in the pharma industry. "I don't see why that would be different with a particular food product, where a food company has to do some RCT to show some functional effect," one said.

One academic admitted she had been subject to "more interference" in reporting of her research from government rather than industry funders. "We have to be honest, that we're all subject to bias and to second guessing what our funders are up to, to supressing and distorting how we write things often consciously and unconsciously."

Be radical – don't take the money

There was some support for the view that the research community should send a clear and firm message in rejecting direct food industry funding outright. One said, "Why take the money? There's no advantage for public health." It was argued that industry funding accounted for a very small amount of public health research and this money would "not be missed". Some suggested there was already too much of the "wrong" research being done and industry funding merely added more, that was of similarly "small impact". Another said, "Nobody is saying don't engage with industry at all. Everyone can engage... but just don't take the money."

The credibility issue

Some acknowledged the funding pressures researchers were under but warned that accepting funding could harm their credibility and efforts to influence public health policy in the long term. "If in future you want to make a point on any issue or be on a guidelines panel, your effectiveness will have been reduced having taken the money, it's just the way it is," one said. The point was also made

that transparency about receipt of industry funding is insufficient, as the mere act of receiving funding from any organisation leads to indebtedness.

Another issue voiced was that vehemently opposing industry funding or involvement in research risks a researcher being see as 'radical' or 'activist', which itself might lead to reputational damage in certain circles.

It was acknowledged there were particular problems for young researchers starting out in their careers and PhD students in need of funds to attend scientific meetings. One participant expressed the opinion that: "People in senior positions need to start campaigning for better public funding and independent pools of money because it's very tough for young people coming through."

Another said, "If we start taking money from the food industry we can't really turn round and say it's not okay in other areas of public life, like the NHS."

There was a counter view that not accepting money was "playing into industry hands", given that most of the time the food industry "did not want to give money for research". One said, "Why not make them pay properly to do really decent research that gives us really good evidence? Rather than small bits of research, proper RCTs costing millions of pounds."

One participant commented that research decisions could become a trade-off between carrying out industry-funded research or the research not being done at all. Given that it could be argued that not doing the research is better than carrying out poor research, which outcome was preferable for public health nutrition? How would 'poor' research in this context be defined?

Pooled funding model

There was much support for the idea that food industries should be held responsible for harms and therefore fund dietary public health research via a third party, such as a research funder.

A levy on companies would allow funds for independent research to be "pooled", thus avoiding any direct link between the company and the research. This money could then be directed to investigating bigger research and policy questions. As one said, "If we want to tax them and put that money into the pot, great, there'll be even more money and we'll be able to spend it on the right research."

7.5. Consumers – the "elephant in the room?"

Reminders were given throughout the day to keep the consumer, the ordinary citizen, uppermost in discussions and central to any decisions that might ultimately be taken. Otherwise there was a danger the public health research community could be seen as being too insular, too much wrapped up in its own concerns. There was a risk consumers could miss out on the benefits of engagement. It was acknowledged researchers were falling short in "the way we communicate evidence".

One described the consumer as "the elephant in the room" and challenged the meeting: "Are we doing this to improve public health in society? How do we move from getting papers into journals to knowledge that consumers can use on a day to day basis?"

Public confusion

This reflected some calls for a "more balanced" debate, angled less on junk food and more towards the entire food sector's role in efforts to improve nutrition quality and food practices.

"We should be talking about what's right for the consumer for health reasons. I think this debate needs to evolve with consumer thinking in mind," one said. It was suggested "anyone who can influence behaviours and consumer choices has a very big part to play" so researchers needed mature dialogue with the food industry and "knowledge exchange".

Another participant was concerned there was "widespread confusion" among the public on dietary health and that this stemmed from something more fundamental - a "lack of clarity produced by researchers of any kind" - as well as there being too much "trivial" research.

Communication and the media

It was noted that whatever consensus was ultimately arrived at, the research community would need to explain it via the media. Above all, researchers' role was to deliver high quality, impartial science on diet and it was vitally important to communicate findings clearly so as to improve population health.

They should be more aware how media stories became dominated by rows, disagreements and alleged or perceived conflicts of interest, further fuelled by "smear, insinuation and innuendo".

