# **ONE BITE AT A TIME: CONSUMERS AND THE TRANSITION TO SUSTAINABLE FOOD**

Analysis of a survey of European consumers on attitudes towards sustainable food

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# **TABLE OF CONTENTS**

| Ι.  | CONTEXT AND OBJECTIVES  | 6  |
|-----|---|----|
| II. | METHODOLOGY   | 7  |
| ш.  | FINDINGS AND RECOMMENDATIONS  | 8  |
| IV. | DETAILED RESULTS OF THE SURVEY  | 19 |
|     | 1. Food habits and the environment                                      | 19 |
|     | 2. What 'sustainable' means to consumers in relation to food            | 22 |
|     | 3. Barriers to eating (more) sustainably                                | 23 |
|     | 4. Steps consumers are willing to take                                  | 25 |
|     | Ready for change?   | 25 |
|     | What about prices?  | 27 |
|     | Attitudes towards proteins  | 28 |
|     | 5. Zooming in on meat consumption                                       | 30 |
|     | 6. Consumer attitudes towards alternative protein sources               | 32 |
|     | Little love for high-tech food  | 32 |
|     | GMO-free plant-based alternatives are better accepted                   | 33 |
|     | 'Meaty' names or not?   | 35 |
|     | 7. What needs to be done to make food production and consumption (more) |    |
|     | sustainable, according to consumers                                     | 36 |
|     | On the production side  | 36 |
|     | On the consumption side   | 38 |
| V.  | ANNEX – QUESTIONNAIRE   | 41 |

# IN A NUTSHELL

Between October and November 2019, BEUC, The European Consumer Organisation, carried out a survey together with 12 of its member organisations across 11 EU countries<sup>1</sup> to investigate consumer attitudes towards sustainable food.

## **Key findings**

# 01

**Consumers tend to underestimate the environmental impact of their own eating habits**, although there is some awareness about the impact of food habits in general.

# 02

Overall, when it comes to food, **consumers primarily see 'sustainable' as a synonym for environmentally friendly, without GMOs and pesticides, and local,** with some specificities across countries.

# 03

Over half of consumers say that sustainability concerns have some influence (42.6%) or a lot of influence (16.6%) on their eating habits. Price, lack of information and the challenge of identifying sustainable food options as well as their limited availability are the main perceived barriers to sustainable eating.

## 04

Two thirds of consumers are open to changing their eating habits for environmental reasons, with many willing to waste less food at home, to buy more seasonal fruit and vegetables and to eat more plant-based foods. However, decreasing their dairy consumption or spending more money for sustainably produced food is more of a challenge for consumers.

# 05

Slightly over 40% of consumers say they have either stopped eating red meat or have cut down due to environmental concerns. Yet with EU red meat consumption levels still well above the recommended intake for optimal human and planetary health, more efforts will have to be made to foster behavioural change. This is particularly the case among those consumers (over 1 in 3) currently unwilling to eat less red meat.

# 06

Whilst they have little appetite for insects and cultured meat, consumers are more likely to consider plant-based 'burgers' (if made without GMOs) and traditional vegetarian foods (e.g. pulses) as alternative sources of protein.

O7 Over one third of consumers (38.9%) would support regulations obliging farmers and food producers to meet more stringent sustainability standards. Even more (53%) agree that farmers should be given incentives (e.g. through subsidies) to produce food more sustainably.

08

Most consumers (57%) want sustainability information to be compulsory on food labels. However, the idea of taxing less sustainable food is not very popular with consumers (only 1 in 4 agree that less sustainable food should be taxed more).

# 09

Finally, **consumers expect their governments to take leadership** in promoting sustainable food production and consumption. They also want **the EU to stick to its current level of ambition on food sustainability**, regardless of whether or not other countries around the world are doing the same.

<sup>1</sup> Austria (Arbeiterkammer), Belgium (Test Achats/Test Aankoop), Germany (vzbv), Greece (Ekpizo, KEPKA), Italy (Altroconsumo), Lithuania (Lietuvos vartotojų organizacijų aljansas), Netherlands (Consumentenbond), Portugal (DECO), Slovakia (Spoločnosti ochrany spotrebiteľov), Slovenia (Zveza Potrošnikov Slovenije), Spain (OCU).

## **BEUC recommendations**

Our survey shows some encouraging trends regarding consumer willingness to adopt more sustainable food habits (albeit these trends are not commensurate with the shift that experts say is needed). The survey also highlights important barriers to change that need to be addressed to support sustainable food choices by consumers.

Considering all of these findings, the following recommendations should be considered during the policy debate around making the EU food system more sustainable:

# 01

Public awareness about the environmental impact of food production and consumption - especially when it comes to people's own food choices - is insufficient and **must be increased.** 

## 02

independent advice Clear. from public authorities through dietary guidelines that take both nutrition and sustainability into account is needed. This would help consumers who want to make more sustainable food choices turn their intentions into actions.

# 03

It must be made easier for consumers to identify the sustainable choice via improved information on food labels. This would also include clamping down on greenwashing and misleading sustainability claims.

# 04

Consumers must be encouraged and supported in adopting diets that are more plant-based, as cutting down on red meat is crucial for lowering the foodrelated footprint. Focussing on positive messaging that encourages consumers to eat more plant-based foods rather than less meat; providing consumers with attractive alternative protein sources; and offering a wider range of meat-free options in the food catering and hospitality sector can all help in this respect.

# 05

Food prices must be fair in order to protect people and the planet, and they must send the right signal to consumers to foster behaviour change. At the same time, it is vital to ensure that all consumers can afford a healthy and sustainable diet. This may become even more of a challenge in the aftermath of COVID-19.

## 06

A focus on consumer choice and individual responsibility alone will not be sufficient to bring about the significant changes in food habits that are required. We need action at various levels (regulation, food production, retail, etc.) to change the food environment (i.e. all factors that shape consumer choices, such as pricing, availability and marketing) in a way that makes it easy for consumers to adopt healthy and sustainable diets.

## WHAT ABOUT COVID-19?

COVID-19 has caused significant disruption to the EU food system, shaking supply and demand, and it may have a knock-on effect on food availability and prices down the road.

Had our survey been conducted after the outbreak of COVID-19, it is possible that some of the findings might have been different (e.g. food availability and affordability might have been more prominently associated with 'sustainable' by consumers).

But the health crisis has also brought about rapid change in consumer food habits, with more home cooking, greater attention to food waste, and a growing demand for food from short local chains. Although only time will tell if these trends will last, policymakers should seek to capitalise on them where they can contribute to greater food sustainability. 5

# **CONTEXT AND OBJECTIVES**

Food production uses up significant amounts of water and energy, emits pollutants into the air, water and soil, and is responsible for approximately 11.3% of EU greenhouse gas (GHG) emissions.<sup>2</sup> The EU's food system is driving environmental degradation and biodiversity loss, whilst failing to secure decent livelihoods for farmers and contributing to unhealthy diets and food waste.<sup>3</sup> There is no doubt that Europeans cannot continue to produce and consume food unsustainably if we are to keep global warming under control.<sup>4</sup>

As consumers become more aware of the challenges facing the food system, a growing number of them are paying attention to how food is produced, where it comes from and whether it is good for their health and the planet. There is a perceptible, albeit small, change in European consumers' food habits; for example red meat consumption is slightly falling in the EU whilst demand for organic food is rising.<sup>5</sup> Yet this degree of change is nowhere near enough to keep food consumption in the EU within planetary boundaries.

Through their food purchases,

consumers have the potential to drive the transition by steering food systems towards better outcomes. In cooperation with 12 of its member organisations, BEUC launched a survey among in 11 consumers European countries<sup>6</sup> to better understand attitudes towards sustainable food and the extent to which consumers realise the impact that their food choices have on the environment. We also investigated the obstacles faced by consumers in adopting more sustainable food habits, and the measures they think are needed to make the sustainable choice easier.7

On 20<sup>th</sup> May, the European Commission unveiled its 'Farm to Fork' strategy for making the EU food system more sustainable. Insights from this survey will allow us to contribute to the implementation of the EU strategy to ensure it meets consumer needs and expectations.

In this report, after introducing the survey methodology we will present our key findings and put forward some recommendations for ensuring that future policy actions to make the EU food system more sustainable address the needs and expectations of consumers. Detailed results per country are available in a subsequent section.

The survey was conducted in the autumn of 2019, hence before the COVID-19 outbreak. It is difficult to ascertain the extent to which responses to the questionnaire would have been different had the survey been carried out after the COVID-19 crisis. Nevertheless, where relevant. the report's recommendations discuss the potential impact that the COVID-19 pandemic might have on consumers' attitudes, needs and expectations in relation to sustainable food.

<sup>&</sup>lt;sup>2</sup> European Commission, Reflection Paper, *Towards a Sustainable Europe by 2030*, 2019.

 <sup>&</sup>lt;sup>4</sup> The <u>special report</u> on climate change and land by the UN Intergovernmental Panel on Climate Change (IPCC) describes dietary changes as a major opportunity for mitigating and adapting to climate change.

<sup>&</sup>lt;sup>5</sup> European Commission, DG Agriculture and Rural Development, EU agricultural outlook for markets and income 2019-2030, 2019.

