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What do people want to know? Information avoidance and food policy implications

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ABSTRACT

What information would people like to have? What information would they prefer to avoid? How does the provision of information bear on welfare? And what does this mean for food policy? Representative surveys in eleven nations find that substantial percentages of people do not want to receive information even when it bears on health, sustainability, and consumer welfare. Nonetheless, substantial percentages of people also do want to receive that information, and people's willingness to pay for information, contingent on their wanting it, is mostly higher than people's willingness to pay not to receive information, contingent on their not wanting it. We develop a model and estimate the welfare effects of information provision. We find substantial benefits and costs, with the former outweighing the latter. The results suggest that in principle, policymakers should take both instrumental and hedonic effects into account when deciding whether to impose disclosure requirements for food, whether the domain involves health, safety, or moral considerations. If policymakers fail to consider either instrumental or hedonic effects, and if they fail to consider the magnitude of those effects, they will not capture the welfare consequences of disclosure requirements. Our evidence has concrete implications for how to think about, and capture, the welfare consequences of such requirements with respect to food.

1. Introduction

With the rise of large data sets, growing numbers of apps, and new regulatory mandates, it is increasingly possible for people to obtain information that they might use in their lives. That information might enable people to make better choices; it might also make them happy or miserable and lead them to feel safer or more at risk. This proposition certainly holds for food. Every day, people make food choices that might have profound consequences not only for their own health, but also for farm animals and the environment. Consumers are increasingly able to obtain information that bears on those choices. They might, for example, learn the caloric content of chocolate bars and alcoholic drinks; the amount of sugar in soft drinks; whether food contains GMOs; how to reduce their carbon footprint; and how any animals, used as food, were raised. For both public and private institutions, an important question is the welfare effects of such information. Does it make people better off or worse off? How much are they willing to pay for it? Might people be willing to pay *not* to receive certain information and thus to remain ignorant?

The answers to the latter two questions cannot, of course, resolve the welfare question. The willingness to pay criterion has serious limitations. Because of a lack of information, people might not want information. As Kenneth Arrow explained, "there is a fundamental paradox in the determination of demand for information; its value to the purchaser is not known until he has the information, but then he has in effect acquired it without cost" (Arrow, 1962, p. 615). When people lack information, they may not know enough to know whether they should want it, let alone how much to pay to obtain it. At the very least, this point raises serious problems for ex ante estimates of willingness to pay. People might not know, for example, that if they receive caloric

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information, they can potentially improve their health.

There is a separate problem. With respect to food in particular, it is possible that a behavioral bias will lead people to avoid information from which they would greatly benefit, or to seek information that would make them worse off. For example, "present bias" might lead people to focus on the short-term cost of receiving food-related information while neglecting the long-term benefits (Thunström et al., 2016). More generally, unrealistic optimism about future life events might make people unwilling to search for potentially valuable information, particularly with respect to health (Weinstein, 1982; Clarke et al., 2000). Confirmation bias might lead people either to seek or to avoid information, and to update their beliefs selectively with self-serving interpretations, depending on whether the information supports or contradicts prior beliefs (Bruner and Potter, 1964; Rabin and Schrag, 1999; Möbius et al., 2011; Sunstein et al., 2017). Also, concerns for upholding one's self-image, a desire to avoid interpersonal tradeoffs and bad news, and also laziness, inattention, and confusion have been found to motivate people to avoid information in experimental settings (Exley and Kessler, 2021). All of these points have evident implications for information-seeking and information-avoidance with respect to food.

Taken together, a lack of knowledge, behavioral biases, and other motivations might lead people to show an unduly low, or an unduly high, willingness to pay for information (Sunstein, 2019). Nonetheless, people's desire to receive information, or not to receive it, certainly provides relevant clues about the welfare effects. It also provides relevant clues about whether information will be useful. If people do not want to learn about something, they might try to avoid the information even after it is made available. If they cannot easily avoid it (say, because it is posted visibly in a place they visit, such as a restaurant menu), their lack of interest might mean that they do not take it into account and so will not benefit from it. In democracies, whether people want to learn something is also relevant for purposes of policy. If people want or do not want to receive information, public officials might well be interested in their preferences in deciding whether to mandate or otherwise support its provision. As emphasized by Nordström et al. (2020), the underlying mechanisms behind strategic ignorance certainly matter if the policy goal is to maximize welfare.

1.1. Previous research

The present paper contributes to a rapidly developing body of research on the welfare effects of information, some of it involving food policy (Allcott and Kessler, 2019). Such research explores, in both theory and practice, the question whether and when people want to receive or avoid information and whether information might increase or decrease individual welfare (e.g., Loewenstein, 2006; Sweeny et al., 2010; Narayan et al., 2011; Barbour et al., 2012; Hirvonen et al., 2012; Hertwig and Engel, 2016; Thunström et al., 2016; Ullmann-Margalit, 2017; Charpentier et al., 2018; Allcott and Kessler, 2019; Karim et al., 2019; Sunstein, 2019; Thunström, 2019; Exley and Kessler, 2021; Golman et al., 2020; Ho et al., 2020; Nordström et al., 2020; Sharot and Sunstein, 2020; Edenbrandt et al., 2021). Information avoidance has been defined as preventing or delaying the acquisition of available information (Sweeny et al., 2010). People might avoid information even if it would be useful: people might not seek information, or might affirmatively avoid it, for hedonic reasons. For example, they might believe that it will cause sadness or fear (Sullivan et al., 2004; Ganguly and Tassof, 2016), produce mental discomfort (Taylor and Brown, 1988) or cognitive dissonance (Akerlof and Dickens, 1982; Edenbrandt et al., 2021), or increase uncertainty (Golman and Loewenstein, 2018). While consumer research helps explain why consumers do not want information that they deem irrelevant (e.g., Hutchinson and Alba, 1991), affirmatively "wanting not to know" - including "deliberate ignorance" (Hertwig and Engel, 2016) and "strategic self-ignorance" (Thunström et al., 2016) - is motivated by more than just irrelevance (Golman et al., 2017; Exley and Kessler, 2021).

specifically, many people do not want to receive bad news, and if they fear that what they might learn will make them anxious, hopeless, or angry, they might not want to learn (Golman et al., 2017; Exley and Kessler, 2021). Not knowing about the caloric content of food might enable people to enjoy their meals more. Not knowing about a genetic predisposition to a serious disease might enable people to lead happy lives until the disease actually strikes. Not knowing about the fate of others and the consequences of one's choices (e.g., one's greenhouse gas emissions per car trip) might "licence" more pleasant but less moral decisions, leading to a "moral wiggle room" (Dana et al., 2007).

There is also the question whether information might prove useful. Some information has *positive instrumental* value; it might, for example, help people to avoid health risks due to being overweight. Other information has *negative instrumental* value – if, for example, a lawyer learns that her client is guilty (and so does her job less well), or if a consumer learns about the high caloric content of some fruits and replaces them with less nutritious snacks. And much information is essentially irrelevant to what people might do.

A model proposed by Golman et al. (2017) covers instrumental utility as well as hedonic effects, with special reference to attention and curiosity. Drawing on neuroscientific, psychological, and economic literature, Sharot and Sunstein (2020) propose an integrative framework of active information-seeking and avoidance that encompasses three diverse motives. They posit that information can have a threefold effect: on action (instrumental value), affect (hedonic value), and cognition (cognitive value), each in both positive and negative ways. The model assumes that people integrate these effects and estimate the overall impact and value of given information, and then actively decide whether they seek, ignore, and avoid the information. The present paper draws on the model suggested by Golman and Loewenstein (2018) and the framework suggested by Sharot and Sunstein (2020).

With respect to food-related information in particular and information-avoidance more generally, existing empirical work is preliminary and sparse, and it leaves many open questions. People appear to make judgments about whether information would make them feel sad or upset, and about whether information would be useful, and also seem to make judgments about the magnitude of these effects (Golman et al., 2017). With respect to one's date of death, for example, surveys in Germany and Spain find that strong majorities believe that ignorance is bliss (Gigerenzer and Garcia-Retamero, 2017). In the United States, studies have revealed a great deal of heterogeneity with respect to people's interest in information that the government requires companies to provide, including fuel economy labels and calorie labels (Sunstein, 2019; Thunström, 2019).

With respect to calorie labels, Thunström (2019) finds that people with low self-control experience an emotional cost from receiving the information and do not alter their choices (and so do not receive health benefits), while people with higher levels of self-control do not experience an emotional cost and do alter their choices (and so receive health benefits). She also finds that calorie labels have net benefits, but that a more targeted approach might produce higher welfare gains (to the same effect, see Allcott and Kessler, 2019). Nordström et al. (2020) find that 46 percent of their study subjects strategically avoided reading labels in order to calibrate "optimal expectations" (Brunnermeier and Parker, 2005): People did not want to know so they could downplay the probability that their preferred meal would be high-calorie – which made them consume more calories than they would have had they been informed (Nordström et al., 2020).

A multi-country study on information avoidance by young people (Karim et al., 2019) explores the potential influence of demographics and information literacy.¹ In representative surveys, about 25 percent of

¹ The four major competencies of "information literacy" are: realizing information needs and sourcing, 'information evaluation,' 'examine and compare information', and 'critical thinking.'

young respondents in diverse countries said they would actively avoid information about themselves or in general if they suspected it to be negative. Higher education, higher information literacy, self-efficacy, living in an urban area, and being employed were associated with a lower propensity to information avoidance. The authors conclude that information avoidance should be regarded as common consumer behavior rather than as an anomaly (Karim et al., 2019).

Ho et al. (2020) have constructed and validated an "information preference scale" that measures people's desire to obtain or avoid information that may be unpleasant. Applying the scale to the domains of consumer finance, personal characteristics, and health, they found that across settings, many respondents actively prefer to remain ignorant, even when information is freely available. They also found information preferences to be stable personality traits even though an individual's preference for information can differ across domains (Ho et al., 2020) an important finding for policy with respect to how to target information and how to assess the likely welfare effects of disclosure requirements. While personality traits are important, the specific situation also affects information avoidance. For instance, information search seems to be hampered by stress, which might evoke coping mechanisms such as blunting, rejection, and repressing of information (Case et al., 2005). If people assume that they lack control over the outcome, they are less likely to seek additional information. And if the information itself threatens to demand a change in beliefs or undesired action, people are more likely to avoid it (Sweeney et al., 2010).

Much of this empirical work has been done for health-related issues. For instance, McCloud et al. (2013) found that respondents who were younger and female, and who had greater debt and lower income, were more likely to avoid information about cancer after diagnosis. St. Jean et al. (2017) observed cancer-related health information avoidance to be linked to lower levels of education, household income, occupational status, and self-efficacy. Some studies have found information avoidance in everyday life situations, involving not only health but also consumption and leisure (Narayan et al., 2011). Others have explored information avoidance and information-seeking with respect to energy costs (Allcott and Kessler, 2019). While there is ample research on climate change denial (e.g., Kovaca, 2019; Meah, 2019), we are aware of only a single study exploring information avoidance with respect to sustainability issues, in this case carbon labels (Edenbrandt et al., 2021).

1.2. The present study

A great deal remains to be learned, in general and with respect to food policy in particular. But research has clearly established that information avoidance is widespread. That finding bears in turn on the welfare effects of both voluntary and mandatory disclosure. Such effects might be surprising or ambiguous. Adding to this literature and improving the knowledge base for policymakers in general and for food policy specifically has been the main motivation for the present study. We emphasize that our questions spend a wide range, though food policy issues are an important subset. Focusing on individual welfare effects and estimating welfare effects for countries, we report the results of a large-scale study of people's stated preferences with respect to whether to obtain information (Willingness to Know, WTK), whether and how much they would be willing to pay for receiving it (Willingness to Pay, WTP) or, to the contrary, how much they would be willing to pay for *not* receiving it (WTPn), indicating "active information avoidance" (e.g., Golman et al., 2017) on a variety of issues, including four on foodrelated information. More specifically, we report on nationally online representative surveys in eleven democratic nations: Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. We ask twenty questions, organized into three thematic clusters: health and food, sustainable development, and consumer protection. We also ask both about people's willingness to pay for information, if they do want to receive it, and their willingness to pay *not* to receive information, if they want to avoid it. Because of the sheer number of nations and issues, we are able to provide a general if partial map of people's views with respect to information-seeking and information-avoidance. We can also offer rough estimates of the welfare effects of information disclosure with respect to those issues. Throughout the paper, we focus on results that are relevant for food policy. Our principal findings are as follows.

- 1. In all eleven nations, large percentages of people do *not* want to receive information, even it would seem to be highly relevant to their lives. The percentages vary from topic to topic, and also across nations. But in all nations, at least one-third of people, and often more than one-half, have no interest in receiving information that might seem to have some value.
- 2. Across nations and issues, those who want to receive information of various sorts are often willing to pay something for it. In general, the relevant amounts are relatively modest, but across large populations, they suggest that provision of information would generate large monetized benefits. With respect to the particular questions we ask, those benefits are higher for health-related information than for sustainability and consumer information. Because we are dealing with a survey rather than with actual behavior, and with willingness to pay figures, the specific numbers have to be taken with many grains of salt; but the overall trends are noteworthy.
- 3. Across nations and issues, those who do not want to receive information are sometimes willing to pay something not to receive it, suggesting, again across large populations, significant monetized costs from provision of information. But in all of our issue areas, including food, willingness to pay to receive information, contingent on wanting to receive it, is far higher than willingness to pay *not* to receive information, contingent on not wanting to receive it. The result is that in different nations and across different issues, provision of information can be expected to produce large aggregate welfare benefits, at least according to standard economic measures.
- 4. There are intriguing differences both across issue areas and across nations. Aggregating responses, we find that the lowest percentages of people would like to know the year of their death (about 25 percent), followed by global temperature in about 2100 (about 32 percent). By contrast, we find that the highest percentages of people would like to know about who uses their online private data for commercial or political goals (62 percent) and about personal prices they pay compared to prices others pay for various goods and services (60 percent).
- 5. For the issues we test, Canada, Denmark, and Italy have the highest percentages of people who want to know in general, whereas Germany, Japan, and the Netherlands have the lowest. But these differences mask important variations across issue areas.

The remainder of the paper is organized as follows. Sections 2-5

present the goals and methodology of the survey, including sampling and statistical analysis (2.), our main empirical results with respect to wanting to know, willingness to pay for information, and willingness to pay not to receive information (3.), our model and estimates of the welfare effects of information (4.), discussion of the main results (5.), and a conclusion (6.). In light of the magnitude of data stemming from such a large-scale survey and to allow replication and detailed scrutiny, we provide empirical data (Appendix A) and the detailed welfare model (Appendix B) as appendices. We also present the full study design and survey as online Supplementary Material.

2. The survey

2.1. Goals

The main goals of our study were twofold: first, to find out what information people in different countries worldwide want to have (and what information people want *not* to have) and how much they are willing to pay for information, contingent on wanting to have it; and second (and more speculatively), to estimate how the provision of information would likely affect their welfare. We are interested in the "yes/no" question, with respect to receipt of information, and also the question of intensity, measured by willingness to pay to receive/not to receive information. In addition, we explore differences across issues. It would not be surprising if, for example, people are more interested in receiving health-related information than in learning the total number of worms on the planet (we did not ask the latter question).

We are interested as well in differences across nations, in general and with respect to food policy in particular. Might the citizens of some countries be especially eager to obtain information? Might the citizens of others show high levels of deliberate ignorance? Because we ask twenty questions, and not 500 questions, we are unlikely to obtain authoritative answers. But we should be able to find patterns. We estimate welfare gains (from providing people with information that they want) as welf as welfare losses (from providing people with information that they do not want). We emphasize that we explore welfare gains and losses to the individuals who receive or do not receive the information, not the gains or losses to third parties (as, for example, when individuals learn about risks they themselves face, take precautions, and benefit friends and family members as a result).

2.2. Methodology

2.2.1. Sampling and sample

In eleven countries, we employed nationally representative online surveys including about 1000 adult respondents per country, covering Belgium, Canada, Denmark, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. We chose those countries in order to focus on health, food, sustainability, and consumer information policies within democratic nations. The tested countries have comparatively stable governments, developed affluent market economies, reasonably good health care systems, and active debates about the kinds of issues that we explore.

Notably, seven of the eleven countries are members of the "Group of Seven" (G7) that together represent 40 percent of global GDP and 10 percent of the world's population. We added two Nordic countries (Denmark and Sweden) as well as two Benelux countries (Belgium and the Netherlands) to cover most Western European regions. In all of the sample countries, the nation's online population nearly equals full population. We can assume nearly full representativeness of the surveys since we used stratified quota sampling with quotas for age, gender, and education. To assess the representativeness of the latter, we used information from the OECD (2020) on the country-specific proportions of people with an education level below upper secondary, upper secondary, and tertiary level.² For the whole sample, we detected only a small difference between the expected and observed numbers ($P(\chi_2^2 > 1.11863) = 0.5715995$) (see Fig. S1 in the Supplementary Material). Country-specific χ^2 tests suggest that Denmark and France are not fully representative in terms of education; however, the values are within an acceptably small range of deviation (see Figs. S2 and S3). We used no weighting.

According to OECD data, the sample includes too few participants with a low and medium number of years of schooling for Denmark (Fig. S2). This is a typical result for Denmark, which has a highly and widely educated population, with very few individuals below the standard nine years of formal schooling. In contrast, in France, individuals both with a low and a high number of years of schooling are slightly oversampled (Fig. S3).

All questionnaires were filled out as a CAWI (Computed Assisted Web Interview) following a strict protocol during the same calendar weeks in all eleven countries. There were no screening questions and no framing. The quality of responses was checked by several screening logics such as attention filters, filters for survey rushes, and plausibility of entries. (Table S1 in the Supplementary Material provides information on the sampling and samples in the different countries.)

Field time started in October 2019 with a soft launch, where we sampled about 10 percent of our final sample size. The idea was to test the survey structure and adjust it at early stage if necessary. During the soft launch period, small adjustments were made.³ The first field phase ended in December 2019 with a break during the Christmas holidays to prevent holiday bias in responses. Our market research partner Qualtrics, one of the largest market research companies, processed and cleaned the raw data in January 2020. To fulfil the quotas and to gather the required sample size, the survey was continued and a second field phase took place in January. Through a web interface to Qualtrics, we were able to monitor the incoming data closely during the entire period of the fieldwork.

Qualtrics used online panel recruitment for the study using a blend of their panel partners in the different countries. After a highly conservative cleaning of the raw data by the row-wise dropping of implausible values (e.g., willingness to pay to receive/not to receive information larger than 6500.00), outliers (age, weight, and height larger than the 99th percentile; net household income larger than the 90th percentile), and missing information, the final overall sample was reduced from 11,000 to 8,229 observations, with sample sizes differing slightly across countries. Despite this substantial decrease in the number of observations, the descriptive statistics indicate a valid final sample. For instance, the average age of respondents is 48 years; 52 percent of our final sample are female and 48 percent are male; they completed on average 13 years of formal education. (The full descriptive statistics of the eleven country samples and covariates are presented in Table A1 in Appendix A).

2.2.2. Survey instrument

The core questionnaire included twenty questions involving the

² <u>https://data.oecd.org/eduatt/adult-education-level.htm#indicator-chart</u>. For Japan, we only had information on the proportion of people with tertiary education.

³ Namely: adding a screen out logic for education and weight; adding a text input field to the WTP questions instead of a list of predetermined options; increasing the screen out logic for the duration of the survey. We included those observations from the soft launch that were considered highly plausible after data cleaning, having excluded outliers in terms of age, weight, height, and income.

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- a) Seven questions on *health-information*, including two food items: whether one will get Alzheimer's disease; genetic predisposition to a potentially curable or lethal type of cancer; near-family members' genetic predisposition to incurable disease; likely year of death; calorie content of restaurant food; labels indicating the potential healthiness of food.
- b) Seven questions on information relevant to sustainable development, including two food items: ecological footprint of one's lifestyle compared to others; greenhouse gas emissions of a trip; likely global temperature in 2100; whether food contains genetically modified organisms; products containing conflict minerals from Africa; animal welfare issues of meat production; working conditions in textile production.
- c) Six questions on disclosure of *consumer information*: annual cost of operating one's home appliances; standard fee for late payment of one's credit card bill; safety ratings for one's car tires; who uses one's online private data for commercial or political goals; personal prices in online shopping compared to prices others pay.

Ten of those twenty items had been employed in a pilot study in the US (Sunstein, 2019); the others were selected based on actual or potential disclosure policies that are currently in place or debated in one or more of our countries. To date, most of the items regarding sustainable development are provided voluntarily in most countries covered (one exception being mandatory GMO labelling within the European Union), while most of the consumer information items are regulated in one or another way in the G7 and the Nordic and Benelux countries. The health information items range from purely voluntary (e.g., genetic predispositions) to largely regulated (e.g., caloric content and healthiness as presented by food labels). While we do not investigate the effect of existing policies in the present study, one might speculate that people's information preferences shift as a result of those policies, and with the availability of and exposure to the respective information.

It is important to note that there is a difference between the health and consumer issues on the one hand and the sustainable development issues on the other: While health and food information primarily helps patients and consumers reduce personal risk, and consumer disclosure might be useful for saving money or protecting private data, sustainable development issues generally involve externalities, in the form of the harm done to third parties (i.e., animals, workers in the Global South). A full analysis of welfare effects would consider the benefits and costs (1) to those who receive or do not receive information (and might, for example, change their eating habits as a result) and (2) to third parties (who, for example, might enjoy cleaner air as a result of changed eating habits on the part of those who receive information). The intention here is to focus solely on the benefits and costs to those who receive or do not receive information.

We began by asking respondents whether they want to receive information on each of those items; if they answered yes, we asked for their willingness to pay. If they answered no, we asked for their willingness to pay not to receive the information (e.g., for not getting the information on a food label or a late payment bill). Hence, we asked for active information search or avoidance for twenty questions (provided in Table 1).

Table 1

Overview of the 20 core questions.

