

Research Findings Brief September 2021

# **H2020 VALUMICS Project**

# Behavioural insights for sustainable food consumption

# Pathways towards more sustainable eating behaviours

This research is about behaviourally informed strategic action plans [...] with the potential to foster enjoyment, innovation and public acceptance on the way to more sustainable eating behaviours.

## **About this Research**

The necessary transition towards more sustainable food systems in Europe has put a key question on the table: how can we halve the consumption of high impact foods in Europe in the next decades, thereby also cutting by half their negative sustainability impacts? Which interventions work? Which ones fail? The Valumics report "Putting solutions on the table" aims at contributing to this discussion, by analysing and showcasing the latest and most compelling pieces of evidence about behaviourally-informed interventions that support a shift towards more sustainable and healthier diets in real-life contexts. The report is particularly targeted at policy makers, retailers and restaurants to guide them putting this shift forward, but also to the general citizens, to learn about their own possible behaviour change towards this path.

# **Background**

Socioeconomic, political and ecological systems are both defined by and condition human behaviour. A prime example is the food market, where individuals act as representatives and shapers of market demand. Various scientific fields, including the social sciences, economics and psychology, as well as the cognitive and neurosciences have generated a growing body of thematically diverse empirical evidence grounding insights into human behaviour and its socioeconomic manifestations. Such insights have been initially used to understand and protect consumer decision making in all areas of life and work, including food consumption<sup>1</sup>. However, over the years, with increasing awareness of our societies' unsustainable development patterns, behavioural insights have been recognized and utilized as an important aspect of mitigation and prevention strategies in all areas (including food) and on various levels (top-down/ bottom-up).

# **Behavioural insights**

It has been estimated that a large share of our daily behaviours is based on unreflected routines Error!

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# What do behavioural insights tell us?

Challenging the longstanding premise of humans as purely rational decision makers and information optimisers, behavioural insights suggest people possess limited rationality and incapable of perfectly understanding all the elements and implications of a given situation. To ensure non-interrupted functioning, people rely on simple cognitive heuristics, mental shortcuts and satisfying strategies, which in turn cause them to make predictable errors<sup>2</sup>.

Taking the food market as an example, and particularly in retail stores, consumers have access to a large variety of goods and services. When making food purchasing choices, consumers must take in a lot of information ranging from the price, nutritional value, taste and origin of the product to its sustainability performance. Nonetheless, consumer behavioural studies show

<sup>&</sup>lt;sup>1</sup> OECD (2017), Behavioural Insights and Public Policy: Lessons from Around the World, OECD Publishing, Paris.

<sup>&</sup>lt;sup>2</sup> Thaler, H. R. & Sunstein, R.C. (2008). Nudge: improving decisions about health, wealth and happiness. Yale University Press, New Haven & London

<sup>&</sup>lt;sup>3</sup> Verplanken, B. & Wood, W. (2006). Interventions to break and create consumer habits. In: Journal of Public Policy and Marketing, 25(1), 90-103. American Marketing Association.

# **Effective policies**

Behavioural insights support the design, implementation and evaluation of more effective policies<sup>1</sup>.

### **Informed strategies**

Behaviourally informed strategies have greater potential in fostering sustainable behaviours that those focusing on information provision and awareness raising<sup>6</sup>.

#### How?

- Simplify information
- Frame the language
- Change physical environment
- Change default options
- Influence social norms
- Priming

that, due to information overload and the inability to process all this information at once, consumers opt for easier decision-making processes that might take in only a few criteria, such as price, appearance and taste<sup>4,5</sup>. In turn, this might lead to food choices that in the long-term might not be in the best interests either of the consumer or of a sustainable development trajectory.

Hence successful attempts to influence behaviours in a desired direction, in this case to make them more sustainable, should go beyond strategies targeting knowledge, awareness as well as information provision, and focus on easing the adoption of intrinsically sustainable behaviour. This is particularly true when it comes to food consumption, which is largely habituative and un-reflected, and therefore prone to behaviourally-informed strategies.<sup>6</sup>

# Who can benefit from behavioural insights?

Behavioural insights can be utilized by actors and institutions that work with citizens and consumers. By supporting a better-informed decision-making process about how to most effectively intervene in the food system<sup>7</sup>, behavioural insights can support policymakers, the food industry and Civil Society Organisations (CSOs) in effectively designing, implementing and evaluating interventions that promote heathier and more sustainable short-term and, most importantly, long-term food consumption<sup>1</sup>. Citizens and consumers can also benefit from this research, by identifying and addressing their own biases and engaging in the discussion that shapes the future of food policy.

