



# Healthier Food Choices: From Consumer Information to Consumer Empowerment in EU Law

N. Gokani<sup>1</sup>

Received: 24 August 2023 / Accepted: 11 March 2024 / Published online: 10 April 2024  
© The Author(s) 2024

## Abstract

This article evaluates the European Union’s efforts to regulate consumer food information with the aim of improving consumer nutrition as part of its broader consumer protection agenda. With nearly a million deaths attributed to unhealthy diets annually, the EU’s New Consumer Agenda, its Farm to Fork Strategy, and Europe’s Beating Cancer Plan all highlight the objective of empowering consumers to make informed, healthy food choices. This underscores the EU’s longstanding emphasis on regulating information to protect consumers, an approach which is even stronger with nutrition more specifically. This article shows that the EU food information law is based on two beliefs. First, consumers are given food information that is sufficient, accurate, non-misleading, clear and easy to understand and they are, therefore, *well-informed*. Second, well-informed consumers are *empowered*. This article argues that both of these beliefs are misguided. The current food information rules do not truly inform consumers well and do not, on their own, empower consumers to make healthy dietary decisions. Consequently, this article expresses scepticism about the ability of the current rules to promote improved nutrition. In light of the critiques of the current rules, this article offers suggestions for an improved food information paradigm. In addition to rules that would more effectively inform consumers, such a paradigm would acknowledge the limitations of information to empower healthier food choices and, therefore, give greater weight to more substantive interventions. This would align food law with broader trends in consumer protection law and thereby genuinely promote healthier nutrition.

**Keywords** Consumer · Health · EU · Food · Information · Law

## Introduction

Since its inception, the European Union (“EU”) has regulated food products to increase fairness in the marketplace and help protect the health, economic, and other interests of consumers. In its earlier years, the EU focussed on improving food safety and promoting the internal market (MacMaoláin, 2015). Following the realization of the consequences of unhealthy diets—typically high in fat, saturated fat, sugar, and salt and low in fruit,

---

✉ N. Gokani  
nikhil.gokani@essex.ac.uk

<sup>1</sup> School of Law, University of Essex, Colchester, UK

vegetables, wholegrains, and legumes—attention is now also given to improving nutrition (Garde, 2010). In the EU, approximately 950,000 deaths and 16 million years of poor health result from unhealthy diets each year (European Commission, 2021a).

Regulating food is a part of broader EU consumer protection. In the opening lines, the EU's New Consumer Agenda declares that "consumers rightly expect to benefit fully from the single market and to be empowered to make informed choices" (European Commission, 2020b, p. 1). It continues by echoing the Farm to Fork Strategy (European Commission, 2020c) that one of the EU's objectives is "empowering consumers to make informed, healthy... food choices" (European Commission, 2020b, p. 5). These statements reflect the EU's longstanding belief that informing consumers empowers them in the marketplace. This article asks how effectively EU regulation of consumer food information promotes healthier food choices and how it could do so more effectively while reflecting on the scope and limitations of the information paradigm in consumer law more generally.

The literature has explored information regulation in consumer protection law and policy more broadly (e.g., Helleringer & Sibony, 2017; Howells, 2005; Luzak et al., 2023; Twigg-Flesner, 2016; Willett & Morgan-Taylor, 2012). This includes significant laws such as Directive 2005/29 concerning unfair business-to-consumer commercial practices ("Unfair Commercial Practices Directive," "UCPD"). Understanding food information regulation remains significantly less developed. Food information discussions are even more important and timely in light of the continuing and renewed focus of the EU on information regulation to improve diets if it is to successfully reduce the burden of diet-related diseases as it has committed to. Analysis beyond the existing literature is necessary for several reasons. First, it is unclear what the EU's values and objectives are in regulating food information and how it has tried to implement these through food law. Earlier work has examined the history of EU food law and its reliance on information regulation (Friant-Perrot & Garde, 2014; MacMaoláin, 2007). This article goes further by answering fundamental unexplored questions, including understanding the objectives of food information law, the rules introduced to achieve these objectives, and what it means to be well-informed and empowered in food decisions. Second, it is important to assess the extent to which the EU's rules meet the stated objectives of empowering consumers to make well-informed, healthy food decisions. Aspects of this have been explored to some extent on specific issues, such as the average consumer benchmark, front-of-pack nutrition labelling, and food claims (e.g., Garde, 2010; Gokani, 2022; MacMaoláin, 2008). This article goes further by completing the remaining gaps. For instance, it explores how food information law protects members of lower socioeconomic groups, such as consumers with lower incomes. Moreover, rather than looking at different rules separately, this article assesses the collection of food information rules related to healthier choices to holistically determine the extent to which food law contributes, and could contribute, to fulfilling the EU's objectives. It further reflects on how food law can benefit from insights from broader consumer law and, in turn, what lessons food law could offer on the scope and limitations of the information paradigm in general consumer protection policy.

The "[Regulating Food Information to Improve Nutrition](#)" section seeks to understand the importance the EU has given to regulating consumer information to improve diets. It explores the scope and limitations of information regulation in broader consumer law and how information law remains central to food policy but without sufficient acknowledgement of its limits and, thereby, argues that reliance on information regulation is far greater with food than in other areas of consumer law. The "[Well-Informed Consumers and Food Information Law](#)" section explores the *design* of the information-based regulatory tool to assess whether, and how, EU food law can successfully ensure that consumers

are *well-informed* about nutrition. It puts forward a conceptualization of the consumer food information paradigm: consumers are considered to be well-informed through rules which aim to ensure that information is sufficient, accurate, non-misleading, clear, and easy to understand. This section further shows that the EU rules do not in fact lead to well-informed consumers according to these criteria. The “[Empowered Consumers and Food Information Law](#)” section discusses the EU’s *choice* of the information-based regulatory tool to *empower* consumers to make healthy decisions. This shows that even well-designed information rules, if they were implemented, would not on their own empower consumers to make healthy food decisions. In turn, it shows how the consumer food information paradigm can be developed by recognizing how complementary substantive interventions (such as on availability, pricing, or reformulation) would actually allow evidence-based information rules to be utilized to improve dietary choices. Finally, the “[Food Information Law and Healthy Food Decisions](#)” section reflects on the implications for food law and healthier food choices of the significant progress made in other areas of consumer law. Elsewhere, information-based rules have been improved, and more substantive, non-information-based rules have been introduced. It concludes that bringing food information law in line with the emerging trend in broader consumer protection law toward more substantive intervention is feasible but currently prevented due to a lack of political will and leadership influenced by economic actors profiting from selling unhealthy food.

## Regulating Food Information to Improve Nutrition

This section seeks to understand the importance the EU has given to regulating consumer information to improve diets. First, it considers consumer law beyond food law by providing an important broader context. In line with the literature on consumer information regulation generally, it shows that it is accepted that well-designed information regulation has a key role in informing and empowering consumers. Crucially, however, it also shows how the EU has acknowledged that information regulation is limited in protecting consumers and, therefore, the EU legislature has also introduced measures that go beyond information regulation, such as withdrawal rights (e.g., Helleringer & Sibony, 2017; Howells, 2005; Luzak et al., 2023; Twigg-Flesner, 2016; Willett & Morgan-Taylor, 2012). Second, building on the early literature on the use of food information regulation for healthy diets (Friant-Perrot & Garde, 2014; MacMaoláin, 2007; van der Meulen, 2013), it further shows that regulating information is also central to food policy. With respect to food, however, the EU has *not* acknowledged the limitations of information to help improve diets. In short, therefore, this section argues that reliance on information regulation is far greater with respect to nutrition than with respect to consumer protection generally. This highlights the importance of assessing the effectiveness of the information paradigm in improving diets.

## Consumer Information as a Tool to Protect Consumers

Even if no specific consumer policy was envisaged in the earliest days of the European Economic Community, visions of consumer protection go back as far as at least 1975 (Council Resolution of 14 April 1975). In these early days, what is now the Court of Justice of the European Union (“CJEU”) was faced with cases challenging national rules as being contrary to EU free movement provisions, particularly what are now Articles 34–36

of the Treaty on the Functioning of the European Union (“TFEU”). The impugned national measures often sought to improve consumer protection in the national context. However, they also restricted the free movement of goods across the EU and, therefore, reduced consumer choice and economies of scale. Many national rules were struck down. The rules that survived were often narrowly focused measures targeting particular national sensitivities (Weatherill, 2016). Take, for example, the seminal *Cassis de Dijon* case (Case 120/78, 1979). In this case, German rules prohibited an alcoholic beverage of less than 25% alcohol from being marketed as fruit liqueur even when it was freely sold in France. Germany argued that the prohibition protected consumers because a lower alcohol content (alcohol being the most expensive constituent of the beverage) would lead to an advantage over other products. In striking down the German consumer protection rules, the CJEU expressed its view that consumers could adequately be protected by labelling the product with its alcohol content. This was the beginning of what came to be known as the labelling doctrine: Where consumers can adequately be protected through labelling, more restrictive measures are disproportionate (Unberath & Johnston, 2007; Weatherill, 2013).

The breaking down of national barriers through deregulatory negative harmonization was insufficient to promote the proper functioning of the internal market. In parallel, increasing positive harmonization legislation was adopted, emphasizing consumer information. This is seen most significantly in consumer contract law, where Directive 2011/83 on consumer rights sets out an extensive list of pre-contractual disclosure requirements. Beyond contract law, the Unfair Commercial Practices Directive regulates practices in business-to-consumer transactions. While the UCPD does not impose information duties directly, it does prohibit misleading actions, which include information that is false or likely to deceive the consumer, and misleading omissions, where material information is not given. These positive harmonization measures seek to protect consumers and level the playing field for industry. Nonetheless, they recognize that proportionate national rules may still be necessary for consumer protection. For instance, the UCPD permits Member States to apply stricter measures in financial services (Article 3(9) UCPD).

As the EU has clarified in its various consumer policy documents, a core rationale is that consumers need “to be empowered to make informed choices” to fully benefit from the single market (European Commission, 2020b). However, the effectiveness of information rules in informing and empowering consumers has been critiqued extensively. These criticisms include highlighting the limitations of human processing capabilities as shown by behavioural economics; societal and personal barriers, such as a lack of time; and market impediments, such lack of bargaining power or no market alternatives (Micklitz, 2012; Ramsay, 1985; Willett & Morgan-Taylor, 2012). Therefore, over time, general consumer law has evolved to also try to empower consumers in ways other than informing them. For instance, with many distance contracts, consumers are granted withdrawal rights (Directive 2011/83/EU, Chapter 3), which not only allow consumers to study information but also to reflect on decisions and examine and test goods (Twigg-Flesner & Schulze, 2010). Similarly, the Unfair Commercial Practices Directive prohibits aggressive practices that impair consumers’ freedom of choice even though the consumer may be well aware of their limited freedom of choice. Empowerment is also sought through maximum harmonization, as this gives consumers similar rights across the entire EU and therefore increases familiarity with rules (Twigg-Flesner, 2011), as well as enforcement and justice mechanisms which seek to improve consumer redress. Significantly, the protections in consumer law go beyond empowerment by enhancing the quality of goods and services and improving consumer choice. In particular, Directive 2001/95 on general product safety goes beyond providing consumers with information about product safety by requiring that only safe

products be placed on the market. Similarly, Directive 93/13 on unfair terms in consumer contracts not only requires contract terms to be transparent but also mandates that these terms meet a test of substantive fairness (Willett, 2018).