One participant argued that high quality, thorough investigative journalism is needed to expose hidden conflicts and resulting biases, and such journalistic investigations should be encouraged. However, they also felt that there had been a lot of superficial reporting that suggests certain scientists are automatically untrustworthy because they have links with industry, even if there is no evidence to support the alleged bias. This may discourage scientists from carrying out science (or engaging with the media) on important health topics with industry involvement if they are fearful of being 'exposed' in the press.

7.6. Public health policy and long-term goals

There was support for looking at research integrity in the wider context of public health policy and doing more to ensure good research was properly implemented.

It was feared that well-intentioned academics, perhaps focused narrowly on their own projects, could be unaware how large companies sought to frame dietary debates and the kinds of studies that were carried out. It was argued research into products was related to "bigger questions about policy and which foods should be incorporated into policies" and linked to corporate tactics.

The ultra-processed food industries had the biggest interest in "undermining progress" on tackling public health goals and may succeed "partly through what they do with the research community". One participant said, "What can we do to minimise the advantages they have? For me that's the top priority. In certain circumstances they have to be outside of the picture."

Use policy levers intelligently

It was argued this had been the main purpose of the Framework Convention on Tobacco Control, to "protect public health policymaking from the influence of the tobacco industry". "We have to decide which question we're addressing – is it the issue around credibility from a research perspective or public health protection?" one asked.

It was suggested researchers were "seriously deluded" if they thought their science by itself would convince ministers to "shift the balance" of public health policy towards new priorities. They were

urged to consider "what kind of levers" beyond research could be brought to bear on the policy-making process.

"We really need to train our guns on that as much as sorting out our relationship with industry," one said. Some spoke of using policy levers "intelligently" and support was expressed for issue-focused groups that were working effectively to improve public health and lobby for action on sugar and salt reduction.

Influence global food politics

There was a warning that industry collaborations with researchers, such as the US diet soda study referred to in an earlier presentation, were diverting attention from more effective, evidence-based taxation policy measures.

The meeting heard that scientists should become "more engaged in global food politics" and focused on "keeping the corporate influence out of policy setting". But there was also a view that excluding "all the people who work with industry" in the pursuit of better policy would leave the issue in the hands of a small "select group" when wider expertise was required.

Working towards taxation

It was suggested that researchers should aim for agreement on long-term policy goals. There was much support for a proposal that in 20 years' time there should be a tax on the food industry to fund dietary research so that there was no need for direct funding. Its proponent said, "If we all think that in 20 years' time that is the way it should be, then maybe we should be pushing for that. It's taken more than my entire lifetime so far to get to the point where we have voluntary food labelling and we're not going to develop a consensus immediately."

8. Taking action

Participants were asked to decide in their small groups on three ideas or actions they believed would most protect the consumer and integrity of research. Ideas included:

- 1) a framework, principles or guidelines for engagement between researchers and the food industry
- 2) a risk assessment tool to measure adherence to principles
- 3) more transparency on researcher conflicts of interests involving the food industry
- 4) a database of research funders' interests and open "declaration of interests" for all involved in research
- 5) information and training for researchers in how the food industry works
- 6) an independent funding mechanism for food and nutrition research
- 7) a tax or levy on industry to fund research on food and nutrition
- 8) work to regulate how industry engages with the policymaking process.

9. Next steps

Professor Martin White, of the MRC Epidemiology Unit & CEDAR at Cambridge University concluded the meeting by saying that the day had been an important starting point and that further work to develop consensus-building would now begin.

This document was subsequently shared with all meeting participants for comment to ensure that it is as fair and accurate a reflection of discussions as possible. Comments have been incorporated in this final version. Further views and comments are welcomed from the wider research, policy and practice communities. If you have any comments, please share with Oliver Francis, ocf26@cam.ac.uk. Feel free to annotate the report with track changes or comments if you would like to respond to particular points in it.

The meeting has underlined the potential scale of the task ahead, and the importance that any outcomes need to be owned by the research community at large. Contributions to this collaborative endeavour are invited. CEDAR plans to take this work forward by working with relevant agencies and individuals to:

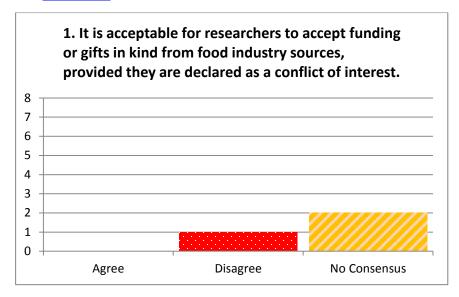
- 1) seek funding to establish a project to advance the agenda for action set out above
- 2) develop and implement a process to achieve international consensus on a framework, principles and guidance for engagement between researchers and the food industry
- 3) establish a framework and process for researchers to record and openly declare food industry interests in research
- 4) develop information and resources for researchers, policymakers and practitioners to improve understanding of the food industry.

