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Monitoring the nutrition quality of Europe's food offer

Insights on gaps and opportunities for food reformulation

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Abstract

Food reformulation policies for healthier food and beverage products available to consumers are considered among the most cost-effective actions to reduce unhealthy diets.

Through different EU-funded programs (EUREMO, and Joint Actions Best-ReMaP and JANPA), several European countries were able to access funding and share best practices to support the harmonized collection of data from packaged foods and beverages. This harmonised data is hosted in the Food and Beverages Labels Explorer (FABLE), created by the Joint Research Centre, and is displayed in an interactive and intuitive way for policy makers, researchers, and the public.

This report presents the results of the analysis of the European food-offer across five priority categories (breakfast cereals, bread products, fresh dairy & desserts, delicatessen meats and soft drinks) across 21 European countries. Our findings show that reformulation is both possible and urgently needed, with wide country-to-country variations in nutrient content and many sub-categories displaying large distributions of sugars, fats, salt and fibre.

The evidence directly supports EU policy levers - targeted reformulation incentives, updated nutrient benchmarks, and enhanced FABLE-based monitoring - to accelerate healthier product portfolios and reduce diet-related disease burden.

Acknowledgements

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Executive summary

Policy context

Monitoring the food offer quality is key for the success of food reformulation. A lot of progress has been made recently on data collection efforts at European level, via several EU-funded projects. The critical next step of making this data useful for policy makers, researchers and the public was taken by the Joint Research Centre (JRC) which developed the Food and Beverages Labels Explorer (FABLE). This report provides a comprehensive overview of the nutrition quality of the food offer across 21 European countries for >180000 products, with a focus on five food categories prioritised by the EU Member States, providing evidence to directly support EU and national policy development regarding food reformulation.

Key conclusions

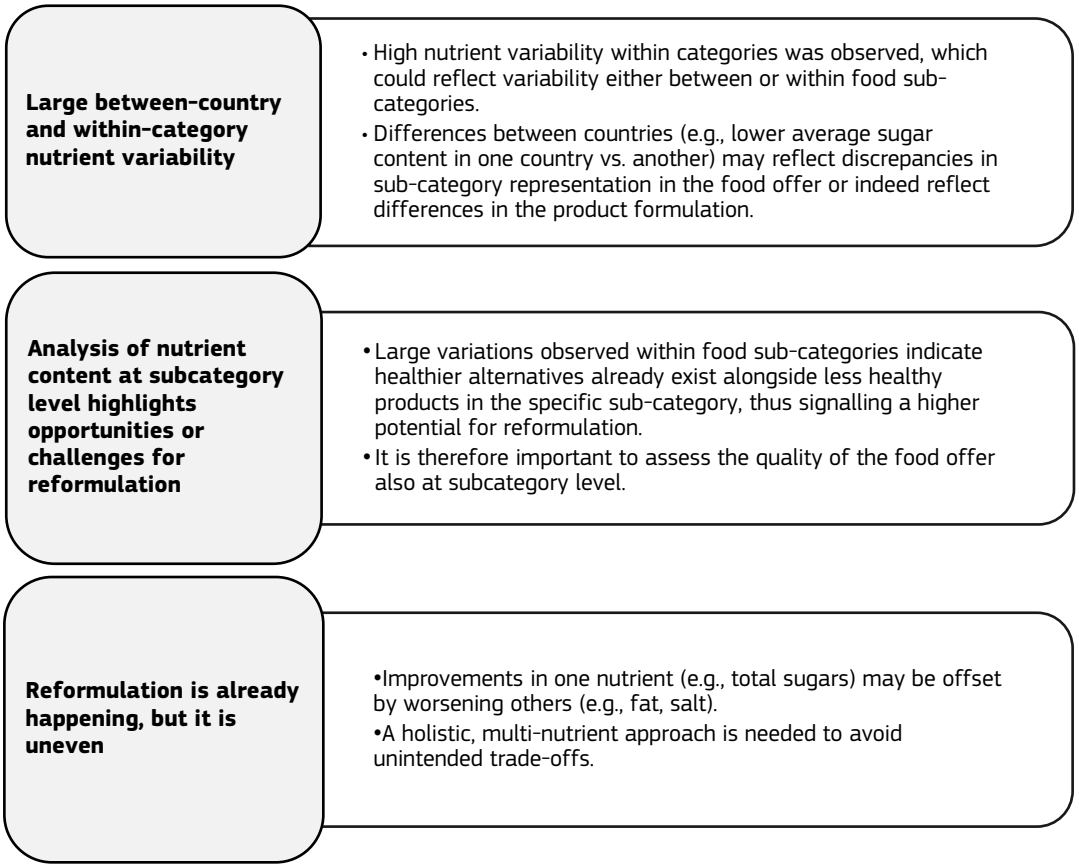
The analysis of the European food offer across five priority categories (breakfast cereals, bread products, fresh dairy products & desserts, delicatessen meats & similar products, and soft drinks) reveals wide inter-country variations in nutrient content and many sub-categories displaying large distributions of total sugars, total and saturated fats, salt and fibre. Such variations underline the feasibility of targeted reformulation actions, especially in sub-categories where the potential impact is greatest.

Some improvements have been made, for example total sugars have decreased in breakfast cereals and salt has decreased in bread products. However, the results highlight the risk of a single-nutrient approach (e.g. reductions in total sugars in breakfast cereals have been offset by increases in total and saturated fats) and the need for a holistic approach to improve overall nutrient quality.

Collaborative efforts, through Joint Actions and EU-funded projects, that harmonised data collection and data treatment methods have greatly improved comparability, over time and between countries, to provide a stronger evidence base to inform policy making.

However, some knowledge gaps and uncertainties remain, when it comes to consumer acceptance of reformulated products, the impact of added versus natural dietary fibre, and the long-term health effects of simultaneous nutrient changes. In addition, an analysis of the product ingredients would provide important insights that could help in understanding industry practices and in better focusing further reformulation efforts.

Main findings



Related and future Joint Research Centre work

The JRC will update FABLE with new data coming from the Joint Action PreventNCD after 2027. This will enable the evaluation of more recent trends, better informing on food reformulation efforts. Upcoming FABLE analysis related to ingredients will further help focus food reformulation work.

Quick guide

This report evaluates the nutrient content of five key food categories in 21 European countries. It quantifies total sugars, total and saturated fats, salt and fibre, compares them with European and international nutrient content benchmarks, and highlights large cross-country variability. The analysis assumes that label-declared nutrition information accurately reflects product composition. Key methodological points include food classification harmonisation, analysis of latest data and temporal changes, and analysis at food sub-category level. Uncertainties may stem from heterogeneous data-collection methods or food sub-categories coverage across years.

Curious to dig deeper?

You'll find more information for all 32 food categories and 21 European countries on the FABLE website.

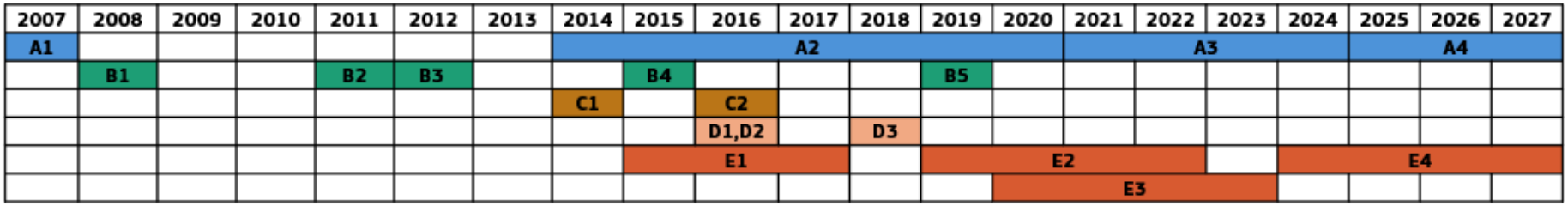
1. Introduction

The burden of non-communicable diseases (NCDs) is high (OECD, 2026); more than 88% of deaths and more than 84% of the total years of healthy life lost in the European Union (EU) in 2023 were the result of NCDs (Global Burden of Disease Collaborative Network, 2024). Consuming diets high in salt, sugars, total and saturated fats, and low in dietary fibre has been linked with higher prevalence of various NCDs, such as obesity, type 2 diabetes, cardiovascular diseases and cancer (Afshin et al., 2019; European Commission, 2025b; World Health Organization, 2025). European adults have intakes outside the recommended ranges for these nutrients of concern (European Commission, 2026a, 2026b, 2026c, 2026d); it is therefore paramount that public health initiatives across Europe encourage a closer-to-optimal intake of these nutrients, aligning with dietary guidelines (EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA), 2010b; EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA) et al., 2019; World Health Organization, 2015).

Addressing these widespread dietary imbalances requires systemic, population-level strategies that go beyond individual behaviour change. The World Health Organization (WHO) published a list of cost-effective interventions (best buys) for the prevention and control of NCDs, for each of the four key risk factors for NCDs (tobacco, harmful use of alcohol, unhealthy diet and physical inactivity); reformulation policies for healthier food and beverage products was highlighted as one of the best-buys to reduce unhealthy diet (World Health Organization, 2024), and further listed as an "NCD quick buy", expected to achieve public health impact within one year (Galea et al., 2025).

European countries have been working on food reformulation in various ways (**Figure 1**). High-level policy documents have been developed that laid out the broad strategic visions (Commission of the European Communities, 2007; European Commission: Directorate-General for Health and Food Safety, 2014; European Commission, 2020, 2025a). Specific technical initiatives and regulations have been developed, such as EU frameworks (European Commission, 2012; European Commission: High Level Group on Nutrition and Physical Activity, 2008, 2011, 2015), and regulations (e.g. European Commission, 2019). Council conclusions (Council of the European Union, 2014, 2016), also building on the 'Roadmap for action on food improvement' (European Commission: Directorate-General for Health and Food Safety, 2016a), called for Member State collaboration and implementation actions; cost-effective interventions/actions (Best practices) were identified and prioritised through systematic procedures (European Commission, 2018; European Commission: Directorate-General for Health and Food Safety, 2016b). In addition, Member States, through their food reformulation experts in the High-Level Group on Nutrition and Physical Activity (HLG), identified monitoring as key for the success of food reformulation efforts; the HLG further called 'on food business operators to continue their efforts on food reformulation for salt, sugars and fat' (European Commission: Directorate-General for Health and Food Safety, 2018). Finally, EU-funding mechanisms, such as the Third EU Health Programme (2014-2020) and EU4Health Programme (2021-2027), have enabled data collection relevant to food reformulation monitoring across European countries through the EUREMO (EU REformulation MOnitoring) project and the Joint Actions (JA) Best-ReMaP (Joint Action on Implementation of Validated Best Practices in Nutrition), JANPA (Joint Action on Nutrition and Physical Activity) and PreventNCD (Joint Action on Cancer and other NCDs prevention –action on health determinants) (see **Box 1**).

Figure 1. Overview of some of the actions around food reformulation in the European Union during the last two decades



A High-level policy documents	A1	White Paper on a Strategy for Europe on Nutrition, Overweight and Obesity related health issues
	A2	EU Action Plan on Childhood Obesity 2014-2020
	A3	Farm to fork strategy
	A4	Safe Hearts Plan
B Technical initiatives and regulations	B1	EU Framework for national salt initiatives.
	B2	EU Framework for national initiatives on selected nutrients
	B3	Annex I: Saturated Fat
	B4	Annex II: Added Sugars
	B5	Regulation on trans fats (EU 2019/649)
C Council conclusions	C1	Council Conclusions on nutrition and physical activity
	C2	Council Conclusions on food product improvement
D Best practices for implementation	D1	Netherlands EU Presidency: Roadmap for action on food product improvement
	D2	Slovakia EU Presidency: Best practices of the Member States in food reformulation
	D3	Marketplace workshop on nutrition and physical activities best practices
E EU-funded Joint Actions and projects	E1	JANPA — Joint Action on Nutrition and Physical Activity
	E2	EUREMO — EU REformulation MOnitoring
	E3	Best-ReMaP — Joint Action on Implementation of Validated Best Practices in Nutrition
	E4	PreventNCD —Joint Action on Cancer and other NCDs prevention –action on health determinants

Source: JRC

The question was how all this collected information could be communicated to and be useful for the end users (policy makers, researchers and the public) in an easy way regardless of the end users' data analytics capacity or available resources. Currently there is no systematic approach to collect and access data to allow continuous monitoring of the food offer, and no possibility to verify data independently outside industry reports. In order to link research with policy and practice, the European Commission's Joint Research Centre (JRC) developed the Food and Beverages Labels Explorer (FABLE), which offers an interactive user interface that allows to easily explore and visualise the data (Grammatikaki et al., 2023). FABLE was launched in September 2023 during the final conference of the JA Best-ReMaP. It currently has two data analytics modules, Nutrients and Trends. Whilst researchers can access the data for analyses, the wider public is offered various data visualisations via a web-based interactive interface to quickly explore the situation or trends of their interest.

The purpose of this report is to describe the status of the nutrition quality of the food offer in Europe, using information presented in the currently available FABLE modules on nutrients and trends. It includes analyses of the content of total sugars, total and saturated fat, salt, fibre and protein in packaged food and beverages; time trends; and comparison between food sub-categories. This provides evidence to directly support EU and national policy development regarding food reformulation.

2. Methodology

2.1. Data collection

FABLE hosts labelling information of branded food and beverage products collected through several EU funded projects (JANPA, EUREMO, Best-ReMaP) and other national efforts. Data was collected through in-store visits, provision of data by the retailers or obtained online (ANSES and Sciensano, 2023; European Commission, 2022). Some key methodological aspects of these projects are presented in **Box 1**.

All projects collected information from the labels of packaged food and beverage products. A template for data collection was developed during Best-ReMap, by ANSES in collaboration with the JRC, to make sure that data collection would be harmonised across countries, and with the data that had been collected through EUREMO. Datasets collected through JANPA or other national efforts were also integrated into the same template to allow for easier data analysis across studies.

Food and beverage products are thoroughly described in the database, including product information; energy and nutrient content; ingredients used; flavours, allergens, and types of claims (EUREMO only); and front-of-pack nutrition labels (Best-ReMaP only) when available.

Box 1. Overview of current and future data sources for FABLE

Joint Action Best-ReMaP

Best-ReMaP aimed at contributing to an improved quality of food supplied to citizens of Europe. It was coordinated by the Slovenian National institute of Public Health and funded by the European Union's Health Programme (2014-2020). It consisted of three core pillars: 1) monitoring an analysis of the quality of the food offer, 2) regulations on marketing to children, and 3) procurement of food by public bodies. Within pillar 1, the aim was to share and promote beast practices on how to implement a sustainable European monitoring system for processed food reformulation.

For the selection process, consumption data from 18 EU countries was linked with food composition to estimate the intakes in sugars, salt, fat and saturated fat, in children, adolescents and adults. The top 10 contributors were identified for each nutrient, country and population combination. A global ranking (combined for all countries) was then obtained for each nutrient and population combination. The resulting food groups were then assessed based on the following criteria: rank number (1 to 5 vs. 6 to 10); number of nutrients for which the food category is the main contributor at least for one population group (1 to 4); number of countries with (at least partly) preexisting data for this food category (1 to 16); and potential for reformulation (yes vs. limited). The final selected categories were bread products, breakfast cereals, dairy products, delicatessen meats, and soft drinks (ANSES and Sciensano, 2023).

Eighteen European countries participated in new data collection/contributed with data for FABLE: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Poland, Portugal, Romania, and Slovenia. In addition, France contributed with data coming from their latest regular data collection for each of the prioritised food categories.

Project page at EU Funding & Tenders Portal: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/31061266/951202

EU REformulation MOnitoring project - EUREMO

EUREMO was a feasibility study for a monitoring system on reformulation initiatives for salt, sugars and fat. It was coordinated by ICF S.A. and funded by the European Union's Health Programme (2014-2020) through a service contract managed by the European Health and Digital Executive Agency (HaDEA).

Box 1 (cont.)

EUREMO's objectives were to 1) develop and test a monitoring system for assessing the impact of reformulation initiatives on salt, sugar and fat, and 2) provide support to national public authorities to implement reformulation initiatives (European Commission, 2022).

A sample was defined to cover at least 50% of the market share of food and beverage products in each country, and to provide a representative baseline for the monitoring system. Product information was collected primarily within supermarkets, to ensure the comprehensive coverage of selected subcategories. Data was collected across 16 countries in Europe (Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Greece, Hungary, Italy, Lithuania, Malta Portugal, Romania, Slovenia, and the United Kingdom).

The products collected inform 14 product categories: sugar-sweetened beverages; sugar-sweetened dairy and dairy imitates; breakfast cereals; bread and bread products; confectionary; cakes and biscuits; ready meals and soups; savoury snacks and crisps; sauces and condiments; sugar-sweetened desserts, ice cream; canned fruits and vegetables; meat and fish products; cheeses; and energy drinks and sport drinks. To ensure interoperability across the different projects, data was reclassified according to the Best ReMaP nomenclature (see Chapter 2.2).

Joint Action on Nutrition and Physical Activity – JANPA

JANPA aimed at contributing to halting the rise of overweight and obesity in children and adolescents by 2020. JANPA was coordinated by ANSES (France) and funded through European Union's Health Programme (2014-2020). JANPA included 26 participating countries which shared and discussed implemented practices to combat obesity and overweight, to identify the most effective levers for action. A specific Work Package related to "monitoring of nutritional information and promoting the reformulation of foods".

The French OQALI model was tested in Austria and Romania, within two categories of products most consumed by children: breakfast cereals and non-alcoholic beverages (i.e., soft drinks). The final database included over 500 breakfast cereals and around 900 soft drinks from the 2 countries. The results of this pilot test demonstrated that OQALI could be transferable to other countries, making it a common approach.

Project page at EU Funding & Tenders Portal: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/31061266/677063

Joint Action PreventNCD

Prevent NCD is currently supporting strategies and policies that aim to reduce the burden of cancer and NCDs, focusing on both personal and societal risk factors. It is coordinated by the Norwegian Directorate of Health and funded by the EU4 Health Programme (2021-2027). One of the tasks aims at supporting public policies to promote food reformulation; new datasets will be classified into Best-ReMaP food sub-categories during the course of the project and will be then integrated into the FABLE database.

Project page at EU Funding & Tenders Portal: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/projects-details/43332642/101128023

Other national data collection efforts

Several Member States contributed with data collected either in years before the three above-mentioned projects or on food categories outside their scope.

Belgium, Estonia, France, Germany and Hungary contributed data on the five food categories prioritised by JA Best-ReMaP; Austria four food categories (all except bread products); Ireland on dairy products and breakfast cereals. Further to this, Ireland made available data on the baby food category and France on an additional 25 food categories.

All data was reclassified according to the Best-ReMaP nomenclature (see Chapter 2.2). For more detail for each national effort for data collection, refer to national institutions.

Data collection for the different countries took place across different years. Data from most countries was collected as part of Best-ReMaP (2021-2023), EUREMO (2019-2022), JANPA (2016) or other national efforts (spreading between 2016 and 2021). EUREMO initially planned to collect data in 2019-2020 but this timeline was delayed due to COVID-19. Two main reasons have been described: shortages of products in supermarkets due to 'a combination of supply chain issues and bulk/panic buying by some consumers'; and the temporary or complete halt of in-store visits due to governmental or retailer restrictions during that period. Data from France are part of their national food monitoring efforts and are collected regularly according to an established rolling plan for each food category (spreading from 2008 to 2020). Overall, more than 190k products, that have been collected by different European countries across the years, have been included in FABLE (**Table 1**).

Table 1. Summary of data collection details by country

Country	Study	Number of products collected	Number of food categories assessed at least once [b]	Number of food categories assessed more than once [b]
Austria	1, 2, 3, 4	11293	19	5
Belgium	1, 2, 4	9398	18	5
Bosnia	2	1975	5	0
Bulgaria	1, 2	3738	20	5
Croatia	2	897	5	0
Denmark	1, 2	5021	19	5
Estonia	1, 2, 4	8793	19	5
Finland	1, 2	6734	21	5
France	1, 2, 4	87195	31	28
Germany	2, 4	13494	5	3
Greece	1, 2	4793	19	5
Hungary	1, 2, 4	6335	19	5
Ireland	2, 4	5100	6	3
Italy	1, 2	4677	20	5
Lithuania	1	2036	20	0
Malta	1, 2	3327	20	3
Poland	2	1604	5	0
Portugal	1, 2	4873	20	5
Romania	1, 2, 3	4138	19	5
Slovenia	1, 2	7189	20	5
United Kingdom	1	2231	20	0

[a] 1: EUREMO; 2: Best-ReMaP; 3: JANPA; 4: Other national effort

[b] Food categories have been reclassified according to the Best-ReMaP nomenclature.

Source: JRC analysis

The most recent data collection rounds (regardless of the project collecting the data) were identified by country and food sub-category and will be referred to as 'latest data' throughout this report. Latest data collection mainly ranges between 2019 and 2023; France follows a national data collection rolling plan with latest data collection ranging between 2013 and 2019. **Table 2** shows the year(s) of the latest data collection per country and for each of the Best-ReMaP prioritised food categories. A comprehensive table for all food categories can be found in the FABLE website (FABLE, Background and Methodology section - Latest data collection timepoints, by country and food category).

Table 2. Latest data collection years for each of the Best-ReMaP priority food categories, by country

Countries	**Bread products**	**Breakfast cereals**	**Fresh dairy products & desserts**	**Delicatessen meats & similar**	**Soft drinks**
Austria	2022	2022	2022	2022	2022
Belgium	2022	2022	2022	2022	2022
Bosnia	2022	2022	2021 - 2022	2021 - 2022	2022
Bulgaria	2022 - 2023	2022	2022	2022 - 2023	2022
Croatia	2021 - 2022	2021 - 2022	2022	2021 - 2022	2021 - 2022
Denmark	2022	2022	2022	2022	2022
Estonia	2022	2022	2022	2022	2022
Finland	2022	2022	2022	2022	2022
France	2019	2018	2017	2013	2019
Germany	2020	2022	2022	2020 - 2021	2022
Greece	2022	2022 - 2023	2022 - 2023	2022	2022
Hungary	2022	2022	2022	2022	2022
Ireland	2021	2021	2021	2021	2021
Italy	2022 - 2023	2022 - 2023	2023	2023	2023
Lithuania	2020 - 2021	2020 - 2021	2020 - 2021	2020 - 2021	2020 - 2021
Malta	2020 - 2021	2022 - 2023	2020 - 2022	2022	2022 - 2023
Poland	2021 - 2022	2021 - 2022	2021 - 2022	2021 - 2022	2021 - 2022
Portugal	2022	2022	2022	2022	2022
Romania	2022	2022	2022	2022	2022
Slovenia	2022	2022	2022	2022	2022
United Kingdom	2019 - 2022	2019 - 2022	2019 - 2022	2019 - 2022	2019 - 2022

Source: JRC analysis

2.2. Food classification

The food classification adopted by Best-ReMaP is used to present the data included in FABLE. It has been designed with the aim of monitoring food reformulation by grouping products with similar sales names, manufacturing technology, recipe or marketing positioning. It allows for the identification of margin of reformulation, best-in-class products and for comparing product nutritional composition between countries. It is based on the Oqali one (www.oqali.fr), which was designed by ANSES and INRAE and discussed with French stakeholders. During the JA Best-ReMaP, it has been adapted by ANSES to fit the European market on the basis of gathered products in JANPA and feedback from ICF S.A. that was coordinating the EUREMO project. It comprises 32 food categories with a total of 618 food subcategories. The full list of food categories and subcategories is available at the Background and Methodology section of the FABLE website[1]. A description of the five prioritised food categories and respective subcategories can be found in Annex 1.

2.3. Data management

Data from EUREMO were received in JSON format and integrated into the dedicated FABLE dataset, which was developed and managed using SQL. Data from the remaining projects were received in XLSX format and integrated into the FABLE dataset via a dedicated pipeline developed in KNIME Analytics Platform (version 5.4). This process allows for the easy import of future datasets and performs some initial quality checks in terms of data structure; validation rules were applied to correct fields for variable type, decimal points, unexpected content, etc.

A data cleaning process was developed in KNIME Analytics Platform as part of the quality checks in terms of nutrient information. Products with missing values for energy content in both kcal and kJ were excluded from the analysis. Missing values for energy content in kJ for products that had values available in kcal was calculated using the following formula 1 kcal = 4.184 kJ. The same formula was used to calculate missing energy content in kcal for products that had available values in kJ. Products were removed from the analysis when they had incomplete or implausible values for all nutrients examined (for example, over 100 g macronutrients in 100 g of product; over 25 g carbohydrates or 25 g of protein or 25 g of total sugars in 100 kcal of product; over 11.1 g of total or saturated fat in 100 kcal of product). Further to this, checks were performed for products with implausible or extreme salt content, and any mis-recorded values were revised accordingly. 'Trace' or 'traces' were replaced by 0.0001. When the non-quantified value '<' was found then the numeric value has been divided by 2 (for example, < 0.5 was replaced by 0.25).

After data cleaning, 8219 out of the 194841 products (4.2%) have been excluded from further analysis.

2.4. Data analysis

Using the latest data (see **Chapter 2.1** and **Table 2** for more details), distributions of nutrient content (in g per 100g of product) across products were plotted, using boxplots. The box spans the distance between the first quartile (Q1, 25th percentile) and the third quartile (Q3, 75th percentile).

[1] List of food categories and sub-categories based on the Best-ReMaP nomenclature. https://food-labels-explorer.jrc.ec.europa.eu/sites/default/files/2023-10/BestReMaP-categories-and-subcategories.xlsx

The distance between Q1 and Q3 is called the interquartile range (IQR) and represents the middle 50% of the data. The horizontal line inside the box represents the median (Q2, 50th percentile). The whiskers, i.e. the lines extending from the box, show the overall spread of the values; they extend to values within 1.5 times the IQR. Products with values outside the whiskers (higher than Q3+1.5 IQR or lower than Q1 – 1.5 IQR) are considered outliers and are shown as blue dots.

Furthermore, distributions of country averages for each specific nutrient (in g per 100 g of product) and food sub-category were plotted, using boxplots. The subcategory 'Classic sweet yoghurts and fermented milks' within the food category 'Soft drinks' only had data from one country, and was excluded from this analysis.

Time trends were analysed to assess changes in the nutrient content of products across different years of data collection. Some data collection rounds took place across one single year; others took place across consecutive years. For an easier and more meaningful visualisation of the results, the first year of a range (or the year when the largest proportion of data collection took place, if not the same) is used in the graphs. Comparisons of the same product across years were outside the scope of this report; however, such analysis could be useful in the future. In addition, for some of the food categories, during later data collection rounds a larger number of food sub-categories were collected compared to the first ones, for example in soft drinks or bread products. Due to the inherently different nutrient profiles of the additional food sub-categories (for example breads versus bakery products), analyses have been adapted accordingly (in terms of years of comparison or by grouping countries based on the extent of data they have collected) to account for this methodological discrepancy when examining trends.

In order to evaluate the potential impact of the nutrient content of the food offer, the European Food Safety Authority (EFSA) Comprehensive Food Consumption Database (EFSA, 2026) was used to obtain data on daily consumption of the prioritised food categories. FoodEx2 level 2 data was used for all categories, except for dairy products and desserts for which FoodEx2 level 3 data was used. Only countries with available data in both EFSA and FABLE datasets (Austria, Belgium, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Romania, and United Kingdom) have been taken into account. The EFSA food consumption data is presented by country and not summarised at EU level; consumption was therefore indicated as a range of the lowest to the highest average consumption at country level. Nutrient intakes at population level were then estimated using the average daily consumption of each food category (in grams) at country level and the average nutrient content of each food category again at country level. It has been assumed that all products consumed are packaged. The combined amount of nutrients obtained from these five food categories was then calculated. In addition, nutrient intakes were calculated just for the proportion of the population consuming a specific food category. Consumption data for consumers is available for the different FoodEx2 level categories; however, they are not mutually exclusive. Therefore, it was not possible to sum different values together to get the average daily consumption at a higher food category level. It was only possible to do so for consumers of breakfast cereals, which comprised just one EFSA category.

Webtools v2 and Highcharts v12.4.0; and Tableau 2024.2 (http://www.tableau.com) were used to visualise the results and prepare the nutrient content distribution and time trend graphs.

3. Results

In total, data from 21 European countries is included in FABLE: Austria, Belgium, Bosnia, Bulgaria, Croatia, Denmark, Estonia, Finland, France Germany, Greece, Hungary, Ireland, Italy, Lithuania, Malta, Poland, Portugal, Romania, Slovenia, and the United Kingdom.

We are presenting detailed results only for the five food categories that were identified as priority categories by the Member States participating in the Joint Action Best-ReMaP and for which the majority of the countries had collected data more than once: bread products; breakfast cereals; delicatessen meats & similar; fresh dairy products & desserts; and soft drinks. A list of the subcategories for these five food categories is presented in Annex 1.

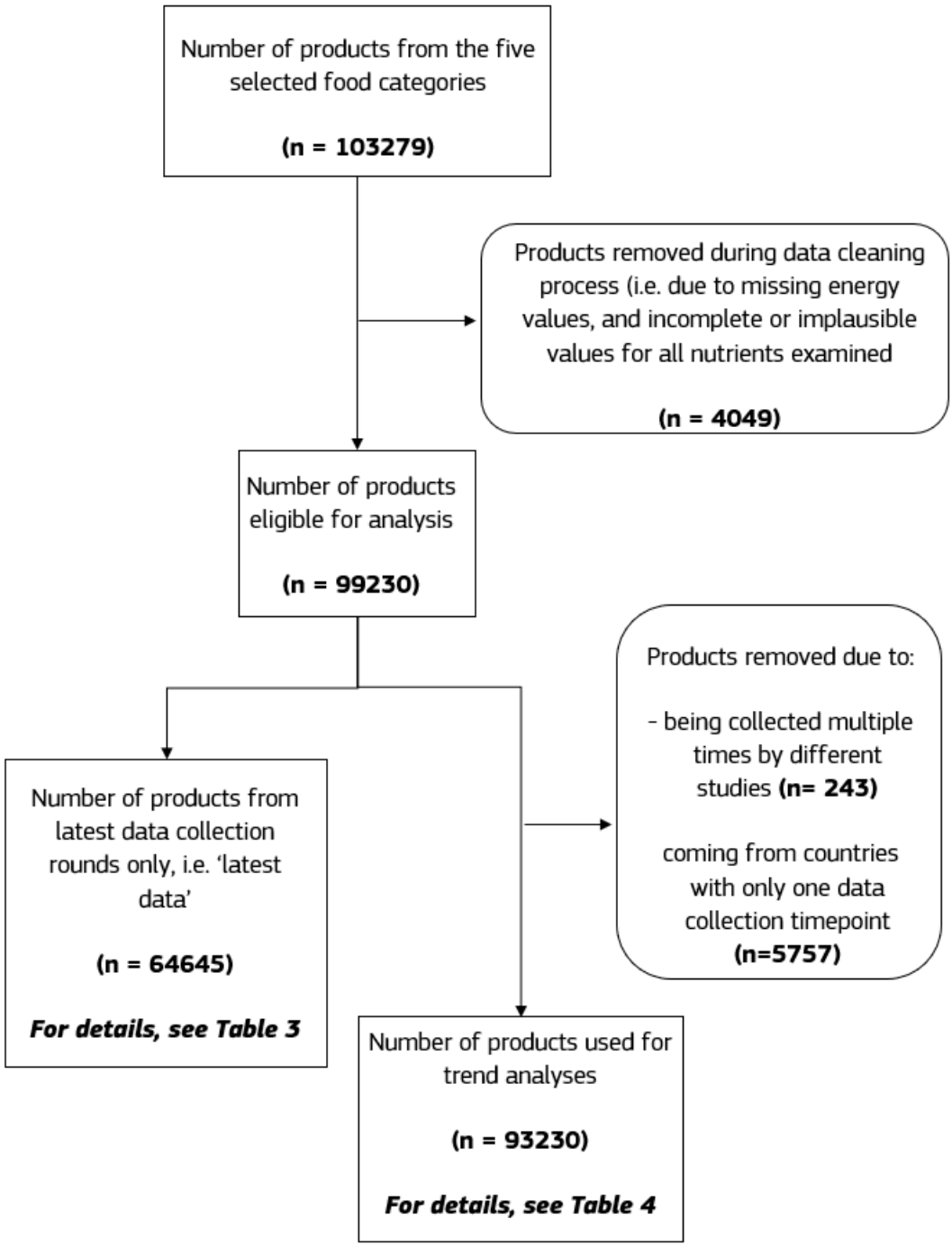
A total of 103279 products were collected from the five selected food categories; 4049 products (3.9%) were excluded from analysis during the data cleaning process (**Figure 2**). The analyses in this report use either the sub-sample of latest data only (n= 64645 products) (**Table 3**) or, when evaluating trends, use the full sample after further removing products that were collected multiple times by different studies or products coming from countries with just one data collection timepoint (n=93230 products) (**Table 4**).

For each of the five prioritised food groups, the following graphs are presented:

- distribution of content of total sugars, total fats, saturated fats, salt, fibre, and protein in the specific food group across European countries (use of latest data only);
- distribution of the content of each nutrient examined (total sugars, total fat, saturated fat, salt, fibre, and protein) in the specific food group by country (use of latest data only);
- time trends of the content of each nutrient examined (total sugars, total fat, saturated fat, salt, fibre, and protein) in the specific food group by country (use of sample for trends analyses);
- distribution of country averages for the content of each nutrient examined (total sugars, total fat, saturated fat, salt, fibre, and protein) in the specific food group by sub-category (use of latest data only).

For the rest of the food categories that are available in FABLE, results (distribution of content of total sugars, total fats, saturated fats, salt, fibre, and protein in the specific food group (using latest data only) are presented in Annex 2. The information that is presented in the other graphs using the latest data, can easily be retrieved by selecting the relevant options in the Nutrients modules of the FABLE website. However, information on trends is scarce for most of these food categories since very few countries collected data on them on more than one timepoint.

Figure 2. Flowchart showing the sub-samples used for each type of analysis in this report



Source: JRC analysis

Table 3. Number of products included in the analyses using the latest data across the five prioritised food categories, by country.

Country	Bread products	Breakfast cereals	Delicatessen meats and similar	Fresh dairy products and desserts	Soft drinks	Grand Total
Austria	341	312	1087	610	1168	3518
Belgium	618	364	1168	1105	1743	4998
Bosnia	207	280	728	247	452	1914
Bulgaria	285	177	802	368	550	2182
Croatia	180	283	80	62	264	869
Denmark	391	321	1037	351	838	2938
Estonia	480	505	1030	776	1071	3862
Finland	586	338	241	382	235	1782
France	1728	655	1351	3117	2120	8971
Germany	833	1483	2511	1281	2888	8996
Greece	459	263	389	406	571	2088
Hungary	248	237	880	453	738	2556
Ireland	537	359	706	712	719	3033
Italy	372	314	793	690	758	2927
Lithuania	124	101	206	133	139	703
Malta	49	321	670	136	695	1871
Poland	251	174	466	381	289	1561
Portugal	241	316	627	776	675	2635
Romania	390	285	371	736	659	2441
Slovenia	452	535	1068	979	1056	4090
United Kingdom	112	120	157	172	149	710
Total	8884	7743	16368	13874	17777	64645

Source: JRC analysis

Table 4. Number of products included in the time trends analyses across the five prioritised food categories in the 16 countries having more than one data collection timepoint, by country.

Country	Bread products	Breakfast cereals	Delicatessen meats and similar	Fresh dairy products and desserts	Soft drinks	Total
Austria	515	1459	2899	1810	2523	9206
Belgium	1032	620	2012	1760	2409	7833
Bulgaria	329	233	900	433	624	2519
Denmark	501	463	1361	381	914	3620
Estonia	819	938	2073	1481	1846	7157
Finland	945	423	733	883	565	3549
France	3126	1390	2255	6383	3992	17146
Germany	833	2370	2511	2782	4739	13235
Greece	572	376	597	592	680	2817
Hungary	402	568	1830	745	1309	4854
Ireland	537	795	706	1285	719	4042
Italy	408	380	920	821	849	3378
Malta	49	607	805	136	813	2410
Portugal	292	421	698	1100	766	3277
Romania	437	592	459	814	1188	3490
Slovenia	555	623	1176	1135	1208	4697
Total	11352	12258	21935	22542	25144	93230

Source: JRC analysis

3.1. Breakfast cereals

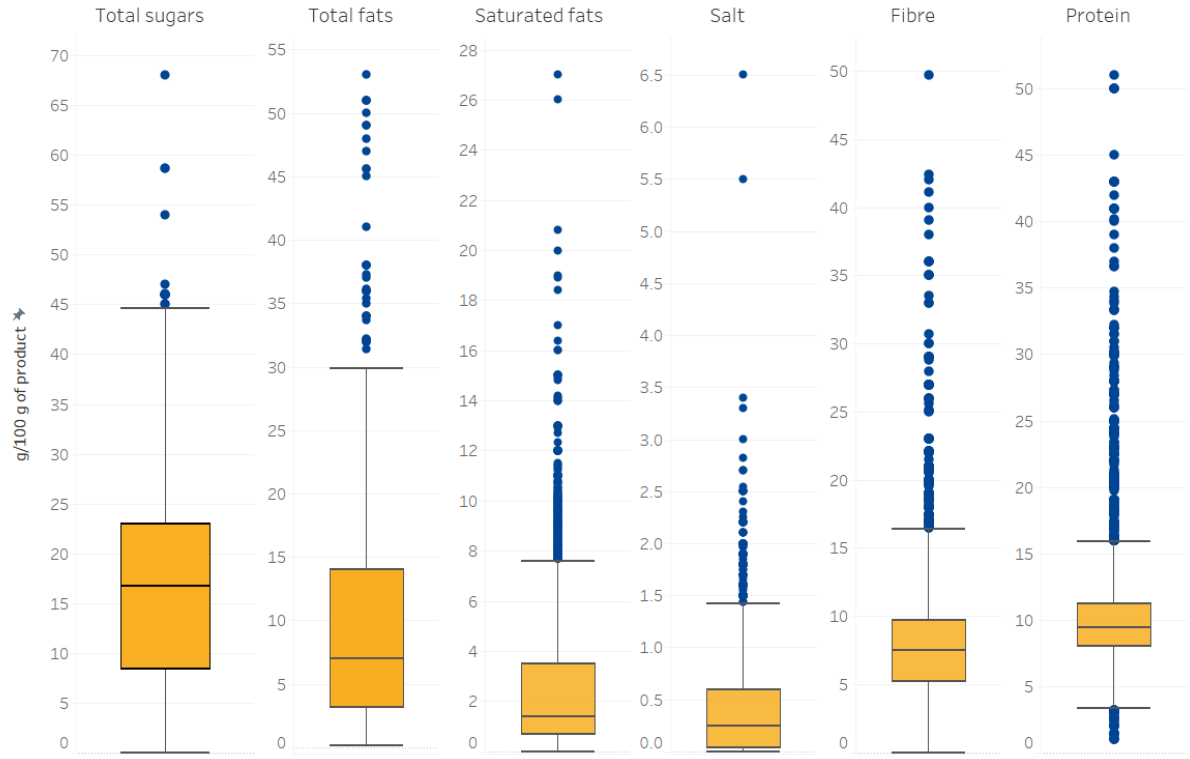
The distribution of the content of key nutrients (total sugars, total fats, saturated fats, salt, fibre and protein) for all breakfast cereals products[2] across different European countries, in grams per 100 grams of product, can be found in **Figure 1**.

Per 100g of product, the average total sugars content is 15.8g, the average total fats content is 8.9g, the average saturated fats content is 2.4g, the average salt content is 0.38g, the average

[2] The subcategory 'Cereal preparation to drink' has been excluded from analyses. The information on label was in most cases not for the ready-to-consume product but for its powdered form; however, due to missing information regarding preparation method it was not possible to calculate the nutrient values for the ready-to-consume product. In addition, only two countries collected data for this subcategory.

fibre content is 7.8g, and the average protein content is 10.1g. In this food category there is a wide variation for each of the nutrients: 0.0-68.0 g of total sugars (IQR: 8.4.0g-23.0g), 0.2-53.0 g of total fats (IQR: 3.2g-14.0g), 0.0-27.0 g of saturated fats (IQR: 0.7g-3.5g), 0.00-6.50 g of salt (IQR: 0.04g-0.60g), 0.0-50.0g of fibre (IQR: 5.0g-10.0g), and 1.0-51.0g of protein (IQR: 8.0g-11.2g).