- 1. Information about whether you will get Alzheimer's Disease?
- 2. Information about your genetic predisposition to (curable) cancer (of a type that has good chances of healing when detected early)?
- 3. Information about your genetic predisposition to a lethal type of cancer?
- 4. Information about your near family members' genetic predisposition for a severe incurable disease?
- 5. Information about your likely year of death?
- 6. Information about calorie labels at a restaurant where you eat?
- 7. Information about potential healthiness of food, e.g., by traffic lights labels or other visual cues?
- Information about how resource and energy intensive your lifestyle is compared to others (ecological footprint)?
- 9. Information about how much greenhouse gas you emit when making a trip (by car, by plane, other)?
- 10. Information about the global temperature in 2100?
- 11. Information about food containing genetically modified organisms?
- 12. Information about products containing minerals used to finance mass atrocities in Africa?
- 13. Information about how the animals have been raised and slaughtered (when buying meat)?
- 14. Information about under which working conditions your clothes were produced?
- 15. Information about the annual cost of operating the appliances in your home?
- 16. Information about the standard fee for late payment of your credit card bill?
- 17. Information about the safety ratings for your tires?
- 18. Information about who uses your online private data for commercial goals?
- 19. Information about who uses your online private data for political goals?
- 20. Information about whether you pay a different price for a product or service (e.g., a laptop, a flight) than other online shoppers?

Notes: The questions were: (1) Would you like to know...?. (2) How much would you be willing to pay to get/not to get this information (once/per visit)? Food-related questions marked in bold.

Pretests suggested that respondents found it challenging to provide meaningful estimates for their willingness to pay or not to pay per year or month (with the exception of item 15 "annual operating cost of appliances," where people are used to thinking in annual cost). We adjusted our questions accordingly and later estimated overall WTP and WTPn based on frequencies of the decisions in people's lives. In those cases in which the information is typically provided only once (such as "one's likely year of death"), there was no need to qualify further (items 1 to 5, 10, 16). In those cases where the information could potentially be useful repeatedly, but the most valid answers could be expected if respondents focused on one decision situation, we added the word "once" to the question (item 8). In other cases, the wording of the question described the decision situation clearly (item 9 "when making a trip," item 17 "safety rating for your tires," items 18 and 19 "who uses private data"). Finally, for those decisions that typically take place repeatedly (such as "buying meat"), we explicitly asked for the value of information "per (store) visit" (items 6, 7, 11, 12, 13, 14, i.e., all food related items) or "per online purchase" (item 20). The exact wording of the respective items is provided in the Supplementary Material (Table S3).

The questionnaire was fully structured. The order of questions within the three topic blocks (i.e., health, sustainability, consumer issues) was randomly assigned. Each item was shown on a single screen.

Beyond the information questions, we asked the respondents a broad set of sociodemographic questions (i.e., country, rural/urban, gender, age, years of formal schooling; relationship status; children, income; nationality). We also added health-related variables (i.e., height/ weight), smoking, alcohol and meat consumption, subjective health, and life satisfaction) in order to explore potential relationships between personal health and information preferences. For instance, one could hypothesize that a person with a high Body Mass Index (measured in weight and height) might be particularly interested in information from calorie labels – or to the contrary, might prefer to avoid such information to avoid fear or discomfort.

We also inquired about selected psychographic variables (i.e., worry about the environment, worry about personal future health and family's health, risk aversion, subjective freedom of choice) to be able to explore patterns between such characteristics and information search or avoidance. Earlier research suggests, for example, a relationship between risk aversion and information search (Moorthy et al., 1997). Finally, we asked for social media use and trust in the largest social media platforms (Twitter, Facebook, Instagram), hypothesizing that use of trust in social media might be linked to wanting or not wanting to receive information. However, we do not further explore the social media data in the present paper.

Aiming for a high response rate, we asked participants to answer each of the included questions without offering a "don't know/no answer" option (except for the gender question, for ethical reasons). We are aware that this approach might lead to idiosyncratic error in the responses, as participants could choose a random answer if they do not know the actual answer or do not want to provide it. There is no way to avoid this. However, DeRouvray and Couper (2002) show that offering questions without a "don't know" option leads, in general, to a higher response rate. In light of the challenge in reaching online representative samples in eleven countries, we accepted what we consider to be the small risk of such a measurement error.

The choice of these 23 additional questions was informed by prior literature on information avoidance as well as our own pilot work (Sunstein, 2019; Winegar and Sunstein, 2019). The original survey (US version) with 43 questions version was taken as a blueprint for the translations and re-translations into the respective languages. It was translated into Danish, French, German, Italian, and Japanese. The English (for the US and UK) and French versions (for Belgium, France, and Canada) were locally adapted to country specifics; currencies and metrics were adapted respectively. The translations of all questions were performed by professional mother-tongue translators; the translated versions were back-translated from another professional translator and – after a quality check by the author team that led to adaptions – retranslated into the respective languages. Final versions were pretested during a soft launch that resulted in small improvements as noted above.

2.2.3. Statistical analysis

In a first step, we focused on the main results with respect to (not) wanting to know specific information and willingness to pay for (not getting) the information in the 20 cases. We were interested in the overall frequencies as well as in-country differences, particularly regarding the food-related items. Respective rates are presented in Part II.

In a second step, we checked for statistically significant effects of all sociodemographic variables and all other variables on specific information items, using two different regression models. While we apply a logistic model to model the binary coded outcome of WTK (yes/no), we use ordinal linear regression to estimate the effects of different explanatory variables on WTP and WTPn.⁴ In a variance inflation factor analysis, we found (unproblematic) multicollinearity due to the correlation between height and weight. Detailed results for the respective

WTK, WTP, and WTPn for health-related, sustainable developmentrelated, and consumer-related information are provided in Appendix A and the Supplementary Material.

In a third step, presented in Part 4, we developed a model that allows us to interpret the welfare effects of receiving the relevant information.

2.2.4. Limitations

Although we have taken numerous steps to obtain a high-quality sample, we cannot claim full representativeness. Although the countries included have a near-complete internet coverage, online representativeness does not fully correspond to representativeness in general. As outlined above, the French and Danish samples have a slightly limited representativeness with respect to education. Furthermore, we cannot exclude the possibility that information from online surveys may be biased due to the willingness to conduct online surveys for money.

With respect to the survey: While it was carefully prepared, translated, back translated, and pretested with a soft launch in the different countries, we cannot entirely rule out misunderstandings. Also, in a multi-country study with eleven nations and six languages in five geographical versions, it is not feasible to fully track the respective media and public discourse that might influence the salience of topics and hence the value of specific information items during several weeks of field time (we did check for major national events such as food scares, though). Moreover, as opposed to many WTP studies that employ some type of payment cards, we used open-ended answer categories instead, mainly for reasons of practicality. We acknowledge that without a price anchor presented, suggesting WTP numbers might be a difficult task for some respondents. At the same time, our approach has the advantage of avoiding the potentially distorting effects of anchors. In addition, pretests had not suggested any systematic difficulties for respondents. We also checked for unlikely outliers and excluded them from our analysis.

With respect to the associations on country level: The cross-sectional nature of the data precludes causal interpretations of the observed relationships. One would need longitudinal or experimental studies to show these. As we shall see, we found strong associations, suggesting the potential value of further research.

An emerging literature explores the challenges and limits of measurement of preferences through WTP in general, and on WTP for information items in particular (see Sunstein, 2019; Viscusi, 2019). As noted, WTP may not be an accurate measure for welfare, even putting externalities to one side. A pervasive concern is that whenever people generate a WTP number for some good, they are estimating the welfare effects of obtaining that good; the estimate might be biased or otherwise inaccurate (Sunstein, 2019). With respect to information specifically, people might lack the information that would enable them to generate sensible numbers; how would one know how much to pay for information that one lacks? In some contexts, that is a serious problem (Sunstein, 2019). The willingness to pay questions asked in our survey may well run into that problem. Recall also that for some of the relevant questions (and all food items), our calculations are based on the assumption that the individual pays the amount of money per restaurant/shop visit; in our survey, we explicitly asked participants to state their WTP to receive/not to receive information for each restaurant/store visit, which should make that assumption plausible. Note that we do not claim to measure precise welfare effects; we have referred to the serious limitations of the WTP criterion, which are even more serious in the context of surveys. Our aim is only to present suggestive estimates, based on that criterion, using plausible values.

3. Interest in information and covariates

3.1. Interest in and WTP for information across countries

First, we were interested in the percentages of people in the eleven countries who wanted to obtain information on the twenty questions. Fig. 1 displays the results. It is immediately apparent that many people

⁴ In general, the sampling distributions for WTP and WTPn suggest that the data generating process is related to a right-skewed distribution with zero inflation. However, since the OLS estimator is asymptotically consistent (regardless of the underlying distribution), is easy to implement (compared to more sophisticated models), and since we could only speculate about the true data generating process and the associated conditional distribution of the outcome variable, we decided to keep the basic OLS framework.

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would prefer *not* to receive relevant information, even if it bears on their lives, and even if it might help them to avoid costs of various kinds. Perhaps unsurprisingly, the lowest percentage of people would like to know the date of their death (about 25 percent), and only a relatively small minority would like to know the likely global temperature in 2100 (about 30 percent).

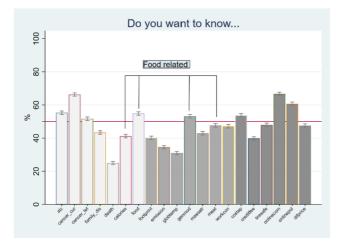


Fig. 1. Share of individuals wanting to get specific information (WTK), all countries. *Notes*: Disclosure of potentially important health-related information (light grey); disclosure of information regarding sustainable development (medium grey); consumer disclosure (dark grey); including 95% confidence interval (small bars).

With respect to health, <50 percent of participants would like to know whether near family members have a genetic predisposition to a severe incurable disease and the calorie content of restaurant food. However, more than half of the respondents would like to receive information on the healthiness of the food they eat, e.g., by traffic lights or other visual cues. About the same share of respondents is interested in whether their food contains genetically modified organisms (GMO). With respect to animal welfare in meat production and the environmental footprint of one's overall consumption, on average <50 percent and <40 percent, respectively, wanted to know. In Part 4, we discuss possible explanations for these findings.

Across countries, there are marked and significant differences with respect to willingness to pay for information in general. To provide a general overview, we mapped those rates, as shown in the Supplementary Material (Fig. S7).

Fig. 2 shows that contingent on wanting to know (WTK), people are willing to pay (WTP) relatively modest amounts both to receive information (top) and *not* to receive information (bottom) (WTPn). In general, the highest amounts that people are willing to pay are for health-related information, in particular for knowing about Alzheimer's disease, genetic predisposition for curable and lethal types of cancer (highest WTP with ca. €37.60), genetic risk of an incurable disease in the family, and one's possible year of death. We think that those numbers could be seen as relatively low, considering the impact that such information could have on one's welfare.

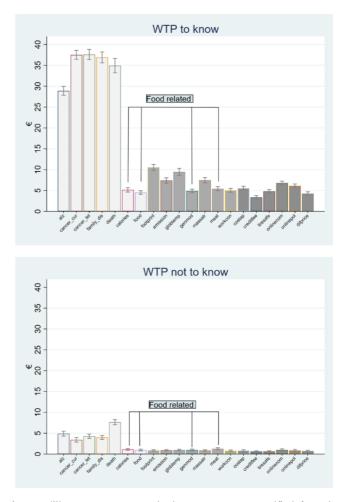


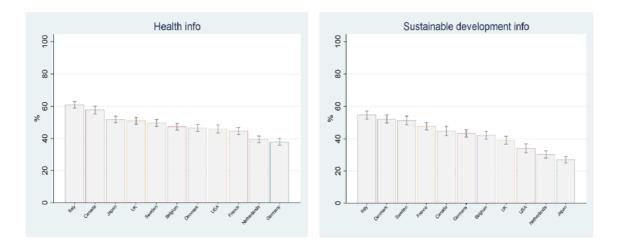
Fig. 2. Willingness to pay to get (top), resp. not to get specific information (bottom). *Notes*: Disclosure of potentially important health-related information (light grey), disclosure of information regarding sustainable development (medium grey); consumer disclosure (dark grey); including 95% confidence interval (small bars).

At the same time, these potential contributions are higher than the highest amounts that people are willing to pay *not* to receive information, contingent on not wanting to receive it. Those amounts are also quite low (and lowest for consumer-related information). It is worth noting that people show the highest willingness to pay to avoid information with respect to the likely year of their death (ℓ 7.65).

With respect to the four food-related information items, we find that the average WTP to get information is 5€ and the average WTP *not* to get information is about 1.1€. In comparison, for the 16 other items, the average WTP to get information is 15.42€ and the average WTP *not* to know is 2.08€, with those results being mainly driven by the healthitems as noted above.

Focusing on national differences and WTK, citizens of Italy (including 60 percent for health information and 55 percent for sustainable development information), Denmark (including 60 percent for consumer information), and Canada show the highest overall percentages of people interested in receiving information. By contrast, citizens of Germany (including 40 percent for health), the Netherlands (including 45 percent for consumer information), and Japan (including 30 percent for sustainable development) show the lowest overall percentages (Fig. 3). But these differences mask variations across issue areas.

worldwide (Komatsu et al., 2019). The comparatively low percentage of people interested in sustainability issues in the United States fits to what we know the interest in these topics in that nation on average (Sunstein, 2019) as well as the positive correlation between individualistic cultures and ecological footprint (Komatsu et al., 2019). The same holds for the Netherlands, another highly individualistic society (Komatsu et al.,



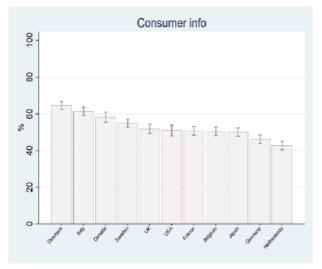


Fig. 3. Share of individuals per country willing to get specific information, three topics. *Notes*: Disclosure of potentially important health-related information (a), disclosure of information regarding sustainable development (b); consumer disclosure (c). Average percentage of respondents answering "yes" for the three types of information in each country. 95% confidence interval indicated by the small bars.

Italy, Canada, and Japan show the highest percentages of people who want to receive health information. At the same time, Japan shows the lowest rate of people interested in the information items on sustainability. At first glance, this is surprising since Japan is typically found in the upper ranks of environmental concern worldwide (e.g., Franzen and Vogt, 2013) while also having one of the highest ecological footprints (Global Footprint Network, 2019). On the other hand, citizens of Japan have been found to be mainly motivated by adhering to the social norm of "consuming responsibly" (e.g., separating waste, using public transport), but rank quite low on what has been defined as "consumer citizenship" (e.g., discuss environmental issues, voice concerns) (Lim et al., 2019). Wanting to know (and paying for it) seems to be an act of the latter rather than of the former. More speculatively, information search can be characterized as an individualistic rather than a collectivist action, and Japan rank is low on the individualism scale of countries 2019). The Dutch sample also seems to be least interested in consumer policy issues, together with Germany and Japan. Again we can only speculate here, but a possible reason could be that the sustainability and consumer policy issues covered in this questionnaire have a long tradition in those countries and respondents might assume that the regulator has already taken care of them. Empirically valid accounts of country results are beyond the goal and scope of our study.

Finally, focusing on food information only (see Fig. 4), we found that Italy (62.22 percent), France (55.29 percent), and Sweden (54.66 percent) show the highest percentages of people interested in information disclosure, while the U.S. (41 percent), Japan (38.57 percent), and the Netherlands (35.59 percent) show the lowest percentages in this domain. The corresponding numbers of WTP and WTPn are provided in the Supplementary Material (Fig. S8).

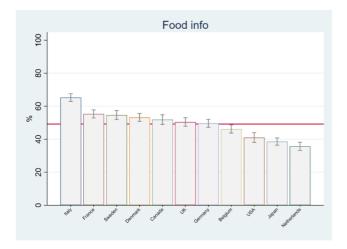


Fig. 4. Share of individuals per country willing to get specific information related to food. *Note*: Average percentage of respondents answering "yes" to the four questions related to information disclosure of food information (items 6, 7, 11, 13) in each country. 95% confidence interval indicated by the small bars. The red line indicates the overall country average.

3.2. Covariates of information seeking and avoidance

Can these results be associated with socio-demographic and other individual variables, such as trust in government, worries about health, or concerns with respect to the environment? To approach these questions, we first draw correlation matrices ("heatmaps") of all included variables that provide a broad overview of potential links between variables (Figs. S4, S5 and S6 in the Supplementary Material). In a heatmap, the darker the color, the stronger the correlation. Fig. S4 (WTK) suggests, for instance, a positive correlation between wanting-toknow and trust in social media, worries about health, and concerns regarding the environment. The correlation matrices depicted in Fig. S5 (WTP) and Fig. S6 (WTPn) support this observation.

Based on this analysis, we derive more precise estimates of the relationships between specific covariates and the WTK and WTP for a given type of information using logistic (WTK) and linear (WTP) regressions.

Detailing Figs. 1, 3, and 4 above, nine additional tables in Appendix A show the results for a respondent's WTK (Tables A2–A4), WTP (Tables A5–A7), and WTPn (Tables A8–A10) on selected explanatory variables. We offer the most noteworthy results here.

3.2.1. Wanting to know (WTK)

Some of the associations are unsurprising. Across countries, higher age, lower formal education, and being a smoker are mostly associated with a *lower* probability of wanting to receive information on the twenty items. ⁵By contrast, higher income and having children are associated with a *higher* probability of wanting to receive information (over all items). Across countries, we find correlations between specific knowledge items and sociodemographic and other variables. For instance, men are more interested in knowing their likely year of death than women, and divorced people have a higher interest in knowing about getting lethal cancer than single people. Higher trust in Instagram and Twitter are associated with a *higher* probability for information seeking. Higher trust in Facebook is mainly associated with a *lower* probability of wanting to receive specific information (in general). On this count, the typical Facebook user differs systematically from the typical Twitter and Instagram user. Lower (subjectively felt) freedom of choice and being worried about one's personal or family's future health status are (independently) associated with a higher probability of wanting to receive information; perhaps surprisingly, so is having deleted a social media account.

With regard to our special focus on food, we find that interest (WTK) in the four food-related information items is positively linked to (higher) education, city size, income, interest in and concerns about one's health, health concerns for one's family, and environmental concerns. It is negatively correlated with (higher) age, meat consumption, and subjectively felt freedom of choice.

Comparing interest in the three fields, we find, as expected, that being concerned about the environment is positively linked to interest in all seven *sustainability*-related types of information. Being male is associated with wanting to know about the likely global temperature in 2100. Higher meat intake and better health status are (independently) associated with a higher probability of wanting to receive *consumer*related information. We also find that being married or being divorced is associated with a higher probability of wanting to receive *health*-related information than being single.

With respect to particular issues, we also find statistically significant differences *between* countries. For instance, the percentage of people who want to know whether they will be diagnosed with Alzheimer's disease is highest in Canada, Italy, and Sweden and lowest in France, Germany, and the Netherlands.

Because we cannot rule out confounding variables, these reported associations need not suggest a causal relationship. However, the results suggest potential avenues for future work, and they might be relevant to policy. For instance (see Table A2), subjective well-being shows statistically significant positive correlations with wanting to know about calories and healthiness of food, but negative associations with wanting to know about "year of death" and "lethal cancer." Future studies might investigate reasons and consequences for health communication.

3.2.2. Willingness to pay to obtain information (WTP)

Overall, WTP for information is highest for health-related information, much lower for sustainability-related information, and lower still for consumer issues. In Appendix A, we give a detailed account of all covariates. Tables A5–A7 present covariates for the WTP to receive information in the three areas.⁶

Regarding the food-related items, the following picture emerges: WTP for information is positively related to the number of children and health status. It also increases with concern for personal and family health, while it is negatively associated with age. As one might expect, higher meat intake is associated with a lower WTP for information about how animals have been raised and slaughtered. WTP for health information tends to be higher for married people, people with better health (small effect), and people with higher income, as well as with those with a higher willingness to take a risk (independently). Older respondents show a lower WTP for health-related information. In general, WTP is very low for both sustainability- and consumer-related information, and highest for health-related information.

Again, as indicated by the standard errors of the country dummies in

⁵ For results reported in 3.2.1 see Tables A2–A4; all reported effects are on the 5 percent significance level.

⁶ All reported effects are on the 5 percent significance level.

Tables A5-A7, there are statistically significant differences across countries. For instance, respondents from Japan are willing to pay more to learn whether they will be diagnosed with Alzheimer's disease than are respondents from the United States, and respondents from the United States are willing to pay more for that information than are respondents from Denmark and the UK. With respect to demographics, Ho et al. (2020) have found that the tendency to avoid information does not substantially vary with gender, age, and education. By contrast, our results show a "male effect" with respect to health information: Being male is strongly associated with a decrease in WTP for health-related information. (It is is weakly associated with an increase in WTP to pay to get consumer-related information.) This finding is in line with earlier research that finds that men show a lower interest in searching for health information in general (e.g., Ek, 2015) and also online (Bidmon and Terlutter, 2015); and that males generally display lower health risk perceptions than females, even when objectively at higher risk (Dryhurst et al., 2020). Older subjects generally have a lower WTP for health information, and those who are concerned about their families' health show a higher WTP.

3.2.3. Willingness to pay not to receive information (WTPn)

Finally, we were interested in whether we can find a marked willingness to pay *not* to receive information, i.e., to remain ignorant, whatever the reasons might be. Recall that overall the WTPn is much lower than WTP. Tables A8–A10 in Appendix A present covariates for WTPn.⁷ For the four food-related items, we found a positive association between concern for family health and trust in Instagram with respect to WTPn, and a negative association (for all four items) between WTPn and age. Again, we find statistically significant differences across countries. To offer just one example, respondents from Japan are willing to pay more than respondents from the United States not to get the information whether they will be diagnosed with Alzheimer's disease.

4. Welfare effects

4.1. Motivation and general results

The focus of our study is on how much provision of specific information would affect people's welfare. While we do not claim to provide precise measures of welfare effects, especially in light of the limits of the WTP criterion, we develop a theoretical measurement model and then apply the best available data to calculate well-grounded estimates.