<sup>&</sup>lt;sup>6</sup> Austria, Belgium, Germany, Greece, Italy, Lithuania, the Netherlands, Portugal, Slovakia, Slovenia and Spain. <sup>7</sup> The health dimension of food choices is not addressed in this report. To make the healthy choice easier for consumers, BEUC advocates, among other measures, mandatory front-of-pack nutritional labelling.

# **METHODOLOGY**

The survey was conducted simultaneously across 11 EU countries (Austria, Belgium, Germany, Greece, Italy, Lithuania, the Netherlands, Portugal, Slovakia, Slovenia and Spain) throughout October and November 2019. The data, which was collected via a market research company via an online questionnaire, was analysed by Belgian consumer organisation Test Achats/Test Aankoop. The questionnaire, comprising 10 questions (see <u>Annex</u>), was administered to panels of slightly over 1,000 respondents per country who were selected based on pre-defined quotas for age, gender and geographical region (according to the distribution of the national general population). Samples were then weighed for age, gender, educational level and region in order to be representative of the countries' national populations.



# FINDINGS AND RECOMMENDATIONS

In this section, we will present the survey findings and put them into perspective with additional data and evidence in order to derive recommendations for policymakers.

**Consumers tend to underestimate the environmental impact of their own eating habits.** They are more likely to correctly evaluate the impact of food habits in general, especially compared to other activities such as car use.

On average, only slightly over 10% of those surveyed agree that what they eat has a negative impact on the environment, whereas 63.6% disagree (ranging from 54.6% in Belgium to 71.2% in Greece). But concerning the relative environmental impact of food habits compared to car use, half of respondents (47.9%) think that food habits have at least as big an impact as car use. According to the European Commission,<sup>8</sup> food consumption is in fact the main driver of negative environmental impacts generated by households in the EU, followed by housing (especially space heating) and mobility (particularly the use of private cars).

Food consumption is an important contributor to environmental impacts including acidification, eutrophication (excessive algae growth), ecotoxicity, water and land use, ozone depletion and climate change.

## **BEUC RECOMMENDATIONS:**

There is a need to **foster greater public awareness** about the impact that food habits, including one's own food choices, have on the environment.

- Diversified and innovative ways to raise awareness should be explored, such as dedicated school curricula, information sessions at the workplace, websites, and apps that allow users to calculate the environmental impacts of their lifestyles (including food habits).<sup>9</sup>
- **Consumer organisations can also play a key role** in raising awareness about the impact of consumption choices including eating habits on the environment. With capacity building programmes and adequate support (also financial), those with more limited resources could further develop their activities in this area.

<sup>&</sup>lt;sup>8</sup> European Commission Joint Research Centre, Indicators and assessment of the environmental impact of EU consumption, 2019.

<sup>&</sup>lt;sup>9</sup> Such as this test developed by the Finnish Innovation Fund Sitra: <u>https://lifestyletest.sitra.fi/</u>

Consumers are also unsure about how the EU fares in comparison with other countries regarding the environmental impact of food production and consumption. As many respondents believe that the EU does better than China or the USA (32.9%) as those who think that it does not (33.5%).

For many environmental impact categories, the EU Commission report found that per capita

results in the EU are higher than the impacts of an average world citizen (food being the main driver of the environmental impacts generated by the average EU citizen). A big chunk of the EU's food-related environmental impacts is 'embodied' in the agricultural and food products it imports from third countries. Whether consumers know about this 'trade footprint'<sup>10</sup> – which is admittedly difficult to assess – seems unlikely.

## **BEUC RECOMMENDATIONS:**

- Consumer awareness of today's food supply chains needs to be increased in order to correct misconceptions about the real environmental impact of food production and consumption in the EU. Ignoring the share of this impact 'embodied' in agricultural products that are imported into the EU (e.g. feed for livestock raised in the EU) can lead consumers to overestimate the environmental friendliness of EU food production.
- Food businesses should better inform consumers about production methods and the origin of raw materials. Marketing practices that perpetuate an erroneously romantic vision of agriculture and food production run counter to the objective of fostering greater consumer awareness around the impact of individual food choices.

Most consumers say they pay some attention (47%) or a lot of attention (17.3%) to the environmental impact of their food choices. Consumers in Italy, Spain, Portugal, Greece and Slovenia are more likely to state that they pay attention to the environmental impact of their food choices than those in Belgium, Germany, Lithuania, the Netherlands and Slovakia.

Remarkably, the latest Eurobarometer poll on Europeans and the environment found that

'changing diet to more sustainable food'<sup>11</sup> came at the bottom of the list of actions European citizens say they have undertaken to tackle environmental issues. In fact, only a fifth of respondents (19%) declared that they have actually changed their diets to incorporate more sustainable food. This might mean that although many consumers claim to pay attention to the impact of their food choices on the environment, few really act upon it.

### **BEUC RECOMMENDATION:**

• To 'activate' consumers, it is essential to identify and address the barriers, real or perceived, that prevent them from turning their intentions to buy sustainably into deeds.

<sup>&</sup>lt;sup>10</sup> European Commission Joint Research Centre, <u>Indicators and assessment of the environmental impact of EU consumption</u>, 2019. The report describes the EU's 'trade footprint'. Products with limited supply chains are the main contributors to the impacts induced by imports: agricultural and food products (in particular meat products) and food-related services have significant impacts on acidification, terrestrial eutrophication, freshwater eutrophication, marine eutrophication, land use and water use in third countries.

<sup>&</sup>lt;sup>11</sup> European Commission, Special Eurobarometer 501 <u>Attitudes of European citizens towards the environment</u>, 2020.

Consumers most spontaneously associate "sustainable food" with "low environmental impact" (48.6%), "use of GMOs and pesticides to be avoided" (42.6%) and "local supply chains" (34.4%). Responses are consistent across countries, with some specificities. Close to a third of respondents from Belgium and the Netherlands associate "sustainable food" with a "fair revenue for farmers". This greater awareness of the situation of farmers by Belgian and Dutch consumers may be due to the societal context and the farmers' protests that took place in the Netherlands in the autumn of 2019 (when the survey was conducted). Slovak consumers, for their part, appear to be primarily concerned about "food availability and affordability". Consumers in Portugal, Greece and Lithuania also associate "sustainable food" with "minimally processed, traditional".

The survey shows that the **environmental/** ecological dimension is what most spontaneously comes to consumers' minds when they think of "sustainable food". A majority of them cite "low environmental impact", "use of pesticides/GMOs to be avoided" and "local supply chains" (rightly or wrongly, it is the general perception that locally produced food has a lower environmental impact).<sup>12</sup> By no means can it be deduced that consumers give little consideration to other elements of sustainability (e.g. health, animal welfare), but they less spontaneously associate these aspects with the term 'sustainability'.

The survey was carried out before the COVID-19 outbreak, which in the meantime has led many consumers to worry about food supplies for themselves and their families. It is possible that, had the same question been asked after the outbreak of the crisis, more consumers might have associated "food sustainability" with "food availability and affordability" (i.e. food security).

It is also likely that even **more consumers might have associated "food sustainability" with "local supply chains"**. Due to the lockdowns and movement restrictions, many consumers across Europe have turned to their local farmers and food shops to purchase food.<sup>13</sup> A Swiss study exploring consumer behaviour during COVID-19 times has shown a clear trend towards the increased purchase of regional and Swiss products. This trend is set to continue, with many Swiss consumers saying they intend to pay more attention to the regionality of products in the future, as well as to shop in their neighbourhoods or directly from farms.<sup>14</sup>

### **BEUC RECOMMENDATIONS:**

- Consumers may benefit from a clear, understandable definition of what 'sustainability' means in relation to food.
- Knowing what consumers most spontaneously associate with 'sustainable food' provides useful
  insights into what they may infer from a 'sustainable food' label, which would come without clear
  indications of what it exactly covers and means. Any 'sustainable food' label that might be developed
  in the future will have to be transparent on the underpinning criteria including any potential
  trade-offs to avoid confusing consumers or creating expectations that cannot be met.
- A series of distinct indicators corresponding to various components of sustainability might be preferable to a synthetic label/logo that aggregates different sustainability attributes.

<sup>12</sup> European Parliament Research Service, Briefing: Short food supply chains and local food systems in the EU, 2016.

<sup>13</sup> N. Foote, <u>'Innovation spurred by COVID-19 crisis highlights</u> 'potential of small-scale farmers', Euractiv, 2 April 2020, accessed 10 May 2020.

<sup>&</sup>lt;sup>14</sup> M. Zbinden, D. Georgi, <u>Macht Corona die Bevölkerung nachhaltiger? Das Konsumentenverhalten vor, ährend und «nach» Corona</u>, Hochschule Luzern, wwApril 2020.

On average, over half of consumers say that sustainability concerns have some influence (42.6%) or a lot of influence (16.6%) on their eating habits.

Consumers in Italy, Portugal, Spain, Austria and Slovenia are more likely to say that their eating habits are influenced by sustainability concerns compared to those in Belgium, the Netherlands Lithuania. and Slovakia.

Price, lack of knowledge, and the challenge of identifying sustainable food options as well as their limited availability are the main perceived barriers to sustainable eating. Price ranks first in all countries except Greece and Lithuania, where a lack of knowledge is perceived as the main barrier. In Belgium, Lithuania and the Netherlands, resistance to change and indifference to sustainability concerns also appear to be important limiting factors in the adoption of more sustainable eating habits.

Affordability of food is likely to become more of an issue for many consumers given the expected economic impact of the COVID-19 crisis. It is therefore vital to ensure that the sustainable food choice is not the most expensive one (and that it is not perceived in that way).