Figure 3. Distribution of content of total sugars, total fats, saturated fats, salt, fibre and protein (g/100g product) in breakfast cereals in 21 European countries



Source: JRC analysis

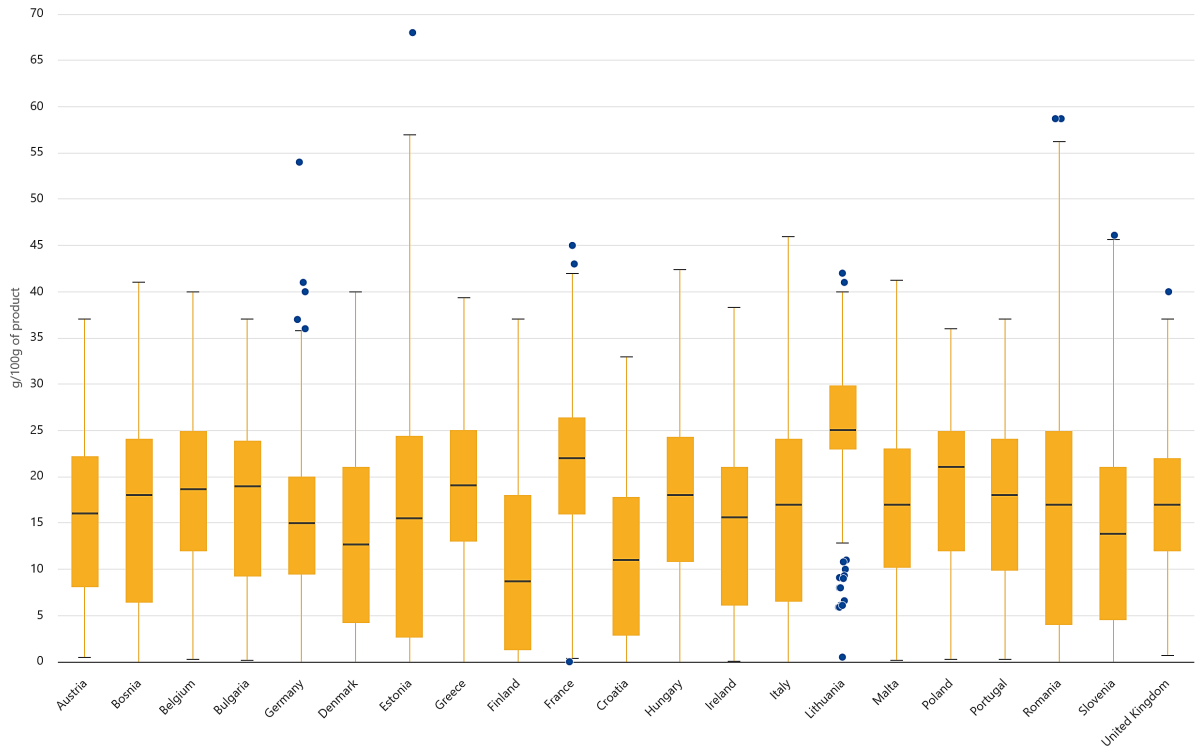
3.1.1. Total sugars

The average total sugars content per 100g of product for the food category of breakfast cereals is 15.8g, ranging from 10.5g in Finland to 25.1g in Lithuania (**Figure 4**). The country with the widest distribution is Estonia (range: 0-68.0g with IQR: 2.8g-24.4g), and the one with the narrowest is Croatia (range: 0-33.0g with IQR: 3.0g-17.7g).

There is an overall decreasing trend of total sugars content in breakfast cereals, for most of the countries (**Figure 5**). Fifteen out of 16 countries decreased total sugars content between their first and last data collection points. The largest decrease was observed for Bulgaria (from 26.2g in 2020 to 17.1g in 2022), and the smallest decrease for Belgium (from 18.2g in 2018 to 17.5g in 2022); it remained stable in Denmark at 14.6g between 2020 and 2022. Half of the countries (8 out of 16) had more than 20g of sugars during the first data collections. For the 15 countries that last collected data in 2021-2022, the average sugars content was 16.7g (ranging from 14.6 for Denmark to 19.0g for Romania).

'Filled cereals' is the sub-category with the highest median value of country averages for total sugars content with 27.6g of total sugars per 100g of product. The one with the lowest median value of country averages for total sugars content is 'Cereals without added sugar' with 1.2g of total sugars per 100g of product. Overall, the widest variation of country averages is noted for the 'Cereal flakes with fruit' sub-category (range: 13.6-39.4g), and the narrowest for 'Cereals without added sugar' sub-category (range: 0.5-1.7g) (**Figure 6**).

Figure 4. Distribution of total sugars content (g/100g product) in breakfast cereals by country



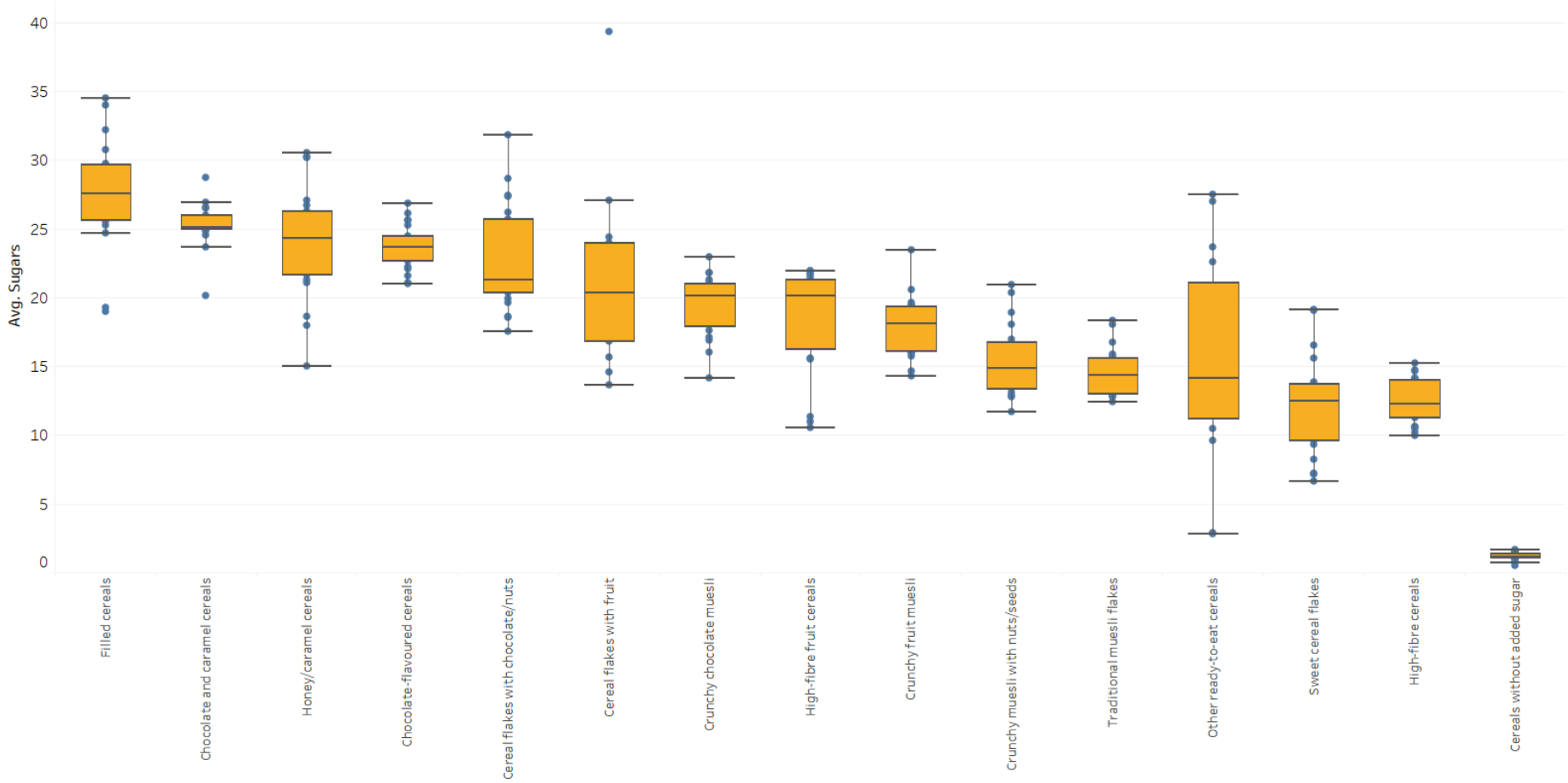
Source: FABLE website

Figure 5. Time trends of total sugars content (g/100g product) in breakfast cereals by country



Source: FABLE website

Figure 6. Distribution of country averages for total sugars content (g/100g product) in breakfast cereals across different European countries by food sub-category



Source: JRC analysis

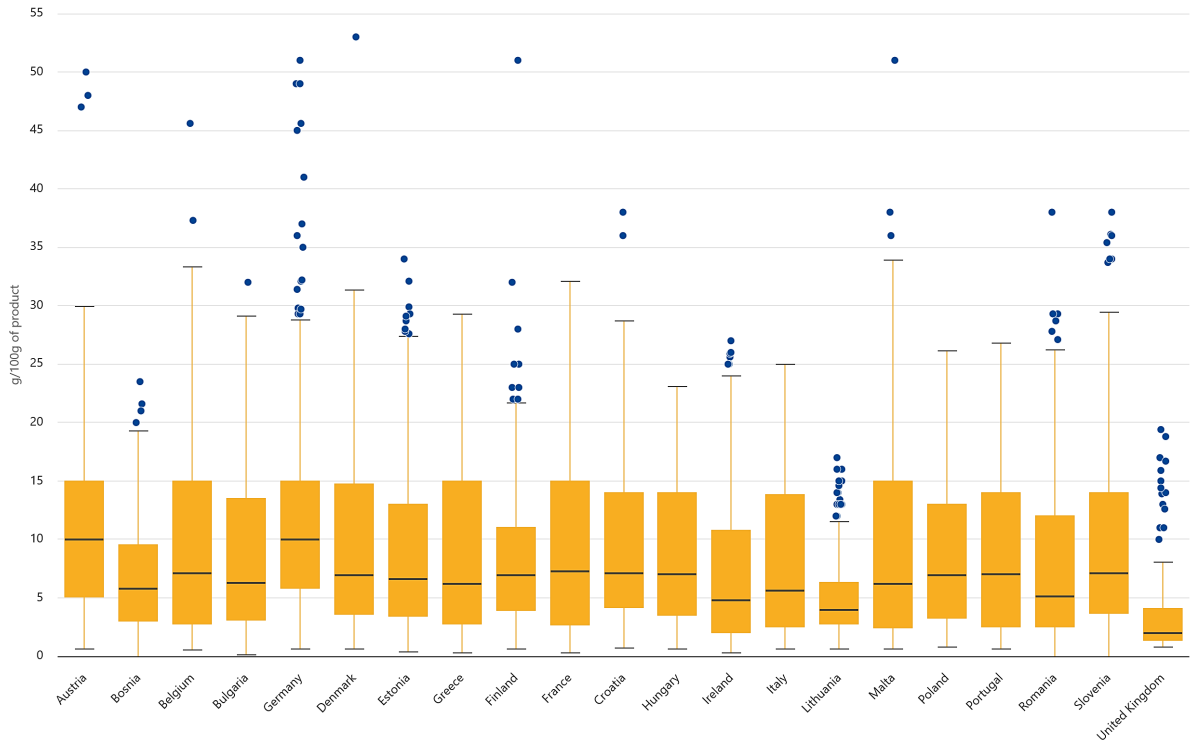
3.1.2. Total fat

The average total fat content per 100g of product for the food category of breakfast cereals is 8.9g, ranging from 3.8g in the UK to 10.8g in Germany (**Figure 7**). The country with the widest distribution is Denmark (range: 0.6-53.0g with IQR: 3.6g-14.7g), and the one with the narrowest is Lithuania (range: 0.6-17.0g with IQR: 2.8g-6.3g).

There is an overall increasing trend of total fat content in breakfast cereals (**Figure 8**). Ten out of 16 countries increased total fat content between their first and last data collection points. The largest increase was observed for Portugal (from 4.4g in 2020 to 8.4g in 2022), and the smallest increase for Estonia (from 7.2g in 2018 to 7.9g in 2022). Total fat content remained relatively stable in three countries (Belgium with around 8.7g; Romania with around 9.0g; and Ireland with around 8.6g). A decrease was observed for three countries: Denmark (from 10.8g in 2020 to 8.3g in 2022), France (from 8.3g in 2008 to 7.0g in 2018), and Austria (from 9.6g in 2016 to 9.1g in 2022). One third of the countries (6 out of 16) had less than 7g of fat during the first data collections. For the 15 countries that last collected data in 2021-2022, the average fat content was 8.8g (ranging from 7.9 for Estonia to 9.8g for Slovenia).

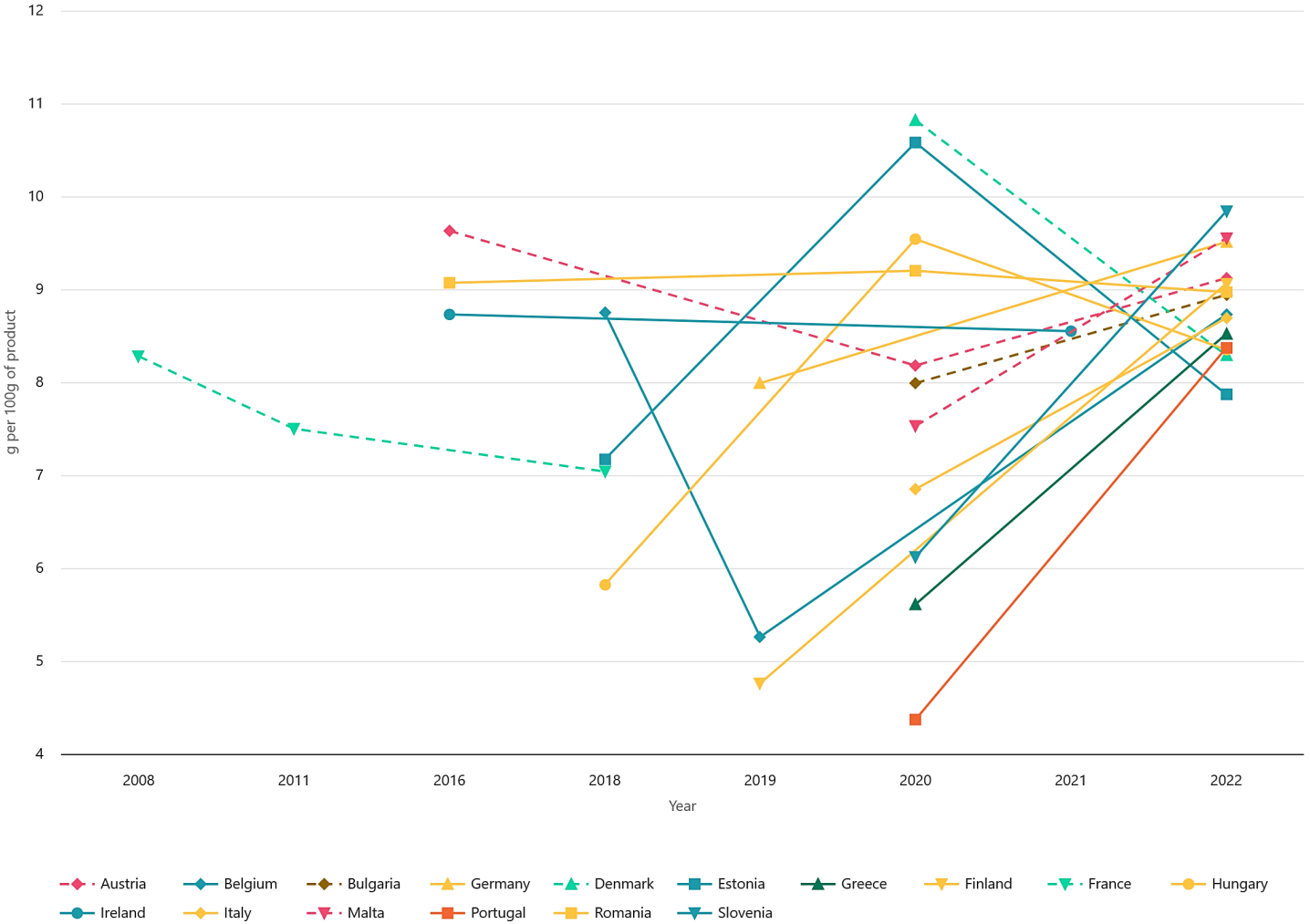
'Crunchy muesli with nuts/seeds' is the sub-category with the highest median value of country averages for total fat content with 16.9g per 100g of product. The one with the lowest median value of country averages for total fat content is 'Sweet cereal flakes' with 1.5g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other ready-to-eat cereals' sub-category (range: 1.3-48.3g), and the narrowest for 'Sweet cereal flakes' sub-category (range: 0.9-2.9g) (**Figure 9**).

Figure 7. Distribution of total fat content in breakfast cereals (g/100g product) by country



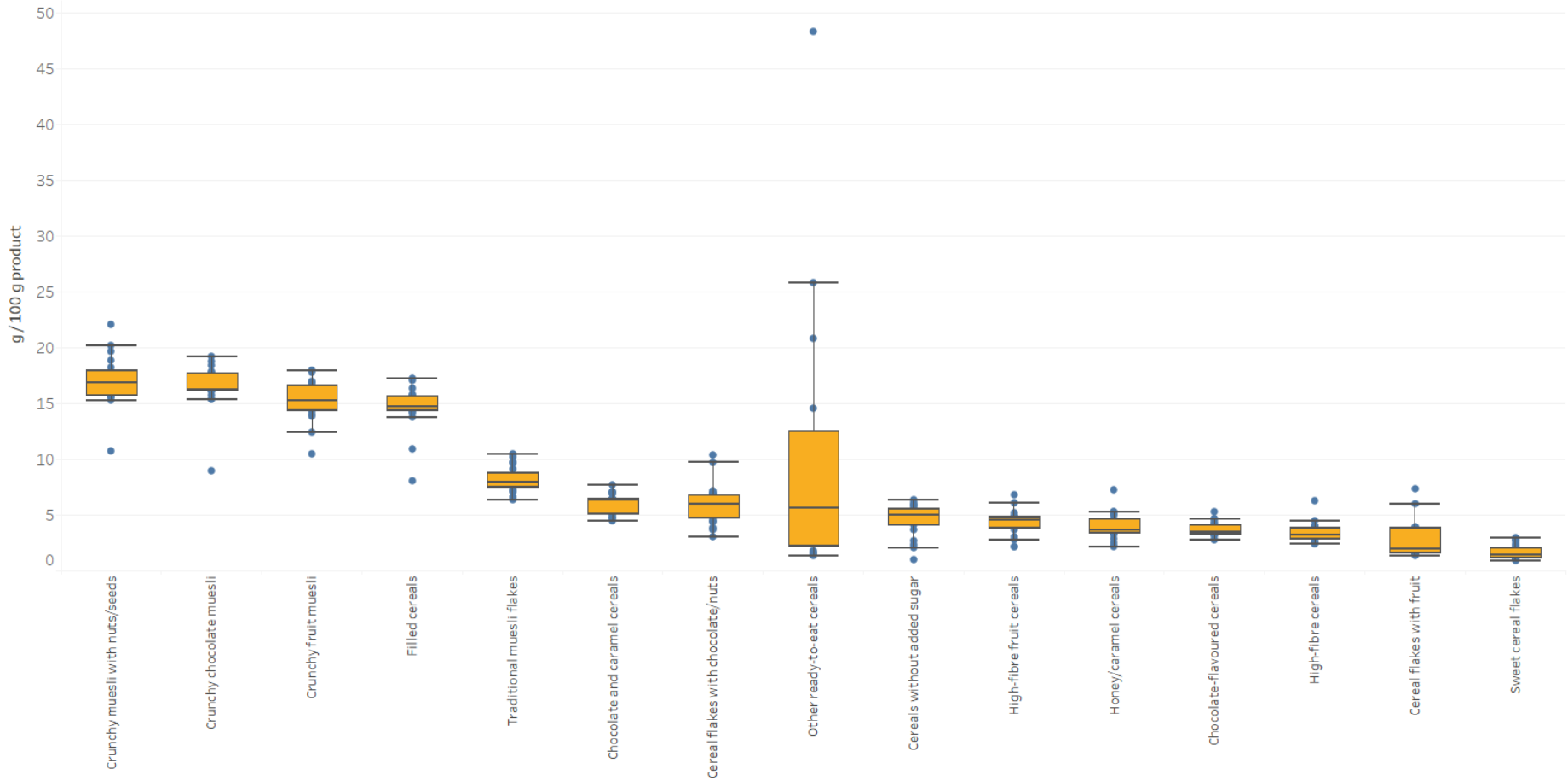
Source: FABLE website

Figure 8. Time trends of total fat content (g/100g product) in breakfast cereals by country



Source: FABLE website

Figure 9. Distribution of country averages for total fat content (g/100g product) in breakfast cereals across different European countries by food sub-category



Source: JRC analysis

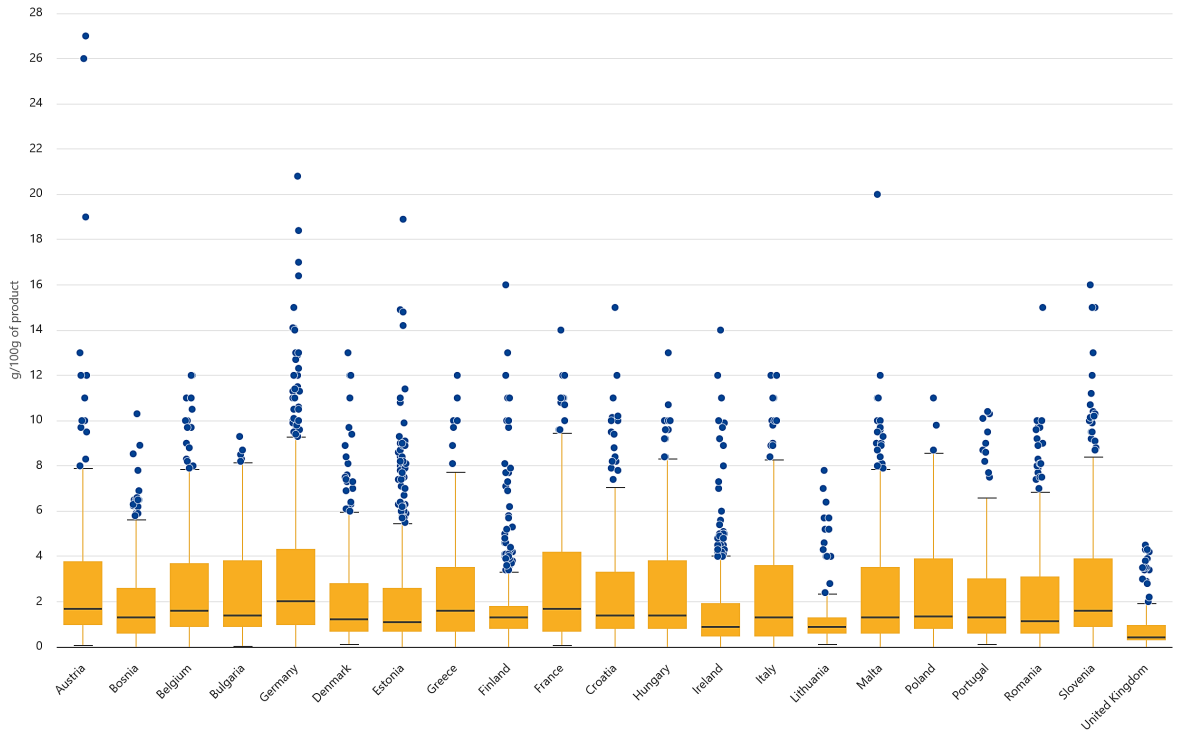
3.1.3. Saturated fats

The average saturated fat content per 100g of product for the food category of breakfast cereals is 2.4g, ranging from 1.0g in the UK to 3.0g in Germany (**Figure 10**). The country with the widest distribution is Austria (range: 0.1-27.0g with IQR: 1.0g-3.7g), and the one with the narrowest is the UK (range: 0-4.5g with IQR: 0.3g-0.9g).

There is an overall increasing trend of saturated fat content in breakfast cereals (**Figure 11**). Ten out of 16 countries increased saturated fat content between their first and last data collection points. The largest increase was observed for Portugal (from 1.2g in 2020 to 2.3g in 2022), and the smallest increase for Malta (from 2.4g in 2020 to 2.6g in 2022). Saturated fat content remained relatively stable in two countries (Estonia with around 2.1g; Belgium with around 2.3g). A decrease was observed for five countries: the largest decrease was noted for Austria (from 3.4g in 2016 to 2.2g in 2022), and the smallest decrease was noted for Romania (from 3.3g in 2016 to 2.8 in 2022). One fourth of the countries (4 out of 16) had less than 2g of saturated fat during the first data collections. For the 15 countries that last collected data in 2021-2022, the average saturated fat content was 2.4g (ranging from 2.0 for Denmark to 2.9g for Slovenia).

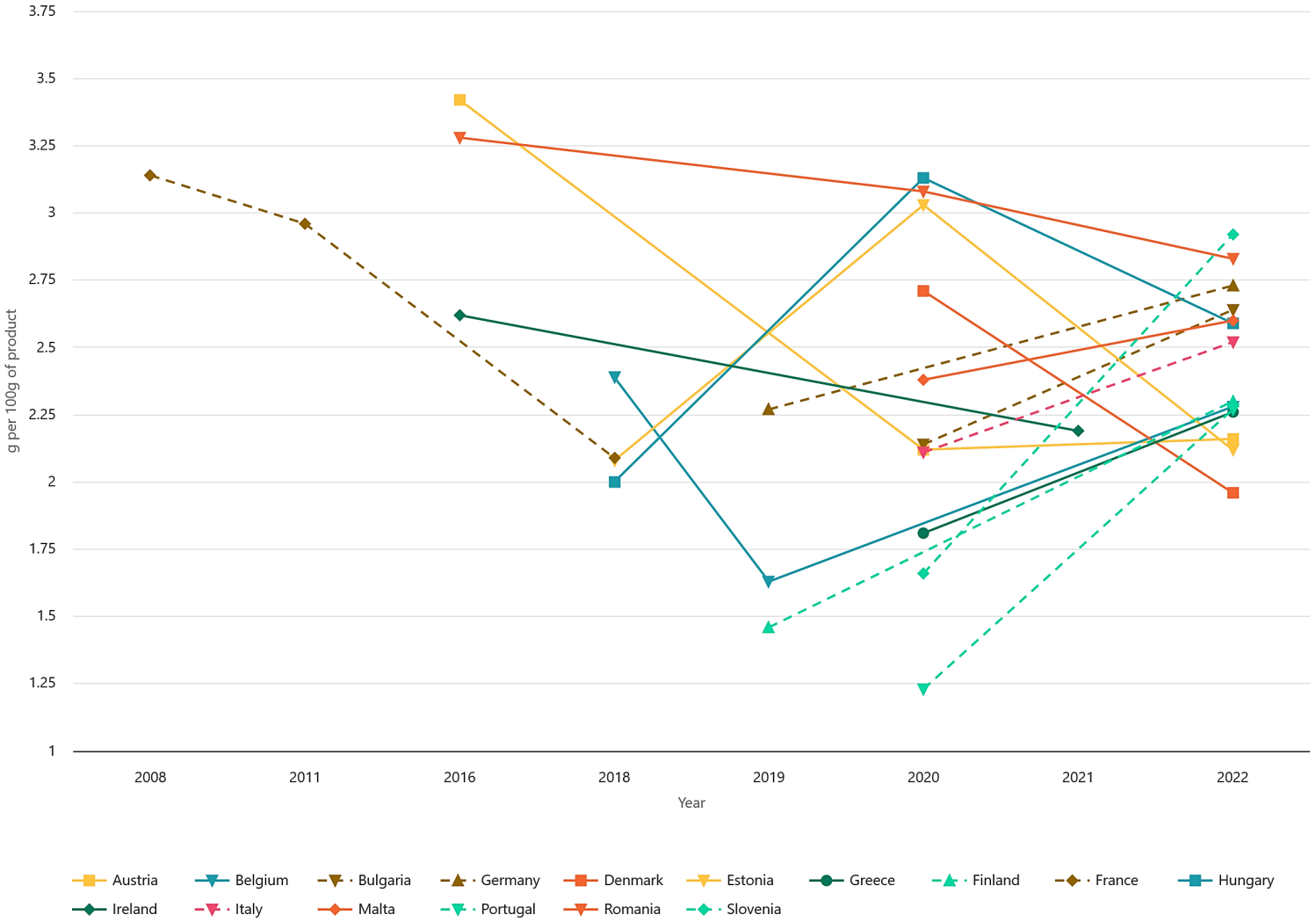
'Crunchy chocolate muesli' is the sub-category with the highest median value of country averages for saturated fat content with 5.5g per 100g of product. The one with the lowest median value of country averages for saturated fat content is 'Sweet cereal flakes' with 0.4g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other ready-to-eat cereals' sub-category (range: 0.5-24.0g), and the narrowest for 'Honey/caramel cereals' sub-category (range: 0.5-1.4g) (**Figure 12**).

Figure 10. Distribution of saturated fat content (g/100g product) in breakfast cereals by country



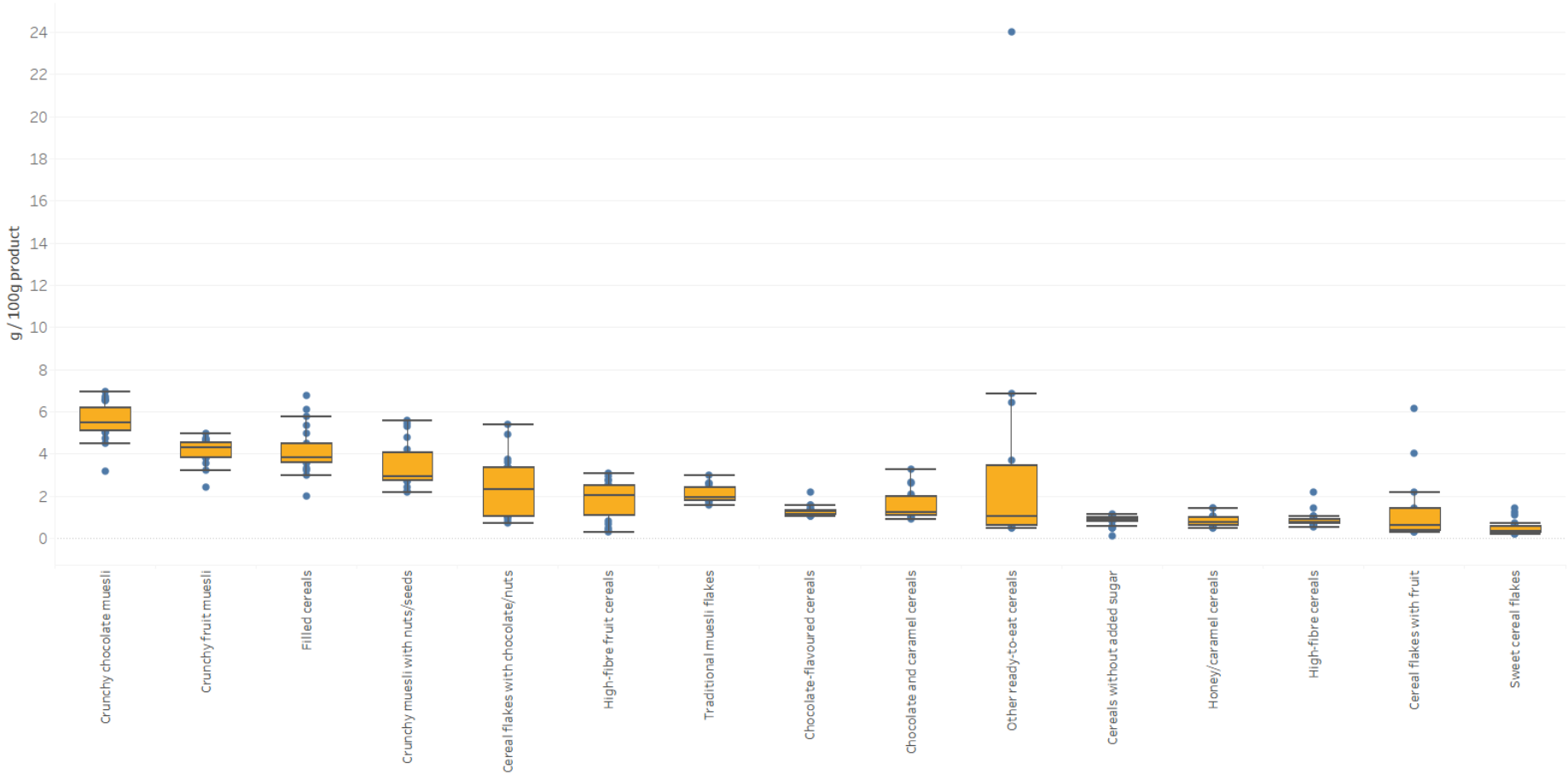
Source: FABLE website

Figure 11. Time trends of saturated fat content (g/100g product) in breakfast cereals by country



Source: FABLE website

Figure 12. Distribution of country averages for saturated fat content (g/100g product) in breakfast cereals across different European countries by food sub-category



Source: JRC analysis

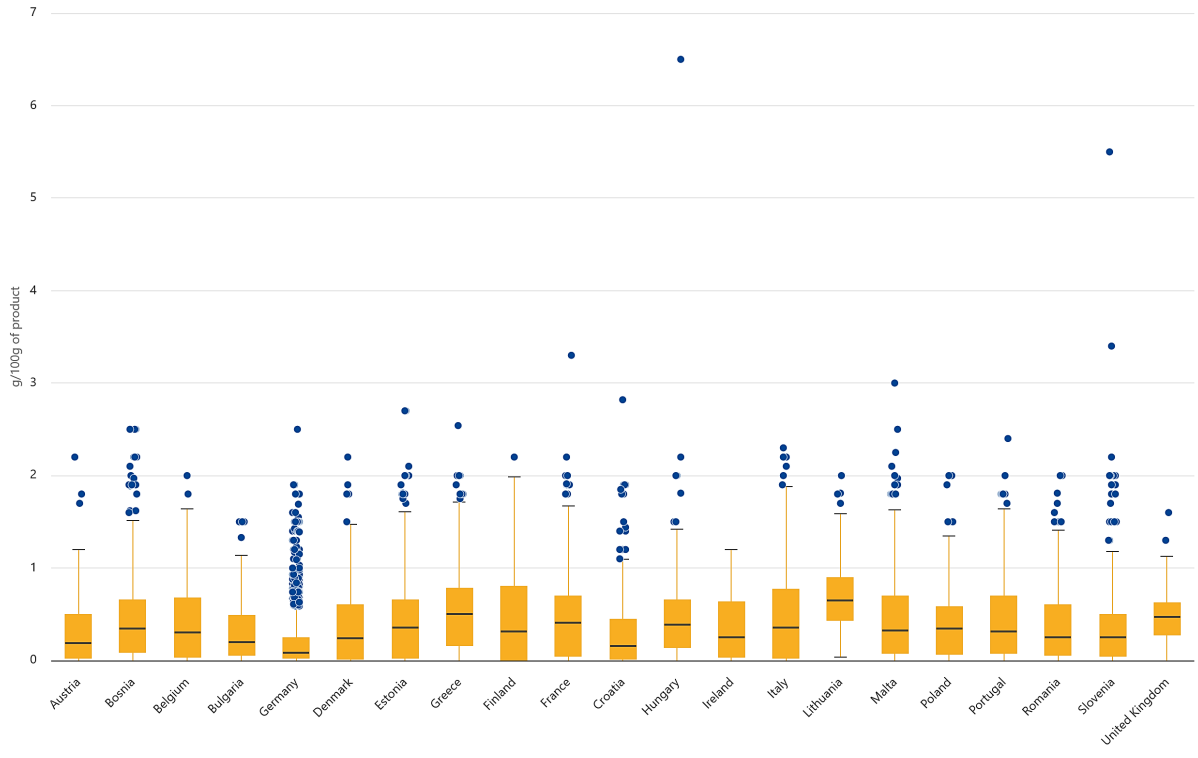
3.1.4. Salt

The average salt content per 100g of product for the food category of breakfast cereals is 0.38g, ranging from 0.22g in Germany to 0.71g in Lithuania (**Figure 13**). The country with the widest distribution is Hungary (range: 0.0-6.5g with IQR: 0.14g-0.65g), and the one with the narrowest is Ireland (range: 0-1.2g with IQR: 0.04g-0.63g).

There is an overall decreasing trend of salt content in breakfast cereals (**Figure 14**). Thirteen out of 16 countries decreased salt content between their first and last data collection points. The largest decrease was observed for Portugal (from 0.93g in 2020 to 0.48g in 2022), and the smallest decrease for Romania (from 0.52g in 2016 to 0.49g in 2022). An increase was observed for two countries: Denmark (from 0.40g in 2020 to 0.46g in 2022), and Estonia (from 0.61g in 2018 to 0.66g in 2022). Salt content in breakfast cereals remained stable in Ireland at 0.42g (between 2016 and 2021). More than two thirds of the countries (11 out of 16) had more than 0.50g of salt during the first data collections. For the 15 countries that last collected data in 2021-2022, the average salt content was 0.47g (ranging from 0.39 for Bulgaria and Slovenia to 0.66g for Estonia).

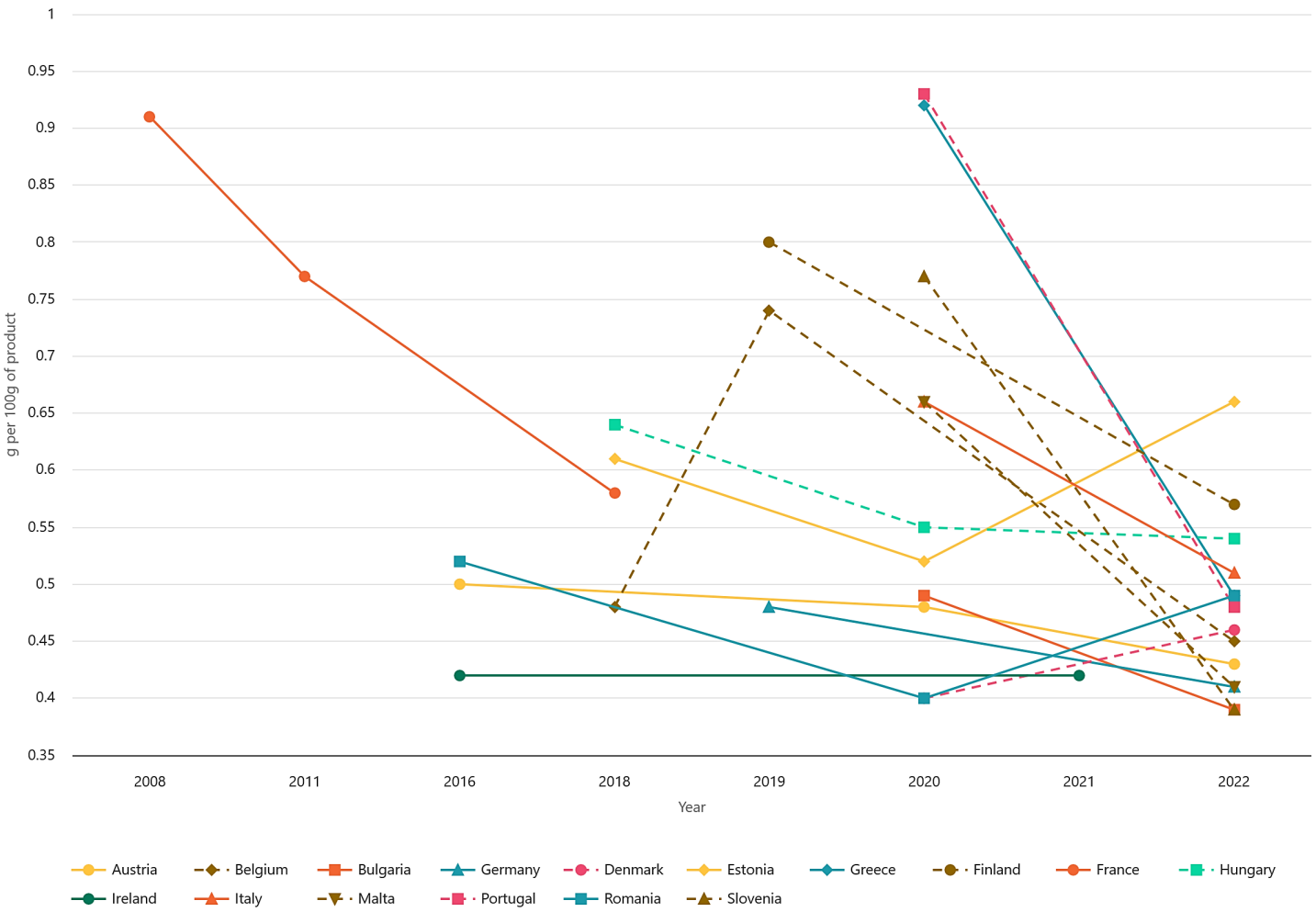
'Sweet cereal flakes' is the sub-category with the highest median value of country averages for salt content with 1.15g per 100g of product. The one with the lowest median value of country averages for salt content is 'Cereals without added sugar' with 0.10g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other ready-to-eat cereals' sub-category (range: 0.01-2.10g), and the narrowest for 'Crunchy fruit muesli' sub-category (range: 0.16-0.41g) (**Figure 15**).