## Consumer Food Information as a Tool to Promote Healthy Diets

In parallel with general consumer protection law, the EU has developed a system of harmonized food law. In the earliest years, EU food law focused on creating an internal market for food. Developments in food quality focused on safe food rather than nutritious food (Garde, 2010, Chapter 2; MacMaoláin, 2007, Chapter 3; MacMaoláin, 2015, Chapter 7; van der Meulen, 2013). For the safety aspect of food quality, food law utilizes information regulation. For instance, food should be labelled with a date of minimum durability or a “use by” date. With food safety, the EU has gone well beyond empowerment through information. There is a general prohibition on unsafe food and extensive substantive regulation of matters such as biocides, product traceability, novel product approval, ingredients, contamination rules, hygiene in manufacturing, irradiation, packaging materials, animal health, and genetically modified organisms.

However, this article focuses on nutrition and diet where, as will now be seen, the information paradigm dominates. It is only relatively recently that food law has developed to encourage nutritious consumer food choices (Alemanno & Garde, 2013). In light of the increasing international calls to address unhealthy diets (World Health Assembly, 2000; WHO, 2004), in the 1990s, the EU began to think more about nutritional quality (European Commission, 1997). In its Green Paper on Healthy Diets, the links between health, consumer protection, and information regulation were explicitly set out: “[c]onsumer policy aims to empower people to make informed choices regarding their diet” (European Commission, 2005). The Commission also emphasized the importance of consumer understanding in the subsequent Obesity White Paper. It stated its desire to increase consumer understanding through two information-based regulatory mechanisms (European Commission, 2007b, Section 4): on the one hand, regulating voluntary food information (food information which is not mandatory in law, such as advertising or marketing on labels). This was to be achieved most significantly through the then-recently adopted Regulation 1924/2006 on health and nutrition claims (“Food Claims Regulation,” “FCR”), which seeks to prohibit misleading health and nutrition claims on food. On the other hand, the provision of mandatory food information, particularly on labelling, which led to the adoption of Regulation 1169/2011 on the provision of food information to consumers (“Food Information to Consumers Regulation,” “FIC”).

In 2014, the Commission published its Action Plan on Childhood Obesity. One key action area was to “[i]nform and empower families.” The Commission emphasized that “providing appropriate information to consumers could help them to identify nutritious, affordable and convenient options” (European Commission, 2014). Only two legislative initiatives were considered, both of which concerned information regulation: regulating mandatory nutrition labelling and regulating voluntary food claims and other marketing. More recently, in May 2020, the Commission published its Farm to Fork Strategy. In this, the Commission claimed that “[t]he provision of clear information that makes it easier for consumers to choose healthy and sustainable diets will benefit their health and quality of life, and reduce health-related costs” (European Commission, 2020c, p. 13). It states that one of the EU’s objectives is “empowering consumers to make informed, healthy...food

choices” (European Commission, 2020b, p. 5). The only legislative commitments in the Strategy designed to improve nutrition are measures on information regulation.

It is not surprising that the EU values consumer food information and its regulation. The rationales are similar to those of broader consumer protection policy. Mandatory food information rules can better inform consumers about the products they are buying and using and correct information asymmetries. Voluntary information enables economic operators to promote the advantages of their products (European Commission, 2006). Information-based regulation tends to regulate lightly because it places fewer restrictions on industry, such as by not requiring changes to ingredients. Information rules can also be less expensive to implement and enforce. Such rules can, therefore, be easier to reach political agreement on (Howells, 2005; Luzak, 2018; Willett & Morgan-Taylor, 2012). This regulation is a compromise because it is claimed that consumers are sufficiently protected while avoiding more intrusive measures, such as product prohibitions, and is considered more proportionate.

If the rationales favouring food information are similar to those for information-based regulation in general consumer protection, so are the limitations. As discussed in the next section, consumers are not always exposed to consumer food information and may not see it, understand it, draw correct inferences, integrate it with other data, or use it to make healthy purchasing and consumption decisions. One might, therefore, expect the EU to go beyond information regulation in food law, as it has in general consumer protection. However, aside from a few isolated examples, particularly a recent limit on trans fatty acid content (Commission Regulation 2019/649), EU law does not regulate food to improve nutrition beyond information rules. This is even more concerning because horizontal consumer protection mechanisms, such as withdrawal rights, are not as useful for daily food purchases or are often excluded for food (Articles 16(d) & 3(3)(j) Consumer Rights Directive). The EU’s reliance on information regulation with food is, therefore, relatively greater than in other areas of consumer protection. Therefore, analysis of the effectiveness of information-based rules is paramount in the food sector. Hence, the subsequent sections of this article assess whether EU food information law leads to consumers who are well-informed (“Well-Informed Consumers and Food Information Law” section) and, in turn, empowered (“Empowered Consumers and Food Information Law” section) to make healthy food decisions.

## Well-Informed Consumers and Food Information Law

This section explores the *design* of the information-based regulatory tool to assess whether, and how, EU food law can successfully ensure that consumers are *well-informed* about nutrition. First, it puts forward a conceptualization of the consumer food information paradigm: consumers are considered to be well-informed through rules which aim to ensure that information is sufficient, accurate, non-misleading, clear, and easy to understand. It then evaluates whether the EU rules actually lead to well-informed consumers by assessing for the first time whether food information is indeed sufficient, accurate, non-misleading, clear, and easy to understand. This brings together the critiques of relevant rules related to healthy food choices in a unified argument demonstrating that food information law fails to lead to *well-informed* consumers. In assessing weaknesses, this section also offers suggestions for reforms. In short, it argues that the current EU rules do not lead to well-informed consumers but can be improved. Aspects of this have been explored to some extent in the

literature on specific issues, such as the average consumer benchmark, front-of-pack nutrition labelling, and food claims (Friant-Perrot & Garde, 2014; Garde, 2010; Gokani, 2022; MacMaoláin, 2008, 2014). Significant gaps remain, which this section seeks to complete, such as the rules on clear food information.

## Consumer Food Information Paradigm

Food information law—that is to say “Union provisions governing the food information” (Article 2(b) FIC)—is explicitly focused on informing consumers. Regulation 178/2002 on the general principles and requirements of food law (“General Food Law Regulation,” “GFLR”) sets out the general principles of EU food law. Article 5(1) GFLR declares the general objective of ensuring “a high level of protection of human life and health and the protection of consumers’ interests, including fair practices in food trade.” Article 8(1) GFLR states “Food law shall aim at the protection of the interests of consumers and shall provide a basis for consumers to make informed choices in relation to the foods they consume.” It shall aim for the “prevention of...practices which may mislead the consumer.” The Food Information to Consumers Regulation states that it aims for a high level of consumer protection taking into account consumers’ “information needs” and “lays down the means to guarantee the right of consumers to information” (FIC, Article 1 & Recitals 3, 17, 26, 37). The Food Claims Regulation also refers to giving “the consumer the necessary information to make choices in full knowledge of the facts” (FCR, Recital 9).

Beyond mere aims, Article 16 GFLR prohibits misleading labelling, advertising, and presentation of food products and the information made available about them. The body of EU food law is structured around the principle of *lex specialis derogat legi generali*. Therefore, consumer food information is mainly governed by more specific measures. In particular, the Food Information to Consumers Regulation regulates all food information made available to the final consumer under the responsibility of the food business operator (FIC, Articles 1 & 2). It regulates information through three sets of rules. First, some rules govern all food information. These rules require, in particular, that food information “shall not be misleading” and “shall be accurate, clear and easy to understand for the consumer” (FIC, Article 7). Second, other rules require that certain food information be given on a mandatory basis, such as a list of ingredients or a nutrition declaration (FIC, Chapter IV). Exceptions and detailed provisions are provided, including requiring that this information appears on the packaging (FIC, Article 9). Third, some rules apply only to voluntary information (FIC, Chapter V). In particular, voluntary food information shall not “mislead the consumer,” “shall not be ambiguous or confusing” (FIC, Article 36), and shall not “be displayed to the detriment of the space available for mandatory food information” (FIC, Article 37). The Food Information to Consumers Regulation is also without prejudice to more specific provisions (FIC, Article 1(4) & Recital 38).

The Food Claims Regulation is more specific. It covers food claims. A claim is defined as “any message or representation, which is not mandatory under [EU] or national legislation, including pictorial, graphic or symbolic representation, in any form, which states, suggests or implies that a food has particular characteristics” given through “commercial communications whether in the labelling, presentation or advertising of foods” (FCR, Articles 1(2) & 2(2)(1)). Two types of food claims are regulated. One is a health claim, which is any claim that states, suggests or implies that a relationship exists between a food and health (FCR, Article 2(2)(5)). This would include, for instance, “oats help reduce cholesterol.” Health claims may only be used if the claim appears on the health claims register following

a successful application for approval made to the Commission. Other requirements include, for instance, that health claims must be accompanied by a statement “indicating the importance of a varied and balanced diet and a healthy lifestyle” (FCR, Article 10(a)). The other type of food claim is a nutrition claim. This is any claim which states, suggests or implies that a food has particular beneficial nutritional properties due to the energy, nutrients or other substances it contains, does not contain or contains at a reduced or increased rate (FCR, Article 2(2)(5)). A nutrition claim would include, for instance, “low in fat.” Only the 30 nutrition claims listed in the FCR Annex may be used. Both health and nutrition claims must also satisfy overarching conditions, including on consumer understanding, scientific validity and that they shall not be “false, ambiguous or misleading” (FCR, Chapter II).

More specific measures also apply. These include “quality schemes,” which do not regulate quality but, rather, regulate whether specific products may be labelled and marketed under specific designations (Regulation 1151/2012) (MacMaoláin, 2001). For example, feta cheese may only be designated as such if it is produced in certain parts of Greece (Regulation 1107/96, Annex). There are other product-specific and sector-specific rules. For instance, soy-based dairy alternatives may not be designated as “milk,” which is defined as an animal product (Regulation 1308/2013, Annex VII; Case C-422/16 (2017)). Some products have specific labelling rules, such as some chocolate products requiring labelling on the content of cocoa solids (Directive 2000/36/EC, Article 3). Finally, food information law is embedded in the broader framework of EU law, including the general principles of internal market law.

