



D2.5 Report on public engagement events

Exploring the public's conceptualisations of public benefit – ensuring public concerns are fed into best practice guidelines for COMFOCUS



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Glossary

Abbreviation	Full form
FCS	Food Consumer Science
GDPR	General Data Protection Regulation
RRI	Responsible Research and Innovation
ISCED	International Standard Classification of Education
UNI	ISCED 5-9, equivalent to University level or more of educational attainment;
NON-UNI	ISCED 0-4, equivalent to less than University level of educational attainment

Executive Summary

Task 2.7 aimed to foster public engagement on social, ethical and legal concerns and barriers to the sustainable Food Consumer Science (FCS) community. Consumers are the key stakeholders of COMFOCUS, both as data subjects and as beneficiaries of FCS community. Their engagement is necessary to ensure concerns of the publics are fed into the best practice guidelines.

The overall objective of Task 2.7 was to explore the public's conceptualisation of public benefit to capture its potential implications for COMFOCUS. To do so, we conducted public engagement events in 6 European countries: Denmark, Italy, Germany, Slovakia, Spain and the UK and with 2 different levels of attained education: University level equivalent or more and less than University level.

Differences were found among participants from various countries and levels of attained education, but one commonality identified across groups was that Health was viewed most often as a public benefit. Although initially predominantly related to Health services, debates and discussions as part of the PlayDecide (playdecide.eu) methodology used led this to change and become more focused on Improving health. We captured not only perspectives on public benefits and their associated trade-offs and related core responsible actors but how a focused discussion could lead to a shifting of views, in the case of Health from a more remedial approach to one of a more preventive nature, with greater focus on facilitating the consumption of healthier and more sustainable food options, relevant to COMFOCUS.

We also found that autonomy was an important issue both in relation to food choice, but also in terms of how people's consumer data is used. Although autonomy was not necessarily viewed as a public benefit by most of our participants, discussions did highlight that people were very resistant to being told what to do. They were often much more open to the price of healthier and more sustainable foods being reduced and other nudges.

Our participants were aware their food consumer data is often being used to manipulate them and/or to generate profits for others which excludes them. They wanted to know what their data was being used for, and had suggestions of how it could be employed to further benefit them, such as in assisting them to make healthier and/or more sustainable food choices or providing them with personalised recommendations based on their current state of health. Thus, if their data is being used for "public benefit", they want and need to be included in the conversation of what that definition of "public benefit" entails.

Dilemmas also emerged around preferences for local vs imported food. Although local food was prized for its higher quality and sustainability by many, it was also considered to be inaccessible by some and to reduce the diversity of food choice which many have become accustomed to.

Finally, participants were open to receiving further assistance in making healthier and/or more sustainable food choices as a public benefit. While some believed that education (for children, adults and families) and information (such as labels) would assist those who need it to make healthier choices, others thought it to be insufficient, but that “healthier” food that was cheaper, and other nudges and enablers would be beneficial.

Although we also summarise here some of our findings related to differences between participants from different countries and levels of attained education, it must also be noted that our sample sizes were small (N=105), with 16 to 20 participants in each country and 52 participants from higher (UNI, University level equivalent or more) vs 53 from lower levels of attained education (NON-UNI, Less than University level).

Denmark had a higher number of participants than most countries, but they initially mentioned a smaller variety of benefits, trade-offs or responsible actors across education groups which were mostly not food-related. Some of the unique points which Danish participants raised were related to free health services giving people the license to behave in unhealthy ways, as well as concerns related to how their data is being used. After discussions there was a marked increase in food-related benefits, trade-offs and responsible actors especially among the UNI group.

Germany also had a considerable number of participants and mentioned a variety of benefits (especially food-related benefits), trade-offs and responsible actors. Their unique points of discussion revolved around personal responsibility for making healthier choices, although they also believed the Government should assist the population to make better choices and recognised the existence of financial challenges in doing so. Health (and especially Improving health) was the top mentioned benefit after discussions, replacing Regulation (which had been mentioned especially in relation to improving the cost-efficiency of Companies and food production).

Italy had relatively fewer participants than Denmark and Germany, and thus fewer mentions of benefits, trade-offs and responsible actors. Italian participants initially focused on Other public services as benefits. The unique points of their discussions centred around personal experiences and how personalised feedback could assist people in making healthier choices in the NON-UNI group, whereas these were more systems-focused around increased education and information

in assisting people in making healthier choices in the NON-UNI group. They also discussed nudges and limiting the availability of unhealthy food, although some believed this would wipe out the food culture in entire regions.

Slovakia had the lowest number of participants alongside Italy, and also the lowest number of public benefits, trade-offs and responsible actors mentioned. The public benefits were similarly focused around Other public services initially. Their unique discussions revolved mainly around the relative superiority of local food in terms of its quality as compared to imported food, and their concern that big Hypermarkets were being built on fertile land better used for agriculture. They were also dissatisfied with the subsidies given to local producers and believed that education on healthy eating is important for children and families. and this was reflected in the public. After discussions, public benefits became more food-related and included greater Regulation, especially in the form of government subsidies given to local farmers.

Spain had a medium number of participants but several mentions of benefits, trade-offs and responsible actors, including benefits related to Moral Values among the top 3 most often mentioned benefits and Consumer Organisations as a responsible actor. Participants from Spain were very aware of the cost and time involved in healthy food preparation and how this has been affected by women working outside the home (NON-UNI). They were mostly in favour of local food and worried about the impact on Sustainability of the distance imported food could travel. After discussions, the main benefit cited shifted to Education, although better accessibility to Healthy/Sustainable options occupied second place.

The UK also had a medium number of participants and a similar number of benefits, trade-offs and responsible actors mentioned. NON-UNI participants mentioned a greater number of benefits related to the accessibility of Healthy/Sustainable food options as compared to UNI participants prior to discussions. Participants in the UK were especially vocal about not limiting or raising the price of unhealthy food choices in the UNI group alongside the importance of educating people about eating healthily on a budget. Within the same group, others supported the notion that it is not about a lack of knowledge of healthy eating, but having the financial ability and time to prepare and eat the healthy food they would like to eat. The unique points raised by the NON-UNI group revolved around how children are too fussy nowadays because they are given too much choice, and how unhealthy foods should be reformulated or banned to assist in healthy eating. Apps were also mentioned as a way to use data for public benefit, by promoting healthier choices.

The main differences identified between participants in the UNI and NON-UNI groups were likely related to their lived experiences. Those from NON-UNI groups were more aware of the challenges and barriers to eating more healthily and sustainably as well as the positive consequences that could accrue from the public benefits listed, as likely beneficiaries. They were also more open to receiving assistance in making healthier and more sustainable food choices but were more wary of food innovations. The discussions also stimulated the number of benefits and responsible actors described, as well as the number of Trade-offs defined as something which must be forfeited beforehand in exchange for a benefit.

Although participants from UNI groups were especially aware that “free” choice was not always free, especially due to financial constraints, they were also proponents of providing more education and information to those who needed it (i.e., which mostly referred to others) as a solution. They defended the preferability of Local over Imported food (as the often higher costs of these products might have represented less of a challenge), being more future-focused on issues such as Sustainability, although also mentioned enjoying preparing food with a variety of ingredients from various places, which of course would be limited with less food coming in from abroad. After the discussions, the number of mentions of benefits associated with more accessible healthier and/or sustainable food options increased alongside greater Regulation, indicating the need for more government intervention in this area including related to pricing. In addition, more barriers to public benefits were mentioned, signalling an increased awareness of these.

This exercise of exploring public benefit derived from consumer food data from the consumer/citizen’s perspective with this limited sample is only a starting point rather than a conclusion. Our findings highlight the need to draw for frequent engagement in dialogues around public benefit with diverse groups, not just as beneficiaries, but also because of how the concept can evolve after open discussions and also over time, with ever-changing and ever-increasing uses for data being discovered.

In terms of data governance, it also implies that how public benefit is being defined should be clearly stated in setting research agendas, proposals and consent forms, to increase transparency and enable people to evaluate how these align with their own views of public benefit. In this manner trust can be increased as well as a willingness to further accept inevitable risks and trade-offs which are bound to emerge.

1. Introduction and Background

1.1 Introduction

The aim of COMFOCUS is to advance the food consumer science community beyond its current level of fragmentation that prevents it from being a user-relevant data-rich science it could be in support of European healthy and sustainable food choice public policies and private strategies. Its goals are to:

- Foster the principles of open science through data and infrastructures sharing
- Develop digital platform that links food consumer data across Europe;
- Align its processes with Responsible Research and Innovation (RRI) and FAIR principles.

A crucial part of this promise is data sharing, to move towards Open Science, and shift towards collaborative science. General Data Protection Regulation (GDPR, 2018) permits data sharing under two conditions: consent and public benefit. The latter is a likely legal basis for most open science due to the complexity of sourcing informed consent from the participants. However, it is not clear how public benefit is defined and the GDPR is not explicit about it. So, if we are to create the COMFOCUS community in line with both the GDPR and RRI principles, we need to clarify what is considered public benefit that may arise from sharing food consumer data. This is the question that we sought to explore, through public engagement across 6 countries.

Thus, our main goal was **to explore public’s conceptualisations of public benefit (in terms of examples, related trade-offs and responsibility for) both before and after focused discussions linking public benefit to food consumer science related themes, also as a reason for sharing food consumer behaviour**. To do this, we had participants answer open-ended questions related to what constitutes “public benefit” across 6 European countries (Denmark, Germany, Italy, Slovakia, Spain and the UK) and looked at how these perceptions evolved in a participatory discussion using the PlayDecide methodology (<https://playdecide.eu/>) and a consensus-based vote on the ranking of different policy options on different types of public benefit derived from the use of food consumer data.

1.2 Public benefit – conceptualisations and challenges

The term “public benefit” is used across a range of disciplines, from law to philosophy to economics, but there is no single definition even within the same field (e.g., Williams 2022; Del Baldo 2019; National Data Guardian 2022; Harrison, 2021; Hazelkorn and Gibson 2019; <https://www.lawinsider.com/dictionary/public-benefit>). Some common elements are found in its usage and are encapsulated in this definition from a law dictionary: “something that will improve the welfare of (or reduce harm to) society or part of it” (<https://www.lawinsider.com/dictionary/public-benefit>).

Whilst there may be some agreement about the general principle behind public benefit, what this means in practice is often a matter of societal negotiation among societal actors (both as stakeholders and beneficiaries of the public benefit) (Hazelkorn and Gibson, 2019). The process of negotiating what constitutes public benefit itself can be considered a public benefit as it increases transparency of the reasoning behind the public benefit and trust between the societal actors responsible for creating and delivering the public benefit, such as e.g. scientists and policy-makers (Harrison, 2021). It ensures consensus around how the collective investment into public benefit is directed and it helps societal actors overcome self-interest. Public benefit is not an absolute concept, but in many ways will emerge from societal and cultural processes as societies will imbue different meanings into the vision of what is for the benefit of all. Dialogue and debate are therefore central to decisions about public benefit.

Dialogues around public benefit often deal with the issues of not only what it is, but what it is not, trade-offs that need to be made to enable public benefit, and responsibilities and accountabilities associated with the intended realisation of public benefit. Articulation of trade-offs aids transparency of decision-making and ultimately affects the way in which responsible actors govern public benefit and direct resources. For instance, in the context of COMFOCUS, clarity about not only what people consider to be public benefit, but also what they are willing to give up or forfeit to achieve it and the extent to which personal data is part of that consideration, can help the scientific community reflect on the ethical and governance framework within which research is conducted. COMFOCUS will build on this insight as it will facilitate the current efforts of COMFOCUS to develop responsible governance and help articulate the concerns and responsibilities that the scientific community should adopt within the practices of open science. In the sections that follow the way in which trade-offs are conceptualised in the context of public benefits is introduced (related to specific aims 1.1.2. and 1.2.2 Crucial trade-offs involved with respect to public benefits) as well as some considerations on who is responsible for public benefits (Specific aims, 1.1.3, 1.2.3 Core responsibilities assigned to different stakeholders in relation to public benefits)

1.3 Conceptualisation of trade-offs as they related to crucial trade-offs involved with respect to public benefits

A trade-off can be defined as something you give up to obtain something else. Green and Venkataramani (2022) have suggested that “economics is the study of trade-offs that individuals, institutions, or countries face when making decisions under resource and time constraints.” Economics give us insights how people may make decisions involving trade-offs, starting from the premise that they will act in their own best interest (Cawley, 2004). For instance, while people value their health, they may also value other things more (Cawley, 2004). They need to rank decisions related to competing priorities, however, in the process may overlook the

value of certain benefits or conversely, the costs/risks of certain behaviours. They might also be unaware of how their actions may benefit or harm others now or in the future.

Although often referred to as cost-benefit analyses, where stakeholders rationally try to minimise costs and maximise benefits when making a choice, people do not necessarily put much thought into and neither are they clinical or comprehensive in their deliberations. People often exhibit heuristics in making judgments about trade-offs, such as loss aversion or gut feelings, that drive their assessments. People are motivated to avoid short-term loss rather than achieve longer-term gain (Khaneman and Tversky, 1979), though this may be moderated by cultural factors (Wang et al, 2017). For instance, a person may value their health, but they value having a quick, filling, and palatable meal more, thus underestimating the longer-term risk of unhealthy eating habits in order to avoid the immediate cost of more expensive, healthier foods. When considering the trade-off between risks and benefits, the risk perception literature has demonstrated that the two are mutually exclusive in people's judgements: those things that are perceived to accrue greater benefit are generally considered to be less risky (and therefore costly), and vice-versa (Finucane et al., 2000) and this is largely due to the role of affect in people's decision-making (as benefit is associated with a positive affect).

However, in addition to these well-documented cognitive and affective heuristics, personal preferences, beliefs and worldviews also influence what is considered public benefits. In public policy, shaped by economic thinking, public benefit and the associated "value" is typically expressed in quantifiable terms and often reduced to monetary expression, to aid comparability and enable transparent articulation of trade-offs. This however may exclude things for which monetisation is a challenge such as intergenerational fairness, sustainability, or human rights. Often, when benefits and costs are not commensurable, transparent accounting of trade-offs may be a challenge both personally and at the societal level, which in turn calls for the processes of dialogue and negotiation. Transparency is closely associated with trust and with ascription of responsibility: low transparency can diminish trust, and it can also affect the processes of governance and allocation of responsibility. How people view responsibility vis-à-vis delivery and custody of public benefit is therefore an important issue in the context of understanding what governance processes should be implemented. We are now turning to the conceptualisation of responsibility in literature as it relates to public benefit.

1.4 Conceptualisation of Core responsibilities assigned to different stakeholders in relation to public benefits

Although the government has often been linked to the provision of public benefits, this has not always been the case. Historically the state's focus was on national security, and other public benefits were ignored or left to philanthropy (Desai 2003). Philanthropy (which has been referred to by Sulek (2010) as the use of private resources for public benefit) itself has also been associated with the government (such as where monetary

gifts are received and administered by the government). Philanthropy is not always singularly motivated by compassion but has included such things as the fear of infection or disease or the enforcement of what is perceived as appropriate moral behaviour (Jung & Harrow, 2015). It has targeted selected groups of people whose characteristics made them deserving causes but have not provided for all those in need (Jung & Harrow, 2015). Governments funded by the public have evolved to taking a more active role in providing public benefits, and also in regulating non-governmental organisations claiming to have public benefit as their aim (Jung & Harrow, 2015, Moore, 2005). However, this role has been somewhat reduced with the advent of neo-liberal ideology that demanded the shrinking of the state and the reliance on the “market” as arbiter of public benefit. This has led to proliferation of charities and not-for-profit organisations filling the gaps in delivering public benefit in some countries (e.g. UK). Moore compiled an extensive list of 26 “public benefit” activities within different European countries in 2005 typically delivered by charities and foundations in Europe. Those included are based on needs, values and traditions and range from activities such as assistance to refugees to consumer protection, culture to democracy, ecology to social cohesion (Moore 2005). Charities and not-for-profit organisations providing public benefit activities focus on societal and environmental value, while private companies tend to focus on economic/financial value for themselves and their shareholders (i.e., private benefit).

Since Covid 19 the State has re-emerged as the most important responsible actor of public benefit through public expectations of provision of treatments, vaccinations, financial help and food to the public in response to the pandemic. However, for the issues that are as complex as food system it is widely accepted that the delivery of the public benefit for all sections of society should be both created and managed by a broad cross-section of society and social actors. Similarly, in the context of research and innovation systems and specifically the GDPR, scientists are tasked with taking responsibility for carrying out research for public benefit, however, within this imperative, definition of what public benefit entails is sorely lacking. The assumption is that public benefit is somehow unproblematically determined through the process of research design. However, as we have already discussed above, public benefit is complex and it involves trade-offs, both of which require deliberation and negotiation. It is therefore necessary to engage the public in considerations about public benefit and who is responsible to deliver it.

1.5 Public benefit and COMFOCUS

Within COMFOCUS we aimed to open up a dialogue, across a number of countries, among the publics with diverse backgrounds on what constitutes public benefits, what trade-offs are necessary and what responsibilities are desirable to achieve these public benefits, especially in the context of using consumer food-related data. We started from the premise that such a dialogue is not only a manifestation of Responsible Research and Innovation within the project through enabling of societal engagement with the project, but a

necessary activity to inform and enhance our thinking about how to conduct open science in an ethically and societally acceptable way that can lead to public benefits.

2. Specific aims and objectives

For ease of reference and clarity, the specific aims and objectives of this task were numbered and are as follows:

1. To understand the extent to which the concept of “public benefit” resonates with consumers/citizens (also) as a reason for sharing food consumer behaviour information by identifying:
 - 1.1. How consumer/citizens intuitively describe public benefit in terms of:
 - 1.1.1.Examples of public benefits
 - 1.1.2.Crucial trade-offs involved with respect to public benefits
 - 1.1.3.Core responsibilities assigned to different stakeholders in relation to public benefits
 - 1.2. To what extent dialogue and debate on public benefits derived from food consumer science related themes and policy options relevant to COMFOCUS shapes and affects consumer/citizen conceptualisation on delivery of public benefit, including by identifying how consumers/citizens intuitively describe public benefit in terms of:
 - 1.2.1.Examples of public benefits
 - 1.2.2.Crucial trade-offs involved with respect to public benefits
 - 1.2.3.Core responsibilities assigned to different stakeholders in relation to public benefits
2. To understand the extent to which the concept of “public benefit” and its associated aspects differs across 6 countries and 2 levels of attained education

3. Methodology

3.1 Selection of the methodology

We have engaged the publics from 6 European countries (Denmark, Germany, Italy, Slovakia, Spain and the UK) through a PlayDecide “serious game” public engagement format. This is an open-access resource where players familiarise themselves with a question, gain insights from different perspectives and develop their own opinion through simple, fact-based, and respectful discussions of controversial issues, with guidance from a

facilitator (Agell, Soria, & Carrió, 2015; PlayDecide; Ricciardi & De Paolis, 2014; Ward et al., 2019). Its aim is to encourage participants to arrive at a consensus of the policy option(s) which can best address the theme of interest at the end of the discussion (PlayDecide). PlayDecide has over 350 downloadable games in 28 languages related to different themes on its website and is supported by the European Network of Science Centres and Museum to drive science engagement forward (PlayDecide). It was chosen as a suitable method because it is an innovative, widely tested resource and has been used to engage the public on a variety of challenging, contested issues.

The question posed in our adaptation of the PlayDecide serious game was related to which policy option proposed corresponded to the greatest public benefit from the use of consumer food data. An extensive list of potential policy options was created and later narrowed down to 6 by the wider research team. The policy options are listed in Table 1 below.

Table 1. Policy options which provide the greatest public benefit using food consumer data.

Options: What provides the greatest public benefit from the use of consumer food data? INDIVIDUAL VOTING

Temporary name: _____

	No public benefit					Extreme public benefit
	1	2	3	4	5	6
A) Reducing the number of food products available, keeping only those which are healthier or more sustainable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B) Linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C) Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D) Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E) Encouraging people to choose new types of food that are healthy and more sustainable than the food that we are used to (i.e., insects, genetically modified food), even if it is not familiar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F) Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Before voting on the options individually and as a group, participants were asked to choose 1 or 2 cards from each of the card categories, which included: Information cards, presenting current facts related to consumer food data and food choice; Story cards including the experiences of fictional characters related to food choice based on reality; and Issue cards presenting questions for debate around different food choice issues (Ward

et al., 2019). These cards were created based on the literature (e.g. EUFIC, 2020) and on other existing PlayDecide games (Creek, 2021; Hamill, 2013). An example of each of these categories of cards is included below in Figure 1. Participants were also asked to share why they selected each of the cards, thus stimulating discussions. A detailed description of the procedures and cards used in the PlayDecide serious game are included in Appendix I.

Figure 1. Sample of the Information, Story and Issue Cards used in the PlayDecide serious game



To achieve our aim of better understanding the concept of “public benefit” from a consumer/citizen perspective (Aim 1) and look at how that may differ across groups from different countries and levels of attained education (Aim 2) we used open ended questions, before and after a guided dialogue and debate and voting on which policy options using consumer data provided the greatest public benefit.

In order to achieve Aim 2, to examine to what extent perceptions of public benefit differs between participants in different countries and levels of attained education, we collected data in Denmark, Germany, Italy, Slovakia, Spain and the UK in two groups: one with higher attained education (UNI group, equivalent to University level or more, ISCED 5-9) and one with lower attained education (NON-UNI group, equivalent to less than University level, ISCED 0-4) with an age and gender distribution reflecting, in broad terms, the adult population distribution. This diverse range of countries and people provides a sample of different cultural and socio-demographic characteristics.

3.2 Ethics

Favourable ethical opinion was given by the University of Surrey University Ethics Committee on 21 November 2022 (EGA ref: FHMS 22-23 010 EGA Project Title: COMFOCUS Civic Engagement Workshops - What provides the greatest public benefit from the use of consumer food data?) which encompassed data collection in the UK, Spain and Slovakia, as data collection in these countries was undertaken on behalf of the University of Surrey. Ethical approval was also obtained locally for partners in Italy, Denmark and Germany according to their institutional guidelines (given in Italy by the Bioethics Committee of the University of Bologna on 25 Oct 2022, in Denmark by Aarhus University's Research Ethics Committee Institutional Review Board on 26 Oct 2022 and in Germany by the Ethics Committee of the Georg-August-Universität Göttingen on 12 Apr 2023).

3.3 Participants/recruitment

We used a UK recruitment agency and its international partners and collaborators to recruit and incentivise participants in Denmark, Italy, Slovakia, Spain and the UK. An additional recruitment agency was used in Germany. Agencies were tasked with recruiting a quota of male and female participants of different age groups and educational attainment levels, who were able to understand and speak the national language to participate in an in-person focus group.

Table 2 illustrates the number of participants who took part in the focus groups in each country, from 1 December 2022 to 29 June 2023 with a total of 105 participants (49 women, 56 men). Participants were emailed the participant information sheet and consent forms in advance by the recruitment agencies. They also received a physical copy of the consent form and information sheet upon arrival at the focus group and had the opportunity to ask any questions about the study. They then returned a signed consent prior to any data collection.

Table 2. Participant characteristics from each country (UNI: ISCED 5-9, equivalent to University level or more of educational attainment; NON-UNI: ISCED 0-4, equivalent to less than University level)

	DENMARK		GERMANY		ITALY		SLOVAKIA		SPAIN		UK		TOTAL
	UNI	NON-UNI	UNI	NON-UNI	UNI	NON-UNI	UNI	NON-UNI	UNI	NON-UNI	UNI	NON-UNI	
18-24 Years	1 M	1 F	1 M	1 F	1 M	1 F	1 M	1 F	1 M	1 F	1 M	1 F	12 (6 F, 6 M)
25-34 Years	2 F 2 M	1 M	1 M 1 F	2 M	1 F 1 M	1 M	1 M	1 M	1 F 2 M	1 M	1 M	1 F	20 (6 F, 14 M)
35-44 Years	1 F	1 F	1 F	1 F	1 F	1 F	1 F 1 M	1 F 1 M	1 M	1 F	2 F 1 M	2 M	17 (10 F, 7 M)
45-54 Years	1 M	2 M	1 M	1 M	1 M	1 M	2 F	1 M 1 F	1 M	1 M	-	2 F	15 (6 F, 9 M)
55-64 Years	1 F 1 M	2 F 1 M	2 M 1 F	1 M 1 F	1 F 1 M	1 F 1 M	1 F	1 F	1 F 1 M	1 F 2 M	1 F 1 M	1 M	24 (12 F, 12 M)
65+ years	1 F	1 F 1 M	1 F	1 M 1 F	1 F	1 F 1 M	1 M	1 M	1 F	1 F 1 M	1 M	1 F 1 M	17 (9 F, 8 M)
TOTAL	10 (5 F, 5 M)	10 (5 F, 5 M)	9 (5 M, 4 F)	9 (4 F, 5 M)	8 (4 F, 4 M)	8 (4 F, 4 M)	8 (4 F, 4 M)	8 (4 F, 4 M)	9 (4 F, 5 M)	9 (4 F, 5 M)	8 (3 F, 5 M)	9 (5 F, 4 M)	105 (49 F, 56 M)

3.4 Procedure

All partner institutions followed the protocol devised by the research group at the University of Surrey in the UK as sponsor and coordinating partner of the study. In each country the PlayDecide game was run by the same trained facilitators from each of the study teams with 2 separate groups (UNI and NON-UNI) either on the same day or on consecutive days.

Before the game

Participants were handed a questionnaire and asked to individually write down answers to the following 4 open-ended questions on public benefit. The questionnaire also stated that: "There are no right or wrong answers to these questions. We are simply interested in your views are about this."

- 1) Please write down three examples of public benefit.
- 2) What is it about each example that made you consider it a public benefit?
- 3) What are the trade-offs (if any) associated with each of the public benefit examples you listed?
- 4) Who is involved in making each of these benefits available?

During the game (including voting for policy options)

A tailored procedure was developed for the PlayDecide game (described in greater detail in Appendix I). This involved participants individually selecting one or more of each of the categories of cards described above (Story Cards, Information Cards and Issue Cards) and providing an explanation for their card choices, which stimulated discussion. Individuals were then asked to vote and rank each of the 6 policy options related to the greatest public benefit provided by consumer food data. A group consensus was achieved either through group discussions (UK, Denmark, Italy, Slovakia) or by averaging individual scores on voting sheets (Spain, Germany). Audio-recordings were made of the entire duration of the PlayDecide game and later transcribed using Microsoft Word.

After the game

The same open-ended questionnaire which participants filled-in at the beginning of the questionnaire was also filled-in at the end.

4. Data analysis

All data were collected to achieve the aim of better understanding to what extent the concept of “public benefit” resonates with consumers/citizens also as a reason for sharing food consumer behaviour information and how that might differ in groups from different countries and levels of attained education. The main data collected was:

Before the game

Content analysis was used to analyse individual written answers to the open-ended questionnaire on examples of public benefits (Aim 1.1.1), trade-offs related to public benefits selected (Aim 1.1.2) and who is responsible for the provision of these (Aim 1.1.3) and comparing them between countries and education groups (Aim 2).

During the game (including voting for policy options)

Notes and transcriptions of the PlayDecide game led to the identification of the cards selected by the participants as well as quotations from discussions. The information about the selected cards was compared between the countries and groups of different educational levels.