## **BEUC RECOMMENDATIONS:**

- There needs to be greater consumer awareness about the fact that eating sustainably does not necessarily have to cost more. If it goes hand in hand with dietary changes (including reducing meat consumption and shifting to tap instead of bottled water) and/or with shorter supply chains (e.g. buying food directly from the farm), sustainable food can be affordable to all.<sup>15</sup> Public awareness campaigns could help to clear the misconception that eating sustainably is reserved for a select few.
- Food prices should send the right signal to consumers: the sustainable food choice should not be the most expensive one. To move towards true cost accounting for food, the European Commission should develop a methodology for quantifying the externalities associated with food production in economic terms (such as environmental, societal, and health-related costs).

about how to eat more sustainably. They are confronted with inconsistent and at times conflicting messages about whether certain

Many consumers feel they lack information food is (or is not) sustainable. Because sustainability has multiple dimensions that could potentially lead to trade-offs,<sup>16</sup> consumers can easily feel discouraged when trying to shop sustainably.

### **BEUC RECOMMENDATION:**

Clear, independent advice from public authorities through dietary guidelines that take both nutrition and sustainability into account would help consumers who want to make more sustainable food choices turn their intentions into actions.

<sup>15</sup> Fédération Romande des Consommateurs, '<u>Manger durable est à la portée de tous</u>', 2017.

<sup>&</sup>lt;sup>16</sup> Test-Achats, Alimentation bio, Test-Achats 597, May 2015.

Faced with a label jungle, consumers can of availability of such options (both real and have a hard time identifying the genuinely perceived) is also an issue for many shoppers. sustainable options at the store. The lack

## **BEUC RECOMMENDATIONS:**

- As is already the case for health-related marketing messages, food manufacturers should have to substantiate their claims related to the environmental impact and sustainability of products. This would help to abolish bogus sustainability claims about food products, whilst giving more visibility to trustworthy labels (e.g. organic, fair trade, etc.).
- **Consumer organisations can play a key role in appraising and comparing labels** and in providing consumers with information about which ones to trust.
- Information about the origin of food should be more widespread. In particular, indication of the origin of milk, as well as meat and milk used as ingredients in processed foods, should be compulsory.
- Information about production methods, transport modes and so forth should also be available to consumers, as well as to interested organisations (such as consumer organisations) willing to develop apps that could help make the information meaningful for and usable by consumers.
- Retailers should be encouraged to provide a **larger and more recognisable range of sustainable food options** (e.g. seasonal fruit and vegetables and sustainably sourced fish).

Two thirds (66.7%) of consumers say that they are open to changing their eating habits that harm the environment. Male respondents tend to be more reluctant to alter their eating habits than women. Concretely:

- Most consumers (59.5%) are willing to buy mainly seasonal fruit and vegetables. The willingness to waste less food at home is also widespread (65.5%).
- Only one in five consumers say they are willing to spend more money on sustainable food. The situation varies across countries; whilst only 12.4% of Belgian consumers are willing to spend more on sustainable food, close to a third of Italians are willing to do so.
- Spending more money on food so that farmers can get a fairer revenue for their work scores slightly better (29.4%).

- An average of only **1 in 3 consumers say they are willing to cut down on red meat** consumption. Italy is an exception, with more respondents (45.1%) willing to cut down on red meat than not (26%).
- Cutting back on dairy appears to be even more of a challenge for consumers. As many as 56.2% of respondents across the 11 countries state that they are not willing to cut down on dairy (only 20.4% are willing to do so).
- . At when asked the same time. about their **willingness** to eat more vegetables/plant-based foods, most consumers (44.9%)positively. reply

Even where consumer support for certain changes is high (e.g. eating more seasonal produce and wasting less food at home), evidence shows that it is difficult for these changes to materialise (e.g. household food waste in the EU remains high<sup>17</sup>, although there are signs of improvement in some countries).<sup>18</sup>

<sup>&</sup>lt;sup>17</sup> Households generate more than half of total food waste in the EU (47 million tonnes).

<sup>&</sup>lt;sup>18</sup> Voedingscentrum, <u>Nederland op koers in strijd tegen voedselverspilling</u>, accessed 10 May 2020.

## **BEUC RECOMMENDATIONS:**

- Consumer choices are shaped by the food environment, including marketing and advertising, promotional offers, food availability and price, the spatial layout in supermarkets, etc. There is strong evidence that a focus on consumer choice and individual responsibility alone is likely to be insufficient in achieving the necessary changes in food habits.<sup>19</sup> Action is needed at various levels (regulation, food production, retail) to change the food environment in a way that makes it easy for consumers to adopt sustainable food habits.
- In parallel, consumers must be provided with more practical tools and solutions to help them turn their intentions into practice. These include for instance improved storage instructions for food products, clearer date marking, meal planning apps to cut food waste at home, greater availability of seasonal fruit and vegetables, suggestions for easy recipes, etc.

Concerns around food affordability make it difficult for consumers to accept paying more for food that is produced more sustainably, or for which farmers get better prices. Yet in practice, many people are already doing so. A study published earlier this year in Germany found that a majority of consumers are now putting quality before price, and that they expect supermarkets to offer an attractive range of ecologically sustainable products (at affordable prices).<sup>20</sup> The success of the 'C'est qui le patron?' brand in France,<sup>21</sup> which guarantees a decent revenue for farmers, also illustrates this shift in consumer attitudes.

## **BEUC RECOMMENDATIONS:**

- Food affordability is set to remain a key concern for many consumers, even more so in the aftermath of the COVID-19 crisis. Ensuring that sustainable diets are affordable to all is therefore paramount.
- Success stories show that when products can demonstrate strong social and/or environmental credentials, more consumers are willing to pay a premium for them.
- Greater transparency around price formation and transmission in the food chain may foster a better share of the value added across various food chain actors.



<sup>&</sup>lt;sup>19</sup> Science Advice for Policy by European Academies (SAPEA), <u>A sustainable food system for the European Union</u>, Evidence Review Report No. 7, April 2020.

<sup>&</sup>lt;sup>20</sup> '<u>Supermärkte hängen Discounter ab</u>', *Tagesschau*, 4 February 2020, accessed 10 May 2020.

<sup>&</sup>lt;sup>21</sup> See <u>https://lamarqueduconsommateur.com/</u>

A reduction in the consumption of animal-based foods – and especially meat – is one of the changes that needs to happen. The Intergovernmental Panel on Climate Change (IPCC) described plantbased diets as a major opportunity for mitigating and adapting to climate change.<sup>22</sup> One of the experts involved in this report said that "it would indeed be beneficial, for both climate and human health, if people in many rich countries consumed less meat".<sup>23</sup> Shifting to more plant-based diets is also desirable from a public health perspective.<sup>24</sup>

### **BEUC RECOMMENDATIONS:**

- While many consumers are highly reluctant to cut back on animal-based foods, their willingness to eat more vegetables/plant-based foodstuffs is more encouraging. Focussing on positive messaging to encourage consumers to eat more plant-based foodstuffs might be more effective than exhorting them to eat less meat and dairy.
- Considering the influence of gender on food choices, tailoring messages and interventions to different population groups might also be necessary.

An average of 41.6% of consumers say they have either stopped (6.2%) or reduced (35.4%) their red meat consumption due to environmental concerns. If consumers believe

that they have already sufficiently lowered their consumption levels, this might partly explain why few of them state their willingness to (further) cut down on red meat. A fifth of respondents have not yet cut down on red meat but say that they intend to do so (16.4% want to reduce their red meat intake, while 3.5% want to stop eating red meat altogether). A third have not lowered their red meat consumption and do not intend to do so. A total of 4.6% of those surveyed across the 11 countries identify themselves as vegetarian or vegan.

Consumers in Lithuania, Greece, Slovakia and Slovenia are the most reluctant to cut back on red meat, while consumers in Italy, Portugal, Austria and Spain are the most willing to do so.

While there is some degree of uncertainty around the actual amount of meat, including red meat,

### consumed in the EU and its Member States, there is no doubt that current consumption levels exceed the quantities recommended for good human and planetary health.

Consumption data at the consumer level is not readily available. Yet food supply data published by the Food and Agriculture Organization (FAO) can be used as a proxy, keeping in mind however that it overestimates real consumption by individuals.<sup>25</sup> According to the FAO, the 'apparent' red meat consumption in the EU ranges from 35.3 kilograms per person per year in Bulgaria up to 68.3 kilograms per person per year in Spain.<sup>26</sup> The average EU consumption amounts to 57.6 kilograms per person per year. The apparent annual red meat consumption level per capita is below the EU average in Bulgaria (35.3 kilos), Slovakia (43.5), Belgium (51.3), Slovenia (51.6), Lithuania (52.6), Greece (54.2)<sup>27</sup> and the Netherlands (54.2). It is above the EU average in Italy (60.2 kilos), Portugal (62.1), Germany (66.2), Austria (67.9) and Spain (68.3).

More refined consumption data is available for some countries. The Belgian national food

<sup>&</sup>lt;sup>22</sup> IPCC Special Report on Climate Change and Land, Summary for policymakers, pg. 24, 2019.

<sup>&</sup>lt;sup>23</sup> Q. Schiermeier, '<u>Eat less meat: UN climate-change report calls for change to human diet</u>', Nature, 8 August 2019, accessed 10 May 2020.