We base our analysis of the welfare effects on a theoretical model that is fully elaborated in Appendix B. Our aim is to model and understand the optimal (though potentially different) behavior of individuals who are either willing to know (in the following denoted as *I*) or not (in the following denoted as *U*) specific information items. For this purpose, we utilize a (stochastic) reinforcement-learning process (Van Otterlo and Wiering, 2012) for representative rational agents from both of these groups and compare the hypothetical outcomes.

Consistent with Golman and Loewenstein (2018) and Sharot and Sunstein (2020), we see agents who are not information-seeking as believing that the relevant information will not produce instrumental or hedonic benefits, and may produce instrumental or hedonic harms. In contrast, information-seeking agents have the contrary predictions. Of course, this simplified assumption of the model will not explain why people ignore (or do not ignore) information. However, due to the axiomatic nature of these basic assumptions, we are able to build a simplified model that ultimately leads to an improved understanding of the actual welfare effects of information.⁸

In a first step we are interested in the information state s_t at which the respective agent refuses to pay for getting or not getting a specific type of information if we assume some fixed price levels p_U and p_I (with $p_U \in \mathbb{R}^+$ being the price, an agent has to pay for not receiving information and $p_I \in \mathbb{R}^+$ being the price he has to pay for receiving information, respectively). As our model uses the discrete choice set A, we can denote the state where the willingness to pay is equal to 0 for the first time as s^* (i.e., the agents opt for a = not pay in all of the following states). Formally, we are interested in solving the following Equation for s_t :

$$\sum_{s_{t+1}} \Pr_{x}[s_{t+1}|s_{t}, a = not \ pay](R_{x}(s_{t}, a = not \ pay, s_{t+1}) + \gamma V_{x}(s_{t+1}))]$$

$$\geq \sum_{s_{t+1}} \Pr_{x}[s_{t+1}|s_{t}, a = pay](R_{x}(s_{t}, a = pay, s_{t+1}) + \gamma V_{x}(s_{t+1}))]$$
(1)

for $x \in \{U, I\}$ and $\gamma \in (0, 1)$

To find the set of all states s_t for which Eq. (1) applies, we first solve each agent's maximization problem (Eq. (B10) in Appendix B) numerically by using value-function iteration (where Pr and R being the transition probability and the reward function, respectively). Since the value function $V_{r}^{*}(s_{t})$ depends on the intertemporal discount factor γ and the prices, we set γ to both 0.9 and 0.99, and solve the model for both specifications and different price levels separately.⁹ Apart from the technical necessity, the specification of gamma also gives us a subtle theoretical interpretation. Our model does not explicitly specify the time that passes during the transition from one state to another (see Appendix B). Given the evidence that intertemporal discount rates are estimated to be around 10 percent (Newell and Siikamäki, 2015) for a one-year period, setting γ at 0.9 implies that we are assuming a small learning process and thus a long period between moving from one state to another. This fact allows us to go even further and associate a high discount rate (in our model) with consumption decisions based on an annual rather than a monthly (or even daily) basis. In contrast, if we attempt to model a monthly decision (e.g., whether someone wants to know the calorie intake during a monthly restaurant visit), we should stick to lower discount rates.

We then use Eq. (1) to compute s^* as a function of the price levels p_U and p_I , respectively. Additionally, we use 100 states, i.e., we set T to be equal to 100. This has the advantage that we can interpret s^* as the share of potential information that already has been acquired by the agent. That is, if (for a given specification) s^* were equal to, let us say, 80, then the agent's WTP would be equal to 0 in a state where 80 percent of the potential information was already disclosed.

The results are shown in Fig. 5. While the blue line indicates the value of s^* for an agent *I*, the red line denotes the value for an agent *U*. The model specifications show (panel (a) shows the solution for $\gamma = 0.9$, panel (b) for $\gamma = 0.99$) that the willingness-to-pay is much higher for individuals that want to get information than for individuals who do not. For example, at a price level of $p_U \approx p_I \approx 2$ the WTP on the part of people who do not want to receive information drops to 0 at about 25 percent of the information stock.

⁸ See Golman and Loewenstein's (2018) work for a more fundamental and indepth understanding of the various factors that might influence the benefits associated with information disclosure.

⁹ Additionally, $V_x^*(s_t)$ depends on g. However, given that the specified linear relationship of g and s in Equation B(5) holds, the presented results are independent of g in terms of their relevance.

⁷ All reported effects are on the 5 percent significance level.

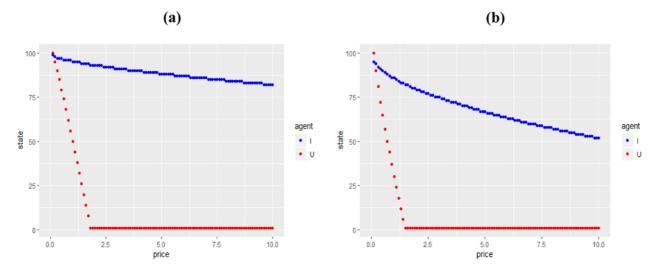


Fig. 5. Share of the information stock when the agents refuse to pay as a function of *p*. *Notes*: The figure depicts the proportion of the information stock when the WTP of an agent reaches 0, as a function of p_U and p_I , respectively. Panel (a) is computed with $\gamma = 0.9$; Panel (b) is computed by setting $\gamma = 0.99$. The blue line indicates the optimal response of agent I; the red line indicates the optimal response of agent U.

In comparison, people who wish to receive a specific type of information are still willing to pay if about 90 percent of this information has already been disclosed. The explanation for this is simple: once a certain level of disclosure of information is reached, people who do not want to receive information (correctly) anticipate that they cannot improve their welfare by continuously paying money to remain in this uninformed state. Or, to put it more loosely, they learn that they cannot prevent what will happen anyway: the full disclosure of information in the future (which, of course, is a basic assumption in our model).

This relationship, in combination with the fact that a deterministic reward structure is assumed for people who want to receive information (depending on the p_I and the γ , those individuals can always make them better off by buying information), leads to a faster decrease in the willingness to pay for people who do not want to receive information compared to people who want to receive it.

Also, if we interpret information stocks as an indicator of a certain level of general knowledge about a certain type of information in a given state (e.g., how many individuals in a society are aware of the risk of smoking), the results show that the willingness to accept a certain price (for not getting/getting information) is a decreasing function of this general knowledge. Or in less technical terms: If individuals do already exhibit some knowledge about, for instance, the externalities of a consumption decision, they are less likely to pay for getting/not getting additional information. In contrast, the opposite applies to cases where less general knowledge is available. This result seems quite intuitive. For example, one might assume that individuals are willing to pay much more to know what the state of the world will be like in 2100, compared to the willingness to pay for answering the question of whether soft drinks contain an unhealthy amount of sugar.

Given the differences in Fig. 5 in relation to the two values of γ , we conclude that willingness to pay is a decreasing function of the frequency of potential information disclosure. Again, the interpretation of this fact is quite simple: While a consumer is rarely confronted with information about her carbon footprint, it is much more common for someone to learn about unhealthy food intake. Since the blue line in panel (b) is strictly below the blue line in panel (a), the model suggests that the WTP to obtain information will be much larger in the first case than in the second. The comparison of the red lines shows that this correlation is much less evident for people who do not want to receive information.

The summary of these results leads us to the following predictions: *Prediction 1*: WTP to get information is much larger than WTP not to get information.

Prediction 2 (a): WTP to get information as well as WTP not to get information will decrease with the amount of information already known.

Prediction 2 (b): WTP to get information as well as WTP not to get information will decrease with the frequency of potential information disclosure. This difference is larger for WTP to get information than WTP not to get information.

4.2. Welfare effects

Because we are interested in the impact of information disclosure on net welfare, we approximate it by the average net benefit (AB) of information disclosure in our model as follows:

$$AB := \frac{1}{T} \sum_{t=0}^{T} \left[\rho V_{U}^{*}(s_{t}; p_{U}) + (1 - \rho) V_{I}^{*}(s_{t}; p_{I}) \right]$$
(2)

That is, we take the weighted average of the value functions of both agents in relation to each possible state s_t . For this purpose, we introduce the parameter $\rho \in [0, 1]$, which captures the overall share of individuals within a society that is not interested in information disclosure. Since *AB* depends additionally on p_U and p_I , we fix p_I and compute the average benefit for different values of p_U . It is important to note that we are not that much interested in the effect of the absolute values of p_U and p_I on *AB* (this would make no sense in our numerical setup), but rather in the relationship between all our variables. In the same way (and without losing the generality) we could also calculate *AB* as a function of p_I , where p_U is fixed.

Since our previous results indicate that the WTP to get information is larger than the WTP not to get, we choose a value for p_I that lies strictly above p_U . Specifically, this means that we set $p_I = p_I = 10$ and construct a grid for values of p_U between 0 and p_I .¹⁰ Fig. 6 shows the resulting values of *AB*. Again, panel (a) shows the solution for cases with potentially low-frequency information disclosure ($\gamma = 0.9$), while panel (b) simulates high-frequency information disclosure ($\gamma = 0.99$). We can derive three postulates regarding the average benefit:

¹⁰ It is directly apparent from the structure of the reward function that V_X^* is a monotone decreasing function of the price level. Combined with the fact, that the right-hand side term of Equation (B.10) in Appendix B is equal to a constant, changing p_I simply means shifting *AB* by $(1 - \rho)(\partial V_I^*(s_t; p_I)/\partial p_I^*\Delta p_I)$.

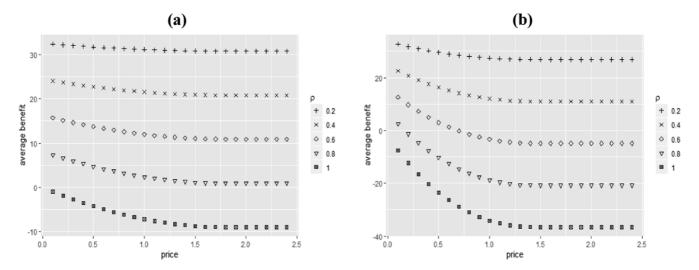


Fig. 6. Average benefit as a function of the price for not getting information. *Notes*: The figure depicts the simulated average benefit for both agents as a function of p_U . Panel (a) is computed with $\gamma = 0.9$; Panel (b) is calculated by setting $\gamma = 0.99$. $p_I = 10$.

- I. Comparing panel (a) and panel (b) shows that high prices for not getting information (in absolute terms) are associated with a lower average benefit for high-frequency information disclosure than compared to low-frequency information disclosure (the curves show strictly lower values in panel (b) compared to panel (a)). This seems intuitive, as it is plausible that the same price (note that we now are talking about (hypothetically) given prices, not the potential WTP of individuals) does not affect the welfare determined by a low-frequency information disclosure in the same way as it would with high-frequency information. For example: Considering that someone is neither interested in the outcome of her annual skin cancer risk nor the sugar intake during her weekly restaurant visit, it is likely that a \$10 fee for ignorance of the first case would not cause the same welfare loss as a \$10 fee for the second case, because the information is shared with varying frequency.
- II. Both panels in Fig. 6 show that an increasing proportion of individuals within a society who do not want to receive a certain type of information has a negative impact on welfare. This becomes particularly evident when looking at panel (b), where large values of ρ even lead to negative welfare effects.
- III. Given the fact that we fixed $p_I = p_I$, we can conclude that larger values for p_U relative to p_I will decrease the average benefit (all curves depicted in Fig. 6 are monotonically decreasing in p_U), while lower values will increase it. This means that we expect a constant ratio between the price of not getting and the price of acquiring information to preserve a given welfare effect. For example, as soon as the price of not getting information, we expect a negative welfare effect (and vice versa).

Prediction 3 (a): A positive welfare effect can be expected even for moderate levels of ρ .

Prediction 3 (b): A positive welfare effect can be expected if the prices for not getting information are lower in relation to prices for getting information (especially if γ is large).

4.3. Empirical results

In a next step, we calculate the ratio WTP to WTPn (Table B1 in Appendix B). This ratio varies between 4.27 for animal friendliness of meat production (i.e., the WTP to get the specific information is 4.27 times higher than the WTPn to get the specific information), and 11.93 for the environmental footprint of one's travel, depending on the type of

information. The mean ratio equals 7.15 with a standard deviation of 2.23, i.e., the WTP for an information item is on average 7.15 times higher than the WTPn (which is in line with *Prediction 1*).

Moreover, these empirical results suggest that information items that might probably be known at the time of decision-making (e.g., information about calorie intake during a restaurant visit) have lower values in both WTP and WTPn compared to items that are associated with almost complete ignorance (e.g., information about the probable year of death). For example, people in our survey were willing to pay about ℓ 29 to know (and still about €5 not to know) whether or not they will develop Alzheimer's - a type of information that is undoubtedly characterized by a high degree of ignorance. On the other hand, the WTP for information on the safety rating of one's car tires (an information piece that is probably already known) is only around ℓ 4 (ℓ 0.70). Although this result would agree with Prediction 2 (a), the large difference in WTP for several items can also be explained by the theoretical considerations behind Prediction 2 (b). Indeed, our empirical results show that both WTP and WTPn decrease with the frequency of potential information disclosure, with a higher (overall) decrease for WTP. For example, information about cancer risk (cancer_cur) - information that shows a rather low frequency of occurrence (usually one is not confronted with one's cancer risk every month) - is valued higher than information about the cost of the standard fee for a person's late payment of their credit card bill, information that is disclosed regularly and can also easily be retrieved.

Using the results of Table B1 in Appendix B, we are able to approximate the welfare effects associated with a specific type of information k in country i by taking the product of the population size (pop_i) , the average willingness to pay to get/not to get the specific information $(WTP(n)_{ik})$, the share of individuals who don't want to receive that information $(share_{ik})$, and the frequency with which the information is (annually) obtained (y_k) .¹¹ The calculation of the average *loss*, and the average *benefit* are then given by:

$$loss_{ik} = y_k \times share_{ik} \times WTPn_{ik} \times pop_i \tag{3}$$

$$benefit_{ik} = y_k \times (1 - share)_{ik} \times WTP_{ik} \times pop_i$$
(4)

As Eqs. (3) and (4) show, the associated loss (benefit) is highly

¹¹ Note that this estimation mirrors the theoretical derivation of the average benefit in Equation (12) in the Supplementary Material. Here, instead, we use *share* = ρ , while $V(s_t; p_I)$ is approximated by the *WTP/WTPn*, the population size (*pop*), and *y*.

dependent on the frequency y. While this is unproblematic for those information items where the information is revealed only once (for instance, the risk of getting Alzheimer's disease or one's likely year of death), we have to estimate the frequencies for those information items that concern repeated consumption choices such as information about working conditions in textile production or calorie content of food. As a base, we use available international consumer data to determine the respective average frequencies of such choices for the different countries. This approach is needed since real consumption frequencies are not available for all items in all states and even if this was the case, the data is hardly comparable on country-level since data sources and compilation methods differ substantially. Using average frequencies reduces the variance of the final estimates. Therewith, we can rule out the possibility that country-specific differences in average loss/benefit are due solely to the higher proposed frequency of use of a particular item of information (Table S2 in the Supplementary Material).¹² Based on these estimated average frequencies,

Tables B2 and B3 in Appendix B show the welfare losses and gains per item per country, respectively.

For example, in Belgium, the estimated welfare gain associated with information about the potential healthiness of food (e.g., by traffic lights labels or other visual cues) is 1.5 billion $\notin (-54\% \times -12 \text{ million} \times 113 \times -\pounds3.60)$, while the estimated welfare loss equals 0.5 billion $\notin (-46\% \times -12 \text{ million} \times 113 \times \pounds3.60)$. We compile the results, averaged over all countries, in Fig. 7.

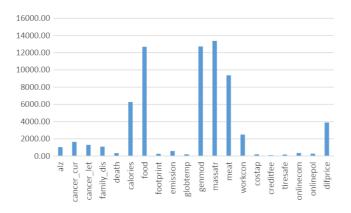


Fig. 7. Overall average net benefit in \pounds 1,000,000. *Notes*: The figure shows the annual average differences in estimated losses and benefits.

In line with *Prediction 3 (a)* and *3 (b)*, the estimated average benefit is larger than the loss for all types of information. The largest net benefits can be found for the provision of information about (un)healthy food (i. e., calories of a meal; health labels) and potentially unethical production processes (i.e., GMO food; conflict minerals; meat production). As the WTP has rather low values for these goods, the substantial welfare effect is due to the high frequency with which these consumer decisions are made. For example, although the WTP to know if someone develops Alzheimer's (*alz*) is almost six times greater than that to get information about the calorie intake during a restaurant visit (*calories*), the gap is more than compensated by the fact that information on Alzheimer's disease is disclosed once. In contrast, calorie intake may be disclosed each time a restaurant is visited.

Overall, we find the largest welfare gains for information with respect to regular consumption decisions as well as for information about effective price differences in online shopping. Some information that seems important, such as early warnings with respect to Alzheimer's or cancer, does not have a substantial net benefit.

These results are largely driven by the estimated frequency of information disclosure. It could be argued that once a particular type of information has been reported, the associated willingness to pay for obtaining or not obtaining it automatically drops to zero. However, we specifically ask respondents to indicate their willingness to pay for a particular type of information *each* time that this information could have been hypothetically disclosed. Given the precise and pretested wording of the survey questions, we assume that respondents largely took into account that, for instance, they do not always order exactly the same food when they go to the restaurant or buy the same type of shoes when they visit a store. Hence, we interpret the reported willingness-to-pay less a statement of actual willingness-to-pay for disclosure/nondisclosure of information but rather as an averaged (discounted) willingness-to-pay *over a longer period of time* that includes multiple disclosures of information.

5. Discussion and policy implications

To the best of our knowledge, the present study is the first to use a representative multi-country survey to elicit people's desire to receive or not to receive information and their willingness to pay to receive or not to receive it, and to use the resulting data to estimate the welfare effects of information provision. One of our main concerns has been food-related information, where we are able to offer new findings about what people want to know.

In eleven nations, we find that while majorities generally want to receive the tested information, significant minorities do not, and that contingent on wanting information, people's willingness to pay is relatively small. These propositions hold for the four food-related items we tested. At the same time, contingent on wanting to receive it, people's aggregated willingness to pay to obtain information generally exceeds the aggregated willingness to pay not to receive information, of those who do not want it. These propositions also hold for the four foodrelated items we tested. Our model thus shows substantial net benefits from information provision, including in the domain of food policy, though the magnitude of those benefits differs dramatically across issue areas. This finding should encourage policymakers to become as knowledgeable as possible about their citizens' preferences and to consider, to the extent feasible, a selective or targeted information provision approach rather than following the traditional information paradigm, assuming that more information is always better than less.

It is plausible to think that many people want health-related information because they think that they can use it; the same is true of consumer information. It is also plausible to think that the comparatively lower numbers for sustainability information stem from a belief, on the part of many respondents, that such information is not relevant to their choices. In spite of all evidence, the assumption that climate change and environmental degradation are problems of future generations or people in the Global South is still widely held. Moreover, environmental and animal welfare issues can be viewed as public goods, and people might have little incentive to ask for additional information given the small impact of their actions (Bonnet et al., 2020). Here, then, is evidence that instrumental utility greatly matters (Golman et al., 2017). At the same time, hedonic utility seems to matter as well; note that the smallest percentages of people say that they want to receive information about the date of their death. Hedonic values might also explain the low WTP for information on animal welfare. This is in line with the finding that although some consumers show serious concern, the average WTP for this attribute is typically low (e.g., Clark et al., 2017).

For policymakers, the main lesson is simple: On welfare grounds, the preferred approach would be to personalize disclosure, so as to ensure that information is provided only to people who want it, and not to

 $^{^{12}}$ Based on publicly available information on consumption patterns, we use the following frequencies: *calories* \sim 52 times/year; *food* \sim 113 times/year; *genmod, massatr, meat* \sim 68 times/year; *workcon* \sim 17 times/year; emission \sim 3.5 times/year (see Online Appendix for details). We assume that all other variables are disclosed once (per year).

people who do not want it. In some cases, however, personalization is not feasible, because the relevant information is a public good. We also emphasize that people's willingness to pay for information is an imperfect guide to the welfare effects of providing it to them, because they might lack the information that is necessary for them to know whether to seek it, and because they might suffer from behavioral biases, such as present bias or unrealistic optimism (Sharot and Sunstein 2020). It is relevant that other tools, such as enhancing information literacy through education, seem to decrease information avoidance (Karim et al., 2019).

For regulators and policymakers, serious challenges remain. In many areas, regulators have concluded that they are unable to quantify the benefits of disclosure requirements and for this reason cannot comply with the frequent requirement that the benefits must be shown to justify the costs (Sunstein, 2019). We have offered reason to believe that in critical domains, at least some kind of quantification is possible, and that disclosure requirements would in fact provide net benefits. At the same time, the magnitude of those benefits varies across areas, and in some cases, consideration of the purely material costs of labels might tip the balance against mandatory disclosure. In principle, however, even rough estimates of welfare effects might allow policymakers to prioritize information and communication campaign and disclosure mandates accordingly.

Our central findings are straightforward. Large minorities, and in some cases majorities, of people in eleven nations do not want information that would seem to be relevant to their lives, or at least of some interest. At the same time, substantial minorities, and in many cases majorities, do want that information, and people's willingness to pay for information, contingent on wanting it, is far higher than people's willingness to pay not to receive information, contingent on not wanting to receive it. On standard economic assumptions, our numbers suggest that making the relevant information available, in the stated domains, is justified on welfare grounds; our model supports that conclusion. But a more targeted policy, giving information only to people who actually want it, would appear to be far more efficient. Personalized disclosure should ensure higher net benefits.

These conclusions bear on food policy in particular. For the items tested, majorities in diverse nations would prefer to receive the relevant information. For each of those items, aggregated willingness to pay for information, contingent on wanting to receive it, was significantly higher than aggregated willingness to pay not to receive information, contingent on not wanting to receive it. For those items at least, an admittedly imperfect measure of welfare suggests that information disclosure is justified on welfare grounds. Here again, however, a more targeted approach, providing information only to those who want it, would be better – if it were feasible, and if we conclude that those who do not want the information do not suffer from some kind of behavioral bias.