The discussions that emerged during the selection and commenting on the cards by the participants were analysed using thematic analysis (Braun and Clarke, 2006). Thematic analysis is a qualitative analysis methods that involves identifying themes, topics and patterns that emerge within qualitative data. To achieve the harmonisation of the analysis, regular meetings were conducted between members of the team. The initial coding of the country-level data was discussed at these meetings and the coding structure agreed. The quotes were then categorised under the coding scheme, which then led to the identification of the higher order themes.

Finally, the game produced data on individual voting and ranking of the policy options as well as group voting and ranking results. (Aims 1 & 2)

After the game

Content analysis was used to analyse individual written answers to the open-ended questionnaire on examples of public benefits (Aim 1.2.1), trade-offs related to public benefits selected (Aim 1.2.2) and who is responsible for the provision of these (Aim 1.2.3) and comparing them between countries and education groups (Aim 2).

4.1 Data analysis by aims:

To meet each of our aims we carried out the analyses below.

Aims 1.1.1 and 1.2.1 How consumer/citizens intuitively describe public benefit in terms of examples of public benefits:

Content analysis was used to create over-arching categories and sub-categories for benefits which emerged across countries and were agreed upon in wider research group meetings. These are listed below. Following this, the number of instances each category and sub-category were mentioned by participants in each country were counted and compiled for a total number of mentions.

Health (Health services, Reducing burden on health services, Improving health)

Education (Education in general, Food-related education, Health-related education)

Information (Food-related information – i.e., labels, Informed choices, Using consumer food data – non-health-related, Using consumer food data – health related, general information)

Financial Benefits (Money paid by the government – i.e., pensions, benefits)

Regulation (Banning/limiting foods, Subsidies, Taxes, Food quality, Food safety, Food production, Food sustainability, General regulation)

Healthy/Sustainable Food Options (Availability, Convenience, Encouragement/Influence, Research, Price, Appearance, Specialty foods – i.e., diabetes, gluten free)

Other Public Services (Provided by the government – i.e., Libraries, Parks, Public Transport, Sanitation, Safety)

Charities/NGOs (i.e., Churches, Food banks, etc.)

Sustainability (General sustainability, Water, Waste reduction, Energy use reduction, Reducing transportation of food, Animal welfare, Sustainability education)

Moral values (Altruism, Sense of community, Justice and Fairness, Respect, Trust, Peace, Deferred gratification, Gratitude)

Individual rights (Autonomy)

Democracy

Enjoyment (Food-related enjoyment – i.e., pleasure in eating, Non-food related enjoyment – i.e., nature, culture, relaxation)

Aims 1.1.2 and 1.2.1 How consumer/citizens intuitively describe the concept of public benefit in terms of crucial trade-offs involved with respect to public benefits key benefits involved, also in terms of priority:

A similar procedure was used for the trade-offs, with the caveat that trade-offs were not well understood. In analysing our data we coded the different meanings people ascribed to trade-offs, listed below:

Trade-off (Something that had to be forfeited beforehand in exchange for the benefit)

Barrier (Something making the realisation of the benefit difficult)

Consequence (What would happen if the benefit was/ was not available)

Requirement (Something necessary for the adequate implementation of the benefit)

Example (Giving an example of the benefit)

Alternative (Giving alternatives if there are problems in accessing the benefit)

Question (Asking a question related to the benefit)

Reason (Why the benefit is important)

None (Affirming there are no trade-offs for the benefit)

Don't know (Writing "don't know", "?" or leaving the question blank)

Aims 1.1.3 and 1.2.3 How consumer/citizens intuitively describe the concept of public benefit in terms of core responsibilities assigned to different stakeholders in relation to public benefits:

As before, categories of stakeholders were created and listed below which were used to count the number of mentions made of each stakeholder in connection with the public benefits mentioned.

Government (Government, Local Authorities, Health Secretary, Education Secretary, Politicians, Public Administrators, the State, Public Sector, Legislative Power)

People (People in general – i.e., public, ourselves, us, everyone, the final customer, volunteers, the population; People paying tax – i.e., people who are employed, workers, Others – i.e., parents, managers, cooks, etc.)

Companies (Companies, Manufacturers, Food Manufacturers, Food Industry)

Retailers (Supermarkets, Retailers, Shops)

Farmers

Health Care Staff (Health care staff, Doctors, Hospitals, Nurses, Nutritionists, Dieticians)

Researchers (Researchers, Bodies that carry out research)

Media (Social media, Social media campaign managers)

Funders (Funders, Investors, Rich countries)

Charities/NGOs (Churches, Food Banks)

Aim 1.2 To what extent dialogue and debate on public benefits derived from COMFOCUS-type data sharing shapes and affects consumer/citizen conceptualisation on delivery of public benefit.

Research teams from each country analysed the dialogue mainly through thematic analysis (Brown and Clarke, 2012) in the original language. Discussions revolved around the Story, Information or Issue cards which were most often selected by the participants, although additional themes such as “Education” also emerged. In a series of meetings between all the research partners, a common coding frame was developed that was based on the most commonly observed themes. The frame was then applied to the second order analysis to identify the most relevant quotations. The translation of these quotations was then carried out and are included in the cross-country thematic analysis presented in the results. We also looked at the results of the voting exercise as well as the change in the number of mentions of each category of benefit, trade-offs and responsibility to examine how these were influenced and changed before and after discussions and reported them in Aims 1.2.1, 1.2.2 and 1.2.3.

Aim 2. To what extent do perceptions of benefits, trade-offs and responsibilities as well as discussions and voting on policy options differs between participants in different countries and levels of educational attainment.

Here, the number of mentions of each of the categories, themes of discussion and voting on policy options were compared across groups of participants from different countries and higher and lower levels of education (UNI vs NON-UNI)

5. Results

Results are reported under each of the aims. Results by country can be found in the country reports in Appendix II.

Aim 1.1.1 How consumer/citizens intuitively describe the concept of public benefit in terms of examples of public benefits (before):

The categories and sub-categories of public benefit most often mentioned among all participants were Health (health services), Regulation (of food and food production) and Other Public Services (such as libraries, transport, public safety etc.) (Table 4). The top 3 categories mentioned by each group are highlighted in the table below. These were mostly connected to services provided by governments to ensure the well-being of their populations. It is of note that these were mentioned prior to participants having seen the discussion cards or policy options they would be voting for.

Table 3. Count of examples of public benefit given by public benefit category (BEFORE):

Public Benefit Category	Denmark		Germany		Italy		Slovakia		Spain		UK		TOTAL
	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	
Health	8	9	5	3	5	1	5	2	6	2	7	5	58
Regulation	1	0	17	7	1	2	0	6	4	1	1	3	43
Other public services	2	2	0	0	7	2	5	4	5	1	2	3	33
Education	5	6	1	1	2	5	2	0	4	3	1	0	30
Information	1	0	7	8	1	5	1	0	1	1	0	4	29
Sustainability	0	0	4	5	0	0	7	1	1	6	1	2	27
Financial benefits	5	6	0	0	0	1	2	2	2	0	4	2	24
Healthy / sust food options	0	0	4	7	0	2	0	0	1	3	1	5	23
Moral values	0	0	0	3	5	3	0	0	2	8	1	1	23
Enjoyment	0	0	0	1	1	1	0	0	0	4	0	2	9
Charities / NGOs	0	0	0	0	0	0	1	1	1	0	1	2	6
Individual rights	0	0	0	1	0	0	0	0	1	0	1	0	3
TOTAL	22	23	38	36	22	22	23	16	28	29	20	29	308

Aim 2 Comparison between groups in different countries and across education levels (for Aim 1.1.1)

The greatest number of mentions of examples of public benefit were given in Germany, and the lowest in Slovakia. Health received most mentions in Denmark and the UK, Regulation was the most cited in Germany, Other public services provided by the government occupied the top position in both Italy and Slovakia and Moral values were the highest mentioned category in Spain.

Participants from UNI and NON-UNI groups were balanced in terms of the numbers of mentions of public benefits they made (153 UNI and 155 NON-UNI). When examining the responses by education level across countries, Health was mentioned more often in the UNI groups (with the exception of Denmark and Germany) whereas Healthy / sustainable food options were more often mentioned by NON-UNI groups (except for in Denmark and Slovakia, where no mentions were made). The greatest differences in frequency of public benefits mentioned by education level were apparent in Germany (Regulation), followed by Spain (Moral values), Slovakia (Sustainability), Italy (Other public services), and the UK (Healthy/sustainable food options).

There were only very slight differences by education level in Denmark. Other differences between UNI vs NON-UNI groups varied across countries and are discussed further in the country reports (see Appendix II).

*Aim 1.1.2 How consumer/citizens intuitively describe the concept of public benefit in terms of crucial **trade-offs** involved with respect to public benefits key benefits involved (before):*

The concept of trade-off was not well understood as in most cases the answer to this question was blank or “don’t know”. Although some did mention trade-offs (defined as something that had to be forfeited before receiving a benefit) responses were varied and were therefore categorised using the definitions presented in Table 5.

Table 4. Categorisation of responses to "trade-offs related to benefits" question (BEFORE):

"Trade-off" Category	Definition	Examples and Public Benefit category to which it related
Trade-off	Something that had to be forfeited beforehand in exchange for the benefit	- Giving up low-quality, cheap food (Italy, UNI, Enjoyment)
Barrier	Something making the realisation of the benefit difficult)	- Lack of interest in prevention (Slovakia, NON-UNI, Health)
Consequence	What would happen if the benefit was/was not available	<u>Positive:</u> - [Reducing] heart disease and obesity (UK, male, NON-UNI, Regulation) <u>Negative:</u> - Extinction, need to find another planet to live (Spain, NON-UNI, Sustainability) - People are more aware of unhealthy food so may buy them less -- implication on the businesses -- loss of jobs (UK, UNI, Information)
Requirement	Something necessary for the adequate implementation of the benefit	- Balance between complex information and clarity for all (Italy, UNI and NON-UNI, Information)
Example	Giving an example of the benefit	- Healthy foods (Germany, NON-UNI, Democracy)
Alternative	Giving alternatives if there are problems in accessing the benefit	- Going to private hospitals if public hospitals are too busy (Denmark, NON-UNI, Health)
Question	Asking a question related to the benefit	- Are public schools are good enough or do we wish to pay for private schools? (Denmark, NON-UNI, Education)
Reason	Why the benefit is important	- [Having information on food is important] so we know what we are buying (UK, female, NON-UNI, Information)
Absence	Affirming there are no trade-offs for the benefit	- Can't think of a trade-off really – it offers also to make use of out-of-date food (UK, female, UNI, Charities)
Don't know	Writing “don't know”, “?” or leaving the question blank	-

After blank or “don’t know”, the most common response category were Barriers to the realisation of the public benefits mentioned, followed by Trade-offs (defined as something which must be forfeited beforehand to receive the benefit), Negative consequences (in the presence/absence of the benefit) and Requirements related to the benefit.

The most cited Barrier was the expense of better quality goods and services and the most cited Trade-off (defined as something that has to be forfeited beforehand in exchange of the benefit) was cost, in particular cost to the taxpayer. This is not surprising, as most of the benefits mentioned were related to services provided by the government (e.g., Health, Other Public Services). The top 2 categories of responses to the trade-off question are highlighted below in Table 6.

Table 5. Count of responses to trade-offs question by category (BEFORE):

	Denmark		Germany		Italy		Slovakia		Spain		UK		TOTAL
TRADE-OFFS	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	
Blank/don't know/?	13	6	12	8	4	6	11	10	0	0	5	5	80
Barriers	4	1	6	10	0	1	0	2	12	14	4	3	57
Trade-offs	3	5	2	3	9	5	1	2	8	2	5	4	49
Negative consequences	1	1	17	7	0	0	0	0	2	3	4	2	37
Requirements	0	0	7	2	6	3	0	0	6	1	1	3	29
Positive consequences	0	3	0	0	0	4	0	0	0	4	0	3	14
Example	1	1	0	1	0	0	5	0	0	0	0	1	9
Questions	0	3	0	2	0	3	0	0	1	0	0	0	9
Reason	1	2	0	0	0	1	1	0	0	0	1	2	8
Alternative	0	4	0	0	1	0	0	1	0	0	1	0	7
Absence	0	0	0	0	3	0	0	0	0	0	2	0	5
TOTAL	23	26	44	33	23	23	18	15	29	24	23	23	304

Aim 2 Comparison between groups in different countries and across education levels (for Aim 1.1.2)

Participants from Germany provided the greatest number of answers to this question, whereas those in Slovakia provided the fewest. Trade-offs (defined as something that must be forfeited before receiving a benefit) received the second greatest number of citations in most countries, except for participants from Spain (citing Barriers most often) and Germany (citing Negative consequences such as less profit for companies, violation of data protection, less innovation and products being sold at too high a price). Some negative consequences could arguably be viewed as Trade-offs as well, although they would occur after the benefit is realised. The groups from Italy cited the highest number of Trade-offs (defined as something that must be forfeited before receiving a benefit), followed by those from Spain, the UK, Denmark, Germany and Slovakia.

There were differences among education groups in terms of other interpretations of “trade-offs”. Participants from the UNI groups provided more answers to this question (160 vs 144) and mentioned a greater number of Trade-offs (defined as something that must be forfeited to receive a benefit – 28 vs 21). This group also cited there should not be trade-offs in relation to the benefits (categorised as Absence) whereas NON-UNI participants did not do so, and tended to cite more Requirements regarding the benefits than NON-UNI participants. On the other hand, only NON-UNI group participants cited Positive consequences of the benefits

mentioned. The NON-UNI groups also mentioned a greater number of Barriers related to Healthy /Sustainable Food Options in the NON-UNI groups, including such things as cost, accessibility, inequalities and the ease of consuming unhealthy foods.

Aim 1.1.3 How consumer/citizens intuitively describe the concept of public benefit in terms of core responsibilities assigned to different stakeholders in relation to public benefits (before):

Because most benefits mentioned were related to public services provided by the government (i.e. Health, Other Public Services), the most often mentioned responsible actors were the Government, followed by the Public (people in general as well as taxpayers) (Table 7). Companies were also mentioned by at least one participant in every country.

Table 6. Count of responses to “responsibility for public benefits” question by category (BEFORE):

RESPONSIBLE ACTOR	Denmark		Germany		Italy		Slovakia		Spain		UK		TOTAL
	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	
Government	15	19	8	5	17	7	12	12	15	14	16	7	147
People (in general)	6	6	4	6	5	4	1	0	13	4	9	5	63
Companies	1	0	21	13	0	4	3	0	5	4	2	5	58
Shops	0	0	4	6	0	4	0	0	0	3	1	3	21
Farmers	1	0	1	3	0	0	0	0	0	2	0	1	8
Schools	1	0	1	3	1	0	0	0	0	1	1	0	8
Researchers	1	0	1	3	0	1	0	0	0	0	1	0	7
Media	0	0	1	1	2	1	0	0	0	0	1	0	6
Health care staff	2	0	0	0	0	0	0	0	0	1	2	0	5
NGOs	0	0	0	0	0	0	0	1	0	0	0	3	4
Funders	0	0	0	0	0	0	1	0	0	0	1	0	2
TOTAL	27	25	41	40	25	21	17	13	33	29	34	24	329

Aim 2 Comparison between groups in different countries and across education levels (for Aim 1.1.3)

The only country which did not mention the Government as the most frequently mentioned responsible actor was Germany, where Companies occupied the top spot. Participants from the UK, Spain and Italy mentioned a greater variety of responsible actors whereas those from Denmark and Slovakia mentioned the least. Only in Spain did participants cite Consumer Associations as a responsible actor.

Participants from the UNI groups made a greater number and variety of mentions of responsible actors than those in NON-UNI groups (177 vs 152). People in general were also most often mentioned by UNI groups in most countries, apart from Germany and Denmark. This was also the case for Companies, although the exceptions in this instance were Italy and the UK.

After the collection of the initial questionnaire on general perceptions of public benefit we moved into to the focused discussion of the greatest public benefit provided by food consumer science data using the PlayDecide methodology.

Aim 1.2 To what extent dialogue and debate on public benefits derived from COMFOCUS-type data sharing shapes and affects consumer/citizen conceptualisation on delivery of public benefit.

PlayDecide cards: Story, Information and Issue Cards Selected

The PlayDecide methodology includes the selection of different types of cards by the participants and explanations of why the cards were selected, stimulating discussion. Below is an analysis of the main cards selected in each category across countries:

Story cards

These cards included personalised accounts of 12 fictional individuals were created to capture issues around food choice relevant to the policy options providing the greatest public benefit using consumer food data. The four cards most often selected by the participants across countries and the number of participants mentioning them are shown in Table 8 below (all 12 story cards are listed in Appendix I):

Table 7. Most popular Story cards selected across groups:

	<i>Story card 10 – I am a single parent and I am trying to make the money I earn last a bit longer. I am upset to see that the cheapest food options in my city are often the least healthy. I wish there were options for people on a low income like me to feed their family healthily. Someone I worked with suggested that I try beans, lentils or chickpeas but I don't know how to make them, and I really can't spend a lot of time cooking as I work 2 jobs.</i>	<i>Story card 4 – I am a professional living on my own. I enjoy creating exotic dishes on the weekends and inviting a few close friends over to enjoy them with me. I love the variety and selection of foods I can get in my town, from fresh farmers' market produce to the international ingredients which make a dish special. Access to this wide variety of foods is important to allow us to enjoy what we eat.</i>	<i>Story card 3 - I am a cook in a school canteen. We have been trying to make our menus more sustainable and healthier for the children. We recently sent a letter to the parents that we will be reducing the meat in our stew and adding more beans instead and invited the parents to come and taste it. Some have complained and opted to send lunch into school instead, but the majority were happy to support the change.</i>	<i>Story card 2 - I am a busy working mother with 3 children. When I go to the supermarket I need to be as quick as possible in buying food that my family will like that is not too expensive. Sure, I want it to be healthy and sustainable, but I simply do not have the time to read labels or compare products. I just grab what I can and run. I am so glad there are ready meals which I can just put in the microwave when I get home.</i>
NON-UNI	11	6	9	7
UNI	16	16	7	7
TOTAL	27	22	16	14

The story card most selected across participants highlighted the difficulty in eating healthily on a budget, and the lack time and familiarity in preparing other nutritious food which might be cheaper. The second most

popular card was related to the enjoyment of cooking food with a local and imported ingredients for oneself and others, followed by the substitution of meat for pulses in school dinners.

Aim 2 Comparison between groups in different countries and across education levels (for Story Cards)

The difficulty of eating healthily on a budget was the most popular story card in Denmark and Germany whereas Enjoyment of food preparation with a variety of local or imported ingredients was the most selected story card in Slovakia. In Italy the substitution of meat for pulses in school dinners was the most popular choice, whereas in Spain, it included good intentions to eat healthily but a lack of time to do so. In UK, the difficulty of eating healthily on a budget shared the top spot with 2 other cards not as popular in other countries (a builder upset that he could not find his usual unhealthy meal in shops and a vegetarian who believes there should be more vegetarian food on offer in stores).

NON-UNI groups selected the difficulties of eating healthily on a budget most often. Although also popular among UNI groups, it was tied in first place with the card describing the enjoyment of preparing food with a variety of ingredients from various sources. The latter was not as popular with the NON-UNI groups as it came in 4th place. The substitution of meat for pulses in school dinners and good intentions to eat healthily but a lack of time to do so were more popular among NON-UNI groups.

Thus, being able to afford and prepare healthier food was an important consideration for both the UNI and NON-UNI groups, as illustrated in the quotations mentioned before, whereas the ability to enjoy both local and imported food was highlighted mainly among UNI participants.

Information cards

Six information cards presented factual information on the themes relevant to the issues discussed. The three cards most often selected in this category are indicated in Table 9 below. All six information cards appear in Appendix I:

Table 8. Most popular information cards selected across groups:

	<i>Info card 3 - Choice is an important part of our current food system. People like having choices because it gives them a sense of freedom and makes them feel more powerful and in control of choosing the 'better' option. In the past, people have had fewer food choices because there were fewer types of food and food products available. Even today, although this has changed, many people can't afford to choose what they would like but need to content themselves in choosing from what they can afford. Having too many choices can also be bad for our health and the environment and can lead people to feel overwhelmed.</i>	<i>Info card 6 - Taxes make the prices of food products higher, so people are less likely to buy them. When the price of sugary food and drink is made more expensive, less is sold, so companies in the UK for example reduced the amount of sugar in their products to keep the price the same. Incentives work in the opposite way - they make healthier products cheaper and easier to buy, making people more likely to eat them. Fruit and vegetable vouchers in the USA led to more of these foods being bought. Taxes or incentives can reduce profits for food companies, so they resist them. Some consumers don't like them because it reduces their freedom of choice.</i>	<i>Info card 1 - Food consumer research helps us understand why people eat what they eat. To do this we need information on what people are eating (e.g., from questionnaires in person or in an app, food orders online or in a restaurant, supermarket loyalty cards, menu choices in a cafeteria) and information on why they made the choices they made (e.g. because it was cheap, because it tasted good, because it was easy to make, because it is healthy, because it is good for the environment, because I wanted to try something new, because I always eat this type of food).</i>
NON-UNI	29	18	15
UNI	30	21	13
TOTAL	59	39	28

Choice was the most selected information card across all participants. It discussed the positive and negative aspects of choice in addition to whether people have a choice. Taxation and incentivisation was the second most popular information card chosen, explaining both approaches as well as some associated trade-offs. The third most selected card explored data used in consumer food research.

Aim 2 Comparison between groups in different countries and across education levels (for Information Cards)

Choice was the most selected card in Germany, Slovakia, Spain and the UK. Taxation and Incentivisation was the most popular card in Denmark and it also shared the top spot with Personalisation (sharing personal data with health professionals or Apps to received personalised food choice recommendations) in Italy.

The number of participants was balanced across UNI and NON-UNI groups in the selection of the cards. The choice of information cards suggested that Choice (or the lack thereof) is a salient issue across countries and education groups. It also suggests that Taxation and Incentivisation are on people's minds and that participants were interested in how their data was being used for consumer food research.

Issue cards

Eight issue cards were developed which offered questions for debate. The 5 most popular cards are listed in Table 10 below and the complete set can be found in Appendix I.

Table 9. Most popular Issue cards selected across groups:

	<i>Issue Card 4 - Local alternatives or imported food? Should people be encouraged to purchase local alternatives, substitutions, and adaptations for food and ingredients from other countries or should they be allowed to make a free choice about where the food they purchase comes from?</i>	<i>Issue Card 1 - Unhealthy eaters or All? Should we focus on people who are eating the least healthily and try to help them change their diets or should we focus on helping everyone make their diets a little bit healthier?</i>	<i>Issue Card 2 - Less environmentally friendly or All? Should we focus on people who are eating foods which are worse for the environment to encourage them to make different choices, or should we help everyone make their diets a bit better for the environment?</i>	<i>Issue Card 7 - Health in the future or immediate gratification? Should people give up some of the foods that they like and are cheap to be healthier and prevent disease or should they just enjoy what they can right now and not worry about the future?</i>	<i>Issue Card 8 - Get involved or ignore? Should people be asked to join the conversation about what they can do to make sure that the food that we can buy is healthy and plentiful for people around the world or do they want governments, scientists, and companies to argue about it amongst themselves, as long as they have their cheap and tasty food?</i>
NON-UNI	19	23	14	12	8
UNI	27	9	13	15	15
TOTAL	46	32	27	27	23

The most selected Issue card between having access to imported foods or to be limited to those produced locally. In second place was the issue to focus only on those eating unhealthily or to help everyone eat more healthily. There was a tie in third place between focusing only on those eating in a less environmentally friendly way or helping everyone and thinking about health in the future or immediate gratification. In fourth place was the issue of whether to join the conversation on making food choices healthier and plentiful around the world to keep things as they are.

Aim 2 Comparison between groups in different countries and across education levels (for Issue Cards)

Local vs Imported foods was the most often selected card among participants in Denmark, Germany, and Slovakia. Unhealthy eaters or all was the top choice among participants in the UK, whereas this was Less environmentally-friendly eaters of all for those in Italy. For Spain the Issue card most selected by participants was thinking about health in the future or eating with immediate gratification in mind.

Local or imported foods was the first choice among UNI group participants, whereas Unhealthy eaters or all was the top choice among NON-UNI participants. Less environmentally-friendly eaters or all was in third place for NON-UNI groups, whereas it lagged behind thinking about health in the future or immediate gratification and whether to join the conversation on making food choices healthier for the UNI groups.

The selection of Issue cards highlighted differences between the UNI and NON-UNI groups. Mainly among UNI participants (but also to some extent among NON-UNI participants), the debate on whether to support the importation of food or to be limited to that which is locally produced was often raised. Focusing on those eating unhealthily or improving the diet of all was the most often mentioned issue among NON-UNI participants.

The selection of these cards highlighted differences among participants from different education groups in most countries (apart from Slovakia and Germany, where local vs imported food was most salient). This suggests that those for whom eating healthier may be more challenging because of limited means, time or other resources are more aware of the need for further assistance in making improvements (both health and sustainability-wise) which should be accessible to all. On the other hand, participants from UNI groups may have been less concerned by a reduced selection of cheaper, imported foods, as they might be better able to afford local products and reduce the mileage travelled by their food. It was also interesting to note that participants in the UNI groups also raised issues related to “Health in the future or immediate gratification” and “Get involved or ignore” more often, suggesting future orientation and a desire (and also perhaps the confidence, time and availability) to be part of the conversation on healthy food for all.

Main themes emerging from transcribed discussions

The main themes identified across countries in transcribed discussion were choice-related, including **free choice, healthier and unhealthier food choices, local or imported foods, the role and responsibilities of actors in influencing food choice and further assistance required in making healthier food choices**. Some quotations on **public benefit** and the **use of consumer food data** are also included after the other themes. For a discussion on themes identified in groups within particular countries, please see the individual country reports in Appendix II.

Free choice

The quotations below revolve around the general issue of choice. Some participants have discussed free choice as a value that must be protected, however, this is sometimes caveated with the recognition of constraints (e.g. financial) that exist on our ability to exercise these choices. Also discussed was the degree to which healthy choice should be imposed or made mandatory as opposed to people being gently nudged towards them.

"[...] so one could better guide people instead of forcing them into healthier choices. [...] in regard to if it has a negative effect, then I think people would find a way to get it [unhealthy foods]. So to protect the free choice, if they mean it's their right, in some way."

- Denmark, male, NON-UNI group (H)

"...it should perhaps be a fairer thing, not taxing indiscriminately what one thinks others should do. It put me in a bit of trouble, so maybe it's right that consumers don't agree so much because it's a limitation of their freedom."

-Italy, female, UNI group (S)

"I think that choice is great. I think that's what kind of gives us freedom in this country is that we have so much choice and if you wanna be vegan then you can be vegan, if you wanna eat crickets you can eat crickets."

- UK, male, NON-UNI (F)

...

"[...] and then F, the free choice, I have put this as the lowest one, because I do not think our free choice is so free in the end. So that was just that."

- Denmark, female, UNI group (P)

"The three precisely because they are currently yes very much choice of food and some people still cannot afford it. In the past, there was less food where you couldn't choose so much and it wasn't as noticeable as it is today."

- Germany, female, UNI group (B)

"Obviously, if the supermarket doesn't give you the opportunity to do this [i.e., to choose healthier food], you are unable to make a choice and therefore you eat what is sometimes not healthy."

- Italy, male, NON-UNI group (O)

"I would say to everyone that we eat not only according to choice, but also according to finances."

- Slovakia, female, NON-UNI (P)

"...you could argue everyone has choice because we all go into the supermarket and have the same options available, but we don't all have choice because some people can't afford to buy the food that is better nutrition and what they should be feeding their family."