Figure 13. Distribution of salt content (g/100g product) in breakfast cereals by country



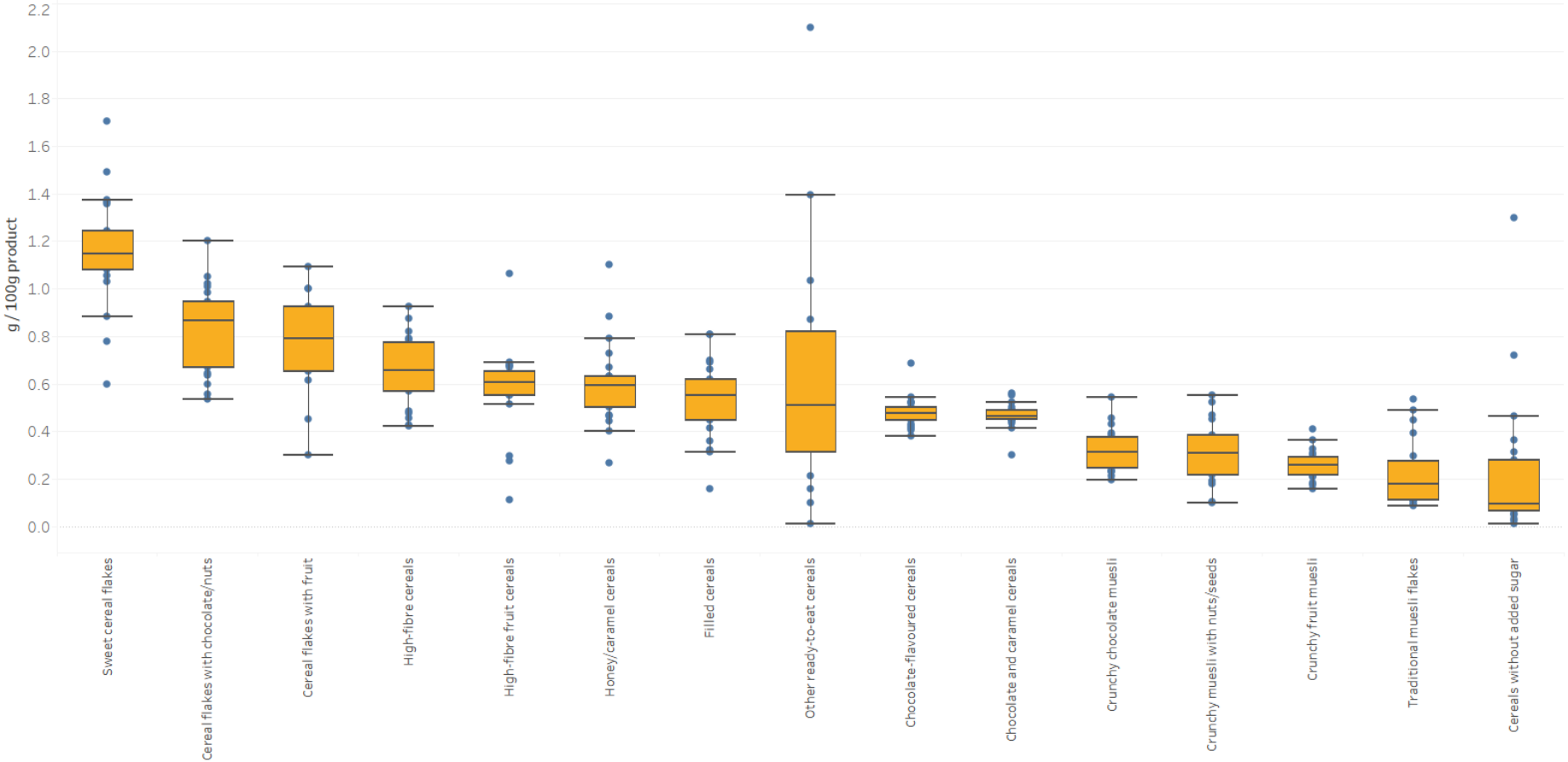
Source: FABLE website

Figure 14. Time trends of salt content (g/100g product) in breakfast cereals by country



Source: FABLE website

Figure 15. Distribution of country averages for salt content (g/100g product) in breakfast cereals across different European countries by food sub-category



Source: JRC analysis

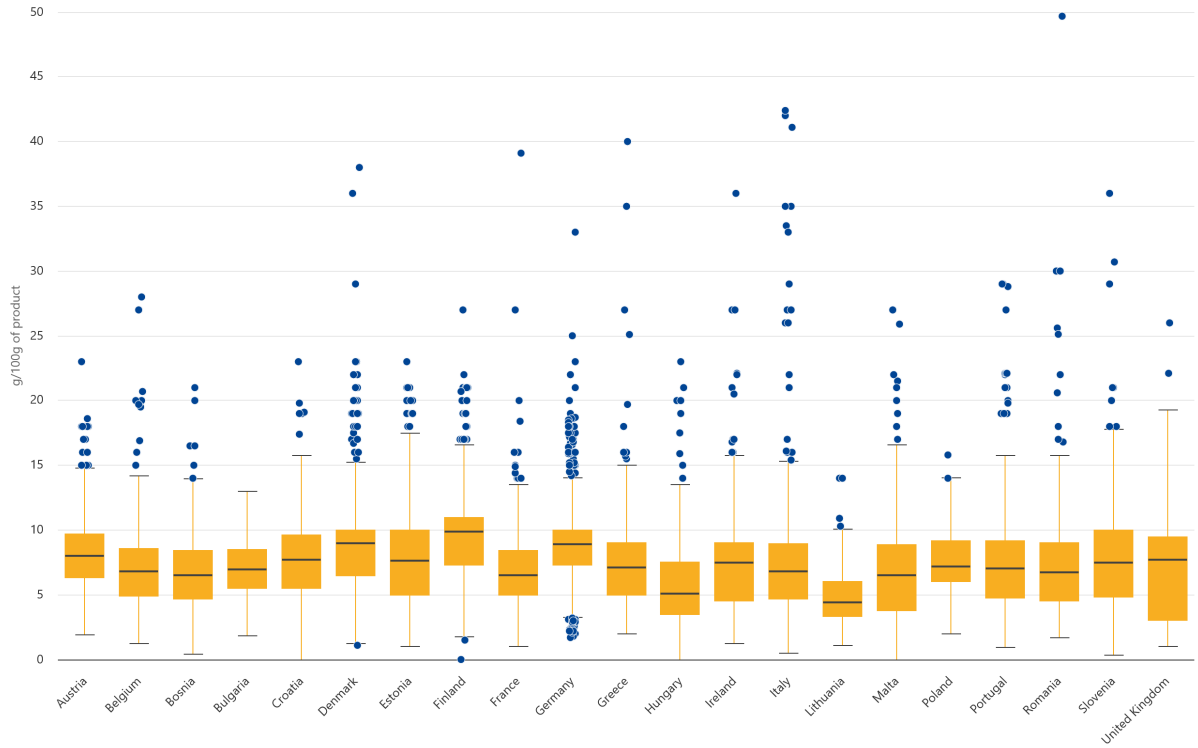
3.1.5. Fibre

The average fibre content per 100g of product for the food category of breakfast cereals is 7.8g, ranging from 5.1g in Lithuania to 9.5g in Denmark and Finland (**Figure 16**). The country with the widest distribution is Romania (range: 1.7-49.7g with IQR: 4.6g-9.0g), and the one with the narrowest is Bulgaria (range: 1.8-13.0g with IQR: 5.5g-8.5g).

There is an overall increasing trend of fibre content in breakfast cereals (**Figure 17**). Twelve out of 16 countries increased fibre content between their first and last data collection points. The largest increase was observed for Portugal (from 5.5g in 2020 to 8.0g in 2022), and the smallest increase for France (from 6.9g in 2008 to 7.1g in 2018). A decrease was observed for four countries: Denmark (from 8.7g in 2020 to 8.4g in 2022), Belgium (from 7.3g in 2018 to 7.1g in 2022), Slovenia (from 5.8g in 2020 to 4.9g in 2022), and Malta (from 6.8g in 2020 to 6.4g in 2022). Almost one third of the countries (5 out of 16) had less than 6.0g of fibre during the first data collections. For the 15 countries that last collected data in 2021-2022, the average fibre content was 7.1g (ranging from 4.9 for Slovenia to 8.4g for Denmark).

'High fibre cereals' is the sub-category with the highest median value of country averages for fibre content with 11.1g per 100g of product. The one with the lowest median value of country averages for fibre content is 'Sweet cereal flakes' with 3.5g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other ready-to-eat cereals' sub-category (range: 2.4-17.3g), and the narrowest for 'Cereal flakes with fruit' sub-category (range: 4.0-6.2g) (**Figure 18**).

Figure 16. Distribution of fibre content (g/100g product) in breakfast cereals by country



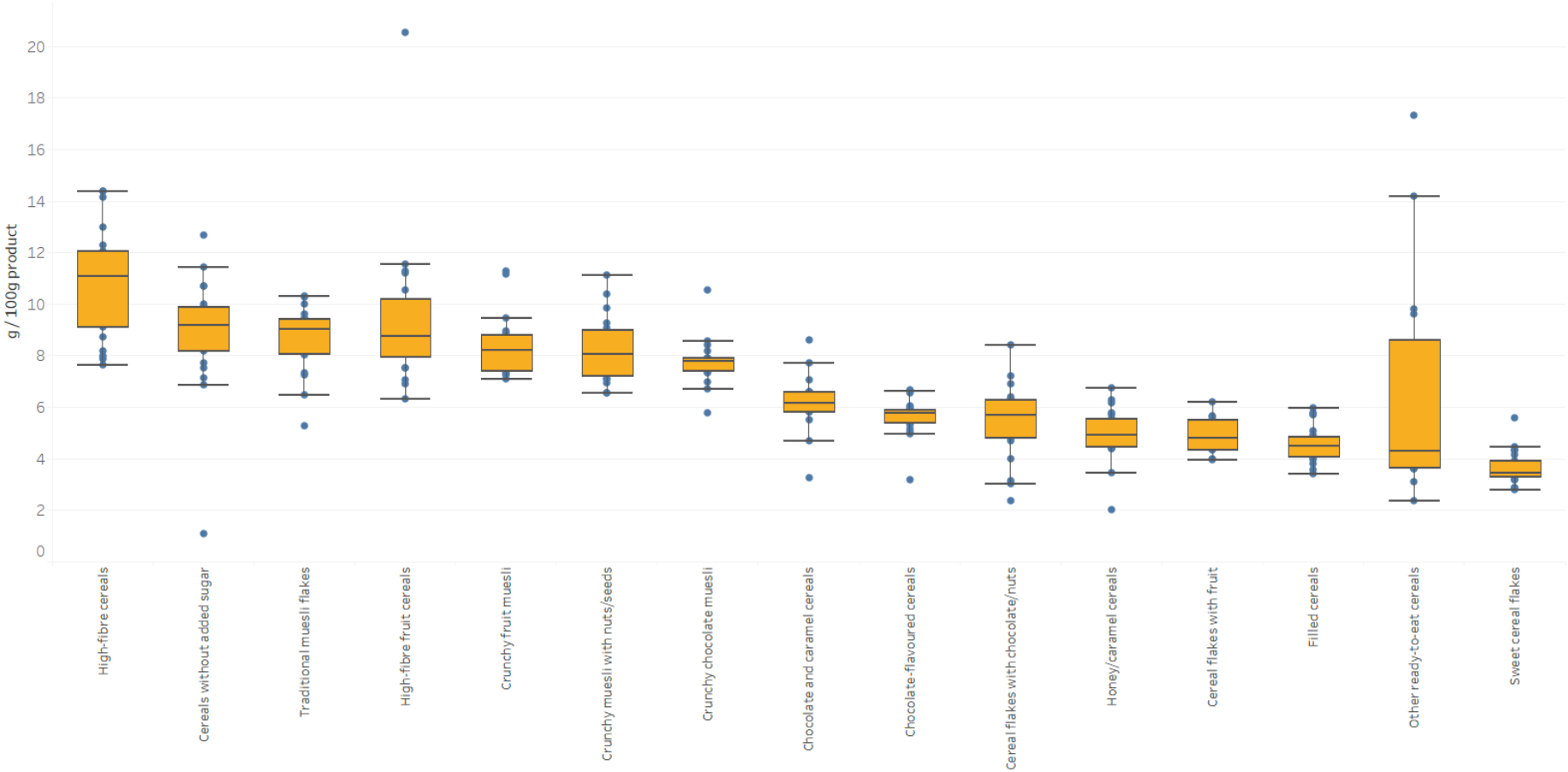
Source: FABLE website

Figure 17. Time trends of fibre content (g/100g product) in breakfast cereals by country



Source: FABLE website

Figure 18. Distribution of country averages for fibre content (g/100g product) in breakfast cereals across different European countries by food sub-category



Source: JRC analysis

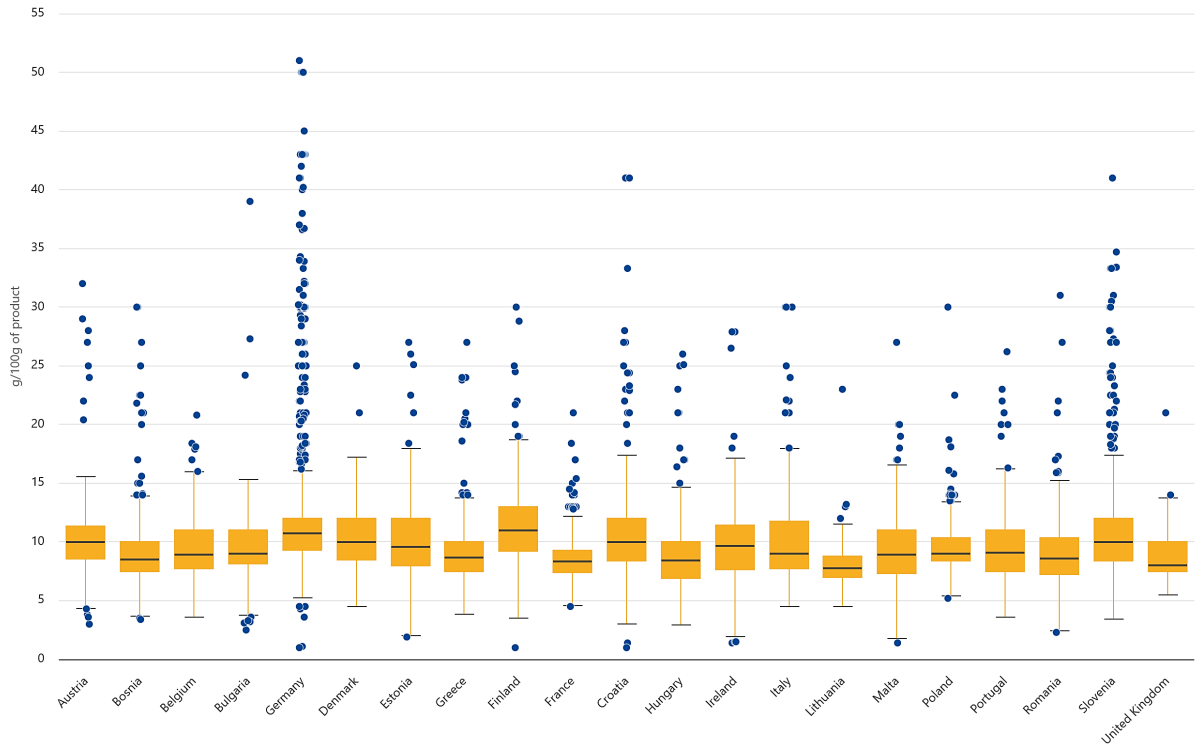
3.1.6. Protein

The average protein content per 100g of product for the food category of breakfast cereals is 10.1g, ranging from 8.1g in Lithuania to 11.7g in Germany (**Figure 19**). The country with the widest distribution is Germany (range: 1.0-51.0g with IQR: 9.3g-12.0g), and the one with the narrowest is the UK (range: 5.5-21.0g with IQR: 7.5g-10.0g).

There is an overall increasing trend of protein content in breakfast cereals (**Figure 20**). Twelve out of 16 countries increased protein content between their first and last data collection points. The largest increase was observed for Italy (from 8.0g in 2020 to 9.7g in 2022), and the smallest increase for Slovenia (from 8.2g in 2020 to 8.7g in 2022). Protein content remained stable in Belgium at 9.2g (between 2018 and 2022). A decrease was observed for three countries: France (from 9.2g in 2008 to 8.6g in 2018), Denmark (from 9.9g in 2020 to 9.7g in 2022), and Ireland (from 9.5g in 2016 to 9.4g in 2021). For the 15 countries that last collected data in 2021-2022, the average protein content was 9.4g (ranging from 8.5g for Hungary to 10.7g for Germany).

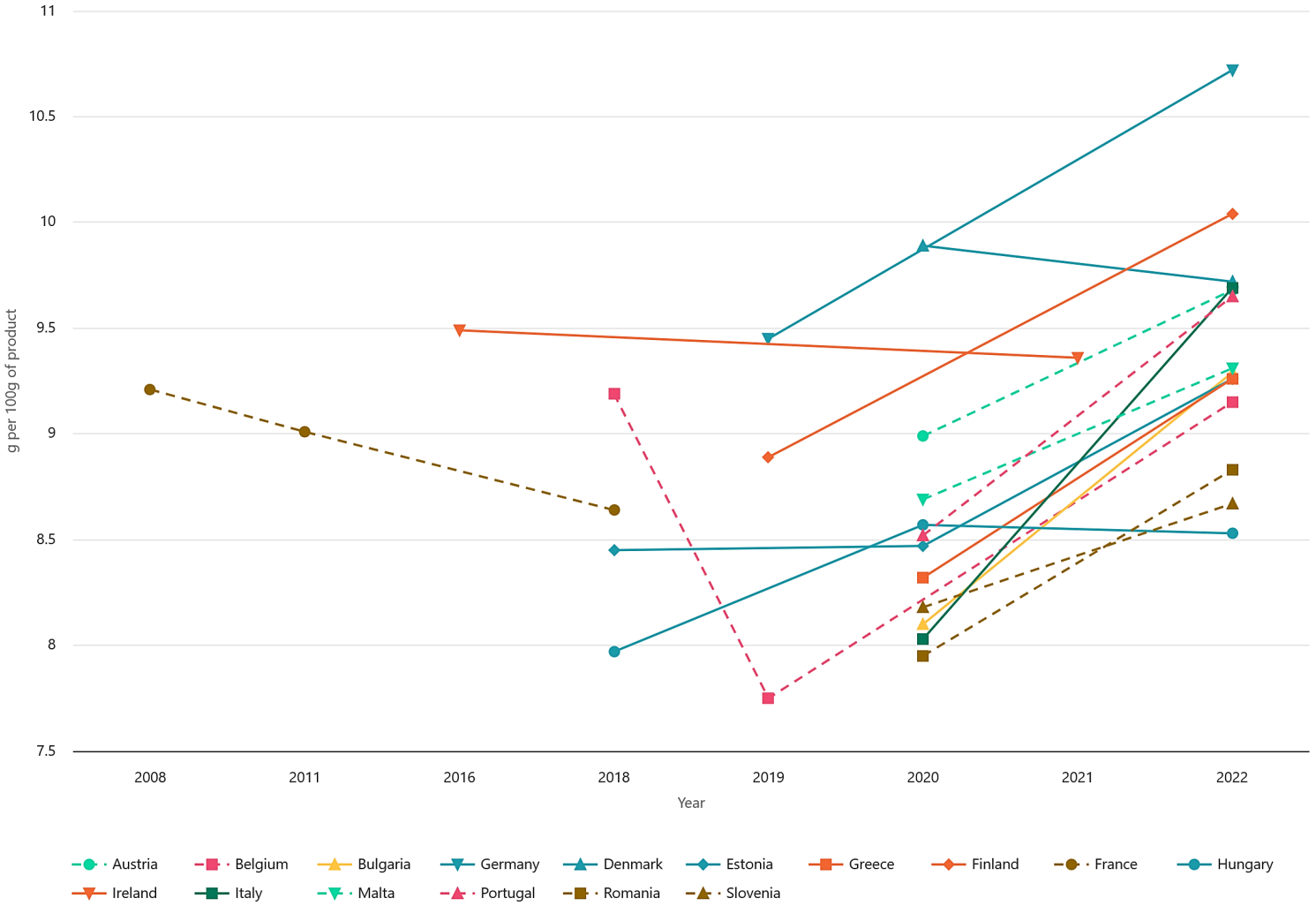
The sub-category with the highest median value of country averages is 'Cereals without added sugar' with 11.7g per 100g of product. The one with the lowest median value of country averages for protein content is 'Filled cereals' with 7.1g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other ready-to-eat cereals' sub-category (range: 3.7-24.5g), and the narrowest for 'Chocolate and caramel cereals' sub-category (range: 7.4-8.8g) (**Figure 21**).

Figure 19. Distribution of protein content (g/100g product) in breakfast cereals by country



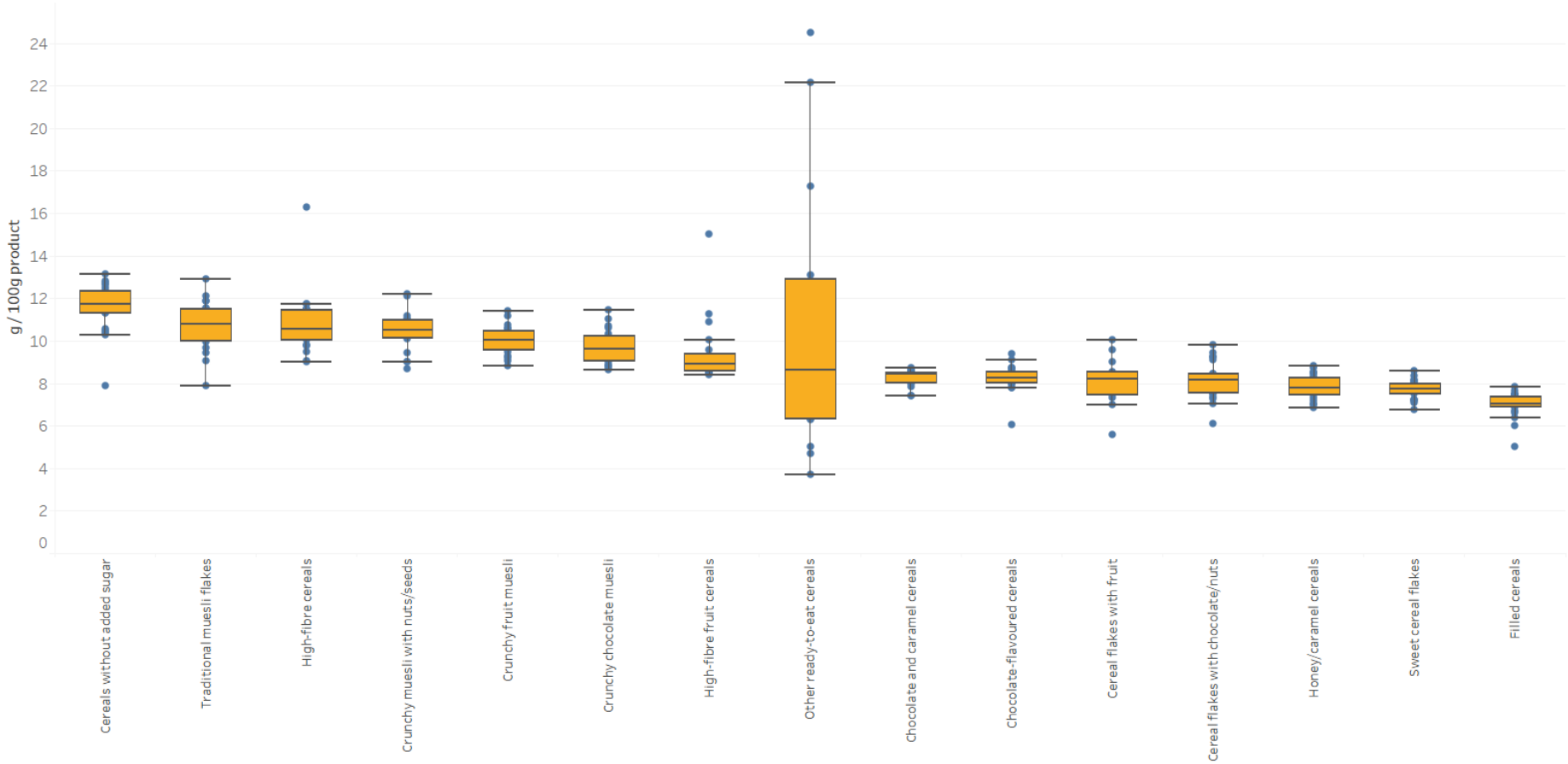
Source: FABLE website

Figure 20. Time trends of protein content (g/100g product) in breakfast cereals by country



Source: FABLE website

Figure 21. Distribution of country averages for protein content (g/100g product) in breakfast cereals across different European countries by food sub-category



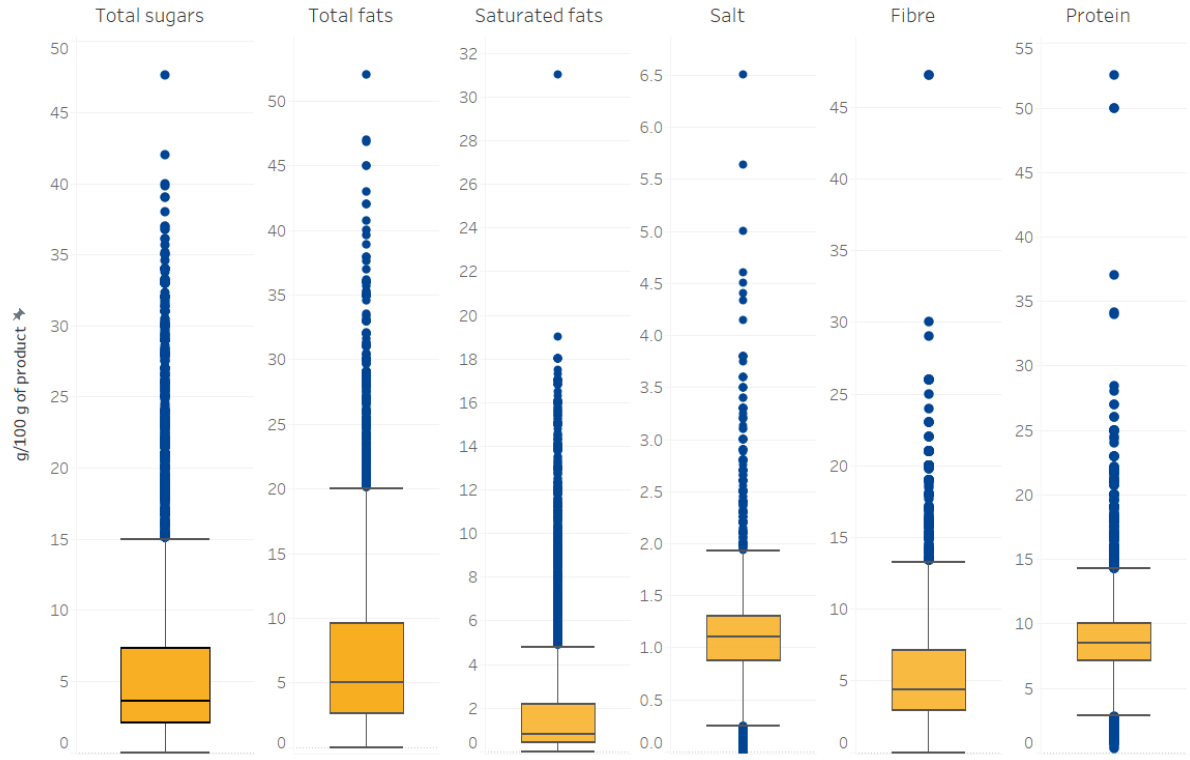
Source: JRC analysis

3.2. Bread products

The distribution of the content of key nutrients (total sugars, total fats, saturated fats, salt, fibre and protein) for all bread products across different European countries, in grams per 100 grams of product, can be found in **Figure 22**.

Per 100g of product, the average total sugars content is 6.3g, the average total fats content is 7.5g, the average saturated fats content is 2.3g, the average salt content is 1.07g, the average fibre content is 5.5g, and the average protein content is 8.8g. In this food category there is a wide variation for each of the nutrients: 0.0-47.6 g of total sugars (IQR: 2.1g-7.3g), 0.0-52.0g of total fats (IQR: 2.6g-9.6g), 0.0-31.0 g of saturated fats (IQR: 0.4g-2.2g), 0.00-6.50g of salt (IQR: 0.88g-1.30g), 0.0-47.0g of fibre (IQR: 3.0g-7.0g), and 0.3-52.5g of protein (IQR: 7.2g-10.0g).

Figure 22. Distribution of content of total sugars, total fats, saturated fats, salt, fibre and protein (g/100g product) in bread products in 21 European countries



Source: JRC analysis

3.2.1. Total sugars

The average total sugars content per 100g of product for the food category of bread products is 6.3g, ranging from 3.1g in Malta to 9.2g in Bulgaria and Portugal (**Figure 23**). The country with the widest distribution is France (range: 0-47.6g with IQR: 3.0g-12.0g), and the one with the narrowest is Malta (range: 0-7.5g with IQR: 1.4g-4.6g).

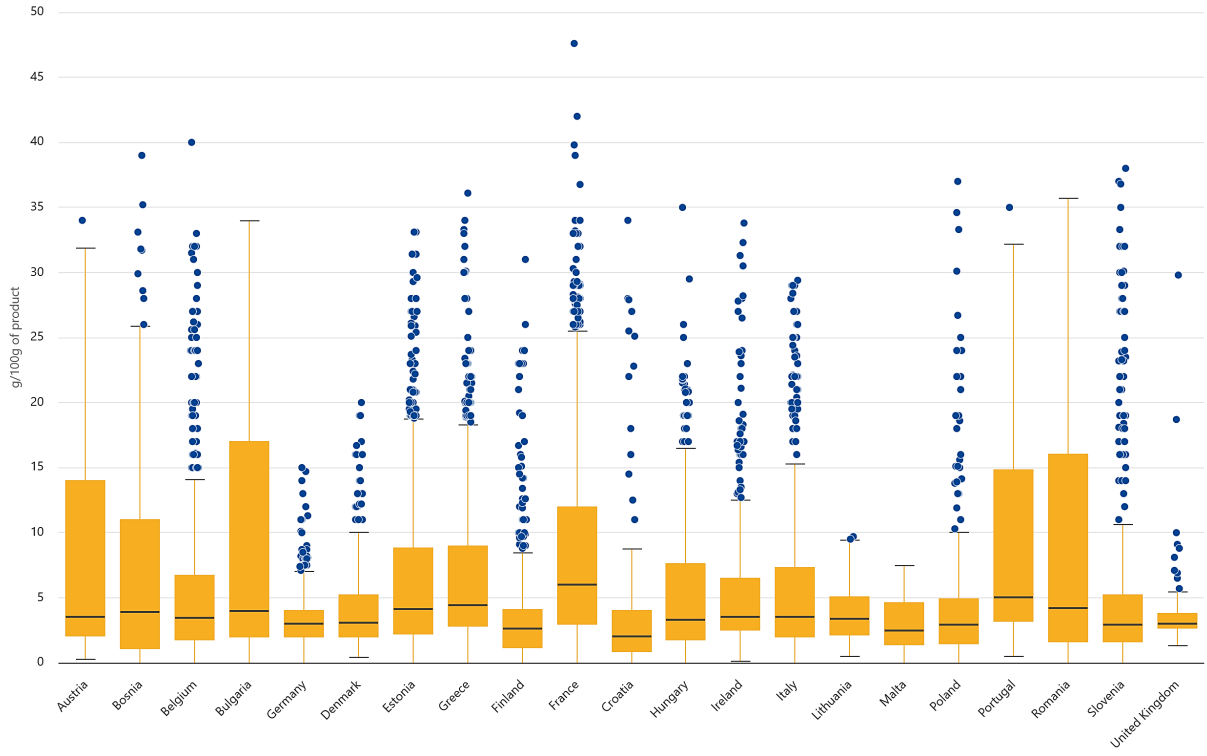
There is an overall increasing trend of total sugars content in bread products, likely driven by the extension of sub-categories collected under this category (**Figure 24**). Twelve out of the 13 countries only collected a limited number of sub-categories, mainly just breads, during their first

data collection rounds. Only France collected a wider range of sub-categories including both breads and bakery products in the first data collection round. All countries collected a more extensive range for the latest data collection rounds. A direct comparison between years is therefore not possible for this category for all countries.

Two countries (Finland and Hungary) collected data on bread-related sub-categories only, on at least two time points. An increase of average sugars content was observed in both countries (in Hungary from 2.3g in 2018 to 6.2g in 2022, and in Finland from 3.0g in 2019 to 5.1g in 2022). Additionally, two countries (Belgium and France) collected data on both bread-related sub-categories and bakery-related sub-categories, on at least two time points. An increase of average sugars content was observed in Belgium (from 5.2g in 2018 to 7.5g in 2022), while no difference was observed for France (with an average of 9.5g, between 2009 to 2019).

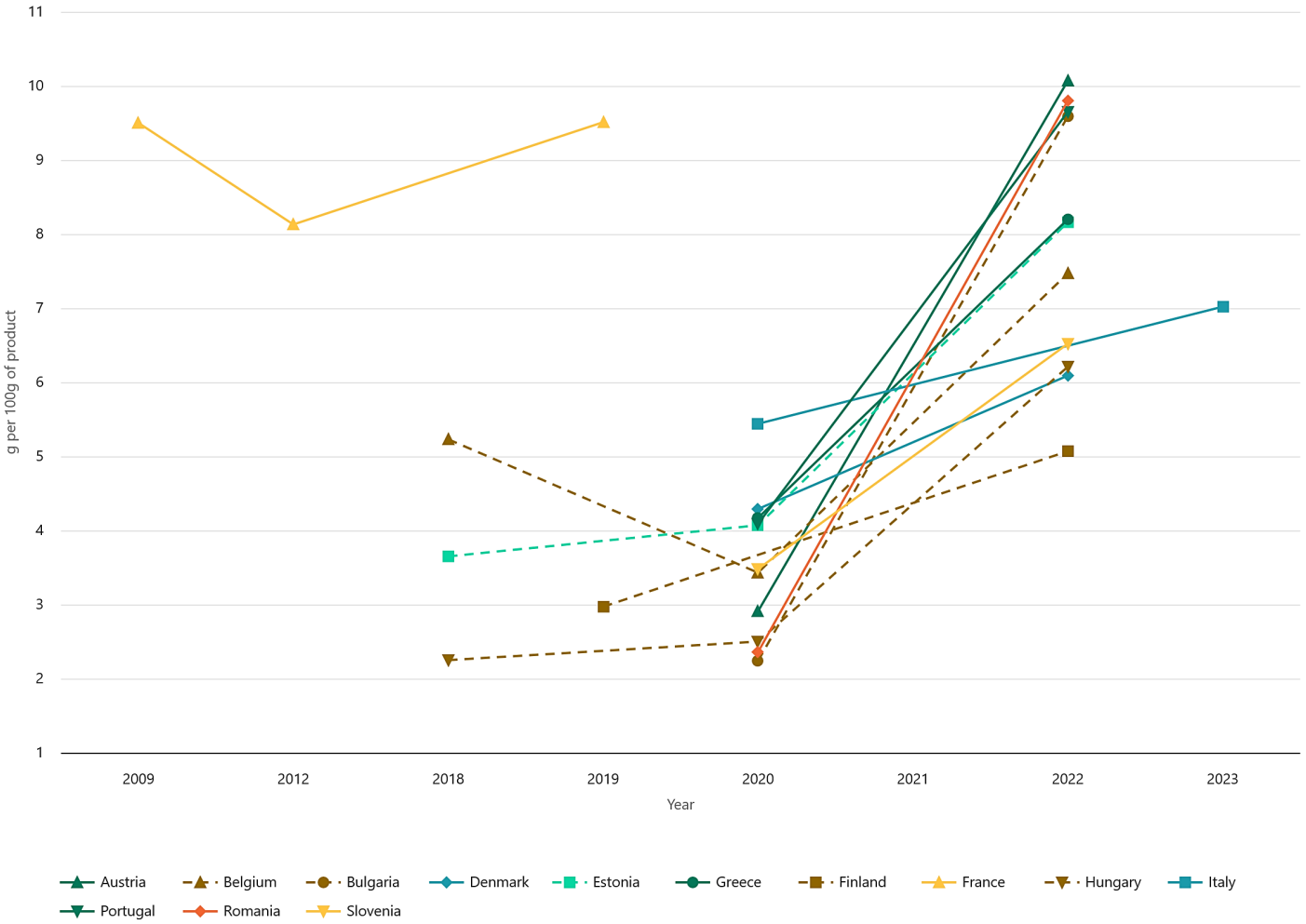
'Brioches with fruit' is the sub-category with the highest median value of country averages for total sugars content with 23.3g of total sugars per 100g of product. The one with the lowest median value of country averages for total sugars content is 'Unleavened breads' with 2.3g of total sugars per 100g of product. Overall, the widest variation of country averages is noted for the 'Other bread products' sub-category (range: 1.0-29.4g), and the narrowest for 'Pre-baked breads' sub-category (range: 1.7-3.8g) (**Figure 25**).

Figure 23. Distribution of total sugars content (g/100g product) in bread products by country



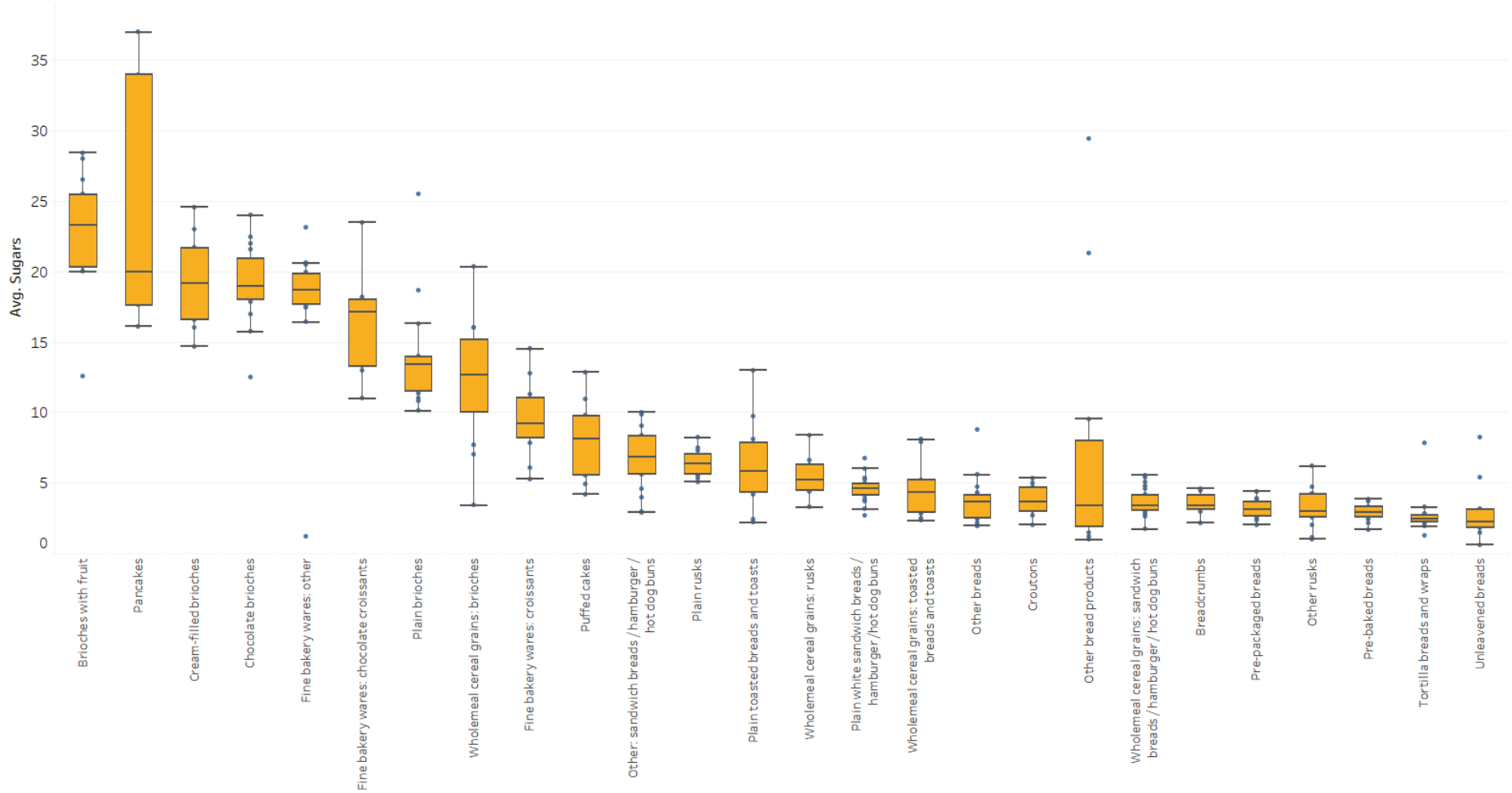
Source: FABLE website

Figure 24. Time trends of total sugars content (g/100g product) in bread products by country



Source: FABLE website

Figure 25. Distribution of country averages for total sugars content (g/100g product) in bread products across different European countries by food sub-category



Source: JRC analysis

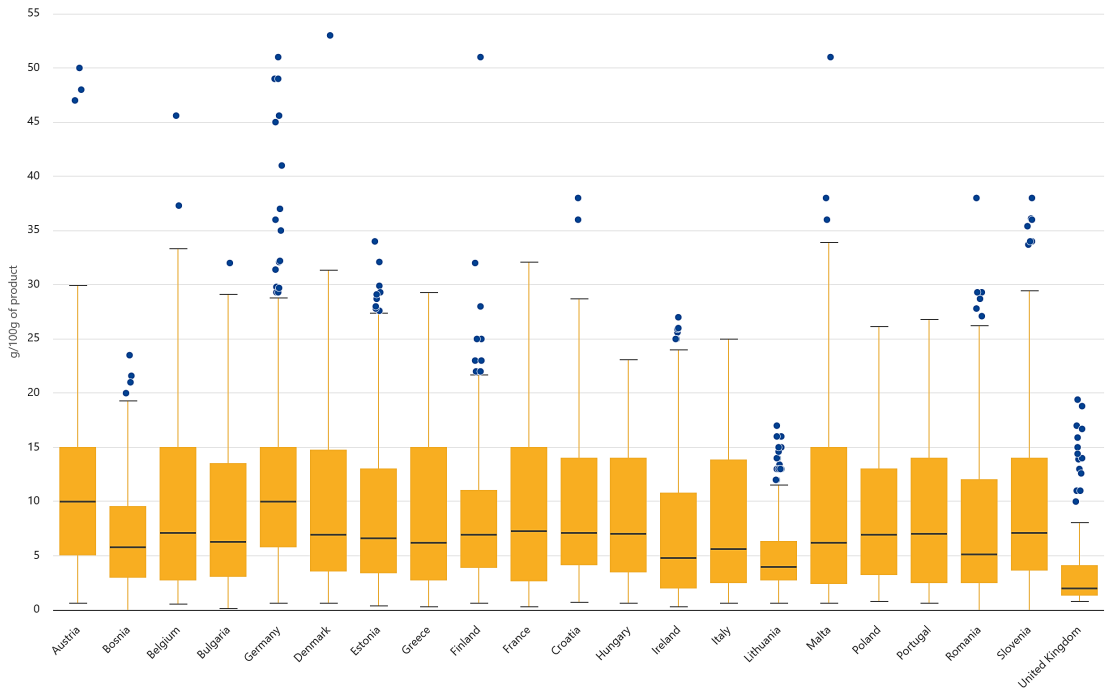
3.2.2. Total fat

The average total fat content per 100g of product for bread products is 7.5g, ranging from 3.5g in Malta and the UK to 9.9g in Romania (**Figure 26**). The country with the widest distribution is Slovenia (range: 0.6-52.0g with IQR: 2.7g-10.4g), and the one with the narrowest is Malta (range: 0.8-8.0g with IQR: 2.6g-4.0g).