<sup>&</sup>lt;sup>24</sup> FAO and WHO, <u>Sustainable healthy diets – guiding principles</u>, Rome, 2019.

<sup>&</sup>lt;sup>25</sup> Per capita food supply data represents only the average supply available for the population as a whole and does not necessarily indicate what is actually consumed by individuals, as there could be considerable variation in both levels and patterns of consumption between individuals. Supply data overestimates the real consumption as it includes food that is wasted, unsold or uneaten at retail and household levels. For meat, FAO supply data is based on 'dressed carcass weight', which also includes bones.

<sup>&</sup>lt;sup>26</sup> Bovine meat, mutton & ovine meat and pig meat. Data for the year 2017 (see <u>FAOSTAT</u>).

<sup>&</sup>lt;sup>27</sup> Red meat intake level in Greece used to be higher before the economic crisis.

consumption survey assessed the (total) average meat consumption at 111 grams per person per day<sup>28</sup> (i.e. 40.5 kilograms per person per year for all meat types) in 2014-2015. In Italy, a study<sup>29</sup> found an annual per capita intake of red and processed meat of 24 kilos. In the Netherlands, it has been estimated that consumers eat on average 76 grams of red meat per day (i.e. 27.8 kilograms per person per year).<sup>30</sup>

According to the World Health Organization, a healthy diet is "limited in meat (if eaten), especially red meat and processed meat products".<sup>31</sup> The World Cancer Research Fund recommends eating no more than about three portions of red meat per week (equivalent to about 350–500 grams per week, i.e. 18.2-26 kilos per year).<sup>32</sup>

Several countries have also issued advice to their populations regarding red meat consumption. In Italy for instance, consumers are advised to eat no more than one portion of red meat (100 grams) per week and to consume processed meat only occasionally.<sup>33</sup> In Belgium, the latest food-based dietary guidelines recommend limiting weekly red meat intake to 175 grams, and in any case no more than 300 grams (i.e. between 9.1 and 15.6 kilos annually).<sup>34</sup> The Dutch 'Wheel of Five' also advises consumers to eat no more than 300 grams of red meat per week to limit the risk of colon cancer, stroke and type 2 diabetes.<sup>35</sup> In Greece, the latest national dietary guidelines (2014) recommend that the general adult population should eat no more than 120-150 grams of red meat per week.<sup>36</sup>

**Current red meat consumption levels are also not in line with sustainability goals.** According to the 'planetary healthy diet' developed by the EAT-Lancet Commission,<sup>37</sup> a diet that delivers on both nutrition and environmental sustainability should include an average of 14 grams of red meat per day (and no more than 28 grams per day), i.e. 5.1 kilos per year (and no more than 10.2 kilos per year).

### **BEUC RECOMMENDATIONS:**

- Public health authorities should greatly increase their communication towards the public about recommendations for healthy diets. This should be done in very practical and concrete terms, so that consumers can better assess the extent to which their own dietary habits deviate (or not) from the recommendations.
- For those consumers for whom the recommendation to cut down on red meat due to environmental concerns does not resonate sufficiently, making the case for reducing red meat consumption for health or animal welfare reasons might be more effective. A study by the Dutch consumer organisation Consumentenbond found that animal welfare and their own health were the most important drivers for Dutch consumers to eat less meat – whereas environmental concerns ranked third.<sup>38</sup>
- The COVID-19 crisis has shown that a large proportion of overall meat consumption does not take place at home. Demand for meat, especially red meat, has plummeted with closures of restaurants and food service businesses.<sup>39</sup> The food hospitality and catering sector can greatly contribute to the goal of reducing meat consumption – particularly red meat – by providing consumers with a wider range of meat-free options.

<sup>38</sup> Consumentenbond. <u>Onderzoek alternatieven voor vlees</u>. <u>Nieuwe eiwitten op je bord</u>, 2016.

<sup>&</sup>lt;sup>28</sup> T. Lebacq, Viande, poisson, œufs et substituts. In Bel S., Tafforeau J. (éd.), Belgian national food consumption survey 2014-2015. Rapport 4. WIV-ISP, Brussels, 2016.

<sup>&</sup>lt;sup>29</sup> V. Russo, A. De Angelis and P.P. Danieli, Consumo reale di carne e di pesce in Italia, 2017.

<sup>&</sup>lt;sup>30</sup> National Institute for Public Health and the Environment, <u>Wat eet Nederland: Vlees</u>, accessed 10 May 2020.

<sup>&</sup>lt;sup>31</sup> WHO, <u>A healthy diet sustainably produced</u>, information sheet, 2018.

<sup>&</sup>lt;sup>32</sup> World Cancer Research Fund, *Limit red and processed meat*, accessed 10 May 2020.

<sup>&</sup>lt;sup>33</sup> Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria, *Linee guida per una sana alimentazione 2018*.

<sup>&</sup>lt;sup>34</sup> Superior Health Council, *Dietary guidelines for the Belgian adult population*, 2019.

<sup>&</sup>lt;sup>35</sup> Voedingscentrum, <u>Schijf van Vijf-vak: vis, peulvruchten, vlees, ei, noten en zuivel</u>, accessed 10 May 2020.

<sup>&</sup>lt;sup>36</sup> Greek Ministry of Health. <u>National Nutrition Guide for Adults</u>, 2014.

<sup>&</sup>lt;sup>37</sup> EAT-Lancet Commission, Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems, 2019.

<sup>&</sup>lt;sup>39</sup> F. McNulty, <u>'McDonald's closure to have big impact on beef sector</u>, RTE, 23 March 2020, accessed 10 May 2020.

Consumers have little appetite for innovative or high-tech options for replacing red meat, such as insects and cultured ('lab-grown') meat. On average, as few as 10.3% of consumers would be willing to replace meat with insects. Respondents are slightly more open to lab-grown meat (13.4% would be willing to replace meat with its cultured counterpart).

Plant-based meat alternatives (such as plantbased burgers) find greater acceptance among consumers, **provided they are not made from ingredients derived from GMOs.** A third of consumers on average say they would be willing to replace meat with non-GMO plant-based alternatives. But acceptance drops to 13.6% if the plant-based meat alternatives contain ingredients derived from GMOs.

**Consumers find traditional vegetarian foods the most attractive alternative sources of proteins.** A total of 60.3% would be willing to replace meat with meat-free options such as vegetable stews, dishes containing pulses, etc. The 'planetary healthy diet' from the EAT-Lancet Commission also recommends increasing the production and consumption of pulses (e.g. beans, lentils, and peas).

## **BEUC RECOMMENDATIONS:**

- A range of attractive, affordable and convenient alternative sources of proteins must be available to consumers if they are to cut down on meat consumption (especially red meat).
- Whilst there is a lot of hype around innovative products such as insects, lab-grown meat and algae many of which are not yet even on the EU market consumers seem to have little appetite for these 'high-tech' solutions. As other alternative protein sources such as pulses (beans, peas and lentils) are likely to have better consumer acceptance, their production and increased consumption should be fostered.
- **EU consumers' acceptance of GMOs remains low**. It remains to be seen whether plant-based meat alternatives that contain GMO ingredients can be successful on the EU market.
- The healthiness of alternative sources of protein also needs to be considered. Tests by consumer organisations, such as the Consumentenbond in the Netherlands<sup>40</sup> or the Fédération romande des consommateurs in Switzerland,<sup>41</sup> have shown that salt levels in some meat substitutes can be high.

Most consumers (42.4%) believe that the use of 'meaty' names (e.g. veggie 'burgers' or 'sausages') should be permitted provided the products are clearly labelled as vegetarian/vegan. Only 1 in 5 consumers think the use of 'meaty' names should never be allowed on vegetarian/vegan products (whilst 1 in 4 do not see any problem at all with using such names, irrespective of whether the products are labelled as vegetarian/vegan or not).

### **BEUC RECOMMENDATIONS:**

• The attractiveness of alternative protein sources also depends on them being easily identifiable by consumers – including how to integrate them in a meal. The denomination of vegetarian/vegan products should neither mislead consumers nor discourage them from buying these products.

<sup>&</sup>lt;sup>40</sup> Consumentenbond, <u>'Hoe gezond zijn vleesvervangers?'</u>, 2019, accessed 10 May 2020.

<sup>&</sup>lt;sup>41</sup> Fédération romande des consommateurs, <u>'Galette végétarienne : ceci n'est pas un steak'</u>, frc mieux choisir 109, June 2018.

• The use of 'meaty' names on plant-based products makes it easier for consumers to know how to integrate these products within a meal, and as such should not be banned. However, it should be ensured that consumers can clearly identify these products as vegetarian/vegan and that they are not misled about their nutritional quality (e.g. that they are not necessarily healthier than meat). A harmonised approach to the labelling of these products should be found at EU level.

On the production side, to make sustainable food choices easier, most consumers (38.9%) would support regulations obliging farmers and food producers to meet more stringent sustainability standards. Respondents in Italy (54.5%) and Portugal (49%) are those most in favour of stricter rules. Dutch respondents are the least supportive: 41.7% disagree that stricter environmental regulations should be imposed on farmers and food producers (although this could be interpreted in the light of the farmers' protests that were taking place at the time the survey was conducted).