- UK, female, UNI (R)

Healthier and unhealthier food choices

Drivers of healthier and unhealthier food choices were also discussed across countries. The 'Healthy choice' mantra is often perceived as unduly imposing, creating expectations of a particular lifestyles that can marginalise and increase feelings of helplessness when people are unable to achieve this. Unhealthy choice is seen as yet another legitimate choice by many, and this is where freedom and agency are considered to be of higher order value than health. Finally, a number of participants discussed levers of choice – be it Nutriscores or other policies as a useful tool to achieve healthy choice.

"No one should force me to eat healthy when I do not feel like it"

- Italy, male, NON-UNI group (A)

"Like if people wanna be...I think if people wanna be unhealthy and eat sugary stuff I think that should be their prerogative and they shouldn't be like charged to be...to have like sugary stuff. I don't really see the point of that. 'Cause if you wanna, if you wanna make a conscious choice to eat healthier like you can do it..."

- UK, male, UNI group (S)

"The choice of what it is...[...]. The feeling of freedom, power and control. And you can only change things with people, not just for people. It has to be both."

- GER, female, NON-UNI group (O)

...

"... somehow I think the whole problem lies in that we are working against each other, because these stores [...] or where we are shopping, they would like us to buy certain goods and they need a large profit. Well, they made a study at some point, where it showed that if you put vegetables up near the cashier, well, then it sold way better, instead of the candy, but since they made more money on the candy then after the study disappeared, or like two months after or what it was, then the candy was put back up. So, this thing with a government or other companies that wants us to be healthier... We need to make the right choices and we really need to want it ourselves. It is being opposed those places where we have the opportunity to buy the goods, and I also think that the price counts, as we all talked about in here."

- Denmark, male, UNI group (O)

"...In the past, people had less choice, which I agree with on the one hand. On the other hand, today the choice is wide, even so, people may be focusing on some of the unhealthy foods."

- Slovakia, female, UNI (V)

"...go for the healthier options or like suggesting beans, lentils and chickpeas, but she doesn't know how to make them. It's the same with me. Like how? How do you do it? And then they're not gonna eat it and that's why. And then she says that she's explaining that she has two jobs. So do I. And you don't have time to cook. So you're continuing, doing...at the end you haven't got any money."

- UK, female, NON-UNI (C)

"(...) I see the problem [with unhealthy choices] not necessarily with the consumer, but also with the producers and sellers. Other countries, especially in Latin America, solve this problem by means of a Nutri-score, which is prescribed by law, so that the sellers have to write on it what it is. Advertising is reduced, and these are precisely the levers where I think the state can intervene in order to bring this educational gap, (...)."

- GER, male, UNI group (E)

"And also, the point that has already been mentioned, that we have more choice, that nevertheless all cannot afford [it]. So not all people can afford it and that's bad for health and the environment."

- GER, female, NON-UNI group (O)

Local or imported food

There was a general feeling among most participants that consuming local food was a good idea and the right thing to do. Many defended the higher quality and more sustainable nature of foods produced locally as a better choice:

"[...] and one could replace some of the things people usually does. So, if one informs about what we actually have at home that can be used to create exactly the same dish, if using this product that we already have here, instead of importing it from some exotic place. And then as P said, to follow the seasons."

- Denmark, female, UNI group (O)

"I would abandon all foreign importers and put only domestic products on the market. And to keep them alive, to be supported by the state, to eat domestic food, not foreign food."

- Slovakia, female, NON-UNI (K)

"... I'm lucky, I live in the countryside, so I buy from farms that I've seeked (sic) out locally to where I live. I don't eat a great deal of meat, I couldn't eat it every day so therefore, I can afford to buy, you know, pastured meat that's of a good quality..."

- UK, female, UNI group (P)

"It is better to use local food than food that comes further away. I mean, I do not have to drink necessarily seltzer water from Italy. And it's already important to buy local food here."

- Germany, female, UNI group (B)

On the other hand, some were not as positive about local foods, raising issues related to the higher costs of local or organically produced food and questioning whether this was in fact accessible to the wider population. One suggested local food was of poorer quality and another questioned what can be defined as "local", defending the wider variety offered by a choice of foods that goes beyond one's national borders. There was a relative scarcity of comments on the possibility that imported food might occasionally be more sustainable.

"My grandfather went on for a lifetime to go to his farmer friend and bring home some stuff that they drank and ate, the worst I've ever tasted in my life. But he said "ah, as good as my farmer friend's", and his farmer friend earned a living."

- Italy, male, UNI group (G)

"We had a farm shop near us....but I went with my friend one time and she bought a chicken. It was about this big, no lie, and it was organic and it was £13.00. And I was like "wow". But then you go in like Lidl or Aldi and you get a big chicken and it's like £3.99. You know that's £10 difference."

- UK, female, NON-UNI group (S)

"Locally, you have to ask yourself the question, what does local mean? Is it local to my county or is it my state? Or is it my country? Is it in Europe? And I think even Europe is still relatively local, and you still have a large selection and still have the freedom to decide what you want to buy."

- Germany, male, NON-UNI group (B)

Role and responsibility of actors in influencing food choices

Many participants thought the government should take a more active role, rather than simply allowing the market to lead the way using the strong influence and large budgets of the advertising industry. This included promoting local products, imposing regulations on companies and supermarkets around the healthfulness or

provenance of the food they are allowed to sell, using taxes and subsidies to affect prices as well as enabling people to access the healthy food they know they should be eating. A few were very verbal in their rejection of government interference, which they viewed as limiting their autonomy in making choices.

“However, I can say that expensive advertising should not be underestimated. So the arguments are right. Actually, you decide yourself, but not for nothing so much is spent on advertising. And I'm then, also, not quite where you think, “Oh man, it's just so great [and it] is on offer.” [...] But I think, not for nothing is every week advertising in the front door. That already has an influence.”

- GER, female, NON-UNI group (O)

“So therefore, I would like if the supermarkets were... I mean, if they would take on a larger responsibility (for helping people make healthier food choices) and maybe, before they are willing to do that, it would require help from the state and maybe then it would also give an economic benefit in the other end”.

- Denmark, female, UNI group (M)

“On the one hand, the state pretends to support Slovak producers, that is, some brand that no one cares about, because I, as a consumer, do not notice it. Or 80 percent of people don't notice it. Rather, I think there should be an advertising campaign [for Slovak food].”

- Slovakia, female, UNI group (V)

“These people that you know, produce stuff and do stuff. Yeah, there must be some sort of guidelines on them I think. You don't want it to be, I don't know what that word is? For a.. a stateless yeah... No, well, not quite a nanny state, because they're trying to do the real work...you've got to have some little bit of a control over them or what they produce, otherwise it doesn't get to marketplace.”

- UK, male, NON-UNI group (B)

“And then I choose ‘taxes and incentives’, but not so much because I'm thinking of the consumer, they might also feel it, but also the companies, that they should take responsibility or be forced into taking responsibility, yes.”

- Denmark, female, NON-UNI group (S)

“Still it's...seems to me, there's, there's two major things: that one is about people knowing and being understand and be educated to be able to do that kind of stuff and understanding the health benefit. And then the access to it at the other side. They've got to be able to have it available to them locally or in a certain price range where they could buy those simple foods, or just shops and other stuff. So they can do that cheaply. I

mean there are, there are two very different things. One, one is about educating people, the other is about the state or, or us providing that facility for them to be able to use that education.”

- UK, male, UNI group (Y)

“Perhaps even as an end consumer then asked and also rather the supermarkets that they are legally obliged to buy certain products regionally. If one for example eggs would be perhaps a method. That REWE then accordingly contracts with regional producers, which is also partly already made and that the then made available.”

- Germany, male, UNI group (E)

...

“But honestly, to read that the government is changing the rules, that it's trying to help people to eat healthier, no! That is, I find it an intrusion, the government must perhaps give me the possibility to choose, give me tools, but not that it can impose what I have to eat, that's it.”

- Italy, male, UNI group (R)

“... like I read in the newspapers about they're like not allowed to put it [sugary foods/drinks] from certain places in store, so they're making it technically harder to find, but to me that's just a bit of a...like nanny state and we shouldn't be like...”

- UK, female, UNI group (R)

Further assistance in making healthier choices

Many welcomed assistance in making healthier choices. Here, people discuss the need to increase confidence, skills and competencies to make healthier choices, without curtailing the freedom to choose poorly. There is some evidence of “othering” of those people who are lacking in knowledge and of deep distrust in more insidious attempts to influence choices. Overall, providing the adequate knowledge to choose optimally is implicitly considered a public benefit.

“It must be easy and quick to make a choice and if it really is easy and quick then we kinda remember our ideals in it. So, I think information works, but sometimes they are presented too complicated to... so that one as a consumer cannot figure it out.”

- Denmark, male, UNI group (H)

“It is right that people are willing to tell and have recommendations on how to improve their state of health.”

- Italy, female, NON-UNI group (C)

"I believe that we place too much trust in information and education, meaning that while many people with the right information and education may understand the right direction, not everyone does. There are people who simply don't care at all; you can explain it to them for twenty years, and they still won't get it. So, the solution lies in perhaps investing more in certain healthier foods and ultimately providing the consumer with a healthier product at a slightly lower price in supermarkets, and a less healthy product at the same or slightly higher price."

- Italy, male, UNI group (C)

"And I do... like I... like I think those red, yellow, green things [labelling on food products] like are really handy because they just give you an instant understanding of, "Oh, that's a bit better than that one."

- UK, female, UNI group (R)

"And if you told them [an app] what you've eaten the whole week, it could give you an alert saying: "Your sugar must be like here, like you're going to have a heart attack," and that's important, you know. I've had, I've had chest issues recently and it's been quite scary for me as well, like the things I'm going through, and it's blatantly because of my lifestyle."

- UK, male, NON-UNI group (F)

"That's what it's all about. Yes, to provide a little bit of knowledge, so that people can decide, like nutrition education, maybe something like that. If I eat that, then maybe I'll have more problems in the future, but I'll enjoy it now, that there's maybe a bit more personal responsibility coming in, that can also be motivating for the health aspect. For example. Yes, exactly. For example, if I reduce my sugar intake, I know that I don't have neurodermatitis. This motivation, that you have something like that. Maybe if you can find out something like that."

- Germany, male, UNI group (H)

"...but I think people in general if they're educated in the right ways they can make healthy choices without breaking the bank entirely and the government and the education system have a part to play in that."

- UK, male, UNI group (O)

"(...I would actually like more general information. In the past, I don't know if that's still the case now, we were shown the food pyramid every day at school. Or in the hospital or wherever, that one brings out something like that again more strongly or. Thus, more generally informed and not now certain products are marked and one not at all exactly knows, how those came to this marking."

- Germany, male, NON-UNI group (G)

Public benefit

Health was not only the most mentioned public benefit prior to the PlayDecide serious game, but it was also viewed as a benefit during discussions. Although mostly indirectly, a few did mention it outright. Despite previous quotations having illustrated how some participants valued their autonomy to eat unhealthily over their health (also because if they became unhealthy they would receive free healthcare, such as was raised in Denmark), participants also directly affirmed that having free choice at the expense of the environment and society did not constitute public benefit to them.

"...the idea that you, we could produce food that's healthy and plentiful for people around the world that they can all afford, it's got to be the ultimate benefit."

- UK, male, UNI group (Y)

"Like, maybe everyone wants to be healthier or like... but, like, it is more a question on how." (implying being healthier is a public benefit)

- DK, male, UNI group (W)

"Because we live in a society where everyone is always rushing, so someone who has a family arrives home at 06:54 in the evening and has to prepare dinner quickly. Either there's a big organization behind it, but one cannot spend the weekend preparing food for the whole week and freezing it. So, people often end up preparing quick things, which are not as healthy. Instead, in my opinion, making the preparation of healthy food more accessible would already be a big step forward." (implying making preparation of healthy food more accessible is a public benefit)

- Italy, female, NON-UNI (F)

"I think there's obviously benefits and everyone wants to eat healthy, but again, because of the cost, because... the selection people go for that easier option, but I think if they were... obviously if there was promotions... and if there was like better [food] out there then people would go for that healthier option. But it's time, you know, like days go so quickly so it's just quick and unfortunately the quick of it is just to pick up whatever it is to quickly cook and stuff. So I think it... I think everyone out there would obviously want to go healthier, but it's constant, you know, no time." (implying that eating healthier is a benefit)

- UK, female, NON-UNI (W)

...

"[...] because I believe it is not a public benefit to have a free choice."

- DK, female, UNI group (L)

“Because as important as it is in my opinion to protect the free choice of any individual in this context, it does us no good here. I mean OK, let's conserve some, let's protect the free choice of individuals who do what they want, but at the level of... it doesn't give us any benefit in my opinion.”

- Italy, male, NON-UNI group (F)

“I know we all said we like autonomy and people to be able to have their free choice etc. But we're trying to create an answer and that's not really public benefits.”

-UK, female, UNI group (P)

“Well, I do not completely agree on that one should not incur something on others, but the reason one does it is because one have not taken, what can you say, taken use of the public benefits that exist and made a choice from the start, the thing that we are interested in being like that in our country and then one acts accordingly” (implying that the existence of public benefits, such as free healthcare, enables us to make unhealthy choices)

- DK, female, UNI group (O)

“And also in connection with our health care, ne, because ultimately, the unhealthy food is often also to corresponding costs and where we are then again all involved.” (implying that choosing to eat unhealthily corresponds to increased costs rather than benefits)

-Germany, male, NON-UNI group (G)

“And yes, and with health, too. If someone permanently eats an unhealthy diet and then suffers from diabetes, heart attacks and whatnot from the age of 50 onwards, the costs are ultimately borne by the community. The costs are ultimately borne by the community. So I think a sense of responsibility for oneself and for the community has to develop somewhere.” (implying that choosing to eat unhealthily corresponds to costs rather than benefits)

-Germany, male, UNI group (H)

The use of consumer food data

The use of consumer food data was also discussed to a greater extent in some countries than in others. There was often a feeling that a considerable amount of data was already being collected and used, with some feeling more negatively about it than others. Indeed, participants were able to articulate that there are different purposes to which data was harnessed. They recognised the nuances in the way in which the consumer food related data can be harnessed for the benefit of the society or private companies. Positive suggestions were also made about the use of data. Of particular concern were the issues of custody of the data and lack of trust (in particular in the government) to be honest custodians of the data. Whilst often critical in the possible

misuse of data, some participants were able to offer positive suggestions were also made about the use of data such as systems through which data can be donated for the right purpose, thus maintaining control and agency of the data subject over their own data. Indeed, the complexity of the issue is recognised, when discussed, suggesting a clear governance regime around this issue of data sharing.

“... for example, the supermarkets do know how we shop and stuff like that. They know how to get us to shop a certain way, but their agenda is not that we need to get healthier or more sustainable. That isn't what they want with the data they have. So, they data they have they use for making more money...”

- Denmark, male, UNI group (W)

“People should be willing to share their consumption data, but [...] [only when it] 1) Isn't treated as just marketing back to you. It's not like, “Oh, these are my spending habits,” and go, “Oh, why don't you buy my product instead.”

- UK, male, UNI group (G)

“Well, they [retailers] are controlling us a lot with all these data they gather on us when we shop. Also, in the way they put up the stock. We think we have a free choice, but we really don't completely. We should at least be very conscious about what we want.”

- Denmark, female, UNI group (P)

“The idea of sharing biometric data, even if it were with the government, if tomorrow the government decides to resell that data to someone makes me swoon.”

- Italy, male, UNI group (P)

“Data is quite interesting, but I feel like they use it to market to us based on how much money they can get out of us instead of this guy might be unhealthy and he might not be good for him to tell him that he should go and get KFC tonight and to keep sending it to his phone and adverts and stuff. So that's interesting. that that could be used in in a bit more of a beneficial way.”

- UK, male, NON-UNI group (F)

“...but maybe we would like it [our data] to be used for something else. So for a lot of the stuff, we want to do, I think we already have the data that can help it. I think it maybe is about who has it [consumer data] and what it is used for”.

- Denmark, male, UNI group (W)

“...data on food consumption, I think they are important to understand where we are going and where maybe we need to correct”

- Italy, female, NON-UNI group (C)

“And who uses consumption data? That is card 2 of consumer food, so that data is very important, because it is already a health issue, because we have people with different diagnoses and they had the opportunity to read it.”

- Slovakia, female, UNI group (O)

“People should be willing to share their consumption data, but on a conditional basis [...] Like, no, it needs to be within a system where people feel like they can voice their concerns about their food and about the impact that their food is having on them.”

- UK, male, UNI group (G)

There's also a bit of a dilemma as far as I'm concerned. In general, I would like to receive personalized recommendations. On the other hand, data protection is also relatively important to me. That's a bit of a dilemma. Yes, that's what I think.

- GER, male, NON-UNI group (B)

“That goes with the info card one with the data, in terms of data collection and data protection and those things. As I said before, I think that's important. Data is important for making decisions, but so is the handling of data and the consideration of data protection and so on. You have to keep a close eye on who can do what with what data and when.”

- GER, male, NON-UNI group (A)

Group voting

Following the discussions, participants voted on which of the 6 policy options previously presented represented the greatest public benefit from the use of consumer food data.

Overall, “Making healthy food cheaper and easier to prepare and unhealthy food more expensive and difficult to find” was viewed as the option representing the greatest (or one of the greatest) public benefits. Similarly, “Protecting the free choice of individuals at the cost of the environment or society” was viewed as having the least (or among the least) public benefit across countries. Other options showed more variation across countries and education groups, which will be discussed further below.

Aim 2 Comparison between groups in different countries and across education levels (for group voting)

Among participants in the UNI groups, the option “Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores”, was selected as the option with the greatest public benefit in 4 out of 6 countries, although for UK participants this was rated as the least public benefit (see Table 11 below). Participants from Spain, Slovakia and Denmark also rated “Linking food choices with health data” positively, whereas it received lower ratings by participants from Germany, the UK and Italy. Similarly, “Encouraging people to choose food innovations” was favoured by participants in Italy, Denmark and Germany, whereas it was viewed less favourably by those in Spain, Slovakia and the UK. “Promoting local food even to the detriment of the environment” was prized by participants in Slovakia, whereas it was viewed more negatively by participants in Spain, Denmark, the UK and especially Italy. There was more consensus regarding the unfavourable rating given to “Free choice at the expense of the environment or society” (apart from in the UK), and the lowest average scores across participants was for “Keeping only healthy food products”, although this was not given particularly low ratings by participants in Italy and Slovakia. The additional options viewed proposed by Italy, Spain and the UK also included an element of further education and provision of information to the general public. Spanish participants also included incentivization and legislation and those in the UK proposed a culture change around eating with the introduction of more joy around food. The UK participants additionally created an option increasing access to affordable, healthy food which did not include barriers to accessing unhealthy food.

Table 10. Group voting for University level or higher attained education (ISCED 5-9 or UNI) groups (1: Greatest public benefit; 6: Least public benefit)

OPTIONS	Italy	UK	Spain	Slovakia	Denmark	Germany	Average
A) Reducing the number of food products available, keeping only those which are healthier or more sustainable.	4	8	6	4	5.5	5	5.4
B) Linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so).	6	4	2	2	3	4	3.5
C) Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.	7	5	4	3	4	2.5	4.25
D) Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.	3	7	1	1	1	1	2.3
E) Encouraging people to choose new types of food that are healthy and more sustainable than the food that we are used to (i.e., insects, genetically modified food), even if it is not familiar.	2	6	5	6	2	2.5	3.9
F) Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society.	5	3	5	5	5.5	6	4.9
Extra 1) (UK additional option) Access to affordable, healthy food		1					
Extra 2) (UK additional option) Creating more joy out of food from early life through education		2					
Extra 3) (Italy additional option) Incentivize the education and information of citizens at all levels	1						
Extra 4) (Spain additional option) Consumer education			3				
Extra 5) (Spain additional option) Incentivize products within their natural terms			7.5				
Extra 6) (Spain additional option) Legislation			7.5				

Among participants in the NON-UNI groups (Table 12), those from 4 out of 6 countries chose “Linking food choices with health data” as the option with the greatest public benefit, although participants in Slovakia rated it the least favourably. “Making healthier food cheaper and easier to prepare and find and unhealthy food more expensive and harder to find”, was ranked favourably across all countries, and thus surpassed “Linking food choices with health data” in its average rank. The option to favour local foods above sustainability was viewed most positively by Slovakia, followed by Germany, but not so much by Italy, Denmark, the UK and Spain. Exploring innovative types of food was viewed more positively among Spanish and Danish participants and less so by the other four countries. Limiting foods sold to those which are healthier and more sustainable was only viewed positively in the UK and less favourably in other countries. The least favourable option on average was protecting free choice, although this received more positive views in Slovakia. The additional options included by participants in Italy revolved around promoting education and increased awareness of nutrition among the population, similarly to Spain, where an option related to more information was also introduced. The other extra options suggested by a Spanish participant echoed portions of other options initially presented to the group (cheaper, healthier food, incentives for consuming healthier and more sustainable products). Thus, in the NON-UNI group providing personalised feedback related to health on the food choices people are making was popular (except for participants in Slovakia, which stood out as outliers favouring local foods above other benefits), as well as making healthier and more sustainable foods more

accessible and healthier foods less accessible. This suggests that for participants in this group assisting and enabling people to make healthier and more sustainable food choices was deemed to be of the greatest public benefit and protecting the free choice of individuals at a cost to the environment and society of the lowest benefit.

Table 11. Group voting for less than University level attained education (ISCED 0-4 or NON-UNI) groups (1: Greatest public benefit; 6: Least public benefit):

OPTIONS	Italy	UK	Spain	Slovakia	Denmark	Germany	Average
A) Reducing the number of food products available, keeping only those which are healthier or more sustainable.	3.5	3	4	5	5	4.5	4.2
B) Linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so).	1	1	1	6	1	2	2
C) Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.	3.5	5	5.5	1	4	3	3.7
D) Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.	2	2	2	2	2	1	1.8
E) Encouraging people to choose new types of food that are healthy and more sustainable than the food that we are used to (i.e., insects, genetically modified food), even if it is not familiar.	5	4	3	4	3	4.5	3.9
F) Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society.	6	6	5.5	3	6	6	5.4
Extra 1) (Italy additional option) Raising awareness about the evolution of health and the changes in eating patterns as people grow up	2						
Extra 2) (Italy additional option) Education on nutrition (by schools and doctors)	2						
Extra 3) (Spain additional option) Information and culture			7				
Extra 4) (Spain additional option) Cheaper, healthier food			8.5				
Extra 5) (Spain additional option) Incentives for consuming healthier and sustainable products			8.5				

Changes in perceptions of public benefits, trade-offs and responsible actors after discussions and voting

Changes were observed in the answers to the open-ended questions related to public benefits, trade-offs and responsible actors following the PlayDecide serious game and group voting. We summarise the main findings here, and further detail by country can be found in the reports in Appendix II.

Aim 1.2.1 How consumer/citizens intuitively describe the concept of public benefit in terms of examples of public benefits (after):

The number of examples of public benefits provided by participants increased after discussions and voting, from 308 to 332. Health remained as the most mentioned benefit category across countries even though the number of mentions of benefits in the Healthy and sustainable food option category doubled and increases were also seen for the Regulation, Education, Information, Sustainability and Individual rights categories (Table 13). Decreases were observed in the Other public services category as well as in the Financial benefits, Moral values and Enjoyment categories.

Table 12. Count of examples of public benefit given by public benefit category (AFTER):

Public Benefit Category	Denmark		Germany		Italy		Slovakia		Spain		UK		TOTAL
	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	
Health	3	10	9	7	2	3	3	4	6	3	11	5	66
Regulation	4	3	6	3	1	0	7	7	6	3	2	7	49
Other public services	0	2	0	0	0	0	3	3	1	0	1	1	11
Education	1	5	3	2	2	6	3	0	10	2	3	7	44
Information	5	3	2	5	7	5	2	0	1	2	4	3	39
Sustainability	6	4	6	4	0	3	2	1	2	6	0	0	34
Financial benefits	0	2	0	1	0	1	0	0	1	0	4	1	10
Healthy / sust food options	11	3	5	11	0	2	0	0	2	8	1	12	55
Moral values	0	1	1	2	2	1	0	0	0	4	1	1	13
Enjoyment	0	0	0	0	0	0	0	0	0	1	0	0	1
Charities / NGOs	0	0	0	0	0	0	0	0	0	0	2	0	2
Individual rights	0	1	0	1	0	2	0	0	2	0	1	1	8
TOTAL	30	34	32	36	14	23	20	15	31	29	30	38	332

Aim 2 Comparison between groups in different countries and across education levels (for Aim 1.2.1)

After discussions and voting, the number of examples provided was higher in Denmark, Spain and the UK, whereas it was lower in Germany, Italy and Slovakia. Mentions of examples related to Healthy and sustainable food options were among the top 3 categories for most countries (apart from Italy and Slovakia). Examples related to Regulation also increased in most countries except for Germany and Italy, where these decreased.

When looking at results by education groups, participants from the NON-UNI groups gave more examples of public benefits than those in the UNI groups after the discussions and voting (175 vs 157). They also mentioned Health and sustainable food options more often than participants from UNI groups in most countries (apart from Denmark and Slovakia). Examples within the Regulation category were mentioned most often by participants from UNI groups in most countries (apart from in Slovakia and the UK).

Aim 1.2.2 How consumer/citizens intuitively describe the concept of public benefit in terms of crucial trade-offs involved with respect to public benefits key benefits involved (after):

After the discussions and voting there was a general decrease in the number of different categories of responses provided to the “trade-offs related to benefits” question by participants and despite a slight reduction (from 80 to 77) the number of Blank/Don’t know responses remained as the most popular answer to this question (Table 14). An increase was observed in mentions of Trade-offs as a category (defined as something which must be forfeited before receiving a benefit) and, conversely, in those mentioning there should be no trade-offs associated with the benefit (Absence). Thus, the number of answers left blank/don’t know, or which cited Negative consequences, Requirements, Examples, Questions and Alternatives decreased.

Table 13. Count of responses to trade-offs question by category (AFTER):

	Denmark		Germany		Italy		Slovakia		Spain		UK		TOTAL
	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	
TRADE-OFFS													
Blank/don't know/?	8	12	4	18	9	3	13	3	3	3	1	0	77
Barriers	4	2	18	10	0	1	0	1	14	6	6	3	65
Trade-offs	9	6	0	0	5	7	0	6	7	7	5	5	57
Negative consequences	5	1	8	3	0	0	0	1	1	6	6	3	34
Requirements	2	2	4	1	1	3	0	2	1	2	2	2	22
Positive consequences	3	3	0	0	0	2	4	1	0	0	0	1	14
Example	0	0	0	0	3	0	3	0	0	0	0	1	7
Questions	1	1	1	0	0	1	0	0	0	0	1	0	5
Reason	0	1	0	0	1	2	0	0	0	0	0	4	8
Alternative	0	1	0	0	0	0	0	1	0	0	0	0	2
Absence	0	0	0	0	2	0	0	0	1	0	3	1	7
TOTAL	32	29	35	32	21	19	20	15	27	24	24	20	298

Aim 2 Comparison between groups in different countries and across education levels (for Aim 1.2.2)

After discussions and voting, the number of examples provided decreased across most countries, apart from Denmark and Slovakia and Trade-offs (defined as something that must be forfeited before receiving a benefit) increased in all countries apart from Germany. Barriers were still frequently mentioned in most countries, especially in Germany and Spain, as was the case of Negative consequences (except in Italy and Slovakia). Participants mentioned there should be no trade-offs (i.e. Absence) in Italy, Spain and the UK.