The similarities across nations, broadly speaking, are noteworthy, but some of the differences are also striking. In aggregate, Italy, Canada, and Denmark show the highest percentages of people who would like to receive information, whereas Germany, Japan, and the Netherlands show the lowest such percentages. At the same time, the aggregate data conceal significant differences across issue areas. Knowing more about those differences, and about what is responsible for them, would allow for international comparisons that might inform supranational policy making, e.g., on the European level.

Informational instruments as those tested in our study are typically used to reduce the information asymmetries between consumers and producers or between patients and doctors and to better match people's preferences. In principle, people's desire to receive or not to receive information on the issues explored here should turn largely on two factors: (1) its instrumental value, that is, whether people can use it, and if so how much; and (2) its hedonic value, that is, how the information makes people feel, and with what intensity and duration. Policymakers should ideally take both values into consideration. The comparatively greater interest in health-related information attests to the importance of instrumental value, as does the comparatively greater interest, in the domain of issues bearing on consumer welfare, in issues involving the use of personal data and energy costs. We suspect that the diversity of responses received here attests to the diversity of judgments with respect to both (1) and (2).

6. Conclusions

We have emphasized that our welfare analysis should be taken with several grains of salt. In choosing whether or not to avoid or to seek information, people must try to solve a difficult prediction problem about its likely welfare effects. Consumers might not be adequately informed about the usefulness of the relevant information (Sharot and Sunstein, 2020). Behavioral biases, such as present bias and unrealistic optimism, might produce a WTP or WTPn that does not capture the actual welfare effects (Sharot and Sunstein, 2020). And if preferences and tastes shift over time, the limits of WTP or WTPn become more serious. A disclosure requirement might, for example, lead people to develop a taste for healthier foods. In some domains, preferences might be endogenous to experience, which can change as a result of disclosure.

But our basic claims are more modest. We now know a great deal about what citizens of diverse nations want to know, and do not want to know. We also know a great deal about how much citizens of various nations are willing to pay to receive information, and not to receive it. Those are things that both private and public institutions should want to know.

CRediT authorship contribution statement

Lucia A. Reisch: Conceptualization, Methodology, Writing - original draft, Funding acquisition, Investigation, Project administration. Cass R. Sunstein: Conceptualization, Investigation, Writing - original draft. Micha Kaiser: Methodology, Data curation, Formal analysis, Writing original draft.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Empirical results

See Tables A1–A10.

Table A1

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Descriptive statistics.

	Description	Mean/share	sd	N
Panel A. Countries				
USA	Share	7.39%	-	608
BELGIUM	Share	10.31%	-	848
CANADA	Share	6.95%	-	572
DENMARK	Share	8.91%	-	733
FRANCE	Share	10.55%	-	868
GERMANY	Share	9.73%	-	801
ITALY	Share	9.76%	-	803
JAPAN	Share	10.34%	-	851
NETHERLANDS	Share	9.47%	-	779
SWEDEN UK	Share Share	7.56% 9.04%	_	622 744
UK	Share	9.04%	-	744 8,229
Panel B. Sociodemographics/socioeconomics				
GENDER	[0] Female	0.48	0.50	8,229
	[1] Male			
AGE	Age of respondent	48.23	16.47	8,229
EDUC	Years of schooling	12.98	4.15	8,229
CITY_SIZE	[0] <5,000	2.13	1.50	8,229
	[1] >5,000 & <10,000			
	[2] >10,000 & <100,000			
	[3] >100,00 & < 500,000			
	[4] >500,000 & < 1,000,000			
	[5] >1,000,000			
SINGLE	Share	25.81%	-	2,124
DIVORCED	Share	9.54%	-	785
LONG TERM RELATIONSHIP	Share	11.12%	-	915
MARRIED/CIVIL RELATIONSHIP	Share	49.28%	-	4,055
OTHER	Share	1.22%	-	100
WIDOWED	Share	3.04%	-	250 8,229
CHILDREN	Number of children	1.26	1.31	8,229
NETHHINC	Net of tax household income	3281.14	4233.46	8,229
NATIVE	Born in country of residence	0.88	0.32	8,229
	[0] No			
	[1] Yes			
Panel C. Health	[1] 100			
HEIGHT	Height in cm	169.20	10.28	8,229
WEIGHT	Weight in kg	74.49	18.17	8,229
SMOKE	Do you smoke	0.31	0.46	8,229
	[0] No			
	[1] Yes			
ALCOHOL	[0] Never	1.00	1.15	8,229
	L-3	1.00		-,227
	[1] >1 & <2 d/week			
	[2] > 2 & < 4 d/week			
	[3] >4 & <6 d/week			
	[4] Daily			
MEAT_INTAKE	[0] Never	2.14	1.10	8,229
	[1] >1 & <2 d/week			
			(continued or	

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	Description	Mean/share	sd	N
	[2] >2 & <4 d/week [3] >4 & <6 d/week [4] Daily			
HEALTH	[1] Bad to [7] Excellent	4.81	1.37	8,229
SWB (LIFE SATISFACTION)	[1] Not satisfied at all to [7] Fully satisfied	4.76	1.42	8,229
Panel D. Psychographics DID NOT DELETE SOCIAL MEDIA ACCOUNT IN PAST	Share	64.44%	_	5,303
DELETED ACCOUNT	Share	19.36%	-	1,593
NEVER HAD AN ACCOUNT	Share	16.20%	-	1,333
ENVIRONMENT	[1] Not worried about the environment to	4.91	1.57	8,229 8,229
PERS_HEALTH	[7] Strong worries about the environment [1] Not worried about future personal health	4.68	1.60	8,229
FAM_HEALTH	[7] Strong worries about personal health in the future[0] Not worried about the family's health	4.78	1.58	8,229
WTR	[7] Strong worries about the family's health in the future [1] Highly risk-averse to	3.74	1.57	8,229
FOC	[7] not risk averse [0] No freedom of choice to	4.77	1.40	8,229
TRUST_INSTA	[7] Full freedom of choice Do you trust Instagram as a general source of information	2.72	1.63	8,229
TRUST_TWITTER	[1] No trust [7] High trust Do you trust Twitter as a general source of information	2.64	1.61	8,229
TRUST_FB	[1] No trust [7] High trust Do you trust Facebook as a general source of information	2.86	1.69	8,229
	[1] No trust [7] High trust			

Notes: Conservative data cleaning reduced the original sample size of around 11,000 observations to 8,229.

Table A2

Logistic regression results, willingness to know health-related information.

	Alz (1)	Cancer_cur (2)	Cancer_let (3)	Family_dis (4)	Death (5)	Calories (6)	Food (7)
Panel A. Countries							
USA AS REFERENCE							
BELGIUM	0.0691	0.4782	0.1355	0.0268	-0.1724	-0.5049	0.7738
	(0.033)	(0.036)	(0.034)	(0.038)	(0.050)	(0.029)	(0.034)
CANADA	0.8736	0.6206	0.3718	0.3935	0.2999	0.3069	0.4840
	(0.025)	(0.019)	(0.022)	(0.020)	(0.029)	(0.020)	(0.033)
DENMARK	0.0886	0.7209	0.3504	0.1151	-0.0390	-0.5063	0.7899
	(0.020)	(0.048)	(0.039)	(0.036)	(0.040)	(0.027)	(0.037)
FRANCE	-0.3150	-0.0790	-0.3076	-0.1782	-0.1067	0.0338	0.9125
	(0.035)	(0.047)	(0.041)	(0.046)	(0.052)	(0.034)	(0.045)
GERMANY	-0.2307	0.1189	-0.3634	-0.4610	-0.5611	-0.4392	0.7660
	(0.031)	(0.045)	(0.030)	(0.039)	(0.034)	(0.040)	(0.048)
ITALY	0.8485	0.6578	0.4958	0.3834	-0.0072	0.8497	1.6677
	(0.037)	(0.062)	(0.041)	(0.052)	(0.055)	(0.058)	(0.066)
JAPAN	0.1593	0.3558	0.3146	0.0972	0.4795	-0.1403	0.6667
	(0.047)	(0.046)	(0.039)	(0.035)	(0.071)	(0.054)	(0.061)
NETHERLANDS	-0.3053	0.3207	0.0644	-0.1928	-0.5513	-0.7245	0.6027
	(0.013)	(0.046)	(0.031)	(0.027)	(0.039)	(0.023)	(0.040)
SWEDEN	0.7268	1.1091	0.4071	0.2574	-0.2555	-0.1338	1.1512
	(0.024)	(0.043)	(0.034)	(0.028)	(0.026)	(0.041)	(0.055)

	Alz (1)	Cancer_cur (2)	Cancer_let (3)	Family_dis (4)	Death (5)	Calories (6)	Food (
UK	0.3632	0.3317	0.1727	0.0759	0.0434	0.0181	1.0647
	(0.027)	(0.032)	(0.022)	(0.025)	(0.039)	(0.034)	(0.040
nel B. Sociodemographics/socioeconomics							
GENDER	0.0416	-0.1201	0.0877	0.0879	0.5022	-0.0272	-0.028
AGE	(0.062)	(0.091)	(0.067) -0.0209	(0.080)	(0.097)	(0.086)	(0.060
AGE	-0.0065 (0.001)	-0.0182 (0.002)	(0.002)	-0.0234 (0.002)	-0.0170 (0.003)	-0.0225 (0.002)	-0.01 (0.002
EDUC	0.0265	0.0318	0.0244	0.0285	0.0122	0.0211	0.0161
EDOG	(0.009)	(0.013)	(0.008)	(0.005)	(0.007)	(0.006)	(0.011
CITY SIZE	0.0414	0.0522	0.0443	0.0220	0.0173	0.0403	0.0302
	(0.015)	(0.015)	(0.017)	(0.015)	(0.020)	(0.016)	(0.015
BEING SINGLE AS REFERENCE	()	()	()	()	()	()	(
DIVORCED	0.2908	0.1778	0.4012	0.2555	0.1057	0.1618	0.169
	(0.092)	(0.075)	(0.092)	(0.133)	(0.164)	(0.133)	(0.108
LONG TERM RELATIONSHIP	0.2314	0.2505	0.1958	0.1060	-0.1279	0.1741	0.127
	(0.078)	(0.095)	(0.073)	(0.102)	(0.112)	(0.076)	(0.084
MARRIED/CIVIL RELATIONSHIP	0.2856	0.2305	0.1612	0.1820	-0.1013	0.1232	0.098
	(0.063)	(0.064)	(0.072)	(0.108)	(0.111)	(0.084)	(0.08
OTHER	-0.4552	-0.4739	-0.3189	-0.3029	-0.2810	-0.2112	-0.06
	(0.267)	(0.251)	(0.362)	(0.343)	(0.424)	(0.262)	(0.18
WIDOWED	0.1141	0.0302	0.0481	0.0559	-0.2834	-0.0044	0.163
	(0.134)	(0.125)	(0.123)	(0.110)	(0.155)	(0.293)	(0.14
CHILDREN	-0.0199	0.0356	0.0284	0.0593	0.0480	0.0182	-0.01
	(0.018)	(0.013)	(0.014)	(0.014)	(0.018)	(0.021)	(0.02
LOGINC	0.0709	0.0778	0.0748	0.0426	0.0188	0.0542	0.050
	(0.018)	(0.021)	(0.021)	(0.013)	(0.017)	(0.013)	(0.01
NATIVE	0.0336	0.0495	0.0446	-0.1044	-0.1236	-0.1233	-0.07
	(0.084)	(0.104)	(0.083)	(0.057)	(0.121)	(0.081)	(0.07
nel C. Health							
HEIGHT	0.0010	0.0028	-0.0019	-0.0032	-0.0045	-0.0004	0.005
	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.00
WEIGHT	-0.0006	0.0000	0.0011	0.0028	-0.0011	0.0056	0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.00
SMOKE	-0.0281	-0.0221	0.0142	0.1120	0.2160	-0.2150	-0.20
	(0.043)	(0.064)	(0.066)	(0.060)	(0.065)	(0.076)	(0.08
ALCOHOL	0.0705	0.0249	0.0138	-0.0187	0.0806	-0.0001	-0.00
	(0.011)	(0.012)	(0.020)	(0.019)	(0.030)	(0.025)	(0.02
MEAT_INTAKE	-0.0023	0.0441	0.0282	0.0302	-0.0097	-0.0917	-0.00
-	(0.024)	(0.035)	(0.028)	(0.023)	(0.025)	(0.040)	(0.03
HEALTH	0.0017	-0.0017	0.0008	0.0040	-0.0060	0.0543	0.011
	(0.014)	(0.019)	(0.014)	(0.019)	(0.024)	(0.027)	(0.03
SWB	-0.0288	0.0162	-0.0458	-0.0169	-0.0878	0.0587	0.053
	(0.021)	(0.025)	(0.015)	(0.023)	(0.026)	(0.023)	(0.02
nel D. Psychographics							
DID NOT DELETE ACCOUNT AS REFERENCE							
DELETE SOCIAL MEDIA ACCOUNT	0.0418	0.0405	0.1393	0.2214	0.3630	0.3069	0.211
	(0.050)	(0.069)	(0.098)	(0.083)	(0.093)	(0.083)	(0.10)
NEVER HAD ACCOUNT	-0.3041	-0.2392	-0.1188	-0.0573	0.2192	-0.1369	-0.17
	(0.066)	(0.071)	(0.093)	(0.072)	(0.107)	(0.031)	(0.06
ENVIRONMENT	0.0792	0.0634	0.0277	0.0381	-0.0223	0.1157	0.208
	(0.014)	(0.019)	(0.021)	(0.017)	(0.024)	(0.024)	(0.01
PERS_HEALTH	0.1343	0.1729	0.1506	0.1152	0.1121	0.0956	0.086
	(0.011)	(0.015)	(0.023)	(0.022)	(0.022)	(0.025)	(0.02
FAM HEALTH	0.0751	0.0788	0.0826	0.1854	0.0441	0.0594	0.102
-	(0.020)	(0.025)	(0.024)	(0.027)	(0.032)	(0.021)	(0.01
WTR	0.0192	0.0254	0.0433	0.0319	0.0773	-0.0082	-0.01
	(0.017)	(0.021)	(0.013)	(0.015)	(0.022)	(0.012)	(0.01
FOC	-0.0049	-0.0218	-0.0128	-0.0411	-0.0357	-0.0174	_0.03
	(0.025)	(0.020)	(0.028)	(0.017)	(0.022)	(0.017)	(0.01
TRUST INSTA	0.0454	0.0311	0.0727	0.0922	0.0742	0.0092	-0.01
	(0.027)	(0.023)	(0.025)	(0.020)	(0.024)	(0.021)	(0.03
TRUST_TWITTER	0.0516	0.0428	-0.0071	-0.0027	0.0089	0.0770	0.113
	(0.022)	(0.027)	(0.023)	(0.028)	(0.019)	(0.019)	(0.02
TRUST FB	-0.0478	-0.0440	0.0055	0.0309	0.0511	0.0002	-0.06
	(0.018)	(0.019)	(0.020)	(0.021)	(0.020)	(0.023)	(0.02)
Constant	-2.3666	-2.2633	(0.020) -1.4363	-1.6730	-0.8315	-2.0247	-3.70
	-2.0000	-2.2000	-1.1000	1.07.50	0.0313	2.027/	-5.7
Constant	(0.481)	(0.421)	(0.333)	(0.332)	(0.557)	(0.502)	(0.49)

Notes: Robust standard errors in parentheses.

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Table A3

Logistic regression results, willingness to know sustainable-development-related information.

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (
anel A. Countries							
USA AS REFERENCE							
BELGIUM	0.6507	0.1180	-0.1833	0.2258	0.4882	0.5555	0.6034
	(0.033)	(0.039)	(0.033)	(0.061)	(0.030)	(0.036)	(0.030)
CANADA	0.4072	0.3592	0.1397	0.4017	0.3169	0.3586	0.5495
	(0.031)	(0.038)	(0.037)	(0.038)	(0.035)	(0.036)	(0.033)
DENMARK	0.4462	0.5193	0.4999	1.0258	1.2443	1.3686	1.3574
	(0.028)	(0.030)	(0.040)	(0.039)	(0.050)	(0.046)	(0.045)
FRANCE	0.6350	0.2872	-0.0720	0.5513	0.5078	0.8501	0.7710
	(0.037)	(0.036)	(0.033)	(0.073)	(0.030)	(0.041)	(0.041)
GERMANY	0.6480	0.0343	-0.2401	0.5176	0.5575	1.1217	0.8174
	(0.036)	(0.038)	(0.042)	(0.068)	(0.046)	(0.055)	(0.043)
ITALY	0.9263	0.5245	0.0843	0.9683	0.8100	0.1020	0.7944
	(0.055)	(0.055)	(0.049)	(0.096)	(0.052)	(0.071)	(0.059)
JAPAN	-0.2841	-0.5703	0.2650	0.2058	-0.1137	-0.9286	-0.7430
	(0.068)	(0.083)	(0.084)	(0.075)	(0.058)	(0.087)	(0.074)
NETHERLANDS	0.1685	-0.2270	-0.4231	-0.3641	0.0576	0.1289	0.3309
	(0.029)	(0.032)	(0.031)	(0.042)	(0.036)	(0.040)	(0.031)
SWEDEN	0.9176	0.7660	0.5414	0.9423	1.3901	1.5121	1.4186
BWEDEN	(0.041)	(0.039)	(0.042)	(0.058)	(0.044)	(0.051)	(0.044)
UK			-0.3005			0.5843	0.3574
UK	0.2253	0.0205		0.0111	0.1535		
mal P. Sociadomographics (assisted assisted	(0.041)	(0.038)	(0.043)	(0.057)	(0.037)	(0.048)	(0.033)
anel B. Sociodemographics/socioeconomics	0.1047	0.4090	0.0000	0.0453	0.0101	0.005.4	0.0007
GENDER	0.1941	0.4033	0.3822	0.0457	-0.0131	-0.0354	-0.0361
1.07	(0.089)	(0.061)	(0.077)	(0.076)	(0.095)	(0.084)	(0.048)
AGE	-0.0267	-0.0273	-0.0326	0.0012	-0.0084	-0.0094	-0.0132
	(0.003)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
EDUC	0.0304	0.0262	0.0184	0.0150	0.0231	0.0184	0.0213
	(0.008)	(0.008)	(0.007)	(0.009)	(0.007)	(0.005)	(0.007)
CITY_SIZE	0.0228	0.0025	0.0079	0.0139	0.0503	0.0144	0.0146
	(0.019)	(0.019)	(0.009)	(0.018)	(0.022)	(0.016)	(0.017)
BEING SINGLE AS REFERENCE							
DIVORCED	0.0078	0.2143	0.1651	0.1435	-0.0020	-0.0831	0.0042
	(0.082)	(0.093)	(0.124)	(0.154)	(0.107)	(0.080)	(0.078)
LONG TERM RELATIONSHIP	-0.1311	0.0601	0.0177	-0.0062	0.0042	0.0254	-0.0709
	(0.061)	(0.077)	(0.084)	(0.086)	(0.093)	(0.086)	(0.090)
MARRIED/CIVIL RELATIONSHIP	-0.0715	0.0248	-0.0547	-0.0385	-0.0470	-0.0455	-0.0416
MARRIED/GIVIE REEATIONSHIP	(0.077)	(0.078)	(0.092)	(0.063)	(0.072)	(0.056)	(0.050)
OTHER						-0.1968	
OTHER	-0.1044	-0.0850	0.0510	-0.1346	0.1822		0.0816
	(0.219)	(0.228)	(0.130)	(0.242)	(0.361)	(0.246)	(0.203)
WIDOWED	-0.0117	0.2483	0.2559	0.0901	0.1342	-0.0784	-0.0748
	(0.255)	(0.210)	(0.208)	(0.202)	(0.190)	(0.129)	(0.124)
CHILDREN	0.0620	0.0306	0.0708	0.0356	0.0096	0.0161	0.0056
	(0.021)	(0.030)	(0.025)	(0.025)	(0.020)	(0.020)	(0.014)
LOGINC	0.0481	0.0123	0.0315	0.0409	0.0096	0.0114	0.0220
	(0.016)	(0.016)	(0.014)	(0.024)	(0.017)	(0.015)	(0.018)
NATIVE	-0.1098	-0.1823	-0.1934	-0.1448	-0.0441	0.0551	0.0025
	(0.084)	(0.077)	(0.078)	(0.108)	(0.085)	(0.139)	(0.132)
anel C. Health							
HEIGHT	0.0015	-0.0040	-0.0033	-0.0026	-0.0002	-0.0012	-0.0048
	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.003)
WEIGHT	0.0001	-0.0022	-0.0026	-0.0035	-0.0000	0.0003	-0.0023
-	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
SMOKE	-0.2131	-0.0884	0.0454	-0.0430	-0.0117	0.0354	-0.0919
UNIONE	(0.064)	(0.047)	(0.085)	(0.056)	(0.052)	(0.054)	(0.053)
41 COLIOI							
ALCOHOL	0.0377	0.0366	0.0453	0.0192	0.0137	0.0557	0.0291
	(0.020)	(0.026)	(0.023)	(0.030)	(0.021)	(0.029)	(0.027)
MEAT_INTAKE	-0.0557	-0.0968	-0.0578	-0.0211	-0.0341	-0.0679	-0.0858
	(0.035)	(0.032)	(0.028)	(0.045)	(0.042)	(0.040)	(0.035)
HEALTH	0.0598	0.0294	0.0151	0.0647	0.0293	0.0308	0.0449
	(0.028)	(0.021)	(0.021)	(0.014)	(0.026)	(0.021)	(0.026)
SWB	0.0020	0.0414	0.0172	0.0327	0.0161	0.0295	0.0256
	(0.032)	(0.026)	(0.022)	(0.017)	(0.028)	(0.018)	(0.024)
anel D. Psychographics							
DID NOT DELETE ACCOUNT AS REFERENCE							
DELETE SOCIAL MEDIA ACCOUNT	0.2143	0.2388	0.2639	0.3326	0.1490	0.1413	0.1094
	(0.088)	(0.048)	(0.067)	(0.079)	(0.069)	(0.084)	(0.097)
NEVER HAD ACCOUNT	-0.1108	0.0885	0.0205	-0.1411	-0.0744	-0.0312	-0.1190
NEVER HAD AGGOUNT							
ENVIRONMENT	(0.079)	(0.072)	(0.063)	(0.078)	(0.082)	(0.052)	(0.083)
ENVIRONMENT	0.3813	0.4817	0.3767	0.2917	0.3994	0.3243	0.4095
	(0.033)	(0.022)	(0.023)	(0.020)	(0.016)	(0.017)	(0.016)
PERS_HEALTH	0.0554	0.0215	0.0184	0.0547	0.0091	0.0413	0.0511
	(0.018)	(0.015)	(0.022)	(0.019)	(0.018)	(0.018)	(0.014)
FAM_HEALTH	0.0439	0.0568	0.0868	0.0839	0.0887	0.0703	0.0666

Table A3 (continued)

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (7)
	(0.020)	(0.011)	(0.018)	(0.029)	(0.028)	(0.023)	(0.019)
WTR	0.0179	-0.0032	0.0042	0.0069	0.0252	0.0017	-0.0224
	(0.010)	(0.010)	(0.014)	(0.009)	(0.012)	(0.011)	(0.013)
FOC	-0.0422	-0.0159	-0.0729	-0.0236	-0.0465	-0.0243	-0.0507
	(0.019)	(0.014)	(0.014)	(0.020)	(0.016)	(0.016)	(0.020)
TRUST_INSTA	0.0333	0.0457	0.0415	-0.0210	-0.0006	0.0334	-0.0072
	(0.016)	(0.020)	(0.018)	(0.031)	(0.022)	(0.022)	(0.018)
TRUST_TWITTER	0.0561	0.0967	0.0957	0.0908	0.1018	0.0732	0.1166
	(0.018)	(0.018)	(0.025)	(0.028)	(0.030)	(0.028)	(0.030)
TRUST_FB	-0.0056	-0.0099	0.0039	-0.0858	-0.0937	-0.0606	-0.0845
	(0.025)	(0.021)	(0.022)	(0.024)	(0.025)	(0.020)	(0.026)
Constant	-3.3109	-2.5489	-1.7692	-2.4947	-3.2875	-2.7298	-1.9682
	(0.532)	(0.642)	(0.717)	(1.010)	(0.754)	(0.647)	(0.669)
Observations	8229	8229	8229	8229	8229	8229	8229

Notes: Robust standard errors in parentheses.