There is an overall increasing trend of total fat content in the overall 'bread products', likely driven by the extension of sub-categories collected under this category (**Figure 27**). Twelve out of the 13 countries only collected a limited number of sub-categories, mainly just breads, during their first data collection rounds. Only France collected a wider range of sub-categories including both breads and bakery products in the first data collection round. All countries collected a more extensive range for the latest data collection rounds. A direct comparison between years is therefore not possible for this overall category across all countries. Comparisons should be made only for countries that collected the same type of sub-categories across years. Finland and Hungary collected data on bread-related sub-categories only, on at least two time points. An increase of average total fat content was observed in both countries (in Hungary from 2.9g in 2018 to 7.6g in 2022, and in Finland from 5.6g in 2019 to 7.1g in 2022). Additionally, Belgium and France collected data on both bread-related and bakery-related sub-categories, on at least two time points. An increase of average total fat content was observed in Belgium (from 7.5g in 2018 to 10.0g in 2022), while a decrease was observed for France (from 9.6g in 2009 to 9.4g in 2019).

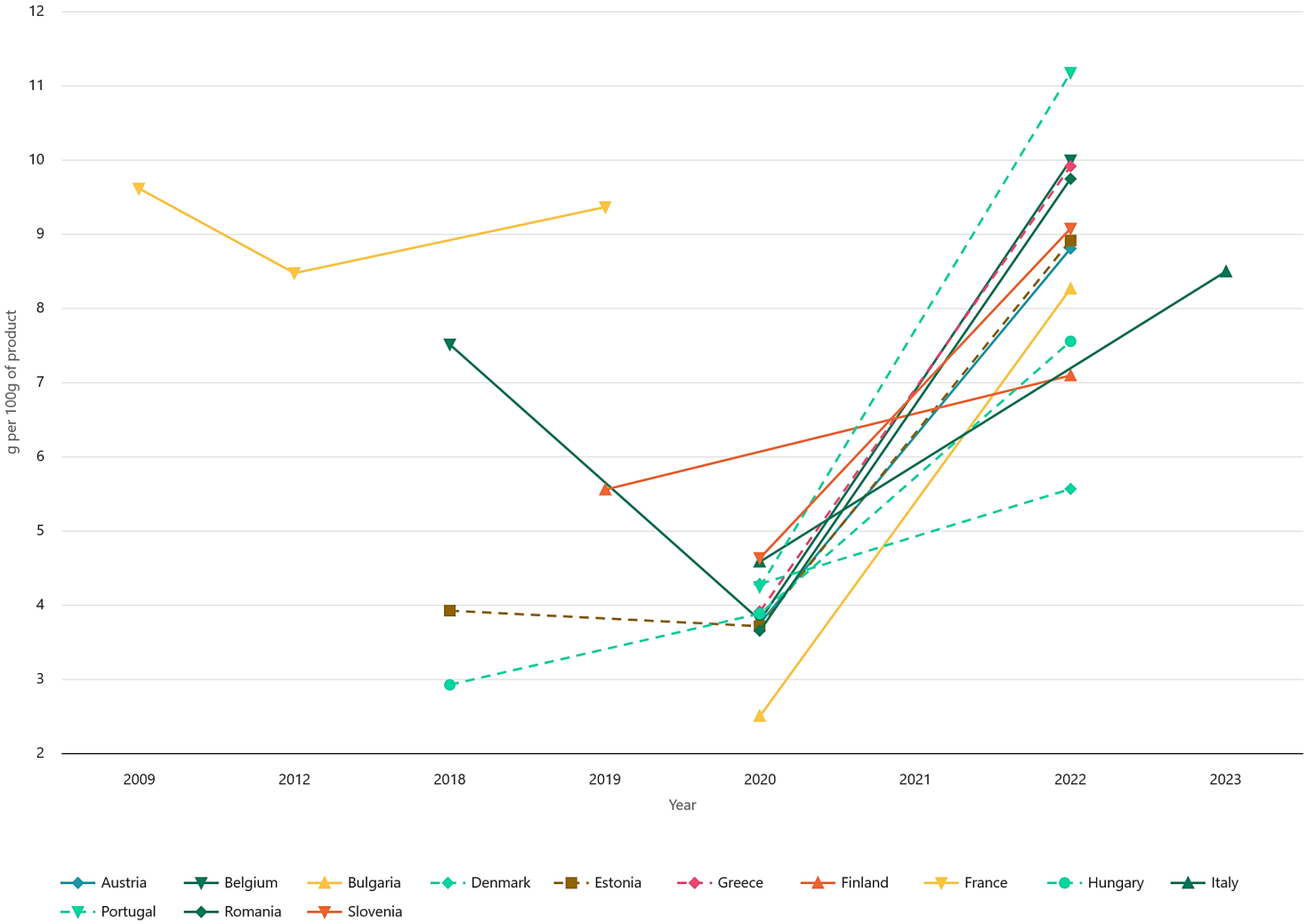
'Fine bakery wares: chocolate croissants' is the sub-category with the highest median value of country averages for total fat content with 21.6g per 100g of product. The one with the lowest median value of country averages for total fat content is 'Breadcrumbs' with 2.8g per 100g of product. Overall, the widest variation of country averages is noted for 'Croutons' (range: 7.5-35.0g), and the narrowest for 'Pre-baked breads' (range: 2.0-5.4g) (**Figure 28**).

Figure 26. Distribution of total fat content (g /100 g product) in bread products by country



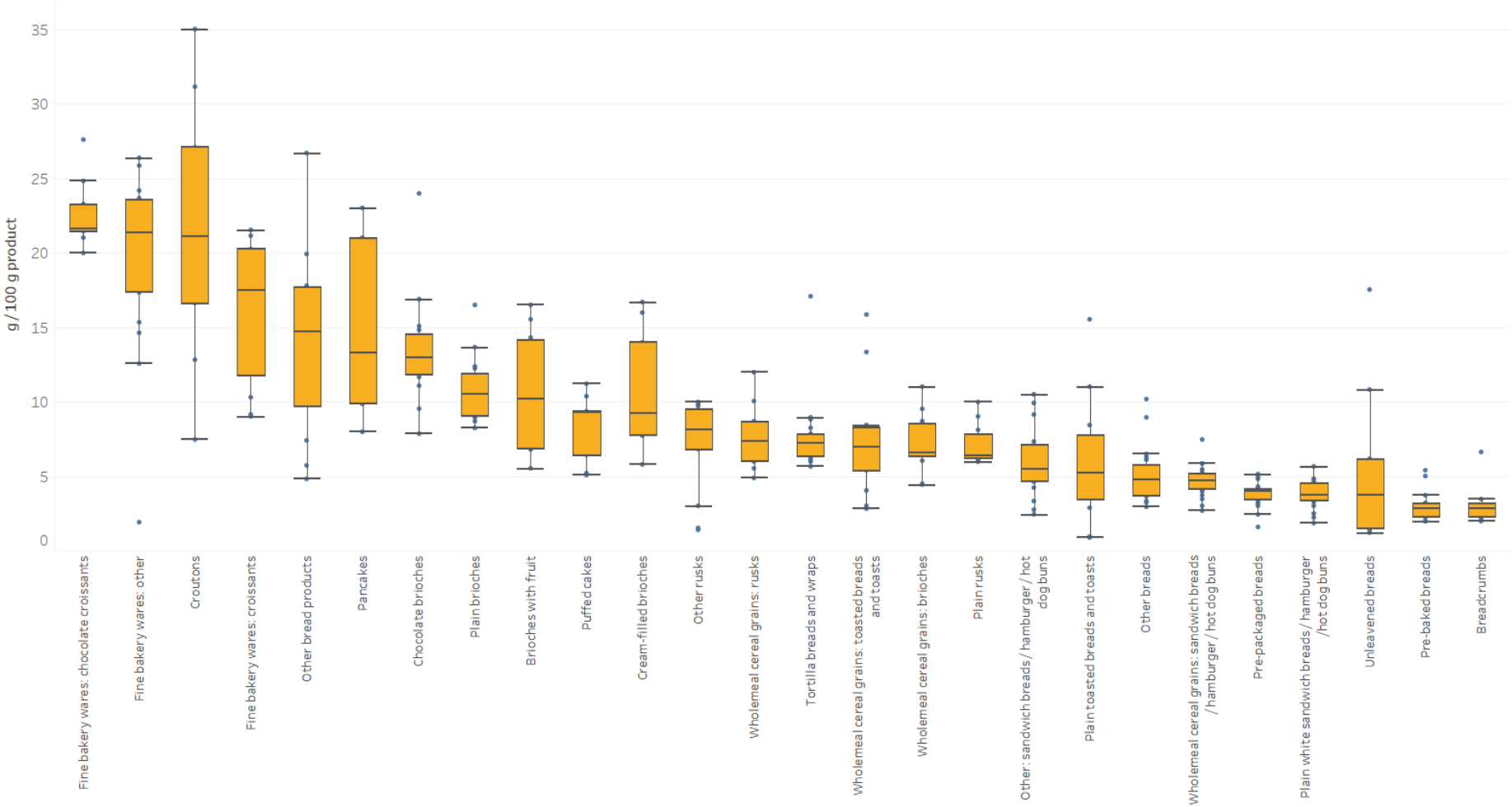
Source: FABLE website

Figure 27. Time trends of total fat content (g/100g product) in bread products by country



Source: FABLE website

Figure 28. Distribution of country averages for total fat content (g/100g product) in bread products across different European countries by food sub-category



Source: JRC analysis

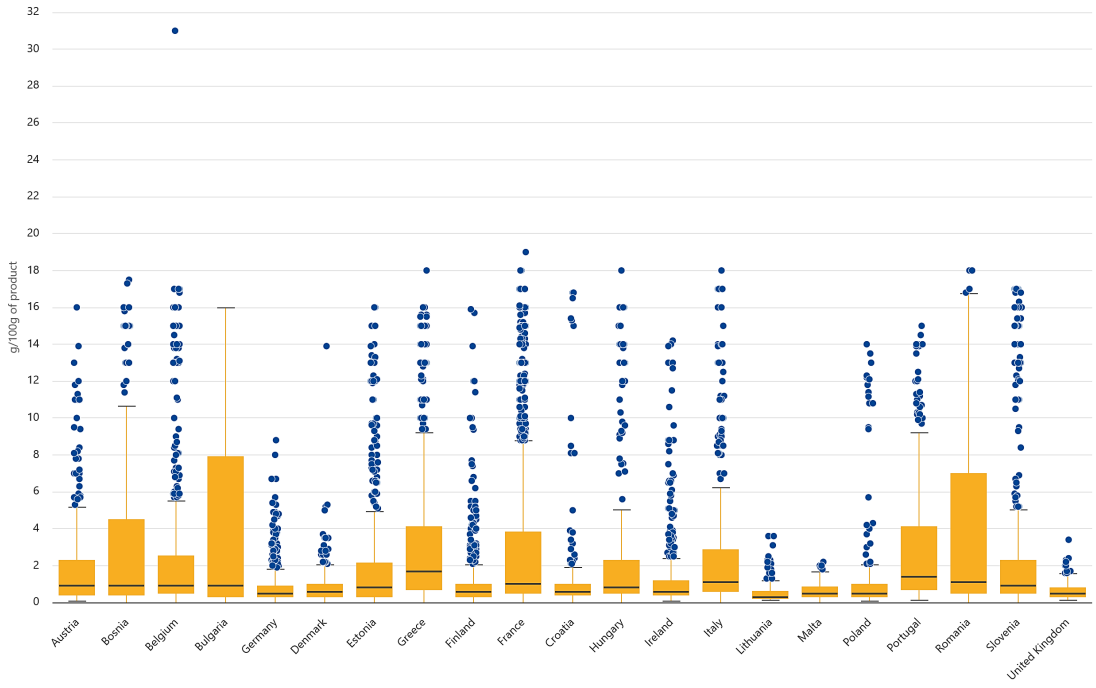
3.2.3. Saturated fats

The average saturated fat content per 100g of product for the food category of bread products is 2.3g, ranging from 0.5g in Lithuania to 3.9g in Romania (**Figure 29**). The country with the widest distribution is Belgium (range: 0-31.0g with IQR: 0.5g-2.5g), and the one with the narrowest is Malta (range: 0-2.2g with IQR: 0.3g-0.8g).

There is an overall increasing trend of saturated fat content in bread products, likely driven by the extension of sub-categories collected under this category (**Figure 30**). Twelve out of the 13 countries only collected a limited number of sub-categories, mainly just breads, during their first data collection rounds. Only France collected a wider range of sub-categories including both breads and bakery product in the first data collection round. All countries collected a more extensive range for the latest data collection rounds. A direct comparison between years is therefore not possible for this category. Finland and Hungary collected data on bread-related sub-categories only, on at least two time points. An increase of average saturated fat content was observed in both countries (in Finland from 0.8g in 2019 to 2.2g in 2022, and in Hungary (from 2.2g in 2018 to 2.6g in 2022). Additionally, Belgium and France collected data on both bread-related and bakery-related sub-categories, on at least two time points. An increase of average saturated fat content was observed in Belgium (from 2.3g in 2018 to 3.5g in 2022), while a decrease was observed for France (from 4.8g in 2009 to 3.3g in 2019).

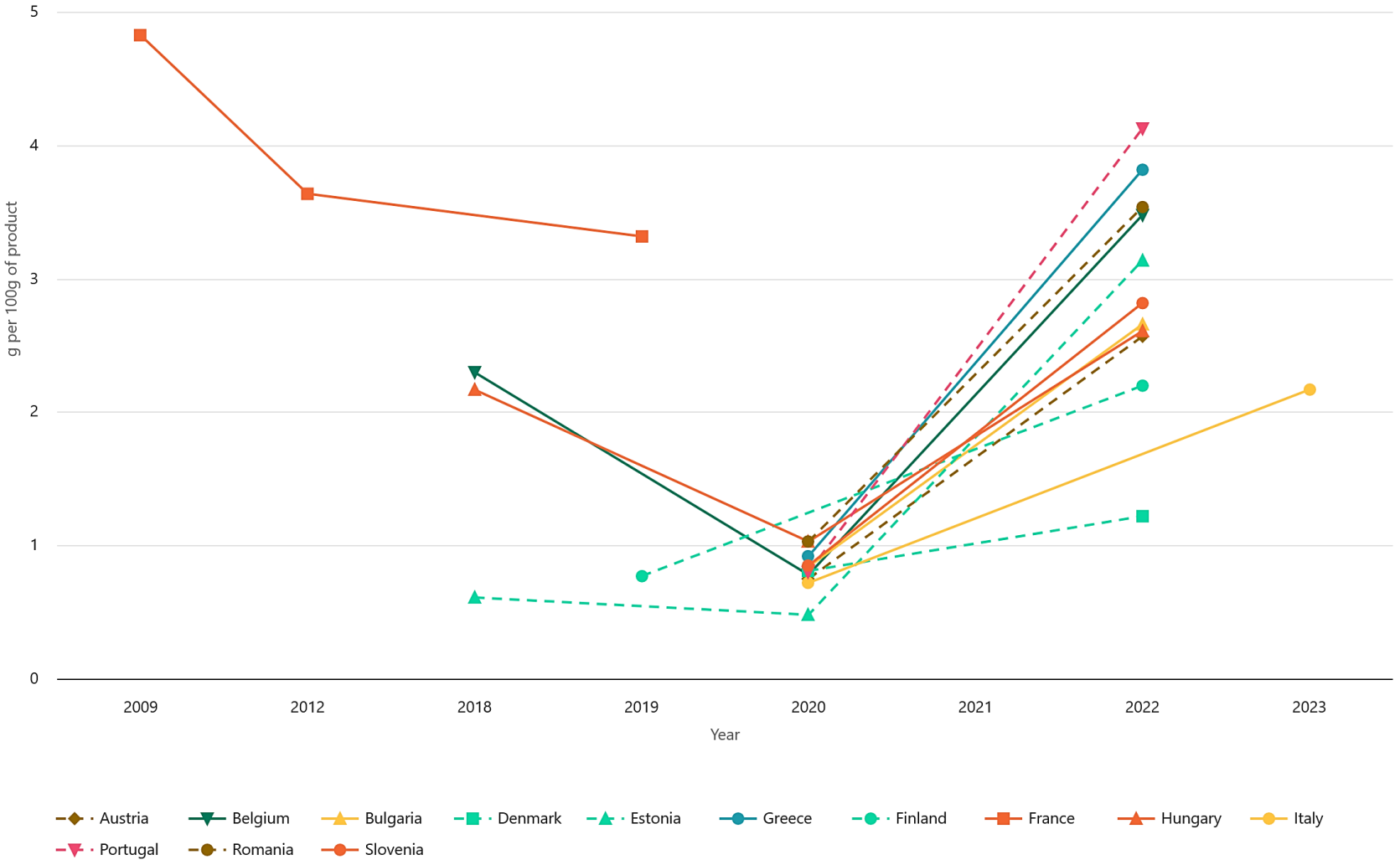
'Fine bakery wares: chocolate croissants' is the sub-category with the highest median value of country averages for saturated fat content with 11.8g per 100g of product. The one with the lowest median value of country averages for saturated fat content is 'Pre-baked breads' with 0.5g per 100g of product. Overall, the widest variation of country averages is noted for the 'Croutons' sub-category (range: 0.9-16.8g), and the narrowest for 'Wholemeal cereal grains: sandwich breads / hamburger / hot dog buns' sub-category (range: 0.5-1.1g) (**Figure 31**).

Figure 29. Distribution of saturated fat content (g/100g product) in bread products by country



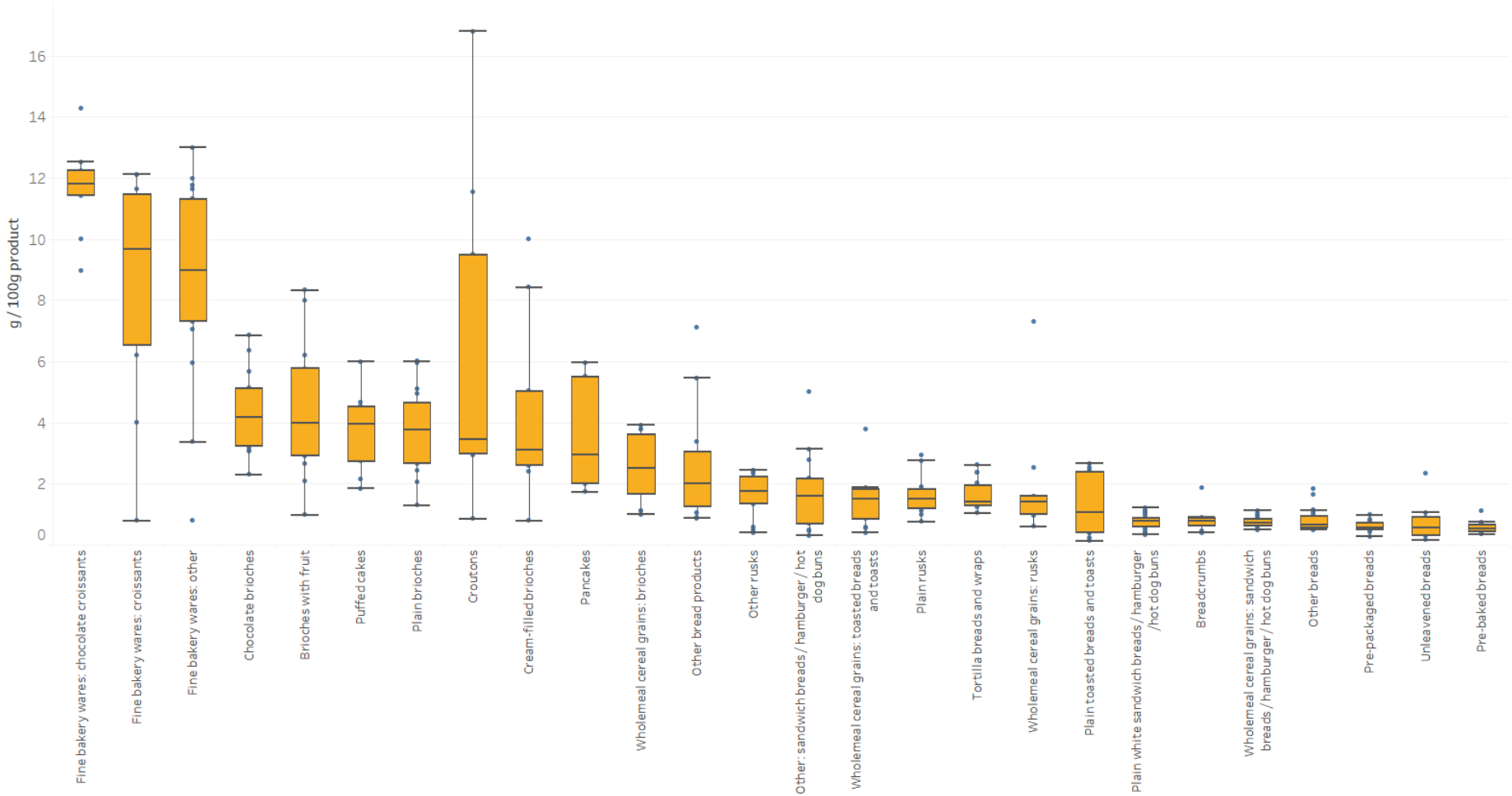
Source: FABLE website

Figure 30. Time trends of saturated fat content (g/100g product) in bread products by country



Source: FABLE website

Figure 31. Distribution of country averages for saturated fat content (g/100g product) in bread products across different European countries by food sub-category



Source: JRC analysis

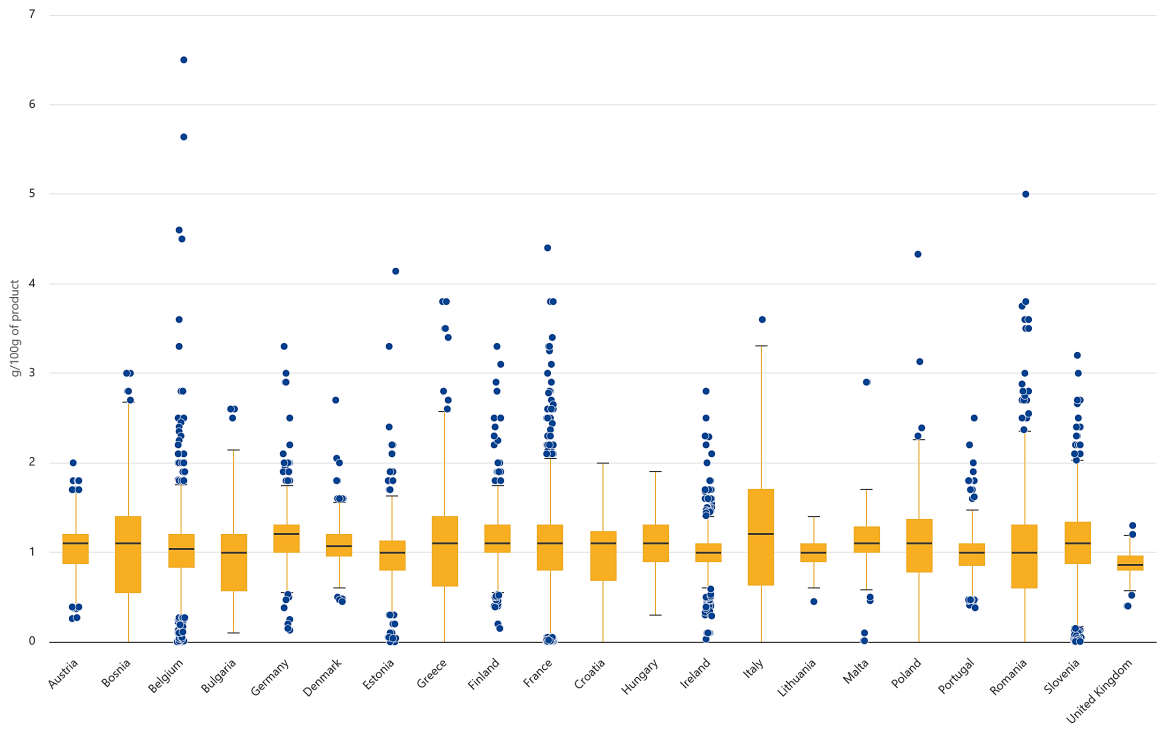
3.2.4. Salt

The average salt content per 100g of product for the food category of bread products is 1.07g, ranging from 0.86g in the UK to 1.25g in Italy (**Figure 32**). The country with the widest distribution is Belgium (range: 0-6.5g with IQR: 0.28g-1.76g), and the one with the narrowest is the UK (range: 0.40g-1.30g with IQR: 0.80g-0.95g).

There is an overall decreasing trend of salt content in bread products, likely driven by the extension of sub-categories collected under this category (**Figure 33**). Twelve out of the 13 countries only collected a limited number of sub-categories, mainly just breads, during their first data collection rounds. Only France collected a wider range of sub-categories including both breads and bakery product in the first data collection round. All countries collected a more extensive range for the latest data collection rounds. A direct comparison between years is therefore not possible for this category. Finland and Hungary collected data on bread-related sub-categories only, on at least two time points. A decrease of average salt content was observed in Hungary (from 1.33g in 2018 to 1.05g in 2022), while remaining stable in Finland at around 1.15g between 2019 and 2022. Additionally, Belgium and France collected data on both bread-related sub-categories and bakery-related sub-categories, on at least two time points. A decrease of average salt content was observed in Belgium (from 1.34g in 2018 to 1.15g in 2022), while remaining stable for France at around 1.05g between 2009 and 2019.

'Croutons' is the sub-category with the highest median value of country averages for salt content with 1.80g per 100g of product. The one with the lowest median value of country averages for salt content is 'Puffed cakes' with 0.42g per 100g of product. Overall, the widest variation of country averages is noted for the 'Croutons' (range: 1.04-3.45g), and the narrowest for 'Cream-filled brioches' (range: 0.45-0.82g) (**Figure 34**).

Figure 32. Distribution of salt content in bread products (g/100g product) by country



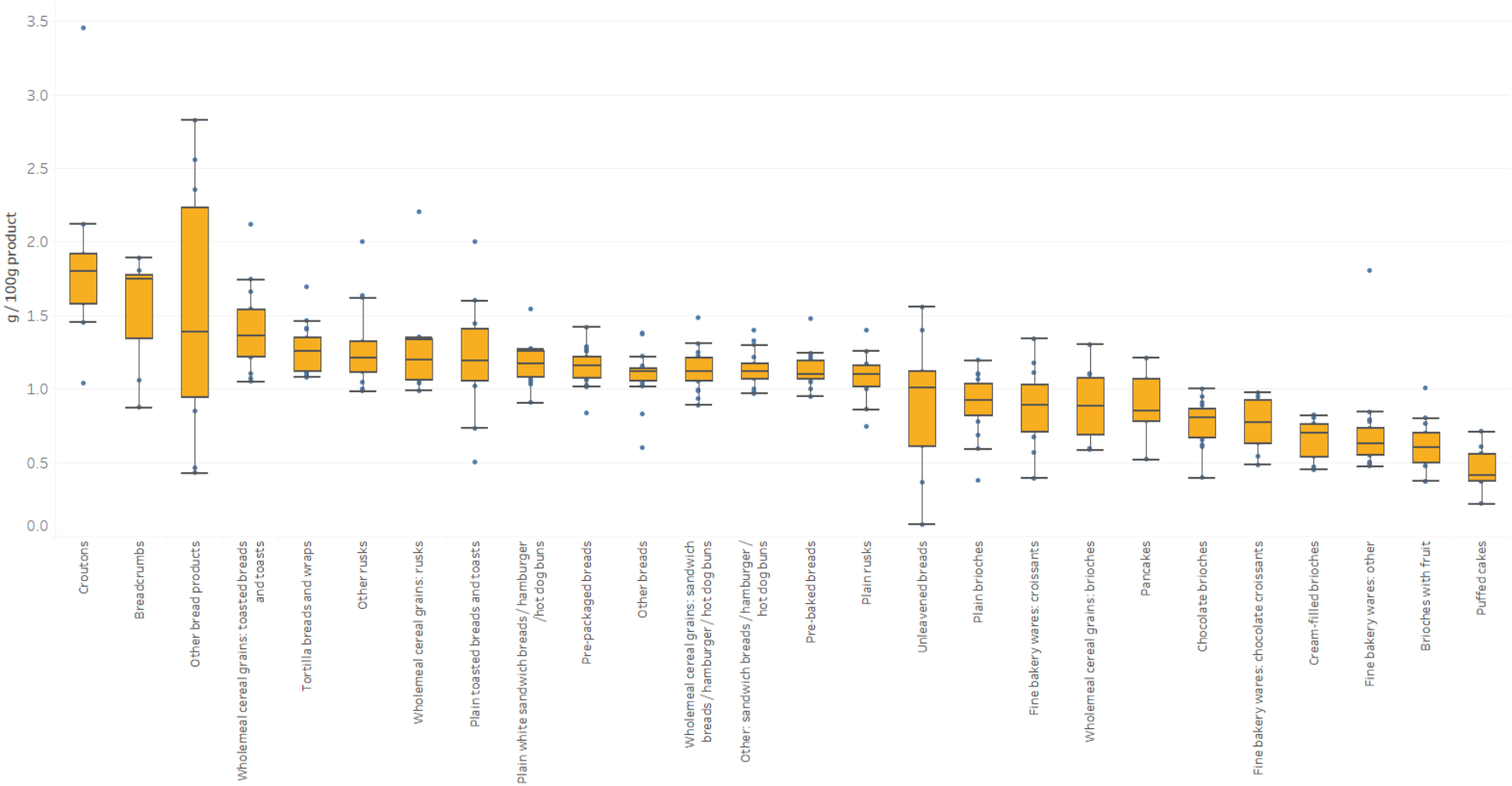
Source: FABLE website

Figure 33. Time trends of salt content (g/100g product) in bread products by country



Source: FABLE website

Figure 34. Distribution of country averages for salt content (g/100g product) in bread products across different European countries by food sub-category



Source: JRC analysis

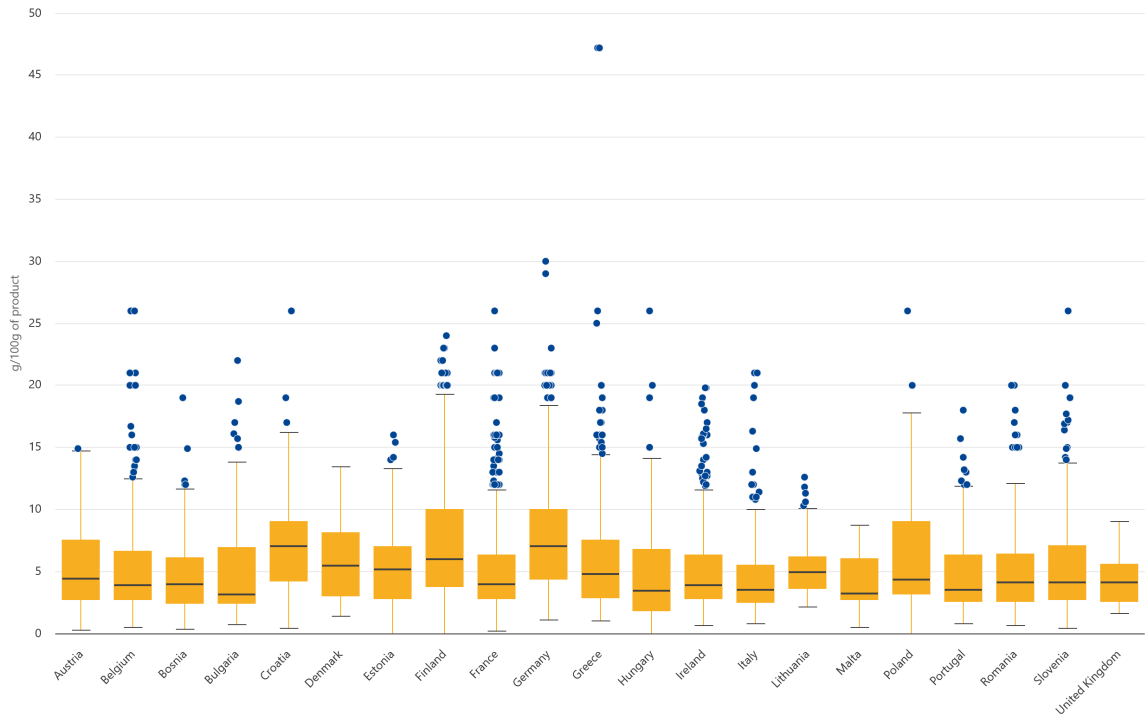
3.2.5. Fibre

The average fibre content per 100g of product for the food category of bread products is 5.5g, ranging from 4.1g in Malta to 7.9g in Germany (**Figure 35**). The country with the widest distribution is Greece (range: 0-47.2g with IQR: 2.8g-7.5g), and the one with the narrowest is the UK (range: 1.6-9.0g with IQR: 2.6g-5.6g).

There is an overall decreasing trend of fibre content in bread products, likely driven by the extension of sub-categories collected under this category (**Figure 36**). Twelve out of the 13 countries only collected a limited number of sub-categories, mainly just breads, during their first data collection rounds. Only France collected a wider range of sub-categories including both breads and bakery product in the first data collection round. All countries collected a more extensive range for the latest data collection rounds. A direct comparison between years is therefore not possible for this category. Finland and Hungary collected data on bread-related sub-categories only, on at least two time points. A decrease of average fibre content was observed in both countries (in Finland from 7.6g in 2019 to 5.7g in 2022, and in Hungary from 5.1g in 2018 to 4.2g in 2022). Additionally, Belgium and France collected data on both bread-related sub-categories and bakery-related sub-categories, on at least two time points. A decrease of average fibre content was observed for both countries, in France (from 4.4g in 2009 to 3.9g in 2019) and in Belgium (from 4.6g in 2018 to 4.4g in 2022).

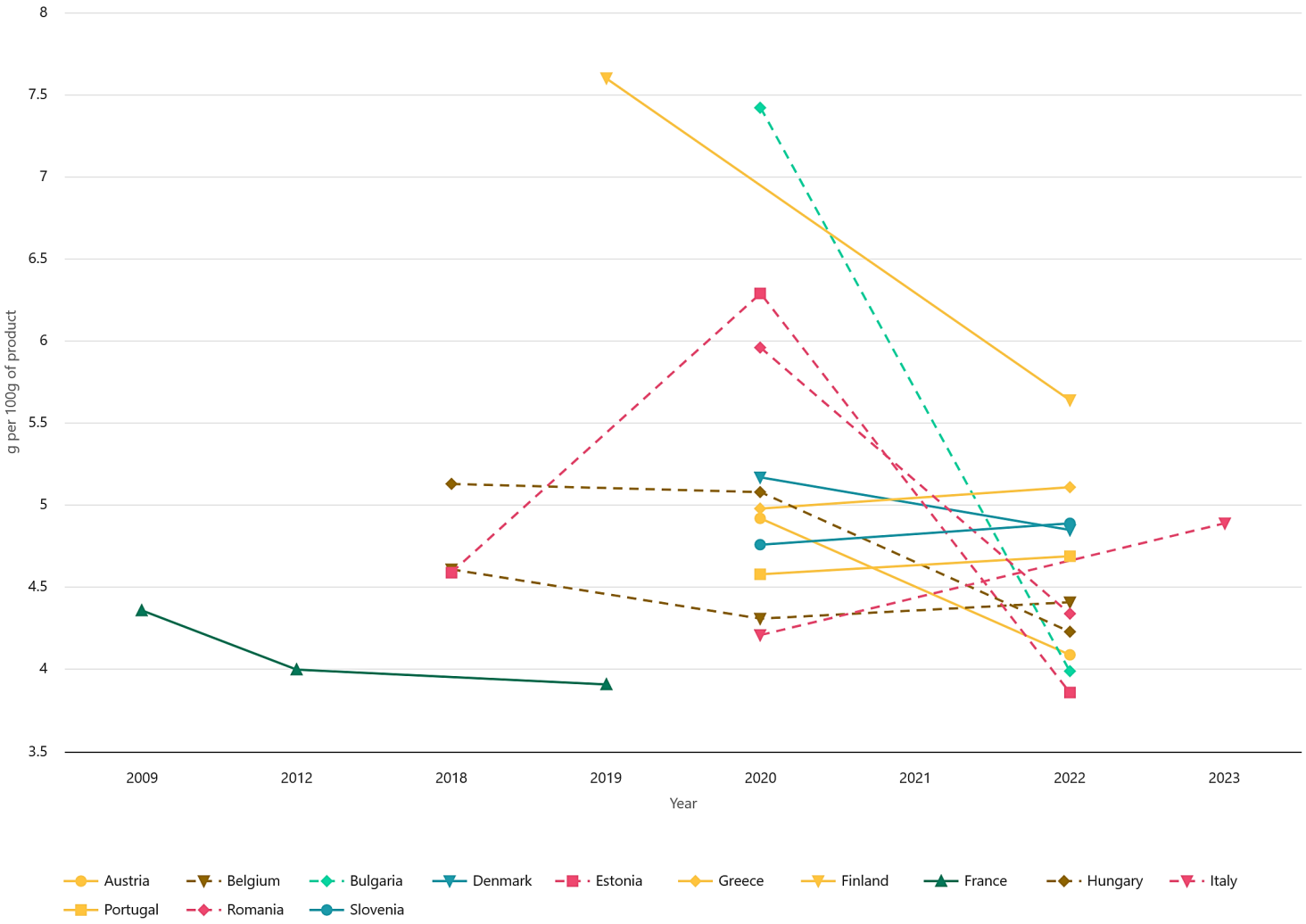
'Other rusks' is the sub-category with the highest median value of country averages for fibre content with 9.8g per 100g of product. The one with the lowest median value of country averages for fibre content is 'Pancakes' with 1.5g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other rusks' (range: 5.9-19.0g), and the narrowest for 'Pancakes' (range: 1.1-1.9g) (**Figure 37**).