Participants from UNI groups provided more answers to this question than those in NON-UNI groups (159 vs 139) as was also the case prior to discussions and voting. Increases in Trade-offs (defined as something that must be forfeited before receiving a benefit) were apparent among participants in all NON-UNI groups (apart from Germany) and the opposite occurred for those in UNI groups in most countries (with the exception of Denmark and the UK). Barriers were mentioned by participants from UNI groups in most countries (apart from in Italy and Slovakia). Negative consequences were most often mentioned by participants from UNI groups in Denmark, Germany and the UK. And whereas previously only participants from NON-UNI groups mentioned Positive consequences, participants from UNI groups also mentioned them after the discussions and voting.

Aim 1.2.3 How consumer/citizens intuitively describe the concept of public benefit in terms of core responsibilities assigned to different stakeholders in relation to public benefits (after):

After discussions, the number of responsible actors for the public benefits mentioned increased from 329 to 405, but the top three most popular actors remained the same (Government, People in general and Companies), as demonstrated in Table 15 below. The increase was observed across all categories of responsible actor, with the exception of Non-governmental organisations (NGOs, including Charities) and Funders. Sizeable increases of 38-47% were seen in the number of mentions of People in general, Farmers, Schools and Researchers.

Table 14. Count of responses to “responsibility for public benefits” question by category (AFTER):

RESPONSIBLE ACTOR	Denmark		Germany		Italy		Slovakia		Spain		UK		TOTAL
	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	UNI	Non-UNI	
Government	14	20	12	14	7	12	8	8	19	12	12	15	153
People (in general)	11	13	8	9	5	12	0	0	17	10	5	12	102
Companies	14	5	15	14	1	3	1	0	4	3	2	1	63
Shops	11	4	1	0	0	2	0	0	0	4	1	6	29
Farmers	1	0	3	6	0	0	1	0	0	3	0	1	15
Schools	0	0	1	2	1	2	1	0	1	1	1	4	14
Researchers	4	0	1	5	0	0	0	0	0	1	1	0	12
Media	0	0	1	0	0	2	0	0	0	3	1	0	7
Health care staff	0	3	0	1	0	2	1	0	0	0	0	1	8
NGOs	0	0	0	0	0	0	0	0	0	0	1	0	1
Funders	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL	55	46	42	51	14	35	12	8	41	37	24	40	405

The highest number of responsible actors mentioned was in Denmark and the lowest in Slovakia. Increases were seen across countries, most often in the category of People in general as responsible actors, apart from Denmark, where the increase was largely driven by increased mention of Companies as responsible actors and in Slovakia, where no mentions of People in general were made after voting and discussions.

Whereas prior to discussions and voting the UNI group participants made a greater number of mentions of responsible actors than the NON-UNI group (177 vs 152), the opposite was true after (188 vs 217). This was evident across all countries, apart from Germany and Slovakia, where only slight decreases were noted. This is interesting to note because not only does it suggest that participants broadened their view of public benefits but also of who should take responsibility for their provision.

6. Discussion

Consumer/citizens are the key stakeholders of COMFOCUS, both as data subjects and as beneficiaries of the Food Consumer Science Community. It is important that we are aware of the views of those to whom we seek to provide benefit, also because GDPR regulations permit data sharing only under 2 conditions: through informed consent or for public benefit (GDPR, 2018). Given different perspectives on public benefit and the lack of a clear definition of this concept, public engagement events on public benefit derived from food consumer data provide an important contribution to COMFOCUS and to Open Science and Responsible Research and Innovation in general.

We conducted public engagement events in 6 European countries (Denmark, Germany, Italy, Slovakia, Spain and the UK) to understand to what extent the concept of “public benefit” resonates with consumers/citizens, also as a reason for sharing food consumer behaviour information (Aim 1). As part of this exploration, we sought to identify how consumers/citizens describe public benefit (Aim 1.1) in terms of examples (Aim 1.1.1), crucial trade-offs (Aim 1.1.2) and core responsibilities (Aim 1.1.3) assigned to different stakeholders in relation to public benefit. Additionally, we sought to examine how each of these might differ after dialogue and debate on public benefits derived from food consumer science related themes and policy options (Aim 1.2, including

Aims 1.2.1, 1.2.2 and 1.2.3) and how these might differ between participants from different countries and levels of attained education (Aim 2).

We found that, initially, participants in our civic engagement exercises provided diverse examples of public benefit, ranging from public services to charities, concrete spaces such as libraries and parks, to abstract concepts such as human rights and enjoyment. Nevertheless, across countries, public benefit was most often conceptualised as services provided by the government, and commonly aligned with human health. Despite the prominence of health as a driving value and desirable outcome, most references within the Health category were made to services designed to treat-ill health rather than promote it. This points to a more remedial, rather than preventative conceptualisation of health. In fact, although participants were aware that the study revolved around their perceptions of the greatest public benefit related to consumer food data from the Participant Information Sheet, mention of food-related public benefits varied greatly, ranging from no mentions to 78% of participants in one of the groups mentioning one or more food-related benefits.

In terms of specific differences identified from participants by country we highlight a few here. In Germany, participants were most focused on food-related benefits and Regulation was the most often mentioned public benefit example category, revolving mainly around process optimization (cost-efficiency) and food production. This may have also due to the location of the discussion groups, as these took place at the University of Göttingen and participants local to the area may have been more conscious of its activities and research associated with Sustainable Land Use and Biodiversity. In Spain, Moral Values were mentioned most often, especially related to justice and fairness. Schwartz's (2014) research on cultural values indicated that Spain and Italy had the highest scores in Egalitarian values (including Social Justice and Equality) which is also supported by our findings with this category of public benefit example attaining the second highest level of mentions in Italy. Interestingly, Schwartz also scored Slovakia and Spain highly on the Harmony dimension (where fitting in with the natural world and preserving rather than changing are valued), and Sustainability was among the top 3 categories of public benefit examples mentioned in Slovakia and Spain.

When considering differences by education level, examples of public benefit provided by those with higher levels of educational attainment (UNI groups) were more focused on Health, whereas Healthy and Sustainable Food Options were only mentioned by those with lower levels of educational attainment (NON-UNI groups). This may be associated with the lived experience of participants with lower levels of attained education experiencing more challenges in being able to access and afford healthier and more sustainable food.

The concept of trade-offs, or something which must be forfeited beforehand to receive a benefit, was not well understood and had varied connotations. Participants most often left this question blank or wrote "don't know" as an answer. For those providing a different answer, the majority referred to barriers preventing the realisation of the benefit (e.g., costs, lack of motivation). Some also referred to negative or positive

consequences of having or lacking the benefit. Arguably the acceptance of negative consequences, such as the loss of profits and jobs, could also be viewed as a trade-off. Positive consequences, including decreases in chronic diseases in the population, could also be viewed as extensions to the benefits themselves. Requirements were also mentioned, such as the need to communicate complex information to consumers that would be clearly understood. There were also assertions that public benefits should not have costs.

When trade-offs were analysed as something that must to be forfeited in exchange for a benefit, they mostly included costs of the provision of public services (i.e., taxes), but there were also mentions of the need for shifts away from self-interest (altruism). The departure from an exclusively profit-driven model towards a more equitable society has also been suggested in the literature, with the rise of companies that voluntarily strive for profit not only for their own shareholders but for the wider community (e.g. del Baldo, 2019) and increased willingness to support redistributive policies, even if not directly in one's self-interest, with higher levels of governmental trust (Garrizman, Neimanns & Busemeyer, 2023). This observation, alongside the assertions that there should be no trade-offs associated with benefits, suggests some participants were equating public benefit with the common good. "Benefit" has classically been linked to economic notions of interests (where people tend to maximise benefits and minimise costs), whereas "good" is often linked to some higher moral notion that is objectively valuable as a kind of "human virtue" (e.g. justice or rights). It is of note that there are trade-offs involved in both public benefits and the common good (such as paying more money to buy "fairtrade" chocolate so that farmers receive a just price for their product), and it would be worthwhile exploring these concepts and the trade-offs they entail further with a wider group of stakeholders. This would be important in arriving at a common understanding of the complexities involved in achieving public benefit and/or common good and building trust between the various stakeholders both within and beyond COMFOCUS.

In terms differences between participants from different countries, the mention of responses to the trade-offs question was proportionate to the number and type of public benefits mentioned, with participants from Germany and Spain mentioning the most and those in Slovakia mentioning the least. The country in which participants cited the greatest number of Trade-offs (defined as something which must be forfeited beforehand to receive a benefit) was Italy, with costs for public services being the main one cited in line with the public benefit examples they provided, as was the case in other countries.

When considering differences by education level, UNI group participants provided a greater number of answers to the trade-offs question than those in NON-UNI groups, as well as a greater number of answers which included Trade-offs defined as something which must be forfeited beforehand prior to receiving a benefit. NON-UNI group participants provided a greater number of answers related to Barriers and Positive consequences. Again, their lived experience may make them more likely to experience barriers in trying to

access benefits, but also more likely to experience benefits if these are made more public and widely accessible to all.

The Government was seen as the main responsible actor for the public benefits cited in general, as these mostly revolved around services provided by the government. This has also been observed in other recent surveys, such as in Poland, for example (Płonka, Niżnik & Jedynak, 2023). This suggests that among these different population samples, there is a recognition of a vital role the government has in providing a safety net to its people, especially the most vulnerable, and a shifting away from the neo-liberal agenda of a market-driven economy with a shrinking governmental role.

The Public was additionally cited as a responsible actor in providing public benefits. Although most references were to the “general public” rather than the “taxpayer”, it seems likely that tax payments were the link behind the public and government services. Only a few mentions specified participants themselves as responsible actors (i.e. “We are”, “Us” or “Ourselves”) and were mostly generalised comments (i.e. “People”, “Public”, “Everyone” or “Society”). In addition, while consumers/citizens have generally been viewed in the literature as exerting influence by creating demand for healthier and more sustainable products, it has also been suggested that this demand is directed by policy and commercial actors (Rinkinen, Shove & Marsden, 2020).

Companies also emerged as responsible actors across countries, which is in line with a growing awareness of the impact they have on society and on how things are run (White et al., 2020). And while some companies are actively and voluntarily shifting their focus from private benefit to a mixture of public and private benefit (e.g., Del Baldo, 2019) others are use misleading health or sustainability claims on products to increase sales (Jahn et al., 2023). Publications additionally report on companies trying to pass on responsibility for unhealthy or unsustainable practices to individuals (Park, 2022) and portraying greater government regulation as undesirable, providing them freedom to maximise their profits at the expense of public health and/or the environment (Stuckler & Nestle, 2012; White et al., 2020).

Collaborative responsibility between different groups of actors were not explicitly mentioned, and this may be because of awareness of the existence or value of such partnerships was lacking among our participants. The existence of a “zero sum game” has also been previously suggested in the literature, where if authorities, for example, take more responsibility, then producers, retailers and consumers feel less responsible (Grill & Nihlén Fahlquist, 2012). An increased awareness of the consequences of the actions of all food system actors could potentially lead to increased responsibility in contributing toward a solution (Tittarelli et al., 2022, Olstad & Kirkpatrick, 2021). With shared responsibility, effort, concerted action and collaboration among all involved great strides can be taken in improving the health of individuals, communities and the entire planet (Ancillotti et al., 2022).

In a similar vein, the number of responsible actors cited was commensurate with the initial number of public benefits mentioned by participants in each country, with Slovakia on the lower end and Germany on the higher end. Germany was the only country in which participants cited Companies more often than the Government, again related to their focus on Regulation improving cost-efficiency of food manufacturing. Likewise, Shops did not receive any mentions as responsible actors in Denmark or Slovakia also because the benefits cited by participants in these countries were not directly food-related.

When considering responsible actors, UNI group participants made more mentions of responsible actors than those in NON-UNI groups, including in the top 3 categories (Government, People and Companies). NON-UNI participants made more mention of Shops than UNI participants, which again may be related to their day-to-day realities.

The stimuli material used during the PlayDecide serious game provided a springboard for discussions and focused them to a greater level around public benefit derived from food consumer data. A number of cards were chosen most often by participants and it was interesting to observe how similar topics resonated across groups. Choice was the main Information card selected and was considered important especially among UNI participants, albeit with the recognition that it was not as “free” as we might think. On the other hand, preserving the free choice of individuals to the detriment of society was not considered a public benefit by most. Participants from the UK, Germany and Slovakia also agreed that too much choice leads to unhealthy eating, and in the case of NON-UNI British participants, to food fussiness caused by parents catering to their children’s preferences. This suggests that having choice was given more weight by UNI participants, whereas those from NON-UNI groups spoke to a greater extent how too much choice can be problematic. This may be because those from NON-UNI groups may have had relatively less choice during their lifetimes than their UNI counterparts.

Taxation and Incentivisation and Food Consumer Data were also popular Information cards. The use of taxes and incentives to modulate food prices was a salient point and welcomed by most although also criticised as government interference, especially by participants from UNI groups. In addition to prizing autonomy over food choice, autonomy over how one’s food consumption data was used was raised as an important issue. Suggestions were made of how data can be better used for public benefit, such as in assisting people to make healthier food choices such as through apps or other personalised recommendations, mainly among NON-UNI groups. UNI group participants viewed the use of consumer food data by Companies and Retailers with greater suspicion and were less positive towards government interference in food choice, whereas participants from NON-UNI were more apt to suggest ways in which data use could be beneficial to them, such as through apps or personalised recommendations, in addition to being more accepting of government intervention. However, for both groups the ways in which consumer data could be used was mostly limited to marketing or

personalisation, highlighting a gap in awareness of how data can be used in governance, science and in other ways.

In terms of differences among participants from various countries, Italian and Danish participants selected Taxation and Incentivisation more often than Choice. In Denmark, the welfare state with its higher taxes and state-provided benefits was a salient point of discussion, whereas in Italy the taxation and reducing choice were seen as viable options for encouraging healthier and more sustainable food choices. Data security and how it is used especially by retailers was an important issue for Danish participants.

The Issue card around Local vs. Imported Food was popular, and with most participants having a more positive view of local food especially related to their higher quality and shorter mileage travelled. On the other hand, the issue of the affordability and variety of local foods were raised by others, citing the financial implications and limited choice connected with fewer imported foods available. Issues around the potentially greater sustainability of imported foods was notably absent, despite this being described in one of the commonly selected Story Cards as well.

The popularity of the Local vs Imported foods issue card was especially notable among participants from Slovakia, as well as Denmark and Germany. Slovakian participants focused to a greater extent on the higher quality and preference for local foods whereas, in Denmark and Germany local foods were still preferred but some discussion was also centred around the diversity of choice which would be lost with exclusive focus on local foods, as was the also the case in Spain. In most countries preference for local foods was more apparent among participants from UNI groups, perhaps linked to their greater consideration of how less sustainable actions now may affect us in the future, but also because they can afford to pay higher prices for local foods rather than relying on cheaper imported products. Participants from NON-UNI groups tended to choose a different issue card, whether help only those eating unhealthily or all. While there did not seem to be a consensus on this issue amongst them, they were more open to receiving further assistance to improve their eating habits as they may have more experience of not being able to eat healthily because of knowledge, time, or resource constraints and in most cases welcomed personalised feedback on their food choices. On the other hand, they were somewhat more inclined to treat innovative products and ingredients with a higher level of suspicion and mistrust.

The Story card most selected highlighted the struggle of a single mother who to eat and feed her child healthily on a budget, citing lack time and familiarity in preparing more affordable, nutritious food. This was a mainstay of the discussions, citing financial, time and other constraints as a major factor in preparing and consuming healthier and more sustainable food. While some believed the solution could lie within education, especially among participants from, others highlighted that knowing how to eat healthily in insufficient, and that people need to have the time and resources to act on that knowledge. In addition, there might be a lack of motivation

or preference for healthy foods, in which case financial incentives and other nudges might be more effective. Throughout the discussions many highlighted that people did not want to be forced or told what to do but wanted to have guidance to be able to make their own informed choices. A greater role by the Government and other actors was seen as needed in making healthy food more accessible and affordable to people through various means, including in imposing additional regulations on Companies and Retailers.

German participants were especially focused on personal responsibility, where additional information would enable people to make healthier choices. British and Italian participants also believed education for children and adults would also be helpful. Although participants in these countries did not ignore how financial constraints might limit people's ability to make these choices, especially in the UK, where the cost-of-living crisis took precedence over issues such as Sustainability, they also believed people could make healthier choices on a budget. British participants additionally highlighted the importance of taking more time to enjoy meals as a family, something which they felt other countries did better but had been lost in the UK.

Enjoyment of food preparation with a variety of local or imported ingredients was the most selected story card by participants in Slovakia, reflecting the focus of their discussion on the benefits of prioritising and subsidising local food. In Italy it was the substitution of meat for pulses in school dinners where the importance of establishing healthy eating habits from a young age was also highlighted. Discussions among Spaniards also reflected a lack of time to prepare healthy food, especially among women traditionally responsible for food preparation. In UK, other popular cards shared the top spot including a builder upset that he could not find his usual unhealthy meal in shops, where people were very vocal in not limiting the offer of unhealthy food, especially in the UNI group. In the UK as well as in other countries, NON-UNI participants affirmed they would still be able to buy unhealthy foods even if they were limited in other settings, such as schools or shops.

These discussions also influenced the ranking of the policy options at the end of the PlayDecide serious game. There was a level of agreement across participants that increasing the affordability and accessibility of healthy, sustainable food and decreasing that of unhealthy food represented the greatest public benefit derived from consumer food data (especially among participants from UNI groups), closely followed by linking food choices to health data to provide personalised feedback (particularly among NON-UNI group participants). Protecting the free choice of individuals to the detriment of society and the environment was viewed as providing the least public benefit (especially among NON-UNI group participants) alongside reducing the number of food products available, keeping only those which are healthy and/or sustainable (mostly among UNI group participants). This can be linked to the perceived sense of agency and the informational environment that produces uncertainty especially among those who have less time or less capacity to engage with the information (NON-UNI group) and therefore seek out guidance. Indeed, this is in line with these groups' greater acceptance of government intervention and emerges from the dialogue around financial restrictions around food choice. In contrast, greater autonomy was prized by UNI groups and limitations on choices they

have become accustomed to be able to access (due to fewer financial constraints), be they healthy or not, are viewed less favourably. There were also outliers in each of the educational level groups affected the final average ranks given to the options. For the UNI group this was the UK participants, whose group votes indicated a strong aversion to limiting any of the unhealthier/unsustainable food options and a greater inclination towards preserving the free choice of individuals; For the NON-UNI group this was Slovakia, whose groups votes were particularly opposed to linking food choices to health data for personalised recommendations and were more favourable towards the promotion of local foods even if they were less sustainable.

The additional options introduced mainly by UNI participants in Italy, Spain and the UK were around education on healthy eating. NON-UNI participants in Italy also introduced an option around nutrition education in schools and throughout the life course. Participants in Spain and the UK also introduced options along the lines of making healthier and more sustainable food cheaper and more accessible but left out making unhealthy or unsustainable food more expensive and harder to find included in the initial option. The introduction of options around education and information suggested support for shifting responsibility for eating healthily and sustainably onto individuals, which is in line with a less restricted, market economy with minimal government interference. Also in line with this view is the resistance to limiting the availability and accessibility of unhealthier food.

After discussions and voting on policy options some changes were observed in the responses provided to the open-ended questions around examples, trade-offs and responsible actors for public benefits. Health maintained its prized position as the most mentioned example of public benefit, but the number of mentions of food-related benefits increased to at least 55% in all groups, and the Healthy/Sustainable Food Options category doubled and moved into second place displacing other government-provided services. In addition, the number of examples of public benefits provided and especially those related to Healthy/Sustainable food options was greater in the NON-UNI groups than in the UNI groups. The opposite was true for Regulation, where UNI group participants provided a greater number of examples of these. This suggests that while both groups were supportive of making healthy, sustainable food cheaper and more accessible, NON-UNI group participants may have been thinking of this at the level of purchasing the food, whereas UNI group participants were considering how increased government regulation through taxes and subsidies would result in making these foods cheaper and more accessible. In addition, the impact of the previous questionnaire, discussions and voting on the idea that making Healthier/Sustainable food options more affordable and accessible and unhealthy options more expensive and less accessible would impact health provided an example of how engaging in discussion can have a beneficial impact in widening limited views of what public benefits can entail. The number of examples of public benefits related to Moral Values decreased, which may have been due to a more specific emphasis being placed on food-related benefits through the focused discussions and voting.

While the number of examples of public benefit provided increased in Denmark, Spain and the UK, decreases were noted in Germany, Italy and Slovakia, although the examples provided in all cases were more focused on food-related benefits. Health remained the top public benefit in the UK whereas for German participants this changed from Regulation to Health. Healthy/sustainable food options became the top option in Denmark, whereas it lost its top position to Education in Spain. In Italy and Slovakia, Other public services were replaced by Information and Regulation as top options, respectively. Interestingly, this suggests that the PlayDecide methodology did not necessarily lead participants from different countries to come to the same conclusion around general views of public benefit, but it did expand their views of public benefits from public services to other potential benefits, and especially those which were food-related.

Understanding was also broadened in terms of trade-offs, or what needs to be forfeited to achieve a benefit, with increases seen in this category as well especially among UNI groups. However, increases in Trade-offs (defined as something that must be forfeited before receiving a benefit) occurred only among participants in NON-UNI groups whereas they decreased in UNI groups in most countries. This was associated with the shift from public service-related benefits to food-related benefits. We did observe indications in the discussions that participants were giving increasing thought to the fact that benefits often are often associated with trade-offs, such as prioritising local food might mean a reduction in the variety of imported food available and a consequent reduction in choice, for example. Interestingly, participants from UNI groups mentioned more Barriers than those in NON-UNI groups in most countries contrary to what was observed before discussions. This suggests that the discussions and voting may have increased their awareness of the difficulties of many in obtaining food related public benefits which may not have been as salient to their lived experience, such as in being able to access and afford Healthier and more Sustainable food. On the other hand, the assertion that there should be no trade-offs on relation to the public benefit slightly increased and remained predominant among UNI participants. This suggests there is still further work to be done in further exploring how trade-offs are associated with benefits.

The only countries where no increases were observed in the number of Trade-offs as defined above were not observed were in Germany and Italy. This is also because the nature of the benefits mentioned in those countries also changed, with German participants reducing their mention of benefits especially related to Regulation (i.e., cost-efficiency and food production) and Italian participants also reducing the number of benefits mentioned particularly related to Other public services and focusing more on Information and Education.

While the top three categories of responsible actors didn't change (Government, People and Companies), the number of responsible actors mentioned increased after discussions, especially in the People, Farmers, Schools and Researchers categories. Again the shift can be traced back to the changes in the examples of public benefits mentioned. There was also some evidence of connections made between a greater number

different actors (e.g. the government imposing regulations on Companies to stock healthier products and individuals having the education and labelling on food products to be able to make healthier choices).

In terms of differences across participants from the various countries involved, it was noted that in Slovakia, as public benefits shifted more towards Regulation (i.e. subsidies for local foods), responsibility for this benefit was allocated more heavily towards the Government. In Germany, there was a shift in responsibility from Companies to the Government, as the public benefits most often mentioned changed from Regulation to Health. A different change was observed in Denmark, where public benefits shifted mostly from Health to Healthy/Sustainable Food Options and an increase in the mention of Companies as responsible actors occurred. In the UK, though Health remained as the top benefit, mentions of Healthy and Sustainable Options doubled and conversely Shops were more often mentioned as responsible actors than Companies although the Government remained in the top position.

Whereas prior to discussions and voting the UNI group participants made a greater number of mentions of responsible actors than the NON-UNI group, the opposite was true after. This was evident across most countries and suggests that participants in NON-UNI groups not only broadened their view of public benefits but also of who should take responsibility for their provision. This provides additional support that participatory discussions are useful tools in increasing awareness around focused topics, especially among groups with lower educational attainment.

7. Summary and conclusions

In this extensive exploration of public benefit and the use of food consumer data for public benefit we have found that perceptions of public benefit are not intuitive. There is much that people have not considered around public benefits, and this is especially the case for trade-offs (defined as something which must be forfeited beforehand to achieve a benefit) as well as who should be responsible for providing these benefits.

Nonetheless, our civic engagement activities indicated that Health was viewed most often as a public benefit. Although initially predominantly related to Health services, debates and discussions led this to change, and become more focused on Improved health (and to a lesser extent to a reduction in the burden to health services). This provided indication that the methodology used facilitating focused discussions around public benefit derived from food consumer data led to participants shifting their views from a more remedial approach to ill health to one of a more preventive nature, with greater focus on facilitating the consumption of healthier and more sustainable food options, relevant to COMFOCUS.

Participants were quite vocal during discussions about their right to make their own choices. On the other hand, some also saw too much choice as being potentially problematic, and most did not think it qualified as a public benefit if it negatively affected the environment and society. Many of the contributions from NON-

UNI group participants reflected their lived experience of facing more challenges in making healthier and more sustainable food choices, which can also be viewed as a limitation of choice. Perhaps this is why they were often more open to additional assistance in improving their eating habits, especially through personalised feedback and nudges including cheaper prices and greater convenience of improved food habits. Although UNI group participants acknowledge prices restricted choice and increased their support for public benefits related to Regulation which would affect the pricing of healthier and unhealthier foods, they were often more focused on providing more education and information to people (especially to others), to enable them to make better informed choices.

The general preference for local food especially among UNI group participants, with the sometimes incorrect assumption that this is always of higher quality, organic and more sustainable, over imported food contributed towards making the idea of trade-offs more concrete to participants. The increased costs, occasionally poorer quality and reduced variety of foods available were mainly brought to light by NON-UNI participants during discussions and in the questionnaires. UNI participants also showed a tendency to be more concerned about future sustainability and health rather than immediate gratification. NON-UNI participants tended to be more aware of more immediate and tangible priorities of individual relevance, such as being able to afford a filling and palatable meal, whilst sustainability is a long-term, collective and non-material gain placed far into the future. This points to the need for a more nuanced dialogue around these issues that can make these contrasts and interconnections between different benefits clearer.

People tended to consider responsibility for public benefits as a zero-sum game: the government is responsible for providing health services, and I may be somewhat involved by paying my taxes so that they can be funded, for example. However, as the public benefits shifted from health services to improving health after discussions and voting, personal responsibility for improving eating habits became more salient especially among UNI groups, with NON-UNI groups welcoming greater guidance (including education and personalised feedback) as tools to enable them to act more responsibly. However, this did not reduce the government's role as an important actor in providing greater education or greater regulation around labelling and pricing interventions, and the influence they it can exert on Companies and Shops to promote healthier and more sustainable food. These two actors were also highlighted as having a role in the push towards better eating habits. This suggested a greater awareness of the interconnectedness of the actors after the discussions and how all can collaborate in achieving better health, for example, if the government exerts more control in promoting healthier foods, especially in terms of price, such as by subsidising healthier foods, education from an earlier age and clear labelling can also help people make more informed choices when deciding what to eat.