# How can behavioural insights help?

Behavioural insights for sustainable food consumption aim to provide knowledge and strategies on how human behaviour can be changed towards this goal. Understanding their behaviours and decision-making patterns is pivotal for the success and effectiveness of policies, business innovations and other interventions. Such strategies are characterised by keeping all consumption options available, while making it easier, normal and more appealing to take the more sustainable road<sup>8</sup>. Below some key examples of behavioural insights are provided and contextualised on how they could support the shift towards more sustainable food consumption.

In the report itself, each behavioural insight is complemented with real-life examples of their implementation in practice.

**Simplifying information.** As highlighted, grocery shoppers tend to base their buying choices in retail stores on only a few factors. Hence simplified, salient information (e.g. labels and tags) tailored to concrete contexts increases the likelihood of influencing consumer behaviour<sup>6</sup>. Empirical evidence has shown the effectiveness of symbol (e.g. traffic-light) labelling of meat products to rate animal welfare<sup>9</sup>. Similar symbols could also be used to facilitate comparison of product sustainability. Simplified information of this sort – rather than rating individual products separately – seems most effective when applied to a range of products within the same category placed alongside each other<sup>8</sup>.

**Framing the language.** An important premise of behavioural approaches is that communication matters and ways of communicating a message or problem will have an impact on the final

<sup>&</sup>lt;sup>4</sup> OECD (2017a), "Using behavioural insights to incentivise environmentally sustainable food consumption", in Tackling Environmental Problems with the Help of Behavioural Insights, OECD Publishing, Paris.

<sup>&</sup>lt;sup>5</sup> Barden, P. (2013), Decoded: the science behind why we buy, Chichester: Wiley

<sup>&</sup>lt;sup>6</sup> Mont, O., Lehner, M. & Heiskanen, E. (2014). Nudging. A promising tool for sustainable consumption behaviour? Swedish Environmental Protection Agency. Report 6643.

<sup>&</sup>lt;sup>7</sup> Shephard, D. (2018). Applying behavioural insights to organisations. Global case studies. OECD.

<sup>&</sup>lt;sup>8</sup> Behavioural Insights Team (BIT) (2020). A menu for change. Using behavioural science to promote sustainable diets around the world.

<sup>&</sup>lt;sup>9</sup> Tierwohl Initiative (n.d.). Available from: https://initi- ative-tierwohl.de/

# **Wording matters**

Emphasizing enjoyment and pleasure in food consumption is key to supporting more sustainable alternatives.

### Availability is key

The greater the availability and prominence of more sustainable food options, the greater their potential uptake by consumers<sup>8</sup>.

#### **Social influence**

People are strongly influenced by what others do $^2$ .

outcome<sup>2</sup>. Choosing the right communication frame can enhance the acceptance and implementation of a suggested behaviour. Wordings such as "vegan", "vegetarian" or "healthy" may sound unattractive for those that don't consider themselves part of this consumer group. In this sense, emphasizing enjoyment and pleasure in food consumption is key to supporting more sustainable alternatives.

Changing the physical environment. The design of the physical space and disposition of food options where food consumption takes place matters. Evidence shows that the greater the availability and prominence of more sustainable and healthier food options, the greater their potential uptake by consumers ("perceived popularity of a product")<sup>8</sup>. The size of portions and plates also plays an important role both in motivating increased consumption of more sustainable food and in supporting the reduction of unsustainable consumption practices<sup>6</sup>.

Changing the default options. Default options are pre-set courses of action that take effect if nothing is specified by the decision maker. If a choice has been marked as default by the choice setter, people will generally accept it as such and not engage in changing it<sup>2</sup> because the individual tends to conform to the status quo and perform daily activities without paying much attention to them; and because they perceive it as the optimum available<sup>2,10</sup>. Default choices can, therefore, serve as worthwhile nudges to increase the consumption share of the sustainable option. While changing the default option still leaves the final (purchasing) decision to consumers, the concept of 'choice editing' sees governments and businesses resetting the portfolio of (default) options by editing out choices that are less sustainable.