Most consumers (53%) agree that farmers should be given incentives (e.g. through subsidies) to produce food more sustainably. Consumers in Italy (62.3%), Portugal (60.9%), Slovenia (63.4%) and Greece (60.6%) are those most in favour of subsidies for farmers for sustainable production. In contrast, Belgian (42.3%) and Dutch (37%) respondents are those most opposed.

One in two consumers want the EU to stick to its level of ambition on sustainable food production even if other world players such as China and the USA lag behind (only 1 in 5 would rather not see the EU be more proactive on sustainable food production). On the consumption side, most consumers (53.9%) say they do not want someone to tell them or decide for them what they should or should not eat. 1 in 4, however, would not be against.

45.6% of consumers (up to 58.6% in Lithuania) disagree that unsustainable food products (e.g. strawberries in winter) should be pulled from the shelves. Still, 27.8% (up to 40.8% in Italy) would agree with a more limited choice if it meant that the least sustainable options disappeared.

Most consumers (57%) want sustainability information to be compulsory on food labels (only 18.5% do not).

Taxing food that is less sustainable is not very popular with consumers. On average, only 1 in 4 (up to 38.2% in Italy) agree that less sustainable food should be taxed more, making it more expensive for the consumer. Half of respondents disagree (up to 62.3% in Lithuania).

Finally, most consumers find that their governments are not doing enough to encourage/ promote food sustainability. On average, only 15.9% are happy with their government's action to promote sustainable food. Slovenia is an exception, with 48.7% of Slovenian respondents saying that their government is doing enough to encourage/ promote food sustainability.

### **BEUC RECOMMENDATIONS:**

 The 'yellow vests' protests in France have shown the need to consider public acceptance in designing measures to tackle the climate crisis. A mix of interventions, both hard and soft and some likely better accepted than others,<sup>42</sup> will be needed to make the EU food system more sustainable.

<sup>42</sup> Science Advice for Policy by European Academies (SAPEA), <u>A sustainable food system for the European Union, Evidence Review Report No. 7</u>, April 2020.

- Although unpopular measures (e.g. taxes) may need to be discarded or amended, they may also need to be explained so that they are better understood, or 'bundled' with other measures to mitigate their impact and increase their acceptability.<sup>43</sup>
- Information about the sustainability of various food options must be improved to enable consumers to make more informed choices. Lessons can be learned from developments in the area of nutrition labelling. The information should be easily understandable, without being patronising, and must be usable by consumers. Any EU system for the sustainability labelling of food should be developed based on solid, independent and transparent scientific evidence, and must be free from commercial interests. Attention should be paid to making such a system accessible and affordable to all producers, big and small (e.g. costly certification schemes and complex sustainability indicators may deter smaller producers from using the labelling system).
- Yet the shift to a more sustainable food system cannot rely solely on individual choices by consumers. The food offer itself must become more sustainable, through an adequate mix of incentives and stricter regulations. The EU Common Agricultural Policy, in particular, must be reorientated to promote more sustainable food production. All forms of agricultural subsidies and promotion policies should be better aligned with recommendations for healthy and sustainable diets.
- Consumers expect the EU to continue to lead on sustainability, regardless of whether other world players are doing the same. On the other hand, it would be unfair to put EU producers at a competitive disadvantage when the EU continues to import foodstuffs that do not meet its standards for environmental protection, animal welfare and so forth. The EU trade policy needs to be an enabler, and should not create obstacles to the EU's journey towards food sustainability. Food that is imported into the EU should therefore comply with all of our regulations.
- Consumers expect governments to take leadership roles in promoting sustainable food production and consumption. At EU level, the same is expected from the European Commission, which should come forward with an integrated food policy to ensure greater coherence between the various EU policies (agriculture, health, environment, trade, etc.) that affect food production and consumption.



<sup>43</sup> L.P. Fesenfeld et al., *Policy packaging can make food system transformation feasible*, Nature Food volume 1, 2020, p. 173–182.

# DETAILED RESULTS OF THE SURVEY

Food habits and the environment

A first set of questions (Q1 - Q2) aimed at assessing the extent to which consumers correctly evaluate the impact of food habits (including their own) on the environment, and whether or not this affects their food choices.

A clear majority of respondents appear to underestimate the environmental impact of their personal food habits, with most of them disagreeing with the statement "My food habits negatively affect the environment" (see Figure 1: 63.6% on average, ranging from 54.6% in Belgium up

to 71.2% in Greece). Only slightly over 10% of those surveyed agree that what they eat has a negative impact on the environment (ranging from 8.7% in Italy and Germany up to 14.6% in Austria).



Figure 1: Q1a - Level of agreement with the statement: 'My food habits negatively affect the environment' [Base: all respondents]<sup>44</sup>

<sup>&</sup>lt;sup>44</sup> For Q1, Q6 and Q10, respondents were presented with a series of statements and were asked to express their level of agreement/disagreement for each of them using a scale from 1 (strongly disagree) to 10 (strongly agree). The following recoding was used:

<sup>-</sup> For Belgium, Italy, Austria, Germany, Lithuania and the Netherlands: 1-5 disagree/6-7 undecided (i.e. neither agree nor disagree)/8-10 agree.

<sup>-</sup> For Portugal, Spain, Greece, Slovakia, Slovenia: 1-4 disagree/5-7 undecided/8-10 agree.

On the other hand, when asked about the environmental impact of food consumption habits in general compared to the impact of other types of activities, consumers are more likely to recognise that what we eat is no less harmful to the environment than for example car use (Figure 2).

On average, close to half of respondents (47.9%) disagree with the statement: "When compared to car use, food habits have only little impact on the

environment". Another fifth (19.2%) is undecided. Still, a quarter of those surveyed (25.8%) believe that car use has a bigger impact on the environment than do food habits. Austrians (59.3%), Germans (54.3%) and Greeks (53.9%) are more likely to correctly assess the impact of food consumption habits on the environment in comparison with car use, whereas Slovenians tend to underestimate it the most (with only 36.3% disagreeing that food habits cause less environmental harm than car use).



Figure 2: Q1b - Level of agreement with the statement: "When compared to car use, food habits have only little impact on the environment" [Base: all respondents]

Responses to Q1a and Q1b suggest that while many consumers correctly evaluate the negative environmental impact of our food consumption patterns in general, **they tend to minimise it when it comes to evaluating their** *own* **eating habits**.

In terms of how the EU fares in comparison with other countries regarding the environmental impact of food habits and production, on average, a third of respondents (32.9%) believe that the EU performs better than China or the USA. Roughly the same proportion (33.5%) think that the EU does not perform better. Another third is either undecided or has no opinion on the subject.

Replies are fairly similar across countries, but German, Spanish and Belgian respondents tend to have a slightly more severe judgement about the EU's impact, while those in Portugal and Slovenia are a bit more likely to believe that the EU is performing better than countries such as China or the USA.



Figure 3: Q1c - Level of agreement with the statement: "In relative terms, the environmental impact resulting from food habits and production in the EU is smaller than in countries such as China or the USA" [Base: all respondents]

When asked how much attention they pay to the impact of their food choices on the environment, on average **most respondents reply that they pay some (47%) or a lot (17.3%) of attention** (Figure 4). Slightly over a quarter (27.8%) admit paying little attention, whilst 7.9% simply do not care. Consumers in Italy, Spain, Portugal, Greece, and Slovenia are more likely to claim that they pay attention to the environmental impact of their food choices than those in Belgium, Germany, Lithuania, the Netherlands, and Slovakia.

In Belgium, Portugal, Spain, Austria, Lithuania and Greece, women are more likely than men to pay attention to the impact of their food choices on the environment. In Italy, Germany and the Netherlands, the consumer's financial situation appears to be the most influential variable. In Slovakia and Slovenia, age is the main determinant with older consumers (aged 58 years and above) paying more attention to the impact of their food choices on the environment than younger ones.



Figure 4: Q2 – "How much attention do you pay to the impact of your food choices on the environment?" [Base: all respondents]

# 2 What 'sustainable' means to consumers in relation to food

The concept of 'sustainable food' covers multiple dimensions: environmental as well as social, economic and health. To get a better understanding of what 'sustainable food' means to consumers, respondents were asked to select the three elements (out of a list of nine) they most spontaneously associate with 'sustainability' when it comes to food.

On average, consumers tend to most • spontaneously associate 'sustainable food' with "low environmental impact" (48.6%), "use of GMOs and pesticides to be avoided" (42.6%) and "local supply chains" (34.4%) (Figure 5). A quarter of respondents associate 'sustainable food' with food that is "minimally processed, traditional". Other elements such as "healthy", "fair revenue for farmers" and "high animal welfare standards" primarily come to mind for a fifth of respondents. "Economic growth of the agri-food sector" is mentioned by less than 1 in 10 survey participants.

Responses are consistent across countries, with some specificities. However:

• The local component is most important to consumers in Austria, Germany, Slovenia and Belgium.

Close to a third of respondents in Belgium and the Netherlands associate 'sustainable food' with a "fair revenue for farmers", while in other countries fewer respondents say this comes to mind when they are asked what 'sustainable food' means to them. This may be due to the societal context as well as the farmers' protests that took place in the Netherlands in the autumn of 2019 (when the survey was conducted).

- Slovak consumers appear to be primarily concerned about "food availability and affordability" when thinking about 'sustainable food'. This is followed by "use of pesticides and GMOs to be avoided" and "low environmental impact".
  - The criterion "minimally processed, traditional" matters most to consumers in Portugal, Greece and Lithuania, who rank it above "local supply chains".