The use of consumer food data was also one which are participants had a limited understanding of, and which was mostly restricted to advertising and personalisation. In addition to autonomy over choice, our participants

valued autonomy over their data. They had questions and negative feelings around how their data is being used, especially around it being sold and increasing profits for Companies and Shops, which they did not view as public benefit. Participants from NON-UNI groups especially were more positive on how it could be used for apps to assist people to eat healthier and more sustainably and to provide personalised feedback on food choices. Using consumer data to reduce waste, make future projections or around food innovations also received a few mentions, but any other mentions related to governance or research were lacking. This may have been because the stimulus material used in the PlayDecide game did not include direct reference to other examples, which could be included in the future. Nonetheless, this is an area which further discussions can serve to enrich, and indeed explore further, as new ways to use data are constantly emerging potentially leading also to public benefits previously unknown.

The PlayDecide serious game methodology used in this civic engagement exercise enabled us to explore our research question using standardised stimuli across countries and groups with different levels of attained education. It was useful in that it enabled us to observe commonalities, but also differences and had an impact on participants' views. It focused participants' attention on the topic of interest which was challenging to describe and assisted them in formulating and adapting their opinions on the public benefits, trade-offs and responsibilities, especially among those with lower levels of educational attainment. While it did not necessarily change the opinion of all, it also gave participants the flexibility to introduce new options outside of the stimulus material (around education, for example). It also has implications for COMFOCUS in that it highlights the value of debates and discussions with the public in gaining an understanding of and insights from their perspectives, but also to demonstrate the extent of their malleability as well.

The implications for COMFOCUS are therefore that this is a starting point, rather than a conclusion. It highlights the need to draw for frequent engagement in dialogues around public benefit with diverse groups, not just as beneficiaries, but also because of how the concept itself can evolve over time, with ever-changing and ever-increasing uses for data being discovered.

In terms of data governance, it also implies that how public benefit is being defined should be clearly stated in setting research agendas, proposals and consent forms, to increase transparency and enable people to evaluate how these align with their own views of public benefit. In this manner trust can be increased as well as a willingness to further accept inevitable risks and trade-offs which are bound to emerge. A type of benefit assessment can also be introduced similar to one recently published by Burdon et al. (2022) using participatory mapping and logic chains to link resources, benefits and beneficiaries, in this case related to the natural resources of the Deben Estuary in the UK. It could be particularly useful in gathering data and increasing awareness of what benefits are generated from consumer food data (i.e. the resource) and which actors they might benefit (or harm) in what way from different perspectives. This could not only broaden the views of the

consumer/citizen around public benefit, but also of other stakeholders who stand to gain or lose under current or different scenarios to promote opportunities for open dialogues and collaboration, further increasing trust.

Thus, the implications for COMFOCUS can be summarised as follows:

- Further dialogues are necessary around public benefits, its associated trade-offs and responsible actors.
 - o Perceptions of public benefit are not straightforward, and people's understanding of trade-offs and the responsible actor(s) is limited. Dialogues can increase understanding and broaden perceptions. In the case of this exercise, it was particularly demonstrated in shifting the perception of the main benefit named (Health) in terms of treating its symptoms (via Health Services), to preventing them (increasing the accessibility to Healthier and more Sustainable Food Options) as well as trade-offs and negative consequences (limiting unhealthy foods and potentially less profit for companies) and greater awareness of shared responsibilities.
 - o People do not always make distinctions between public benefit and public good (e.g., Free Health Services and Equality). Further and more nuanced discussions need to ensue to explore the connections between both, as well as differences around tangible, immediate benefits and longer-term, collective and non-material benefits reaped in the future, as well as the trade-offs involved.
 - o Placing responsibility for public benefits on one actor is limiting. For example, increasing the accessibility to Healthier and More Sustainable Food Options cannot be placed solely on the shoulders of one actor or another (i.e., it is the government's responsibility to make them cheaper, or it is the individual's responsibility to make healthier food choices). With shared responsibility, effort, concerted action and collaboration among all actors, great strides can be taken in improving the health of individuals, communities, and the planet.
 - o Including the public in the conversation around public benefits, trade-offs and responsibilities is part of public benefit as this increases transparency of which stakeholders stand to gain or lose under current or different scenarios and promotes opportunities for collaboration, further increasing trust.
 - o New ways of using data are constantly emerging as well as new potential benefits, trade-offs and risks.
- Autonomy and choice are valued by the public, not only in food selection but in how their data is used.
 - o People do not like being told what to do
 - o Choice was important to people, but not to the detriment of the environment or to society as a whole. This was highlighted by the local vs imported food dilemma. Although local food was prized for its higher quality and sustainability by many, it was also considered to be inaccessible by some and to reduce the diversity of food we have become accustomed to.

- People want to know for what purpose their data is being used, as they are aware that it is often used to manipulate them and/or to generate profits for others which excludes them. Thus, if their data is being used for “public benefit”, they need to be included in the conversation of what that definition of “public benefit” entails.
- Participants suggested ways in which data could be used which would be more beneficial to them, especially through apps assisting them in making healthier and/or more sustainable choices or in personalised recommendations for their current state of health.
- Further assistance in making healthier and/or more sustainable food choices is welcomed as a public benefit, alongside improving health.
 - The prices of “healthy” and “unhealthy” foods were the most important enablers or barriers for better food choices
 - People believe that education and information (such as labels) will assist those who need it to make healthier choices. Many highlighted that education needs to start early in life, including in families, with very young children and in schools.
 - Others believed that education may be insufficient, but that nudges and enablers including the convenience of healthier and more sustainable food, finding and enjoying more time related to food preparation and consumption and personal motivation related to health risks.

8. References

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APPENDIX I.

Instructions for facilitators 14 November 2022

Welcome the participants.

Ask them if they have read and understood the **Participant Information Sheets (PIS)**. Hopefully the recruitment agency will have sent this to them earlier as they were deciding whether or not to participate in the study. If not, provide them with a copy that they can read and ask questions about as other participants arrive.

Once they have read and understood the PIS, provide them with a copy of the **consent form** which they need to read, tick as appropriate and sign and date. (5 minutes)

Once they have provided the signed consent form, place these in a safe location for safe storage.

Invite each participant to choose a name from the 9 pre-prepared stand-up **nameplates** to be placed on the table in front of each participant with pseudonymised names on both sides of the sign. You can choose common names in your country for women and men (Mary, John, etc), colours (Blue, Green, Red, Orange), names of animals (Wolf, Eagle, Cat), cities (Paris, Tokyo, Nairobi) or any category of names which will serve as a pseudonymised identifier to include on the sign. It will be useful to choose pseudonyms with different initials, as this will allow you to note down only their initials as you are filling in the group voting form at the end (i.e., so don't pick names like Blue, Black and Burgundy, as they are all colours but they all start with a "B"). They can then be referred to as their pseudonym on their completed questionnaire and throughout the discussion (Mrs Green, Mr Red, etc.). You can either use different nameplates for each of the focus groups (e.g. animals for the University or more group, colours for the less than University group) but if you use the same ones make sure you are able to distinguish the questionnaires, voting forms and files between each group. Each participant can take their nameplate and have a seat at the table.

Give participants the **"BEFORE" Before & After questionnaire and a pen** and ask them to fill it in individually using their chosen nameplate pseudonym. Explain that, as they read in the PIS, this focus group is about public benefit, and we want to gather a few of their general initial thoughts on the topic. Clarify that there are no wrong or right answers, as we are just interested in their general impressions of public benefit. You may wish

to include this statement at the top of the questionnaire and to ensure these have the word “BEFORE” on then, as they are identical to the “AFTER” questionnaire. If they do not understand the question try to explain what the words mean separately: public (i.e., people) and benefit (i.e. something good someone gets from something) rather than defining public benefit, as this is part of what we are interested in. Also do not give examples, as we don’t want to lead them. We really want to encourage them to fill in the questionnaire, but if they feel like they just don’t know, especially at this initial stage, they can also write “don’t know” on their questionnaire. Collect the BEFORE questionnaire when they are finished. Those who are finished can read the introduction and options on the left-hand side of **the placemat** in front of them (15 minutes)

Present the **placemat** in front of them and introduce the main aim of the discussion (to decide what provides the greatest public benefit from the use of consumer food data). The introduction and options are on the left-hand side of the placemat, so you can point this out to them and explain it verbally or read it aloud. Make sure you read the options aloud, and state that the focus will be on which one of these options provides the greatest public health benefit. The facilitators can also indicate to the participants that if there is another option which they think is important to add, they write this on their placemat and inform the facilitator. (5 minutes)

Stage 1: Information

Ask participants to go through the **story cards (white) and the information cards (green)** and pick one story card and 2 information cards to put on their placemats. They can also create their own card **blank white cards** provided if they believe something important about public benefit from consumer food data has not been covered in the other cards. Explain that they we would like them to share with the group in one or two sentences why they picked that card or wrote their own card (4 minutes to choose individually and 16 minutes to share – 2 minutes per participants for a total of 20 minutes)

Ask participants to have a look at the **issue cards (blue)** and pick 2 issue cards that they believe are most important in deciding which option provides the greatest public benefit from the use of consumer food data and put them on their placemats (remember to include any new options participants may have come up with). Explain that they we would like them to share with the group in one or two sentences why they picked that card (3 minutes to choose individually and 12 minutes to share – 1.5 minutes per participants for a total of 15 minutes). You will need to make a note of which issue cards were most frequently chosen, as these will be informing the Second Stage, the discussion stage.

Stage 2: Discussion

Highlight the options again (remember to include any new options participants may have come up with) and indicate we will be discussing the three most frequently chosen issue cards, one by one, as they relate to the options. Allow approximately 15 minutes of discussion per issue card (or less, if a wider variety of issue cards

were selected by participants), summarising and echoing the points that are being raised by participants and returning to how these are relevant to the options before moving to the next issue card (45 minutes total)

At this point we will be 1 hour 45 minutes into the session, so can have a 15 minute break here.

Stage 3: Voting for options and shared group response

Hand out the **individual voting forms** and ask participants to individually vote for those options which they perceive as providing no benefit (1) to extreme benefit (6), adding their pseudonym to the paper (remember to include any new options participants may have come up with). Please note that the individual forms will have to be slightly changed to make them more user-friendly, also renaming options 1 to 8 to options A to H, so as not to get confused with the ratings. (5 minutes total).

Ask each participant in turn to report what option they gave the highest rating to and then tally up which options received the greatest number of top ratings on the **group voting form**. Please note that the group voting forms will have to be slightly changed to make them more user-friendly, also renaming options 1 to 8 to options A to H, so as not to get confused with the ratings. It will be useful to note the pseudonym (or initials of the pseudonym on the tally form to make sure they have given everyone a chance to report back and no one has reported twice). If there is a tie between options which received most votes, the facilitator can go around to all the participants and ask them to go over some of the pros and cons of each of the tied options, summarising and echoing what is being said and see if participants would like to change their rating or if they are willing to accept another option as representing the greatest benefit, reaching a consensus. If not, a joint first-place can be awarded for the option and the facilitator can move on. The facilitator will then proceed to the option given the lowest ratings and follow the same procedure, alternating between 2nd highest, 2nd lowest, etc, until all options are covered, time permitting. Facilitators then collect the completed individual voting forms, ensuring the pseudonyms are added to the sheets (45 minutes total).

Give participants the **“AFTER” Before & After questionnaire** and a pen and ask them to fill it in individually using their chosen nameplate pseudonym. Clarify again that there are no wrong or right answers, as we are just interested in their general impressions of public benefit. You may wish to include this statement at the top of the questionnaire and to ensure these questionnaires have the word “AFTER” on them, as they are identical to the “BEFORE” questionnaire. They should have less problems in filling it in as they filled in the same questionnaire at the beginning of the session. Collect the “AFTER” questionnaire when they are finished and thank them for their participation. (15 minutes)

PUBLIC BENEFIT – BEFORE/AFTER Temporary name: _____

There are no right or wrong answers to these questions. We are simply interested in your views are about this topic.

1) Please write down three examples of public benefit.

1. _____

2. _____

3. _____

2) What is it about each example that made you consider it a public benefit?

1. _____

2. _____

3. _____

3) What are the trade-offs (if any) associated with each of the public benefit examples you listed?

1. _____

2. _____

3. _____

4) Who is involved in making each of these benefits available?

1. _____

2. _____

3. _____

Options: What provides the greatest public benefit from the use of consumer food data? INDIVIDUAL VOTING

Temporary name: _____

	No public benefit					Extreme public benefit
	1	2	3	4	5	6
A) Reducing the number of food products available, keeping only those which are healthier or more sustainable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B) Linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C) Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D) Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E) Encouraging people to choose new types of food that are healthy and more sustainable than the food that we are used to (i.e., insects, genetically modified food), even if it is not familiar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F) Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Options: What provides the greatest public benefit from the use of consumer food data? GROUP CONSENSUS

	RANK 1	RANK 2	RANK 3	RANK 4	RANK 5	RANK 6
A) Reducing the number of food products available, keeping only those which are healthier or more sustainable.						
B) Linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so).						
C) Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.						
D) Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.						
E) Encouraging people to choose new types of food that are healthy and more sustainable than the food that we are used to (i.e., insects, genetically modified food), even if it is not familiar.						
F) Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society.						
G)						
H)						

Info Card 1**Food consumer data**

Food consumer research helps us understand why people eat what they eat. To do this we need information on what people are eating (e.g., from questionnaires in person or in an app, food orders online or in a restaurant, supermarket loyalty cards, menu choices in a cafeteria) and information on why they made the choices they made (e.g. because it was cheap, because it tasted good, because it was easy to make, because it is healthy, because it is good for the environment, because I wanted to try something new, because I always eat this type of food).

Info Card 2**Who uses food consumer data?**

Different people use food consumer data, including to try to plan how much of a certain type of food people will buy and to reduce waste. Data can also be used to see if people will choose certain food products over others so that they can understand what makes them more attractive. Making a product more attractive can lead to greater sales and more money for companies as well as more jobs. Increasing the attractiveness of healthier and/or more environmentally friendly products can also lead to improvements in people's health and for the environment.

Info Card 3**Choice**

Choice is an important part of our current food system. People like having choices because it gives them a sense of freedom and makes them feel more powerful and in control of choosing the 'better' option. In the past, people have had fewer food choices because there were fewer types of food and food products available. Even today, although this has changed, many people can't afford to choose what they would like but need to content themselves in choosing from what they can afford. Having too many choices can also be bad for our health and the environment and can lead people to feel overwhelmed.

Info Card 4**Innovation**

Innovations in food production such as genetically modified crops have been important in making sure there is enough good quality food for a growing population, and that food crops can be made more resistant to the effects of climate change, such as droughts. Some people do not like these innovations because they don't know much about them and are worried that they may be harmful. Others have seen improvement to the food products they buy as a benefit, as they may have a better taste, have healthier and/or more environmentally friendly ingredients, and/or be easier to prepare. They can also increase profit for small, medium, and large companies.

Info Card 5**Personalisation**

Personalisation means that what people eat and their health is assessed, and specific advice is given to them based on that information. Doctors, nutritionists, and dieticians often do this for patients that are obese, diabetic or who have a heart condition. Some companies and apps claim they provide this personalised approach (e.g., by asking individuals to keep food diaries and/or giving them feedback on blood tests) but they can be expensive and there is a need for appropriate regulation in this sector. Some consumers don't want their doctors to know about what they eat because they would feel judged and unfairly blamed.

Info Card 6**Taxation and Incentivisation**

Taxes make the prices of food products higher, so people are less likely to buy them. When the price of sugary food and drink is made more expensive, less is sold, so companies in the UK for example reduced the amount of sugar in their products to keep the price the same. Incentives work in the opposite way - they make healthier products cheaper and easier to buy, making people more likely to eat them. Fruit and vegetable vouchers in the USA led to more of these foods being bought. Taxes or incentives can reduce profits for food companies, so they resist them. Some consumers don't like them because it reduces their freedom of choice.

Story Card 1**Brian Jones**

I work in the construction industry and usually buy my lunch in a shop nearby. The other day, I wanted to buy my usual soft drink, chips and meat sandwich and there was none there! I had to buy water, a piece of fruit and a veggie burger instead, which made me upset. The shop owner said it was because the government is changing the rules and are trying to help people eat healthier. I don't want to eat healthy; I just want to eat the food that I like.

Story Card 2**Gabrielle Taylor**

I am a busy working mother with 3 children. When I go to the supermarket I need to be as quick as possible in buying food that my family will like that is not too expensive. Sure, I want it to be healthy and sustainable, but I simply do not have the time to read labels or compare products. I just grab what I can and run. I am so glad there are ready meals which I can just put in the microwave when I get home.

Story Card 3**Carol Roberts**

I am a cook in a school canteen. We have been trying to make our menus more sustainable and healthier for the children. We recently sent a letter to the parents that we will be reducing the meat in our stew and adding more beans instead and invited the parents to come and taste it. Some have complained and opted to send lunch into school instead, but the majority were happy to support the change.

Story Card 4**Amir Davies**

I am professional living on my own. I enjoy creating exotic dishes on the weekends and inviting a few close friends over to enjoy them with me. I love the variety and selection of foods I can get in my town, from fresh farmers' market produce to the international ingredients which make a dish special. Access to this wide variety of foods is important to allow us to enjoy what we eat.

Story Card 5**Elizabeth Garcia**

I am responsible for choosing the products we sell in our small grocery store. I saw in the news the other day that large companies are forcing people to rent their land for really cheap prices so that they can make incredible profit from growing trees and using the palm oil in the food that they make. Next time I make an order of products to sell in my store I will make sure I don't order products that have palm oil in them.

Story Card 6**James Muller**

I am a university student who is very concerned about how we are affecting our environment. I have recently become vegan, so when I go food shopping, I need to carefully read all the labels to make sure there are no animal products in what I buy. It would be easier if the regular items had no animal products in them. It really should be the other way around, where vegetable-based products are the norm and animal-based products are less accessible and harder to find. I am glad sugar is not an animal product, because I certainly have a sweet tooth.

Story Card 7**Brianna Thomas**

We have had an apple orchard in my family for generations. We sell our apples when they are in season and keep others at cold temperatures with a new refrigeration system we bought, which is expensive and maybe not very environmentally friendly, but it allows us to keep people employed and to sell our apples during all seasons. I am sure the people in our town will continue to prefer to buy local apples rather than the imported ones sold at the supermarket even if they are cheaper.

Story Card 8**Jordan Lee**

I am a nutritionist at the local health centre, and I run a group for people with high blood pressure on Fridays. When I suggested that each person collect and bring in their food receipts for the week (supermarket, restaurant, take-away and cafeteria) so we could do an interactive activity about the sodium content in the food they are buying, none of them was keen to do so. It seems like people are not willing to [open up](#) about their diets so easily. I really want to help them change their habits, but if they do not want to take part, what can I do?

Story Card 9**Ayana Johnson**

I am a family doctor who was approached by a team of scientists from a university. They invited me to participate in a research project involving a diet-tracking app to help my obese patients lose weight. Some of them found it helpful and lost weight, but others found it really challenging to change their food choices even with the suggestions for healthier choices given by the app. Some even said the app made things worse, making them feel like it was completely their fault that they were unable to follow the app's suggestions.

Story Card 10**Anna Martin**

I am a single parent, and I am trying to make the money I earn last a bit longer. I am upset to see that the cheapest food options in my city are often the least healthy. I wish there were options for people on a low income like me to feed their family healthily. Someone I worked with suggested that I try beans, lentils, or chickpeas but I don't know how to make them, and I really can't spend a lot of time cooking as I work 2 jobs.

Story Card 11**John Roberts**

I am a retired office manager, and my wife and I enjoy eating at our favourite restaurant in town for special occasions. Recently I noticed they have included dishes on the menu that sound very strange, like a salad made from plants grown underground in the city without sunlight – why would anyone want to eat something like that? I worry that people are experimenting with our food too much and our grandchildren will miss having the traditional, tasty food we grew up with.

Story Card 12**Adam Williams**

I am a body builder but am trying to reduce my meat consumption. Recently I discovered cricket flour, which is has been approved by health authorities and is made from specially farmed crickets. It is high in protein and nutrients and doesn't taste any different when I use it to make the bread I usually have with my meals. It is good for the environment and my muscles, too. My wife thinks it is disgusting, but I tell her that if you have ever eaten fruits, vegetables, or spices, it is likely you have eaten some insects mixed in with them, too, without even knowing it!

<p>Issue Card 1</p> <p>Unhealthy eaters or All?</p> <p>Should we focus on people who are eating the least healthily and try to help them change their diets or should we focus on helping everyone make their diets a little bit healthier?</p>	<p>Issue Card 2</p> <p>Less environmentally friendly or All?</p> <p>Should we focus on people who are eating foods which are worse for the environment to encourage them to make different choices, or should we help everyone make their diets a bit better for the environment?</p>	<p>Issue Card 3</p> <p>Novel foods or existing foods?</p> <p>Should we spend more effort in making novel foods tastier and easier to use (e.g., lab-grown meat in ready-made lasagna) or should we focus on making foods that we already have tastier and easier to use (e.g., ready-made bean and lentil soup)?</p>
<p>Issue Card 4</p> <p>Local alternatives or imported food?</p> <p>Should people be encouraged to purchase local alternatives, substitutions, and adaptations for food and ingredients from other countries or should they be allowed to make a free choice about where the food they purchase comes from?</p>	<p>Issue Card 5</p> <p>Personalisation or privacy?</p> <p>Should people be willing to share their consumption data to get personalised recommendations on how to improve their diets or should they keep their food habits private?</p>	<p>Issue Card 6</p> <p>Global sustainability or immediate gratification?</p> <p>Should we create a system in which we encourage people give up some of the foods that they like and are cheap to make things fairer and more beneficial to the environment for people in other countries, or should they just enjoy what they have right now and not worry about people in other countries?</p>
<p>Issue Card 7</p> <p>Health in the future or immediate gratification?</p> <p>Should people give up some of the foods that they like and are cheap to be healthier and prevent disease or should they just enjoy what they can right now and not worry about the future?</p>	<p>Issue Card 8</p> <p>Get involved or ignore?</p> <p>Should people be asked to join the conversation about what they can do to make sure that the food that we can buy is healthy and plentiful for people around the world or do they want governments, scientists, and companies to argue about it amongst themselves, as long as they have their cheap and tasty food?</p>	

APPENDIX II. Country Reports

DENMARK COUNTRY REPORT

The sessions were held January 9th and 10th, both days from 16:00 to 19:00. The sessions were held in a conference/meeting room on the Aarhus BSS (Aarhus University) campus. Both sessions had 10 participants and 3 researchers present.

Researchers responsible for PlayDecide discussions:

Facilitator: Morten Høst Haugaard

Support and note-taking: Violeta Stancu

Note taking: Arne Hørlück Høeg

Country Data analysis and Report: Morten and Violeta

Overall supervision: Liisa Lähteenmäki

BEFORE AND AFTER QUESTIONNAIRESBENEFITS - BEFORE

Commonalities: The benefits mentioned before the focus group were related mainly to the Welfare state idea with its institutions and services. Main cited public benefit for both groups was Health (UNI 8, NON-UNI 9), primarily in terms of Health services. This was followed by Education (UNI 5, NON-UNI 6), primarily about general education, and Financial benefits (UNI 5, NON-UNI 6). These three top benefits were very similarly cited by the UNI and NON-UNI groups.

Differences: The pattern of answers on public benefits was very similar between the two groups. In the UNI group there were more blank answers though (UNI=5, NON-UNI=1).

Public benefits related to food: 2/10 people (20%) for UNI mentioned a benefit that could be seen as related to food to some extent.

BENEFITS – AFTER AND CHANGE

Commonalities: Both groups mentioned some benefits related to the topics discussed in the focus groups, for example Sustainability (UNI 0 to 6, NON-UNI 0 to 4), Information (UNI 1 to 5, NON-UNI 0 to 3) or Regulation (UNI 1 to 4, NON-UNI 0 to 3). Financial benefits were less frequently mentioned after the focus group (UNI 5 to 0, NON-UNI 6 to 2).

Differences: Health remained commonly mentioned in the NON-UNI group (9 to 10), but its prevalence decreased in the UNI group (8 to 3). Some of these Health mentions were about Improving health (UNI 0 to 2, NON-UNI 0 to 4). However, Health services remained prevalent in the NON-UNI group (9 to 6) as opposed to

the UNI group (8 to 1). Another big change happened in the Healthy and sustainable options benefit. This became much more prevalent in the UNI group (0 to 11) after the focus group compared to the NON-UNI group (0 to 3). Education was also more commonly mentioned in the NON-UNI group (6 to 5) as opposed to the UNI group (5 to 1), and in the NON-UNI group Education was mainly about General education. The level of specificity of the benefits linked to the focus group discussions was lower in the NON-UNI group than in the UNI group. In the UNI group there were still more blank answers after the focus groups (UNI=4, NON-UNI=0).

Public benefits related to food: Both groups mentioned benefits related to food after the focus group to some extent. In the UNI group 7/10 people mentioned a benefit explicitly related to food, whereas in the NON-UNI group this was lower at 4/10 people mentioned a benefit explicitly related to food.

BENEFITS Summary: Before the focus groups, the pattern of benefits mentioned was very similar between education groups. The mentioned benefits were related mainly to the Welfare state idea with its institutions and services. Health (UNI 8, NON-UNI 9), Education (UNI 5, NON-UNI 6) and Financial benefits (UNI 5, NON-UNI 6) were the top benefits that people thought about before the focus group discussion. The change after the focus group in the benefits mentioned was bigger in the UNI group as opposed to the NON-UNI group. In particular, in the UNI group the benefits changed to a large extent to the aspects discussed in the focus group whereas in the NON-UNI group some benefits changed to topics discussed in the focus group but there were still many mentions of Welfare state related benefits. The top three benefits for the UNI group after the focus group were Healthy and sustainable options (0 to 11), Sustainability (0 to 6) and Information (1 to 5). In the NON-UNI group, the top benefits after the focus groups were Health (9 to 10), Education (6 to 5) and Sustainability (0 to 4).

TRADE-OFFS -BEFORE

Commonalities: Participants had difficulties formulating trade-offs. There were very few trade-offs mentioned in both groups (UNI 4, NON-UNI 6). Some of these referred to long waiting times in Health services, or to who finances the costs (e.g. financed by taxpayers).

Differences: Before the focus group there were more don't know and blank answers in the UNI group (13) as opposed to NON-UNI group (6). The number of answers that were not blanks or do not know differed by group (UNI 10, NON-UNI 20).

TRADE-OFFS – AFTER AND CHANGE

Commonalities: There were mostly differences in the trade-offs after the focus groups between the education groups.

Differences: The number of answers excluding blanks and do not know was higher in the UNI group (10 to 25), but similar in the NON-UNI group (20 to 19) between the before and after questionnaires. There were though

more blank or do not know answers in the NON-UNI group (12) compared to the UNI (8) after the focus group. The number of trade-offs mentioned remained the same in the NON-UNI group (6 to 6), but it increased in the UNI group (4 to 14). In the UNI group after the focus group some of the trade-offs related to reduction of free choice or goods getting more expensive.

TRADE-OFFS Summary: Trade-offs (defined as something you have to give up in order to obtain a benefit) were difficult for people to grasp. People in the NON-UNI group could name about 6 trade-offs across benefits both before and after the focus groups, whereas those in the UNI group could name more trade-offs after the focus group compared to before. It was challenging to find common themes in the trade-offs, they were quite different or specific.

RESPONSIBILITY – BEFORE

Commonalities: Both for UNI and NON-UNI the most often mentioned responsible actor was the Government (UNI 15, NON-UNI 19), followed by the Public (both taxpayers and the public in general, UNI 8, NON-UNI 7).

Differences: The NON-UNI group mentioned the Government a bit more than the UNI group (19 to 15). In the UNI group there were few mentions of other actors except Government and Public, as opposed to the NON-UNI group. These was one mention of Companies, two of Health care staff and one of Schools as responsible actors.