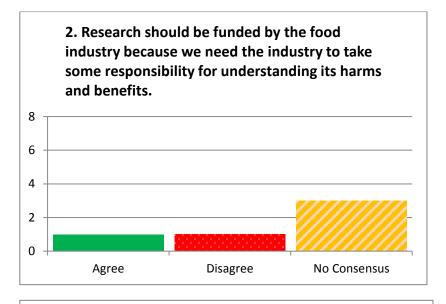
If you would be interested in participating in these consensus building activities, please let us know (email Oliver Francis ocf26@cam.ac.uk)

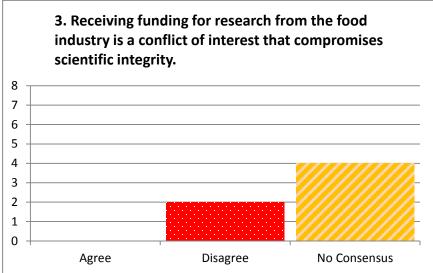
This meeting was written up by Matthew Limb, and this final report was prepared by Matthew Limb, Oliver Francis and Prof Martin White.

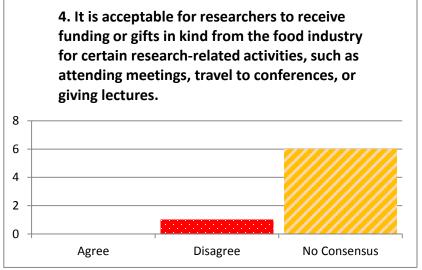
Appendix A: Tally of agreement, disagreement and no consensus with card sort statements

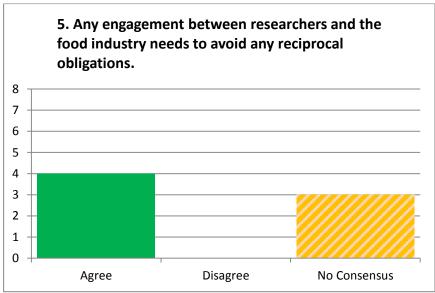
The numbers in each column represent the number of tables reaching majority agreement or disagreement or failing to reach a consensus on each statement. See also Appendix B for the card sort rules.