Figure 35. Distribution of fibre content (g/100g product) in bread products by country



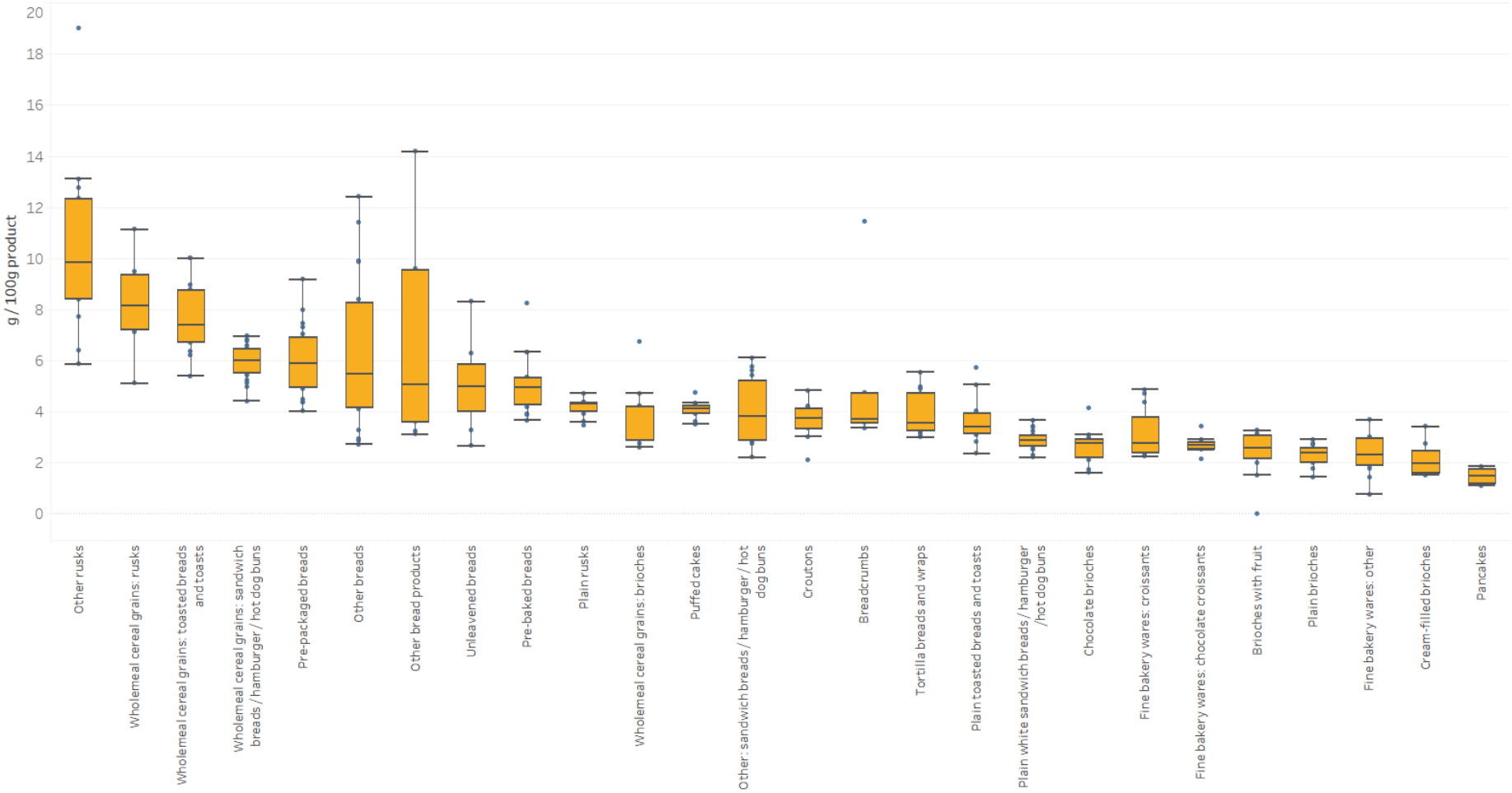
Source: FABLE website

Figure 36. Time trends of fibre content (g/100g product) in bread products by country



Source: FABLE website

Figure 37. Distribution of country averages for fibre content (g/100g product) in bread products across different European countries by food sub-category



Source: JRC analysis

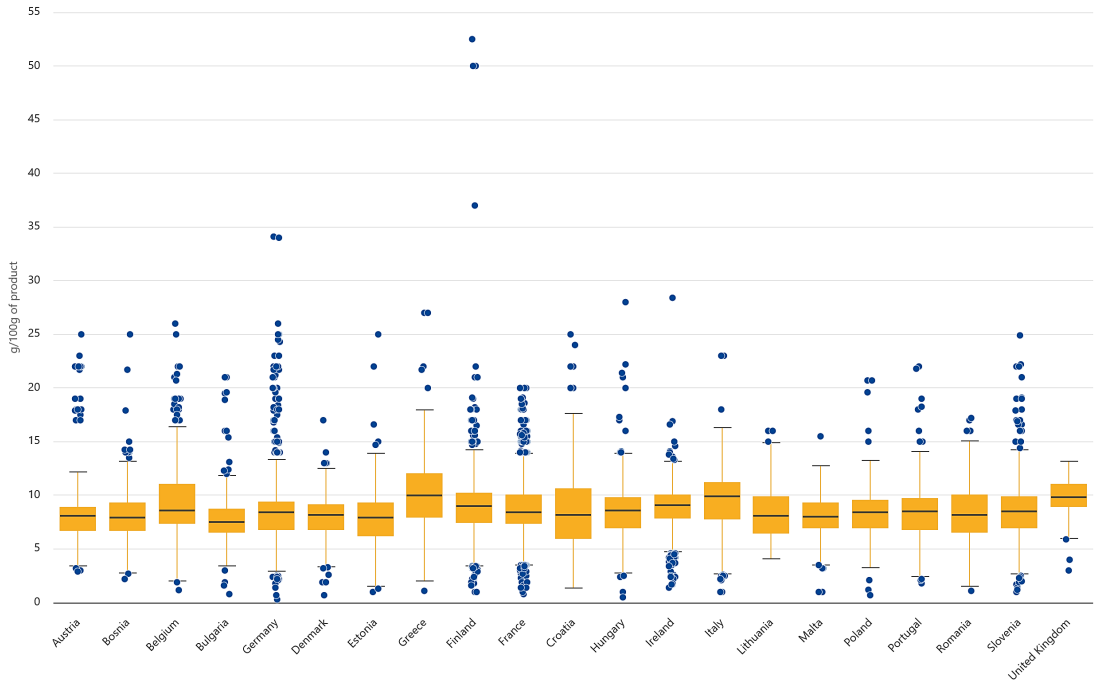
3.2.6. Protein

The average protein content per 100g of product for the food category of bread products is 8.8g, ranging from 7.7g in Malta to 10.1 in Greece (**Figure 38**). The country with the widest distribution is Finland (range: 1.0-52.5g with IQR: 7.5g-10.2g), and the one with the narrowest is the UK (range: 3.0-13.2g with IQR: 9.0g-11.0g).

There is an overall decreasing trend of protein content in bread products, likely driven by the extension of sub-categories collected under this category (**Figure 39**). Twelve out of the 13 countries only collected a limited number of sub-categories, mainly just breads, during their first data collection rounds. Only France collected a wider range of sub-categories including both breads and bakery product in the first data collection round. All countries collected a more extensive range for the latest data collection rounds. A direct comparison between years is therefore not possible for this category. Finland and Hungary collected data on at least two time points on bread-related sub-categories only. A decrease of average protein content was observed in both countries (in Finland from 9.5g in 2019 to 8.3g in 2022, and in Hungary from 9.3g in 2018 to 9.0g in 2022). Additionally, Belgium and France collected data on at least two time points on both bread-related and bakery-related sub-categories. A decrease of average protein content was observed for both countries; in France from 9.1g in 2009 to 8.6g in 2019 and in Belgium from 9.5g in 2018 to 9.2g in 2022.

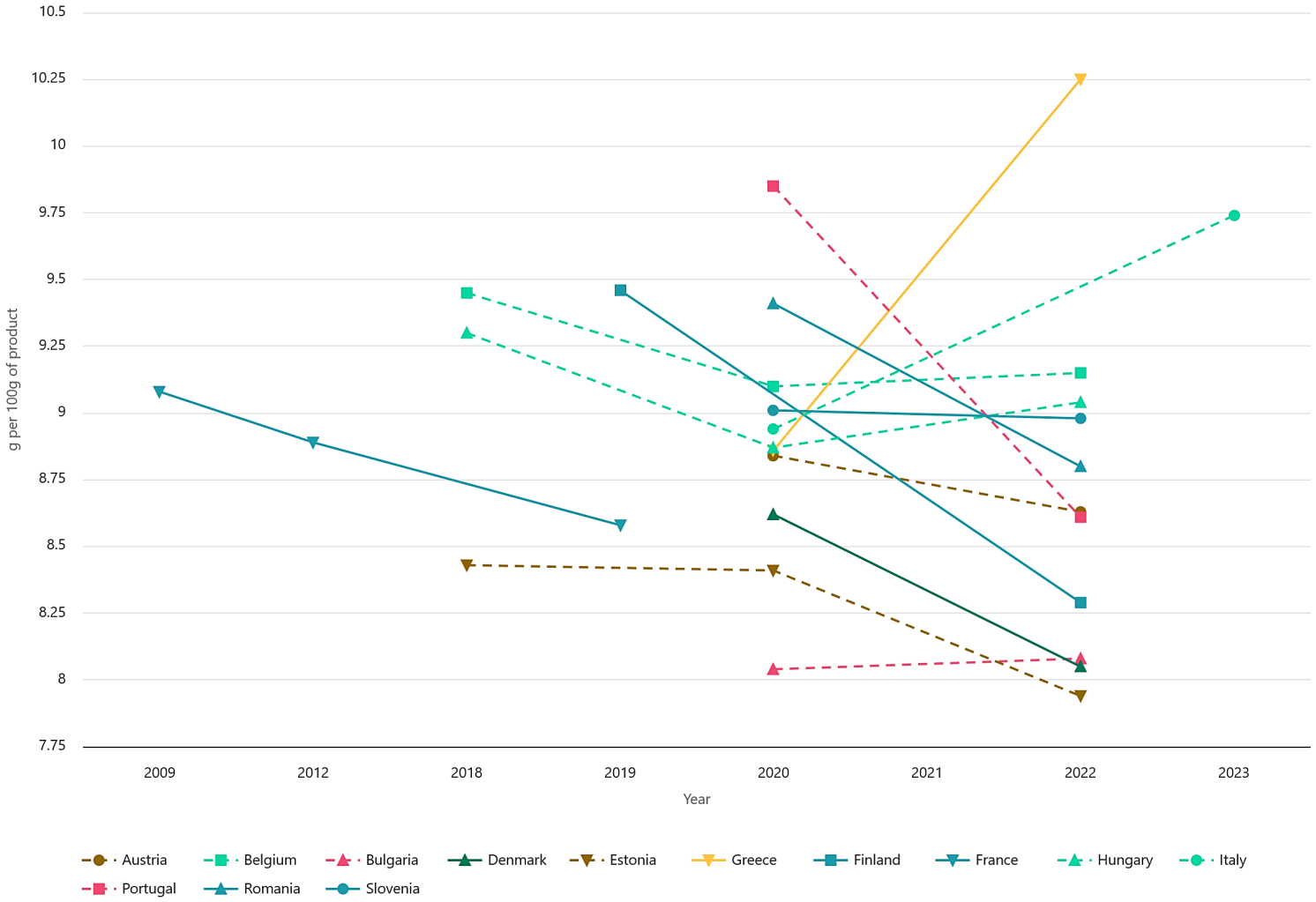
'Wholemeal cereal grains: rusks' is the sub-category with the highest median value of country averages for protein content with 12.2g per 100g of product. The ones with the lowest median value of country averages for protein content are 'Pancakes' and 'Fine bakery wares: other' with 6.5g per 100g of product. Overall, the widest variation of country averages is noted for the 'Wholemeal cereal grains: rusks' (range: 4.1-15.5g), and the narrowest for ''Fine bakery wares: chocolate croissants' (range: 6.4-7.5g) (**Figure 40**).

Figure 38. Distribution of protein content (g/100g product) in bread products by country



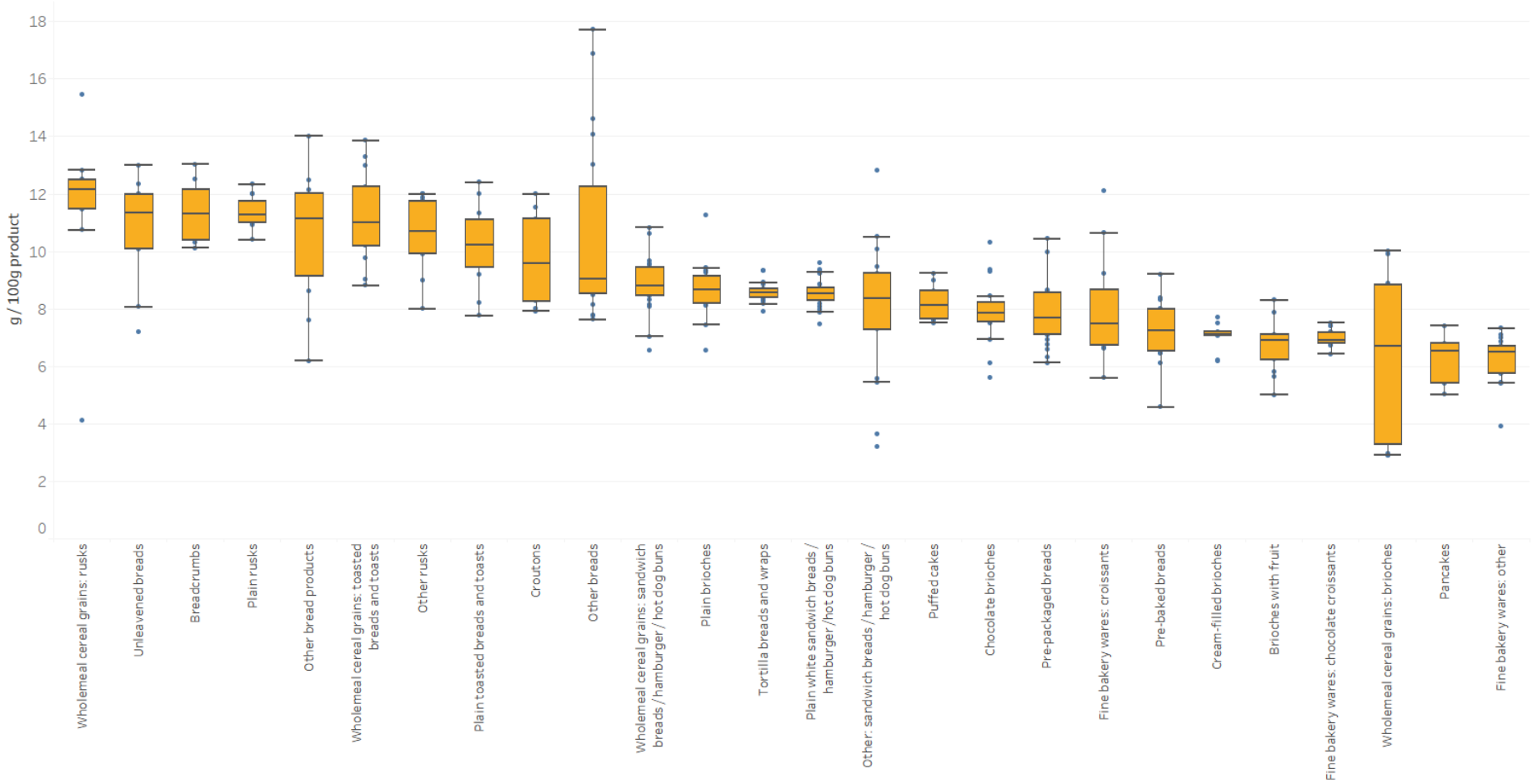
Source: FABLE website

Figure 39. Time trends of protein content (g/100g product) in bread products by country



Source: FABLE website

Figure 40. Distribution of country averages for protein content (g/100g product) in bread products across different European countries by food sub-category



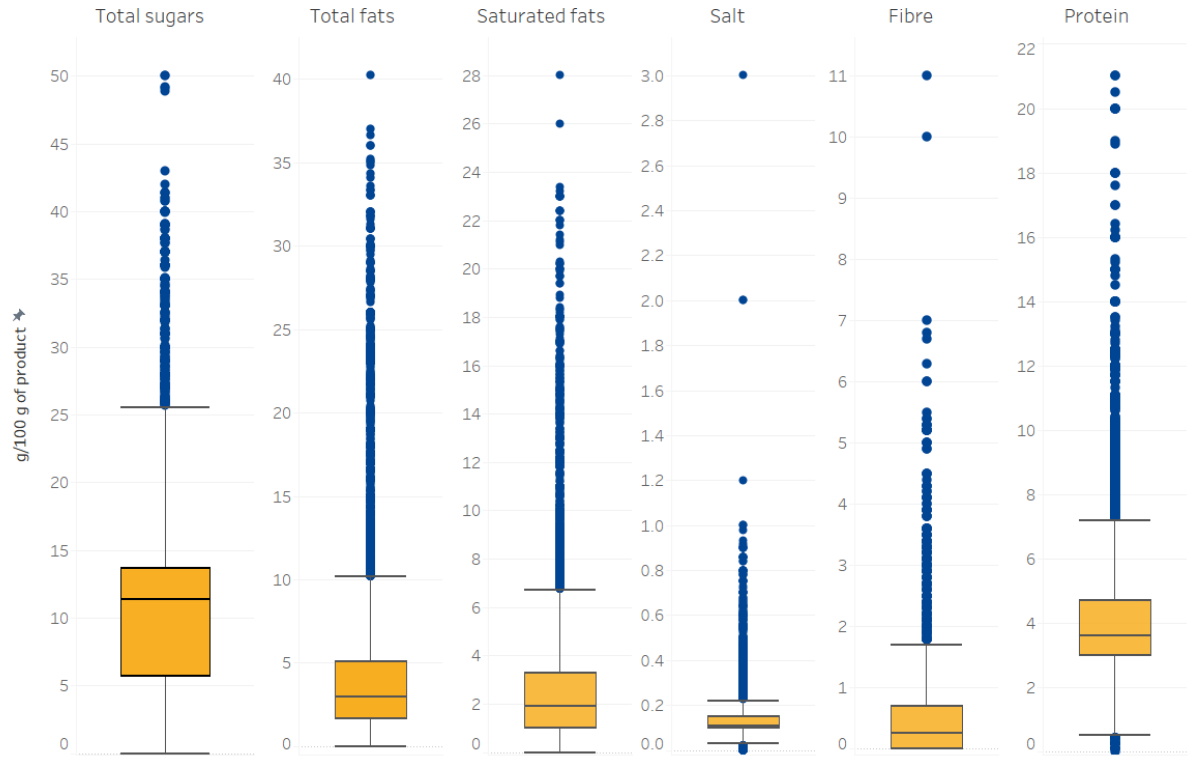
Source: JRC analysis

3.3. Fresh dairy products and desserts

The distribution of the content of key nutrients (total sugars, total fats, saturated fats, salt, fibre and protein) for all fresh dairy products and desserts across different European countries, in grams per 100 grams of product, can be found in **Figure 41**.

Per 100g of product, the average total sugars content is 11.0g, the average total fats content is 4.3g, the average saturated fats content is 2.7g, the average salt content is 0.13g, the average fibre content is 0.5g, and the average protein content is 4.3g. In this food category there is a wide variation for each of the nutrients: 0.0-50.0g of total sugars (IQR: 5.7g-13.7g), 0.0-40.2 g of total fats (IQR: 1.7g-5.1g), 0.0-28.0g of saturated fats (IQR: 1.0g-3.3g), 0.00-3.00g of salt (IQR: 0.10g-0.15g), 0.0-11.0g of fibre (IQR: 0.0g-0.7g), and 0.0-21.0g of protein (IQR: 3.0g-4.7g).

Figure 41. Distribution of content of total sugars, total fats, saturated fats, salt, fibre and protein (g/100g product) in fresh dairy products and desserts in 21 European countries



Source: JRC analysis

3.3.1. Total sugars

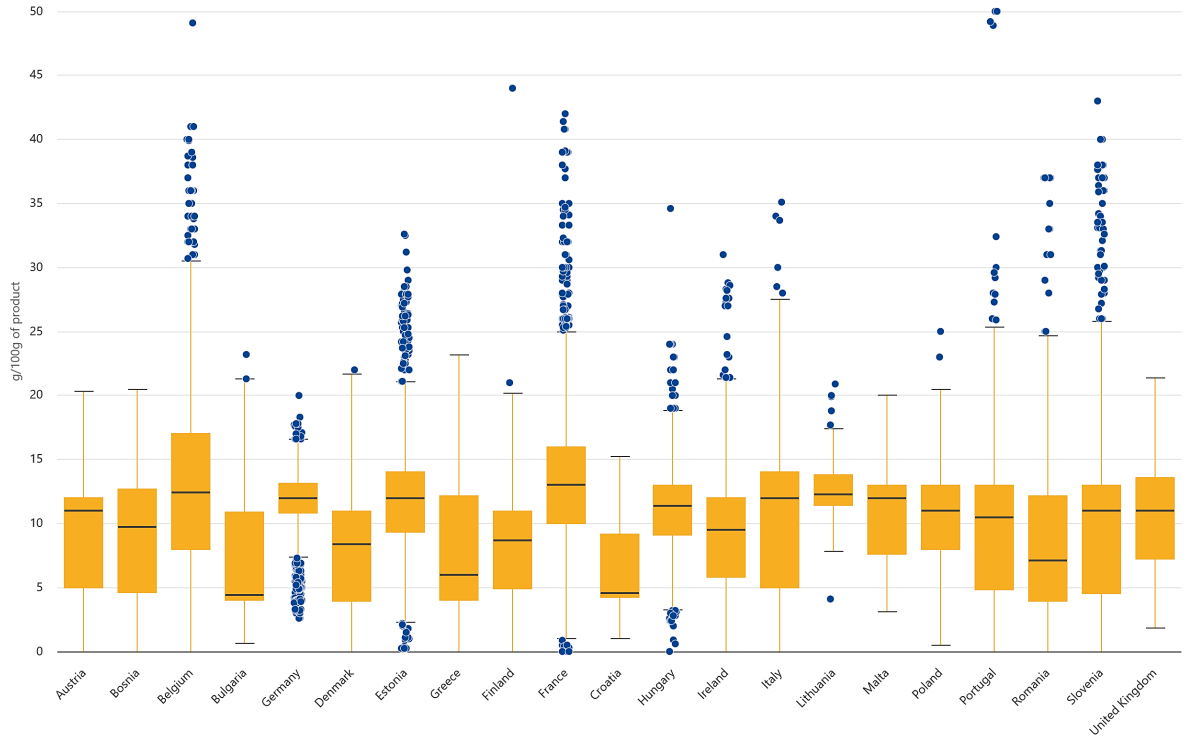
The average total sugars content per 100g of product for the food category of fresh dairy products and desserts is 11.0g, ranging from 6.4g in Croatia to 13.3g in Belgium (**Figure 42**). The country with the widest distribution is Portugal (range: 0.0g-50.0g with IQR: 4.8g-13.0g), and the one with the narrowest is Croatia (range: 1.0g-15.2g with IQR: 4.2g-9.2g).

There is an overall decreasing trend of total sugars content in fresh dairy products and desserts (**Figure 43**). Eleven out of 15 countries decreased total sugars content between their first and last data collection points. The largest decrease was observed for Bulgaria (from 12.5g in 2020 to 8.3g

in 2022), and the smallest decrease for France (from 13.3g in 2008 to 12.3g in 2017). An increase was observed for four countries: Belgium (from 10.6g in 2018 to 11.4g in 2022), Ireland (from 8.6g in 2016 to 9.3g in 2021), Portugal (from 9.1g in 2020 to 9.4g in 2022), and Denmark (from 7.8g in 2020 to 7.9g in 2022). Two countries out of 15 had more than 12.5g of total sugars during the first data collections. For the 14 countries that last collected data in 2021-2023, the average total sugars content was 9.1g (ranging from 7.5g for Greece to 11.4g for Belgium).

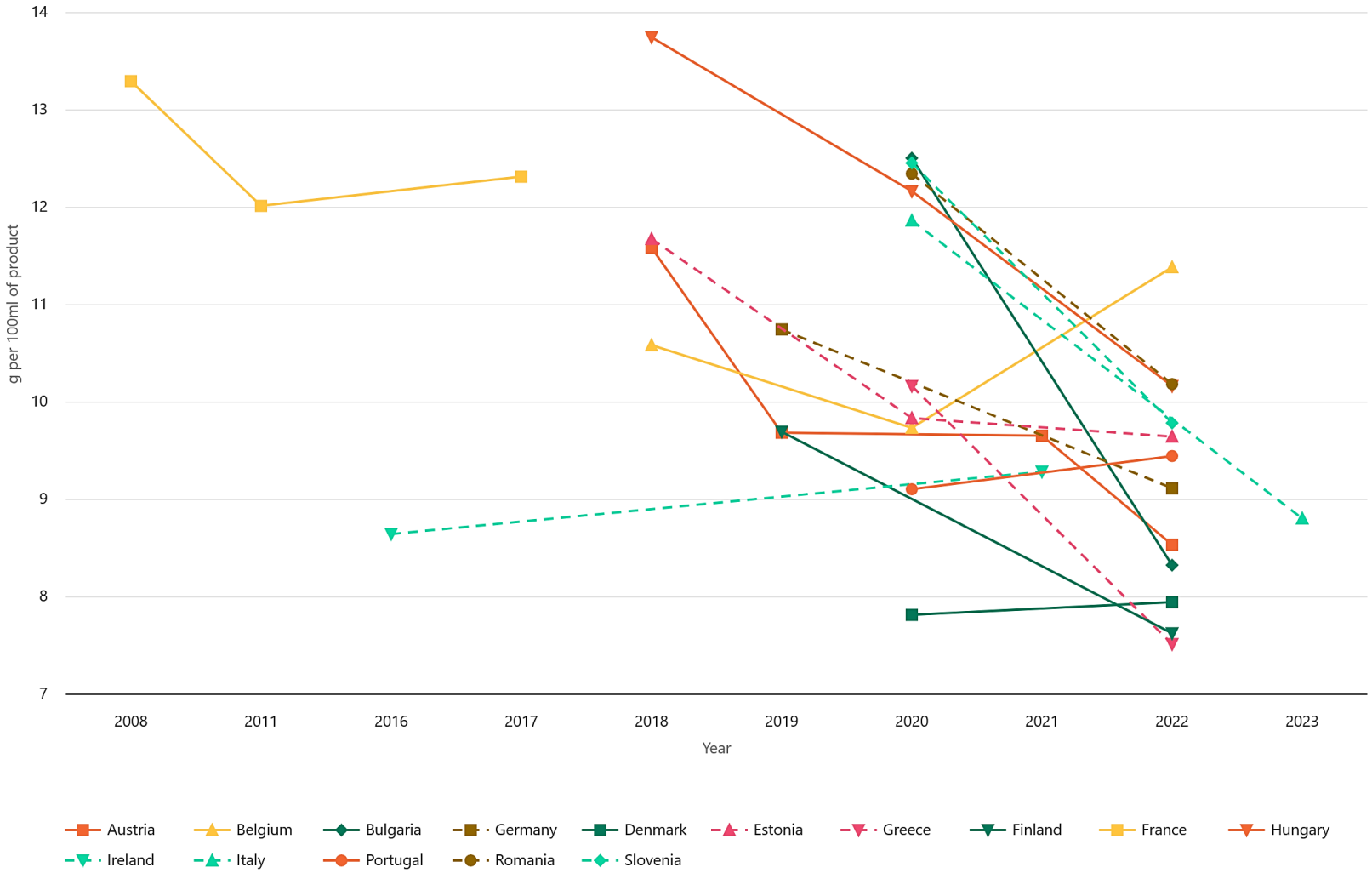
'Fresh cakes' is the sub-category with the highest median value of country averages for total sugars content with 26.5g per 100g of product. The one with the lowest median value of country averages for total sugars content is 'Fresh plain unsweetened soy desserts' with 0.4g per 100g of product. Overall, the widest variation of country averages is noted for the 'Egg-based fresh desserts' sub-category (range: 8.4-43.0g), and the narrowest for 'Gourmet plain yoghurts and fermented milks with no added sugar' sub-category (range: 3.6-4.9g) (**Figure 44**).

Figure 42. Distribution of total sugars content (g/100g product) in fresh dairy products and desserts by country



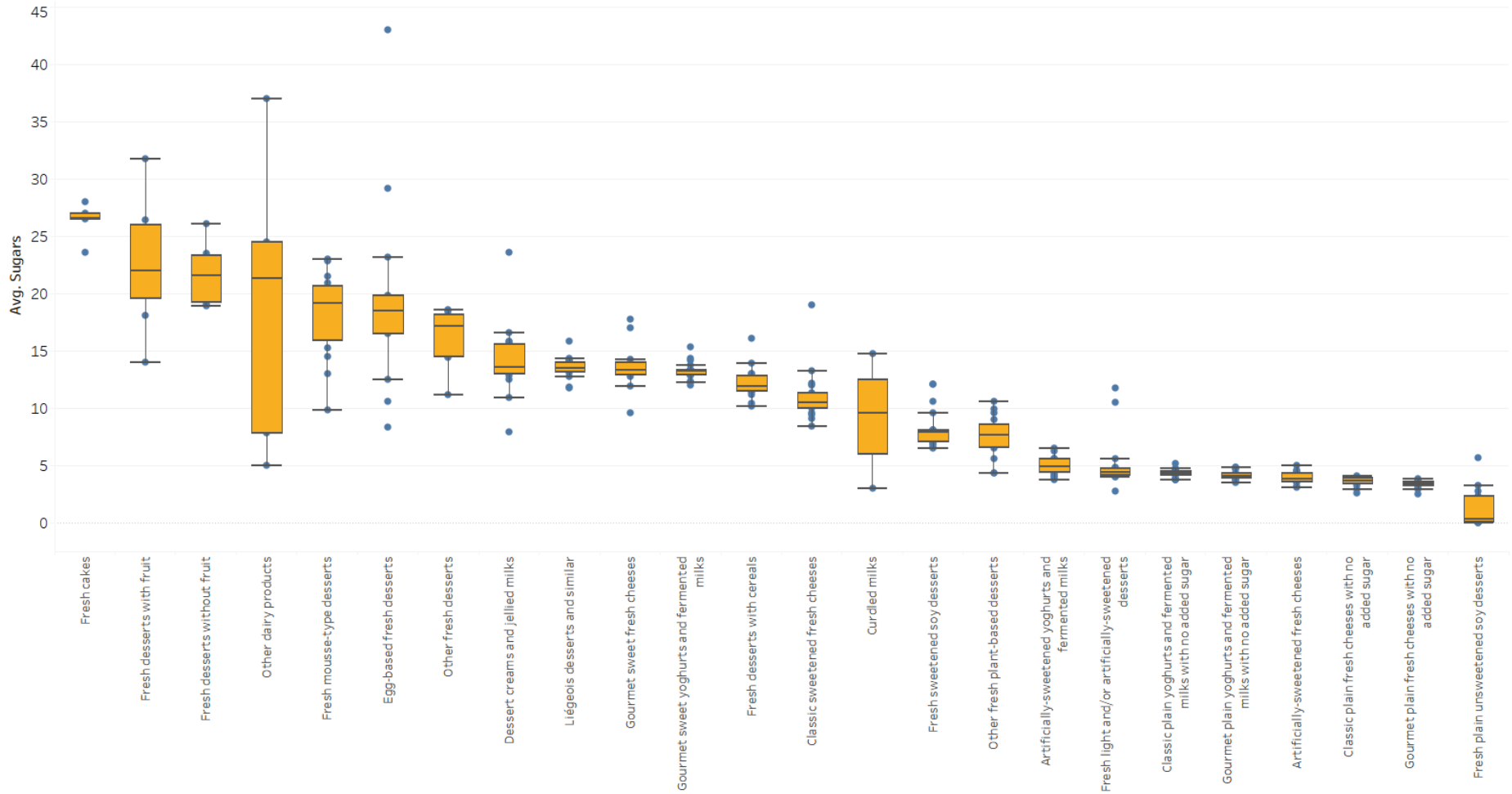
Source: FABLE website

Figure 43. Time trends of total sugars content (g/100g product) in fresh dairy products and desserts by country



Source: FABLE website

Figure 44. Distribution of country averages for total sugars content (g/100g product) in fresh dairy products and desserts across different European countries by food sub-category



Source: JRC analysis

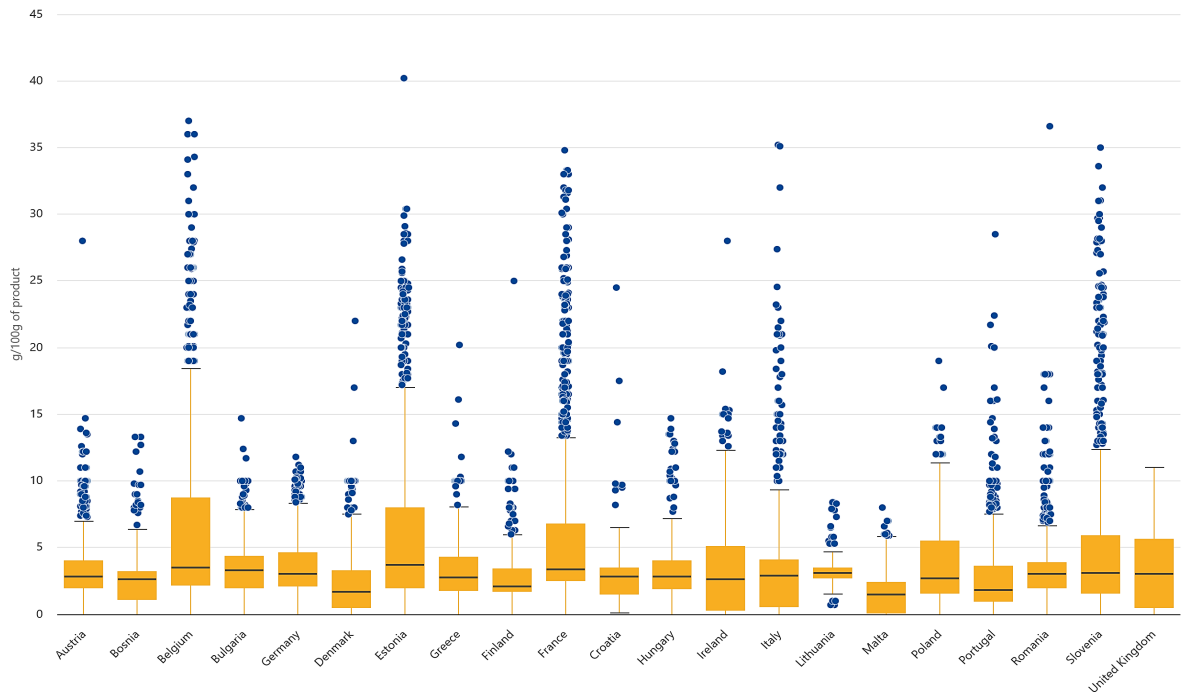
3.3.2. Total fat

The average total fat content per 100g of product for the food category of fresh dairy products and desserts is 4.3g, ranging from 1.7g in Malta to 6.4g in Belgium and Estonia (**Figure 45**). The country with the widest distribution is Estonia (range: 0-40.2g with IQR: 2.0g-8.0g), and the one with the narrowest is Lithuania (range: 0.7-8.4g with IQR: 2.7g-3.5g).

There is an overall increasing trend of total fat content in fresh dairy products and desserts (**Figure 46**). Seven out of 15 countries increased total fat content between their first and last data collection points. The largest increase was observed for Hungary (from 1.2g in 2018 to 3.8g in 2022), and the smallest increase for Slovenia (from 4.0g in 2020 to 5.3g in 2022). Total fat content remained fairly stable (below 0.1g of difference) in two countries; Greece at around 2.7g (between 2020 and 2022), and Estonia at around 5.0g (between 2018 and 2022). A decrease was observed for six countries. The largest decrease was observed for Bulgaria (from 4.6g in 2020 to 2.8g in 2022), and the smallest decrease in France (from 6.1g in 2008 to 5.7g in 2017). More than two thirds of the countries (11 out of 15) had more than 3g of total fat during the first data collections. For the 14 countries that last collected data in 2021-2023, the average total fat content was 3.9g (ranging from 2.4g for Germany to 6.3g for Belgium).

'Fresh cakes' is the sub-category with the highest median value of country averages for total fat content with 19.3g per 100g of product. The one with the lowest median value of country averages for total fat content is 'Artificially-sweetened fresh cheeses' with 0.3g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other dairy products' (range: 1.5-28.0g), and the narrowest for 'Fresh plain unsweetened soy desserts' (range: 2.1-2.8g) (**Figure 47**).

Figure 45. Distribution of total fat content (g/100g product) in fresh dairy products and desserts by country



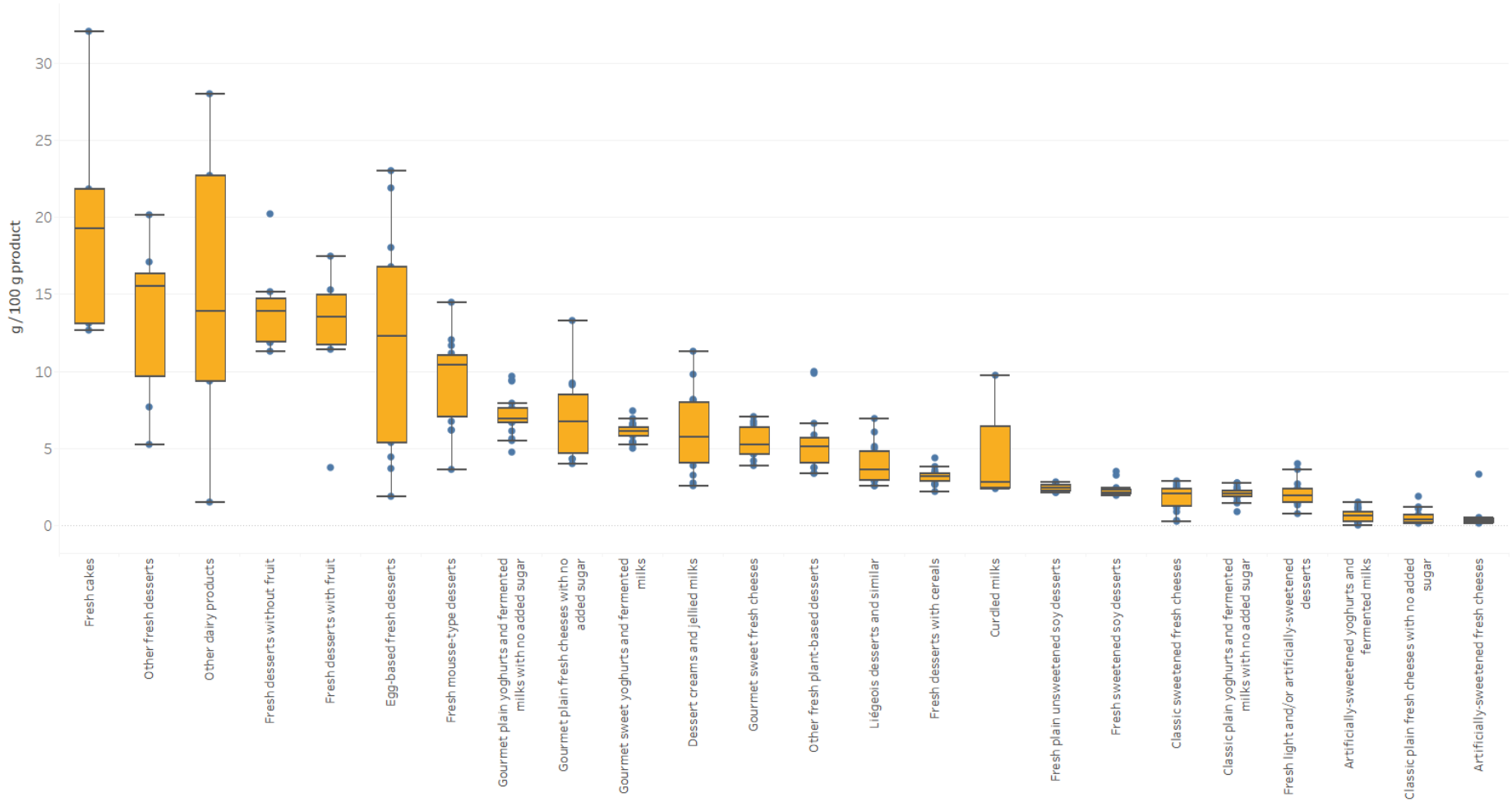
Source: FABLE website

Figure 46. Time trends of total fat content (g/100g product) in fresh dairy products and desserts by country



Source: FABLE website

Figure 47. Distribution of country averages for total fat content (g/100g product) in fresh dairy products and desserts across different European countries by food sub-category



Source: JRC analysis

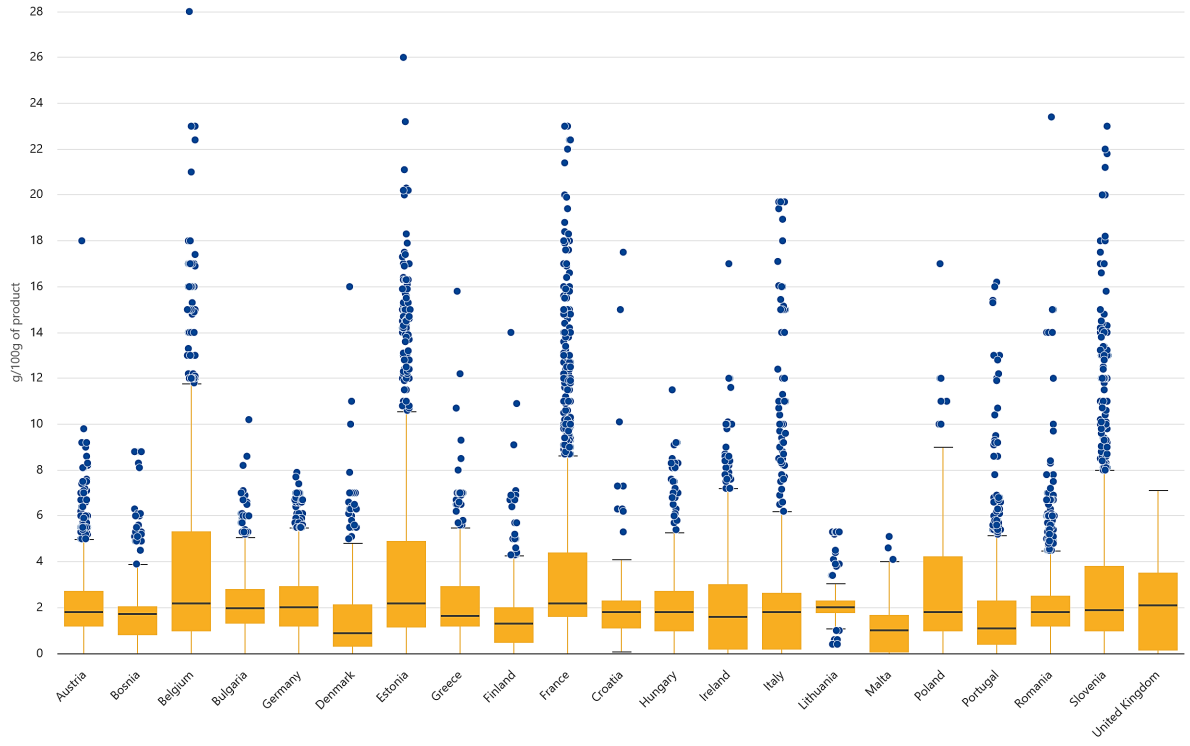
3.3.3. Saturated fats

The average saturated fat content per 100g of product for the food category of fresh dairy products and desserts is 2.7g, ranging from 1.0g in Malta to 4.0g in Estonia (**Figure 48**). The country with the widest distribution is Belgium (range: 0-28.0g with IQR: 1.0g-5.3g), and the one with the narrowest is Lithuania (range: 0.4-5.3g with IQR: 1.8g-2.3g).