RESPONSIBILITY – AFTER AND CHANGE

Commonalities: Similarly to before, both UNI and NON-UNI cited the Government (UNI 14, NON-UNI 20) and the Public (UNI 11, NON-UNI 13) often as the responsible actors. The number of mentions of responsible actors increased in both groups after the discussion compared to before (UNI 27 to 55, NON-UNI 26 to 46).

Differences: The UNI group had more mentions of responsible actors in general than the NON-UNI group (UNI 55, NON-UNI 46). The most commonly mentioned responsible actors differed to some extent between the education groups, namely even though the Government and the Public were among top two for both groups, in the UNI group these shared their positions with private actors. The NON-UNI group still had Government (20) and the Public (13) as top actors mentioned, but they also mentioned other actors that they had not mentioned before the focus group. The newly mentioned actors were Companies (5), Shops (4), Health care staff (3) and Funders (1). For the UNI group, the Government was still frequently mentioned after the focus group compared to before (14 vs 15 respectively), but Companies were equally often mentioned as the Government after the focus group (14 vs 1 before compared to respectively). Thus, the Government and Companies shared the top position. The Public (11 vs 8 respectively) and Shops (11 vs 0 respectively) were the second most mentioned responsible actors after the focus group compared to before for the Uni group. Researchers were mentioned by some respondents in the UNI group after the focus group (4) as well.

RESPONSIBILITY Summary: The Government and the Public were the most often mentioned responsible actors for the public benefits cited, before the discussions among both groups. After the focus groups, the Government was the top most cited responsible actor in the NON-UNI group, but in the UNI group it shared the top position with Companies. The Public was second most cited in both education groups, but in the UNI group it shared the position with Shops. For the UNI group, the Government was a bit less often cited after the focus groups, whereas Companies and Shops were much more frequently cited after the focus group compared to before. The responsible actors were more diverse, especially for the NON-UNI group, after the focus group compared to before. Moreover, the private actors like Companies and Shops increased in mentions after the focus group compared to before, especially so in the UNI group.

DENMARK COUNTRY REPORT – FOCUS GROUP THEMES AND FINDINGS

The Danish focus groups had their discussion relying heavily on the material used for the PlayDecide methodology. This meant that themes discussed were mainly revolving around the *story cards* and *issues cards* chosen by the participants, though few themes emerged outside these topics. Furthermore, the group discussions surrounding public benefits were mainly using the *options* provided on the placemat through the PlayDecide methodology, as a point of departure. Therefore, ideas on what a public benefit could be were not instigated by the participants directly, though through the discussion a couple of arguments over ‘missing options’ were presented by some of the participants.

FOCUS GROUP - EMERGING AND CENTRAL COUNTRY-SPECIFIC THEMES

The summary below presents briefly the central themes that emerged in the focus group discussions in Denmark, which were specific to the Danish data. The main themes common across countries are not covered here as they have been already summarized in the results across countries.

One of the most prevalent themes related to the use of consumer data as a public benefit that emerged from the discussions, outside the options provided, was on the topic of data security and how one’s data is being used by, mainly, retailers. Both the UNI group and the NON-UNI group raised their concerns in who could access their data and how it would be used, where the UNI group’s discussion quickly turned into a scepticism of retailers intention of providing consumers with healthier shopping choices in light of being mainly profit seeking. As a participant raises concerns regarding how retailers use consumer data in this example:

“Well, they [retailers] are controlling us a lot with all these data they gather on us when we shop. Also, in the way they put up the stock. We think we have a free choice, but we really don’t completely. We should at least be very conscious about what we want.”

- DK, female, UNI group (P)

Trust in relation to how data is used was also discussed among the participants in the NON-UNI group, where overall they seemed more divided in feeling safe in sharing data. Some did not care at all, but were contemplating how useful data actually is, others were more concerned about its use in relation to individual responsibility and public welfare, though common was that the discussion inside the NON-UNI group revolved more around health and benefits for the individual in having data on oneself.

The discussion on data usage also touched upon the idea of the consumers not acting freely, in their choice of products, due to efforts of retailers and the way they nudge consumers. The consensus from in the UNI group seemed to be that we are heavily 'helped' in our decisions. The notion of free choice was also discussed in the NON-UNI group where the general consensus was that the free choice would always be there, even if restrictions would be put on certain type of goods. As the following quote states, people would just go a different route to obtain the items they desire:

"[...] so one could better guide people instead of forcing them into healthier choices. [...] in regard to if it has a negative effect, then I think people would find a way to get it [unhealthy foods]".

- DK, male, NON-UNI group (H)

Another theme emerging, that was not directly mentioned in the options, was seasonality of foods, which was mainly mentioned in conjunction with story card 4, with the topic of local vs. international foods, or as a 'missing component' of sustainability in relation to local foods. Though discussions in both groups did touch upon certain types of food grown outside of Danish borders being more sustainable, both groups did seem to argue positively for locally produced food, where the group with the most affinity for consumer data used for promoting local foods being the UNI group.

FOCUS GROUP - CONSENSUS VOTING ON PUBLIC BENEFITS AND REASONING

As far as reaching a group consensus on what the biggest public benefit is, derived from the use of consumer data, the participants from UNI group mainly argued for using data to make healthier foods cheaper and more available (option D). Also using data for creating consumer encouragement for choosing novel foods that are healthier and more sustainable (option E) was voted highly as a benefit derived from using consumer data. The main arguments, presented by people giving a higher score for these benefits, were mainly revolving around price and accessibility of healthy goods and the idea of it being convenient for the consumer to purchase the healthier options.

The NON-UNI group similarly argued for using data to make healthier foods cheaper and more available but ultimately agreed on the biggest public benefit, of using consumer data, being the comparison of food choices with health data to give individualised feedback to each consumer. The arguments here relating on the notion of individual benefits, as well as savings in the healthcare sector, but also due to a consensus that it is better to give people tailored guidance instead of restricting choice. That being said, the free choice (option F) was most often scored lowest as a public benefit by the participants in both groups. This being the case through the argument of it either not being something the participant related to public benefit, because it is more individual contrary to some altruistic, or because individual freedom was seen in direct opposition to what was best for the public or 'greater good'. The prevalent argument that arose from the NON-UNI group was based on the notion of consumers often having the freedom to choose anyways, so protecting it might not seem so important, whereas the UNI group often questioned, throughout the whole focus group discussions, if the consumers actually have as great a free choice due to how both government and private actors 'nudge' the consumers. The persons defending this as an important benefit were steadfast in wanting to protect the free choice of the consumer with the argument that restricting access to certain products will lead people to purchase other unhealthy options.

GERMANY COUNTRY REPORT

Researchers responsible for PlayDecide discussions:

Clara Mehlhose: Overall supervision, Facilitator, Country Data Analysis and Report

Alina Schäfer: Facilitator, Country Data Analysis and Report

Isabelle Weiß: Country Data Analysis and Report

Adriano Profeta: Translation of materials into German

PlayDecide group 1 (NON-UNI): 28.06.2023, from 17.30 – 20.30. Student assistant: Jeremias Tent

PlayDecide group 2 (UNI): 29.06.2023, from 17.30 – 20.30. Student assistant: Leon Küpker

Location for both groups: University of Goettingen, VG, Platz der Goettinger Sieben 7, 37073 Goettingen, Germany

BEFORE AND AFTER QUESTIONNAIRE

BENEFITS – BEFORE

Commonalities: Main cited public benefit for both groups: Information, with the distinction that the NON-UNI group (8) mentioned food-related information and informed choices more often, while UNI (7) focused on using consumer food data (not directly related to health). Healthy/Sustainable options (NON-UNI 4, UNI 3) and Sustainability (NON-UNI 5, UNI 4) also cited by both groups.

Differences: The biggest difference between both groups: Regulation (UNI 15, NON-UNI 5), with the distinction that UNI cited process optimization (cost-efficiency) more often (5 UNI, 1 NON-UNI), while regulation in food production was cited by both groups (UNI 5 and NON-UNI 3). Both, Enjoyment and Moral values was only cited by NON-UNI group (3).

Public benefits related to food: 7/9 people (78%) for NON-UNI and 5/9 (56%) people for UNI.

BENEFITS – AFTER AND CHANGE

Commonalities: Both increased their mention of Health as a benefit (NON-UNI 3 to 7, UNI 5 to 11), both increased their mention of Healthy/Sustainable option (UNI 3 to 5 and NON-UNI 4 to 10). Both groups increased their mention of Education (UNI 1 to 2, NON-UNI 1 to 4). The mention of Financial Benefits decreased in both groups (UNI 3 to 0, NON-UNI 5 to 3). Both groups decreased their mention of information (NON-UNI 8 to 5, UNI 7 to 4). Enjoyment decreased in the NON-UNI group (3 to 0).

Differences: The development of Sustainability and Regulation as benefit pointed in different directions in the comparison of the two groups: While Sustainability decreased for the NON-UNI group (5 to 4), it increased for the UNI-group (4 to 8). For Regulation the development pointed in the different direction: In the NON-UNI group it increased (5 to 8) and in the UNI group it decreased (15 to 8). There were differences in the top 3 cited benefits across groups: For NON-UNI it was Healthy/Sustainable Option (10), Regulation (8) and Health (7). For UNI it was Health (11), Regulation and Sustainability (both 8). Enjoyment was not mentioned anymore.

Public benefits related to food: Only UNI-group increased in the number of benefits related to food, to 6/9 (67%). NON-UNI remained at 7/9 people (78%), but the number of people mentioning food-related public benefits was already quite high at the beginning.

BENEFITS Summary:

To begin with, Regulation was the main benefit cited across groups (20 in total), but mainly because the UNI-group mentioned it often (15 UNI to 5 NON-UNI). They cited process optimization (cost-efficiency) (5 to 1) and food production (5 to 3) more often. After the discussion, the banning/limiting items increased in both groups (NON-UNI 0 to 3, UNI 0 to 2), while process optimization was not (UNI 0, NON-UNI 1) mentioned anymore. Both groups mentioned at the beginning different aspects of Information (15 in total, 8 NON-UNI vs. 7 UNI), mainly the use of consumer food data (not directly related to health). After the discussion, the mention of Information decreased in both groups (NON-UNI 5, UNI 4), mainly because both groups didn't mention the use of consumer data anymore. Sustainability was mentioned before the discussion by both groups (NON-UNI 5, UNI 4), but after the discussion the mention increased in the UNI group (8), while it decreased in the NON-UNI group (4).

TRADE-OFFS –BEFORE

Commonalities: Both NON-UNI (22) and UNI (23) started with a similar number of responses to this question excluding the number of don't know/blank answers (NON-UNI 9, UNI 12). Participants had difficulties formulating trade-offs. A few trade-offs (defined as something you must give up to obtain a benefit) were mentioned in the NON-UNI group (3) and the UNI group (2). Some of these referred to data usage and data protection of consumers, their freedom of choice, and the efficiency of the manufacturing process.

Differences: The NON-UNI group cited Example (3), Reason (2), and Barrier (6) more often than the UNI group. The UNI group more often cited Requirements (3), an Uncertainty (5), or most likely a Consequence (11).

TRADE-OFFS – AFTER AND CHANGE

Commonalities: There were mostly differences in the trade-offs after the group discussion between the NON-UNI and UNI group. Examples were more likely cited after the discussion (NON-UNI 3 to 6, UNI 1 to 15). Trade-offs had no counts after the focus group discussion in both groups. Answers categorized as Uncertainty (NON-UNI 3 to 1, UNI 5 to 1), Barrier (NON-UNI 6 to 4, UNI 1 to 0), and Consequence (NON-UNI 3 to 1, UNI 11 to 4) decreased in both groups after the discussion.

Differences: The NON-UNI group decreased and provided fewer answers to this question after the group discussion (22 to 12) while the UNI group increased and provided more answers to the trade-off questions (23 to 28) excluding the number of don't know/blank answers. This difference is because the NON-UNI group provided a higher count (9 to 20) and the UNI group provided a lower count (12 to 5) of don't know/blank answers after the discussion. The development of answers cited as Reason and Requirement as trade-offs pointed in different directions between groups: While Reasons decreased for the NON-UNI group (2 to 0), it increased for the UNI group (0 to 3). For Requirement the development pointed in different directions as well: In the NON-UNI group the answers decreased (2 to 0) and in the UNI group they increased (3 to 5).

TRADE-OFFS Summary: Although trade-offs (defined as something you have to give up in order to obtain a benefit) were difficult for people to grasp, some people answered trade-offs before but not after the discussion. Most answers were consequences in the UNI group before whereas most answers were examples after the discussion. Barriers were the most cited answers in the NON-UNI group before while examples were the most common answers afterward as well.

RESPONSIBILITIES - BEFORE

Commonalities: For both groups the most often mentioned responsible actor were Companies (NON-UNI 13, UNI 19), followed by the Government (NON-UNI 5, UNI 8). The Public in general and the Shops were mentioned equally in total (NON-UNI 6, UNI 4). Respectively, the Farmers, Researchers, and Schools were mentioned 4 times in total (each, NON-UNI 3, UNI 1). Media was only mentioned once in NON-UNI and once in UNI. Both groups had 2 blank/ don't know.

Differences: The NON-UNI group made more mentions of responsible actors than the UNI group (NON-UNI 43, UNI 41). The Companies and the Government were mentioned more often in the UNI group than in the NON-UNI group, whereas the Public in general and the Shops got more cites in the NON-UNI group. The NON-UNI group also mentioned the Farmers, Researchers, and Schools more often than the UNI group (3 vs 1). The Public in general were tied with the Shops as responsible actors in second place for the NON-UNI group with a tie also in fourth place between the Farmers, Researchers, and Schools (3). For the UNI group there was a tie in third place between the Public in general (4) and the Shops with a tie also in fourth place between the

Farmers, Schools, Researchers, and the Media (1). Only the NON-UNI group made mention of the Health Organisations as a responsible actor (1 mention).

RESPONSIBILITIES – AFTER AND CHANGE

Commonalities: Similarly to before, both NON-UNI (15) and UNI (19) cited the Companies most often as the responsible actor in total. Like before, but with approximately twice the total count the Government (NON-UNI 5 to 15, UNI 8 to 15) was the second most often and the Public in general (NON-UNI 6 to 9, UNI 4 to 10) was the third most often mentioned responsible. More actors were mentioned in connection with the Farmers, as it increased by both groups at the end (NON-UNI 3 to 6, UNI 1 to 3). Mentions of the Shops decreased for NON-UNI (6 to 0) and UNI (4 to 1).

Differences: In the NON-UNI group the number of mentions of responsible actors for the Companies, the Government, and the Researchers increased to a higher magnitude than in the UNI group, whereas the UNI group had a greater increase of mentions of responsible actors for the Public in general. The NON-UNI group doubled the mentioning of the Farmers as responsible actors, the UNI group tripled it. The number of mentions of responsible actors for the Shops decreased with a higher magnitude in the NON-UNI group. In the NON-UNI group, there were decreases in mentioning of Schools and Media. Only the NON-UNI group mentioned Health Care Staff and Health Organisations once, respectively. There was no clear first place for responsible actors in the NON-UNI group (tied between Companies (15) and Government (15)) and no clear fourth place (tied between Farmers (6) and Researchers (6)). Shops and Media only had one count for responsible actors from the UNI group after.

RESPONSIBILITIES Summary: The Companies and the Government were the most mentioned responsible actors for the public benefits cited, before and after the discussions among groups. The NON-UNI group increased cites for the Government after and therefore had the same count for both actors then. The Public in general was the third most mentioned responsible actor for the public benefits before and after the discussion, but with higher counts in both groups afterwards. More mentions of responsible actors were made after the discussions for the NON-UNI and UNI group. It is interesting to note that only the NON-UNI group increased their mentions of responsible actors after the discussion for the Farmers and the Researchers while both groups tremendously decreased mentions of the Shops after the discussion, which was the third highest count in total before and only had one count after from the UNI group.

GERMANY COUNTRY REPORT – FOCUS GROUP THEMES AND FINDINGS

CONSENSUS VOTING ON PUBLIC BENEFITS

For both groups the greatest public benefit related to the use of consumer food data was Option D “Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.” Both groups discussed the trade-off although people are responsible for their own food decisions, comprised information on food products e.g., labels like the Nutri-Score, would enable them to make informed choices and could be mandatory for producers by law.

“I again see the problem not necessarily with the consumer, but also with the producers and sellers. Other countries, especially in Latin America, solve this problem by means of a nutri-score, which is prescribed by law, so that the sellers have to write on it what it is. Advertising is reduced, and these are precisely the levers where I think the state can intervene in order to bring this lack of education, which is not passed on by parents, to the children”. (UNI, male)

„Not only do you target personal responsibility, but you also inform people a bit better. Now with cigarettes, there are these little pictures. When we buy meat, it's barn-raised, pasture-raised, I don't know what. I think that has already helped a lot with some people at least, that they are better informed. As I said, personal responsibility, yes, but I think that if people were made more aware of what they were doing to themselves or what they were doing to the animals.” (UNI, female)

“I think that the unhealthy foods should be better labelled. When I go shopping now, I don't have the time to read through everything first. What's good, what's bad, what's in it? And if somehow it is already labelled on the front, then I can see it from a distance. Would I eat the unhealthy food now or would I rather have something healthy?” (NON-UNI, female)

They see the state and/or government as responsible for action but they also favour personal responsibility. Both groups liked the idea of implementing a labelling system (e.g., Nutri-Score) that clearly provides information about the health or sustainability assessment of a product. This would support consumers identify healthy and unhealthy foods in the supermarket on the one hand, but also hold the state and producers responsible to implement such a system. Furthermore, they argued that a transparent information approach e.g., with the help of labels (related to health, sustainability aspects, animal welfare...) allows people to choose freely, because with transparent product information everybody can decide how important these aspects are to them. Both groups discussed the trade-off that although there already is a wide range of product labels nowadays, not everyone can afford their favoured products. Food consumer data might be one approach for this to improve. That might also explain why Option F “Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society.” was the least favoured option in both

groups, because from their perspective product choices are limited to individual affordability and not the range of food supply.

“The three precisely because there is a lot of choice in food at the moment and some people still can't afford it. In the past, there was less food to choose from and it wasn't as noticeable as it is today. And because the data on consumer research in food now understands, what people eat, I also find it very important to find out what is eaten in the restaurants or what people actually want.” (UNI, female)

“The choice of what it is basically people just important. The feeling of freedom, power and control. And you can only change things with people, not just for people. It has to be both. And also, the point that has already been mentioned, that we have more choice, that nevertheless all cannot afford. So not all people can afford it and that's bad for health and the environment.” (NON-UNI, male)

COMMONALITIES AND DIFFERENCES BETWEEN UNI AND NON-UNI GROUP (COUNTRY-SPECIFIC)

The most prevalent themes that emerged in the focus group discussions in Germany in general, are related to the origin of food, food choices and the access to information about food. However, there were also differences between the groups:

In the NON-UNI group, the discussion was partly prompted by the selection of the stimuli which were often linked to the choice of food (Information card “Choice” was chosen 6 times) but also to novel vs. existing and local vs. imported food (Issue Card “Local alternatives or imported food” was chosen 6 times). Against the background of local vs. imported food, they discussed that buying only locally grown food is limiting the offer/availability of product choices

“When it comes to choice, of course I would have to say that when I buy food that is produced here, the choice is not that big. That has to be clear. Yes, the choice is of course greater if I buy food that is produced here, but if I don't want the choice. The other way round, of course, is the transport route. So, both things are somewhat contradictory. That's something you have to decide. And of course it also depends on how the individual sees it. And how the individual wants to contribute to certain things.” (NON-UNI, male)

They further discussed intensively the food options/availability that people had in the past, compared to the availability and freedom of choices that they have today. Some of them were rather sceptical when it comes to new or innovative products, because they don't like and/or don't trust these products:

“I also have a hard time [...] with meat from the lab. When I hear laboratory, um, um. Yes, I have a huge problem with that. But then again, that speaks for maybe encouraging people to choose new kinds of food [...]. Maybe it's actually just the unknown. But still, um, um, like the state of affairs today. Today I have a lot of

stomach aches with this, so I think we are still a long way from being ready. The products are there. That was, uh, they are just not taken, that people are encouraged to choose healthier products from what is available, or to make them cheaper. That everyone can have it.” (NON-UNI, male)

Contrary to that, others liked the idea of having new/innovative products, especially for societal and environmental reasons:

“I don't think it's so bad if they are now trying to produce meat in the laboratory, because there are more and more people and most of them don't want to give up meat. And maybe it would be an alternative. If you really want to eat meat, you can eat something from the lab. There shouldn't be a big difference in taste. I saw a programme the other day. They had steak for tasting that had been bred in the laboratory. It costs 35,000 euros, because it is still being developed, but the test persons who tasted it said there was no difference to real beef. (...) Maybe it would be an alternative. It would also be good for the environment” (NON-UNI, female)

In the UNI group the discussion was more related to the choice of food (Information card “Choice” was chosen 5 times), in connection with the use of consumer data (Information card “Consumer Data” was chosen 4 times). But they also discussed the origin and/or novelty of foods (Issue Card “Local alternatives or imported food” was chosen 6 times) as well as health and health aspects of different foods (Issue Card “Health in the future or immediate gratification” was chosen 4 times).

They discussed about the use of consumer data and the availability of this data in general, but also showed their worries about data misuse:

“It's about understanding why people eat what, what they eat, why, the motivations, why they buy what, and so on. I think it's important to have the data in the first place in order to be able to judge anything. And the question of which people use it should probably be discussed a bit, because data misuse and data use are often close together. I would say that you have to look at who is allowed to do what with what data.” (UNI, male)

When it comes to the availability of new/innovative products, the UNI-group was quite open to try these products:

“So my background was that you shouldn't really inhibit innovation when there are new ways of making food. Why not try it out? Of course, after it has been tested and found not to be harmful [...]. In principle, I would prefer to be able to get certain foods directly from the region. It's just a bit binary. So there are certain things that I just can't get locally. That's a bit missing from my issue card. But basically there's no reason for me to get meat not locally, for example, if it could be sourced locally here. ” (UNI, male)

And this group discussed also about personal responsibility related to health aspects:

“If I eat this, then I might have more problems in the future, but instead I enjoy the fact that there is perhaps a bit more personal responsibility, which can also be motivating from a health point of view. For example. Yes,

exactly. For example, when I reduce my sugar intake, I know that I don't have neurodermatitis. This motivation, that you have something like that.” (UNI, male)

ITALY COUNTRY REPORT

The Italian PlayDecide groups were held at University of Bologna, Department of Agriculture and Food Science, viale Fanin 50 (IT). They were held on the 1st December 2022 one in the morning, one in the afternoon.

The members of the team involved were:

Elisa Iori: facilitating the PlayDecide groups, country data analysis and report

Camilla Sgroi: assistant (note taking, time supervision, recording supervision)

Caterina Rettore assistant (note taking, time supervision, recording supervision)

Matteo Vittuari: scientific supervision

BEFORE AND AFTER QUESTIONNAIRES

BENEFITS – BEFORE

Commonalities: Both groups highlight at least once the importance of enjoying eating food, regulation and moral values. Neither group identified public benefits related to sustainability or individual rights before the discussion.

Differences: The UNI group provided more examples of public benefits (16 against 12) that were also more heterogeneous with respect to the NON-UNI group. The most cited public benefits for the UNI group are other public services (7), health (5) and moral values (5), while for the NON-UNI group more education (5) and information (5). Only the UNI group mentions democracy as a public benefit before the discussion. Only the NON-UNI group mentioned financial benefits (1).

Public benefits related to food: 2/8 people (25%) for UNI and 4/8 (50%) people for NON-UNI.

BENEFITS – AFTER AND CHANGE

Commonalities: Compared to the answers prior to the discussion, both groups avoided or decreased the mention of other public benefits (UNI 7 to 0, NON-UNI 3 to 0), moral values (UNI 5 to 2, NON-UNI 3 to 1) and enjoyment (both groups 1 to 0). Information becomes one of the most prominent benefits (UNI now 7 from 1, NON-UNI 5 like before) together with health (UNI 2, NON-UNI 3) and education (UNI 2 and NON-UNI 6). Related to information, both groups mentioned food-related information (UNI 2, NON-UNI 1), informed choice (UNI 4, NON-UNI 2) and using consumer food data for health-related purposes (UNI 1, NON-UNI 2).

Differences: After the workshop the UNI group provided less examples of public benefits (12) while the NON-UNI group increased the number of provided examples (18). Education was considered in general terms for

UNI group (2/2) while NON-UNI group considered it as food related in most cases (5/6). NON-UNI group after the discussion mentioned also sustainability/availability of sustainable options (5) and individual rights (2). Financial benefits were still considered only by NON-UNI group (2).

Public benefits related to food: Both groups increased in the number of benefits related to food, with 4/8 people (50%) for the UNI group and 6/8 (75%) people for non-UNI.

BENEFITS Summary: While the UNI group provided more examples of public benefits before the discussion, the NON-UNI group increased the number of mentions after the discussion suggesting that the discussion provided participants with more inputs and ideas for compiling the questionnaire. On the other hand, the decrease in the UNI group suggested that the discussion did not change much in their insights and/or knowledge of the topic perceiving the second questionnaire as “redundant”. On the other hand, the mentions of public benefits for UNI group became more focused on education and information also related to food suggesting that some change in their perceptions of public benefits occurred in the discussion. The NON-UNI responses were already quite focused on food but after the discussions the mentions increased in number especially for health, sustainability and individual rights that probably were influenced by the discussion on these topics.

	ITALY- BEFORE-UNI	ITALY- AFTER-UNI	ITALY- BEFORE- NON-UNI	ITALY- AFTER-NON- UNI
TOTAL	16	12	12	18
SUBTOTAL HEALTH	5	2	1	3
SUBTOTAL EDUCATION	2	2	5	6
SUBTOTAL INFORMATION	1	7	5	5
SUBTOTAL FINANCIAL BENEFITS	0	0	1	1
SUBTOTAL REGULATION	1	1	2	0
SUBTOTAL HEALTHY/SUSTAINABLE OPTIONS	0	0	2	2
SUBTOTAL OTHER PUBLIC SERVICES	7	0	2	0
SUBTOTAL CHARITIES/NGOS	0	0	0	0
SUBTOTAL SUSTAINABILITY	0	0	0	3
SUBTOTAL MORALS	5	2	3	1
SUBTOTAL INDIVIDUAL RIGHTS	0	0	0	2
SUBTOTAL DEMOCRACY	1	0	0	0
SUBTOTAL ENJOYMENT	1	0	1	0

TRADE-OFFS –BEFORE

Commonalities: Both UNI and NON-UNI started with a similar number of responses to this question (UNI 19, NON-UNI 14) and of don't know/blank answers (UNI 4, NON-UNI 9). For the UNI groups there were slightly more mentions of trade-offs (defined as something you must give up obtaining a benefit) and the NON-UNI

group (9 and 5). Both groups identify “Balance between complex information and clarity for all” as a trade-off more than once.

Differences: In terms of answers to the “trade-off” question, the UNI group were more likely to cite trade-offs (as defined above, 9 over 19) than the NON-UNI group (5 over 14). The NON-UNI group cited consequences, requirements and reasons more often than the UNI group (8 vs 6). In terms of trade-offs the UNI group tend to cite the use of resources and tax payments both for health (5) and education (1). The NON-UNI group identify resources in other public services (costs; investments; human capital...), investors and good feeling as possible trade-offs.