Table A4

Logistic regression results, willingness to know consumer-related information.

	Costap (1)	Creditfee (2)	Tiresafe (3)	Onlinecom (4)	Onlinepol (5)	Difprice (6
Panel A. Countries						
USA AS REFERENCE						
BELGIUM	0.2056	0.0574	-0.4200	0.1089	-0.0169	0.2046
	(0.039)	(0.023)	(0.036)	(0.051)	(0.044)	(0.027)
CANADA	0.3511	0.1219	0.3410	0.4908	0.1988	0.1602
	(0.026)	(0.030)	(0.040)	(0.044)	(0.033)	(0.025)
DENMARK	0.7979	0.5424	0.4805	1.1267	0.9937	0.6798
	(0.031)	(0.036)	(0.034)	(0.040)	(0.032)	(0.028)
FRANCE	0.2014	0.0600	-0.2527	0.0679	-0.1609	0.0973
	(0.046)	(0.029)	(0.043)	(0.063)	(0.058)	(0.038)
GERMANY	0.5034	-0.7069	-0.4660	0.3248	0.2051	0.0800
	(0.035)	(0.034)	(0.035)	(0.045)	(0.039)	(0.031)
ITALY	0.2893	0.0992	0.7163	0.6122	0.6236	0.3120
	(0.049)	(0.047)	(0.048)	(0.066)	(0.070)	(0.039)
JAPAN	0.8218	0.0435	-0.2177	0.5754	-0.0849	-0.7519
	(0.049)	(0.066)	(0.067)	(0.087)	(0.069)	(0.049)
NETHERLANDS	0.1935	-0.6539	-0.5448	0.0909	-0.1858	-0.1141
	(0.030)	(0.042)	(0.030)	(0.047)	(0.045)	(0.037)
SWEDEN	0.1020	0.2427	0.1083	1.2334	0.8866	0.4185
	(0.041)	(0.033)	(0.042)	(0.050)	(0.043)	(0.038)
UK	0.2453	0.0373	-0.2414	0.3368	0.1746	0.0395
	(0.025)	(0.042)	(0.031)	(0.038)	(0.034)	(0.037)
Panel B. Sociodemographics/socioeconomics						
GENDER	0.1500	0.1386	0.0879	-0.0564	0.0770	0.1955
	(0.047)	(0.068)	(0.088)	(0.075)	(0.047)	(0.042)
AGE	-0.0094	-0.0163	-0.0052	0.0015	0.0002	-0.0192
	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)
EDUC	0.0204	0.0135	0.0164	0.0178	0.0136	0.0201
	(0.006)	(0.005)	(0.005)	(0.006)	(0.007)	(0.007)
CITY SIZE	-0.0063	0.0024	-0.0464	0.0227	0.0443	0.0208
-	(0.015)	(0.021)	(0.020)	(0.019)	(0.014)	(0.020)
BEING SINGLE AS REFERENCE					. ,	
DIVORCED	0.1251	0.0843	0.0900	0.0820	0.0674	0.0258
DITORCED	(0.048)	(0.119)	(0.130)	(0.141)	(0.105)	(0.113)
LONG TERM RELATIONSHIP	-0.0051	-0.0254	0.0908	-0.1022	-0.0772	-0.0960
	(0.075)	(0.106)	(0.099)	(0.085)	(0.129)	(0.077)
MARRIED/CIVIL RELATIONSHIP	0.0926	-0.0659	0.1643	-0.0269	-0.0393	-0.0685
	(0.058)	(0.102)	(0.064)	(0.079)	(0.088)	(0.076)
OTHER	-0.2659	-0.0875	-0.1588	-0.1139	-0.4215	-0.0280
OTHER	(0.076)	(0.221)	(0.273)	(0.254)	(0.201)	(0.227)
WIDOWED	0.3134	0.2047	0.0516	0.2981	0.0541	-0.0616
(IDONED	(0.114)	(0.129)	(0.156)	(0.168)	(0.182)	(0.127)
CHILDREN	0.0231	0.0488	0.0451	-0.0395	-0.0247	0.0026
Shibbiten	(0.019)	(0.019)	(0.023)	(0.031)	(0.030)	(0.021)
LOGINC	0.0476	0.0180	0.0670	0.0354	0.0137	0.0426
LOGING	(0.015)	(0.010)	(0.014)	(0.020)	(0.019)	(0.0420
NATIVE	0.0681	-0.2216	-0.1490	0.0077	0.0374	-0.2300
141711A	(0.068)	(0.048)	(0.093)	(0.097)	(0.099)	(0.076)
Panel C. Health	(0.000)	(0.040)	(0.053)	(0.057)	(0.055)	(0.070)
HEIGHT	-0.0026	-0.0021	0.0045	0.0019	0.0013	-0.0040
IIEIGIII	-0.0020	-0.0021	0.0045	0.0019	0.0013	-0.0040

Table A4 (continued)

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	Costap (1)	Creditfee (2)	Tiresafe (3)	Onlinecom (4)	Onlinepol (5)	Difprice (6
	(0.002)	(0.003)	(0.003)	(0.004)	(0.004)	(0.002)
WEIGHT	0.0008	0.0019	0.0018	0.0002	0.0017	-0.0001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
SMOKE	-0.0326	-0.0424	-0.1354	0.0428	-0.0937	-0.0800
	(0.072)	(0.077)	(0.051)	(0.059)	(0.052)	(0.077)
ALCOHOL	0.0073	0.0468	0.0306	0.0548	0.0318	0.0211
	(0.029)	(0.026)	(0.024)	(0.024)	(0.026)	(0.023)
MEAT_INTAKE	0.0584	0.0498	0.0594	0.0359	0.0321	0.0873
	(0.031)	(0.025)	(0.022)	(0.032)	(0.031)	(0.028)
HEALTH	0.0421	0.0379	0.0500	0.0771	0.0862	0.0479
	(0.023)	(0.016)	(0.013)	(0.022)	(0.017)	(0.026)
SWB	0.0167	0.0268	0.0522	0.0193	0.0148	0.0257
	(0.026)	(0.034)	(0.014)	(0.029)	(0.021)	(0.020)
inel D. Psychographics						
DID NOT DELETE ACCOUNT AS REFERENCE						
DELETE SOCIAL MEDIA ACCOUNT	0.1864	0.2485	0.1926	0.1430	0.2699	0.1746
	(0.050)	(0.078)	(0.074)	(0.083)	(0.064)	(0.060)
NEVER HAD ACCOUNT	-0.1966	-0.0600	-0.0601	-0.3420	-0.3179	-0.2303
	(0.051)	(0.053)	(0.065)	(0.097)	(0.099)	(0.062)
ENVIRONMENT	0.1449	0.0973	0.1357	0.1693	0.1634	0.1159
	(0.015)	(0.023)	(0.019)	(0.017)	(0.011)	(0.019)
PERS_HEALTH	0.0861	0.0969	0.0941	0.1304	0.0984	0.1031
	(0.021)	(0.014)	(0.015)	(0.020)	(0.019)	(0.016)
FAM_HEALTH	0.0722	0.0551	0.0961	0.0845	0.0758	0.0889
	(0.016)	(0.013)	(0.019)	(0.024)	(0.022)	(0.017)
WTR	-0.0337	0.0384	-0.0150	-0.0200	0.0013	0.0153
	(0.013)	(0.009)	(0.020)	(0.026)	(0.019)	(0.016)
FOC	0.0044	-0.0335	-0.0412	-0.0219	-0.0403	-0.0623
	(0.016)	(0.020)	(0.013)	(0.022)	(0.025)	(0.021)
TRUST_INSTA	-0.0041	0.0237	0.0568	-0.0416	-0.0101	0.0388
	(0.024)	(0.016)	(0.028)	(0.026)	(0.016)	(0.023)
TRUST TWITTER	0.1026	0.0742	0.0753	0.1148	0.0957	0.0674
-	(0.022)	(0.022)	(0.021)	(0.020)	(0.013)	(0.027)
TRUST_FB	-0.0542	-0.0152	-0.0755	-0.1470	-0.1351	-0.0533
-	(0.024)	(0.029)	(0.020)	(0.019)	(0.019)	(0.018)
Constant	-2.0438	-1.5383	-3.4243	-2.5606	-2.3207	-0.9639
	(0.545)	(0.630)	(0.660)	(0.819)	(0.715)	(0.319)
Observations	8229	8229	8229	8229	8229	8229

Notes: Robust standard errors in parentheses.

Table A5

OLS regression results, willingness to pay for health-related information.

	Alz (1)	Cancer_cur (2)	Cancer_let (3)	Family_dis (4)	Death (5)	Calories (6)	Food (7)
Panel A. Countries							
USA AS REFERENCE							
BELGIUM	2.3519	3.3946	3.7442	2.9651	-2.6775	-0.2258	-4.7474
	(0.998)	(0.736)	(0.587)	(1.230)	(0.981)	(0.413)	(0.317)
CANADA	-0.8134	2.7036	1.0407	0.4088	1.0975	0.3894	-3.0123
	(0.595)	(0.703)	(0.706)	(0.841)	(0.929)	(0.285)	(0.174)
DENMARK	-4.4560	-2.3467	-3.5350	-8.0549	-7.5055	-0.9040	-4.7845
	(0.915)	(0.799)	(0.828)	(1.038)	(0.826)	(0.255)	(0.233)
FRANCE	2.2478	-1.0236	-2.3951	-1.5836	-5.3636	0.0294	-3.7967
	(1.136)	(0.875)	(0.638)	(1.356)	(0.971)	(0.496)	(0.427)
GERMANY	6.5242	8.7734	11.1047	11.1318	0.6487	-1.0815	-3.6047
	(0.907)	(0.914)	(0.941)	(1.226)	(1.091)	(0.226)	(0.271)
ITALY	4.7863	9.6114	10.6695	8.2393	-1.3324	0.5013	-3.5880
	(1.221)	(0.987)	(0.947)	(1.358)	(1.349)	(0.488)	(0.506)
JAPAN	13.4977	12.2581	14.1605	10.2775	11.6660	-2.5408	-5.3301
	(1.477)	(1.094)	(0.675)	(1.748)	(1.875)	(0.703)	(0.720)
NETHERLANDS	4.9932	10.1906	8.5125	4.0993	0.0686	-1.3989	-4.4919
	(1.191)	(0.921)	(1.089)	(1.313)	(1.036)	(0.326)	(0.297)
SWEDEN	6.9068	10.3708	9.0853	6.2100	5.8063	1.0706	-3.6626
	(0.920)	(0.901)	(0.965)	(1.115)	(1.191)	(0.315)	(0.382)
UK	-3.2336	0.0922	2.0459	-0.0545	-0.8507	-0.2189	-3.8718
	(0.982)	(0.799)	(0.618)	(0.990)	(0.872)	(0.428)	(0.211)
Panel B. Sociodemographics/socioeconomics							
GENDER	-4.3677	-5.0008	-5.6461	-5.8132	-5.0559	1.5496	1.7289
	(1.275)	(1.831)	(1.907)	(2.532)	(2.136)	(0.888)	(0.847)
AGE	-0.3697	-0.3877	-0.3418	-0.3908	-0.2832	-0.1435	-0.1448
	(0.052)	(0.061)	(0.068)	(0.080)	(0.080)	(0.016)	(0.016)

	Alz (1)	Cancer_cur (2)	Cancer_let (3)	Family_dis (4)	Death (5)	Calories (6)	Food (7
EDUC	0.2882	0.3094	0.1952	0.0812	0.0879	-0.1351	-0.103
	(0.190)	(0.206)	(0.158)	(0.180)	(0.261)	(0.062)	(0.066)
CITY_SIZE	0.9918	1.0480	1.1788	1.0426	0.5139	0.0398	-0.0698
	(0.325)	(0.425)	(0.455)	(0.618)	(0.495)	(0.165)	(0.148)
BEING SINGLE AS REFERENCE							
DIVORCED	-1.5565	0.4980	-1.3588	2.2675	-1.2770	0.3626	-0.2149
	(1.301)	(1.801)	(1.744)	(2.994)	(3.453)	(1.005)	(0.810)
LONG TERM RELATIONSHIP	-0.2785	3.2414	3.4768	4.9998	-0.9056	-0.3555	0.1362
	(1.799)	(2.081)	(2.424)	(2.296)	(3.409)	(0.745)	(0.607)
MARRIED/CIVIL RELATIONSHIP	4.2988	6.1916	4.9508	6.2197	-0.3277	0.3067	0.4636
	(1.525)	(1.431)	(1.525)	(2.003)	(2.999)	(0.582)	(0.608)
OTHER	-11.2047	-4.3401	-1.9629	-6.2739	-1.3018	-1.3549	-1.805
	(3.202)	(5.115)	(4.087)	(5.224)	(9.551)	(1.226)	(0.966)
WIDOWED	0.1021	0.8664	3.6450	4.1464	-9.6618	1.7401	0.2118
	(2.872)	(3.537)	(6.809)	(5.715)	(4.692)	(1.551)	(1.240)
CHILDREN	0.0886	-0.1774	-0.2771	0.1830	0.4103	0.6366	0.3592
	(0.345)	(0.519)	(0.485)	(0.573)	(0.729)	(0.198)	(0.175)
LOGINC	1.8925	1.9641	1.9100	2.2973	1.7697	-0.0671	0.0095
	(0.433)	(0.414)	(0.285)	(0.345)	(0.448)	(0.122)	(0.116)
NATIVE	2.4314	3.4500	3.2200	3.8195	6.1685	-0.9037	-0.641
	(1.029)	(1.211)	(1.676)	(1.325)	(2.897)	(0.846)	(1.036)
Panel C. Health	× /	. ,				× ,	
HEIGHT	0.1893	0.1954	0.2224	0.3207	0.1225	-0.0290	-0.062
	(0.062)	(0.064)	(0.068)	(0.064)	(0.091)	(0.052)	(0.042)
WEIGHT	-0.0246	-0.0246	-0.0223	-0.0203	0.0205	0.0044	0.0239
	(0.039)	(0.033)	(0.022)	(0.059)	(0.041)	(0.021)	(0.019
SMOKE	-1.0342	-1.8305	-1.8935	-1.7059	2.1868	1.0429	0.7467
SMORE	(0.936)	(0.956)	(1.053)	(1.188)	(1.710)	(0.630)	(0.485
ALCOHOL	0.8984	0.3865	0.7023	0.7971	2.0566	0.6419	0.4404
ALCOHOL	(0.473)	(0.433)	(0.575)	(0.468)	(0.785)	(0.261)	(0.206)
MEAT_INTAKE	-0.2486	-0.8786	-0.6825	-0.8010	-0.7925	-0.2994	-0.279
MEAT_INTAKE	(0.625)	(0.601)	(0.814)	(0.600)	(0.948)	(0.179)	(0.178)
HEALTH	0.4473	1.2833	0.7160	0.5818	2.0837	0.4182	0.2441
HEALIH	(0.443)	(0.433)	(0.244)	(0.344)	(0.707)	(0.144)	(0.131)
SWB	0.2428	0.0766	0.4491	-0.5609	-1.1476	0.1559	0.3224
5WB	(0.399)	(0.470)	(0.527)	(0.615)	(0.697)	(0.139)	(0.165)
Panel D. Psychographics	(0.399)	(0.470)	(0.327)	(0.013)	(0.097)	(0.139)	(0.105
DID NOT DELETE ACCOUNT AS REFERENCE	,						
DELETE SOCIAL MEDIA ACCOUNT	0.8093	-2.2613	-1.2091	0.1910	1.7176	4.0324	3.8664
DELETE SOCIAL MEDIA ACCOUNT		(1.770)	(1.837)	(1.750)		(0.845)	(0.693)
NEVER HAD ACCOUNT	(1.551)	-4.0457			(2.165)	2.2942	2.0764
NEVER HAD ACCOUNT	-3.6168		-4.3733	-2.6276	0.3166		
ENUMPONMENT	(1.308)	(1.940)	(1.952)	(3.100)	(2.625)	(0.803)	(0.725
ENVIRONMENT	-0.1368	0.1129	0.1152	0.7510	-1.2262	-0.1850	-0.034
	(0.509)	(0.511)	(0.388)	(0.441)	(0.709)	(0.178)	(0.141
PERS_HEALTH	0.8595	1.5330	0.9910	-0.4137	0.8877	0.0472	0.1527
PANA HEALTH	(0.524)	(0.555)	(0.503)	(0.585)	(0.754)	(0.262)	(0.193)
FAM_HEALTH	0.4027	0.8508	1.1741	2.0381	2.0318	0.2700	0.1676
	(0.323)	(0.365)	(0.363)	(0.299)	(0.608)	(0.106)	(0.135
WTR	0.3319	0.3546	0.3071	0.0216	-0.0933	0.3473	0.1952
	(0.491)	(0.288)	(0.267)	(0.147)	(0.476)	(0.146)	(0.087
FOC	0.2954	-0.1898	0.0401	-0.0196	0.5151	-0.0048	-0.05
	(0.338)	(0.438)	(0.519)	(0.569)	(0.391)	(0.235)	(0.127
TRUST_INSTA	0.3444	0.6536	1.0273	0.8752	0.9246	0.4477	0.6402
	(0.360)	(0.431)	(0.547)	(0.891)	(0.947)	(0.231)	(0.271
TRUST_TWITTER	1.0390	1.3399	0.9523	1.0894	0.9243	0.5370	0.3500
	(0.480)	(0.477)	(0.538)	(0.614)	(0.521)	(0.213)	(0.209
TRUST_FB	-0.4864	-0.8997	-0.6220	-0.9640	0.4861	0.6046	0.5645
	(0.439)	(0.512)	(0.569)	(0.499)	(0.772)	(0.249)	(0.216
Constant	-22.8157	-24.6702	-29.7918	-39.8310	-17.4737	6.7711	14.213
	(10.879)	(14.275)	(13.428)	(13.206)	(16.548)	(9.886)	(8.074
Observations	4549	5451	4240	3559	2048	3373	4497

Notes: Robust standard errors in parentheses.

L.A. Reisch et al. Table A5 (continued)

Table A6

OLS regression results, willingness to pay for sustainable-development-related information.