Making it normal. People are strongly influenced by what others do, in various ways: non-invasively through sharing and exchanging<sup>2</sup>, through unconsciously copying the behaviours of people we socialize with ("behavioural mimicry")<sup>11</sup> or through peer pressure, by adapting behaviour to expectations<sup>2</sup>. Social norms are the behavioural expectations or rules within a society or group. In short, they are perceived as the right thing to do<sup>12</sup>. Accordingly, interventions based on social norms can readily replace unsustainable consumption patterns with more sustainable and beneficial practices<sup>13</sup>. Another way is to lead by example, exploiting the visibility and model role played by governments and recognised people in society. In addition, integrating desired choices (such as plant-based products) into people's habitual context of food purchasing and eating would contribute to normalizing it as a practice.

**Priming (using favourable external stimuli).** Priming captures people's tendency to react and perform in response to external stimuli. A contextual detail, regardless of importance, can prompt a specific behaviour or choice<sup>2</sup>. Reactions to an environment are the result of the emotional state the environment induces in the individual<sup>14</sup>. This effect can also be used to support sustainable food consumption behaviours, for example, by placing (visual, audio or olfactory) cues to remind people of the impact the purchase of sustainable products may have on the environment and/or other members of society.

# Conclusions and outlook

Behaviourally-informed strategies as an opportunity to advance sustainable food consumption strategies, not as the one and only answer. Behaviourally-informed policies or action plans should be conceived as a complementary approach to classic policies /

<sup>&</sup>lt;sup>10</sup> Hansen, G.P., Schilling, M., Malthesen, S.M. (2019). Nudging healthy and sustainable food choices: three randomized controlled field experiments using a veg- etarian lunch-default as a normative signal, Journal of Public Health, fdz154

Lakin, L.J. & Chartrand, L.T. (2003). Using noncon-scious behavioral mimicry to create affiliation and rapport. In: Psychological Science, 14(4), 334-339.

<sup>&</sup>lt;sup>12</sup> Nyborg, K. et al., (2016). 'Social norms as solutions', Science, vol. 354, issue 6308, pp. 42-43.

<sup>&</sup>lt;sup>13</sup> Goldstein, N.J., Cialdini, R.B. and Griskevicius, V. (2008) 'A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels', Journal of Consumer Research, 35(3), pp. 472-482.

<sup>&</sup>lt;sup>14</sup> Biswas, D., Lund, K. and Szocs, C. (2019) 'Sounds like a healthy retail atmospheric strategy: Effects of ambient music and background noise on food sales', Journal of the Academy of Marketing Science, 47(1), pp. 37-55.

# The right moment is now

There is great momentum at the present juncture in history for a change in food consumption behaviours. strategies with the potential to foster enjoyment, innovation and public acceptance in the transition to more sustainable eating behaviour.

There is no one size fits all solution. A certain behaviour change approach can be tailored to address various food consumption behaviours. However, at the same time it is still important to keep in mind that behaviour change approaches work differently in different contexts and in view of different behaviours. Accordingly, it is crucial to understand the targeted behaviour, barriers and opportunities of the specific audience. In addition, measurement and evaluation of the results of interventions is equally important. Only in this way is it possible to understand what works and what might not work, and also to account for potential side-effects.

The right momentum is now. In view of the urgent need to meet sustainability and carbon targets, to which eating behaviours are a major contributor, there is great momentum today for change in food consumption behaviours. And the latest sustainable innovations from the food industry, think tanks and CSOs reveal a new world of untapped opportunities for more sustainable food consumption.

### **Key sources for further information**

This brief has been prepared on basis of the Valumics report 'Putting solutions on the table. A review of successful interventions to support more sustainable food consumption behaviours.

If you would like to learn more about the outcome of the research and/or the respective sources of information, please refer to the original report.

To discuss the research presented in this brief, please contact the authors or email <a href="mariana.nicolau@scp-centre.org">mariana.nicolau@scp-centre.org</a> **Deliverable and reports:** 

Nicolau, M., Xhelili, A., Leimann, L. & Fedato, C. (2021). Putting Solutions on the Table. A review of successful interventions to support more sustainable food consumption behaviours, Wuppertal 52p. DOI:10.5281/zenodo.5011817

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#### Disclaimer:

This brief and report reflect only the authors' view and the EU Funding Agency is not responsible for any use that may be made of the information it contains.

# **H2020 VALUMICS – Understanding Food Value Chains and Network Dynamics**

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