TRADE-OFFS – AFTER AND CHANGE

Commonalities: Both groups agreed that ultimately there should be no trade-off associated to public benefits (3 and 2), and that it is necessary to depriving oneself of something for the sake of others.

Differences: The number of mentioned trade-offs decreased (7 vs 5) and the blanks increased (9 vs 3) for the UNI group while the number of trade-offs increased (5 vs 7) and the blanks decreased (2 vs 5) for the NON-UNI group. The NON-UNI group focused on the increased burden of individual responsibility in order to improve collective Health.

TRADE-OFFS Summary: Trade-offs were the most challenging questions with some non-pertinent answers especially for NON-UNI groups (before answers improved). One of the clearest formulated trade-offs was the giving up of junk food/cars, more taxation, exhaustiveness from being too aware, limit oneself pleasure in eating in favour of others wellbeing, the possibility of “cheating” in eating, giving up privacy for connecting healthy data to choices. The change in the number of mentions provided suggested, as for public benefits, that the discussion provided participants with more inputs and ideas for compiling the questionnaire for the NON-UNI group. On the other hand, the decrease in the UNI group suggested that the discussion did not change much in their insights and/or knowledge of the topic perceiving the second questionnaire as “redundant”.

CATEGORISATION: all (including trade-offs)				
	ITALY-BEFORE-UNI	ITALY-AFTER-UNI	ITALY-BEFORE-NON-UNI	ITALY-AFTER-NON-UNI
CHARITIES/NGOs				
DEMOCRACY	1			
EDUCATION	2		1	2
ENJOYMENT	1		1	
FINANCIAL BENEFITS	1			1
HEALTH	5	2		3
HEALTHY/SUSTAINABLE OPTIONS	1	1	1	3
INDIVIDUAL RIGHTS		1		1

INFORMATION	3	4	4	4
MORAL VALUES	3	1	3	3
OTHER PUBLIC SERVICES	2	1	2	
REGULATION			2	
SUSTAINABILITY				1
Total	19	10	14	18

CATEGORISATION: trade-off				
	ITALY-BEFORE-UNI	ITALY-AFTER-UNI	ITALY-BEFORE-NON-UNI	ITALY-AFTER-NON-UNI
CHARITIES/NGOs				
EDUCATION	1			
ENJOYMENT	1		1	
FINANCIAL BENEFITS				
HEALTH	5	1		3
HEALTHY/SUSTAINABLE OPTIONS		1		1
INFORMATION	1	1		1
MORAL VALUES		1		2
OTHER PUBLIC SERVICES	1	1	2	
REGULATION			2	
SUSTAINABILITY				
Total	9	5	5	7

CATEGORISATION: uncertainty				
	ITALY-BEFORE-UNI	ITALY-AFTER-UNI	ITALY-BEFORE-NON-UNI	ITALY-AFTER-NON-UNI
CHARITIES/NGOs				
DEMOCRACY		1		
EDUCATION		3	4	
FINANCIAL BENEFITS			1	
HEALTH		1	1	1
HEALTHY/SUSTAINABLE OPTIONS			1	
INDIVIDUAL RIGHTS	1			
INFORMATION		3	1	1
MORAL VALUES				
OTHER PUBLIC SERVICES	2		1	
REGULATION		1		
SUSTAINABILITY	1			1
Total	4	9	9	3

RESPONSIBILITY – BEFORE

Commonalities: Both for UNI and NON-UNI the most often mentioned responsible actor was the Government (17 and 7 mentions) followed by the Public and People in general combined (equally 7). Also, the Media were cited by both groups (2 and 1). The difference in the number of mentions is minimal (29 vs 26)

Differences: The NON- UNI group mentioned quite often Companies (4), Shops (4) and also researchers (1) and uncertainty (1) while UNI group did not mention either of them. The UNI group instead mentioned schools (1).

RESPONSIBILITY – AFTER AND CHANGE

Commonalities: Similarly, both UNI and NON-UNI cited again the Government most often as the responsible actor but with the NON-UNI citing it more (7 vs 12 mentions, respectively) as well as the Public and People in general combined but with the Uni group presenting a decrease (5 vs 11) as the second most often mentioned responsible actor. The UNI group cited Companies (1) and Uncertainty (5) similarly to the NON-UNI group.

Differences: The number of mentions of responsible actors decreased in the UNI group (29 to 19), whereas in increased in the NON-UNI group (26 to 35). These were due to decreases in mentions of Government, the Public, and the Media (now 0). In the NON-UNI group, there was an increase in the mention of Government (12) and People/Public (2) as well as the appearance of Health care staff (2) and schools (2)

RESPONSIBILITY Summary: The Government and the Public were the most often mentioned responsible actors for the public benefits cited, both before and after the discussions among both groups. It is interesting to note that while the UNI group made more mentions of responsible actors than the NON-UNI group, the opposite was true after discussions. This is mainly related to increase mentions of the Government and the (general) Public among the NON-UNI group and decreases in the mention of those actors among the UNI group. On the other hand, while companies and shops were cited only by NON-UNI group before the discussion, they were mentioned by UNI group after.

	ITALY-BEFORE-UNI	ITALY-AFTER-UNI	ITALY-BEFORE-NON-UNI	ITALY-AFTER-NON-UNI
COMPANIES		1	4	3
GOVERNMENT	17	7	7	12
HEALTH CARE STAFF				2
MEDIA	2		1	2
PEOPLE IN GENERAL	3	3	4	8
PEOPLE PAYING TAX	2			
PHYSICAL/SOCIAL ENVIRONMENT			1	
PUBLIC IN GENERAL	4	2	3	3

RESEARCHERS			1	
SCHOOLS	1	1		2
SHOPS			4	2
UNCERTAINTY		5	1	1
Tot.	29	19	26	35

IT COUNTRY REPORT – FOCUS GROUP THEMES AND FINDINGS

The PlayDecide methodology highly influenced Italian focus group discussion, both in the NON-UNI and UNI sessions. Story cards, information cards and issue cards were the anchors among which the discussion developed. In the NON-UNI group discussion participants expressed their thoughts and opinions in connections with the selected cards and in rounds more than a back-and-forth dynamic. On the other hand, in the UNI group, although starting from the same material, participants were more able to develop a dialogue that went beyond the given topics. Regarding public benefits, both groups presented more options in the final voting according to the discussion they had even though no real argument was developed around the definition of public benefit.

FOCUS GROUP - EMERGING AND CENTRAL COUNTRY-SPECIFIC THEMES

The NON-UNI group discussed extensively on the importance to develop and maintain a healthy diet for individuals. Personalized dietary advice and the promotion of individual awareness and information were perceived as missing from public health services. They wished for guidelines to select suitable, health-customized products. Also, many of them acknowledged that factors such as economic limitations, time constraints or food preferences, can make it challenging for people to diversify and maintain their diets. Some of them proposed to use data on food consumption to educate individuals about healthy choices and personalized diets. Also sharing information on individual food consumption was perceived as fundamental to improving the general knowledge on how to improve health and sustainability. Many stressed the need for educational efforts to improve food quality in school canteens, where children develop their eating habits and share meals. The discussion included opinions on whether to prioritize economic accessibility or health benefits. Some argued for making healthy foods more affordable and available, while others believed that promoting awareness and understanding the value of eating well were crucial. There was also a call to remove the negative connotation associated with the word "diet," emphasizing that it should signify mindful eating rather than sacrifice or restriction. The debate revolves around respecting individual choices and privacy while encouraging open conversations about food habits to foster better health practices. In general, many people discussed their personal experiences and anecdotes.

"I believe that data on food consumption is important to understand where we are heading and where adjustments might be necessary. At the same time, it allows for personalization, enabling individuals to have

a tailored diet, especially as age progresses and nutrition becomes more crucial for one's health." - IT, male, NON-UNI group (C)

In the UNI group the debate was conducted on a less personal level, discussing the sustainability of the food system and individual choices at societal level. Less personal experiences and anecdotes were mentioned. There was a discussion about the overwhelming variety of food choices, which can lead to confusion and inequality. Taxation was suggested as a means to incentivize healthier food options. Citizen participation was highly advocated in decision-making related to food, promoting transparency and informed choices. The importance of early food education, starting from schools, was also highlighted. The use of consumer data was mentioned to foster knowledge, promote healthier products and protect both human health and the environment. Furthermore, the participants discussed the possibility of supporting local producers without imposing specific food choices on individuals. Education, information, and personal responsibility were considered essential for making conscious food decisions. Finally, the discussion delved into the importance of considering environmental impact and economic aspects while making food choices, including the significance of favoring local and sustainable products.

"But honestly, to read that the government is changing the rules, that it's trying to help people to eat healthier, no! That is, I find it an intrusion, the government must perhaps give me the possibility to choose, give me tools, but not that it can impose what I have to eat, that's it." - IT, male, UNI group (R)

FOCUS GROUP - CONSENSUS VOTING ON PUBLIC BENEFITS AND REASONING

As far as reaching a group consensus on what the greatest public benefit is, derived from the use of consumer data, the participants from UNI group unanimously selected the option developed during the discussion (option G), related to the fostering of education and information for citizens at all levels. Also using data to make healthy food cheaper and easier to find and prepare than less healthy food (option D) was voted highly as a benefit derived from using consumer data, as well as the option related to linking food choices with health data so as to personalize the feedback people are given about what food choices might contribute to their health problems now or in the future (option B).

During the last part of the focus group, participants reasoned about the trade offs and differences among option D and option B, concluding that they are strictly related as the health is the most important factor to consider, but in order to be supported, healthy products must be affordable. Concerning option G, related to consumer education and information, it was agreed that this is the ultimate goal, but more immediate actions (e.g., making healthy foods more affordable) could provide more practical signals to guide consumer behavior.

The NON-UNI group selected as the greatest public benefit of using consumer data the linking of food choices with health data to provide individualized feedback to consumers (option B), in line with the centrality of the health issue throughout during the whole discussion. Similarly to the UNI group, the NON-UNI group voted strongly for the option of using data to make healthy food cheaper and easier to find and prepare than less healthy food (option D). The arguments are similar to those of the UNI group, meaning that health and affordability are two closely related factors, stressing the importance of facilitate the consumer in choosing a healthier product by making it more visible and affordable. The relationship between health and affordability was also discussed in terms of competing goals, as people can be informed about the importance of healthy eating, but they also need to make ends meet.

In the UNI group, reducing the range of products available in order to keep only the healthier and more sustainable ones (Option A) was rated the lowest as a public benefit, together with encouraging people to choose local food in order to steer the local economy, even if it is bad for the environment (Option C). Regarding Option C, supporting the local economy at the expense of the environment was by no means considered a public benefit, as participants agreed that local producers should not be rewarded in any case. Reducing the number of products available was seen as detrimental to freedom of choice. In addition, it was argued that reducing the availability of unhealthy foods would mean wiping out the food culture of entire countries and regions.

In the NON-UNI group there was no consensus on the lowest public benefit and opinions were more dispersed. Similar to the UNI group, Option A was mentioned among the lowest rated public benefits. In addition, the lowest rated options were encouraging people to choose new types of food that are healthier and more sustainable than what they are used to (Option E) and protecting the individual's freedom of choice to eat what they want even if it has a negative impact on the environment and society (Option F). Protecting individual freedom to choose what to eat was not considered to be a public good, but rather an individual good that could in some cases favour choices that are contrary to the public good (e.g. the choice to buy out-of-season produce that is produced at the expense of the environment). Encouraging people to choose new types of food was not considered a public benefit, as it was argued that people should be encouraged to use products that already exist but are little known.

SLOVAKIA COUNTRY REPORT

The PlayDecide groups took place on December 14 and December 15 , 2022, from 16:30 to 19:30 hours at Slovak University of Agriculture, Faculty of Economics and Management, 949 01 Nitra-Chrenova, Slovakia.

The facilitators were Patrik Rovný and Erik Jansto. Elena Horska provided overall supervision and Patrik Rovný was responsible for data analysis and writing the country report.

BEFORE AND AFTER QUESTIONNAIRES

BENEFITS - BEFORE

Commonalities: Participants did not use this terms (also its variation) in both groups. Many participants had empty rows (UNI 6, non-UNI 3). People in both groups were describing topics connected with benefits as health – free health care (UNI 5, non-UNI 2) and also public places + public transport (UNI 5, non-UNI 3).

Differences: UNI group described also topic sustainability (in general form (3), plastic reduction (2) and energy reduction (2)).

Public benefits related to food: none

BENEFITS – AFTER AND CHANGE

Commonalities: Participants did not use this terms (also its variation) in both groups. Many participants had empty rows (UNI 8, non-UNI 5). Both groups described topic regulation (UNI 7, non-UNI 7) and health (UNI 3, non-UNI 4)

Differences: UNI group mentioned also topic education (3). NON-UNI mentioned topic regulation (subsidies 4, taxes 1, food quality 1). After the discussion, a large increase was noted in the UNI group in the area of regulations (before 0 after 6).

Public benefits related to food: Increase from 0/8 to 6/8 in both the UNI and NON-UNI groups.

BENEFITS Summary:

Participants in both groups after and before questionnaire did not use this term benefit in Slovak language and also its variation. No one mentioned public benefits related to food in both groups before the discussions, but they did so after discussions mostly in connection with subsidies of local foods and food quality.

People in both groups were describing topics mostly connected with benefits as health – free health care (before UNI 5, non-UNI 2 and after UNI 3, non-UNI 4). Many participants had empty rows (before UNI 6, non-UNI 3 and after UNI 8, non-UNI 5). After the discussion, a large increase was noted in the UNI group in the area of regulations (before 0 after 6).

TRADE-OFFS -BEFORE

Commonalities: Both UNI and non-UNI had big number of don't know/blank answers (UNI 20 and non-UNI 10). Other answers in both groups were different.

Differences: In terms of answers to the "trade-off" question, the UNI group were more likely to cite trade-offs (7) than the non-UNI group (5). The UNI group provided the following responses: reimbursement of business trips – transport, possibility to pay by card for meals, benches - sitting in the restaurant, drinking water fountains, skating rink - another type of playground and double opinion. The non-UNI group provided the following responses: lack of interest in preventive inspections, in the case of mandatory vaccination, the risk of side effects, not everything is healthy, homemade is also cheap, it's a matter of finances, financial compromise, it is a compromise because the people who do it are serving their punishment by doing beneficial things.

TRADE-OFFS – AFTER AND CHANGE

Commonalities: Both UNI and NON-UNI had blank answers (UNI 15 and non-UNI 3). Other answers in both groups were different.

Differences: In terms of answers to the "trade-off" question, the non-UNI group (12) were more likely to cite trade-offs than the UNI group (6). The UNI group provided the following responses: have more domestic products (2), selection of new types of food, more affordable food, benches - sitting in the restaurant, drinking water fountains, skating rink - another type of playground.

The non-UNI group provided the following responses: voluntariness - involuntariness (setting the rate), investment in campaigns and research, not everything is healthy, homemade is also cheap, it's a matter of finances, social conditions, family security, the introduction of new foods, genetically modified foods that have not been tested for the long term (for DNA changes, effects on cell membranes...), more profit for the company - a healthier company, government - more money for research and development, the compromise is that those foods that we cannot procure in our conditions will be imported, people got a discount - they pay lower amounts but the transport company loses profit, it is partially covered by the residents' taxes, habits (working), compromises within the division of labor are being built, it is not free, so some financial means is required.

TRADE-OFFS Summary:

Both UNI and non-UNI had big number of don't know/blank answers (before UNI 20 and non-UNI 10 and after UNI 15 and non-UNI 3). Other answers in both groups were totally different. In terms of answers to the "trade-off" question, before the questionnaire UNI group were more likely to cite trade-offs (before 7) than the non-UNI group (5). After questionnaire the non-UNI group (12) were more likely to cite trade-offs than the UNI group (6).

RESPONSIBILITY – BEFORE

Commonalities: Both for UNI and non-UNI the most often mentioned responsible actor was the government and local government (UNI 12 and non-UNI 11 mentions)

Differences: UNI group had more blank answers (8) than the non-UNI group (4). UNI group used government in connection with health (3), education (1), financial benefits (2), other public services (2) and sustainability (4). Non-UNI group used government in connection with health (2), financial benefits (2), regulation (4), other public services (2) and sustainability (1).

RESPONSIBILITY – AFTER AND CHANGE

Commonalities: Both for UNI and non-UNI the most often mentioned responsible actor was the government and local government (UNI 8 and non-UNI 8 mentions)

Differences: There were differences in blank answers between both groups. While the number of blank answers decreased in UNI group (from 8 to 3), than the number in non-UNI group increased (from 4 to 7).

UNI group used government in connection with health (2), education (1), information (2) and other public services (3). Non-UNI group used government in connection with health (2), regulation (3), other public services (2) and sustainability (1).

RESPONSIBILITY Summary:

Both for UNI and non-UNI the most often mentioned responsible actor before and after was the government and local government (before UNI 12 and non- UNI 11 mentions and after UNI 8 and non- UNI 8). There were differences in blank answers between both groups. While the number of blank answers decreased in UNI group (from 8 to 3), than the number in non-UNI group increased (from 4 to 7). In both groups government was connected before and after with health (before UNI 3 non-UNI 2 and after UNI 2 non-UNI 2).

Themes - unique to Slovakia

The most frequent discussion contributions of the participants of both groups were the issue of imports and Slovakia's self-sufficiency. In discussions quite often argument was: the opinion that low-quality food is imported to Slovakia. In terms of quality, Slovak foods are of better quality. It is necessary for the government of the Slovak Republic to limit food imports and, on the other hand, to support domestic local food producers.

The discussion clearly revealed the opinion that it is necessary to financially support Slovak farmers and food producers, since imported food is subsidized. Another opinion related to this was the question of the occupation of high-quality agricultural land by the construction of industrial parks.

“So I would be in favor of more of those local stores, because you know that you are buying at least something healthier, even if it is a bit more expensive than in those hypermarkets and supermarkets.”

- PRAGUE, NON-UNI

“We need to prioritize our local foods over imported ones, because we know that, for example, in Spain, quite limited from Spain, so as far as sprays are concerned, now is the season of mandarin oranges. We know that it is that quite dangerous causing cancer.”

- NEW YORK, NON-UNI

“New York is inclined to the same opinion, with the addition that it's Christmas time, it's winter, and I think we should support local sellers, that is, buy more local pears and apples. And we don't need oranges, lemons and tangerines.”

- PRAGUE, NON-UNI

“The only thing I would like to add to this is that we need to support more of the local sellers, because they are poor compared to the fact that, for example, if I go to a hypermarket or a supermarket, I cannot buy normal apples from our crops there, but I actually have to look for what's there. I will find mangoes there, I will find kiwis there, I will find all sorts of other things there, and somewhere I will find some imported apples. So it's about how it's supported and therefore I probably agree with Budapest and what was said here.”

- NEW YORK, NON-UNI

The UNI group participants also discussed linking consumer data with health data and receiving personalised feedback:

“Well, I gave it just because of that. So for me there are 2 biggest benefits. I can imagine that, for example, teas would be displayed in food. They would be divided that these lower blood pressure, some also divided according to indications. That would be the section of teas that lower blood pressure.”

- TOKYO, UNI

“I, on the other hand, think that there are people like I don't want to offend anyone, but simpler people. They do not deal with what it is, what its composition is, what effect it has. They see a nice packaging or see a good

price and buy it. That's why I think that the state or someone should direct them to it and therefore offer mainly the healthier foods."

- VIENNA, UNI

"Foods like fat (lard) and bacon are healthy, but they are so earlier than I've been here. They say they are the best in the world. It is correct? What's right 20 years there was no good bacon or fat (lard) and suddenly it's better than anything possible. So the average person can't navigate this? For example, some scientist says that coffee is good for us, so why don't we all drink coffee? Even those who don't want it. Then in 10 years we will tell him that tea is better. Scientists will achieve what they want to achieve in research."

- BUDAPEST, UNI

And the last area discussed in both groups was healthy eating. The discussants responded that children do not eat healthy because they mainly consume sweet foods. The basis is the family, and consumer behavior must change in the family.

The voting options made by participants in Slovakia

UNI group

On the question what the biggest public benefit is, derived from the use of consumer data, the participants from UNI group mainly argued "Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores "(option 4). Also "linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so)." (option 2) was voted highly as a benefit derived from using consumer data.

In the discussion, the participants stated that affordable are foods that are more subsidized. We know the situation in Slovak agriculture regarding state subsidies. Compared to other countries, the Slovak Republic supports farmers at a low level. Imported food is more subsidized but may not be of high quality. Many times we come across low-quality imported food. The state should also intervene through the media and advertisements to support the sale of Slovak products.

In agriculture, artificial fertilizers are used more and this worsens the environment. Trees are being destroyed in the world at the expense of agriculture. Children need to be influenced to eat less sugary foods that are not healthy for children. It is necessary to influence families on how to eat healthy. There were also opinions that people are poorly informed about food because they don't read labels.

Non-UNI group

On the question what the biggest public benefit is, derived from the use of consumer data, the participants from UNI group mainly argued “Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.”(option 3). Also “Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.” (option 4) In the discussion, the participants stated that support from the state is needed in order for Slovakia to be self-sufficient, as it was in the past. Slovak local food is of better quality than imported food. In Slovakia, food imports are second class (poor quality), and the government has admitted this. It is necessary to reduce or ban the import of foreign low-quality products and support local producers. The land is occupied at the expense of the construction of industrial parks and shopping centers. If we destroy nature - we will not be able to cultivate the soil was voted highly as a benefit derived from using consumer data.

SPAIN COUNTRY REPORT

The PlayDecide groups in Spain took place in Madrid at Parroquia de la Asunción de Nuestra Señora, Gabriel y Galán, 17, 28002 on Dec 14, 2022 10:00-13:00 (NON-UNI group) and 16:00-19:00 (UNI group).

Both Javier de La Cueva and Lluís Guerrero facilitated and took notes during the session. Javier de la Cueva was responsible for the country data analysis and report.

BEFORE AND AFTER QUESTIONNAIRES

BENEFITS - BEFORE

Commonalities: The commonalities between UNI and NON-UNI groups were Education (UNI=4, NON-UNI=3) and Information (UNI=1, NON-UNI=1).

Differences: The main differences between both groups were Financial Benefits (UNI=2, NON-UNI=0), Regulation (UNI=4, NON-UNI=1), Healthy sustainable options (UNI=1, NON-UNI=5), other public services (UNI=5, NON-UNI=1), Sustainability (UNI=1, NON-UNI=6), Morals (UNI=2, NON-UNI=8) and Enjoyment (UNI=0, NON-UNI=4)

Public benefits related to food: 1 of 9 (UNI) and 5 of 9 (NON-UNI) mentioned a benefit that could be seen as related to food to some extent.

BENEFITS – AFTER AND CHANGE

Commonalities: After the discussions, the only commonalities that could be found between both groups were Information (UNI=1, NON-UNI=2) and Other Public Services (UNI=1, NON-UNI=0), although the little mentions could mean they are not significant for the discussants.

Differences: Education, which was one aspect in which both groups shared a common view before the discussion, became a difference (UNI=10, NON-UNI=2). Other differences were Financial Benefits (UNI=2, NON-UNI=0), Regulation (UNI=6, NON-UNI=3), Healthy sustainable options (UNI=2, NON-UNI=8), other public services (UNI=5, NON-UNI=1), Sustainability (UNI=1, NON-UNI=6), Morals (UNI=2, NON-UNI=8) and Enjoyment (UNI=0, NON-UNI=4)

Public benefits related to food: Public benefits related to food increased their importance, being mentioned by 2 of 9 UNI and 8 of 9 NON-UNI participants.

BENEFITS Summary:

Although maintaining the difference between both groups, after the discussions both groups incremented their view over Regulation (UNI from 4 to 6, NON-UNI from 1 to 3) and in Healthy/Sustainable options (UNI from 1 to 2, NON-UNI from 5 to 8). Education mention evolved in the UNI group from a 4-Before to a 10- After. Financial Benefits did not alter the difference, whilst Healthy sustainable options moved from a UNI=1, NON-

UNI=5 into a UNI=2, NON-UNI=8, increasing thus the difference between the Before and After figures. Sustainability maintained its importance in the NON-UNI group, with 6 mentions in both cases, maintaining a significant difference with the UNI group. Morals decreased its importance in both groups, moving from a UNI=2, NON-UNI=8 into a UNI=0, NON-UNI=4. Finally, the Enjoyment item was very low in both groups, maintaining one mention in both before-after UNI, and decreasing from 4 into 1 in the NON-UNI group.

TRADE-OFFS -BEFORE

Commonalities: No common trade-offs between both UNI and NON-UNI groups except the cost of food in relation to quality. It was tacitly accepted by both groups that quality food is more expensive. Thus, the trade-off a healthy nutrition is its cost.

Differences: While UNI group (2) was more concerned about the quality of Education, NON-UNI group (1) focused more into having time to be used for education. No more differences were found not because of the groups education (UNI and NON-UNI), but because of the disparity in the answers.

TRADE-OFFS – AFTER AND CHANGE

Commonalities: No common trade-offs. The cost trade-off, mentioned in the Before discussion was not mentioned in the After discussion.

Differences: No differences can be found. Education quality or prices was dropped in the After discussion.

TRADE-OFFS Summary: The trade-offs enumerated by both groups are really difficult to include in common categories as the examples provided are full with details and nuances. While the methodology used has demonstrated its value in extracting the participants' ideas of the beneficial aspects of Food consumption and habits, it has not shown ease in obtaining the ideas conforming the trade-offs.

RESPONSIBILITY – BEFORE

Commonalities: Both groups were coincidental in showing the WHO (World Health Organization) as one of the responsible organizations (UNI=1, NON-UNI=1) for Health, notwithstanding the responsibilities of Governments (UNI=3, NON-UNI=2) in Morals and Education, people in general (UNI=2, NON-UNI=1) in Education and Manufacturers, Food Manufacturers, Companies, Food Industry (UNI=1, NON-UNI=1) in providing sustainable/healthy options.

Differences: Responsible in Regulation was mentioned twice by UNI group and none by NON-UNI. Responsibility related to the provision of healthy opportunities was considered more a government issue by the NON-UNI group (4) than by the UNI group (2). On the contrary, related to the provision of other public services, it was the UNI group (3) who considered it more under the government responsibility than the NON-UNI group (1). Regarding Sustainability, the balance was UNI group (2) versus NON-UNI group (4). A main difference was found in the moral values, which were not mentioned by the UNI group, with one exception

for Social organizations, and mentioned by the NON-Uni group in six cases: Employers and companies (1), shops (2), farmers (2) and distributors (1).

RESPONSIBILITY – AFTER AND CHANGE

Commonalities: Organizations as the main responsible actors increased in both UNI and NON-UNI groups, from UNI=8 to UNI=12 and from NON-UNI=5 to NON-UNI=6.

Differences: Regarding governmental responsibility in Education, it showed an increase in the UNI group from Before-3 to After-6, increasing in general in the UNI group from 6 to 15 mentions. Regulation, which was mentioned 4 times by the UNI group in the Before discussion, received no mentions in the After report. This change was not so steep in the NON-UNI group, which only changed from 6 to 5. Similarly, the UNI group decreased mentions to Healthy/sustainable options, from 4 to 1, whilst the NON-UNI maintained their mentions, 8 in both Before and After.

RESPONSIBILITY Summary: The NON-UNI group showed more governmental responsibility than the UNI group in Health, Education and providing healthy opportunities. Additionally, the NON-UNI group mentioned more moral/ethical values than the UNI Group. In general, the actors responsible for all factors were varied, none of them being signalled as the only or the main responsible.