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (
anel A. Countries							
USA AS REFERENCE							
BELGIUM	-0.8826	-4.9820	-2.9252	-3.5382	-2.2344	-2.5162	-3.0828
	(0.381)	(0.162)	(0.512)	(0.367)	(0.492)	(0.470)	(0.394)
CANADA	-1.3431	-1.3688	-2.7922	-1.4614	-2.5474	-0.8931	-2.9665
	(0.451)	(0.341)	(0.426)	(0.232)	(0.330)	(0.321)	(0.273)
DENMARK	-3.7681	-5.1563	-5.2452	-5.5505	-5.2587	-3.6331	-4.5975
	(0.416)	(0.419)	(0.390)	(0.301)	(0.474)	(0.457)	(0.472)
FRANCE	-2.3024	-4.0955	-7.4100	-3.8705	-3.7677	-3.5964	-4.7999
	(0.419)	(0.257)	(0.552)	(0.365)	(0.565)	(0.442)	(0.334)
GERMANY	-1.3870	-3.4012	-3.0083	-3.8884	-4.7157	-2.1890	-3.8325
	(0.632)	(0.391)	(0.744)	(0.405)	(0.491)	(0.358)	(0.303)
ITALY	-0.4378	-4.5832	-5.8948	-3.1982	-2.8101	-1.0050	-3.5588
	(0.782)	(0.606)	(0.666)	(0.562)	(0.551)	(0.391)	(0.291)
JAPAN	-4.1432	-6.5149	-5.6587	-6.5739	-5.3414	-4.4783	-5.7447
	(0.894)	(0.774)	(1.022)	(0.672)	(0.793)	(0.891)	(0.848)
NETHERLANDS	-0.8676	-3.3484	-3.7126	-2.3571	-3.4441	-2.9822	-4.4709
	(0.474)	(0.433)	(0.512)	(0.353)	(0.588)	(0.448)	(0.310)
SWEDEN	-1.0112	-2.2096	-3.6662	-3.1649	-2.3297	-0.8180	-2.8560
	(0.627)	(0.614)	(0.732)	(0.446)	(0.596)	(0.379)	(0.335)
UK	-3.3262	-2.6576	-3.7466	-2.3205	-3.3950	-3.3089	-3.6161
	(0.420)	(0.337)	(0.652)	(0.302)	(0.498)	(0.411)	(0.415)
unel B. Sociodemographics/socioeconomics	(0.120)	(0.007)	(0.002)	(0.002)	(0.190)	(0.711)	(0.710)
GENDER	0.5006	1 7415	0 3111	1.7066	1.7355	1.1939	1.5007
GENDER		1.7415	0.3111				
ACE	(1.451)	(1.502)	(1.542)	(0.644)	(1.292)	(0.957)	(0.866)
AGE	-0.1608	-0.1664	-0.2607	-0.1226	-0.1597	-0.1323	-0.1376
	(0.026)	(0.021)	(0.044)	(0.012)	(0.027)	(0.025)	(0.016)
EDUC	-0.0947	-0.0926	-0.2191	-0.1466	-0.2433	-0.1334	-0.1083
	(0.118)	(0.084)	(0.121)	(0.105)	(0.128)	(0.066)	(0.057)
CITY_SIZE	-0.1330	-0.0913	0.1403	0.1528	-0.0329	-0.0658	-0.0980
	(0.154)	(0.210)	(0.227)	(0.150)	(0.226)	(0.210)	(0.183)
BEING SINGLE AS REFERENCE							
DIVORCED	-0.6457	-0.1538	1.0023	0.1446	-0.9027	0.0214	-0.2615
	(1.160)	(0.803)	(1.521)	(0.699)	(1.026)	(0.743)	(0.686)
LONG TERM RELATIONSHIP	0.8140	-0.1169	-0.7642	0.3144	-0.5095	-0.1274	-0.1607
	(1.489)	(1.117)	(1.311)	(0.757)	(1.466)	(1.053)	(1.162)
MARRIED/CIVIL RELATIONSHIP	0.1266	0.5368	1.0200	1.0005	-0.2624	0.3493	0.2064
	(0.988)	(0.681)		(0.770)	(0.872)	(0.785)	(0.609)
OTHER	-1.0624	-1.6738	(1.618) 0.8794	1.1483	-2.2480	-3.6886	-1.2107
OTHER							
NUD ON ED	(2.959)	(2.656)	(3.438)	(3.345)	(2.162)	(1.472)	(2.161)
WIDOWED	-1.3880	-1.2342	-0.6672	0.1645	3.2248	2.4855	1.5089
	(2.730)	(1.568)	(2.359)	(1.105)	(2.046)	(1.654)	(1.391)
CHILDREN	0.0389	0.1535	0.2306	0.3450	0.0582	0.2034	0.0506
	(0.411)	(0.210)	(0.343)	(0.107)	(0.299)	(0.175)	(0.145)
LOGINC	0.5837	0.0568	0.1483	-0.1670	0.2149	-0.1550	-0.0188
	(0.204)	(0.071)	(0.287)	(0.156)	(0.189)	(0.106)	(0.090)
NATIVE	1.2171	0.7492	-0.0343	-0.4150	-1.5508	-0.2029	0.2430
	(0.888)	(0.792)	(1.073)	(0.718)	(1.030)	(0.568)	(0.808)
mel C. Health		. ,					
HEIGHT	-0.0455	-0.0869	0.0089	-0.0304	-0.0258	-0.0246	-0.0743
	(0.077)	(0.067)	(0.064)	(0.033)	(0.063)	(0.036)	(0.039)
WEIGHT	0.0339	0.0256	0.0730	0.0082	0.0125	0.0199	0.0313
	(0.027)	(0.0250	(0.033)	(0.017)	(0.031)	(0.027)	(0.025)
SMOKE	0.8326	1.2874	0.3999		1.1417	1.3437	0.8000
SMOKE				2.1710			
	(1.109)	(1.000)	(0.990)	(0.616)	(0.822)	(0.619)	(0.639)
ALCOHOL	0.3016	0.1260	0.1645	0.2974	0.2674	0.3341	0.3511
	(0.176)	(0.338)	(0.389)	(0.216)	(0.212)	(0.186)	(0.139)
MEAT_INTAKE	-0.2128	-0.8449	-1.1172	-0.4434	-0.8362	-0.7012	-0.5930
	(0.462)	(0.380)	(0.631)	(0.293)	(0.227)	(0.215)	(0.273)
HEALTH	0.2681	0.2503	0.3531	0.3586	0.0124	0.5088	0.0398
	(0.338)	(0.230)	(0.376)	(0.181)	(0.358)	(0.257)	(0.238)
	0.1137	0.6459	0.2912	0.0944	0.2719	0.0854	0.4003
SWB		(0.403)	(0.312)	(0.264)	(0.466)	(0.313)	(0.273)
SWB	(0.226)		. ,	× · · ·	/	、 <i>/</i>	、 <u> </u>
	(0.226)						
anel D. Psychographics	(0.226)						
anel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE		3 61 21	4 2883	3 471 8	4 1501	4 7050	4 1124
unel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE	3.8669	3.6121	4.2883	3.4718	4.1501	4.7959	4.1134
mel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE DELETE SOCIAL MEDIA ACCOUNT	3.8669 (1.232)	(0.782)	(1.306)	(0.648)	(0.554)	(0.767)	(0.725)
anel D. Psychographics	3.8669 (1.232) 0.7284	(0.782) 1.4859	(1.306) 3.1774	(0.648) 1.6105	(0.554) 2.1021	(0.767) 1.7138	(0.725) 2.0166
anel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE DELETE SOCIAL MEDIA ACCOUNT NEVER HAD ACCOUNT	3.8669 (1.232) 0.7284 (1.192)	(0.782) 1.4859 (0.823)	(1.306) 3.1774 (1.079)	(0.648) 1.6105 (0.343)	(0.554) 2.1021 (0.421)	(0.767) 1.7138 (0.834)	(0.725) 2.0166 (0.526)
anel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE DELETE SOCIAL MEDIA ACCOUNT NEVER HAD ACCOUNT	3.8669 (1.232) 0.7284 (1.192) 0.2149	(0.782) 1.4859 (0.823) -0.1697	(1.306) 3.1774 (1.079) 0.2565	(0.648) 1.6105 (0.343) 0.1099	(0.554) 2.1021 (0.421) 0.3541	(0.767) 1.7138 (0.834) 0.1402	(0.725) 2.0166 (0.526) 0.0902
anel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE DELETE SOCIAL MEDIA ACCOUNT NEVER HAD ACCOUNT	3.8669 (1.232) 0.7284 (1.192)	(0.782) 1.4859 (0.823)	(1.306) 3.1774 (1.079)	(0.648) 1.6105 (0.343)	(0.554) 2.1021 (0.421)	(0.767) 1.7138 (0.834)	(0.725) 2.0166 (0.526)
anel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE DELETE SOCIAL MEDIA ACCOUNT	3.8669 (1.232) 0.7284 (1.192) 0.2149	(0.782) 1.4859 (0.823) -0.1697	(1.306) 3.1774 (1.079) 0.2565	(0.648) 1.6105 (0.343) 0.1099	(0.554) 2.1021 (0.421) 0.3541	(0.767) 1.7138 (0.834) 0.1402	(0.725) 2.0166 (0.526) 0.0902
anel D. Psychographics DID NOT DELETE ACCOUNT AS REFERENCE DELETE SOCIAL MEDIA ACCOUNT NEVER HAD ACCOUNT ENVIRONMENT	3.8669 (1.232) 0.7284 (1.192) 0.2149 (0.274)	(0.782) 1.4859 (0.823) -0.1697 (0.363)	(1.306) 3.1774 (1.079) 0.2565 (0.302)	(0.648) 1.6105 (0.343) 0.1099 (0.184)	(0.554) 2.1021 (0.421) 0.3541 (0.194)	(0.767) 1.7138 (0.834) 0.1402 (0.170)	(0.725) 2.0166 (0.526) 0.0902 (0.208)

Table A6 (continued)

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (7)
	(0.271)	(0.182)	(0.223)	(0.151)	(0.228)	(0.169)	(0.175)
WTR	1.0439	0.8674	0.9334	0.3745	0.4377	0.3002	0.3348
	(0.172)	(0.214)	(0.175)	(0.104)	(0.290)	(0.147)	(0.099)
FOC	0.0370	-0.1633	-0.0876	-0.3351	-0.1097	-0.1008	-0.1676
	(0.229)	(0.238)	(0.329)	(0.170)	(0.283)	(0.199)	(0.278)
TRUST_INSTA	0.4094	0.3158	-0.2165	0.8375	0.7555	0.3618	0.6351
	(0.196)	(0.257)	(0.265)	(0.360)	(0.389)	(0.301)	(0.336)
TRUST_TWITTER	1.1207	0.9584	0.5308	0.1535	0.7656	0.6599	0.4398
	(0.269)	(0.295)	(0.410)	(0.262)	(0.249)	(0.301)	(0.228)
TRUST_FB	0.2715	0.4744	1.2312	0.3672	0.2746	0.2262	0.2378
	(0.213)	(0.344)	(0.349)	(0.222)	(0.350)	(0.322)	(0.381)
Constant	6.9495	17.4187	6.0523	11.3892	12.4289	6.6393	16.9308
	(12.822)	(12.256)	(15.263)	(7.171)	(11.866)	(8.492)	(8.976)
Observations	3301	2837	2546	4378	3533	3926	3882

Notes: Robust standard errors in parentheses.

Table A7

OLS regression results, willingness to pay for consumer-related information.

	Costap (1)	Creditfee (2)	Tiresafe (3)	Onlinecom (4)	Onlinepol (5)	Difprice (6)
Panel A. Countries						
USA AS REFERENCE						
BELGIUM	-1.0596	-2.8657	-1.2971	-4.7394	-3.3649	-2.7690
	(0.226)	(0.191)	(0.270)	(0.273)	(0.164)	(0.266)
CANADA	-1.1579	-1.7406	-1.6253	-2.6797	-1.3176	-1.5987
	(0.175)	(0.238)	(0.232)	(0.088)	(0.155)	(0.125)
DENMARK	-2.9485	-3.0648	-2.4889	-4.9170	-3.7747	-3.6715
	(0.339)	(0.348)	(0.273)	(0.230)	(0.175)	(0.200)
FRANCE	-1.9673	-2.0291	-2.1275	-5.4857	-4.4836	-2.5923
	(0.277)	(0.261)	(0.340)	(0.326)	(0.279)	(0.311)
GERMANY	-0.4698	-2.1850	-1.7335	-3.1703	-0.9739	-1.7540
	(0.267)	(0.216)	(0.253)	(0.210)	(0.209)	(0.201)
ITALY	-0.5939	-1.5830	0.1943	-4.0853	-2.4641	-2.8202
	(0.326)	(0.353)	(0.292)	(0.396)	(0.389)	(0.436)
JAPAN	-4.0087	-3.0094	-2.1785	-3.3331	-2.3736	-3.5130
	(0.709)	(0.772)	(0.608)	(0.517)	(0.619)	(0.673)
NETHERLANDS	-1.8477	-2.3392	-1.8670	-3.7787	-3.2518	-1.5738
	(0.201)	(0.199)	(0.228)	(0.180)	(0.153)	(0.151)
SWEDEN	-0.7839	-1.1587	-0.8037	-1.8059	-0.5276	-1.2284
	(0.332)	(0.285)	(0.304)	(0.118)	(0.163)	(0.239)
UK	-1.6941	-1.8394	-0.3610	-3.4241	-2.9211	-2.3345
	(0.296)	(0.190)	(0.274)	(0.141)	(0.218)	(0.177)
anel B. Sociodemographics/socioeconomics	()	()	(()	()	()
GENDER	1.1694	1.8993	1.5186	1.2059	1.6122	1.4561
GENDER	(0.727)	(0.740)	(0.696)	(0.534)	(0.581)	(0.871)
AGE	-0.1574	-0.1268	-0.1544	-0.1856	-0.1927	-0.1223
nge -	(0.014)	(0.011)	(0.014)	(0.013)	(0.017)	(0.012)
EDUC	-0.0524	-0.1207	-0.1065	-0.0079	-0.0790	-0.0718
EDOC	(0.069)	(0.061)	(0.052)	(0.072)	(0.076)	(0.055)
CITY SIZE	-0.1321	-0.0657	0.0805	0.0332	-0.0581	0.0013
CITT_SIZE	(0.132)	(0.129)	(0.111)	(0.110)		(0.113)
BEING SINGLE AS REFERENCE	(0.132)	(0.129)	(0.111)	(0.110)	(0.141)	(0.113)
	0.0051	0.0700	0.7000	0.1004	0.0(10	0 (707
DIVORCED	-0.3051	0.3780	0.7399	-0.1884	0.3613	0.6787
	(0.547)	(0.586)	(0.965)	(0.562)	(0.777)	(0.424)
LONG TERM RELATIONSHIP	-1.6046	-0.6187	-1.0813	-0.0773	-0.6532	0.1345
	(1.058)	(0.655)	(0.512)	(0.775)	(0.891)	(0.949)
MARRIED/CIVIL RELATIONSHIP	0.2022	0.0398	0.1386	0.6643	0.0969	1.0169
	(0.779)	(0.754)	(0.724)	(0.791)	(0.720)	(0.470)
OTHER	0.9351	1.4945	-0.9664	-0.0422	0.1680	-2.9958
	(2.115)	(1.758)	(1.622)	(1.935)	(2.736)	(0.834)
WIDOWED	1.3486	1.1170	1.2381	1.5683	1.4364	1.9828
	(1.067)	(0.810)	(0.871)	(1.440)	(1.315)	(1.491)
CHILDREN	-0.1036	0.4023	0.1350	0.0557	0.0437	0.1774
	(0.167)	(0.226)	(0.247)	(0.118)	(0.132)	(0.167)
LOGINC	0.2310	0.0708	-0.0114	0.1136	0.1386	-0.0437
	(0.100)	(0.075)	(0.109)	(0.104)	(0.112)	(0.135)
NATIVE	-0.8796	-0.3816	0.1049	-0.2925	-1.0433	-0.1012
	(1.004)	(0.808)	(0.808)	(0.773)	(0.650)	(0.833)
Panel C. Health						
HEIGHT	-0.0254	-0.0282	-0.0726	-0.0615	-0.0596	-0.0298
	(0.037)	(0.042)	(0.046)	(0.043)	(0.042)	(0.039)
	0.0296	0.0080	0.0209	0.0371	0.0289	0.0139

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Table A7 (continued)

	Costap (1)	Creditfee (2)	Tiresafe (3)	Onlinecom (4)	Onlinepol (5)	Difprice (
	(0.016)	(0.017)	(0.019)	(0.017)	(0.021)	(0.017)
SMOKE	0.3974	0.8832	1.3419	0.4118	0.3742	1.0348
	(0.511)	(0.557)	(0.599)	(0.471)	(0.668)	(0.670)
ALCOHOL	0.5957	0.4727	0.2558	0.3985	0.3340	0.2457
	(0.184)	(0.208)	(0.183)	(0.230)	(0.120)	(0.136)
MEAT_INTAKE	-0.2788	-0.5845	-0.6738	-0.6847	-0.5299	-0.5374
	(0.188)	(0.187)	(0.136)	(0.255)	(0.272)	(0.208)
HEALTH	0.3366	0.4612	0.3306	0.4990	0.4156	0.1842
	(0.174)	(0.161)	(0.155)	(0.205)	(0.233)	(0.128)
SWB	0.2834	0.1645	0.5925	0.0136	0.2665	0.1639
	(0.254)	(0.210)	(0.132)	(0.267)	(0.264)	(0.157)
anel D. Psychographics						
DID NOT DELETE ACCOUNT AS REFERENCE						
DELETE SOCIAL MEDIA ACCOUNT	3.7127	3.7477	2.9234	2.6496	3.2952	3.9548
	(0.676)	(0,774)	(0.466)	(0.617)	(0.936)	(0.707)
NEVER HAD ACCOUNT	1.7947	1.6486	1.2738	1.2101	1.3847	1.4009
	(0.404)	(0.345)	(0.419)	(0.745)	(0.642)	(0.554)
ENVIRONMENT	0.0148	-0.0690	-0.1406	0.0651	0.0487	-0.1181
	(0.196)	(0.189)	(0.135)	(0.156)	(0.107)	(0.145)
PERS HEALTH	0.0490	-0.0803	0.0058	-0.1612	0.0993	0.1054
-	(0.214)	(0.246)	(0.188)	(0.174)	(0.126)	(0.211)
FAM HEALTH	0.2648	0.0563	0.3436	0.4001	0.2993	0.1930
	(0.127)	(0.145)	(0.182)	(0.080)	(0.194)	(0.179)
WTR	0.3690	0.3814	0.2933	0.2362	0.3192	0,4146
	(0.073)	(0.102)	(0.108)	(0.164)	(0.159)	(0.086)
FOC	-0.0816	-0.1003	-0.0608	-0.1408	-0.2884	-0.0203
	(0.204)	(0.213)	(0.131)	(0.239)	(0.191)	(0.218)
TRUST INSTA	0.4198	0.4710	0.2866	0.5319	0.6112	0.6386
	(0.236)	(0.183)	(0.227)	(0.298)	(0.229)	(0.132)
TRUST_TWITTER	0.3269	0.2667	0.4141	0.1981	0.3869	0.1499
	(0.294)	(0.188)	(0.176)	(0.152)	(0.172)	(0.171)
TRUST FB	0.5801	0.6663	0.3771	0.2426	0.0212	0.5291
	(0.289)	(0.219)	(0.211)	(0.298)	(0.250)	(0.234)
Constant	5.8647	7.1214	15.0116	18.7542	17.6021	7.6306
Constant	(8.265)	(8.434)	(9.458)	(8.152)	(7.523)	(7.048)
Observations	4418	3274	3948	5483	4995	3910

Notes: Robust standard errors in parentheses.

Table A8

OLS regression results, willingness to pay for not getting health-related information.

	Alz (1)	Cancer_cur (2)	Cancer_let (3)	Family_dis (4)	Death (5)	Calories (6)	Food (7)
Panel A. Countries							
USA AS REFERENCE							
BELGIUM	0.4454	-0.3854	-0.4895	1.1671	-1.5220	-0.0964	0.7923
	(0.449)	(0.589)	(0.351)	(0.310)	(0.502)	(0.105)	(0.153)
CANADA	2.7481	2.3357	2.2349	1.6901	0.6791	0.6559	0.8727
	(0.333)	(0.148)	(0.283)	(0.224)	(0.207)	(0.104)	(0.121)
DENMARK	1.5120	0.0244	1.1042	1.7836	-2.2932	-0.0875	0.2833
	(0.311)	(0.377)	(0.454)	(0.299)	(0.311)	(0.121)	(0.118)
FRANCE	1.4501	-0.0407	0.2720	1.3540	-0.3034	-0.1709	0.1345
	(0.507)	(0.665)	(0.479)	(0.374)	(0.603)	(0.143)	(0.178)
GERMANY	3.9341	1.6515	1.5977	3.1312	4.0478	1.0085	0.8044
	(0.471)	(0.407)	(0.295)	(0.235)	(0.522)	(0.113)	(0.129)
ITALY	3.3964	2.3971	1.3770	1.8576	0.9376	0.7811	1.3900
	(0.606)	(0.857)	(0.543)	(0.384)	(0.591)	(0.235)	(0.270)
JAPAN	5.3918	6.4658	3.6993	5.3430	1.9854	1.3637	0.7780
	(0.497)	(0.333)	(0.685)	(0.429)	(0.640)	(0.209)	(0.176)
NETHERLANDS	0.9246	1.1604	0.2768	1.6137	0.7865	-0.3438	-0.0637
	(0.331)	(0.357)	(0.304)	(0.190)	(0.230)	(0.088)	(0.103)
SWEDEN	4.0968	1.7133	4.9638	4.7535	6.3964	0.8069	0.5033
	(0.420)	(0.314)	(0.296)	(0.251)	(0.375)	(0.113)	(0.103)
UK	0.6713	-0.8599	-0.5916	0.5510	-1.5351	-0.0959	0.3889
	(0.280)	(0.380)	(0.321)	(0.298)	(0.425)	(0.122)	(0.140)
Panel B. Sociodemographics/socioeconomics							
GENDER	0.7639	0.8105	0.2254	0.2952	-0.9751	0.7643	0.4257
	(0.610)	(0.567)	(0.336)	(0.532)	(0.596)	(0.358)	(0.246)
AGE	-0.1075	-0.0623	-0.0916	-0.0871	-0.2624	-0.0408	-0.0340
	(0.025)	(0.016)	(0.021)	(0.023)	(0.039)	(0.010)	(0.010)
EDUC	0.0320	0.0269	0.0970	0.0952	0.0442	-0.0609	-0.0714
	(0.076)	(0.088)	(0.064)	(0.057)	(0.068)	(0.029)	(0.033)
CITY_SIZE	-0.0591	0.0996	-0.2008	-0.1700	0.2265	-0.0410	0.0438