Collectively, this body of rules seeks to ensure that consumers are given food information that is sufficient, accurate, non-misleading, clear, and easy to understand and they are, therefore, well-informed. The remainder of this section measures the success of these objectives.

## Sufficient Food Information

The Food Information to Consumers Regulation requires that 12 mandatory particulars are given: legal name of the food; list of ingredients; quantity of certain ingredients; net quantity of the food; date of minimum durability or use by date; special storage conditions; name and address of the food business operator; country of origin or place of provenance in certain circumstances; alcohol content for beverages with more than 1.2% alcohol by volume; instructions for use where appropriate; and a nutrition declaration (FIC, Article 9(1)).

The nutrition declaration is the primary disclosure to help improve nutrition. This requires the energy and macronutrient (fat, saturated fat, carbohydrate, sugar, protein, and salt) content of food to be labelled (FIC, Article 30(1)). This must be declared per 100 g/ml as sold (FIC, Articles 31 & 32), which can help consumers compare different products. However, such comparisons are primarily useful when comparing similar products, as similar products may have comparable water content or portion sizes, whereas dissimilar products may not (Scarborough et al., 2007). Despite this, there is no requirement to provide nutrition information per portion. Indeed, there is also no requirement to provide information on recommended portion sizes, which is concerning because consumers are now eating larger portions and, thus, more calories (Vermeer et al., 2014). Helpful information on food satiety (Blundell & Bellisle, 2013), and ultra-processing which is linked to adverse health outcomes (Pagliai et al., 2021), is also not required. Moreover, the declaration provides only non-interpretive information, whereas evaluative information helps



consumers make healthier choices. For instance, the weight content of fat per 100 g/ml is declared, but consumers are not advised whether the fat content is healthy or unhealthy in absolute terms or relative to other products (Friant-Perrot and Gokani, 2020; Hersey et al., 2013; Peonides et al., 2022).

An ingredients list is also required (FIC, Article 9(1)(f)), but this can also be insufficient. Ingredients are listed in descending order by weight, but the actual quantity of an ingredient is not required unless the ingredient, particularly, is emphasized on the labeling. For instance, consumers may be aware that a product contains fruit, but they will not necessarily learn the quantity of fruit. Similarly, some ingredients are more or less healthy than others, but consumers are not advised about the content or health consequences of some ingredients, such as trans fatty acids.

Mandatory particulars are also insufficient because they are only required on packaging (FIC, Article 12(2)) and, in the case of distance sales, on the website (FIC, Article 14(1)). Information on packaging may help the buyer and, if different, also sometimes the person who is consuming the product. However, purchase intentions are also influenced in the absence of packaging. For instance, consumers can make decisions in response to television advertising (Chandon & Wansink, 2012), but nutrition information is not required on such advertising.

These insufficiencies are amplified because of the variety of exemptions. Most mandatory particulars are not required for products in smaller packaging (FIC, Article 16(2)). A nutrition declaration is not required for 19 products or product categories (FIC, Article 16(3)). It is also not required in the out-of-home food sector, such as takeaways, despite consuming a significant proportion of calories from such outlets (European Commission, 2020d; Nyugen & Powell, 2014).

Most inexplicable are the exemptions for alcohol (Gokani, 2024). Alcohol ranks among the top risk factors for disability and mortality (Lim et al., 2012) and is a causal factor in more than 200 disease and injury conditions (WHO, 1992). Alcoholic beverages contain a variety of ingredients, and 1 gram of alcohol contains 7 kcal (Wannamethee & Shaper, 2003). There is a deficit in consumer knowledge and understanding of the nutritional content, ingredients, and health consequences of alcohol consumption; and consumers are interested in alcohol information (Grunert et al., 2018). Alcohol is defined as food under EU law (GFLR, Article 2). Despite this, beverages with an alcohol content above 1.2% by volume are exempt from a nutrition declaration and ingredients list (FIC, Article 16(4)). Even the Commission has itself acknowledged that there are no objective reasons for the exemptions (European Commission, 2017).

## Accurate and Non-misleading Food Information

Inaccurate information is prohibited (FIC, Article 7(2)). Nevertheless, accurate information can still be misleading. It may be incomplete or can lead consumers to misperceive messages through semantic confusion (Hastak & Mazis, 2011). Food information law protects consumers from misleading food information through three sets of rules.

### Mandatory Information

First, the ways mandatory disclosures must be given are set out in detailed rules designed to be non-misleading. In some circumstances, however, these can actually be misleading. For instance, the nutrition declaration may also be expressed as a percentage of consumers'

reference intake (FIC, Article 32(4)). However, percentage of reference intake can be misleading because it is a nominal value based on the needs of an average adult female (EFSA Panel, 2013). It is, therefore, inaccurate for most of the population, including many women.

Similarly, where nutrition information is given per consumption unit (FIC, Article 33), this can also be misleading because a single consumption unit (such as one square of a chocolate bar) may not reflect a portion size (such as an entire chocolate bar). Likewise, information per portion can also be misleading. This is because, when declared portion sizes reflect larger real-world portion sizes, this may mislead consumers to think that large portions are healthy, which can normalize unhealthy consumption. On the other hand, where portion sizes reflect smaller idealized sizes, the nutrition declaration will not reflect actual consumption.

## Voluntary Information

Second, certain types of voluntary food information, most notably nutrition and health claims, are regulated by detailed rules. Nutrition and health claims (discussed above) provide positive information about the nutritional or health effects of a food product. Both nutrition and health claims are subject to general rules, particularly that they shall not be false, ambiguous or misleading (FCR, Article 3). Nutrition claims may only be used if listed in the FCR Annex; and health claims may only be used if approved by the Commission. Therefore, many inaccurate and misleading claims are not permitted. However, even accurate food claims may not be well understood by consumers (Grunert et al., 2011). For instance, the claim that “iron contributes to the reduction of tiredness and fatigue” may be used without any explicit requirement to mention that this only applies when there is inadequate dietary intake (EFSA Panel, 2010).

Health and nutrition claims can also be misleading because they are marketing tools for unhealthy products. For instance, children’s cereal with significant levels of added sugars can be labelled with promotional claims such as “high in fibre” or “contains calcium.” When specific claims are given, general claims (such as “this food is nutritious”) might also be used (FCR, Article 10(3)). Consumers over-generalize the positive qualities of claims, which creates a “health halo,” leading consumers to think that products are healthier than they are (Chandon & Wansink, 2007; Lähteenmäki, 2013). For example, a yoghurt may be labelled “low in fat,” which makes it seem healthier even if fat has been replaced with a large amount of sugar. Food claims influence purchasing decisions (Talati et al., 2017b) and increase the consumption of unhealthy food (Oostenbach et al., 2019). Article 4 FCR required the Commission to adopt nutrient profiling by 2009 so that unhealthy products can no longer be marketed with claims, but thus far there are no proposals (European Commission, 2020a).

## All Information

Third, Article 7 FIC requires that food information “shall not be misleading.” Emphasis is given to voluntary food information, which shall “not mislead the consumer, as referred to in Article 7” (FIC, Article 36(2)). In line with general consumer protection law, whether or not information is misleading is assessed against the benchmark of the average consumer (FIC, Recital 16). The “average consumer” is “reasonably well informed and reasonably observant and circumspect taking into account social, cultural and linguistic factors” (Case C-210/96, 1996). In assessing how this notional average consumer responds to information, the CJEU has held that this consumer is an active

player in the market who reads information but will pay less attention to everyday products; will have background but not technical knowledge; will be critical towards information and not take it literally; and will not be misled easily if sufficient information is available (see Duivenvoorde, 2015). For instance, in *Darbo*, the CJEU held that the average consumer would not be misled by the claim that jam was “naturally pure” where it contained a gelling agent, provided this was included in the list of ingredients. It held that the average consumer would know that jam can only be made using a gelling agent and would read the ingredients list (Case C-465/98, 2000). A decade-and-a-half later, in *Teekanne*, the CJEU reflected on the principles arising from *Darbo* and held that where food labelling as a whole gives the impression that a particular ingredient is present, even though that ingredient is not in fact present and not listed in the ingredients list, such labelling could be misleading (Case C-195/14, 2015). Even if the CJEU has, to some extent, now acknowledged a degree of real-world behaviour, the benchmark still views consumers as rational actors.

There are several difficulties with the rational actor model (Sunstein, 2011). One difficulty is the extensive and well-established inconsistency between the assumed behaviour of the average consumer and the actual behaviour of consumers in the real world (Micklitz, 2014). For food information to lead to changes in behaviours, consumer decision theories reveal that consumers must be exposed to food information and perceive it; understand it and draw correct inferences; and integrate it with other information, which leads to an evaluation of the product and eventually a purchasing decision (Grunert et al., 2010). At all these stages, the rational actor model assumes that consumers act with System 2 of the brain. This system is effortful, self-aware, and slow. However, many food decisions are actually made using System 1. System 1 is effortless, unconscious, and fast. It is also subject to biases and uses heuristics to reach decisions (Institute for Government, 2010). For instance, extensive research, particularly in behavioural economics, shows that consumers prefer stability. They form habits which can make moving away from default food choices difficult. Consumers have limited cognitive capacity and often evaluate only the most salient information. Consumers are influenced by others. For instance, celebrity endorsements can be more influential than nutrition information. Cognitive dissonance may lead consumers to avoid information if that information conflicts with their choice of unhealthy food. Therefore, decisions made using System 1 are not always rational decisions (Samson & Wood, 2010).

Another difficulty with the model is that, even if consumers do make rational choices, rational choices are not necessarily healthy choices. Rational decisions are often made using a cost-benefit analysis to achieve the greatest net benefits for whatever values are personal to the individual consumer (Korobkin & Ulen, 2000). In a given context, many ends may be rational in light of personal and market factors but may not necessarily promote healthy diets. For example, a single parent working full-time on a low income may rationally choose to purchase food that is locally available, has high energy per unit cost and is quick to prepare, even if this might be less healthy.

## Clear and Easy to Understand Food Information

Food information shall also be “clear and easy to understand” (FIC, Article 7). These relatively new requirements show an evolution in food information law and may be able to help mitigate some of the limitations in the rules presented thus far.