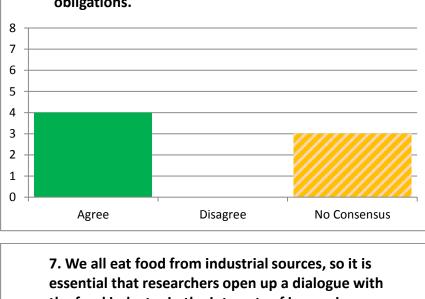


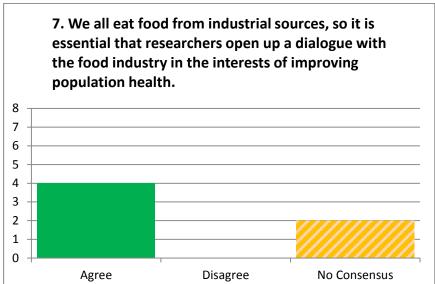


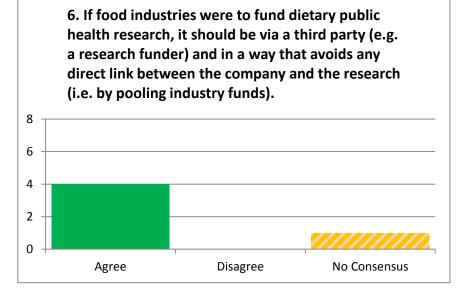


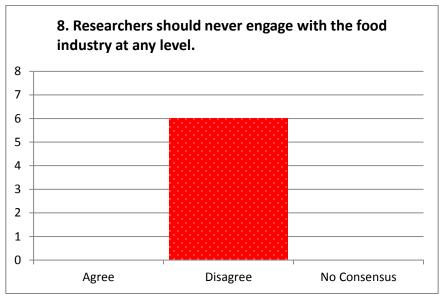


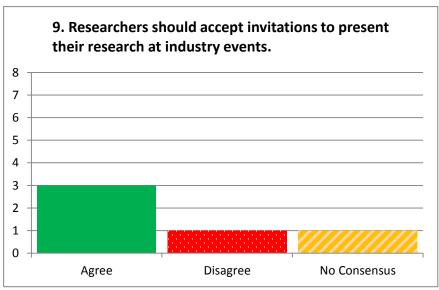


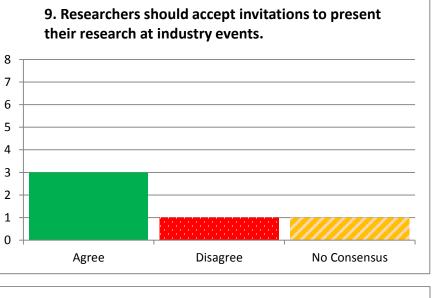


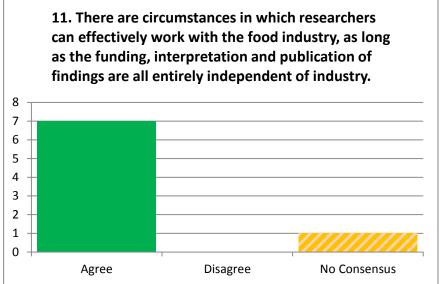


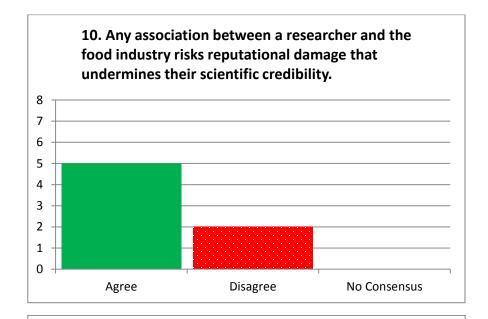


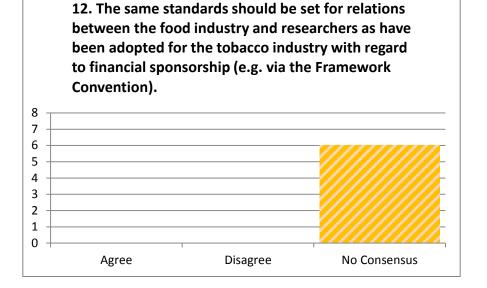


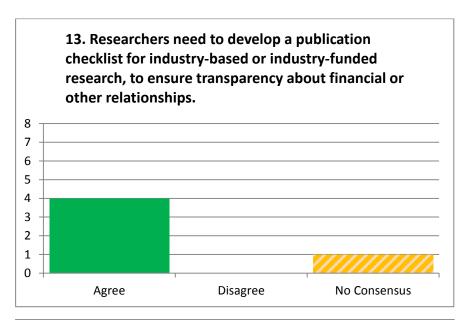


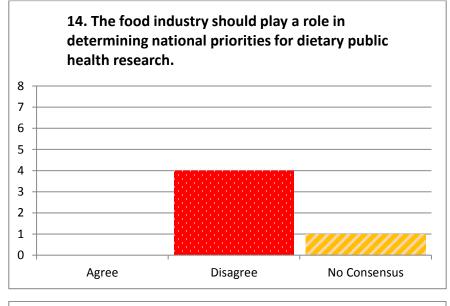


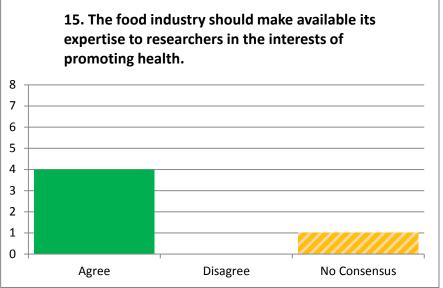


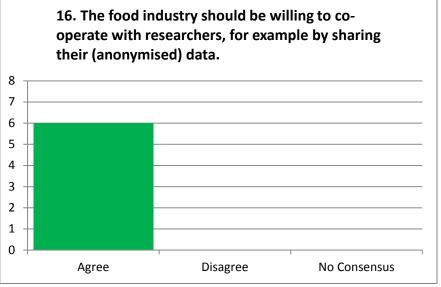


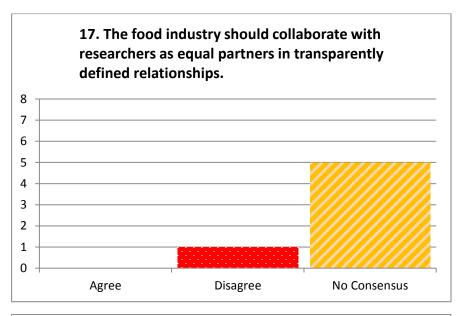


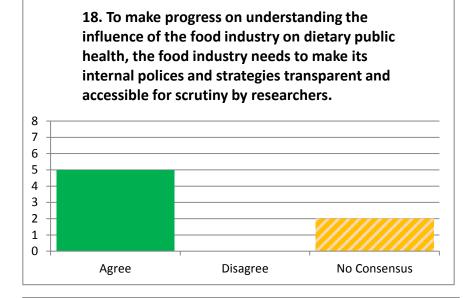


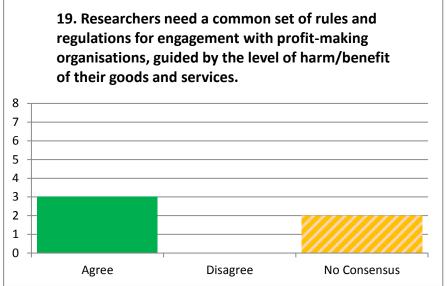


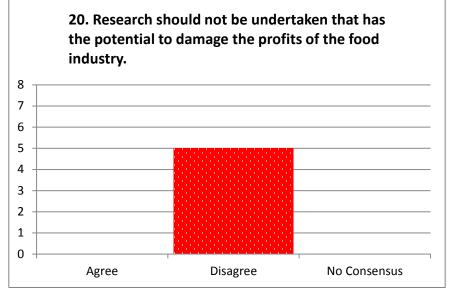


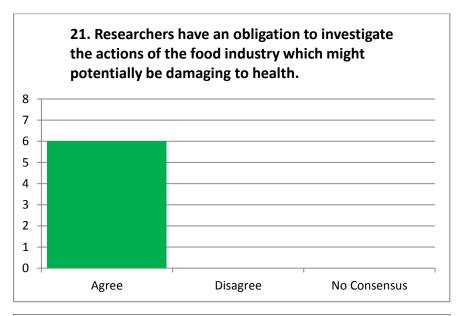


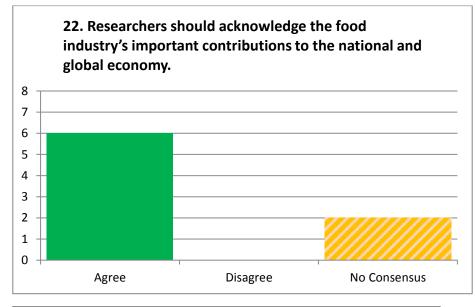


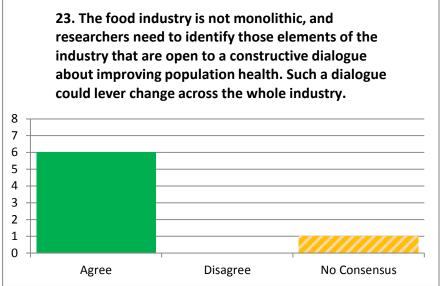


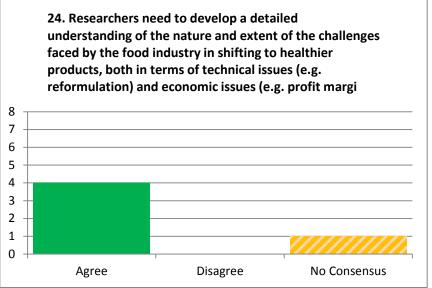


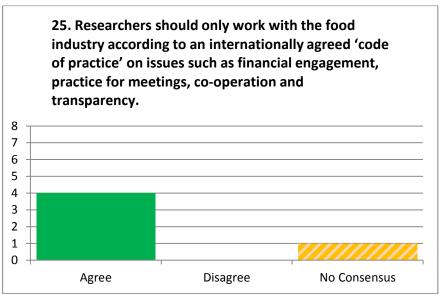


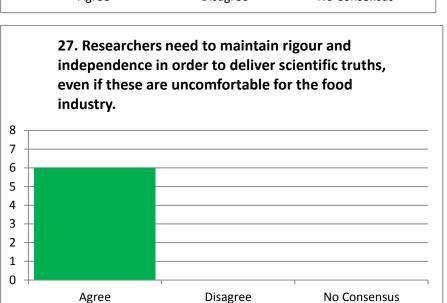