## WHAT COMES TO YOUR MIND WHEN THINKING ABOUT 'SUSTAINABLE FOOD'?

On average, over half of consumers say that sustainability concerns have some influence (42.6%) or a lot of influence (16.6%) on their eating habits (Figure 6). For one in three, sustainability has no influence (9.2%) or only a minor influence (26.5%) on their food choices. Findings are very similar to those for Q2 ("How much attention do you pay to the impact of your food choices on the environment?"), which makes sense considering that most respondents tend to equate 'sustainability' with environmental sustainability.

But as with Q2, there are differences across countries; consumers in Italy, Portugal, Spain, Austria and Slovenia are more likely to say that their eating habits are influenced by sustainability concerns than those in Belgium, Lithuania, the Netherlands and Slovakia.



Figure 6: Q4 – "To what extent would you say that your eating habits are influenced by sustainability concerns?" [Base: all respondents]

## Barriers to eating (more) sustainably

Between 10.2% (Belgium) and 25.7% (Spain) of consumers say that sustainability concerns have "a lot" of influence on their eating habits (see replies to Q4). For the other consumers, the survey sought to investigate the main obstacles preventing them from eating (more) sustainably (Figure 7).

Overall, the **main barriers to sustainable eating** identified by the survey are: the **price** ("too expensive"), the **lack of knowledge** ("lack of information on how to do so"), the **difficulty of identifying sustainable food options** ("lack of clear labelling") and their **limited availability** ("lack of sustainable food in usual shopping/eating places"). One in five respondents also cite "lack of time" as an obstacle to eating more sustainably.

Replies are consistent across countries, with price ranking first in all countries but Greece and Lithuania (where a lack of knowledge is perceived as the main barrier). Consumers in Belgium, Portugal, the Netherlands and Slovenia are most sensitive to price. Lack of knowledge/information is particularly stressed by Greek, Lithuanian and Slovak consumers, whilst Italian, German, and Slovak consumers complain the most about the absence of clear labelling to help them to identify sustainable food options. to change ("I'm not willing to change my eating of consumers in these countries either do not care habits") and indifference to sustainability concerns ("I'm not concerned with sustainability") also appear to be important limiting factors in adopting more

In Belgium, Lithuania and the Netherlands, resistance sustainable eating habits. Indeed, between 30-40% about sustainability and/or are not willing to change the way they eat.



Figure 7: Q5 – "What are the main reasons preventing you from eating (more) sustainably?" [Base: Respondents whose eating habits are not influenced "a lot" by sustainability concerns]





Evidence is growing that we need to change the way we eat in order to ensure that food systems are sustainable. However, some of these changes will require greater efforts by consumers than others.

## **Ready for change?**

(66.7% disagree with the statement "I'm not willing their eating habits than women. to change my eating habits, even if they are not

When asked on a general level about their environment-friendly") (Figure 8). In all countries willingness to change, on average **two thirds of** but Slovakia, gender is the most important socioconsumers say they are open to changing eating demographic factor influencing responses; male habits that are harmful to the environment respondents tend to be more resistant to altering



Figure 8: Q6 - Level of agreement with the statement: "I'm not willing to change my eating habits, even if they are not environment-friendly" [Base: all respondents]

support to the different actions proposed.

Most respondents (59.5% on average) say they 55% respectively willing to do so). are willing to buy mainly seasonal fruit and

When asked about the concrete steps they might vegetables (fewer than one in five disagree with the consider taking in order to eat more sustainably, statement "I'm willing to buy mainly seasonal fruit and however, consumers show a varying level of vegetables") (Figure 9). Dutch, Belgian and German consumers are those most reluctant to eat mainly seasonal fruit and vegetables (with 42.7%, 50.2% and



Figure 9: Q6 – Level of agreement with the statement: "I'm willing to buy mainly seasonal fruit and vegetables" [Base: all respondents]

with close to half of respondents not willing to further cut down on food waste.

A willingness to waste less food at home is also reduce food waste. A possible explanation might widespread (65.5% agree with the statement be that the amount of food thrown away by Greek "I'm willing to waste less food at home") (Figure households is already low – or perceived as such 10). Greece appears to be an exception though, - and hence consumers may find it challenging to



Figure 10: Q6 - Level of agreement with the statement: "I'm willing to waste less food at home" [Base: all respondents]

## What about prices?

wasting less food, paying more for sustainable 12.4% of Belgian consumers are willing to spend food gathers little support from consumers extra money on sustainable food, close to a third (Figure 11). On average, only **one in five consumers** are willing to spend more money for sustainable **food**. Half of them do not want to pay more, whilst a guarter is undecided. This echoes the earlier finding that price is perceived as the main barrier to eating more sustainably.

But unlike eating more seasonal produce and The situation varies across countries; whilst only of Italians are willing to pay more. Consumers in Italy, Spain, Austria, Germany and Slovakia are the most disposed to pay more for food that has been produced sustainably, whereas those in Belgium, Greece, Lithuania, the Netherlands and Slovenia are the least prepared to do so.



Figure 11: Q6 – Level of agreement with the statement: "I'm willing to spend more money for sustainable food" [Base: all respondents]

Consumers' acceptance is slightly higher when Austrian, Italian, and Slovenian consumers are it comes to spending more money on food those most willing to pay more for their food if it so that farmers can get better prices. 29.4% of helps to guarantee better prices for farmers. By consumers on average agree with the statement contrast, consumers in Lithuania, Belgium, Greece, "I'm willing to spend more money on food for and the Netherlands are the most reluctant to do which I'm sure that farmers get a fair price in so. return" (38.8% of respondents disagree, whilst 27.4% are undecided) (Figure 12).



Figure 12: Q6 - Level of agreement with the statement: "I'm willing to spend more money on food for which I'm sure that farmers get a fair price in return" [Base: all respondents]

well as in personal economic situations. While especially in certain EU countries. changing the way we eat is a necessity if we are

Food choices are deeply rooted in consumer to tackle the climate crisis, our survey found that preferences, tradition, and cultural habits, as this will require significant efforts by consumers,

## Attitudes towards proteins

willing to cut down on red meat (Figure 13). Close to half of them (46.3%) declare that they are not willing to reduce their red meat consumption, whilst 1 in 5 is undecided.

On average, only 1 in 3 consumers say they are Lithuanian (58.9%), Slovak (54%) and Slovenian (51.7%) consumers. Italy is an exception, with more respondents (45.1%) willing to cut down on red meat than not (26%). Consumers in Italy, Portugal, Austria, Germany, and Spain are the most willing to lower their red meat consumption.

The reluctance to reduce red meat consumption is especially strong among Greek (73.6%),



Figure 13: Q6 – Level of agreement with the statement: "I'm willing to cut down on red meat (beef, lamb and pork)" [Base: all respondents]

**Cutting back on dairy appears to be even more** followed by Portuguese (28.1%) and Austrians of a challenge for consumers (Figure 14). As (24.7%), but is still lower than the willingness to many as 56.2% of respondents from across the 11 cut down on red meat in these same countries. countries state they are not willing to cut down Consumers in Greece (79.5%), Lithuania (62.6%), on dairy, whilst only 20.4% are willing to do so and Slovakia (61.2%) and Slovenia (56.7%) are the most 19.4% are undecided.

The willingness to reduce dairy consumption is strongest among Italian consumers (30.3%),

reluctant to lower their consumption of dairy products.



Figure 14: Q6 – Level of agreement with the statement: "I'm willing to cut down on dairy" [Base: all respondents]

are the most ready to increase their consumption of least willing to do so. vegetables/plant-based foods, whereas consumers

Consumers in Italy, Lithuania, Portugal and Austria in the Netherlands, Belgium and Greece are the





There are as many consumers saying they are not willing to cut down on red meat as there are who declare they are ready to eat more plant-based foods. This finding might potentially be explained by a shift in the 'undecided' category; those neither agreeing nor disagreeing with the statement "I'm willing to cut down on red meat (beef, lamb and pork)" might, on the other hand, be more inclined to agree with the statement "I'm willing to eat more vegetables/plant-based foods".

The shift might also have to do with the messaging. In one case, the proposed statement was a rather negative message, about (partially) giving up red meat, whereas the statement about increasing consumption of vegetables/plant-based foods sounds more positive. Thus, positive messages may find greater support among consumers than injunctions perceived as restricting one's freedom of choice.

# Zooming in on meat consumption

The next series of questions sought to explore consumer attitudes towards red meat consumption in depth. Whilst Q6 investigated consumers' willingness to cut down on meat (for health and/or environmental reasons), Q7 asked respondents about whether they had reduced (or intended to reduce) their red meat consumption for environmental reasons specifically, and if so, to what extent (Figure 16).

the 11 countries declare themselves as vegetarian/ vegan. The greatest proportion of vegetarians/ vegans is found in Austria (7.2%), Germany (6.8%) and the Netherlands (6.6%), whilst the lowest is observed in Slovakia (1.4%), Lithuania (2.6%) and Spain (2.9%).

Another 41.6% say they have either stopped (6.2%) or reduced (35.4%) red meat consumption due to environmental concerns. This is especially true in Italy and Austria, where half of consumers have either stopped or cut back on eating red meat. However, in Lithuania, Greece, and Slovakia only around a third of consumers have done so.