## Clear

Food information shall be “clear” (FIC, Article 7). This is a visibility requirement linked with “easy legibility” (FIC, Recitals 9 and 26). This visibility requirement is reinforced in the case of mandatory information, which shall be “available” and “easily accessible” directly on the package (FIC, Article 12); be “marked in a conspicuous place in such a way as to be easily visible, clearly legible and indelible”; printed “in such a way as to ensure clear legibility”; and shall not be “hidden, obscured, detracted from or interrupted by any other written or pictorial matter or any other intervening material” (FIC, Article 13). These requirements are limited in informing consumers as the visibility requirement does not translate to a noticeability requirement. For instance, the mandatory nutrition declaration may appear on the back of packaging, where it is less noticeable, instead of on the front. Similarly, “legibility” is defined as “the physical appearance of information, by means of which the information is visually accessible to the general population” (FIC, Article 2(2) (m)). Yet, the minimum character height of mandatory particulars can be less than 0.9 mm (FIC, Article 13). The visibility requirement is also reinforced with voluntary information, which shall “not be displayed to the detriment of the space available for mandatory food information” (FIC, Article 37). However, voluntary information on labels—such as prominent cartoon characters, bright colours or food claims—can be distracting and detrimental to the noticeability of mandatory food information (Hawkes, 2010), even if it is not strictly detrimental to the space available.

On the other hand, “clear” also relates to clarity of meaning, not least as it is linked to “comprehensible” and “understandable” (FIC, Recitals 9 and 26). This is reinforced with voluntary information, which shall not be “ambiguous or confusing for the consumer” (FIC, Article 36(2)(b)). Even this, however, requires assessment against the benchmark of the average consumer, which is too far removed from real-world behaviour.

## Easy to Understand

To increase the understanding of food information, the requirement that food information shall be “easy to understand” (FIC, Article 7(2)) may be more helpful. “Easy to understand” seems to require that consumers “know the meaning of something” (Cambridge Dictionary, n.d.). This requirement does not seem to require consumers “to know why or how something happens or works” (Cambridge Dictionary, n.d.). For example, Recital 37 FIC states “it is important to ensure in this respect that the final consumer easily understands the information provided on the labelling. Therefore, it is appropriate to use on the labelling the term ‘salt’ instead of the corresponding term of the nutrient ‘sodium.’” This suggests that the requirement is focused on the literal meaning of words rather than the significance of the meaning, which is why there is no suggestion that consumers should understand the health consequences of salt in diets.

Moreover, the requirement does not seem to have practical significance for mandatory information because mandatory requirements must be given in prescribed forms. For instance, the mandatory nutrition declaration provides non-interpretive facts in a monochromatic table of words and numbers in small font at the back of packaging. This can be difficult to understand (Campos et al., 2011). Strong evidence shows that front-of-pack nutrition labelling—such as Traffic Light Labelling or Nutri-Score—is easy to see and easy to understand (Kelly & Jewell, 2018). However, many schemes are prohibited under EU

law, and Member States are prevented from making such labelling mandatory (FIC, Article 35) (Gokani, 2022; Gokani & Garde, 2023).

## Vulnerable Consumers

The limited effectiveness of the “clear” and “easy to understand” requirements also represents a missed opportunity to contribute to tackling health inequalities. In the EU, the distribution of diet-related diseases is far from equal among different groups of consumers (European Commission, 2013). The lower the socioeconomic position of the consumer, the more likely they are to be negatively affected by unhealthy diets and diet-related diseases (Drewnowski, 2009). Distinguishing different groups of consumers can help identify those in need of greater protection (Hedegaard & Wrba, 2016). However, neither the General Food Law Regulation nor the Food Information to Consumers Regulation refers to the needs of different groups of consumers. Indeed, the impact assessment accompanying the Food Information to Consumers Regulation proposal explicitly omitted an assessment of equality issues (European Commission, 2008).

This is all the more disappointing as, only a few years earlier, Article 5(3) UCPD introduced a test for vulnerable consumers for unfair commercial practices, even if this test has been subject to extensive critique (Domurath, 2013; Friant-Perrot & Gokani, 2020; Kaprou, 2020; Reich, 2016; Wilhelmsson, 2007). Moreover, even if the UCPD provisions are of limited value to food information, as food information is usually governed by more specific legislation, they have served as inspiration for food law. There is some recognition of consumer vulnerability in food law in the preamble to the Food Claims Regulation. Recital 16 FCR, in particular, states that “[w]here a claim is specifically aimed at a particular group of consumers, such as children, it is desirable that the impact of the claim be assessed from the perspective of the average member of that group.” This is rather unambitious. First, the recital only applies where “a claim is specifically aimed at a particular group of consumers.” In contrast, many claims will not be aimed at specific groups but will still be seen by them. Second, the recital refers to “particular group of consumers, such as children” which is unlikely to consider broader socioeconomic factors of vulnerability, such as poverty or a lack of education (Waddington, 2020). Third, it is difficult to determine who an “average” member is and what characteristics they would have. Fourth, the provision is unlikely to provide an enforceable rule. This is because the assessment is merely “desirable.” Moreover, recitals are interpretive tools for understanding the main text of legislation. They can affect the meaning of an ambiguous provision but cannot restrict the meaning of an unambiguous provision (Case C-424/10 and C-425/10, 2010, paras. 37 & 43–43; Case C-162/97, 1998, para 54; Klimas & Vaičiukaitė, 2008). In this respect, the operative provisions of the Food Claims Regulation state that the average consumer benchmark is the applicable test.

Therefore, food information is assessed against the average consumer benchmark (discussed above), which only takes into account the average consumer’s vulnerabilities (Case 382/87, 1989; Wilhelmsson, 2007). While the benchmark is unrealistic for many consumers, it is particularly unrealistic for members of lower socioeconomic groups. This can be because intrinsic factors, particularly the biases and heuristics described above, can be exaggerated. For instance, poverty causes negative affective states, leading to short-sighted decision-making, which can reinforce habitual unhealthy food behaviours. Similarly, consumers from some socioeconomic groups may have less functional literacy or background knowledge of nutrition. Extrinsic factors also play a part. For instance, a lack of local

availability of healthy products and access to transport can make obtaining healthy food at affordable prices more difficult for consumers who do not have private transport. If information regulation is generally less effective for worse-off consumers, the reliance on food information law would appear to reinforce population health inequalities (Gokani, 2018).

## Empowered Consumers and Food Information Law

If consumers do not have sufficient, non-misleading, clear, and easy to understand information, and are not, therefore, well-informed, this indicates weaknesses in the EU's *design* of the information-based regulatory tool to *inform* consumers well. This section moves on to the *choice* of information-based rules to *empower* consumers. It offers the first assessment of whether food information law, *if* it could inform consumers well, would empower consumers to make healthy food choices. First, building on research on consumer empowerment (Lincoln et al., 2002; Thøgersen, 2005), it shows that empowerment to make healthy food decisions results from a myriad of interacting intrinsic and environmental factors. Information is only one factor, but the EU's approach is too narrowly focused on this. It argues, therefore, that the EU's current approach to improving nutrition through empowerment with information should be met with scepticism. Second, building on research on determinants of food choices (Chen & Antonelli, 2020), this section considers how, if the EU continues to rely on information regulation, such an approach could be modified to better contribute to empowerment. It argues that information rules should be better designed and that the inherent limitations of empowerment by information should be acknowledged through complementary substantive non-information-based measures allowing information to be better utilized.

## Realizing Food Choice Empowerment

Food information law does not explicitly refer to consumer empowerment. Instead, the link between informing consumers and empowering them is set out in policy documents (discussed above). In the Green Paper on Healthy Diets, the Commission asserted that "Consumer policy aims to empower people" and that nutrition information and education are an "important element" (European Commission, 2005). The purpose of information there was to empower consumers to make "informed choices" regarding their diet. However, there was no explicit reference to empowering consumers to make healthy or healthier choices. The Obesity White Paper (European Commission, 2007b) discussed information regulation, but there was no discussion on how information regulation could lead to empowerment. The aim of informing consumers was to make "rational" decisions. The Action Plan on Childhood Obesity (European Commission, 2014) includes discussions on information in a section headed "Inform and empower" but makes no other reference to empowerment.

The explicit link between informing consumers and empowering them to make *healthy* food decisions has emerged in more recent documents. While the New Consumer Agenda states that consumers expect to be empowered to make "informed" choices (European Commission, 2020b), the Farm to Fork Strategy declares that one of the EU's objectives is to empower consumers to make "informed, healthy" food choices (European Commission, 2020c). Europe's Beating Cancer Plan further strengthens this by stating that proposals for harmonized food labelling will "empower consumers to make informed, healthy...food choices" (European Commission, 2021b). This represents a marked departure from earlier

documents. The Commission now asserts that the aim of consumer empowerment is not only to make informed, rational decisions but also informed, healthy decisions.

To realize empowerment to make informed, rational, and healthy food decisions, it is necessary to understand what it means to be empowered. This concept is rooted in power and requires that individuals gain control in the choice environment (Pires et al., 2006). Definitions of empowerment depend on the conceptual lens used to understand power. Under the consumer sovereignty model, consumers are empowered when they act as rational agents. This is a neoclassical economic model according to which consumers are actors maximising their utility by exercising reason. This enables them to know who they are, what they want, their best interests, and how these may be pursued (Slater, 1997). On the other hand, under the cultural power model, industry seeks to control choices, and empowerment is strategic behaviour where consumers resist the choice-influencing conditions created by commercial actors (Denegri-Knott et al., 2006). Within these definitions, empowerment can be a subjective state related to increased abilities or an objective state related to greater understanding (Nardo, 2012). Even if there is no agreement on one specific definition, there is consensus that empowerment is a process of consumers gaining the power to achieve an end, such as buying healthy food conveniently and affordably, rather than merely the availability of tools or means to achieve an end that may be practically difficult (Lincoln et al., 2002).

The EU's food policy documents do not articulate what it means to be empowered. Guidance on this can be found in the EU's broader consumer protection policy documents. In the Consumer Policy Strategy 2007–2013, the Commission stated that “[e]mpowered and informed consumers can more easily make changes in lifestyle and consumption patterns contributing to the improvement of their health” (European Commission, 2007a, section 5.4). In its Staff Working Paper on Consumer Empowerment, the Commission characterized empowerment as permitting consumers to “make optimal decisions by understanding their preferences and the choices available to them” (European Commission, 2011). In the Consumer Agenda, the Commission stated that empowered consumers “can actively participate in the market and make it work for them by exercising their power of choice” (European Commission, 2012). The Commission's view of empowerment is aligned with the consumer sovereignty model. This is far too narrow, not least because, as seen above, consumers are not often rational agents. Moreover, even if consumers have power in some situations, they may not have it in other situations or always.