There is an overall increasing trend of saturated fat content in fresh dairy products and desserts (**Figure 49**). Eight out of 15 countries increased saturated fat content between their first and last data collection points. The largest increase was observed for Hungary (from 0.8g in 2018 to 2.5g in 2022), and the smallest increase for Greece (from 1.5g in 2020 to 1.8g in 2022). Saturated fat content remained fairly stable (below 0.1g of difference) in Estonia at around 3.1g (between 2018 and 2022). A decrease was observed for six countries. The largest decrease was observed for Bulgaria (from 2.9g in 2020 to 1.8g in 2022), and the smallest decrease in Ireland (from 2.5g in 2016 to 2.2g in 2021). Eighty percent of the countries (12 out of 15) had more than 1.0g of saturated fat during the first data collections. For the 14 countries that last collected data in 2021-2023, the average saturated fat content was 2.4g (range: 1.6g for Germany to 3.8g for Belgium).

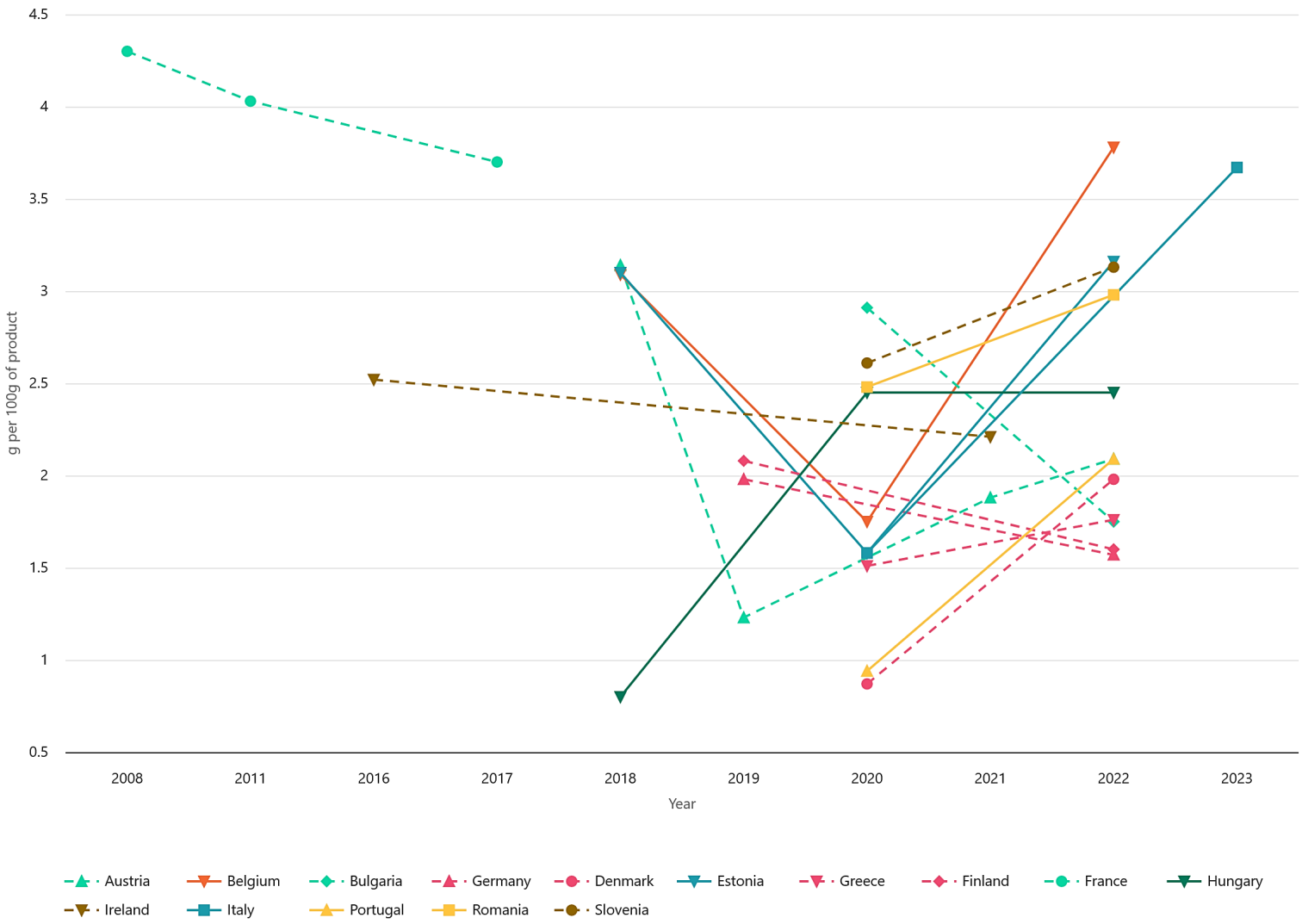
'Other dairy products' is the sub-category with the highest median value of country averages for saturated fat content with 11.1g per 100g of product. The one with the lowest median value of country averages for saturated fat content is 'Artificially-sweetened fresh cheeses' and 'Classic plain fresh cheeses with no added sugar' with 0.2g per 100g of product. Overall, the widest variation of country averages is noted for the 'Other dairy products' (range: 0.9-17.0g), and the narrowest for 'Fresh plain unsweetened soy desserts' (range: 0.3-0.5g) (**Figure 50**).

Figure 48. Distribution of saturated fat content (g/100g product) in fresh dairy products and desserts by country



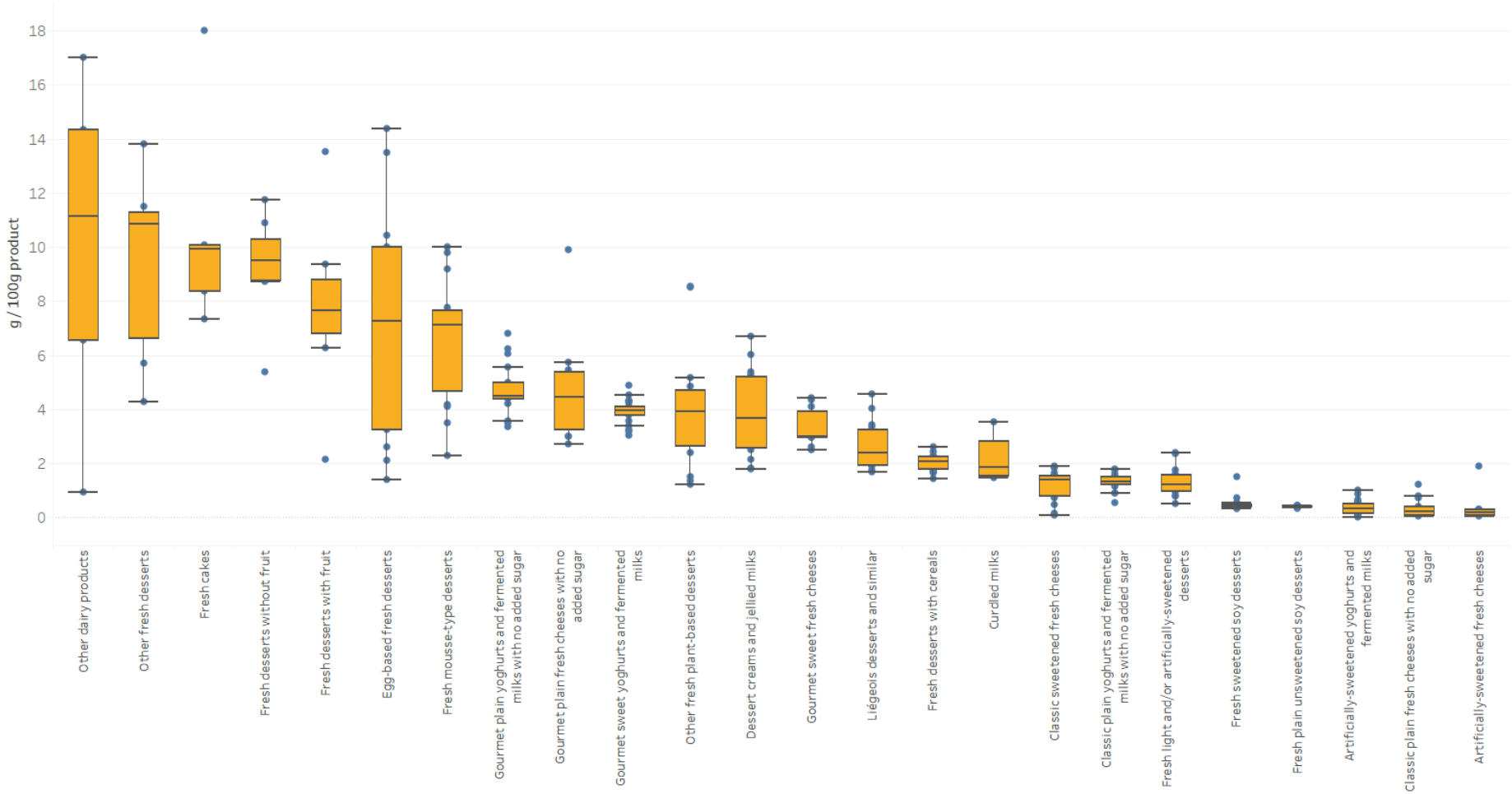
Source: FABLE website

Figure 49. Time trends of saturated fat content (g/100g product) in fresh dairy products and desserts by country



Source: FABLE website

Figure 50. Distribution of country averages for saturated fat content (g/100g product) in fresh dairy products and desserts across different European countries by food sub-category



Source: JRC analysis

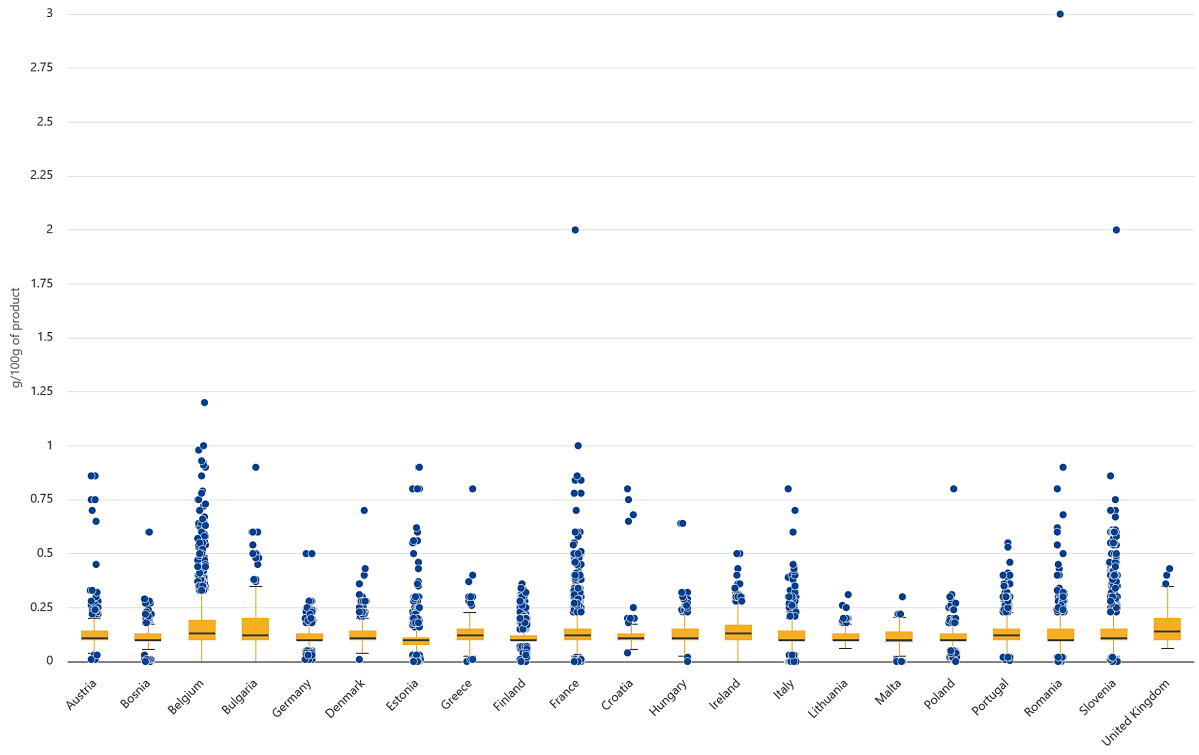
3.3.4. Salt

The average salt content per 100g of product for the food category of fresh dairy products and desserts is 0.13g, ranging from 0.10g in Malta to 0.18g in Belgium (**Figure 51**). The country with the widest distribution is Belgium (range: 0.01-1.20g with IQR: 0.01g-0.19g), and the one with the narrowest is Lithuania (range: 0.06-0.31g with IQR: 0.10g-0.13g).

There is an overall increasing trend of salt content in fresh dairy products and desserts (**Figure 52**). Ten out of 15 countries increased salt content between their first and last data collection points. The largest increase was observed for Slovenia (from 0.11g in 2020 to 0.15g in 2022), and the smallest increase for Belgium (from 0.15g in 2018 to 0.16g in 2022). Salt content remained stable in Germany at 0.10g (between 2019 and 2022), and in Denmark at 0.13g (between 2020 and 2022). A decrease was observed for three countries; Ireland (from 0.20g in 2016 to 0.14g in 2021), Estonia (from 0.14g in 2018 to 0.12g in 2022), and Italy (from 0.14g in 2020 to 0.13g in 2023). For the 14 countries that last collected data in 2021-2023, the average salt content was 0.14g (ranging from 0.10g for Germany to 0.16g for Romania).

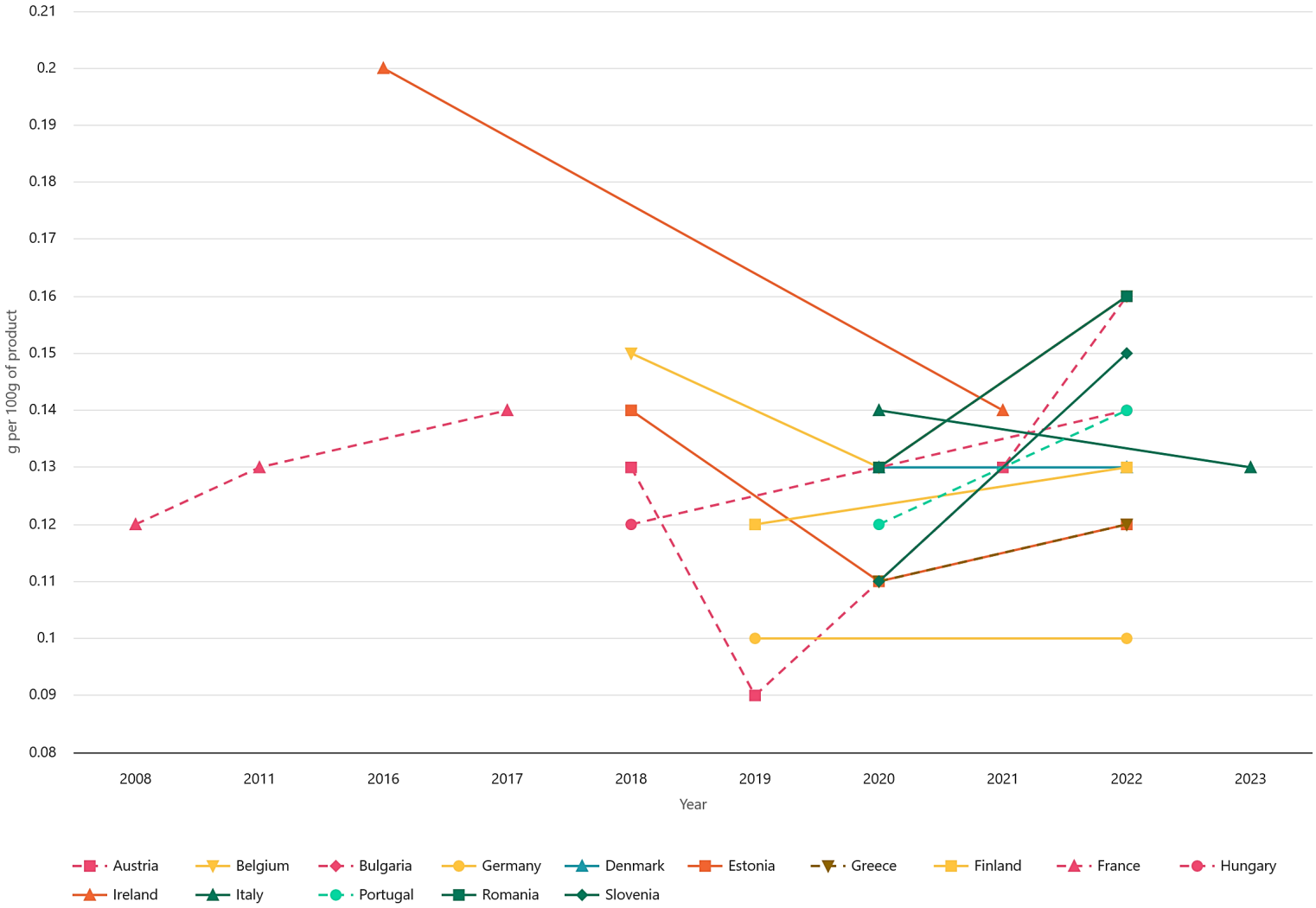
'Fresh desserts with fruit' is the sub-category with the highest median value of country averages for salt content with 0.28g per 100g of product. The one with the lowest median value of country averages for salt content is 'Other fresh desserts' with 0.08g per 100g of product. Overall, the widest variation of country averages is noted for the 'Fresh cakes' (range: 0.11-0.51g), and the narrowest for 'Classic sweet yoghurts and fermented milks' (range: 0.10-0.13g) (**Figure 53**).

Figure 51. Distribution of salt content (g/100g product) in fresh dairy products and desserts by country



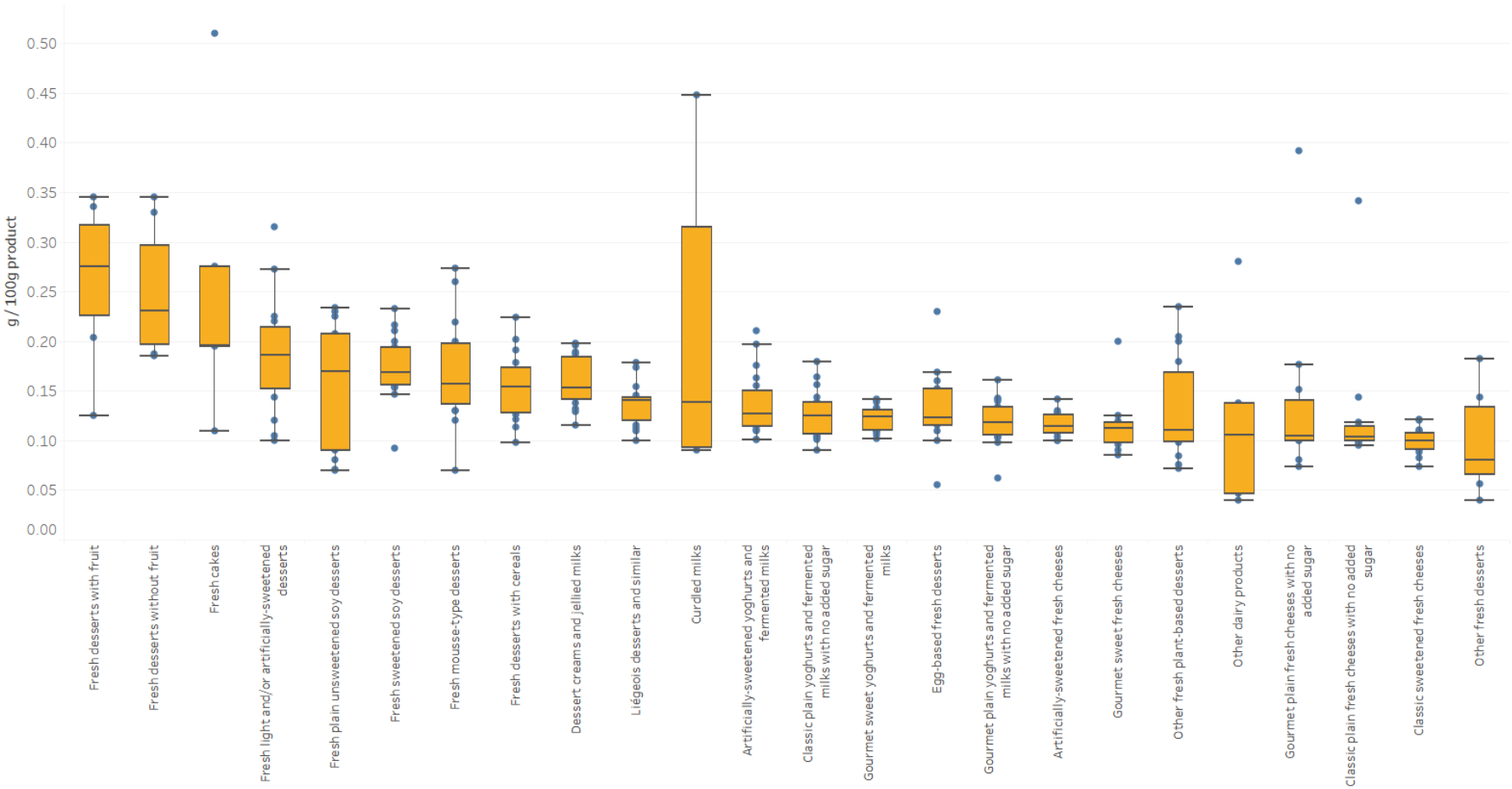
Source: FABLE website

Figure 52. Time trends of salt content (g/100g product) in fresh dairy products and desserts by country



Source: FABLE website

Figure 53. Distribution of country averages for salt content (g/100g product) in fresh dairy products and desserts across different European countries by food sub-category



Source: JRC analysis

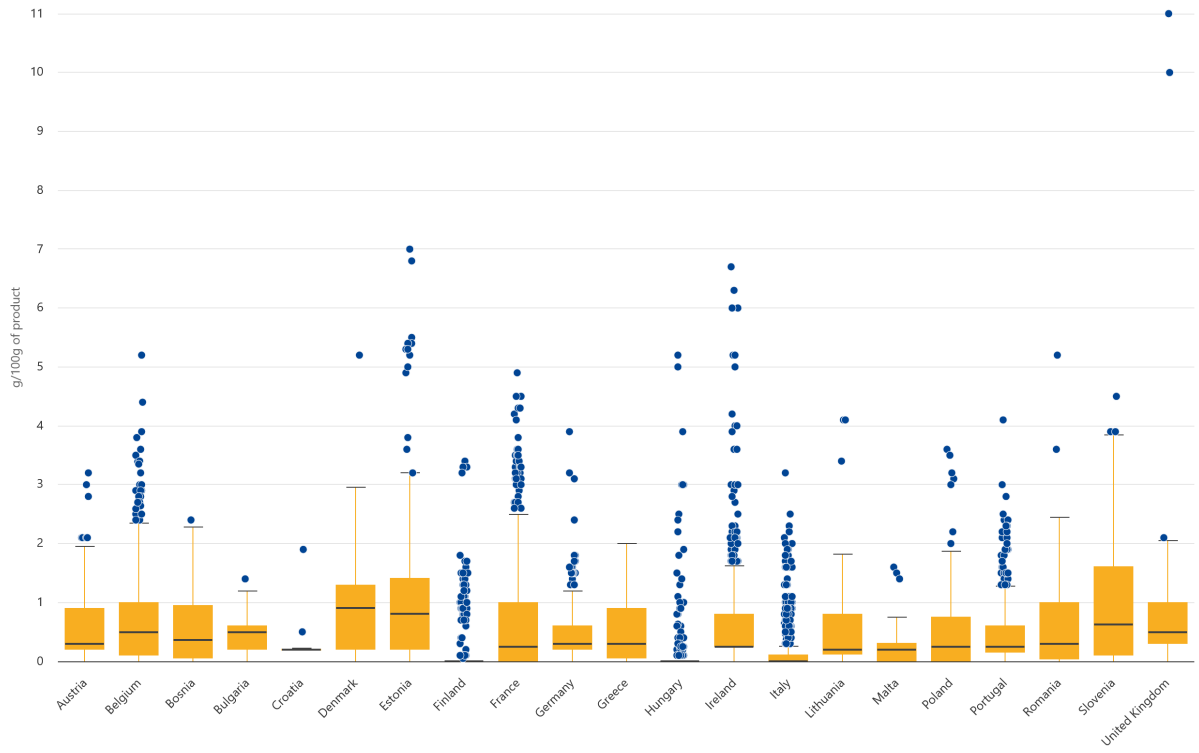
3.3.5. Fibre

The average fibre content per 100g of product for the food category of fresh dairy products and desserts is 0.5g, ranging from 0.1g in Hungary to 1.4g in Estonia (**Figure 54**). The country with the widest distribution is the UK (range: 0.0-11.0g with IQR: 0.3g-1.9g), and the one with the narrowest is Bulgaria (range: 0.0-1.4g with IQR: 0.2g-0.6g).

There is no clear direction of the changes observed for fibre content in fresh dairy products and desserts (**Figure 55**). Eight out of 15 countries decreased fibre content between their first and last data collection points. The largest decrease was observed for Finland (from 0.8g in 2019 to 0.2g in 2022), and the smallest decrease for Portugal (from 0.7g in 2020 to 0.5g in 2022). An increase was observed for seven countries. The largest increase was observed for Estonia (from 0.6g in 2018 to 1.6g in 2022), and the smallest increase in France (from 0.6g in 2008 to 0.7g in 2017). For the 14 countries that last collected data in 2021-2023, the average fibre content was 0.7g (ranging from 0.2g for Hungary and Finland to 1.6g for Estonia).

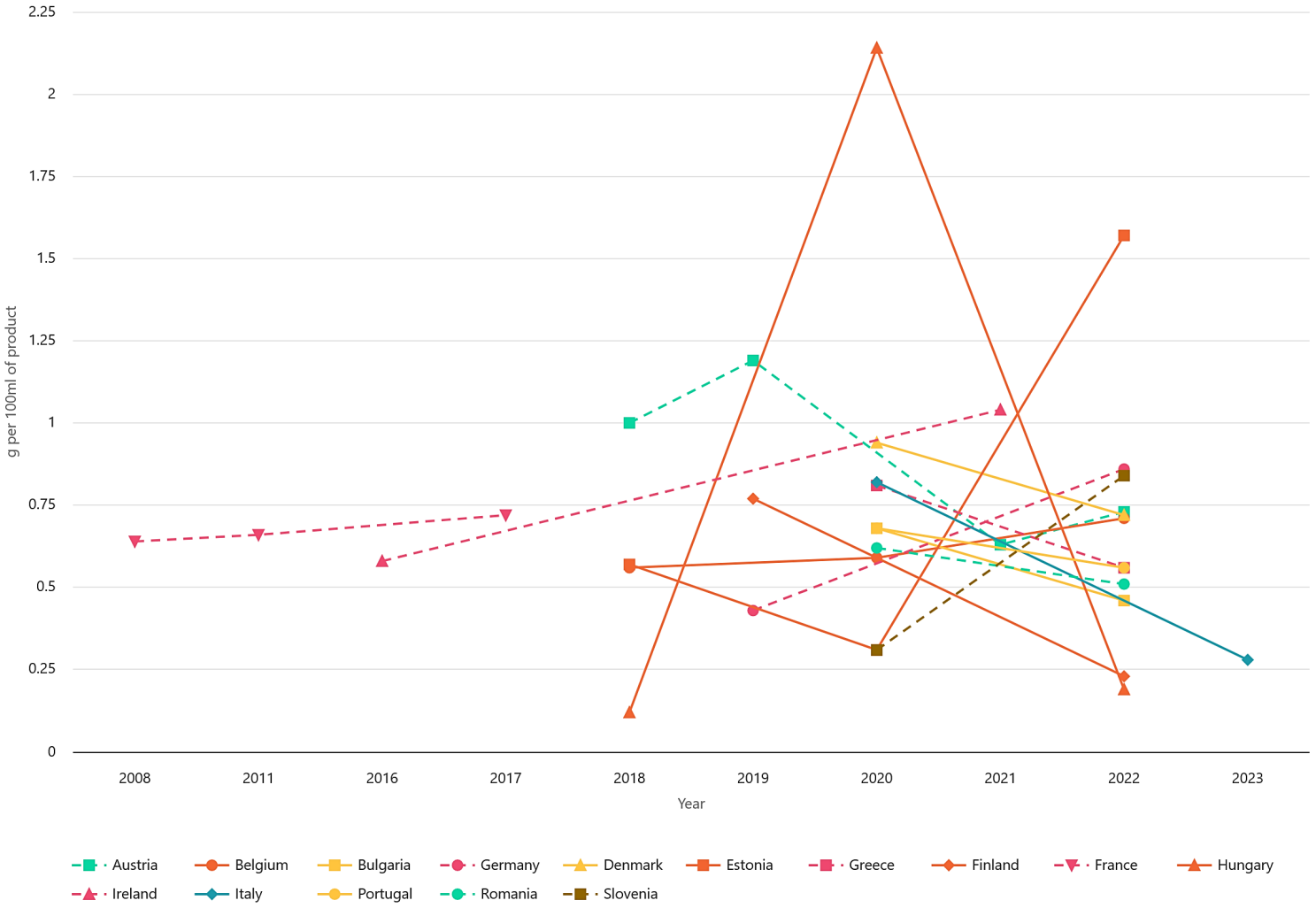
'Fresh cakes' is the sub-category with the highest median value of country averages for fibre content with 2.1g per 100g of product. The one with the lowest median value of country averages for fibre content is 'Classic plain fresh cheeses with no added sugar' and 'Gourmet plain yoghurts and fermented milks with no added sugar' with 0.0g per 100g of product. Overall, the widest variation of country averages is noted for the 'Fresh desserts with cereals' (range: 0.0-5.1g), and the narrowest for 'Curdled milks' (range: 0.0-0.2g) (**Figure 56**).

Figure 54. Distribution of fibre content (g/100g product) in fresh dairy products and desserts by country



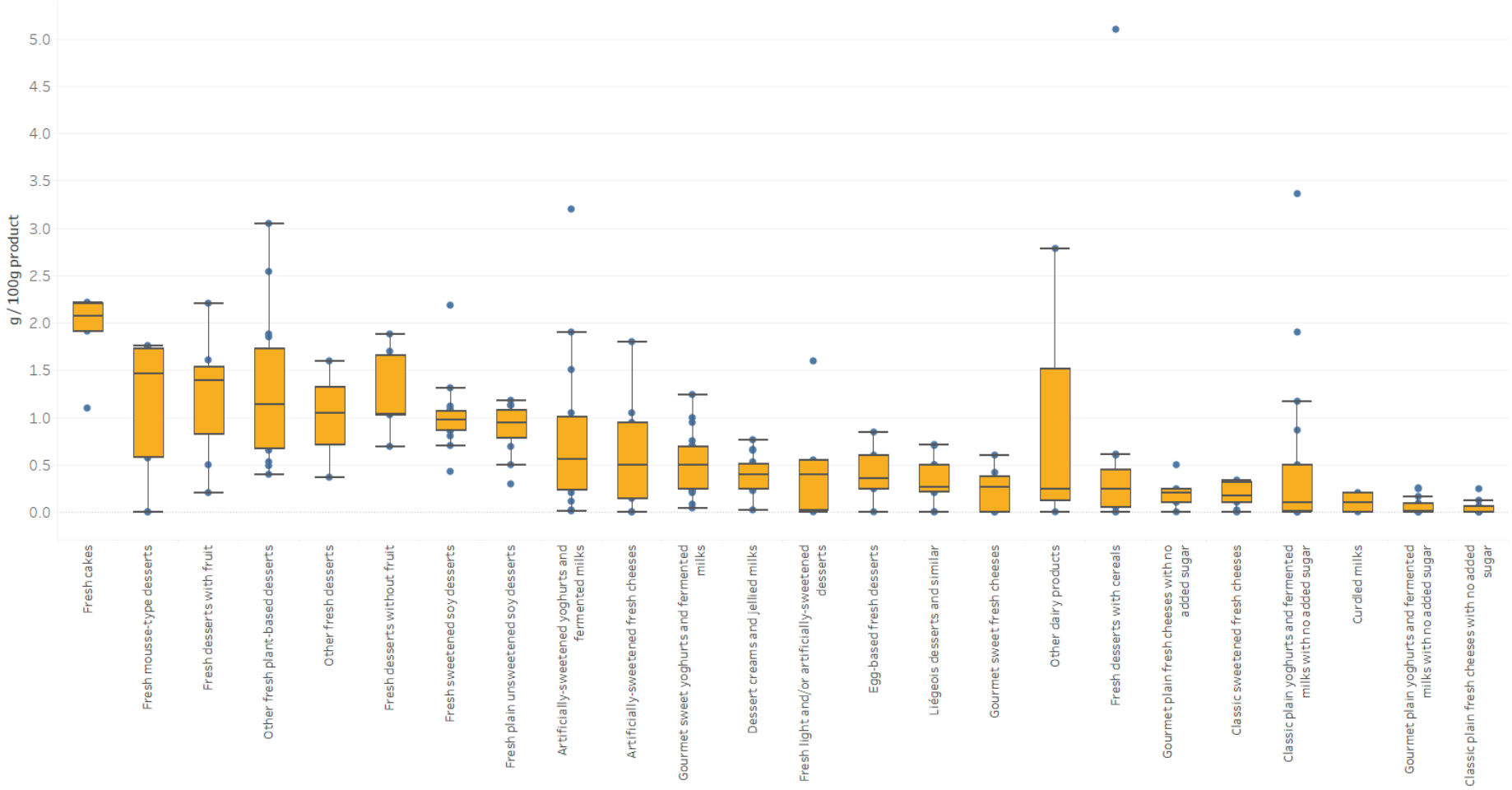
Source: FABLE website

Figure 55. Time trends of fibre content (g/100g product) in fresh dairy products and desserts by country



Source: FABLE website

Figure 56. Distribution of country averages for fibre content (g/100g product) in fresh dairy products and desserts across different European countries by food sub-category



Source: JRC analysis

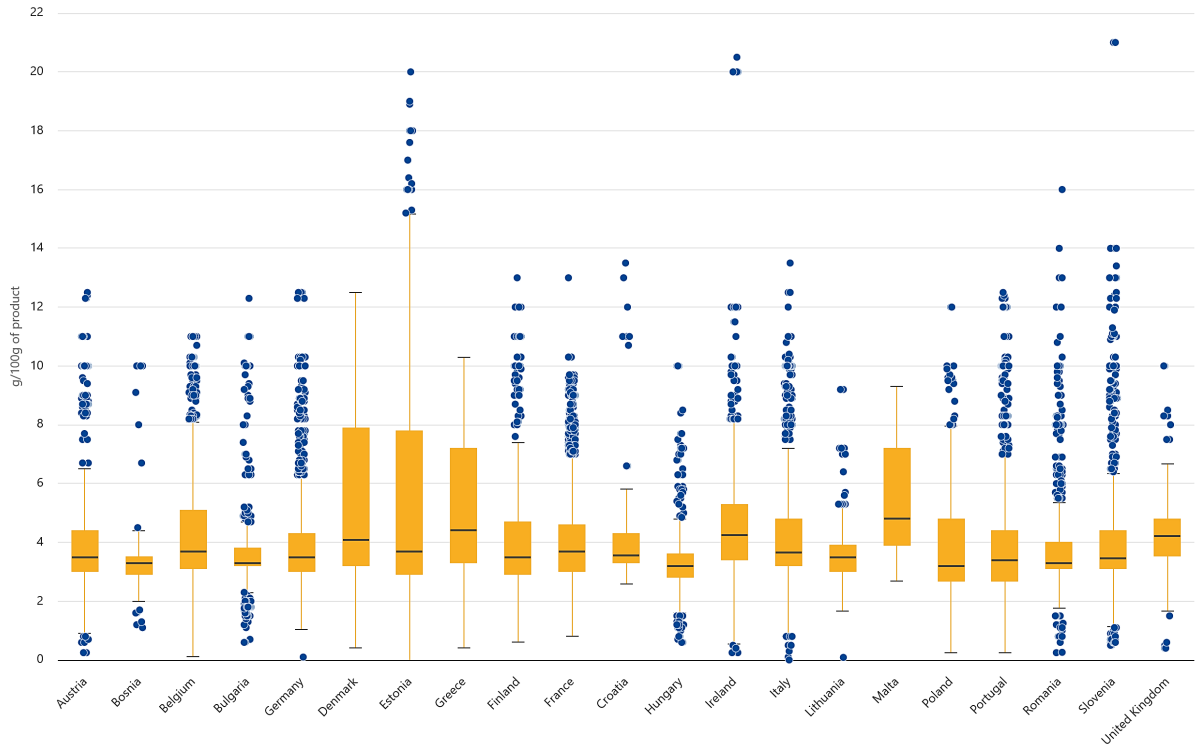
3.3.6. Protein

The average protein content per 100g of product for the food category of fresh dairy products and desserts is 4.3g, ranging from 3.4g in Hungary and Bosnia to 5.6g in Estonia (**Figure 57**). The country with the widest distribution is Slovenia (range: 0.5-21.0g with IQR: 3.1g-4.4g), and the one with the narrowest is Malta (range: 2.7-9.3g with IQR: 3.9g-7.2g).

There is an overall increasing trend of protein content in fresh dairy products and desserts (**Figure 58**). Fourteen out of 15 countries increased protein content between their first and last data collection points. The largest increase was observed for Slovenia (from 3.1g in 2020 to 5.1g in 2022), and the smallest increase for France (from 4.1g in 2008 to 4.2g in 2017). Protein content remained stable in Germany at 5.0g (between 2019 and 2022). For the 14 countries that last collected data in 2021-2023, the average protein content was 5.0g (ranging from 3.8g for Hungary to 6.7g for Estonia).

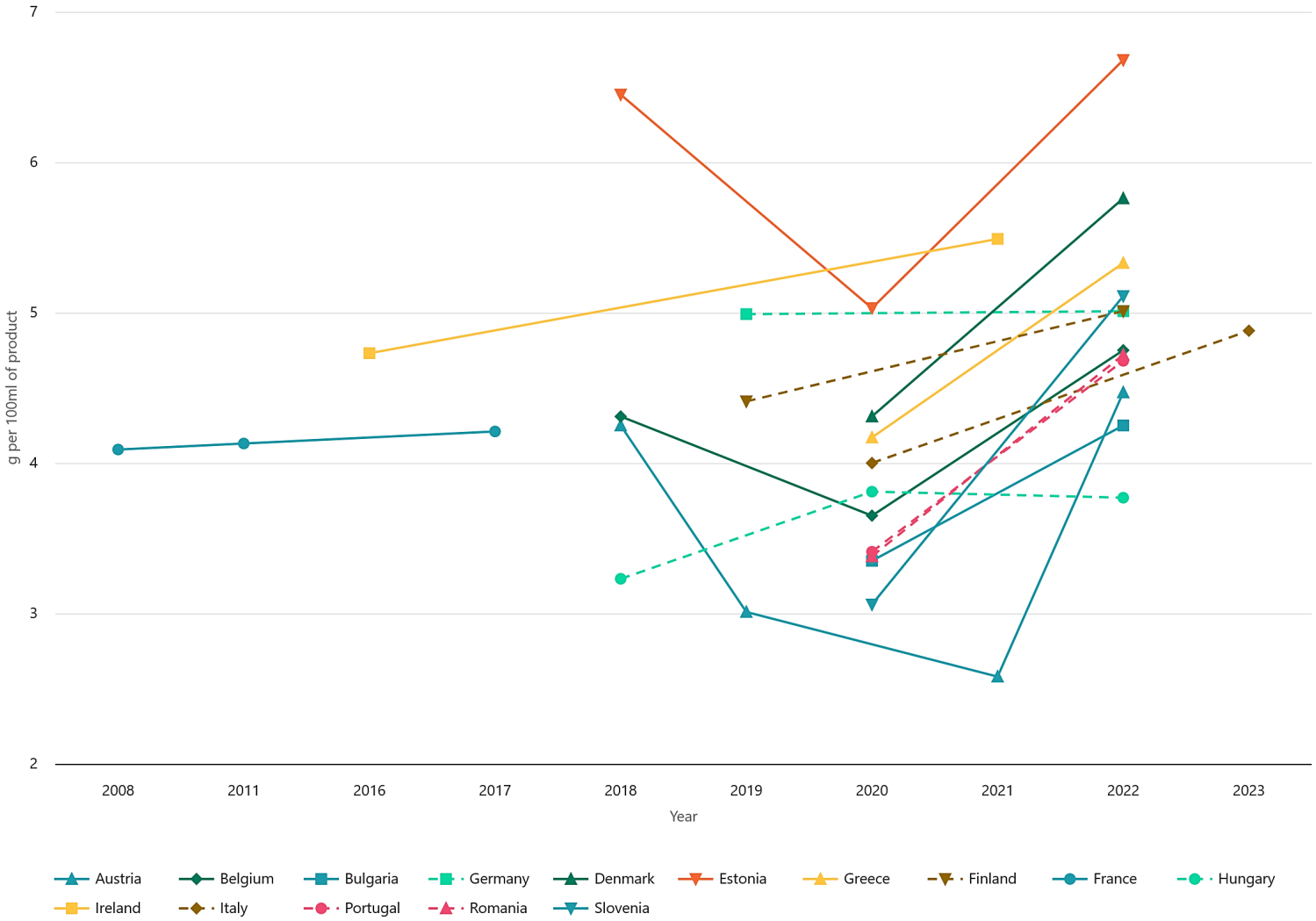
'Classic plain fresh cheeses with no added sugar' is the sub-category with the highest median value of country averages for protein content with 10.2g per 100g of product. The one with the lowest median value of country averages for protein content is 'Other fresh plant-based desserts' with 1.1g per 100g of product. Overall, the widest variation of country averages is noted for the 'Classic plain fresh cheeses with no added sugar' (range: 3.6-15.2g), and the narrowest for 'Fresh desserts with cereals' (range: 2.6-3.4g) (**Figure 59**).