On average, 4.6% of the individuals surveyed across A fifth of consumers (19.9%) have not yet cut down on red meat but say they intend to do so (16.4% want to reduce their red meat intake whilst 3.5% want to stop eating red meat entirely).

> Finally, a third of respondents (33.9%) say they have neither lowered their red meat consumption nor do they intend to do so. The reluctance to reduce red meat consumption is strongest in Lithuania, Slovakia, Greece, and Slovenia and lowest in Italy, Portugal, Spain, and Austria.





## HAVE YOU REDUCED (OR DO YOU INTEND TO REDUCE) YOUR RED MEAT (BEEF, LAMB AND PORK) CONSUMPTION DUE TO ENVIRONMENTAL REASONS?

Figure 16: Q7 – "Have you reduced (or do you intend to reduce) your red meat (beef, lamb, and pork) consumption due to environmental reasons?" [Base: all respondents]

In all countries except Italy and the Netherlands, the most important variable explaining consumers' attitudes towards red meat is gender; female respondents are more likely to have stopped or cut back on eating red meat. In Italy and the Netherlands, age is the most influential factor, with older respondents more likely to have stopped or reduced red meat consumption.

Findings for Q7 are consistent with those for Q6. cutting down on red meat is probably perceived as The same groups of countries come across as either rather reluctant to cut down on red meat (Lithuania, Greece, Slovakia, and Slovenia) or more willing to do so (Italy, Portugal, Austria, and Spain).

The difference in the numbers of respondents unwilling to change their red meat consumption habits (46.3% for Q6 but only 33.9% for Q7) might be explained by the fact that some of those that have already stopped/reduced red meat consumption might have replied that they disagree with the Q6 statement "I'm willing to cut down on red meat" as they cannot, or do not want to further decrease their red meat consumption. Overall, on average, cutting down on red meat is probably perceived as a real challenge to about a third of consumers.

## Consumer attitudes towards alternative 6 protein sources

Reducing meat consumption might become less of a challenge for consumers if attractive alternative protein sources were widely available. Therefore, the survey sought to investigate consumer attitudes towards several of these alternatives.

## Little love for high-tech food

The main finding is that consumers tend to have Belgian, Austrian and Dutch consumers are the little appetite for very innovative or high-tech options, such as insects or cultured ('lab-grown') meat (Figures 17 & 18). As little as 10.3% of consumers Dutch, German and Spanish consumers are the least on average would be willing to replace meat reluctant to eat lab-grown meat (17.4-19.7% would be with insects (76.8% would not, 12.9% are unsure). Respondents are slightly more open to lab-grown meat: 13.4% would be willing to replace meat by its cultured counterpart, and 67.8% would not (18.8% are unsure).

least averse to eating insects (16.6-16.9% say they would be willing to replace meat with insects), whilst willing to replace meat with cultured meat).



Figure 17: Q8 - "In the future, would you be willing to replace meat with insects and insect derivates?" [Base: respondents eating meat]





Figure 18: Q8 - "In the future, would you be willing to replace meat with lab-grown meat (from cell culture)?" [Base: respondents eating meat]

## GMO-free plant-based alternatives are better accepted

Plant-based meat alternatives (such as plant- consumers (36.5%) on average say they would based burgers) find greater acceptance among be willing to replace meat with non-GMO plantconsumers, provided they are not made from based alternatives (43.6% would not, 19.9% are ingredients derived from GMOs. A third of unsure) (Figure 19).



Figure 19: Q8 – "In the future, would you be willing to replace meat with plant-based meat alternatives, only made from ingredients that are not derived from GMOs?" [Base: respondents eating meat]

But acceptance drops to 13.6% if the plantbased meat alternatives contain GMOs (68.7% of respondents say they would not be willing to replace meat with plant-based alternatives containing GMOs, 17.7% are unsure) (Figure 20).

The question, as theoretical as it might seem, reflects the dilemma US consumers are facing with the bestselling plant-based burgers on the US market. The plant-based meat alternatives produced by the Impossible Foods company contain genetically modified ingredients, whereas those produced by its

competitor Beyond Meat do not.<sup>45</sup> Notably, the key ingredient that makes the Impossible Burger 'bleed' like real meat - soy leghemoglobin, short for 'legume hemoglobin' – is produced from a genetically modified yeast. Consumer groups in the US have voiced concern over the lack of data proving that this ingredient can be safely used in food.<sup>46</sup> Whilst the Impossible Burger is not yet on sale in Europe, Impossible Foods filed an authorisation request with the European Food Safety Authority last year to get soy leghemoglobin approved in the EU.<sup>47</sup>



Figure 20: Q8 – "In the future, would you be willing to replace meat with plant-based meat alternatives, even if made from ingredients derived from GMOs?" [Base: respondents eating meat]

be the most attractive alternative source of protein. vegetarian food, whereas those in Greece, Lithuania, meat with traditional vegetarian dishes (1 in 4 would reluctant to do so. not, whilst 15.4% are unsure) (Figure 21). Consumers

Consumers find traditional vegetarian food (e.g. in Italy, Austria, Germany, Spain, and Portugal are vegetable stew, dishes containing pulses, etc.) to the most disposed to replace meat with traditional Most respondents (60.3%) would be willing to replace Slovakia, the Netherlands and Belgium are the most

<sup>47</sup> Agnieszka de Sousa, 'Impossible Foods Seeks to Sell Plant-Based Burgers in Europe', Bloomberg, 23 October 2019, accessed 10 May 2020.

<sup>&</sup>lt;sup>45</sup> S. Barrett, '<u>How the Impossible Burger is changing the debate over GMO foods</u>', CNBC, 13 February 2020, accessed 10 May 2020.

<sup>&</sup>lt;sup>46</sup> R. Rabkin Peachman, '<u>Meat Gets a Makeover</u>', Consumer Reports, 29 August 2019, (accessed 10 May 2020).



Figure 21: Q8 – "In the future, would you be willing to replace meat with traditional vegetarian food (e.g. vegetable stew)?" [Base: respondents eating meat]

## 'Meaty' names or not?

Efforts to make alternative protein sources more (42.4%) believe these names should be permitted policy developments that could affect the naming of these products. In the spring of 2019, Members problem at all with using such names (11% have no of the European Parliament's Agriculture and Rural Development (AGRI) Committee voted to ban the use of 'meaty' names (e.g. 'burger', 'steak', 'sausage') for plant-based products.<sup>48</sup> The use of hostile to 'meaty' names for plant-based products, terminology traditionally associated with meat on the label of plant-based foods is already prohibited in some countries, including Spain.

Because the AGRI Committee's move was said to be motivated by its desire to avoid misleading consumers, we sought to evaluate whether or not consumers disapprove of food companies using 'meaty' names for plant-based products. We found that most consumers do not appear to be concerned about the naming of veggie 'burgers' or 'sausages', as long as the products are clearly identifiable as vegetarian/vegan.

On average, only 1 in 5 consumers (20.4%) think the use of 'meaty' names should never be allowed on vegetarian/vegan products. Most respondents

attractive to consumers may be hindered by recent provided that the products are clearly labelled as vegetarian/vegan, and 1 in 4 (26.2%) do not see any opinion) (Figure 22).

> Austrian and German consumers are the most with a third of respondents in these countries saying that these names should never be permitted for vegetarian/vegan foods.

> A previous study (2015)<sup>49</sup> by the German consumer group vzbv found that most German consumers (78%) would be satisfied if plant-based vegetarian/ vegan products were to include an indication of the plant's origin in the product's name (e.g. "veggie sausage from soy"). A reference to the flavour of the original meat product in the name was also supported (e.g. "liver pâté flavoured veggie spread"). Only 38% of respondents thought that vegetarian/vegan products should bear completely new names, with no reference to the animal products they 'imitate'.

<sup>48</sup> G. Fortuna, 'MEPs rubber-stamp first portion of next CAP, shed spotlight on wine and 'real' steak', Euractiv, 2 April 2019, accessed 10 May 2020.

<sup>&</sup>lt;sup>49</sup> Verbraucherzentrale Bundesverband e.V., <u>Vegetarische "Wurst" und veganer "Käse</u>", 2017.



Figure 22: Q9 – "To what extent do you agree that companies use meat-related names like sausage and burger to describe meat-free vegetarian products (e.g. a veggie burger)?" [Base: all respondents]

## What needs to be done to make food production and consumption (more) sustainable, according to consumers

The last question of the survey (Q10) investigated consumer acceptance of a series of measures that would make food production and consumption more sustainable.

## On the production side

**On average, 38.9% of consumers would support** Respondents in Italy (54.5%) and Portugal (49%) are regulations to oblige farmers and food producers to meet more stringent sustainability standards (28.8% would not, whilst 25.4% are undecided) (Figure 23).

those most in favour of stricter rules, whereas Dutch respondents are the least supportive (41.7% disagree that regulations should force farmers and food producers to meet more stringent environmental standards).



Figure 23: Q10 - Level of agreement with the statement: "Regulations should force farmers and food producers to meet more stringent sustainability standards" [Base: all respondents]

A higher share of consumers (53%) agree that Portugal (60.9%) are among those most in favour farmers should be given incentives (e.g. through of subsidies for farmers to produce sustainably subsidies) to produce food more sustainably together with consumers in Slovenia (63.4%) and (19.4% disagree, 22.8% are undecided) (Figure 24). Greece (60.6%). By contrast, Belgian (42.3%) and The wish for tougher environmental regulations Dutch (37%) respondents are the least disposed to is compatible with the desire to better support financially incentivising farmers to produce food farmers, since consumers in Italy (62.3%) and

more sustainably.