To the extent that consumer empowerment is having the power to achieve an outcome, it is linked to autonomy, which is itself rooted in the idea that consumers make and enact decisions independently, free from external influences imposed by other agents (Wertebroch et al., 2020). These concepts are about self-determination (Ryan & Deci, 2006). However, consumers do not live and shop in insulated environments without external influence. To empower consumers, and grant them the autonomy to make healthy decisions, the food environment should be conducive to consumers genuinely using health-related information. The EU is well positioned to identify features of the market which not only impede but also facilitate this (Nardo, 2012; Thøgersen, 2005). In the Consumer Policy Strategy 2007–2013, the Commission stated that consumers are empowered when they have “real choices, accurate information, market transparency and the confidence that comes from effective protection and solid rights” (European Commission, 2007a, section 3). In its Staff Working Paper on Consumer Empowerment, it is stated that empowerment results from both the “skills, knowledge and assertiveness of consumers themselves” and the “protection, rules and institutions designed to support them” (European Commission, 2011, paras. 1–3 & 12–15). In the Consumer Agenda, the Commission stated that

“empowering consumers means providing a robust framework of principles and tools” and a “robust framework ensuring their safety, information, education, rights, means of redress and enforcement” (European Commission, 2012).

As with the definition of empowerment, these views on achieving empowerment are narrower than in research literature. Researchers in multiple disciplines have explored the factors influencing consumer food choices. These can relate to food-internal factors, such as taste; food-external factors, such as food information and physical environments; personal-state factors, such as physiological needs and habits; cognitive factors, such as skills and attitudes; and sociocultural factors, such as culture and political elements (Chen & Antonelli, 2020). These broader factors are not acknowledged by the Commission, which instead focusses on safety; information and education; and rights. If food choice is a function of both multiple intrinsic consumer qualities and external environmental factors, giving consumers information is not *on its own* empowering them. Rather, it is helping create the ability, or enabling, some consumers to make healthier food choices (Brennan & Coppack, 2008; McGregor, 2005). Therefore, the EU’s strong emphasis on information regulation to empower consumers to make healthy decisions should be met with scepticism.

### Information Regulation as One Important Part of Empowerment

Even if information regulation cannot, *on its own*, empower consumers, it is a significant contributor, or precursor, to achieve empowerment. For information to contribute to empowering consumers to make healthy decisions, two conditions are needed. First, the information rules should be well-designed. Second, the limitations of information should be recognized.

For well-designed rules on mandatory labelling, the EU needs to reflect on developing evidence-based and context-sensitive rules on whether consumer information is provided; what is provided; where and when; and how it is provided. This might help overcome the generally weak current rules described above, which are not based on strong evidence. The EU’s focus on mandatory food information, particularly on labelling, can be developed as suggested above. For instance, nutrition information could be given in advertising. Food information, particularly nutrition information, should be provided in a way which allows consumers to understand not only the literal meaning but also the implications for health through mandatory front-of-pack-nutrition labelling (Feteira-Santos et al., 2020; Talati, 2017a), such as Nutri-Score which has been shown to increase consumer understanding of the nutritional quality of food (Egnell et al., 2019). Even though the Commission is currently permitted to introduce implementing acts (FIC, Article 35(6)), it was only in 2020 that it committed to proposing harmonized front-of-pack nutrition but it continues to miss its 2022 deadline (Gokani, 2022; European Commission, 2020c).

Of the possible interventions, regulating mandatory information alone has been described as the “least protective approach possible” (Willett & Morgan-Taylor, 2012). As described above, regulating voluntary information, including marketing messages, is also essential. Food claims should be prohibited for less healthy products and vulnerability should be accepted as the norm. The Commission was required to introduce nutrient profiling by 2009 (FCR, Article 4(1)), but its commitment to do so only appeared in 2020. Again, it continues to miss its own 2022 deadline to issue proposals (European Commission, 2020c). Food claims are only one form of voluntary food information. Other forms of information-based food marketing are also designed to, or have the effect of, increasing



the recognition, appeal, or consumption of unhealthy food (Folkvord & Hermans, 2020). Indeed, marketing information—including logos and cartoon characters on labelling, event sponsorship and television and digital advertising—is one of the key drivers of the obesity epidemic (Swinburn et al., 2019). While the EU has made some attempts to protect children from harmful marketing, this is ineffective. Directive 2010/13 concerning the provision of audiovisual media services (“Audiovisual Media Services Directive,” “AVMSD”) regulates marketing but focuses on industry self-regulation. Article 9 AVMSD states that “Member States and the Commission shall encourage media service providers to develop codes of conduct” to regulate unhealthy food advertising to children. It is well documented that industry self-regulation is riddled with loopholes and is inadequate. Even though the AVMSD grants Member States the option to adopt stricter standards, this is circumscribed by the state of establishment principle, which prevents such standards from being applied to audiovisual media service providers established in other territories. With clear evidence that food marketing to children increases the consumption of unhealthy food (Gokani et al., 2022; Smith et al., 2019), the EU needs to reform these rules to protect consumers effectively (Bartlett & Garde, 2013, 2017; Garde, 2020).

### More Substantive Interventions and Consumer Empowerment

How consumers make food decisions is multifactorial and complex. Different types of environmental influences operate across multiple domains. At the individual level, food choices are influenced by factors such as attitudes and preferences, including taste preferences acquired during childhood. In the social domain, family settings and interactions with friends and others can impact food choices through, for instance, social norms. The physical environment influences which foods are available, accessible and promoted. For example, unhealthy food products tend to be less available than healthy products. Macro-level factors also play a significant role in dietary choices. For example, income and socio-economic status have an impact on food choices. Ecological models of food decisions show that these factors interact to influence food decisions (Glanz et al., 2005).

As the EU has acknowledged, it needs to “enhance EU consumers’ welfare in terms of price, choice, quality, diversity, affordability and safety” and “protect consumers effectively from the serious risks and threats that they cannot tackle as individuals” (European Commission, 2007a). Food requires tackling the commercial determinants of health that drive poor nutrition (de Lacy-Vawdon & Livingstone, 2020; Hastings, 2012; Swinburn et al., 2019). These industry practices are designed to maximize product sales by encouraging individuals to over-consume unhealthy food at the expense of healthy food. This includes creating new, highly palatable products, promoting them aggressively, selling them at lower prices than healthy food, packaging them in large ready-to-eat portions and selling them in widely accessible locations (Swinburn et al., 2019).

Improvements in individual behaviours are more likely if the environments within which food choices are made support healthy food options. Population-level improvements in diets are unlikely to be achieved sufficiently until environmental influences are identified and modified (Larson & Story, 2009). Environmental measures can help in two key ways. They allow well-designed information rules to be most effective, and they also promote healthier decisions independently of information measures.

Several substantive interventions have been identified that can help create a more health-promoting marketplace, and WHO promotes interventions that are both effective and cost-effective (WHO, 2017). This includes product reformulation. This is the process of altering

the composition of a food product to improve its nutritional profile. Reformulation can lead to products with a healthier profile, even if it does not eliminate concerns about consuming too much of a product. Consumers usually accept, buy, and consume reformulated products, resulting in an overall improvement in the nutritional composition of purchased food. Overall, food reformulation leads to improved nutritional intake. This can lead to a statistically significant improvement in outcomes for diet-related diseases such as mortality from cardiovascular disease. Particular success has been seen with reformulating products to reduce salt and saturated fat from processed food products (WHO, 2020).

Portion sizes of processed food, which have increased in recent years, can also be reduced. It is well established that consumers consume more food when offered larger portions or packages. Sustained reductions in portion sizes reduce the average daily energy consumption, and studies indicate that limiting portion sizes can generate substantial health benefits (WHO, 2020). Other WHO recommendations include fiscal policies, including higher taxation of food high in salt, sugars and fat, and subsidies for healthier products. Evidence shows that fiscal policies can reduce purchases and consumption of taxed foods, encourage product reformulation, increase awareness of healthy eating, and even generate revenue that can be used for health purposes (WHO, 2022).

Other recommended policies may be less obvious. For instance, improvements in public procurement can improve the quality of diets. Healthy public food procurement and healthy food services establish nutrition criteria to increase the availability of foods that promote healthy diets or limit the availability of unhealthy products. This can be applied to food served and sold through government institutional settings, such as schools and hospitals. This can improve the quality of food eaten, increase the understanding of nutrition, strengthen local food systems by promoting purchasing from local producers and improve health equity across population groups (WHO, 2021).

## Food Information Law and Healthy Food Decisions

This article has argued that with respect to nutrition, EU food information law is based on two ideas or beliefs. The first is that consumers are (only) given food information that is sufficient, accurate, non-misleading, clear, and easy to understand and they are, therefore, well-informed. Second, that well-informed consumers are empowered to make healthy food choices. This article has shown that both of these beliefs are misguided and, therefore, the EU's strong emphasis on regulating consumer food information to improve diets is misplaced and cannot contribute meaningfully to reducing diet-related diseases. This is not to suggest that information regulation is unimportant. Rather, it is to make two other claims. First, food information law, *in its current form*, does not lead to *well-informed* consumers, but, rather, leads to *some* consumers making *better* informed decisions. Second, food information law, *on its own*, does not *empower* consumers to make *healthy* food decisions, but, rather, may *enable some* consumers to make *healthier* food decisions.

As the EU's Farm to Fork Strategy declares that one of the EU's objectives is to empower consumers to make *informed, healthy* food choices (European Commission, 2020c), the findings of this article have two policy implications for the consumer food information paradigm. On the one hand, the EU needs to develop its food information rules so that the rules better contribute to informing consumers well. On the other hand, the EU needs to reflect on the limitations of information in its response to unhealthy

diets and acknowledge better the need for more substantive non-information-based measures that can promote the use of information and also more broadly create an environment where healthy decisions are easier.

Even if any of this seems ambitious, it is not unfeasible. The EU has competence to address the internal market in food in line with its obligation to promote a high level of consumer protection and public health (TFEU, Articles 9, 12, 114, 168, and 169) (Ale-manno & Garde, 2013, 2014). Attempts to improve information regulation in other areas of consumer law have been more successful. With tobacco, for instance, packaging with financial offers is prohibited (Directive 2014/40/EU, Article 13). The EU also prohibits radio advertising and sponsorship of cross-border tobacco events (Directive 2003/33/EC, Articles 4 & 5) and audiovisual commercial communications for tobacco products (Directive 2010/13/EU, Article 9(1)(d)). EU law permits Member States to introduce standardized tobacco packaging devoid of virtually all forms of voluntary information (Directive 2014/40/EU, Article 24(2)). Attempts to go beyond information through more substantive measures have also been more successful in other areas of consumer law, where withdrawal rights, regulation of unfair terms, cure remedies in the sale of goods and other non-information-based rights are granted.