	Alz (1)	Cancer_cur (2)	Cancer_let (3)	Family_dis (4)	Death (5)	Calories (6)	Food (7)
	(0.184)	(0.222)	(0.207)	(0.156)	(0.168)	(0.030)	(0.062)
BEING SINGLE AS REFERENCE							
DIVORCED	-1.2822	-2.0089	-3.0475	-2.5584	-1.6315	-0.1102	-0.3901
	(1.475)	(0.958)	(0.685)	(0.495)	(0.995)	(0.342)	(0.320)
LONG TERM RELATIONSHIP	-1.1931	-1.3054	0.2576	-0.6696	-1.3738	-0.1721	-0.5142
	(1.654)	(0.834)	(1.351)	(0.811)	(1.389)	(0.238)	(0.288)
MARRIED/CIVIL RELATIONSHIP	-0.2523	0.3485	-0.6967	-1.2746	-0.1330	-0.0281	-0.2717
	(0.964)	(1.297)	(0.675)	(0.505)	(1.255)	(0.399)	(0.251)
OTHER	2.3207	3.5399	-0.3380	-1.8686	-1.2446	1.8969	2.5991
	(2.989)	(3.999)	(3.281)	(1.902)	(2.581)	(1.835)	(2.843)
WIDOWED	-0.2470	-1.0187	-0.1839	-1.1366	0.8785	0.1129	-0.0884
	(2.355)	(1.672)	(2.213)	(1.000)	(2.440)	(0.360)	(0.426)
CHILDREN	-0.2410	0.0031	-0.0017	0.2033	-0.1741	-0.0650	0.1089
	(0.143)	(0.146)	(0.148)	(0.181)	(0.168)	(0.064)	(0.082)
LOGINC	0.2995	0.0697	-0.1801	0.0248	0.3953	-0.0142	-0.1442
	(0.244)	(0.306)	(0.243)	(0.201)	(0.266)	(0.089)	(0.126)
NATIVE	1.0290	0.7496	0.6731	0.5632	1.0328	-0.3138	-0.3157
	(0.899)	(0.825)	(0.576)	(0.902)	(0.864)	(0.428)	(0.488)
Panel C. Health							
HEIGHT	-0.1096	-0.0704	-0.0361	-0.0715	-0.0115	-0.0240	-0.0118
	(0.045)	(0.036)	(0.029)	(0.039)	(0.035)	(0.019)	(0.012)
WEIGHT	0.0243	0.0215	0.0240	0.0320	0.0177	0.0111	0.0129
	(0.021)	(0.015)	(0.020)	(0.022)	(0.014)	(0.010)	(0.008)
SMOKE	-0.2973	0.5268	0.0730	-0.1142	-0.0332	-0.0560	-0.4205
SMORE	(0.509)	(0.469)	(0.727)	(0.795)	(0.726)	(0.428)	(0.248)
ALCOHOL	0.2975	0.2544	0.3254	0.0875	0.4380	0.0669	0.0163
ALCOHOL	(0.202)	(0.182)	(0.184)	(0.149)	(0.216)	(0.048)	(0.049)
MEAT_INTAKE	-0.2277	-0.4322	-0.4362	-0.5919	-0.1532	-0.1053	-0.2707
MEAT_INTAKE	(0.245)	(0.193)	(0.184)	(0.138)	(0.168)	(0.098)	(0.129)
HEALTH	0.4039	0.3011	0.3827	0.1694	0.2454	0.0433	-0.0008
HEALIH		(0.272)	(0.206)		(0.304)	(0.074)	(0.093)
SWB	(0.305) 0.3036		0.2921	(0.211) 0.2912		0.1165	0.0779
3WB		0.1287			0.4735		
Densel D. Densels - membios	(0.203)	(0.249)	(0.153)	(0.183)	(0.390)	(0.076)	(0.086)
Panel D. Psychographics							
DID NOT DELETE ACCOUNT AS REFERENCE	1 0000	1 2005	1 0011	0.4079	0.0050	0.0000	0.7566
DELETE SOCIAL MEDIA ACCOUNT	1.0009	1.3885	1.8811	0.4973	2.0353	0.9933	0.7566
	(0.758)	(1.248)	(0.952)	(1.017)	(0.850)	(0.308)	(0.229)
NEVER HAD ACCOUNT	1.0700	0.3493	0.2908	0.2806	0.1257	0.2951	0.3584
	(1.035)	(1.071)	(0.600)	(1.028)	(0.906)	(0.162)	(0.254)
ENVIRONMENT	-0.0545	0.0729	0.2180	0.0069	0.5289	0.0189	-0.0455
	(0.180)	(0.167)	(0.152)	(0.151)	(0.197)	(0.029)	(0.036)
PERS_HEALTH	0.4251	0.0773	0.2016	0.1063	0.1084	-0.0033	-0.0781
	(0.224)	(0.230)	(0.213)	(0.214)	(0.203)	(0.063)	(0.037)
FAM_HEALTH	0.3224	0.1543	0.2831	0.5894	0.6901	0.1711	0.1841
	(0.189)	(0.145)	(0.179)	(0.155)	(0.173)	(0.100)	(0.044)
WTR	0.0336	0.2001	0.0496	0.1558	0.2759	-0.0222	0.0610
	(0.196)	(0.172)	(0.117)	(0.094)	(0.187)	(0.063)	(0.065)
FOC	-0.4619	-0.2331	-0.2869	-0.3526	-0.1318	-0.1406	-0.0520
	(0.238)	(0.154)	(0.150)	(0.190)	(0.165)	(0.086)	(0.049)
TRUST_INSTA	0.6593	0.5060	0.5532	0.6431	0.3071	0.4678	0.4915
	(0.325)	(0.268)	(0.286)	(0.276)	(0.306)	(0.177)	(0.122)
TRUST_TWITTER	-0.2429	-0.0700	0.6129	0.5963	0.7254	0.0206	-0.0330
	(0.372)	(0.351)	(0.518)	(0.237)	(0.434)	(0.164)	(0.129)
TRUST_FB	0.7037	0.2651	-0.1811	-0.3775	-0.1782	-0.0020	-0.0026
	(0.159)	(0.176)	(0.311)	(0.234)	(0.192)	(0.101)	(0.064)
Constant	14.1731	8.9958	5.0053	9.8008	3.8213	4.9481	3.9494
	(5.826)	(6.895)	(4.923)	(7.898)	(6.501)	(3.580)	(1.972)
Observations	3680	2771	3962	4640	6143	4821	3685

Notes: Robust standard errors in parentheses.

Table A9

OLS regression results, willingness to pay for not getting sustainable-development-related information.

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (7)
Panel A. Countries							
USA AS REFERENCE							
BELGIUM	-0.5642	-0.1678	-0.9227	-0.3283	-0.5361	-0.6128	-0.8856
	(0.071)	(0.101)	(0.083)	(0.104)	(0.096)	(0.188)	(0.106)
CANADA	0.4213	0.0807	0.1682	-0.0913	0.3614	-0.3030	0.6120
	(0.073)	(0.090)	(0.137)	(0.117)	(0.118)	(0.142)	(0.122)
DENMARK	-0.5302	-0.2973	-0.6821	-0.4355	-0.5872	-0.7810	-0.5528
	(0.067)	(0.074)	(0.118)	(0.143)	(0.126)	(0.177)	(0.138)
FRANCE	-0.7265	-0.4332	-0.8039	-0.0691	-0.4258	-0.6413	-0.3994
	(0.067)	(0.137)	(0.125)	(0.146)	(0.137)	(0.219)	(0.145)

(continued on next page)

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Table A8 (continued)

Table A9 (continued)

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (
GERMANY	-0.3911	-0.3584	-0.2244	-0.1106	-0.5057	-0.4471	0.0431
	(0.090)	(0.105)	(0.112)	(0.123)	(0.101)	(0.111)	(0.089)
ITALY	0.1092	-0.0745	-0.5219	0.3052	-0.2495	-0.8140	-0.1980
	(0.127)	(0.209)	(0.202)	(0.194)	(0.193)	(0.312)	(0.201)
JAPAN	0.0103	-0.0652	-0.9742	-0.7473	-0.4584	-1.1703	-0.8695
	(0.140)	(0.265)	(0.158)	(0.295)	(0.173)	(0.164)	(0.263)
NETHERLANDS	-0.3589	-0.4427	-0.4321	-0.4256	-0.5807	-0.4763	-0.6158
	(0.052)	(0.074)	(0.088)	(0.053)	(0.076)	(0.143)	(0.083)
SWEDEN	0.3334	0.2005	-0.3242	-0.1645	0.1194	-0.7607	-0.1499
	(0.056)	(0.112)	(0.120)	(0.125)	(0.060)	(0.097)	(0.089)
UK	-0.7184	-0.1448	-0.3764	-0.2426	-0.4937	-0.5227	-0.3689
l. D. Control him (and in second	(0.095)	(0.112)	(0.119)	(0.096)	(0.122)	(0.160)	(0.121)
anel B. Sociodemographics/socioeconomics	0.2006	0.3451	0.2245	0.1544	0.0050	0.0164	0.2000
GENDER	0.2006			0.1544	0.2958	0.3164	0.3980
AGE	(0.308) -0.0324	(0.189) -0.0232	(0.339) -0.0551	(0.265) -0.0384	(0.293) -0.0351	(0.337) -0.0491	(0.365) -0.0406
AGE	(0.006)	(0.006)	(0.010)	(0.006)	(0.006)	(0.009)	(0.007)
EDUC	-0.0369	-0.0347	-0.0137	-0.0231	-0.0629	-0.0963	-0.0575
EDOC	(0.030)	(0.031)	(0.025)	(0.034)	(0.044)	(0.045)	(0.035)
CITY_SIZE	-0.0246	-0.0125	-0.0306	-0.0838	0.0750	-0.0055	0.0413
	(0.063)	(0.054)	(0.081)	(0.074)	(0.091)	(0.102)	(0.062)
BEING SINGLE AS REFERENCE	(0.003)	(0.004)	(0.001)	(0.074)	(0.051)	(0.102)	(0.002)
DIVORCED	-0.3130	-0.5208	-0.1395	-0.3548	-0.2885	-0.6116	-0.6489
	(0.209)	(0.232)	(0.228)	(0.344)	(0.299)	(0.292)	(0.234)
LONG TERM RELATIONSHIP	-0.1565	-0.6461	-0.3475	-0.8695	-0.3364	-0.8853	-0.7152
	(0.347)	(0.192)	(0.270)	(0.313)	(0.292)	(0.414)	(0.401)
MARRIED/CIVIL RELATIONSHIP	0.0527	-0.1968	0.1199	-0.5818	0.0411	-0.2509	-0.6172
	(0.151)	(0.283)	(0.303)	(0.389)	(0.360)	(0.355)	(0.316)
OTHER	3.5683	2.0161	1.2933	2.2655	2.6345	2.0694	4.0341
	(2.529)	(2.101)	(2.681)	(2.750)	(2.667)	(2.511)	(4.012)
WIDOWED	-0.0053	-0.2715	0.0129	-0.6415	-0.2252	-0.3591	-0.4437
	(0.291)	(0.313)	(0.350)	(0.299)	(0.390)	(0.451)	(0.328)
CHILDREN	0.1038	-0.0753	0.0371	0.1777	0.1201	0.0529	0.1925
	(0.077)	(0.058)	(0.074)	(0.122)	(0.072)	(0.089)	(0.091)
LOGINC	-0.0618	-0.0238	0.0116	-0.0391	-0.0688	-0.0124	-0.0980
	(0.051)	(0.074)	(0.066)	(0.090)	(0.070)	(0.116)	(0.080)
NATIVE	0.0665	-0.8530	-0.3364	0.0355	-0.3579	-0.4627	-0.6181
	(0.387)	(0.369)	(0.489)	(0.477)	(0.490)	(0.663)	(0.605)
anel C. Health							
HEIGHT	-0.0052	-0.0126	-0.0045	-0.0029	-0.0011	-0.0277	-0.0146
	(0.010)	(0.008)	(0.015)	(0.015)	(0.013)	(0.014)	(0.016)
WEIGHT	0.0077	0.0074	-0.0016	-0.0040	0.0010	0.0066	0.0018
	(0.006)	(0.005)	(0.006)	(0.009)	(0.007)	(0.012)	(0.009)
SMOKE	-0.1935	0.0629	0.0550	-0.3048	0.0231	-0.0288	-0.2801
	(0.306)	(0.288)	(0.283)	(0.348)	(0.244)	(0.259)	(0.263)
ALCOHOL	0.0621	0.0184	0.1396	0.0850	0.0135	-0.0259	0.1580
	(0.062)	(0.061)	(0.065)	(0.087)	(0.062)	(0.065)	(0.058)
MEAT_INTAKE	-0.1949	-0.1187	-0.1642	-0.0743	-0.1323	-0.1565	-0.0591
	(0.101)	(0.103)	(0.114)	(0.116)	(0.115)	(0.132)	(0.103)
HEALTH	-0.0315	0.0631	-0.0573	0.0139	-0.0644	0.0649	0.0085
	(0.091)	(0.074)	(0.101)	(0.078)	(0.065)	(0.100)	(0.070)
SWB	0.0659	0.1136	0.0796	0.1067	0.1208	-0.0465	0.1193
	(0.081)	(0.099)	(0.131)	(0.114)	(0.081)	(0.066)	(0.052)
Panel D. Psychographics							
DID NOT DELETE ACCOUNT AS REFERENCE	0.6550	0 7000	0.5100	0.0007	0.7707	0.0004	0.7400
DELETE SOCIAL MEDIA ACCOUNT	0.6559	0.7999	0.5138	0.6997	0.7797	0.6004	0.7400
NEVER HAD ACCOUNT	(0.309)	(0.281)	(0.272)	(0.348)	(0.435)	(0.321)	(0.340)
NEVER HAD ACCOUNT	0.2560	0.3474	0.1963	0.2142	0.4544	0.2332	0.4466
	(0.177)	(0.146)	(0.149)	(0.160)	(0.262)	(0.207)	(0.253)
ENVIRONMENT	-0.0649	-0.0540	0.1082	0.0491	0.0412	0.0354	0.0483
DEDC HEALTH	(0.056)	(0.067)	(0.067)	(0.081)	(0.053)	(0.064)	(0.033)
PERS_HEALTH	-0.1196	-0.0635	-0.1293	-0.0366	-0.1173	-0.0895	-0.0011
FAM_HEALTH	(0.076) 0.1759	(0.077) 0.1584	(0.107) 0.1742	(0.064) 0.1475	(0.058) 0.1517	(0.120) 0.2051	(0.071) 0.0577
PAM_HEALTH	(0.068)	(0.061)	(0.090)	(0.070)	(0.072)		
WTR	0.0121	0.0109	0.0019	(0.070) -0.0050	-0.0028	(0.104) -0.0028	(0.083) -0.0286
** 11	(0.031)	(0.040)	(0.047)	(0.052)	(0.052)	_0.0028 (0.056)	-0.0286 (0.050)
FOC	-0.0662	(0.040) -0.1425	-0.0809	(0.052) -0.1128	-0.0643	(0.056) -0.0414	-0.1015
POG							
TRUCT INCTA	(0.083)	(0.076)	(0.082)	(0.069)	(0.061)	(0.115)	(0.062)
TRUST_INSTA	0.1650	0.1903	0.3801	0.5744	0.3000	0.4762	0.3225
TRUCT TWITTED	(0.070)	(0.115)	(0.160)	(0.175)	(0.110)	(0.182)	(0.136)
TRUST_TWITTER	0.0860	0.1410	-0.1415	-0.1943	-0.1293	0.0446	-0.0612
TRICT ED	(0.074)	(0.110)	(0.102)	(0.145)	(0.072)	(0.167)	(0.106)
TRUST_FB	0.0309	0.0293	0.0839	-0.0556	0.1395	-0.0740	0.0870
	(0.073)	(0.089) 4.1036	(0.117)	(0.120) 3.1081	(0.082) 3.1364	(0.173) 8.7974	(0.098) 5.8318
Constant	3.4434		4.1855				

Table A9 (continued)

	Footprint (1)	Emission (2)	Globtemp (3)	Genmod (4)	Massatr (5)	Meat (6)	Workcon (7)
Observations	(1.273)	(1.591)	(2.333)	(2.869)	(2.108)	(2.309)	(2.352)
	4928	5392	5683	3851	4696	4303	4347

Notes: Robust standard errors in parentheses.

Table A10

OLS regression results, willingness to pay for not getting consumer-related information.

	Costap (1)	Creditfee (2)	Tiresafe (3)	Onlinecom (4)	Onlinepol (5)	Difprice (6)
Panel A. Countries						
USA AS REFERENCE		a 407 i	0.74.55	0.405-	0.0555	
BELGIUM	-0.7062	-0.4334	-0.7188	-0.1059	-0.8587	-0.3721
CANADA .	(0.171)	(0.103)	(0.087)	(0.157)	(0.132)	(0.148)
CANADA	0.0403	0.2657	0.3424	0.8808	-0.2303	0.0353
DENISCADIZ	(0.118)	(0.098)	(0.099)	(0.135)	(0.216)	(0.093)
DENMARK	-0.4869	-0.3323	-0.5631	-0.6068	-0.8701	0.0037
FRANCE	(0.129) -1.1458	(0.082) 0.5206	(0.096) 0.8641	(0.135) -0.2963	(0.156) -0.6679	(0.088) -0.4739
FRANCE	(0.191)	(0.107)	(0.117)	(0.175)	(0.159)	(0.176)
GERMANY	-0.2220	-0.0900	-0.1115	0.5750	-0.4809	0.3273
GERMANYI	(0.128)	(0.101)	(0.084)	(0.103)	(0.224)	(0.125)
ITALY	-0.6402	-0.3326	0.0678	-0.1849	-0.6819	-0.2325
11/151	(0.181)	(0.126)	(0.240)	(0.347)	(0.239)	(0.219)
JAPAN	-1.1415	-0.7571	-1.0929	-0.6740	-0.8467	-0.8010
	(0.206)	(0.141)	(0.100)	(0.174)	(0.220)	(0.167)
NETHERLANDS	-1.0341	-0.5193	-0.9753	-0.7275	-1.1569	-0.5859
	(0.093)	(0.085)	(0.071)	(0.135)	(0.139)	(0.085)
SWEDEN	-0.3067	0.1666	-0.1984	1.4250	-0.2246	0.3402
	(0.082)	(0.072)	(0.059)	(0.122)	(0.160)	(0.085)
UK	-0.0619	-0.3013	-0.7456	-0.4138	-0.3166	0.1534
	(0.105)	(0.081)	(0.088)	(0.058)	(0.179)	(0.110)
anel B. Sociodemographics/socioeconomics	()	()	()	()	()	()
GENDER	0.5928	0.3114	0.3600	1.0469	0.6041	0.7006
	(0.364)	(0.267)	(0.287)	(0.452)	(0.307)	(0.290)
AGE	-0.0355	-0.0294	-0.0238	-0.0425	-0.0399	-0.0352
	(0.009)	(0.007)	(0.006)	(0.014)	(0.009)	(0.006)
EDUC	-0.0632	-0.0576	-0.0380	-0.0653	-0.0414	-0.0520
	(0.041)	(0.024)	(0.033)	(0.054)	(0.040)	(0.031)
CITY_SIZE	0.0187	-0.0104	-0.0396	0.0518	0.0306	0.0822
-	(0.091)	(0.067)	(0.063)	(0.107)	(0.109)	(0.068)
BEING SINGLE AS REFERENCE						
DIVORCED	0.0166	-0.1289	-0.1269	0.3372	0.4896	0.0164
	(0.229)	(0.235)	(0.212)	(0.333)	(0.412)	(0.291)
LONG TERM RELATIONSHIP	-0.1883	0.0304	-0.1453	-0.1333	0.2394	0.0485
	(0.305)	(0.328)	(0.254)	(0.449)	(0.439)	(0.464)
MARRIED/CIVIL RELATIONSHIP	0.0851	-0.0072	0.1363	0.5361	0.5698	0.2289
	(0.147)	(0.223)	(0.263)	(0.449)	(0.377)	(0.264)
OTHER	2.2306	2.5359	2.4162	5.7751	2.9560	3.6328
	(2.046)	(1.888)	(2.133)	(3.002)	(2.505)	(2.657)
WIDOWED	-0.1239	0.0910	-0.0388	0.4424	0.5740	0.2967
	(0.225)	(0.239)	(0.259)	(0.474)	(0.313)	(0.423)
CHILDREN	0.1517	-0.0002	-0.0091	0.0637	0.1069	0.1034
	(0.146)	(0.090)	(0.096)	(0.085)	(0.085)	(0.068)
LOGINC	-0.1091	-0.0641	-0.0993	-0.1241	-0.1716	-0.1507
	(0.083)	(0.080)	(0.087)	(0.124)	(0.104)	(0.089)
NATIVE	0.1889	-0.0491	-0.3826	-0.8877	0.1422	-0.2829
	(0.326)	(0.350)	(0.356)	(0.718)	(0.366)	(0.404)
Panel C. Health						
HEIGHT	-0.0164	0.0024	-0.0136	0.0113	-0.0171	-0.0196
	(0.014)	(0.008)	(0.011)	(0.011)	(0.012)	(0.012)
WEIGHT	-0.0024	-0.0034	0.0008	-0.0002	0.0125	-0.0022
	(0.006)	(0.005)	(0.006)	(0.007)	(0.011)	(0.006)
SMOKE	-0.1565	-0.2754	-0.4189	-0.3432	0.0921	-0.2597
	(0.267)	(0.229)	(0.211)	(0.392)	(0.301)	(0.260)
ALCOHOL	0.1029	0.1135	0.0866	0.0268	0.0997	0.0139
	(0.059)	(0.070)	(0.053)	(0.046)	(0.091)	(0.054)
MEAT_INTAKE	-0.0937	-0.0876	-0.0917	-0.3133	-0.1864	-0.0442
	(0.151)	(0.105)	(0.130)	(0.152)	(0.168)	(0.125)
HEALTH	-0.0557	-0.1749	-0.1035	-0.0065	0.1515	0.0262
	(0.068)	(0.076)	(0.067)	(0.096)	(0.140)	(0.081)
SWB	0.0104	0.1112	0.0528	0.1181	-0.0387	0.0152
				(0.096)		

Panel D. Psychographics

Table A10 (continued)

	Costap (1)	Creditfee (2)	Tiresafe (3)	Onlinecom (4)	Onlinepol (5)	Difprice (6)
DID NOT DELETE ACCOUNT AS REFERENCE						
DELETE SOCIAL MEDIA ACCOUNT	1.0075	0.6358	1.0330	1.3555	1.1220	0.6115
	(0.427)	(0.251)	(0.366)	(0.582)	(0.559)	(0.382)
NEVER HAD ACCOUNT	0.4983	0.3409	0.3861	0.5936	0.2515	0.2778
	(0.201)	(0.132)	(0.187)	(0.396)	(0.371)	(0.203)
ENVIRONMENT	-0.0291	-0.0165	-0.0392	-0.0749	0.0096	-0.0484
	(0.057)	(0.039)	(0.047)	(0.049)	(0.066)	(0.037)
PERS_HEALTH	-0.1044	-0.0939	-0.0498	-0.0593	-0.1179	-0.1284
	(0.086)	(0.069)	(0.079)	(0.096)	(0.100)	(0.076)
FAM_HEALTH	0.1422	0.1204	0.0910	0.1816	0.1567	0.1931
	(0.097)	(0.079)	(0.073)	(0.113)	(0.104)	(0.076)
WTR	0.0581	-0.0111	0.0329	0.0456	-0.0344	0.0178
	(0.052)	(0.051)	(0.042)	(0.041)	(0.078)	(0.048)
FOC	-0.1102	-0.0652	-0.0914	-0.1429	-0.2025	-0.1041
	(0.099)	(0.073)	(0.083)	(0.106)	(0.092)	(0.079)
TRUST_INSTA	0.5353	0.3929	0.3841	0.2332	0.2802	0.3183
	(0.209)	(0.141)	(0.162)	(0.107)	(0.119)	(0.173)
TRUST_TWITTER	-0.1055	-0.0928	-0.0771	0.1456	0.0311	-0.0032
	(0.179)	(0.098)	(0.092)	(0.101)	(0.175)	(0.101)
TRUST_FB	-0.0495	0.0304	0.0263	0.0886	0.0798	0.0410
	(0.107)	(0.089)	(0.076)	(0.099)	(0.098)	(0.107)
Constant	6.3440	3.0634	5.6354	1.5886	5.4423	6.6347
	(2.589)	(1.747)	(1.724)	(2.492)	(1.906)	(1.976)
Observations	3811	4955	4281	2746	3234	4319

Notes: Robust standard errors in parentheses.