SPAIN COUNTRY REPORT – FOCUS GROUP THEMES AND FINDINGS

Similarly to what occurred within the focus groups held in the other countries, the discussion of Spanish focus groups was mediated heavily by the material used for the PlayDecide methodology, therefore the topics around which the participants held the discussions were framed by the cards. This was more evident when some of the participants supported their opinions based not only in the chosen card but in relation to other cards that were part of the game. The cards provided a strong framework that the participants rarely abandoned. Aside from the PlayDecide methodology, in both UNI and NON-UNI groups there were participants whose voices pushed other participant opinions.

FOCUS GROUP - EMERGING AND CENTRAL COUNTRY-SPECIFIC THEMES

The summary below presents briefly the central themes that emerged in the focus group discussions only in Spain and thus, specific to the Spanish data.

Two different topics conducted the discussions held in the focus group. Whilst the NON-UNI group centred their interventions in the balance between money and time, the UNI group focused on aspects related to choice.

The NON-UNI group connected unhealthy food with lack of time to prepare it due to the incorporation of women to the labour market, being women who were responsible for meal preparation in their families. Nevertheless, this responsibility has evolved into a more shared work, where men also participate. Even, one of the discussants (male) explained how he is the responsible in his family.

The UNI group was more concerned about freedom of choice, markets and ecology, connecting the three items with local food. The wider opinion was in favour of local products, although one of the participants (male) expressed his concerns about reducing the markets. Transportation was the only parameter taken into account when thinking about local or non local food, without mentioning any other costs that could affect the production, as salaries, social security, chemicals, etc. There was a common tacit understanding that local food is better than non local one, without further discussion. This tacit opinion was the *correct* one, although exceptions based on varieties that did not exist locally or based on price could be accepted.

In relation to food technology, it was accepted without criticism by both groups, although the concept had to be explained to a female participant in the NON-UNI group as she understood by food innovation only transgenic food. UNI groups were aware of the diverse possibilities of the technology and did agree on the different uses, good or bad, of innovation and, in some examples, as something needed of a better interpretation due to contradictory use of certain food in contexts that should guarantee the food was healthy (cookies being served to patients in hospitals). Overall, data was nevertheless considered necessary for planning and specifically to avoid as much as possible food wasting.

The concept of public benefit did not arise but as a tacit understanding and as an expression of other values (sustainability, public health, etc.). The nearest approach to this concept appeared in the UNI group but not under the terms *public benefit* but under the expression “Free choice, yes, but there must be norms focused in the good benefit of the society as a whole” (male).

FOCUS GROUP – CONSENSUS

Reaching a broad consensus was not easy. The NON-UNI group reached only two points of consensus, namely to eat healthy and a better product labelling, whilst the discussion about the government giving opportunities to products of all places was not supported by all the participants, as some of them wanted to include the condition of quality. On the other side, the UNI group only had consensus on the need of education. There were discussions about two other concepts, freedom and clear information, but none of them reached consensus: freedom did not reach consensus due to the different conceptions of this term and clear information was rejected because it could not be defined by the participants.

UK COUNTRY REPORT

The UK PlayDecide sessions were held on 10 December 2022, from 10:00 to 13:00 and 14:00 to 17:00 at University of Surrey, Stag Hill, University Campus, Guildford, GU2 7XH, England. Both sessions were facilitated by Lisa Mohebati with additional assistance by Lada Timotijevic. Monique Raats took notes during the sessions. Lisa Mohebati was responsible for the country data analysis and report.

BEFORE AND AFTER QUESTIONNAIRES

BENEFITS - BEFORE

Commonalities: Main cited public benefit for both groups: Health, with the distinction that UNI cited health services more often and NON-UNI cited improving health more often. Other public services also cited by both groups (2 UNI and 3 NON-UNI)

Differences: NON-UNI cited healthy/sustainable options more often than UNI (5 vs 1), as well as Information (4 vs 2)

Public benefits related to food: 3/8 people (37.5%) for UNI and 7/9 (77%) people for non-UNI.

BENEFITS – AFTER AND CHANGE

Commonalities: Both increased mention of Food-related education as a benefit (UNI 1 to 3, NON-UNI 0 to 6), the Health-related use of consumer food data (UNI 0 to 2, NON-UNI 1 to 2), both decreased their mention of Sustainability (UNI 1 to 0, NON-UNI 2 to 0). Both mentioned reducing burden on health services as a benefit afterwards (2 UNI, 1 NON-UNI). Improving health was cited equally across groups (3), as was using consumer-related food data (2), other public services (1), moral values (1) and individual rights (1).

Differences: The magnitude of the increase in Food-related education (UNI 1 to 3, NON-UNI 0 to 6) and Subsidies (UNI 1 to 2, NON-UNI 3 to 7 --especially Banning/limiting food items 0 to 3 and Subsidies on local food 0 to 2 for NON-UNI) was much greater among NON-UNI; mention of NGOs increased among UNI and decreased among NON-UNI (UNI 1 to 2, NON-UNI 2 to 0), similar to improving health (UNI 1 to 3, NON-UNI 4 to 3). There were differences in the top 3 cited benefits across groups: For UNI it was Health (11), Financial Benefits (4) and Regulation (4); For NON-UNI it was Healthy/Sustainable Options (12), Regulation (7) and Education (7).

Public benefits related to food: Both groups increased in the number of benefits related to food (more so in the UNI group because it was lower to begin with) with 6/8 people (75%) mentioning food-related benefits in the UNI group and 8/9 (89%) people doing so in the non-UNI group.

BENEFITS Summary: To begin with, Health was the main benefit cited across both groups. The NON-UNI group cited healthy/sustainable options more often than UNI (5 vs 1), as well as Information (4 vs 2) and a greater proportion of them cited food-related benefits as compared to the UNI group (before: 77% vs 37.5%). After the discussions, both increased their mention of Food-related benefits (after: 75% & 89%), although some did not mention food-related benefits at all. It is of note that the NON-UNI group was more focused on food-related benefits from the beginning. Both groups included mention of Food-related education (especially the NON-UNI group) and Health-related use of consumer-food data and decreased their mention of Sustainability. There was a marked increase in Regulation among the NON-UNI group, especially as regards banning and limiting food items and subsidies for local food. Health (7 to 11) and Financial Benefits (4 to 4) remained the top 2 categories of public benefits cited in the UNI group, with Information (4) replacing Other Public Services (2) after, whereas the top 3 categories for the non-UNI group after went from being Health (5), Healthy/Sustainable Options (5) and Information (4) to Healthy/Sustainable Options (12), Regulation (7) and Education (7).

TRADE-OFFS -BEFORE

Commonalities: Both UNI and NON-UNI started with the same number of responses to this question (23) and the same number of don't know/blank answers (5). For the UNI groups there were slightly more mentions of trade-offs (defined as something you must give up to obtain a benefit) and the NON-UNI group (9/18 vs 6/18). The most commonly cited trade-off (defined as above) was cost (to the government/taxpayer) for both groups.

Differences: In terms of answers to the "trade-off" question, the UNI group were more likely to cite trade-offs (as defined above) than the NON-UNI group. The NON-UNI group cited consequences, requirements and reasons more often than the NON-UNI group. In terms of trade-offs defined as something you must give up in order to have a benefit the UNI group tend to cite them more often related to health, whereas it was for Healthier/Sustainable options in the NON-UNI group, which is related to what was the benefit most often cited in each group. For the UNI group some trade-offs mentioned in addition to cost (most often mentioned in conjunction with Health) were loss of jobs with less consumption of unhealthy foods (related to Information); (political controversies (Financial benefits); and over-regulation (Regulation). For NON-UNI, cost was mentioned most often (in connection with Other Public Services and Financial benefits) and there was one mention of less profit for the retailer (Healthier/Sustainable options) and one mention of more work for the consumer (Sustainability).

TRADE-OFFS – AFTER AND CHANGE

Commonalities: The number of answers left in blank decreased for both UNI and NON-UNI groups and the number of trade-offs (defined as something you must give up to obtain a benefit) increased slightly across both groups (UNI: 9 to 11; NON-UNI: 6 to 8), with the proportion of those related to cost decreasing (UNI: 44% to 27%, NON-UNI: 67% to 37.5%). The most commonly cited trade-off (defined as above) was still cost (to the government/taxpayer) for both groups, although reduced sales and less profit was also tied with cost for first place in the NON-UNI group. A person from each of the groups also mentioned a reduction in choice as a trade-off for the public benefit they selected (related to Health and Healthy/Sustainable options).

Differences: The NON-UNI group provided more answers to this question than the UNI group (27 vs. 23). This is because the NON-UNI group provided a higher number of consequences (especially positive) related to the benefit (9 vs. 3). In terms of answers to the “trade-off” question, the UNI group were more likely to cite trade-offs (defined as something you must give up in order to have a benefit) than the NON-UNI group. Also, the UNI group cited that food received for “free” (i.e. from charities) is often unhealthy (NGOs). In the NON-UNI group there were additional mentions of less sales and less profit for retailers (Healthy/Sustainable options and Regulation) and riots if unhealthy foods are banned (Regulation).

TRADE-OFFS Summary: Although trade-offs (defined as something you have to give up in order to obtain a benefit) seem to have been better understood by the UNI group, they seemed to have been more limited to costs because the public benefits mentioned did not change that much, whereas the range of trade-offs offered by the NON-UNI group was broadened by the discussions and reflected the public benefits most often cited, which shifted away from Health, Financial Benefits and Other Public Services to Healthy/Sustainable options, Regulation and Education after the discussions. The discussions in the NON-UNI group also seemed to increase awareness of more positive consequences related to the benefits mentioned. Interestingly, there were signs that reduction of choice might be a trade-off necessary to achieve the public benefits cited in both groups.

RESPONSIBILITY – BEFORE

Commonalities: Both for UNI and NON-UNI the most often mentioned responsible actor was the Government (16 and 7 mentions) followed by the Public (both taxpayers and the public in general combined, 9 vs 5). Only 1 person in each group mentioned “yourself” or “we are” as responsible for any benefit – the others were more related to the public or taxpayer in general. Neither group mentioned the Government in connection with being responsible for NGOs.

Differences: The UNI group made more mentions of responsible actors than the NON-UNI group (35 and no blank/don’t know vs 29 and 3 blank/don’t know). The UNI group mentioned the taxpayer more often than people in general as compared to the NON-UNI group (5 vs 1). Companies were tied with the Public as

responsible actors in second place for the NON-UNI group with a tie also in third place between Shops (3) and NGOs (3). For the UNI group there was a tie in third place between Companies (2) and Health Care Staff, due also to the nature of the public benefits selected. Only the NON-UNI group made mention of the Physical/social environment as a responsible actor (1 mention).

RESPONSIBILITY – AFTER AND CHANGE

Commonalities: Similarly to before, both UNI and NON-UNI cited the Government most often as the responsible actor (12 and 15 mentions, respectively) and the Public (5 and 12 mentions) as the second most often mentioned responsible actor. Fewer actors were mentioned in connection with Other Public Services, as this public benefit was mentioned less often by both groups at the end.

Differences: The number of mentions of responsible actors decreased in the UNI group (35 to 27), whereas it increased in the NON-UNI group (29 to 41) leading the NON-UNI group to surpass the UNI group in number of mentions of responsible actors. These were due to decreases in mentions of Government, the Public, Health Care Staff, Companies and Funders among the UNI group and increases in mentions of Government, the Public, Shops, Schools and Health Care Staff among the NON-UNI group. In the NON-UNI group, there were decreases in mention of Companies, Funders, NGOs and the Physical/social environment. Only in the NON-UNI group were mentions of “ourselves”, “you yourself”, and “us” made (total of 4 mentions) – mentions of the public were more generic in the UNI group. There was no clear 3rd place for responsible actor in the UNI group (tied between Companies, Shops, Schools, Media, Researchers and NGOs with one mention). For the NON-UNI group, third place was for Shops.

RESPONSIBILITY Summary: The Government and the Public were the most often mentioned responsible actors for the public benefits cited, both before and after the discussions among both groups. It is interesting to note that while the UNI group made more mentions of responsible actors than the NON-UNI group, the opposite was true after discussions. This is mainly related to increase mentions of the Government and the (general) Public among the NON-UNI group and decreases in the mention of those actors among the UNI group. In addition, the Public was most often mentioned in their role as taxpayers than the general public among the UNI group. The reverse was true for the NON-UNI group, and in fact only in the NON-UNI group were any personal mentions of responsibility made (ourselves, us) after discussions.

FOCUS GROUPS – EMERGING AND CENTRAL COUNTRY-SPECIFIC THEMES

In the UK, the cost of living crisis was an important topic, with fuel and food prices high and people having to choose between heating their homes or buying food. Thus, the cost of food was a central issue, whether

related to food choice, healthy or unhealthy food, or local or imported food. Sustainability issues were viewed as less important in the face of the economic crises being experienced.

“For me, one of the most important factors that ranks higher is the cost of living. So I think the environmental impacts is less of a thing now than it was, I think, two years ago. Because people are just in survival mode. How are we gonna get through this week? How are we going to put food on the table, keep the house warm?”

- UK, male, UNI group (O)

“It really annoys me that healthy foods cost more. So how do you make a healthy choice when you go to the supermarket? So if I wanna buy like the organic or you know the “Free From” or any of that kind of stuff, it costs a whole lot more than the other stuff.”

- UK, female, UNI group (P)

“Once again, many people can't afford to choose what they would like, but need to content themselves choosing what they can afford. And once again it goes back to cost, you know. Microwave meals are cheaper, I pay them for a pound. Then if you wanna go for the more expensive option, it's going to cost you more money.”

-UK, male, NON-UNI group (P)

“It's all good having everything in this country home grown, but the expense... if you go and buy something like apples and they're really, they're so much more money than you get apples in South Africa. They are. Why's that?”

-UK, female, NON-UNI group (R)

Participants in the UK also wanted to be a part of the conversation about food, but had some doubts as to whether or not they would be heard.

“Going on about, you know, should it be about scientists or governments or companies to argue about what we -- that's just laughable because they'll never listen to us anyway. So it just, yeah. I would like to believe the governments and scientists should listen more to us but no.... That's the reality.”

- UK, male, UNI group (B)

“A lot of people feel powerless when you look around and you see, you know, sugar tax imposed, and you know, their way of life is just completely changed and everyone feels like they can't really do anything about that, they feel powerless in their voice. And then that kind of carries on to the previous argument I made about, you know, when you feel powerless, you just kind of go with what's happening. You wouldn't necessarily feel empowered enough to make decisions that may benefit you.”

- UK, male, UNI group (G)

“And should we be asked to join the conversations? Yeah, we should. Because we're the consumer so we should be asked. You know about healthy food and and things like that, but we're not. Our, our, our views...we're not allowed to give our view the government make the choice for us.”

- UK, female, NON-UNI group (S)

“People need to be heard. Speak. Speak out. Otherwise you aren't going to get anywhere.”

- UK, female, NON-UNI group (C)

Participants in both groups also highlighted the need to change the current culture around food in the UK, although this was particularly salient in the UNI group.

“...the other side of people who are, you know, who have extremely long hours aren't given this kind of culture around food... it's just people getting knocked side, side, side, side, just completely off their course. So it's a case of look after people, make food cheaper and change this culture around food and around working so that people don't go, “Ohh, I've got half an hour. Shit. I need to go to the Sainsbury's and get my meal deal and run...” before they get knocked down for being late. Which could be a case as well, you know, eating food that you can actually afford and feel happy doing it. What's feeling that you've actually got the liberty to enjoy your food. And when you feel like you can enjoy your food, you'd be more willing to as I said before, go cooking and actually do practices which are beneficial for you and would be more than survival in that sense. So, to loop it back to the, umm, public benefits, I think you gotta be able to let people afford to eat properly, so you need to take care of... you need to subsidize food, you need to change the culture around food and the way that food integrates with the work environment and you actually have to look after people.”

- UK, male, UNI group (G)

“...you know, what I said about, “No one eats together...” other countries like Spain, France....you know what, how, you know I think Britain is probably at the sad end of everything you know, compared to the others...”

- UK, male, NON-UNI group (B)

While similarities were observed across UNI and NON-UNI groups, unique themes also emerged in each group. In the UNI group, discussions connected difficulties with eating healthily with mental health.

“But I think it's interesting to actually look through this and see well, a lot of people who aren't eating the way that either they know they should, or they may actually want to, there's a stigmatization related to it and it kind of shows this kind of general idea that to kind of approach these problems, you have to also take into consideration the mental health of the people that are affected by it. Because otherwise it will just be case,

“Ohh, you should be doing this this, this, this, this” and everyone who's been to the doctors have been told that and not felt good about themselves.”

- UK, male, UNI group (G)

“And I think it ties back to the mental health work as well, is that, [you] can't run everyone down with he's thinking they're making bad decisions and like it's up to them to make those choices. How do you just support them in having, like, a balanced diet?”

- UK, female, UNI group (R)

There was also a somewhat polarised discussion around whether education was a solution to the problem: some defended that people could make healthier choices on a tight budget, whereas others suggested that it wasn't so much that people didn't know or want to eat healthier, but that people need to be able to afford to eat the healthy food they choose to eat, and not necessarily the healthier food they can afford.

Mr O: Yeah, but there are also some foods like porridge which are affordable, if you are educated about it, but you... you can do that when you have to so...

Mr G: But at the same time, it's like... why porridge when you can have things that you right now maybe are inaccessible to people, actually have more diversity, more food if things that are currently.... So yeah, right now there are options that are cheaper options than, yeah, porridge, that's up there. But why does it have to be like that and not, you know, options that you would want that are currently a bit more expensive?

- UK, male, UNI group

There were also a number of mentions of how education can facilitate healthier choices, although participants in the UNI group were very vocal about their disagreement in making it harder to purchase unhealthy food.

“...the builder who couldn't buy what he wanted to eat, that's his choice and if you want to change that maybe he's using that for a reason, for that type of energy he needs for that job, you know, and for somebody else to dictate that to him, I think it's... it's wrong. And and if you don't think that's... there's a better way for him to do it than education is just way to give him the free choice to take that route...”

- UK, male, UNI group (Y)

Ms R: I think it needs to be a different one because... “D”, I do struggle with around the fact that at the end it's got making unhealthy food more expensive and harder to find because you're then reducing choice.

Mr S: I agree

Ms R: Erm, the sugar tax is already there, so I can't imagine it's ever gonna go. [...] like I read in the newspapers about they're like not allowed to put it [sugary foods] in certain places in store, so they're making it technically harder to find, but to me that's just a bit of a...like nanny state and we shouldn't be like...

In the NON-UNI group, a lot of the discussions revolved around lived experiences of the barriers to eating healthier, including cost, lack of time or food preparation skills and preferences related to food. Differences in cooking skills and food fussiness between the younger and older generations were highlighted and extensively discussed.

"I always cooked because I was skint as you know and got the kids and I did meals out of nothing which was difficult and my daughter wouldn't have a clue how to do that slightly now, but she makes proper meals and this is what the children say, they don't want to eat that stuff. "We want to eat pasta, we want to eat pizza". And she makes these casseroles and stew and mince things and they don't want to eat it. So I don't know how you change that, so..."

- UK, female, NON-UNI group (L)

"No one eats together at the table, as a family, seeing what the problems are. Even in that sense. But if it was eating food, you know, dish out the food, you see the other people are eating it, you're like: "Come on, you can eat a little bit more of that, you know." And and you will sort of try to say, "Look, you know, we put the food..., you know that's that's the old adage isn't it, and well, we've had to work hard, we've put this food on the table, you know, you've gotta make an effort to eat it. It is good. All that's out the window at these times."

- UK, male, NON-UNI group (B)

"Our generation as well that... well like....I can...well we're very picky. Very picky. So, and it's I don't think it's fair because like obviously you know, like our parents would just be like: "Eat this, eat this or don't eat at all." But nowadays, we're just so selective and we're so picky...it's not good."

- UK, female, NON-UNI group (M)

"But you can teach kids just by watching a video. All you have to do to get them to watch a video. They don't want to learn how to cook. They don't care about cooking. They get everything given to them. Why would they care? You need to make them care."

- UK, male, NON-UNI group (F)

This group was also wary of ingredients and additives in food and food innovations.

"I don't agree with pumping chickens full of water to make them fatter and chemicals to make them ready quicker.... I think we should stop all that. It's not... it affects us in the long run and it affects our bodies as well."

So I think, yeah, I don't agree with that, with, uh, genetically modified animals and crops. And we should just let nature take its course."

- UK, female, NON-UNI group (S)

Mr A: Pot noodles. How many additives in that?

Ms C: I like Super Noodles. Them Super Noodles in Asda are just really cheap. They're like the best, Super Noodles. I have them a lot. They're about 16p. The Asda range is cheaper.

Mr A: Once again they must have that chemical in them that make you eat it. Guaranteed.

"On that note as well. They always replace it with something that initially is like unheard of. But then five years down the line, it's gonna be bad for you. Like...aspartame? In certain diet drinks? Yeah, so then that's basically worse for you than sugar."

- UK, male, NON-UNI group (F)

On the other hand, this group also seemed more open to guidance, interventions and initiatives to promote healthier eating, including banning and limiting unhealthy items and additives in food.

"And where it comes down to diet I think energy drinks should be banned. I was drinking 2 a day for a good couple of years and ended up in hospital."

- UK, male, NON-UNI group (P)

"...I've got three diseases cause I'm older and it's not like well your diet would be better if you do this and I said could you just tell me, and I was on me own at that time, no wife no this, no that, with every distress of everything else and not be doing that. Can you just give me a list that sort of says cook these 6 meals, this type of.... But you just say, eat vegetables, he didn't make any difference to me in that sort of sense. Still, yeah, but if someone could say, well, this is a healthy meal, that's a healthy meal. This is healthy, then I could sort of say alright I can target those meals."

- UK, male, NON-UNI group (B)

Ms L: And if your Fitbit registered all what went through your body and then said to you: "oh,"

Mr F: "Slow down," yeah, 100% that'd be amazing. And it would work for me I reckon.

“But as you say, maybe they could maybe just say a box of Shreddies, then they could, couldn’t they? So this Shreddies and this Shreddies, and this Shreddies is much healthier than this, and ban the less healthy.”

- UK, female, NON-UNI (L)

“...the government...has to take more control. So it says to all the food people that are coming up with new products and that...mind you, they gotta have another Department of Civil servants, right? They vet some of the stuff. And they say this is good. This is good. You’ve got to get certain levels of whatever. Well, you can release that into the public domain because there’s no real control at all. These people that you know, produce stuff and do stuff. Yeah, there must be some sort of guidelines on them I think.”

- UK, male, NON-UNI (B)

Mr P: Unless the...you know, you have all those chocolate bars, the different varieties, but just put less sugar in. Just put less sugar in so and you can...

Mr B: You can put no sugar in.

Mr P:no sugar at all

Mr F: Almost ban it, but maybe just have a certain point that you’re allowed to put in something. So I don’t think that point exists right now.

FOCUS GROUPS – CONSENSUS VOTING ON OPTIONS PROVIDING THE GREATEST PUBLIC BENEFIT

The ranking of the options providing the greatest public benefit at the end of the PlayDecide game differed across education groups and reflected the main themes from the discussions reported above.

In the UNI group, participants elected to create their own additional options providing the greatest public benefit which included “Access to affordable, healthy food” as the top option and “Creating more joy out of food from early life through education” in second place. Interestingly, their top option was very similar to the option they ranked next to last, the difference being that they did not want unhealthy food to be made more expensive or harder to find. Their lowest ranked option was: A) Reducing the number of food products available, keeping only those which are healthier or more sustainable”; and the second lowest was D) Making healthy food cheaper and easier to find and prepare and unhealthy food more expensive and harder to find in stores.

In the NON-UNI group, the preferred option was: B) Linking food choices with health data (such as weight, blood pressure or blood sugar levels) so that personalised feedback can be given to people on what food choices may contribute to their poor health now or in the future and what food choices could improve their health now or in the future (for those who choose to do so), followed by D) Making healthy food cheaper and

easier to find and prepare and unhealthy food more expensive and harder to find in stores. Their least favourite option was: F) Protecting the free choice of individuals to eat what they want even if it negatively affects the environment and society, followed by C) Encouraging people to choose local food and food products even if they are worse for the environment than imported products so that the local economy can get stronger.

In summary, both groups supported making healthy food less costly and more convenient, although the UNI group was opposed to imposing restrictions on healthier food, which was not the case in the NON-UNI group. Changing the culture around food was also important in the UNI group, whereas the NON-UNI group also valued receiving personalised guidance on improving their food choices to improve their health.

APPENDIX III.

Task 2.7 as a mini exercise in harmonisation

Task 2.7 provided us with the opportunity to pilot test what it might be like to use a harmonised methodology across different countries and cultures. A review of the literature alongside consultations with research teams led to the selection of the construct we wanted to explore (public benefit) as well as the methodology we wished to use (PlayDecide). The methodology was then tailored to the concept of choice and translated into the various languages by the University of Surrey as the coordinating organisation for the task. Consultations also occurred within the team on the selection of the samples to be recruited to the study, including a range of ages, gender, and education level, roughly based on population distributions across participating countries. Having the budget held by the coordinating team led to identification of a recruitment agency with international links to facilitate the process, although a different agency was used in Germany due to a change in partner organisation mid-task. An application for ethical approval was developed so that those partners whose institutions had ethics committees could translate and submit their own applications and those who did not could collect the data on behalf of the coordinating institution. Decisions for data to be kept in each country were made, with only summary data sent/translated to the coordinating institution to be written up in the deliverable and any manuscripts written for publication. Trainings and a trial run of the methodology were used to ensure all were familiarised with the material and procedures, and modifications were made at this point based on this experience. Analyses were led by the coordinating team with contributions from the other research teams and progressed via weekly meetings. These were important given the multidisciplinary nature of the researchers involved and different levels of experience with the analyses of this type of data across teams. The use of software more readily available to all teams (Excel, Microsoft Word) was employed to ensure researchers had access to these, and adaptations were made for those who did not have access to other specialised programmes such as NVIVO. Where additional support was needed it was offered by the coordinating team in separate meetings.

From these activities, we have been able to extract some learning from the process of using the same methodology across consumer science teams in different countries. These are summarised under a few headings in the bullet points below:

REQUIREMENTS

- It is important to have a coordinating team for the research teams involved, especially regarding training, analysis, collating the data and writing up the findings.

CHALLENGES

- Choosing constructs that do not have agreed-upon definitions such as “public benefit” or “trade-offs” within one or more academic fields may pose an additional layer of complexity on difficulties which may arise in translating these terms to other languages. The use of qualitative data may assist in unpicking additional meanings associated with these challenges.
- The use of images of individuals from diverse ethnic backgrounds may be more relevant and more relatable to individuals in some countries than others. On the other hand, care must be taken to ensure that stimulus materials used do not exclude minorities, or foods/habits/norms related to those minority groups.

LEARNINGS

- Once a group of different research teams use the same methodology in different countries it becomes easier/quicker for another research team to come on board and use the same procedures later. This is what we experienced when 5 participating research teams had collected their data and were in the analysis phase when an additional research team joined us.
- Despite the various cultural and linguistic differences across countries, we were able to identify surprising commonalities across groups as well as interesting differences. This bodes well for the use of similar methodologies within the consumer science research field.
- Reflecting on our experiences after the conclusion of the activity could lead to further refinement and improvement of the methodology, although some thought would have to be given on how to maintain a level of comparability with earlier versions of the methodology used.