Underlying broader consumer law is a general trend to move away from values of freedom of contract and consumer self-reliance and more towards recognizing values of protecting consumers (e.g., Hesselink, 2016; Willett, 2018). In food, comparatively little progress has been made. In the food space, large parts of the unhealthy food industry have fiercely resisted similar endeavours (Moodie et al., 2013; Nestle, 2013; Tselengidis & Östergren, 2019). Consumer protection and public health organizations have not been heard well enough and cannot commit even a small proportion of the same resources as industry. When opposing effective policies, tactics the food industry employs include biased research findings. They lobby and co-opt policymakers and professionals by funding complex policy organizations, which have become more prominent with the diversification of power in the EU (Caraher & Coveney, 2003; Miller & Harkins, 2010). Information campaigns and social marketing encourage voters to oppose public health regulation. These frame the choice to eat unhealthily as a matter of personal freedom; poor consumption as a matter of limited willpower; and state intervention as coercive and oppressive (Wiist, 2012). Moreover, to deflect criticism, industry promotes positive actions outside their own fields of activity under the guise of corporate social responsibility, such as highly processed food businesses promoting physical activity (McGarrity & Wagner, 2008). Unfortunately, obesity crisis framing is often dislodged by claims that labelling rules are signs of excessive state intrusion; the food industry does not suffer the same condemnation as other industries like tobacco; and the public is not always aware of the link between food information and dietary choices. Industry often wins when the ideological inclinations of key actors favour industry positions, as occurred with the rapporteur of the Parliament committee of the Food Information to Consumers Regulation proposal (Hoff, 2016; Kurzer & Cooper, 2013).

Broader consumer law shows that progress is possible. The EU must move beyond its current rhetoric (Howells, 2016). Food should not be carved out as an area for weaker protection. It should lead the trend in broader consumer policy towards evidence-based information rules with more substantive protection. It is incumbent on the EU to act as it is EU harmonization that constrains the competence of Member States to introduce effective national rules (Weatherill, 2012). The EU has, therefore, taken responsibility for consumer protection. In short, the EU can and should act, and all its institutions must find the necessary political will with the support of Member States.

**Acknowledgements** I am grateful to Amandine Garde, Chris Willet, Caoimhín MacMaoláin and the anonymous reviewers for comments on earlier drafts. I also thank the organizers of the UACES EU Health Governance panel, where an early vision of this paper was presented.

## Declarations

**Conflict of Interest** The author declares no competing interests.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Alemanno, A., & Garde, A. (2013). The emergence of an EU lifestyle policy: The case of alcohol, tobacco and unhealthy diets. *Common Market Law Review*, 50, 1745–1786. <https://doi.org/10.54648/cola2013165>
- Alemanno, A., & Garde, A. (Eds.). (2014). Regulating lifestyle risks: The EU, alcohol, tobacco and unhealthy diets. Cambridge University Press.
- Bartlett, O., & Garde, A. (2013). Time to seize the (red) bull by the horns: The EU's failure to protect children from alcohol and unhealthy food marketing. *European Law Review*, 38, 498–520.
- Bartlett, O., & Garde, A. (2017). The EU's failure to support member states in their implementation of the WHO recommendations: How to ignore the elephant in the room? *European Journal of Risk Regulation*, 8(2), 251–269. <https://doi.org/10.1017/err.2017.30>
- Blundell, J. E., & Bellisle, F. (Eds.). (2013). *Satiation, satiety and the control of food intake: Theory and practice*. Woodhead.
- Brennan, C., & Coppack, M. (2008). Consumer empowerment: Global context, UK strategies and vulnerable consumers. *International Journal of Consumer Studies*, 32, 306–313. <https://doi.org/10.1111/j.1470-6431.2007.00640.x>
- Cambridge Dictionary (n.d.). Understand. Retrieved, April 21, 2023, from <https://www.oercommons.org/authoring/53029-nursing-clinical-brain/view>.
- Campos, S., Doxey, J., & Hammond, D. (2011). Nutrition labels on pre-packaged foods: A systematic review. *Public Health Nutrition*, 14, 1496. <https://doi.org/10.1017/S1368980010003290>
- Caraher, M., & Coveney, J. (2003). Public health nutrition and food policy. *Public Health Nutrition*, 7, 591–598. <https://doi.org/10.1079/PHN2003575>
- Chandon, P., & Wansink, B. (2007). The biasing health halos of fast-food restaurant health claims: Lower calorie estimates and higher side-dish consumption intentions. *Journal of Consumer Research*, 34, 301–314. <https://doi.org/10.1086/519499>
- Chandon, P., & Wansink, B. (2012). Does food marketing need to make us fat? A review and solutions. *Nutrition Reviews*, 70, 571–593. <https://doi.org/10.1111/j.1753-4887.2012.00518.x>
- Chen, P., & Antonelli, M. (2020). Conceptual models of food choice: Influential factors related to foods, individual differences, and society. *Foods*, 9, 1898. <https://doi.org/10.3390/foods9121898>
- de Lacy-Vawdon, C., & Livingstone, C. (2020). Defining the commercial determinants of health: A systematic review. *BMC Public Health*, 20, 1022. <https://doi.org/10.1186/s12889-020-09126-1>
- Denegri-Knott, J., Zwick, D., & Schroeder, J. (2006). Mapping consumer power: An integrative framework for marketing and consumer research. *European Journal of Marketing*, 40, 950–971. <https://doi.org/10.1108/03090560610680952>
- Domurath, I. (2013). The case of vulnerability as the normative standard in European consumer credit and mortgage law - An inquiry into the paradigms of consumer law. *Journal of European Consumer and Market Law*, 2(3), 124–137.
- Drewnowski, A. (2009). Obesity, diets, and social inequalities. *Nutrition Reviews*, 67, S36–S39. <https://doi.org/10.1111/j.1753-4887.2009.00157.x>

- Duivenvoorde, B. (2015). *The consumer benchmarks in the Unfair Commercial Practices Directive*. Springer.
- EFSA Panel. (2010). Scientific opinion on the substantiation of health claims related to iron and formation of red blood cells and haemoglobin (ID 374, 2889), oxygen transport (ID 255), contribution to normal energy-yielding metabolism (ID 255), reduction of tiredness and fatigue (ID 255, 374, 2889), biotransformation of xenobiotic substances (ID 258), and activity of heart, liver and muscles (ID 397) pursuant to article 13(1) of regulation (EC) 1924/2006. *EFSA Journal*, 8, 1740.
- EFSA Panel. (2013). Scientific opinion on dietary reference values for energy EFSA Panel on dietetic products, nutrition and allergies. *EFSA Journal*, 11, 3005.
- Egnell, M., Crosetto, P., d'Almeida, T., Kesse-Guyot, E., Touvier, M., Ruffieux, B., Hercberg, S., Muller, L., & Julia, C. (2019). Modelling the impact of different front-of-package nutrition labels on mortality from non-communicable chronic disease. *International Journal of Behavioral Nutrition and Physical Activity*, 16, 56. <https://doi.org/10.1186/s12966-019-0817-2>
- European Commission. (1997). *Green paper on European food law*(IP/97/370). European Economic Community.
- European Commission. (2005). *Green paper on promoting healthy diets and physical activity: A European dimension for the prevention of overweight, obesity and chronic diseases*(COM(2005) 637 final). European Union.
- European Commission. (2006). *Labelling: Competitiveness, consumer information and better regulation for the EU*. European Union.
- European Commission. (2007a). *Communication from the Commission to the Council, the European Parliament and the European Economic and Social Committee. EU Consumer Policy Strategy 2007–2013. Empowering consumers, enhancing their welfare, effectively protecting them*(COM/2007/0099 final). European Union.
- European Commission. (2007b). *White paper on a strategy for Europe on nutrition, overweight and obesity related health issues*(COM(2007) 279 final). European Union.
- European Commission. (2008). *Commission staff working document accompanying the proposal for a regulation of the European Parliament and of the council on the provision of food information to consumers: Impact assessment report on nutrition labelling issues*(COM(2008) 40 final). European Union.
- European Commission. (2011). *Commission staff working paper consumer empowerment in the EU (Sect.(2011) 469 final)*. European Union.
- European Commission. (2012). *Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. A European Consumer Agenda - Boosting confidence and growth*(COM/2012/0225 final). European Commission.
- European Commission. (2013). *Health inequalities in the EU: Final report of a consortium*. European Commission.
- European Commission. (2014). *EU action plan on childhood obesity 2014–2020*. European Union.
- European Commission. (2017). *Report from the Commission to the European Parliament and the Council regarding the mandatory labelling of the list of ingredients and the nutrition declaration of alcoholic beverages* (COM(2017) 58 final). European Union.
- European Commission. (2020a). *Commission staff working document executive summary of the evaluation of the Regulation (EC) No 1924/2006 on nutrition and health claims made on foods with regard to nutrient profiles and health claims made on plants and their preparations and of the general regulatory framework for their use in foods*(SWD(2020) 96 final). European Union.
- European Commission. (2020b). *Communication from the Commission to the European Parliament and the Council. New consumer agenda. Strengthening consumer resilience for sustainable recovery* (COM(2020) 696 final). European Union.
- European Commission. (2020c). *Farm to fork strategy: For a fair, healthy and environmentally-friendly food system*. European Union.
- European Commission. (2020d). How much are households spending on eating-out? European Union. Retrieved, December 12, 2020, from <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20200101-2>
- European Commission. (2021a). *EU burden from non-communicable diseases and key risk factors*. European Union. Retrieved, March 23, 2021, from <https://ec.europa.eu/jrc/en/health-knowledge-gateway/societal-impacts/burden>
- European Commission. (2021b). *Europe's Beating Cancer Plan Communication from the commission to the European Parliament and the Council*. European Commission.
- Feteira-Santos, R., Fernandes, J., Virgolino, A., Alarcão, V., Sena, C., Vieira, C. P., Gregório, M. J., Nogueira, P., Costa, A., Graça, P., & Santos, O. (2020). Effectiveness of interpretive front-of-pack