Figure 57. Distribution of protein content (g/100g product) in fresh dairy products and desserts by country



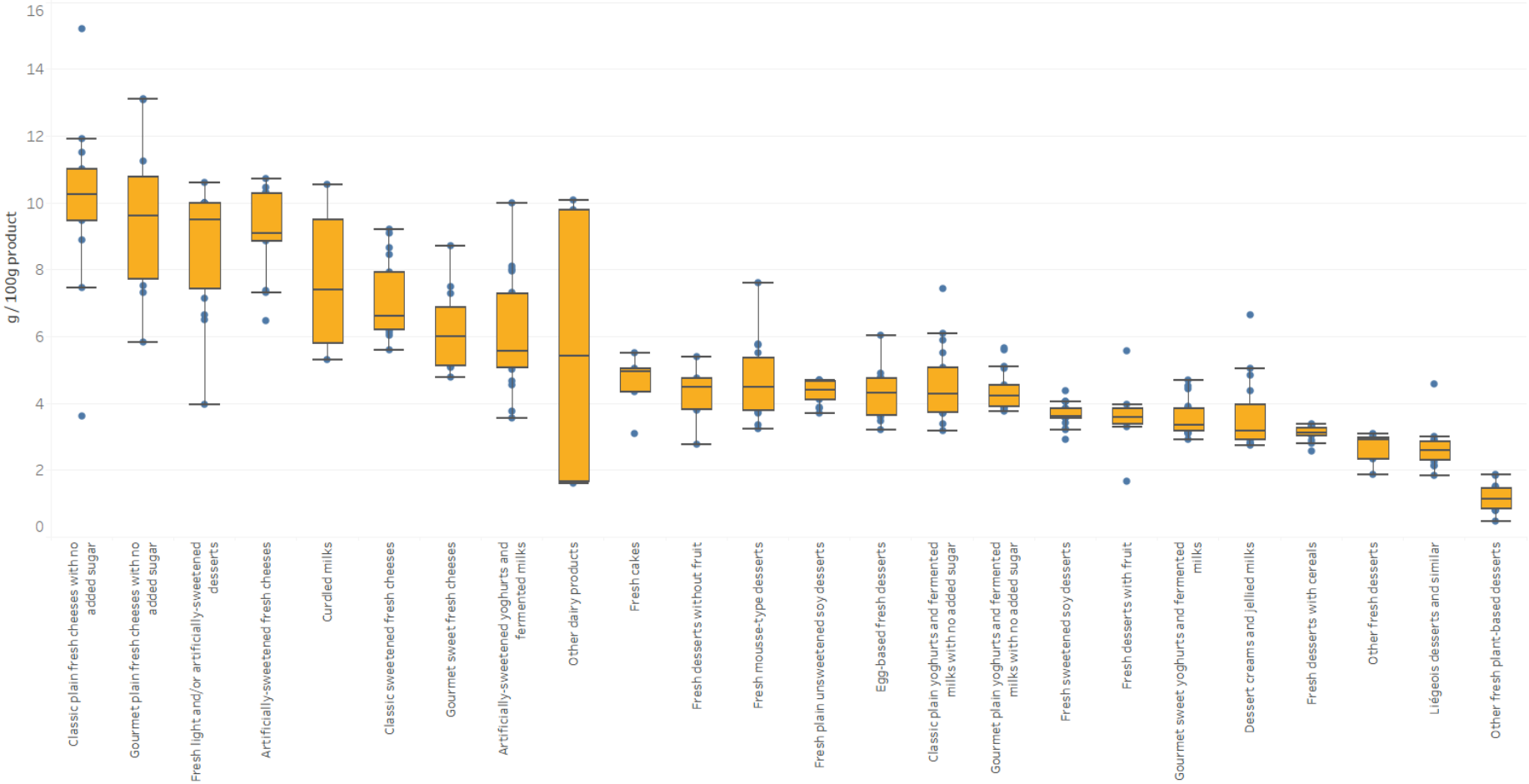
Source: FABLE website

Figure 58. Time trends of protein content (g/100g product) in fresh dairy products and desserts by country



Source: FABLE website

Figure 59. Distribution of country averages for protein content (g/100g product) in fresh dairy products and desserts across different European countries by food sub-category



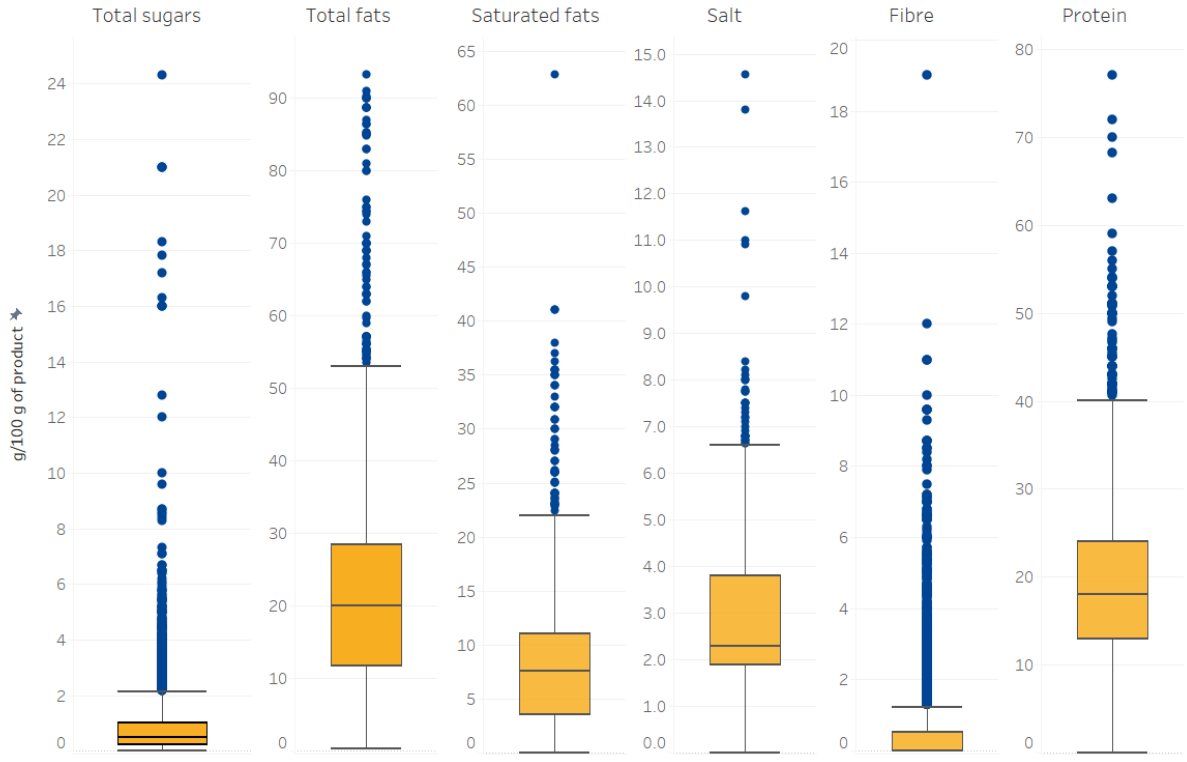
Source: JRC analysis

3.4. Delicatessen meat and similar

The distribution of the content of key nutrients (total sugars, total fats, saturated fats, salt, fibre and protein) for all delicatessen meat and similar products across different European countries, in grams per 100 grams of product, can be found in **Figure 60**.

Per 100g of product, the average total sugars content is 0.8g, the average total fats content is 20.5g, the average saturated fats content is 7.8g, the average salt content is 2.79g, the average fibre content is 0.5g, and the average protein content is 19.0g. In this food category there is a wide variation for each of the nutrients: 0.0-24.3g of total sugars (IQR: 0.3g-1.0g), 0.3-93.2g of total fats (IQR: 11.7g-28.4g), 0.0-62.8g of saturated fats (IQR: 3.5g-11.0g), 0.00-14.55g of salt (IQR: 1.90g-3.80g), 0.0-19.0 g of fibre (IQR: 0.0g-0.5g), and 0.0-77.0g of protein (IQR: 13.0g-24.0g).

Figure 60. Distribution of content of total sugars, total fats, saturated fats, salt, fibre and protein (g/100g product) in delicatessen meat and similar products in 21 European countries



Source: JRC analysis

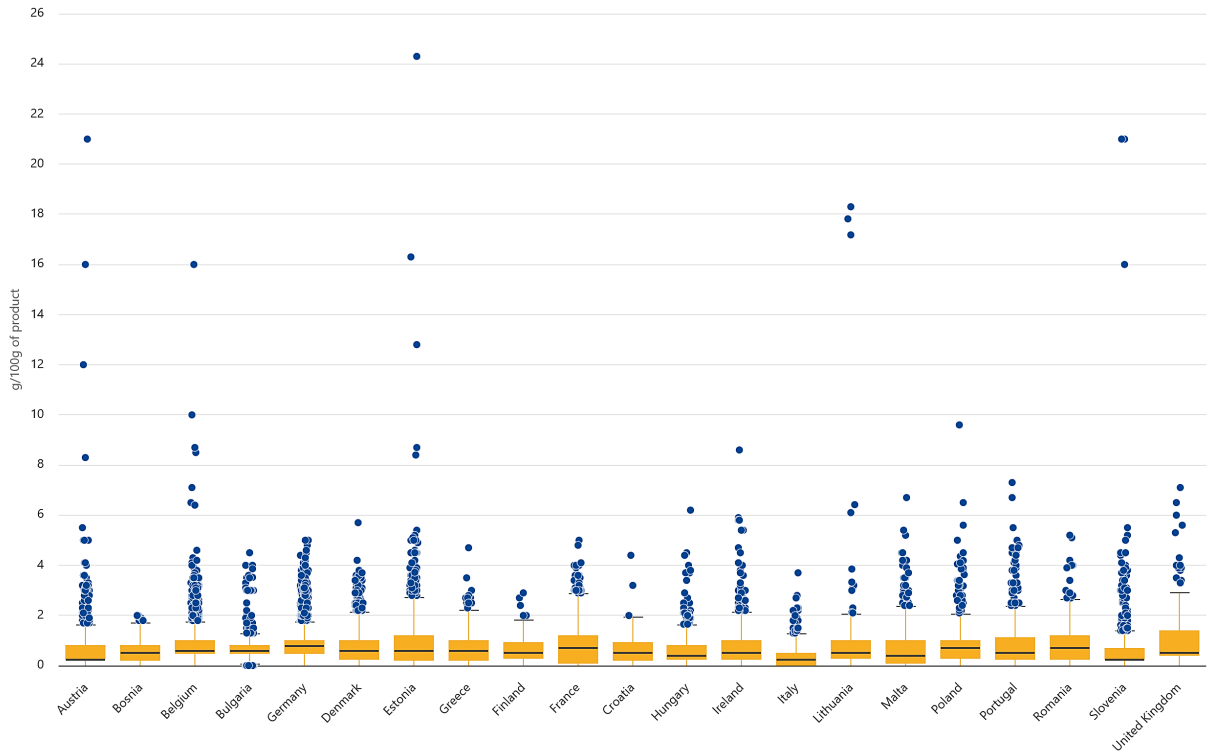
3.4.1. Total sugars

The average total sugars content per 100g of product for the food category of delicatessen meat and similar products is 0.8g, ranging from 0.3g in Italy to 1.1g in the UK and France (**Figure 61**). The country with the widest distribution is Estonia (range: 0-24.3g with IQR: 0.2g-1.2g), and the one with the narrowest is Bosnia (range: 0-2.0g with IQR: 0.2g-0.8g).

There is an overall increasing trend of total sugars content in delicatessen meat and similar products (**Figure 62**). Seven out of 14 countries increased total sugars content between their first and last data collection points. The largest increase was observed for Slovenia (from 0.6g in 2020 to 0.8g in 2022), and the smallest increase for Belgium and Estonia (both from 1.0g in 2018 to 1.1g in 2022). Total sugars content remained stable in five countries; at 1.1g for France, 0.8g for Denmark and Romania, 0.7g for Greece and 0.3g for Italy. A decrease was observed for two countries: Hungary (from 0.9g in 2018 to 0.7g in 2022), and Finland (from 0.8g in 2020 to 0.6g in 2022). More than one third of the countries (5 out of 14) had less than 0.7g of total sugars during the first data collections. For the 14 countries that last collected data in 2022-2023, the average total sugars content was 0.8g (ranging from 0.3 for Italy to 1.1g for Belgium and Estonia).

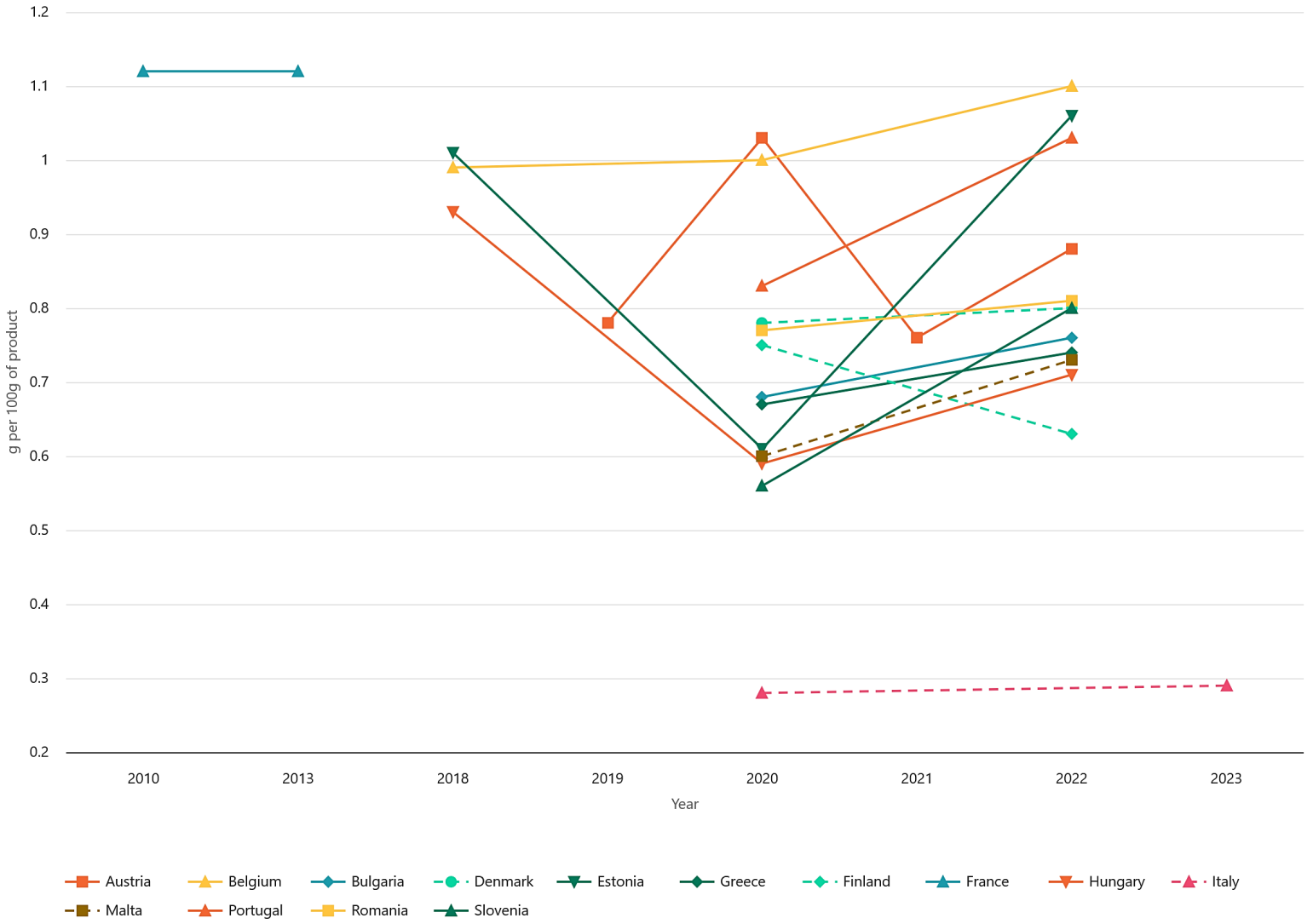
'Alternative products without animal protein' is the sub-category with the highest median value of country averages for total sugars content with 1.7g per 100g of product. The one with the lowest median value of country averages for total sugars content is 'Cured ham' with 0.3g per 100g of product. Overall, the widest variation of country averages is noted for the 'Dried, smoked or cured beef' (range: 0.0-7.4g), and the narrowest for 'Cured ham' (range: 0.1-0.7g) and 'Poultry ham and roast (packaged)' (range: 0.5-1.1g) (**Figure 63**).

Figure 61. Distribution of total sugars content (g/100g product) in delicatessen meats and similar products by country



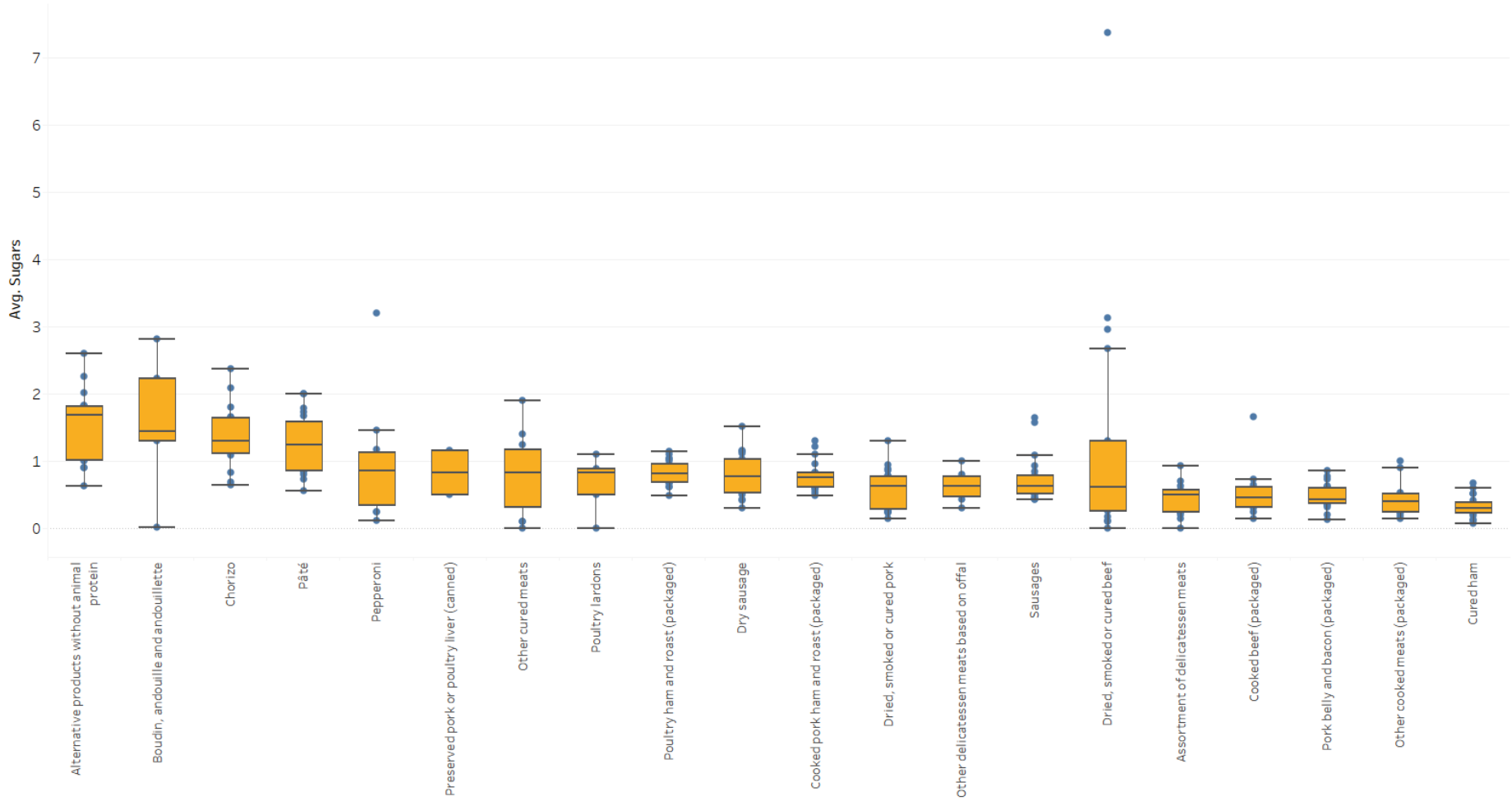
Source: FABLE website

Figure 62. Time trends of total sugars content (g/100g product) in delicatessen meats and similar products by country



Source: FABLE website

Figure 63. Distribution of country averages for total sugars content (g/100g product) in delicatessen meats and similar products across different European countries by food sub-category



Source: JRC analysis

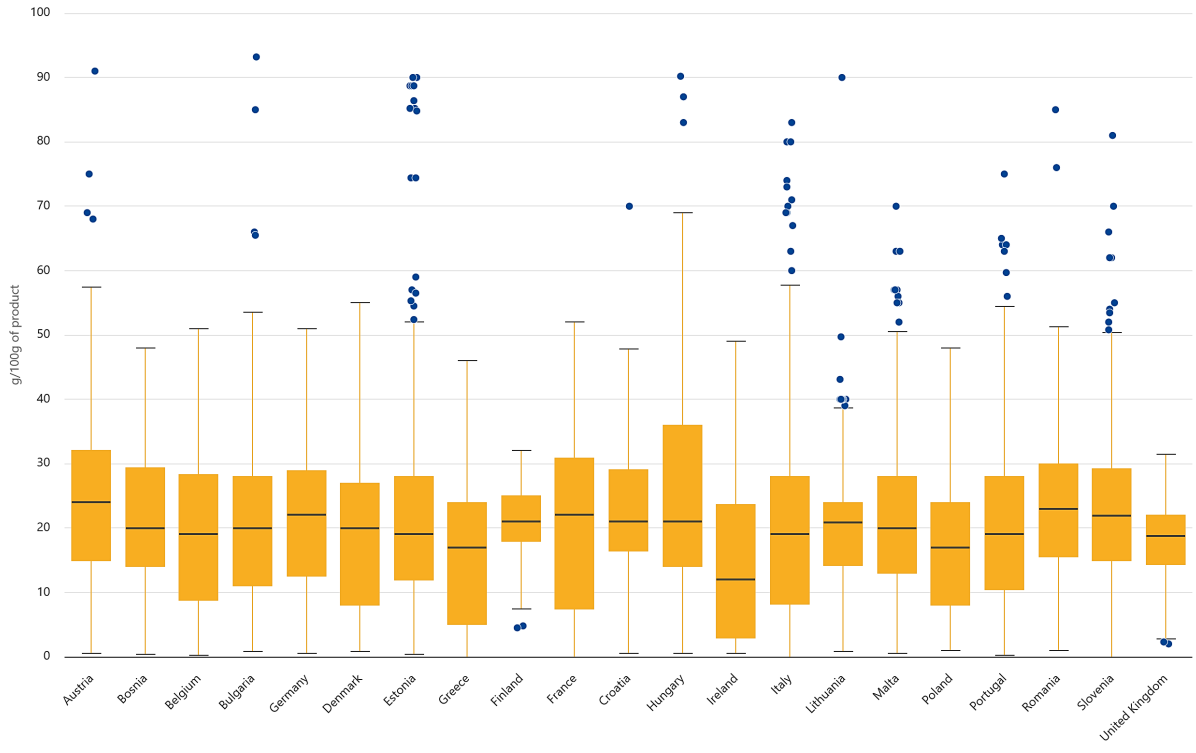
3.4.2. Total fat

The average total fat content per 100g of product for the food category of delicatessen meat and similar products is 20.5g, ranging from 14.2g in Ireland to 24.2g in Hungary (**Figure 64**). The country with the widest distribution is Bulgaria (range: 0.8-93.2g with IQR: 11.0g-28.0g), and the one with the narrowest is Finland (range: 4.5-32.0g with IQR: 18.0g-25.0g).

When looking at time trends of total fat in delicatessen meat and similar products (**Figure 65**), there is no clear direction of the changes observed. Eight out of 14 countries decreased total fat content between their first and last data collection points. The largest decrease was observed for Slovenia (from 25.3g in 2020 to 19.2g in 2022), and the smallest decrease for Estonia (from 18.8g in 2018 to 18.6g in 2022). An increase was observed for six countries. The largest increase was observed for Malta (from 13.0g in 2020 to 18.2g in 2022), and the smallest increase for Denmark (from 16.1g in 2020 to 17.0g in 2022). More than half of the countries (8 out of 14) had more than 17.0g of total fat during the first data collections. For the 13 countries that last collected data in 2022-2023, the average total fat content was 18.3g (ranging from 14.6 for Greece to 22.9g for Finland).

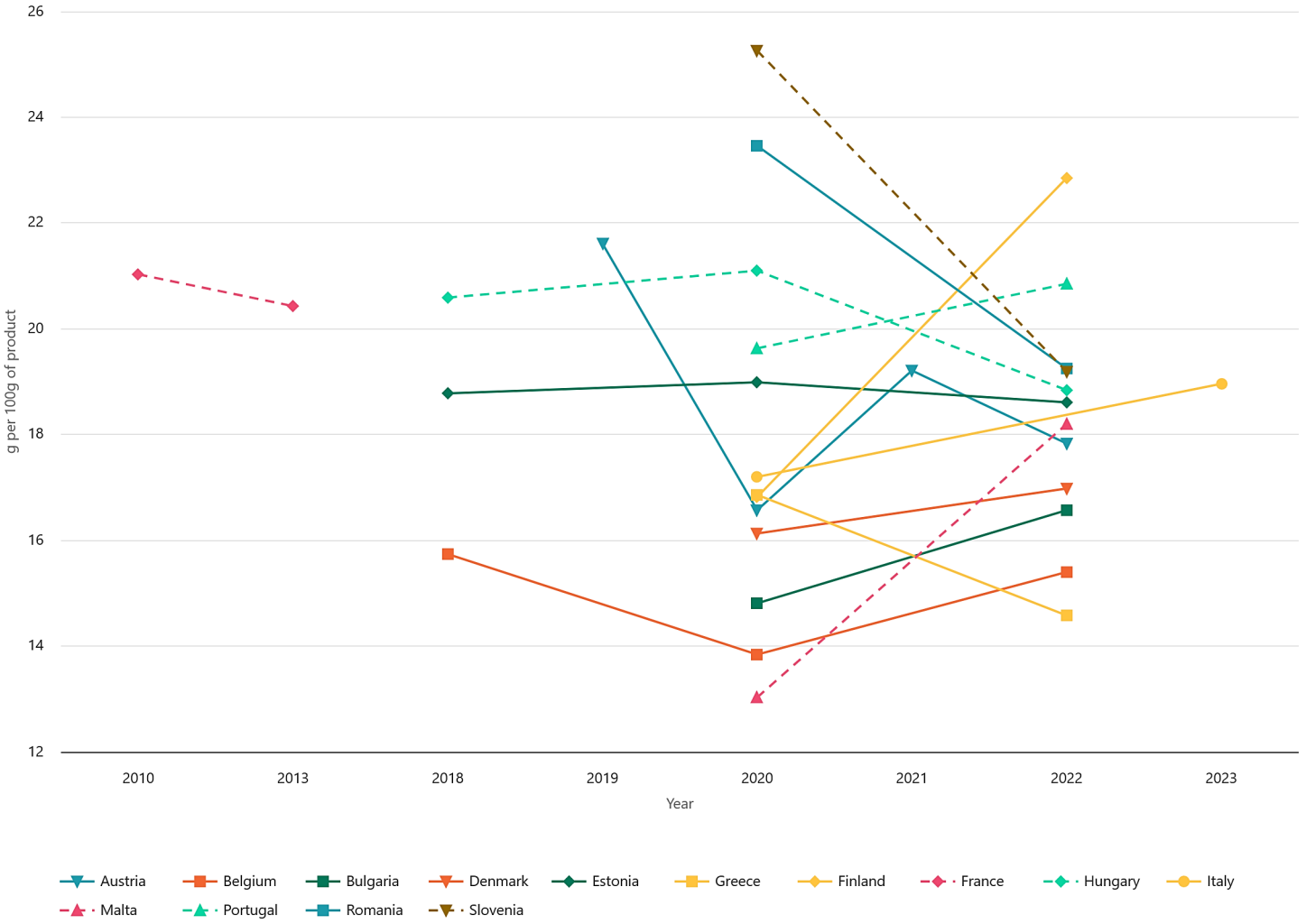
'Pepperoni' is the sub-category with the highest median value of country averages for total fat content with 36.8g per 100g of product. The one with the lowest median value of country averages for total fat content is 'Poultry ham and roast (packaged)' with 2.3g per 100g of product. Overall, the widest variation of country averages is noted for the 'Dried, smoked or cured pork' (range: 2.8-32.9g), and the narrowest for 'Sausages' (range: 17.4-24.0g) (**Figure 66**).

Figure 64. Distribution of total fat content (g/100g product) in delicatessen meats and similar products by country



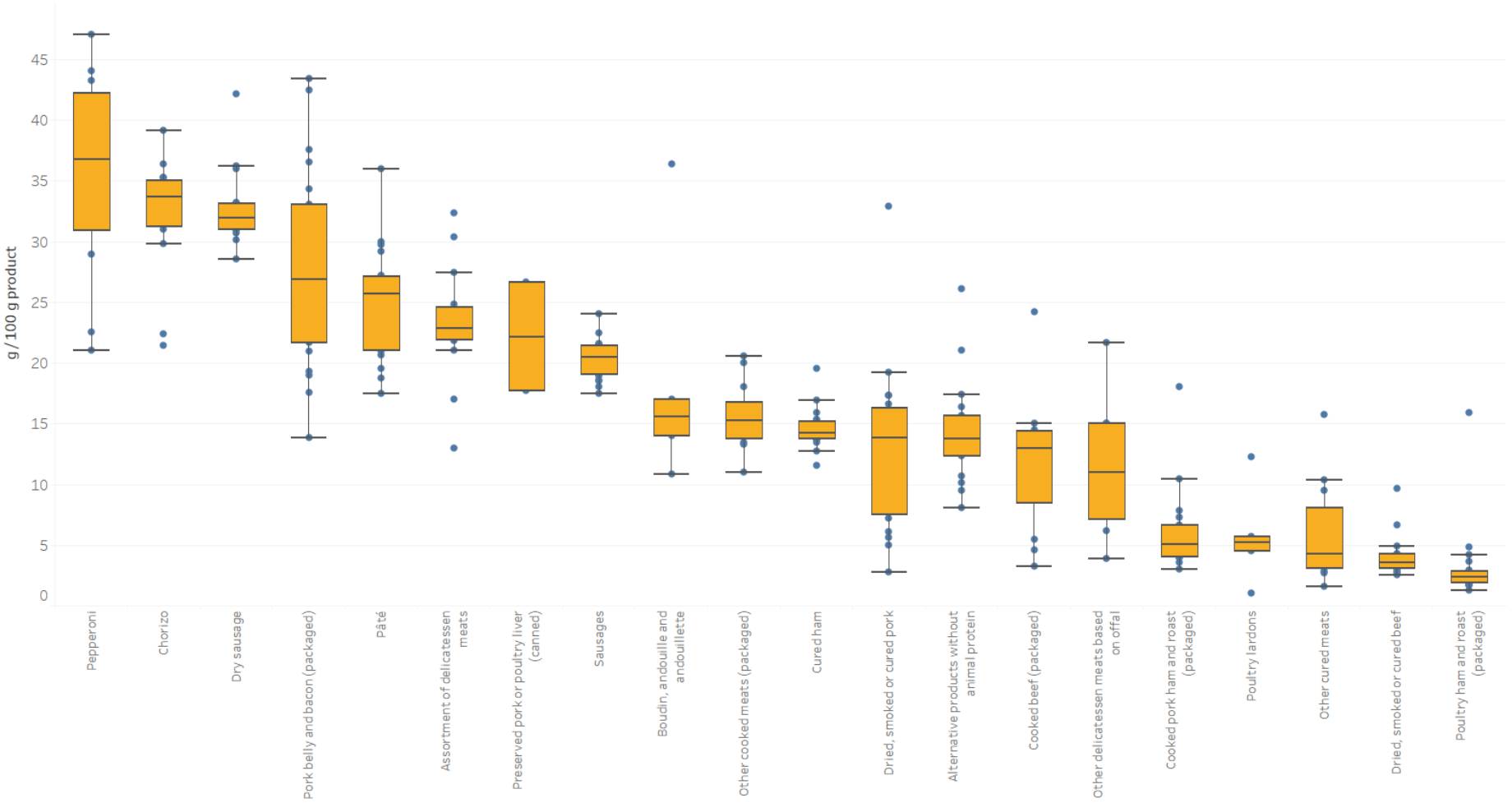
Source: FABLE website

Figure 65. Time trends of total fat content (g/100g product) in delicatessen meats and similar products by country



Source: FABLE website

Figure 66. Distribution of country averages for total fat content (g/100g product) in delicatessen meats and similar products across different European countries by food sub-category



Source: JRC analysis

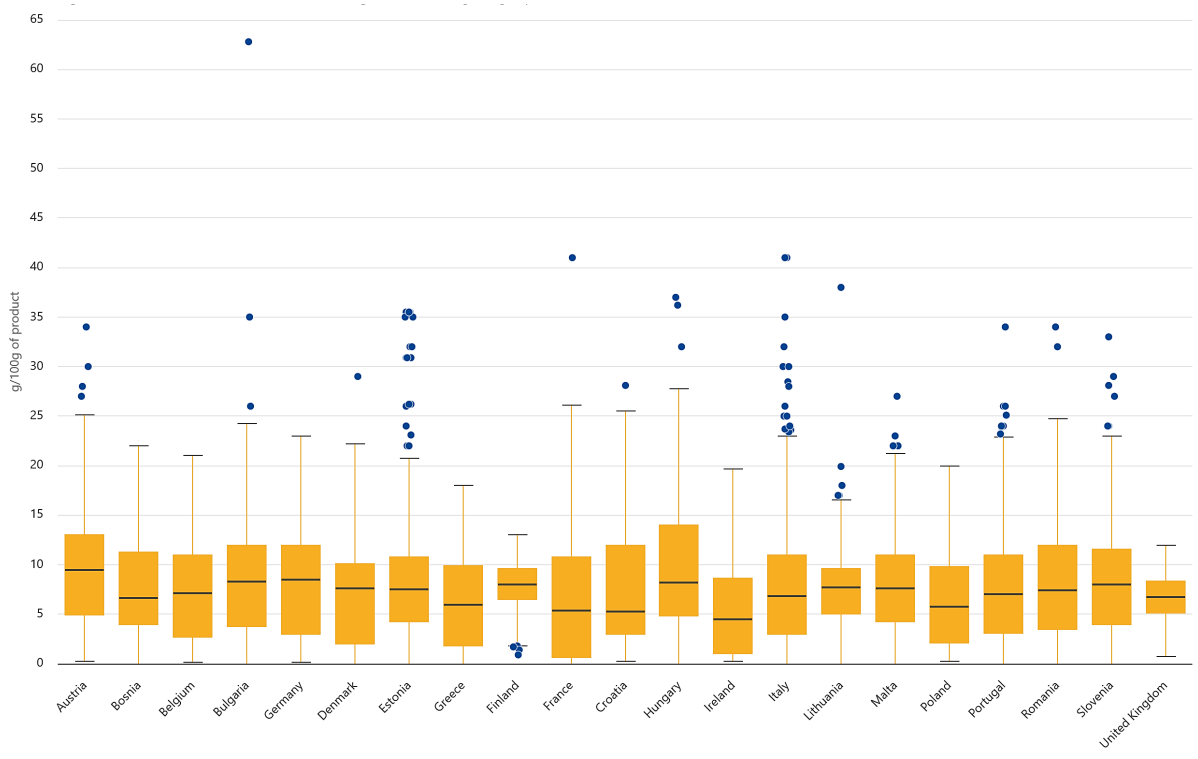
3.4.3. Saturated fats

The average saturated fat content per 100g of product for the food category of delicatessen meat and similar products is 7.8g, ranging from 5.3g in Ireland to 9.4g in Austria and Hungary (**Figure 67**). The country with the widest distribution is Bulgaria (range: 0.0-62.8g with IQR: 3.8g-12.0g), and the one with the narrowest is the UK (range: 0.7-12.0g with IQR: 5.1g-8.3g).

When looking at time trends of saturated fat in delicatessen meat and similar products (**Figure 68**), there is no clear direction of the changes observed. Eight out of 14 countries decreased saturated fat content between their first and last data collection points. The largest decrease was observed for Slovenia (from 9.6g in 2020 to 6.9g in 2022), and the smallest decrease for France (from 8.0g in 2010 to 7.8g in 2013). Saturated fat content remained stable in Denmark at 6.3g between 2020 and 2022. An increase was observed for five countries. The largest increase was observed for Malta (from 5.0g in 2020 to 7.1g in 2022), and the smallest increase for Portugal (from 7.6g in 2020 to 7.9g in 2022). Half of the countries (7 out of 14) had more than 7.0g of saturated fat during the first data collections. For the 13 countries that last collected data in 2022-2023, the average saturated fat content was 6.8g (ranging from 5.3 for Greece to 8.8g for Finland).

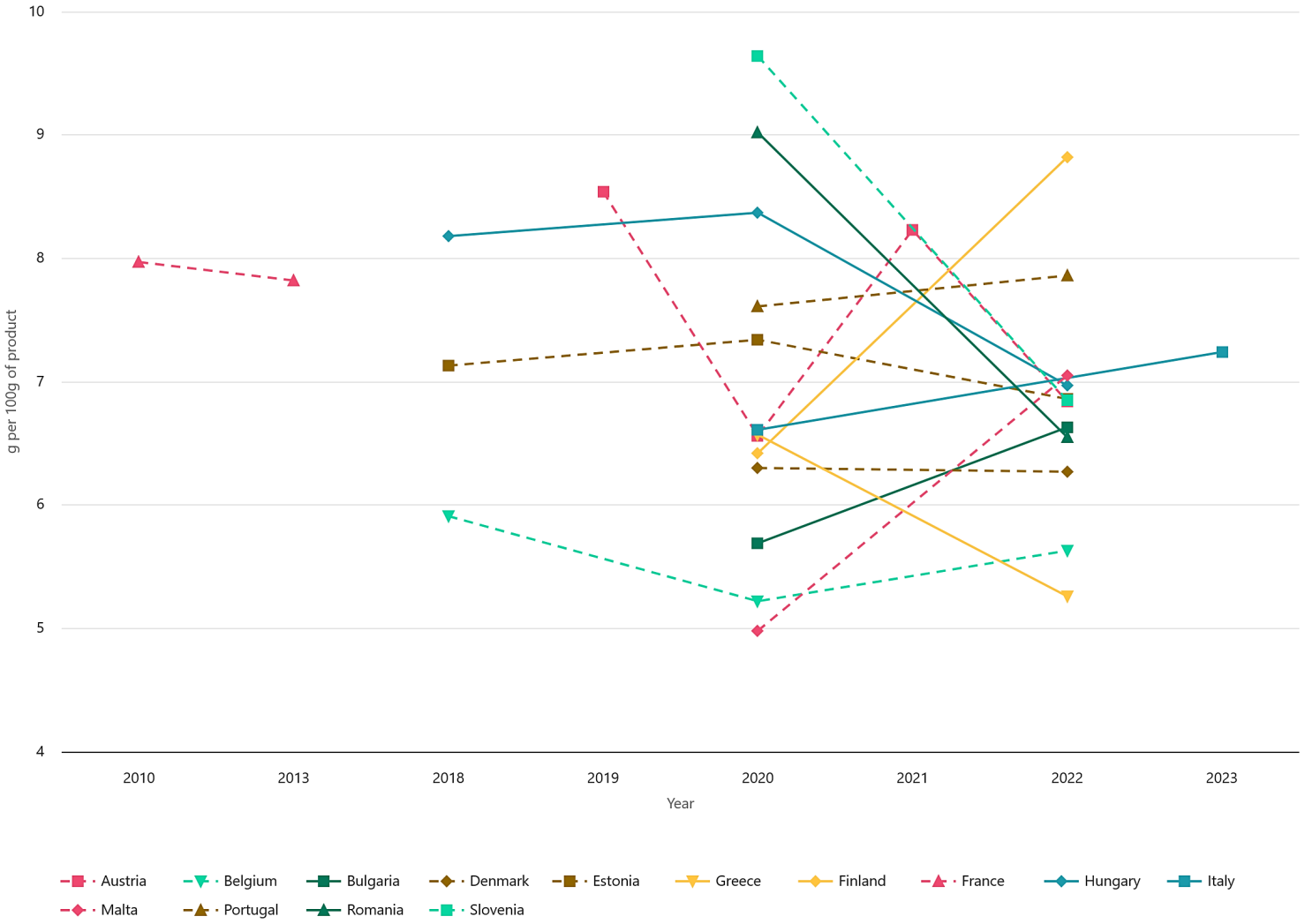
'Pepperoni' is the sub-category with the highest median value of country averages for saturated fat content with 14.2g per 100g of product. The one with the lowest median value of country averages for saturated fat content is 'Poultry ham and roast (packaged)' with 0.7g per 100g of product. Excluding 'Preserved pork or poultry liver (canned)' which only had saturated fat content data from one country, the widest variation of country averages is noted for the 'Pork belly and bacon (packaged)' (range: 5.1-19.0g), and the narrowest for 'Sausages' (range: 5.9-9.2g) (**Figure 69**).