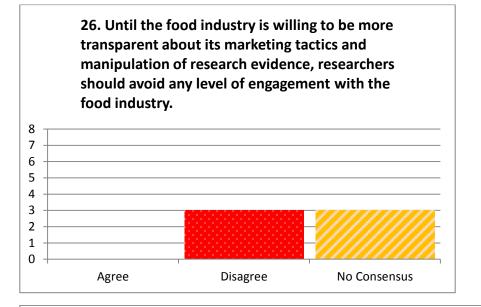


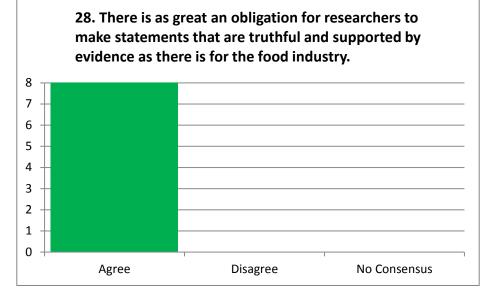


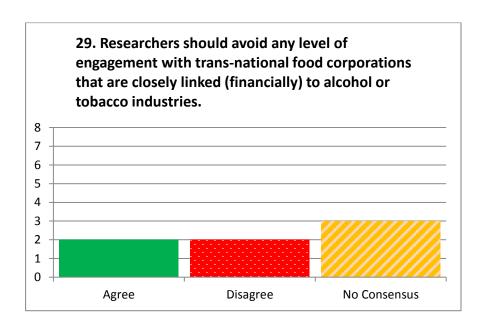


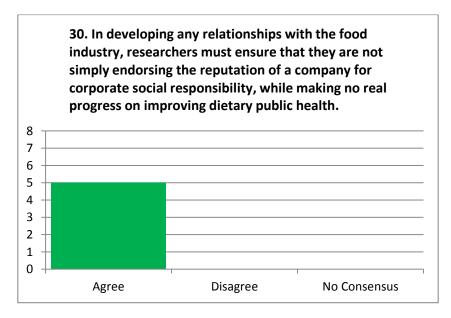












Appendix B: Instructions for card sorting task shared on the day

INSTRUCTIONS FOR CARD SORTING TASK

How we hope it will work

There are numbered statements on cards on each table. These are ordered and should be discussed in the order they appear in the first round of sorting. Try to keep remaining cards in the same order for the second round.

Each statement should be sorted into one of three folders:

- **Table agrees** with the statement (**Green** folder)
- Table disagrees with the statement (Red folder)
- There is **no consensus** on the table (**Clear** folder)

'Agree' or 'disagree' means a maximum of two dissenters from the majority (i.e. a vote of 5/7 or 6/8). Any wider split means 'no consensus achieved'.

Your facilitator will help the process and record the voting on each card. Facilitators are allowed to express their views and to vote.

Timing

Stage 1: Please go through all the cards on your table quickly first to see if there are any that elicit immediate consensus (agree *or* disagree). *15 minutes*.

Stage 2: Return to the cards that require more debate. Don't worry if you don't finish all cards – they are in different orders on different tables. *Remaining time (approx. 40 minutes).*

Add your notes

Feel free to write down your thoughts on post-its or the paper on the table. Thoughts may be particularly important to note if you find yourself in a small minority, so we don't lose that voice of 'dissent'.

Please mark your comment with the relevant statement number.

A table may also decide to reword a statement so that all can achieve consensus. Please annotate the Statement Card clearly. Add any explanation on the back. Amended statements still need to go in the 'no consensus' folder, reflecting the need to modify the original statement as written.