- nutritional labelling schemes on the promotion of healthier food choices: A systematic review. *International Journal of Evidence-Based Healthcare*, 18, 24–37. <https://doi.org/10.1097/XEB.0000000000000214>
- Folkvord, F., & Hermans, R. (2020). Food marketing in an obesogenic environment: A narrative overview of the potential of healthy food promotion to children and adults. *Current Addiction Reports*, 7, 431–436. <https://doi.org/10.1007/s40429-020-00338-4>
- Friant-Perrot, M., & Garde, A. (2014). From BSE to obesity – EFSA’s growing role in the EU’s nutrition policy. In A. Alemanno & S. Gabbi (Eds.), *Foundations of EU food law and policy: Ten years of the European Food Safety Authority*. Routledge.
- Friant-Perrot, M., & Gokani, N. (2020). Human rights, childhood obesity and health inequalities. In A. Garde, J. Curtis, & O. De Schutter (Eds.), *Ending childhood obesity - A challenge at the crossroads of international economic and human rights law*. Edward Elgar.
- Garde, A. (2010). *EU law and obesity prevention*. Kluwer Law International.
- Garde, A. (2020). Harmful commercial marketing and children’s rights: For a better use of EU powers. *European Journal of Risk Regulation*, 11, 841–850. <https://doi.org/10.1017/err.2020.83>
- Glanz, K., Sallis, J. F., & Frank, L. D. (2005). Healthy nutrition environments: Concepts and measures. *American Journal of Health Promotion*, 19, 330–333. <https://doi.org/10.4278/0890-1171-19.5.330>
- Gokani, N. (2018). Regulation for health inequalities and non-communicable diseases: In want of (effective) behavioural insights. *European Law Journal*, 24(6), 490.
- Gokani, N. (2022). Front-of-pack nutritional labelling: A tussle between EU food law and national measures. *European Law Review*, 47(2), 153.
- Gokani, N. (2024). Booze, bottles and Brussels: Member States’ dilemma on alcohol health warnings. *Journal of European Consumer and Market Law*, forthcoming.
- Gokani, N., & Garde, A. (2023). Front-of-pack nutrition labelling: Time for the EU to adopt a harmonized scheme. *European Journal of Public Health*, 33, 751–752. <https://doi.org/10.1093/eurpub/ckad087>
- Gokani, N., Garde, A., Philpott, M., Ireland, R., Owens, R., & Boyland, M. (2022). A game changer for dietary health: Addressing the implications of sport sponsorship by food companies through an innovative interdisciplinary collaboration. *Nutrition Bulletin*, 47, 115–122. <https://doi.org/10.1111/nbu.12535>
- Grunert, K. G., Fernández-Celemín, L., Wills, J. M., genannt Bonsmann, S. S., & Nureeva, L. (2010). Use and understanding of nutrition information on food labels in six European countries. *Journal of Public Health*, 18, 261–277. <https://doi.org/10.1007/s10389-009-0307-0>
- Grunert, K. G., Scholderer, J., & Rogeaux, M. (2011). Determinants of consumer understanding of health claims. *Appetite*, 56, 269–277. <https://doi.org/10.1016/j.appet.2011.01.009>
- Grunert Ks, Hieke, S., & Jörn Juhl, H. (2018). Consumer wants and use of ingredient and nutrition information for alcoholic drinks: Cross-cultural study in six EU countries. *Food Quality and Preference*, 63, 107. <https://doi.org/10.1016/j.foodqual.2017.08.005>
- Hastak, M., & Mazis, M. (2011). Deception by implication: A typology of truthful but misleading advertising and labeling claims. *Journal of Public Policy & Marketing*, 30, 157–167. <https://doi.org/10.1509/jppm.30.2.157>
- Hastings, G. (2012). Why corporate power is a public health priority. *British Medical Journal*, 345, e5124. <https://doi.org/10.1136/bmj.e5124>
- Hawkes, C. (2010). Food packaging: The medium is the message. *Public Health Nutrition*, 13, 297–299. <https://doi.org/10.1017/S1368980009993168>
- Hedegaard, J., & Wrba, S. (2016). The notion of consumer under EU legislation and EU case law: Between the poles of legal certainty and flexibility. In M. Fenwick & S. Wrba (Eds.), *Legal certainty in a contemporary context: Private and criminal law perspectives*. Springer.
- Helleringer, G., & Sibony, A. (2017). European consumer protection through the behavioral lens. *Columbia Journal of European Law*, 23, 607–646.
- Hersey, J., Wohlgenant, K. C., Arsenault, J. E., Kosa, K. M., & Muth, M. K. (2013). Effects of front-of-package and shelf nutrition labeling systems on consumers. *Nutrition Review*, 71, 1. <https://doi.org/10.1111/nure.12000>
- Hesselink, M. (2016). Contract theory and EU Contract Law. In C. Twigg-Flesner (Ed.), *Research handbook on EU consumer and contract law*. Edward Elgar.
- Hoff, A., Lielieveldt, H., & van der Does, R. (2016). A biased rapporteur or politics as usual? Reassessing the balance of interests in the EU food information labelling case. *Journal of European Public Policy*, 23, 296–313. <https://doi.org/10.1080/13501763.2015.1051095>
- Howells, G. (2005). The potential and limits of consumer empowerment by information. *Journal of Law and Society*, 32, 349–370. <https://doi.org/10.1111/j.1467-6478.2005.00328.x>

- Howells, G. (2016). Europe's (lack of) vision on consumer protection: A case of rhetoric hiding substance? In Leczykiewicz, D. & Weatherill S. *The images of the consumer in EU law: Legislation, free movement and competition law*. Hart.
- Dolan, P., Hallsworth, M., Halpern, D., King, D., & Vlaev, I. (2010). *MINDSPACE: Influencing behaviour through public policy*. Institute for Government.
- Kaprou, E. (2020). The legal definition of 'vulnerable' consumers in the UCPD: Benefits and limitations of a focus on personal attributes. In C. Riefa & S. Saintier (Eds.), *Vulnerable consumers and the law: Consumer protection and access to justice*. Routledge.
- Kelly, B., & Jewell, J. (2018). *What is the evidence on the policy specifications, development processes and effectiveness of existing front-of-pack food labelling policies in the WHO European Region?* WHO Europe.
- Klimas, T., & Vaičiukaitė, J. (2008). The law of recitals in European Community Legislation. *ILSA Journal of International & Comparative Law*, 15, 1.
- Korobkin, R. B., & Ulen, T. S. (2000). Law and behavioral science: Removing the rationality assumption from law and economics. *California Law Review*, 88, 1051–1144. <https://doi.org/10.2307/3481255>
- Kurzer, P., & Cooper, A. (2013). Biased or not? Organized interests and the case of EU food information labeling. *Journal of European Public Policy*, 20, 722–740. <https://doi.org/10.1080/13501763.2012.751703>
- Lähteenmäki, L. (2013). Claiming health in food products. *Food Quality and Preference*, 27, 196–201. <https://doi.org/10.1016/j.foodqual.2012.03.006>
- Larson, N., & Story, M. (2009). A review of environmental influences on food choices. *Annals of Behavioral Medicine*, 38, S56–S73. <https://doi.org/10.1007/s12160-009-9120-9>
- Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., AlMazroa, M. A., Amann, M., Anderson, H. R., Andrews, K. G., Aryee, M., Atkinson, C., Bacchus, L. J., Bahalim, A. N., Balakrishnan, K., Balmes, J., Barker-Collo, S., Baxter, A., Bell, M. L., & Blore, J. D. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: A systematic analysis for the global burden of Disease Study 2010. *Lancet*, 380, 2224–2260. [https://doi.org/10.1016/S0140-6736\(12\)61766-8](https://doi.org/10.1016/S0140-6736(12)61766-8)
- Lincoln, N. D., Trvers, C., Ackers, P., & Wilkinson, A. (2002). The meaning of empowerment: The interdisciplinary etymology of a new management concept. *International Journal of Management Reviews*, 4(3), 271–290. <https://doi.org/10.1111/1468-2370.00087>
- Luzak, J. (2018). Who calls the tune? Stock taking of behavioural consumer protection in Europe. In H. W. Micklitz, A. L. Sibony, & F. Esposito (Eds.), *Research methods in consumer law: A handbook*. Edward Elgar.
- Luzak, J., Wulf, A. J., Seizov, O., Loos, M. B. M., & Junuzović, M. (2023). ABC of online consumer disclosure duties: Improving transparency and legal certainty in Europe. *Journal of Consumer Policy*, 46, 307–333. <https://doi.org/10.1007/s10603-023-09543-w>
- MacMaoláin, C. (2001). Free movement of foodstuffs, quality requirements and consumer protection: Have the court and the commission both got it wrong? *European Law Review*, 26, 413–428.
- MacMaoláin, C. (2007). *EU food law: Protecting consumers and health in a common market*. Hart.
- MacMaoláin, C. (2008). Waiter! There's a beetle in my soup. Yes sir, that's E120: Disparities between actual individual behaviour and regulating food labelling for the average consumer in EU law. *Common Market Law Review*, 45, 1147–1165.
- MacMaoláin, C. (2014). Food information regulation: Failing to address ongoing concerns about obesity. *Irish Journal of European Law*, 17, 77–86.
- MacMaoláin, C. (2015). *Food law: European, domestic and international frameworks*. Hart.
- McGarrity, T., & Wagner, W. (2008). *Bending science: How special interests corrupt public health research*. Harvard University Press.
- McGregor, S. (2005). Sustainable consumer empowerment through critical consumer education: A typology of consumer education approaches. *International Journal of Consumer Studies*, 29, 437–447. <https://doi.org/10.1111/j.1470-6431.2005.00467.x>
- Micklitz, H.-W. (2012). The expulsion of the concept of protection from the consumer law and the return of social elements in the civil law: A bittersweet polemic. *Journal of Consumer Policy*, 35, 283–296. <https://doi.org/10.1007/s10603-012-9199-4>
- Micklitz, H-W. (2014). Unfair commercial practices and misleading advertising. In Reich, N., Micklitz, H-W., Rott, P., & Tonner, K. (Eds.), *European consumer law*. Intersentia.
- Miller, D., & Harkins, C. (2010). Corporate strategy, corporate capture: Food and alcohol industry lobbying and public health. *Critical Social Policy*, 30, 564–589. <https://doi.org/10.1177/0261018310376805>