Figure 24: Q10 - Level of agreement with the statement: "Farmers should be given incentives (e.g. through subsidies) to produce food more sustainably" [Base: all respondents]

think the EU should stick to its level of ambition respectively 74.9% and 64.1% of consumers disagree regarding sustainable food production even if that the EU should not do more than China or the other world players lag behind (52% on average disagree with the statement "the EU should not be in Slovakia) would rather not see the EU be more more proactive on sustainable food policies unless other countries such as China or the USA do the world players, and 16.8% are undecided. same") (Figure 25).

Looking at the global context, **half of consumers** This is especially true in Austria and Germany, where USA. A fifth of respondents (20.2%, with up to 29.5% proactive on sustainable food production than other



Figure 25: Q10 - Level of agreement with the statement: "The EU should not be more proactive on sustainable food policies unless other countries such as China or the USA do the same" [Base: all respondents]

## On the consumption side

what they should or should not eat. One in four (23.9%), however, would not be against this (18.2% tell me or decide for me what I should eat or not"). are undecided) (Figure 26). Lithuanian and Slovenian

Most consumers (53.9%) say that they do not consumers are the least positive about being told want someone to tell them or decide for them what or what not to eat (73.1% and 65.7% respectively agree with the statement "I do not want someone to



**Retaining the freedom of choice (even when** choice if it meant that the least sustainable options that choice is not environmentally friendly) disappeared, whilst 20.5% are undecided. Italian is important to 45.6% of consumers. These consumers are the most willing to accept the nonconsumers disagree that unsustainable food availability of unsustainable food options (40.8% products (e.g. strawberries in winter) should not agree), whereas Lithuanian consumers are the least be on supermarket shelves (Figure 27). Still, 27.8% of respondents would agree with a more limited

happy with this prospect (58.6% disagree).



Figure 27: Q10 - Level of agreement with the statement: "Unsustainable food products should be pulled from shelves (e.g. no strawberries in winter, supermarkets should only sell fish sourced sustainably, etc.)" [Base: all respondents]

For their choice to be an informed one, most Austrian and Italian consumers are the most consumers (57% on average) agree that interested in sustainability information (68% and sustainability information should be compulsory on food labels. Only 18.5% disagree, whilst 19.4% are consumers are the least supportive of making undecided (Figure 28). This is in line with replies to Q5, sustainability information mandatory on food where the difficulty of identifying sustainable food labels (43.2% and 45.7% respectively). options ("lack of clear labelling") came across as one of the main perceived barriers to sustainable eating.

66% respectively), whereas Dutch and Belgian



Figure 28: Q10 - Level of agreement with the statement: "Sustainability information should be compulsory on food labels" [Base: all respondents]

**Ontheotherhand, the idea of taxing less sustainable** Support for taxes on less sustainable food is highest in food is not very popular with consumers. On average, only 1 in 4 agree that less sustainable food should be taxed more - and as a result be more expensive. Half of respondents disagree, whilst 18.1% are undecided (Figure 29). These findings are not surprising, given that price ("too expensive") was identified as the main perceived barrier to sustainable eating in Q5.

Italy (38.2%) and Slovenia (37.3%), whereas Lithuania (62.3%) and Greece (60.1%) are the countries with the strongest opposition to taxing less sustainable food.



Figure 29: Q10 - Level of agreement with the statement: "Food which is less sustainable should be more taxed (and be more expensive)" [Base: all respondents]

government is not doing enough to encourage/ respondents (48.7%) say that their government promote food sustainability. When all countries is doing enough to encourage/promote food are considered, only 15.9% are happy with their sustainability. By contrast, Greek consumers are government's actions to promote sustainable the least satisfied with governmental action to food, whereas 56.7% are not satisfied and 16.5% are promote food sustainability, with a whopping 73.2% undecided (Figure 30).

Finally, on average, most consumers find that their Slovenia is however an exception: nearly half of responding that not enough is being done.



Figure 30: Q10 - Level of agreement with the statement: "The government is doing enough in encouraging/ promoting food sustainability" [Base: all respondents]

# ANNEX | QUESTIONNAIRE

## YOUR OPINION ABOUT FOOD SUSTAINABILITY

Every person can answer this questionnaire, no matter the food habits or diet. Your participation is very important since it allows gathering information useful to all consumers.

## 1. To what extent do you agree with each of the following statements? [answer from 1 (strongly disagree) to 10 (strongly agree)]

- a. My food habits negatively affect the environment
- b. When compared to car use, food habits have only little impact on the environment
- c. In relative terms, the environmental impact resulting from food habits and food production in the European Union is smaller than it is in countries such as China or the USA No opinion

## 2. How much attention do you pay to the impact of your food choices on the environment?

- 0 = I do not care about whether my food choices affect the environment or not
- 1 = I pay few attention
- 2 = I pay some attention
- 3 = I pay a lot of attention

### 3. What comes to your mind when thinking about "sustainable" food? [Tick maximum 3 items]

- a. Low environmental impact
- b. Availability and affordability of food for all
- c. Use of pesticides and GMOs to be avoided
- d. Local supply chains
- e. Fair revenue for farmers
- f. High animal welfare standards
- g. Economic growth in the agri-food sector
- h. Minimally processed, traditional
- i. Healthy

#### 4. To what extent would you say that your eating habits are influenced by sustainability concerns?

- 0 = no single influence
- 1 = minor influence
- 2 = some influence
- 3 = big influence (Filter to Q5)
- 4 = I don't know

#### 5. What are the main reasons preventing you from eating (more) sustainably? [Tick maximum 3 reasons]

- a. Lack of information on how to do so
- b. Lack of clear labelling
- c. I'm not concerned with sustainability
- d. Lack of sustainable food products in my usual shopping places / eating places
- e. Too expensive
- f. I'm not willing to change my eating habits
- g. Lack of time (to buy it, to cook it, etc.)
- h. Other reason

#### 5. What are the main reasons preventing you from eating (more) sustainably? [Tick maximum 3 reasons]

- a. Lack of information on how to do so
- b. Lack of clear labelling
- c. I'm not concerned with sustainability
- d. Lack of sustainable food products in my usual shopping places / eating places
- e. Too expensive
- f. I'm not willing to change my eating habits
- g. Lack of time (to buy it, to cook it, etc.)
- h. Other reason

#### 6. To what extent do you agree with each of the following statements?

#### [answer from 1 (strongly disagree) to 10 (strongly agree)]

- a. I'm willing to buy mainly seasonal fruit and vegetables
- b. I'm willing to spend more money for sustainable food
- c. I'm willing to spend more money on food for which I'm sure that farmers get a fair price in return
- d. I'm willing to cut down on red meat (beef, lamb and pork)
- e. I'm willing to cut down on dairy
- f. I'm willing to waste less food at home
- g. I'm willing to eat more vegetables/plant-based food
- h. I'm not willing to change my eating habits, even if they are not environment-friendly No opinion

# 7. Have you reduced (or do you intend to reduce) your red meat (beef, lamb and pork) consumption due to environmental reasons?

- a. I don't eat meat, because I'm vegetarian/vegan (Filter to Q8)
- b. Yes, I've stopped eating red meat (though I'm not vegetarian/vegan) due to environmental reasons
- c. Yes, I've reduced red meat consumption (but still eat it)
- d. Yes, I'm intending to reduce red meat consumption due to environmental reasons
- e. Yes, I'm intending to stop eating red meat due to environmental reasons

f. No, I didn't reduce red meat consumption, nor do I intend to do it due to environmental reasons

### 8. In the future, would you be willing to replace meat with each of the following food items?

- 0 = по
- 1 = yes

2 = I don't know / I'm not sure

a. Insects and insect derivates

- b. Lab-grown meat (from cell culture)
- c. Plant-based meat alternatives, only made from ingredients that are not derived from Genetically Modified Organisms
- d. Plant-based meat alternatives, even if made from ingredients derived from Genetically Modified Organisms

e. Traditional vegetarian food (e.g. vegetable stew)

# 9. To what extent do you agree that companies use meat-related names like 'sausage' and 'burger' to describe meat-free vegetarian products (e.g. a veggie 'burger')?

- a. It should never be allowed for vegetarian products
- b. It should be allowed only if it is clearly labelled it's a vegetarian product
- c. I don't see any problem for using such names
- d. I have no opinion

### 10. To what extent do you agree with each of the following statements?

#### [answer from 1 (strongly disagree) to 10 (strongly agree)]

- a. Sustainability information should be compulsory on food labels
- b. Food which is less sustainable should be more taxed (and be more expensive)
- c. Unsustainable food products should be pulled from shelves (e.g. no strawberries in winter, supermarkets should only sell fish sourced sustainably, etc.)
- d. I do not want someone to tell me or decide for me what I should eat or not
- e. Regulations should force farmers and food producers to meet more stringent sustainability standards (in terms of greenhouse gas emissions, water use, biodiversity impact, etc.)
- f. Farmers should be given incentives (e.g. through subsidies) to produce food more sustainably
- g. The EU should not be more proactive on sustainable food policies unless other countries such as China or the USA do the same
- h. The government is doing enough in encouraging/promoting food sustainability (e.g. public campaigns, incentives) No opinion









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