Appendix B. Welfare effects

1. Theoretical framework

In the following, we present a simple theoretical framework that allows us to derive some hypotheses and predictions about the effects of information on different outcome measures. Specifically, we aim to model and understand the optimal (though potentially different) behavior of individuals who are either willing to know information (referred to below as I) or not (referred to below as U). For this purpose we use a (stochastic) reinforcement learning process (Van Otterlo and Wiering, 2012) for the representative rational agents from these two groups and compare the hypothetical results of interest.

At the beginning of the learning process, each representative agent finds himself in an uninformed state s_0 . The set of states are given by the following set $s \in S := \{1, 2, 3, ..., T\}$, i.e., they are given by integer numbers. We set s_T to be the final state for which we assume that all potential information has been revealed. That means that independent whether an agent wants to know information or not, as soon as he reaches the terminal state, the learning process immediately comes to a halt. At each time step t, the agents can decide between the two actions given by the set $a \in A := \{not pay, pay\}$. Dependent on the two representative agent's preferences (agent U prefers to stay uninformed, while agent I wants to receive information) the agents' reward function R_U and R_I , associated with the two choices of a, are for $s_{t+1} \leq s_T$ defined as follows:

$$R_{U}(s_{t}, a, s_{t+1}) = \begin{cases} -1, if (s_{t+1} - s_{t}) = 1 \text{ and } if a = not pay \\ +1 - p_{U}, if (s_{t+1} - s_{t}) = 0 \text{ and } if a = pay \\ -1 - p_{U}, if (s_{t+1} - s_{t}) = 1 \text{ and } if a = pay \\ 0 \text{ if } (s_{t+1} - s_{t}) \notin \{0, 1\} \end{cases}$$
(B.1)

$$R_{I}(s_{t}, a, s_{t+1}) = \begin{cases} +1, \text{if } (s_{t+1} - s_{t}) = 1 \text{ and if } a = not \text{ pay} \\ s_{T} - s_{t} - p_{I} \text{ if } a = pay \end{cases}$$
(B.2)

Additionally, note that there is no possibility to earn any positive rewards for $s_t = s_T$, since s_T is equal to the terminal state (which necessarily implies that the transversality condition must hold (Beavis and Dobbs 1990, pp. 252–9). From that, it follows:

$$R_{U}(s_{t}, a, s_{t+1}) = \begin{cases} 0 & \text{if } a = not \ pay \\ -p_{U} & \text{if } a = pay \end{cases}$$

$$R_{I}(s_{t}, a, s_{t+1}) = \begin{cases} 0 & \text{if } a = not \ pay \\ -p_{I} & \text{if } a = pay \end{cases}$$
(B.3)

The interpretation of these equations is straightforward: Dependent on their choice of *a*, i.e., whether the agents do pay or not pay to get/not to get information, the potential reward differs. As Eq. (B1) shows, agent *U* will receive a negative reward of -1 (or $-1 \cdot p_U$, with $p_U \in \mathbb{R}^+$ being the price he has to pay for not receiving information) if he moves from an uninformed state to a (relatively) more informed state, while the reward might be positive $(+1 \cdot p_U)$ if he is capable of staying in the same state. In other words: An agent that prefers to be uninformed (i.e., that "does not want to know a particular information") is negatively affected in his utility if he receives particular information and (potentially) positively affected if not. For agent *I*, however, the opposite holds. Hence, he will receive a reward of +1 (or $s_T - s_t - p_I$, with $p_I \in \mathbb{R}^+$ being the price he has to pay for receiving information) if he moves from an uninformed state.

Besides the choice of a, it also depends on the transition probabilities Pr_U and Pr_I in which state an agent ends up. While we assume the transition

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probabilities of an agent *I* to follow some stochastic process, we consider a fully deterministic structure for the agent that wants to receive information. Hence, in all states, agent *I* can transfer instantaneously to the terminal state if he purchases the information by paying a certain amount p_I , i.e.:

$$\Pr_{I}(s_{T}|s_{t},a) = 1 \quad if \quad a = pay \tag{B.4}$$

For an agent U we assume that the transition probabilities are (generally) following a Bernoulli distribution of the following form:

$$Pr_{U}(s_{t+1}|s_{t}, a) \sim Ber(g(s_{t}))$$

$$g: \begin{cases} S \rightarrow [0, 1] \\ s_{t} \rightarrow a + bs_{t}, \text{ with } a > 0 \text{ and } b < 0 \end{cases}$$
(B.5)

Hence, for
$$(s_{t+1} - s_t) \in \{0, 1\}$$
 Pr_U can explicitly be written as:

$$Pr_{U} = \begin{cases} g(s_{t})^{(1-(s_{t+1}-s_{t})}(1-g(s_{t}))^{(s_{t+1}-s_{t})} & \text{if } a = pay \text{ and } s_{t+1} \le s_{T} \\ 1 & \text{if } a = not \text{ pay and } s_{t+1} \le s_{T} \\ 0 & \text{if } s_{T} = s_{T} \text{ and } \forall a \in A \end{cases}$$
(B.6)

Eq. (B6) reflects the fact that even though an agent wants not to know a specific type of information (and also though he pays for not knowing it), he cannot be entirely sure he won't gain the knowledge anyway. For instance, if someone prefers not to be informed about the calorie content of a meal, he might still be exposed to it (and note it) when he looks at the restaurant menu. Additionally, we model the probability for transitioning from a given knowledge state to further distant states as being not possible, i.e.: $\Pr_U(s_{t+1}|s_t, a) = 0$ for $(s_{t+1} - s_t) \notin \{0,1\}$. This means, we neither allow an agent *U* to "forget" information nor to increase his information stock by a large amount.

These assumptions also hold for an agent *I*, that is, for $(s_{t+1} - s_t) \in \{0, 1\}$ the following transition probabilities must be met:

$$\Pr_{I}(s_{t+1}|s_{t},a) = \begin{cases} 1 & \text{if } a = not \ pay \ and \ s_{t+1} \le s_{T} \\ 0 & \text{if } s_{t} = s_{T} \end{cases}$$
(B.7)

Again, a transition to further states without taking action a = pay is not possible:

$$\Pr(s_{t+1}|s_t, a) = 0 \text{ for } (s_{t+1} - s_t) \notin \{0, 1\} \text{ and } a = not \text{ pay}$$
(B.8)

Note the symmetry of action set a: As shown by the reward function, we only allow for an incremental learning process if the agents choose not to pay, as there is no reward for large transitions. That is, regardless of whether an agent wants to receive information or not, as long as he is taking action a = not pay, he will instantaneously and gradually increase his information stock. However, while these incremental transitions are related to a positive reward for an agent *I*, they go along with a negative reward for an agent *U*. Hence it holds that:

$$\Pr_{I}(s_{t+1}|s_{t} = s_{t+1} - 1, a = not \ pay)R_{U}(s_{t} = s_{t+1} - 1, a = not \ pay, s_{t+1})$$

$$= |\Pr_U(s_{t+1}|s_t = s_{t+1} - 1, a = not \ pay)R_U(s_t = s_{t+1} - 1, a = not \ pay, s_{t+1})|$$
(B.9)

Figs. B1 and B2 visually summarize the basic structure of the model. Both agent U (Fig. B1) and an agent I (Fig. B2) start in a state s_0 , where no information is currently available (this could be the case when a new product enters the market, and individuals are not yet aware of the health risks or the environmental externalities associated with the consumption of that good). Now, if an agent decides to take action a = not pay he will automatically increase his information stock, i.e., moves from state s_0 to the following one. This process captures the gradual diffusion of information, which is taking place regardless of whether an individual shows an active interest in obtaining information or not.¹³ However, if an agent decides to take action a = pay,

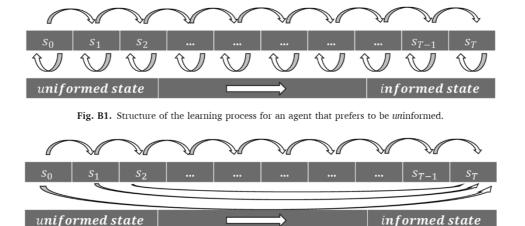


Fig. B2. Structure of the learning process for an agent that prefers to be informed.

¹³ Note that we do not explicitly specify the time amount it takes until an individual reaches the terminal state. We just specify the terminal state to be reached in *T*. It is obvious that the duration of the transition from an uninformed to a fully informed state varies according to the specific information type. For instance, while it might take several years (or even decades) to get aware of the environmental externalities caused by someone's air travel (if he is not actively calculating his carbon footprint, i.e. actively purchasing this information), it may only take one month for someone to be informed of the standard fee of late payment of his credit card bill. One way to address this issue to implicitly model the time span by the intertemporal discount rate, as its level differs with the time-span that will be analyzed.

(B.10)

he might be better off in terms of his respective reward function. That is, the difference between an agent *U* and an agent *I* (when taking action a = pay) is that agent *U* increases the probability to stay in his current (comparatively uninformed) state (which he would prefer by definition of R_U). In contrast, an agent *I* deterministically reaches the terminal state when buying the information. This difference is based on the assumption that it is quite unlikely that an individual who actively searches and is willing to pay for some information (e.g., his carbon footprint) will fail to obtain this piece of information (always based on the assumption that is possible to retrieve this information in principle). On the other hand, there is no guarantee that a person who does not want to receive certain information - and even pays for it - will not receive it anyway. For instance, a smoker who does not want to be informed about the health risks of smoking, might buy (more expensive) cigarette packs that do not contain warnings. However, if he now happens to see a television report on the health risks of smoking, he would be unable to maintain his uninformed status, regardless of whether he was willing to or not. This uncertainty is essentially the reason why we assume the parameter of the probability distribution shown in Eq. (B6) to be (linearly) decreasing in s_t . It also implies that the probability of remaining uninformed is much greater when someone is in an uninformed state of the world, compared to the case where almost all potential information has been revealed (Jensen and Grunert, 2014). Figs. B1 and B2 visualize the two learning processes.

If we finally combine all the previous assumptions and by applying Bellman's principle, each agent's value function can finally be expressed as follows:

$$V_x^*(s_t) = \max_a \left[\sum_{s_{t+1}} \Pr_x[s_{t+1}|s_t, a](R_x(s_t, a, s_{t+1}) + \gamma V_x(s_{t+1}))\right]$$

As Eq. (B10) shows, the agents maximize the expected utility in a given state with respect to his possible choices of *a*. Due to the structure of the model, the choice of the best *a* in each state, depends (implicitly) on three factors: the intertemporal discount factor γ (i.e., the time preferences of the agents), the price for getting/not getting a particular information *p*, and the state itself.

2. Main results and predictions

with $x \in \{U, I\}$ and $\gamma \in (0, 1)$

See Tables B1-B3.

Table B1

Average WTK and WTP to get/not to get information in €.

Variable	WTK (in %)	WTP to get info in \pounds	WTP not to get info in \pounds	Ratio
ALZ	55.28	28.88	4.89	5.90
		(36.31)	(18.05)	
CANCER_CUR	66.24	37.50	3.40	11.02
		(40.07)	(15.01)	
CANCER_LET	51.65	37.60	4.27	8.80
		(40.04)	(16.83)	
FAMILY_DIS	43.40	36.91	3.98	9.28
		(39.88)	(16.11)	
DEATH	24.94	34.93	7.65	4.57
		(39.55)	(23.75)	
CALORIES	41.15	5.15	1.12	4.61
		(15.29)	(7.27)	
FOOD	54.83	4.52	0.96	4.72
		(14.14)	(6.51)	
FOOTPRINT	40.11	10.55	0.88	11.93
		(20.56)	(6.35)	
EMISSION	34.48	7.39	0.91	8.10
		(17.70)	(6.55)	
GLOBTEMP	30.94	9.47	0.96	9.90
		(21.77)	(7.44)	
GENMOD	53.20	4.89	0.97	5.02
		(14.63)	(7.08)	
MASSATR	42.93	7.47	0.86	8.68
	12190	(18.99)	(6.38)	0.00
MEAT	47.71	5.45	1.28	4.27
	0.01	(15.54)	(7.85)	1127
WORKCON	47.17	5.05	0.78	6.44
	17.17	(14.46)	(6.32)	0.11
COSTAP	53.69	5.59	0.84	6.64
5001111	33.07	(14.35)	(6.46)	0.01
CREDITFEE	39.79	3.36	0.61	5.52
GIEDITTEE	33.73	(12.18)	(5.82)	5.52
TIRESAFE	47.98	4.81	0.62	7.78
TIKESAFE	47.58	(13.25)	(5.81)	7.78
ONLINECOM	66.63	6.80	0.98	6.92
ONLINECOM	00.03		(7.24)	0.92
ONLINEDOL	60.70	(16.62)	0.87	7.01
ONLINEPOL	60.70	6.12		7.01
DIEDDICE	47 51	(16.33)	(6.84)	E OC
DIFPRICE	47.51	4.27	0.72	5.96
		(13.30)	(6.20)	

Notes: The figure shows the average WTP to get/not to get specific information in \notin . Standard deviation in parenthesis. We did not adjust the WTP measures to the respective country currencies; however, we assume that differences will be small and would not change the results in any meaningful way. Note that ee do not claim that the amounts resulting from our analysis are exact measures; they are (good) estimates.

Table B2

Welfare loss related to disclosure of information.

	Belgium	Canada	Denmark	France	Germany	Italy	Japan	Netherlands	Sweden	UK	USA
Panel A. Heali	th info										
alz	19.27	56.19	10.39	170.03	260.81	106.23	519.83	34.09	21.85	84.86	514.95
cancer_cur	6.77	47.57	2.56	67.44	108.10	92.02	371.08	21.07	9.03	20.98	279.79
cancer_let	16.30	84.92	9.46	151.44	205.85	131.88	368.19	26.43	35.05	80.02	469.95
family_dis	20.45	66.70	9.40	137.80	264.76	123.16	523.84	33.95	35.27	92.62	305.39
death	50.08	215.83	18.76	316.59	690.76	378.11	741.13	107.69	99.76	271.62	1687.89
calories	347.17	1325.37	111.44	1494.72	4482.01	2090.89	9908.34	286.64	470.70	1287.39	6595.89
food	534.69	1613.03	104.32	1371.08	2615.52	2309.95	6528.32	185.63	257.18	1411.59	4320.65
Panel B. Susta	inable developn	nent									
footprint	4.30	31.24	1.71	18.36	24.55	39.30	124.51	9.51	7.69	15.18	241.94
emission	26.58	96.28	8.32	103.99	106.20	126.72	448.85	31.15	25.12	142.73	813.85
globtemp	5.03	39.06	2.31	36.79	64.06	45.88	56.88	13.76	5.96	52.29	285.04
genmod	421.25	1169.54	108.13	2532.10	1947.97	1976.29	3536.36	607.18	271.19	2227.18	12150.2
massatr	319.83	2295.77	81.66	2137.37	1664.47	2284.34	5538.61	491.34	379.21	1745.55	16391.4
meat	512.94	2237.14	112.40	2296.32	2417.62	3572.78	8289.56	963.95	230.62	2737.65	23873.2
workcon	37.77	570.27	22.73	428.72	557.72	499.72	981.35	85.78	56.78	395.24	3606.76
Panel C. Cons	umer info										
costap	4.87	21.78	1.66	13.74	31.46	28.96	30.52	3.00	5.27	37.82	197.21
creditfee	3.63	20.74	1.58	17.07	40.46	27.95	25.75	4.98	6.00	21.03	135.47
tiresafe	3.75	21.50	1.25	14.90	40.66	29.31	23.79	1.13	4.92	10.61	153.15
onlinecom	4.82	22.04	0.61	24.46	38.14	22.30	22.44	1.53	5.93	13.22	120.79
onlinepol	3.97	16.39	0.70	31.75	24.22	22.68	42.76	2.48	3.44	24.94	195.14
difprice	97.99	392.10	39.97	534.69	1127.22	755.47	1170.83	74.94	143.01	869.78	3432.44

Notes: The table shows the welfare loss in \pounds 1,000,000 associated with the disclosure of a specific type of information. For the variables *alz, cancer_cur, cancer_let, family_dis, death, footprint, globtemp, costap, creditfee, tiresafe, onlinecom and onlinepol* we assume that the information can only be revealed once (cf. Eq. (1)). Based on publically available information on consumption patterns, we use the following frequencies: *calories* ~52 times/year; *food* ~113 times/year; *gennod, massatr, meat* ~ 68 times/year; *workcon* ~17 times/year; emission ~3.5 times/year (see Supplementary Material for details).

Table B3

Welfare gain related to disclosure of information.

	Belgium	Canada	Denmark	France	Germany	Italy	Japan	Netherlands	Sweden	UK	USA
Panel A. Heal	th info										
alz	163.76	758.73	60.99	782.37	1161.74	1311.84	2964.08	227.21	199.34	950.22	4519.18
cancer_cur	274.62	1043.09	115.68	1156.92	1954.59	1861.52	4030.77	457.33	309.50	1472.21	6518.86
cancer_let	208.52	810.47	87.22	816.33	1348.31	1601.72	3578.51	337.51	208.28	1249.73	5568.69
family_dis	182.89	744.02	62.48	841.52	1100.17	1371.76	2658.60	237.13	160.15	1029.87	5170.40
death	80.99	455.05	34.48	454.97	416.92	562.09	2453.31	89.46	66.21	610.15	3075.53
calories	1123.66	6161.95	438.04	9176.43	4819.11	14533.22	8539.61	1022.19	972.39	7671.51	43025.65
food	1565.85	7532.20	673.79	13403.11	11256.37	18209.42	15857.02	2071.83	1295.67	11282.71	77610.32
Panel B. Susta	unable developi	nent									
footprint	55.21	192.18	19.81	298.35	344.22	433.65	243.48	63.35	44.90	230.01	1391.76
emission	85.15	566.30	39.37	669.13	609.00	864.14	449.07	111.11	100.32	642.05	4156.46
globtemp	36.23	157.56	17.14	134.07	204.59	208.85	304.83	36.92	30.09	193.05	1461.27
genmod	1968.81	9888.39	541.21	13225.05	10980.00	20165.55	8436.76	2339.59	1507.70	12304.91	85539.06
massatr	2889.18	9081.46	1075.21	15462.70	12519.83	23598.00	14557.46	2644.74	2590.28	13161.61	82804.41
meat	2274.00	8558.97	795.79	13207.49	15089.57	17099.32	7654.26	1760.89	2257.84	10322.61	71347.21
workcon	529.37	1820.69	196.57	2636.61	2920.10	4018.91	1806.79	438.64	441.87	2657.85	17163.69
Panel C. Cons	umer info										
costap	36.87	139.44	14.48	181.40	259.40	257.22	282.59	44.48	24.20	192.80	1202.71
creditfee	12.17	64.36	4.54	103.78	57.29	135.40	134.07	15.25	12.67	100.61	731.73
tiresafe	22.97	103.59	9.43	133.51	108.08	305.76	237.94	26.35	18.38	166.03	1048.58
onlinecom	41.00	215.22	21.95	199.11	340.73	336.59	671.20	62.81	58.77	299.25	1972.22
onlinepol	35.78	184.35	17.95	152.15	324.46	314.04	473.63	44.73	48.72	231.69	1553.00
difprice	627.20	2714.96	214.24	3679.26	3735.76	4383.11	4044.76	848.94	539.82	3348.05	27162.40

Notes: The table shows the welfare gain in $\epsilon_{1,000,000}$ associated with the disclosure of a specific type of information. For the variables *alz, cancer_cur, cancer_let, family_dis, death, footprint, globtemp, costap, creditfee, tiresafe, onlinecom and onlinepol* we assume that the information can only be revealed once (cf. Eq. (1)). Based on publically available information on consumption patterns, we use the following frequencies: *calories* ~52 times/year; *food* ~113 times/year; *genmod, massatr, meat* ~ 68 times/year; *workcon* ~17 times/year; emission ~3.5 times/year (see Supplementary Material for details).

Appendix C. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.foodpol.2021.102076.

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