- Moodie, R., Stuckler, D., Monteiro, C., Sheron, N., Neal, B., Thamarangsi, T., Lincoln, P., & Casswell, S. (2013). Profits and pandemics: Prevention of harmful effects of tobacco, alcohol, and ultra-processed food and drink industries. *Lancet*, *381*, 670–679. [https://doi.org/10.1016/S0140-6736\(12\)62089-3](https://doi.org/10.1016/S0140-6736(12)62089-3)
- Nardo, M. (2012). Consumer Empowerment in Europe: Its determinants and the challenges met in measuring it. In L. Hansson (Ed.), *Making sense of consumption: Selections from the 2nd Nordic conference on consumer research 2012*. Centre for Consumer Science.
- Nestle, M. (2013). *Food politics: How the food industry influences nutrition and health* (3rd ed.). University of California Press.
- Nguyen, B., & Powell, L. (2014). The impact of restaurant composition among US adults: Effects on energy and nutrient intakes. *Public Health Nutrition*, *17*, 2445–2452.
- Oostenbach, L. H., Slits, E., Robinson, E., & Sacks, G. (2019). Systematic review of the impact of nutrition claims related to fat, sugar and energy content on food choices and energy intake. *BMC Public Health*, *19*, 1296. <https://doi.org/10.1186/s12889-019-7622-3>
- Pagliai, G., Dinu, M., Madarena, M. P., Bonaccio, M., Iacoviello, L., & Sofi, F. (2021). Consumption of ultra-processed foods and health status: A systematic review and meta-analysis. *British Journal of Nutrition*, *125*, 308–318. <https://doi.org/10.1017/S0007114520002688>
- Peonides, M., Knoll, V., Gerstner, N., Heiss, R., Frischhut, M., & Gokani, N. (2022). Food labeling in the European Union: A review of existing approaches. *International Journal of Health Governance*, *27*, 460–468. <https://doi.org/10.1108/IJHG-07-2022-0072>
- Pires, G., Stanton, J., & Rita, P. (2006). The internet, consumer empowerment and marketing strategies. *European Journal of Marketing*, *40*, 936–949.
- Ramsay, I. (1985). Framework for regulation of the consumer marketplace. *Journal of Consumer Policy*, *8*, 353–372.
- Reich, N. (2016). Vulnerable consumers in EU law. In D. Leczykiewicz & S. Weatherill (Eds.), *The images of the consumer in EU Law: Legislation, free movement and competition law*. Hart Publishing.
- Ryan, R., & Deci, E. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will? *Journal of Personality*, *74*, 1557–1586. <https://doi.org/10.1111/j.1467-6494.2006.00420.x>
- Samson, A., & Wood, O. (2010). *Behavioral economics: A primer*. London School of Economics and Political Science.
- Scarborough, P., Rayner, M., & Stockley, L. (2007). Developing nutrient profile models: A systematic approach. *Public Health Nutrition*, *10*, 330–336. <https://doi.org/10.1017/S1368980007223870>
- Slater, D. (1997). *Consumer culture and modernity*. Polity.
- Smith, R., Kelly, B., Yeatman, H., & Boyland, E. (2019). Food marketing influences children's attitudes, preferences and consumption: A systematic critical review. *Nutrients*, *11*(4), 875.
- Sunstein, C. (2011). Empirically informed regulation. *University of Chicago Law Review*, *78*, 1349–1429.
- Swinburn, B. A., Kraak, V. I., Allender, S., Atkins, V. J., Baker, P. I., Bogard, J. R., Brinsden, H., Calvillo, A., De Schutter, O., Devarajan, R., Ezzati, M., Friel, S., Goenka, S., Hammond, R. A., Hastings, G., Hawkes, C., Herrero, M., Hovmand, P. S., Howden, M., Jaacks, L. M., et al. (2019). The global syndemic of obesity, undernutrition, and climate change: The Lancet Commission report. *The Lancet Commissions*, *393*, P791–P846. [https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8)
- Talati, Z., Norman, R., Pettigrew, S., Neal, B., Kelly, B., Dixon, H., Ball, K., Miller, C., & Shilton, T. (2017a). The impact of interpretive and reductive front-of-pack labels on food choice and willingness to pay. *International Journal of Behavioral Nutrition and Physical Activity*, *14*, 171. <https://doi.org/10.1186/s12966-017-0628-2>
- Talati, Z., Pettigrew, S., Neal, B., Dixon, H., Hughes, C., Kelly, B., & Miller, C. (2017b). Consumers' responses to health claims in the context of other on-pack nutrition information: A systematic review. *Nutrition Review*, *75*, 260–273. <https://doi.org/10.1093/nutrit/nuw070>
- Thøgersen, J. (2005). How may consumer policy empower consumers for sustainable lifestyles? *Journal of Consumer Policy*, *28*, 143–177. <https://doi.org/10.1007/s10603-005-2982-8>
- Tselengidis, A., & Östergren, P. (2019). Lobbying against sugar taxation in the European Union: Analysing the lobbying arguments and tactics of stakeholders in the food and drink industries. *Scandinavian Journal of Public Health*, *47*, 565–575. <https://doi.org/10.1177/1403494818787102>
- Twigg-Flesner, C. (2011). Good-bye harmonisation by directives, hello cross-border only regulation? – A way forward for EU consumer contract law. *European Review of Contract Law*, *2*, 235–256. <https://doi.org/10.1515/ercl.2011.235>



- Twigg-Flesner, C. (2016). The importance of law and harmonisation for the EU's confident consumer. In D. Leczykiewicz & S. Weatherill (Eds.), *The images of the consumer in EU law: Legislation, free movement and competition law*. Hart.
- Twigg-Flesner, C., & Schulze, R. (2010). Protecting rational choice: information and the right of withdrawal. In G. Howells, I. Ramsay, & T. Wilhelmsson (Eds.), *Handbook of research on international consumer law*. Edward Elgar.
- Unberath, H., & Johnston, A. (2007). The double-edge approach of the ECJ concerning consumer protection. *Common Market Law Review*, 44, 1249–1284.
- van der Meulen, B. (2013). The structure of European food law. *Laws*, 2, 69–98. <https://doi.org/10.3390/laws2020069>
- Vermeer, W., Steenhuis, I. H. M., & Poelman, M. P. (2014). Small, medium, large or supersize? The development and evaluation of interventions targeted at portion size. *International Journal of Obesity*, 38, S13–S18.
- Waddington, L. (2020). Exploring vulnerability in EU Law: An analysis of 'vulnerability' in EU criminal law and consumer protection law. *European Law Review*, 45, 779–801.
- Wannamethee, S., & Shaper, A. (2003). Alcohol, body weight, and weight gain in middle-aged men. *American Journal of Clinical Nutrition*, 77, 1312. <https://doi.org/10.1093/ajcn/77.5.1312>
- Weatherill, S. (2012). Maximum versus minimum harmonization: Choosing between unity and diversity in the search for the soul of the internal market. In N. Shuibhne & L. Gormley (Eds.), *From single market to economic union*. Oxford University Press.
- Weatherill, S. (2013). *EU consumer law and policy*. Elgar.
- Weatherill, S. (2016). Empowerment is not the only fruit. In D. Leczykiewicz & S. Weatherill (Eds.), *The images of the consumer in EU law: Legislation, free movement and competition law*. Hart Publishing.
- Wertenbroch, K., Schrifft, R. Y., Alba, J. W., Barasch, A., Bhattacharjee, A., Giesler, M., Knobe, J., Lehmann, D. R., Matz, S., Nave, G., Parker, J. R., Puntoni, S., Zheng, Y., & Zwebner, Y. (2020). Autonomy in consumer choice. *Marketing Letters*, 31, 429–439. <https://doi.org/10.1007/s11002-020-09521-z>
- WHO. (2004). *Global strategy on diet, physical activity and health*. World Health Organization.
- WHO. (2017). *Tackling NCDs: 'Best Buys' and other recommended interventions for the prevention and control of noncommunicable diseases*. World Health Organization.
- WHO. (2020). *Reformulation of food and beverage products for healthier diets*. World Health Organization.
- WHO. (2021). *Action framework for developing and implementing public food procurement and service policies for a healthy diet*. World Health Organization.
- WHO. (2022). *Fiscal policies to promote healthy diets*. World Health Organization.
- WHO (1992). *Statistical classification of diseases and related health problems*. 10th revision. World Health Organization.
- Wiist, W. (2012). The corporate play book, health, and democracy: The snack food and beverage industry's tactics in context. In D. Stuckler & K. Siegel (Eds.), *Sick societies: Responding to the global challenge of chronic disease*. Oxford University Press.
- Wilhelmsson, T. (2007). The informed consumer v the vulnerable consumer in European unfair commercial practices law: A comment. *Yearbook of European Law*, 27, 211.
- Willett, C. (2018). Re-theorising consumer law. *Cambridge Law Journal*, 77, 179–210. <https://doi.org/10.1017/S0008197318000107>
- Willett, C., & Morgan-Taylor, M. (2012). Recognising the limits of transparency in EU consumer law. In J. Devenney & M. Kenny (Eds.), *European consumer protection: Theory and practice*. Cambridge University Press.
- World Health Assembly. (2000). *Global strategy for the prevention and control of noncommunicable diseases* (Vol. 53). WHA.

## Legislation

### European Union

- Commission Regulation (EU) 2019/649 of 24 April 2019 amending Annex III to Regulation (EC) No 1925/2006 of the European Parliament and of the Council as regards trans fat, other than trans fat naturally occurring in fat of animal origin [2019] OJ L 110/17.
- Council Resolution of 14 April 1975 on a preliminary programme of the European Economic Community for a consumer protection and information policy [1975] OJ C 92/2.
- Directive 2000/36/EC of the European Parliament and of the Council of 23 June 2000 relating to cocoa and chocolate products intended for human consumption [2000] OJ L 197/19.

- Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety [2002] OJ L 11/4.
- Directive 2003/33/EC of the European Parliament and of the Council of 26 May 2003 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the advertising and sponsorship of tobacco products [2003] OJ L 152/16.
- Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council [2005] OJ L 149/22.
- Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010 on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services [2010] OJ L 95/1.
- Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council [2011] OJ L 304/64.
- Directive 2014/40/EU of the European Parliament and of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC [2014] OJ L 127/1.
- Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety [2002] OJ L 31/1.
- Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods [2006] OJ L 404/9.
- Regulation (EU) No 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs [2012] OJ L 343/1.
- Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 [2013] OJ L 347/671.
- Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004 [2011] OJ L 304/18.

## Cases

### European Union

- Bundesverband der Verbraucherzentralen und Verbraucherverbände – Verbraucherzentrale Bundesverband e.V. v Teekanne GmbH & Co. KG (case C-195/14) ECLI:EU:C:2015:361.
- Gut Springenheide GmbH and Rudolf Tusky v Oberkreisdirektor des Kreises Steinfurt - Amt für Lebensmittelüberwachung (case C-210/96) ECLI:EU:C:1998:369.
- Nilsson (Ed.) and Others (case C-162/97) ECLI:EU:C:1998:554.
- R. Buet and Educational Business Services (EBS) v Ministère public (case 382/87) ECLI:EU:C:1989:198.
- Rewe-Zentral, A. G. v Bundesmonopolverwaltung für Branntwein (case 120/78) ECLI:EU:C:1979:42.
- Tomasz Ziolkowski and Barbara Szeja and Others v Land Berlin (joined cases C-424/10 and C-425/10) ECR I-14035.
- Verband Sozialer Wettbewerb eV v TofuTown.com GmbH (case C-422/16) ECLI:EU:C:2017:458.
- Verein gegen Unwesen in Handel und Gewerbe Köln eV v Adolf Darbo AG (case C-465/98) ECLI:EU:C:2000:184.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.