Figure 67. Distribution of saturated fat content (g/100g product) in delicatessen meats and similar products by country



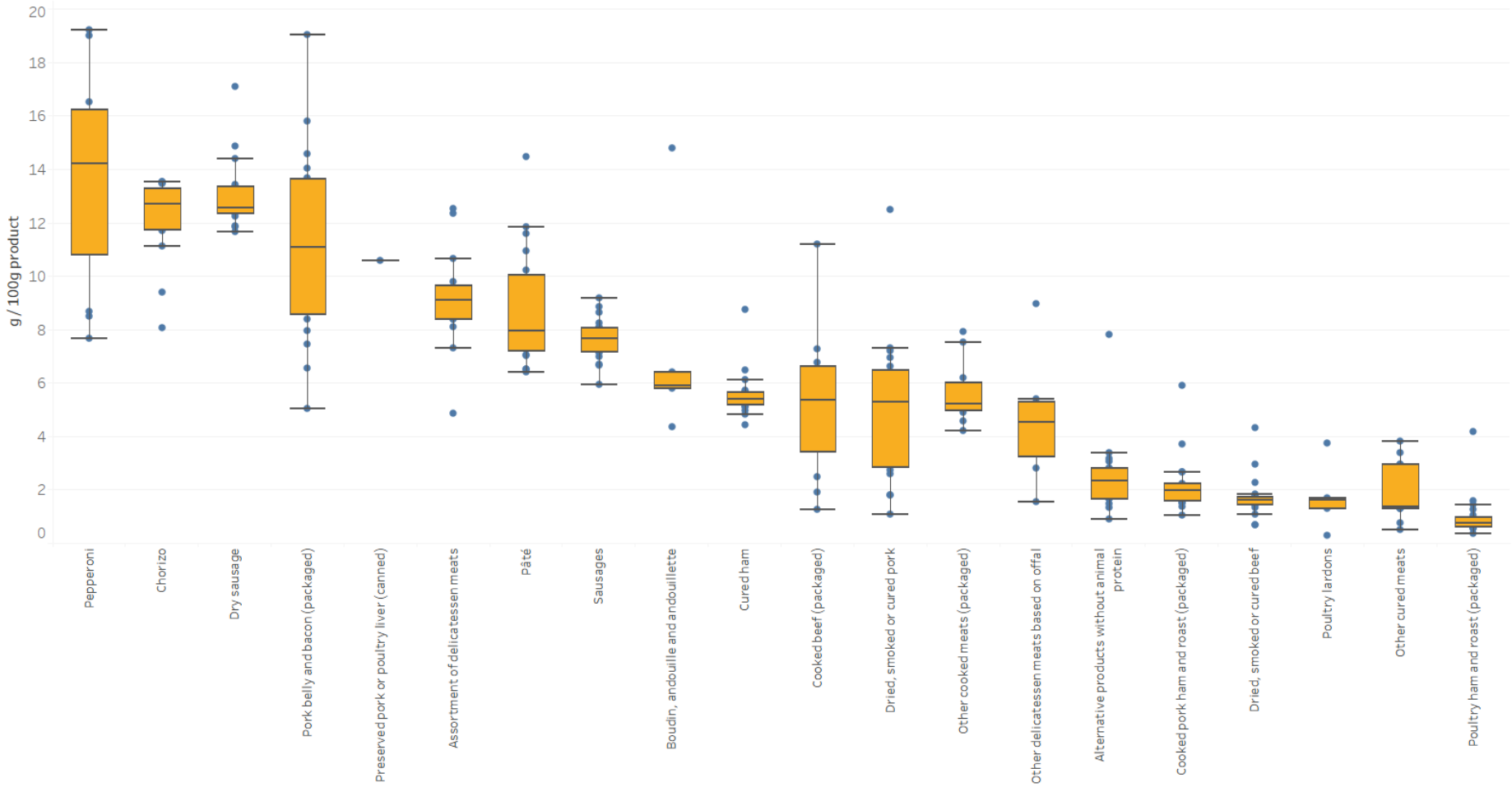
Source: FABLE website

Figure 68. Time trends of saturated fat content (g/100g product) in delicatessen meats and similar products by country



Source: FABLE website

Figure 69. Distribution of country averages for saturated fat content (g/100g product) in delicatessen meats and similar products across different European countries by food sub-category



Source: JRC analysis

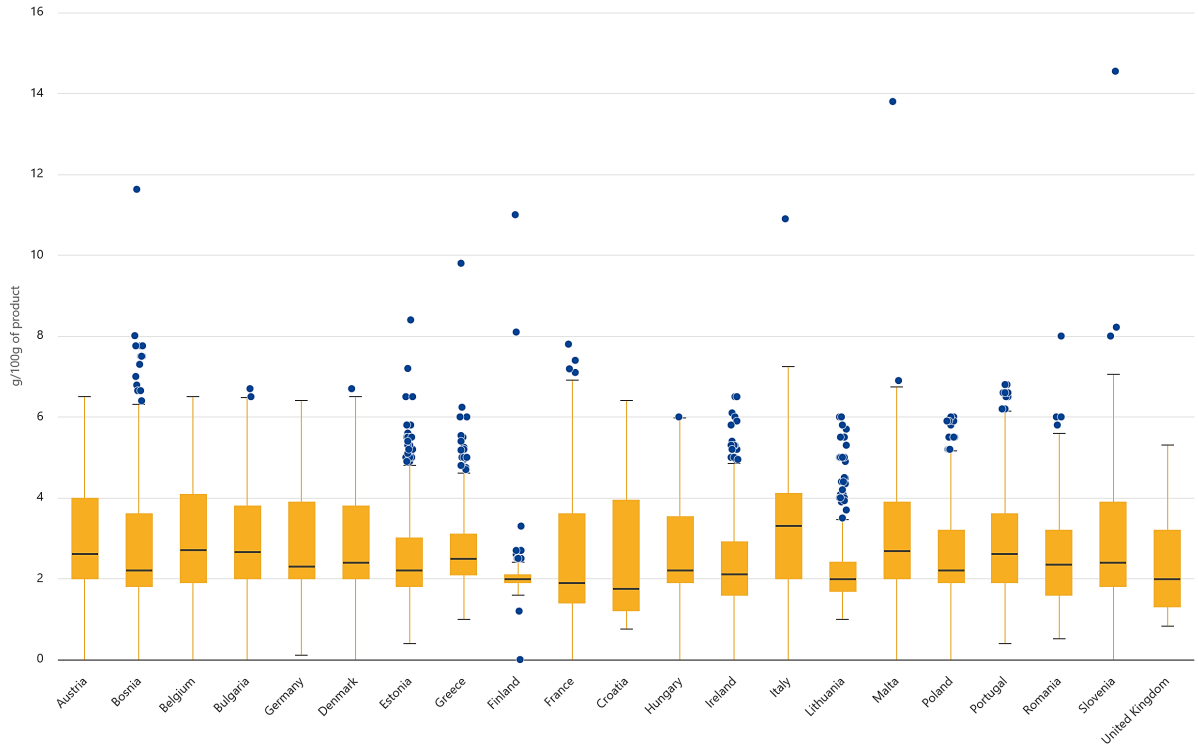
3.4.4. Salt

The average salt content per 100g of product for the food category of delicatessen meat and similar products is 2.79g, ranging from 2.06g in Finland to 3.26g in Italy (**Figure 70**). The country with the widest distribution is Slovenia (range: 0.24-14.55g with IQR: 2.00g-3.90g), and the one with the narrowest is the UK (range: 0.83-5.30g with IQR: 1.80g-3.95g).

There is an overall decreasing trend of salt content in delicatessen meats and similar products (**Figure 71**). Eight out of 14 countries decreased salt content between their first and last data collection points. The largest decrease was observed for Finland (from 2.90g in 2020 to 2.09g in 2022), and the smallest decrease for Denmark (from 3.16g in 2020 to 2.94g in 2022). Salt content remained fairly stable (below 0.05g of difference) in four countries; Italy (from 3.21g in 2020 to 3.18g in 2023), Belgium (from 2.86g in 2018 to 2.84g in 2022), Greece (from 3.11g in 2020 to 3.09g in 2022), and Austria (from 2.87g in 2019 to 2.91g in 2022). An increase was observed for two countries; Hungary (from 2.35g in 2018 to 2.61g in 2022), and Bulgaria (from 2.62g in 2020 to 2.83g in 2022). Around two thirds of the countries (9 out of 14) had more than 3.0g of salt during the first data collections. For the 13 countries that last collected data in 2022-2023, the average salt content was 2.8g (ranging from 2.09g for Finland to 3.18g for Italy).

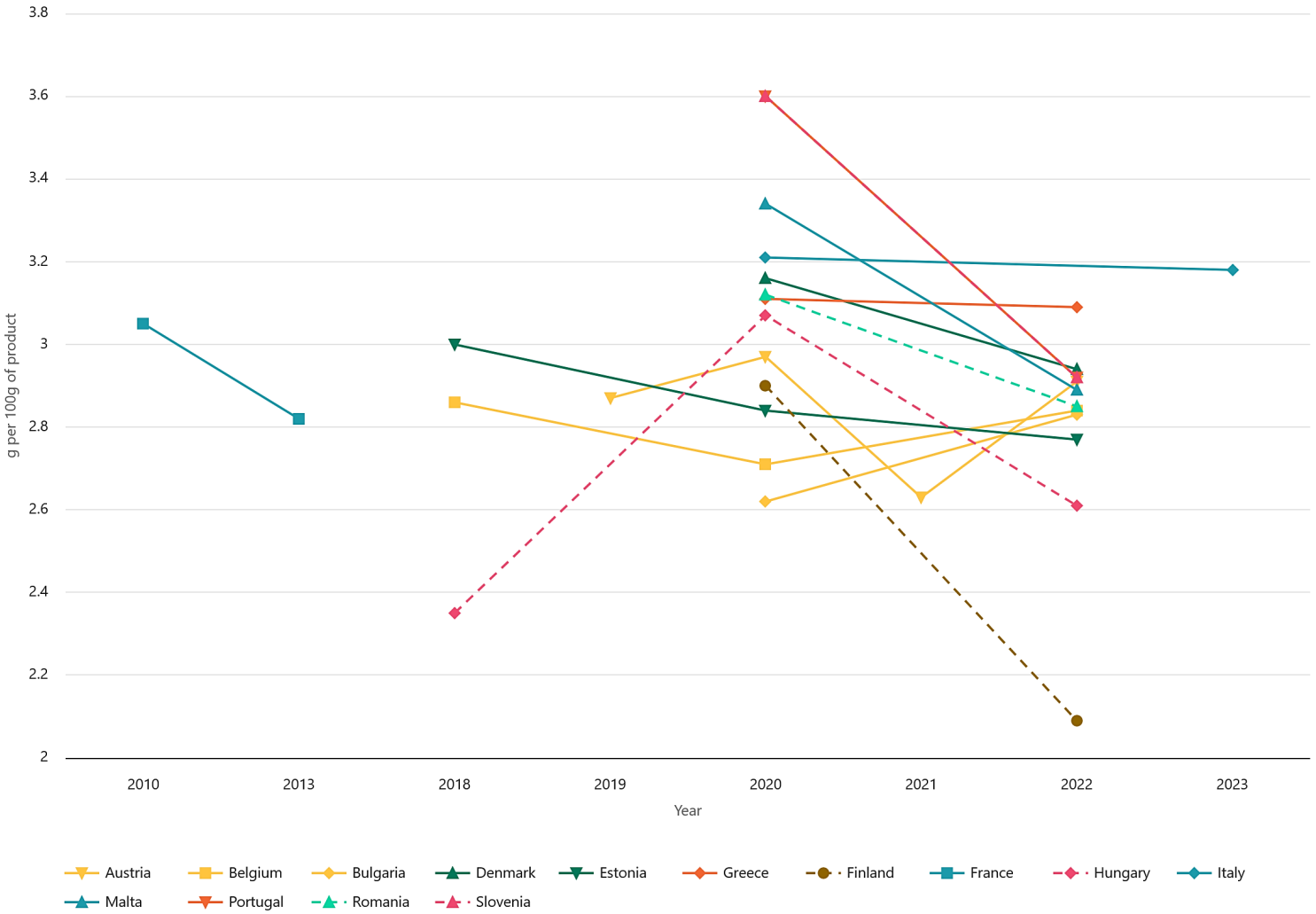
'Cured ham' is the sub-category with the highest median value of country averages for salt content with 4.82g per 100g of product. The one with the lowest median value of country averages for salt content is 'Pâté' with 1.62g per 100g of product. Overall, the widest variation of country averages is noted for the 'Dried, smoked or cured pork' (range: 1.55-4.88g), and the narrowest for 'Preserved pork or poultry liver (canned)' (range: 1.70-2.00g) (**Figure 72**).

Figure 70. Distribution of salt content (g/100g product) in delicatessen meats and similar products by country



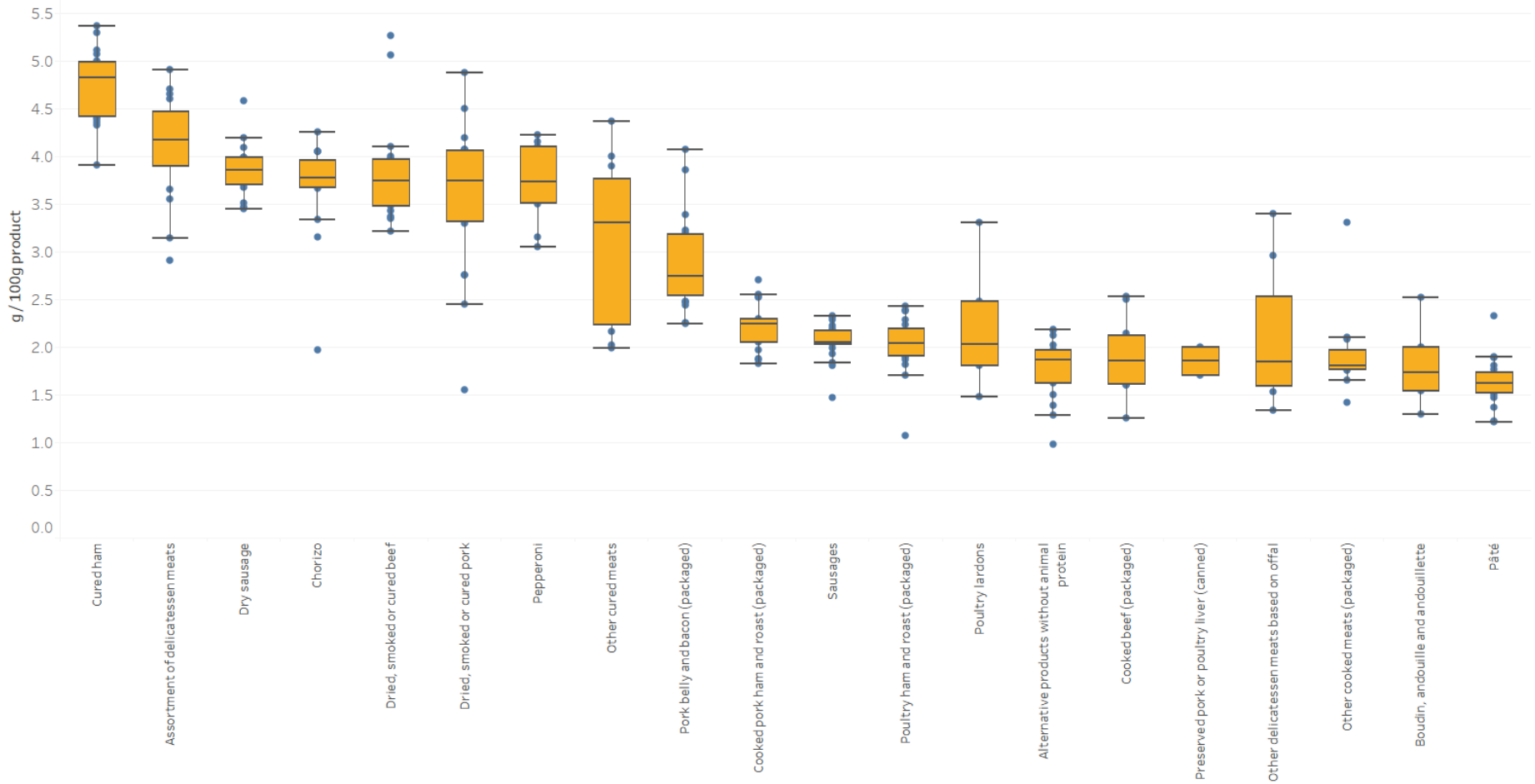
Source: FABLE website

Figure 71. Time trends of salt content (g/100g product) in delicatessen meats and similar products by country



Source: FABLE website

Figure 72. Distribution of country averages for salt content (g/100g product) in delicatessen meats and similar products across different European countries by food sub-category



Source: JRC analysis

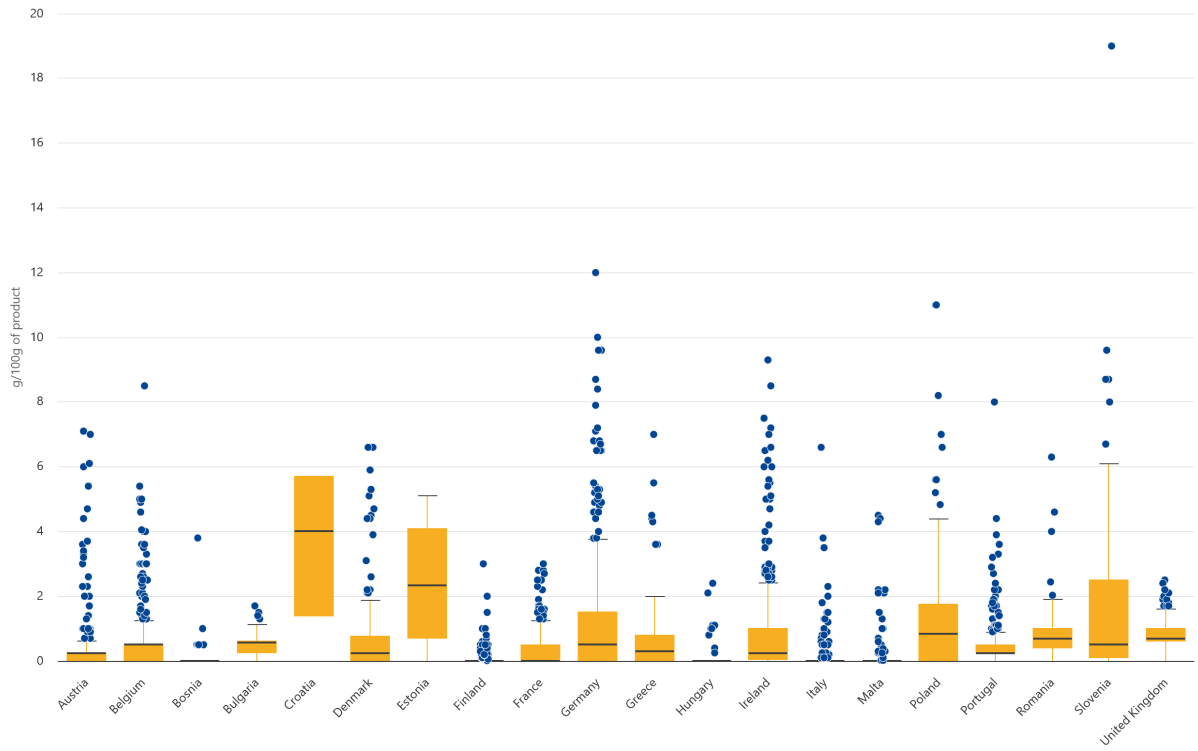
3.4.5. Fibre

The average fibre content per 100g of product for the food category of delicatessen meats and similar products is 0.5g, ranging from 0.0g in Malta and Hungary to 3.7g in Croatia (**Figure 73**). The country with the widest distribution is Slovenia (range: 0.0-19.0g with IQR: 0.1g-2.5g), and the one with the narrowest is Lithuania (range: 0.0-0.3g with IQR: 0.0g-0.2g).

There is an overall decreasing trend of fibre content in delicatessen meats and similar products (**Figure 74**). Nine out of 12 countries decreased fibre content between their first and last data collection points. The largest decrease was observed for Hungary (from 0.7g in 2018 to 0.01g in 2022), and the smallest decrease for Denmark (from 0.6g in 2020 to 0.5g in 2022). Fibre content remained stable in Bulgaria at 0.4g between 2020 and 2022. An increase was observed for two countries: Estonia (from 0.4g in 2018 to 1.0g in 2022), and Greece (from 0.5g in 2020 to 0.7g in 2022).

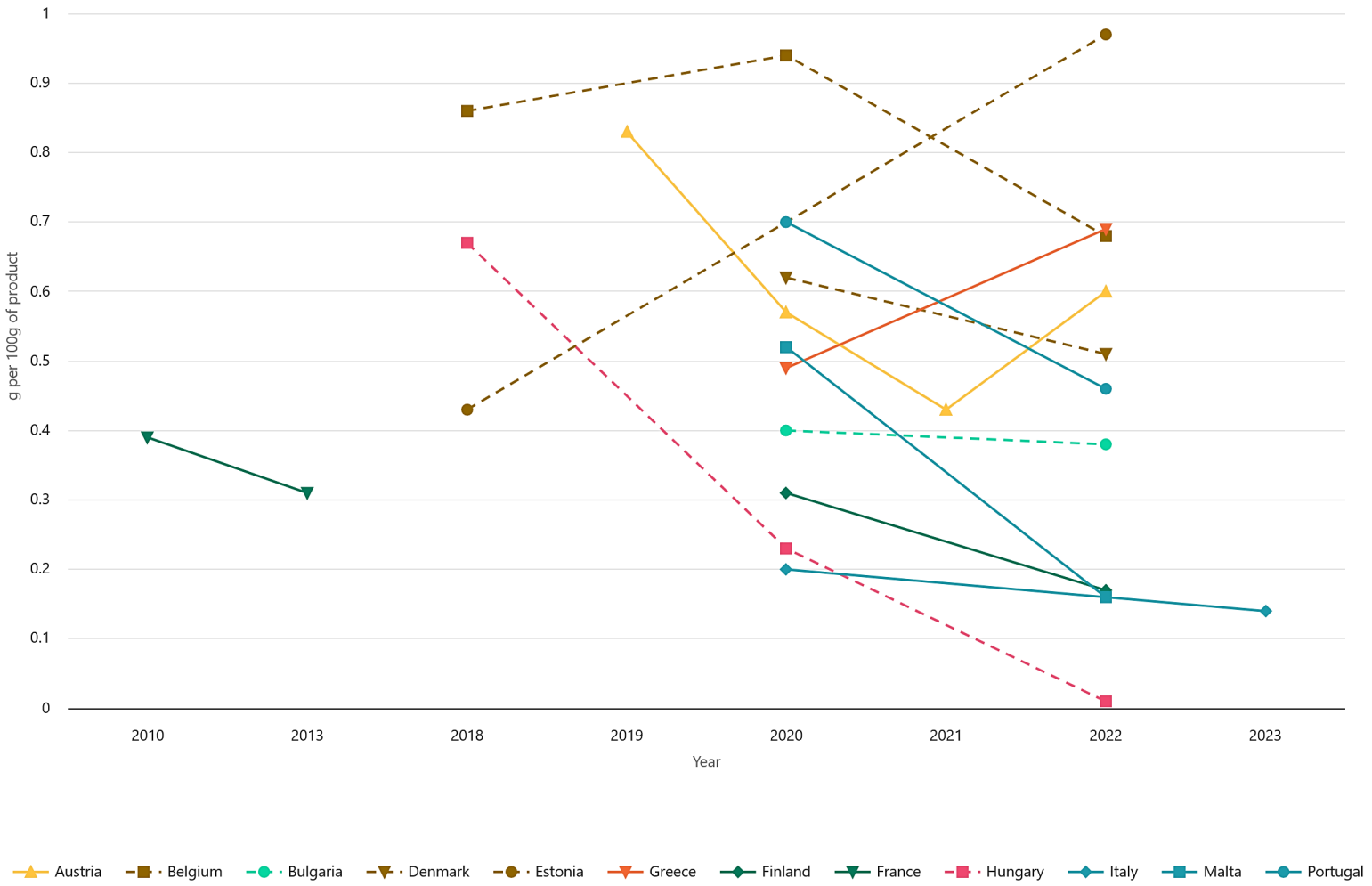
'Alternative products without animal protein' is the sub-category with the highest median value of country averages for fibre content with 3.3 per 100g of product. The one with the lowest median value of country averages for fibre content is 'Pepperoni' and 'Cooked beef (packaged)' with 0.0g per 100g of product. Excluding 'Preserved pork or poultry liver (canned)' which only had fibre content data from one country, the widest variation of country averages is noted for the 'Alternative products without animal protein' (range: 0.0-5.2g), and the narrowest for 'Cooked beef (packaged)' , 'Dried, smoked or cured beef', 'Pepperoni' and 'Other cured meats' (all range: 0.0-0.4g) (**Figure 75**).

Figure 73. Distribution of fibre content (g/100g product) in delicatessen meats and similar products by country



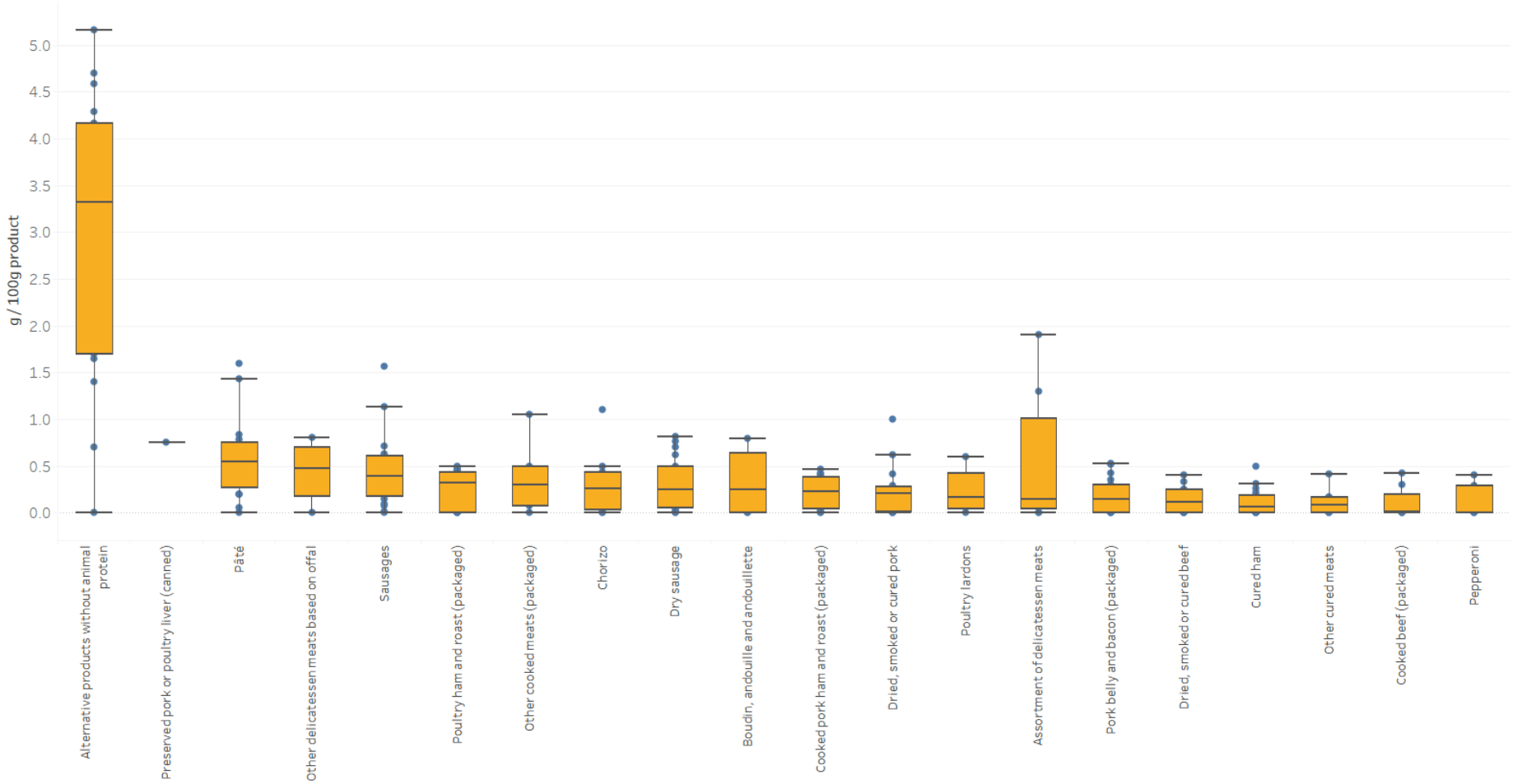
Source: FABLE website

Figure 74. Time trends of fibre content (g/100g product) in delicatessen meats and similar products by country



Source: FABLE website

Figure 75. Distribution of country averages for fibre content (g/100g product) in delicatessen meats and similar products across different European countries by food sub-category



Source: JRC analysis

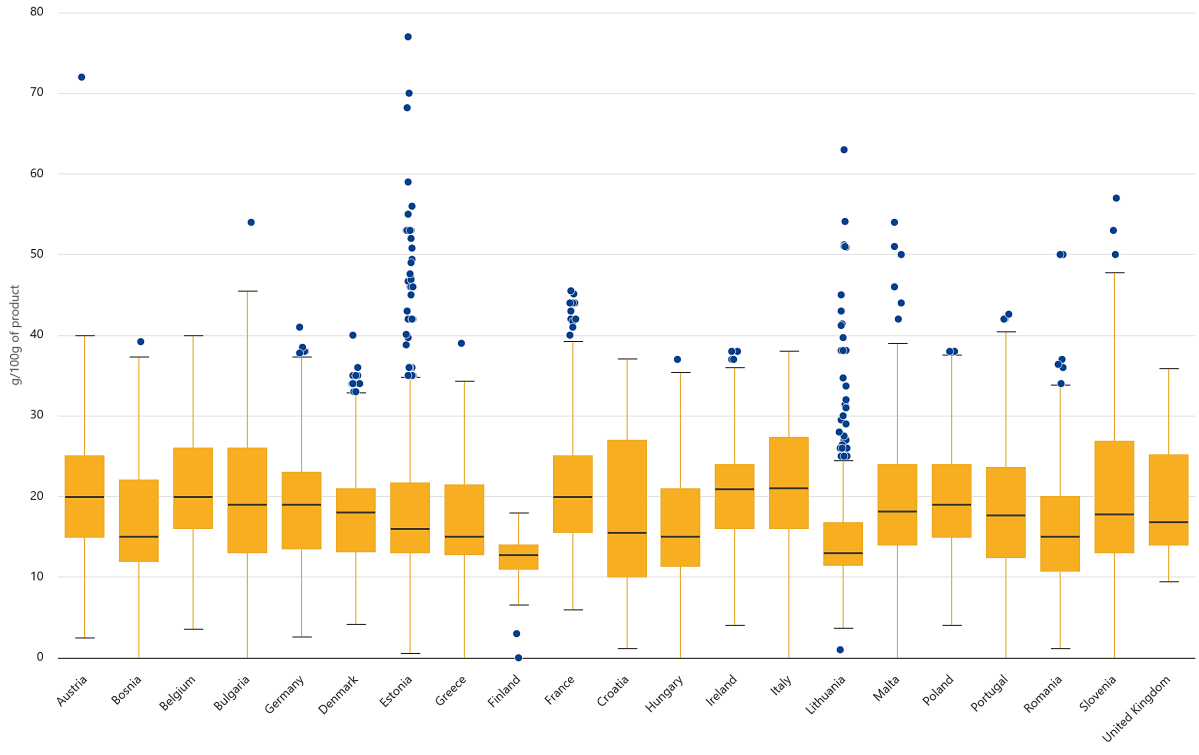
3.4.6. Protein

The average protein content per 100g of product for the food category of delicatessen meats and similar products is 19.0g, ranging from 12.4g in Finland to 21.9g in Italy (**Figure 76**). The country with the widest distribution is Estonia (range: 0.5-77.0g with IQR: 13.0g-21.7g), and the one with the narrowest is Finland (range: 0.0-18.0g with IQR: 11.0g-14.0g).

There is an overall decreasing trend of protein content in delicatessen meats and similar products (**Figure 77**). Eight out of 14 countries decreased protein content between their first and last data collection points. The largest decrease was observed for Finland (from 18.4g in 2020 to 13.3g in 2022), and the smallest decrease for Belgium (from 20.7g in 2018 to 20.3g in 2022). Protein content remained fairly stable (below 0.2g of difference) in two countries; Greece (from 19.1g in 2020 to 18.9g in 2022), and Denmark (from 19.4g in 2020 to 19.5 g in 2022). An increase was observed for four countries: Bulgaria (from 16.9g in 2020 to 19.9g in 2022), Austria (from 19.4g in 2019 to 20.6g in 2022), Malta (from 19.0g in 2020 to 20.0g in 2022), and Hungary (from 14.6g in 2018 to 15.4g in 2022).

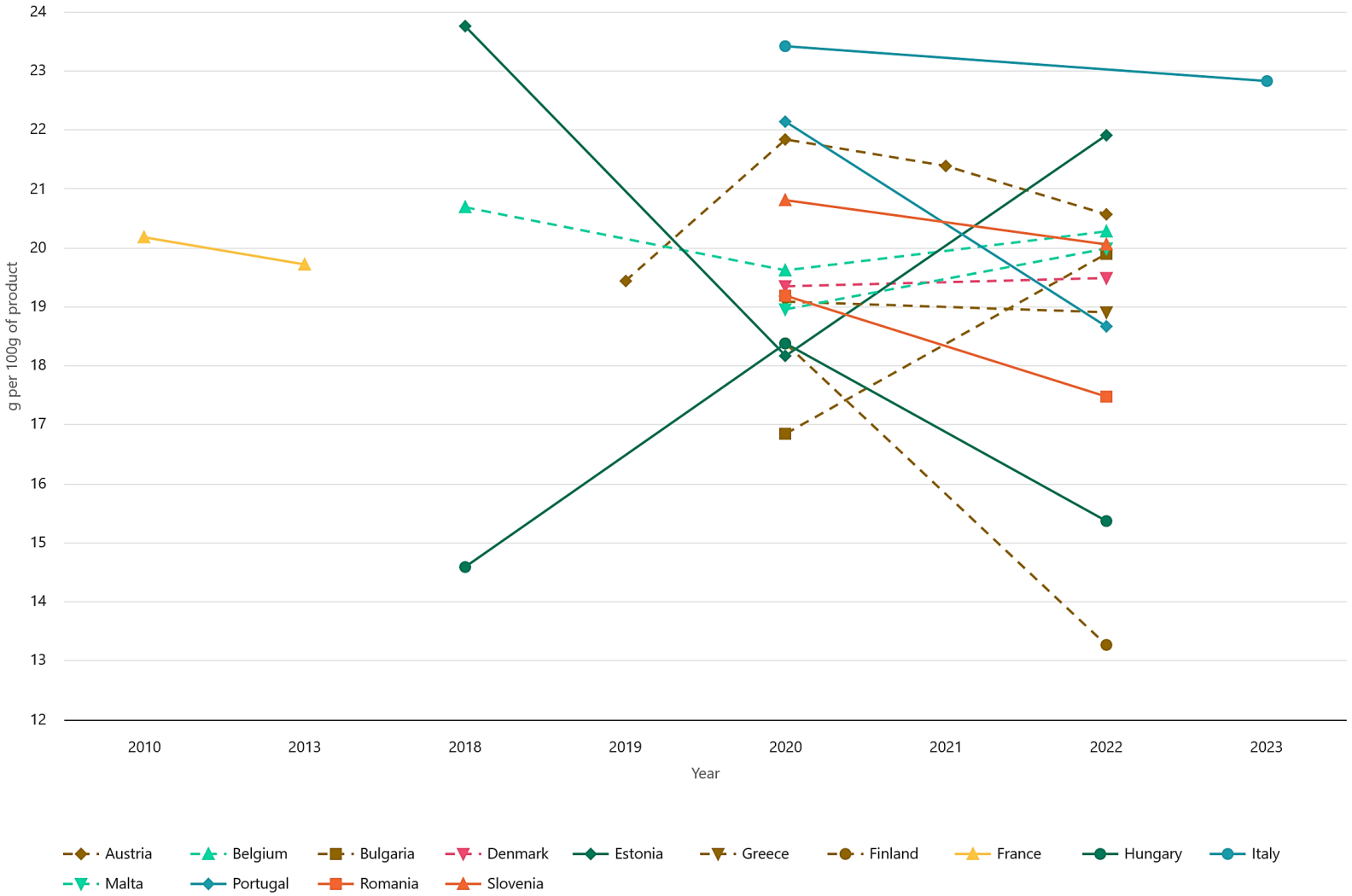
'Dried, smoked or cured beef' is the sub-category with the highest median value of country averages for protein content with 32.0g per 100g of product. The one with the lowest median value of country averages for protein content is 'Pâté' with 10.8g per 100g of product. Excluding 'Preserved pork or poultry liver (canned)' which only had saturated fat content data from one country, the widest variation of country averages is noted for 'Other cured meats' (range: 15.0-53.0g), and the narrowest for 'Poultry lardons' (range: 18.0-21.3g) (**Figure 78**).

Figure 76. Distribution of protein content (g/100g product) in delicatessen meats and similar products by country



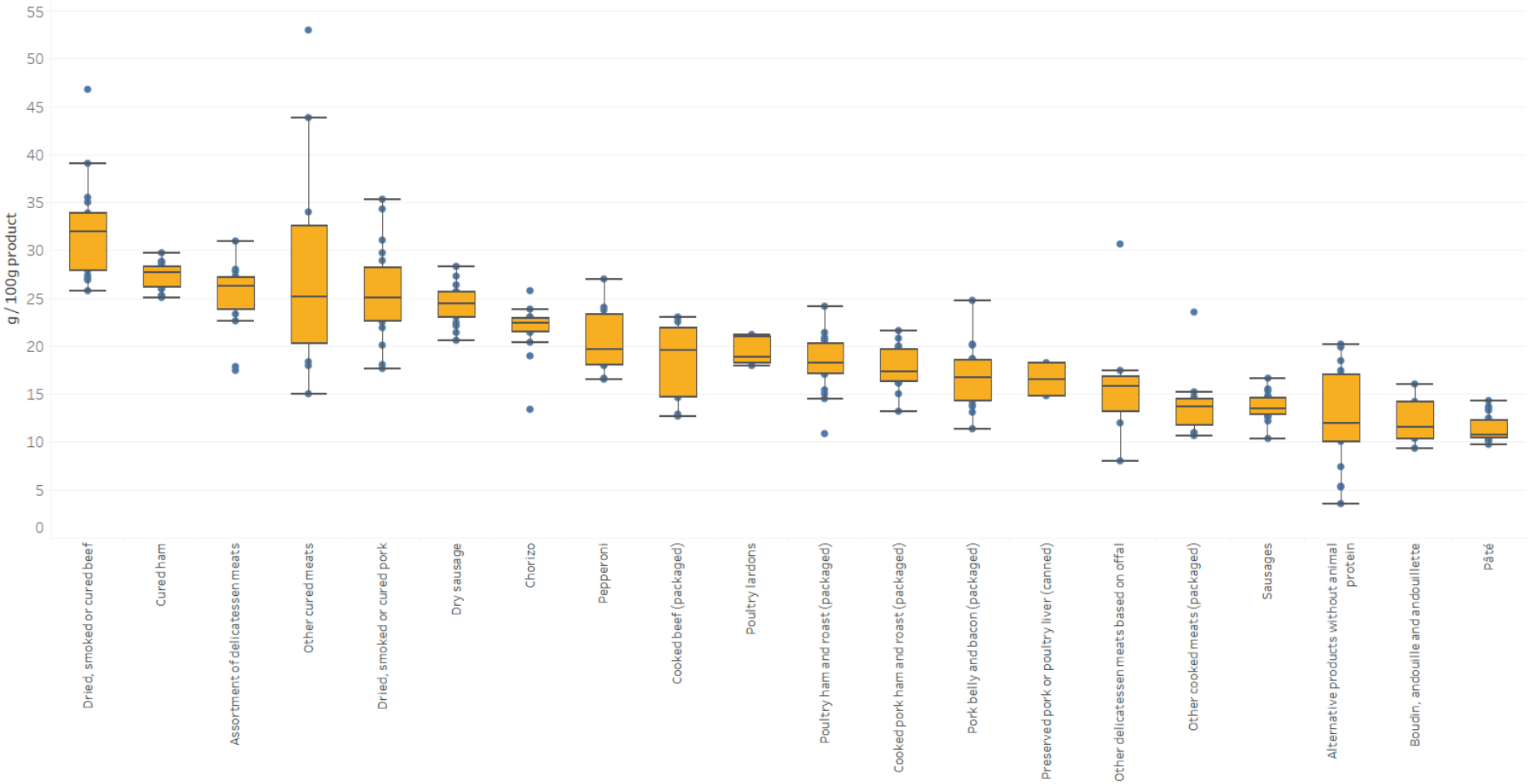
Source: FABLE website

Figure 77. Time trends of protein content (g/100g product) in delicatessen meats and similar products by country



Source: FABLE website

Figure 78. Distribution of country averages for protein content (g/100g product) in delicatessen meats and similar products across different European countries by food sub-category



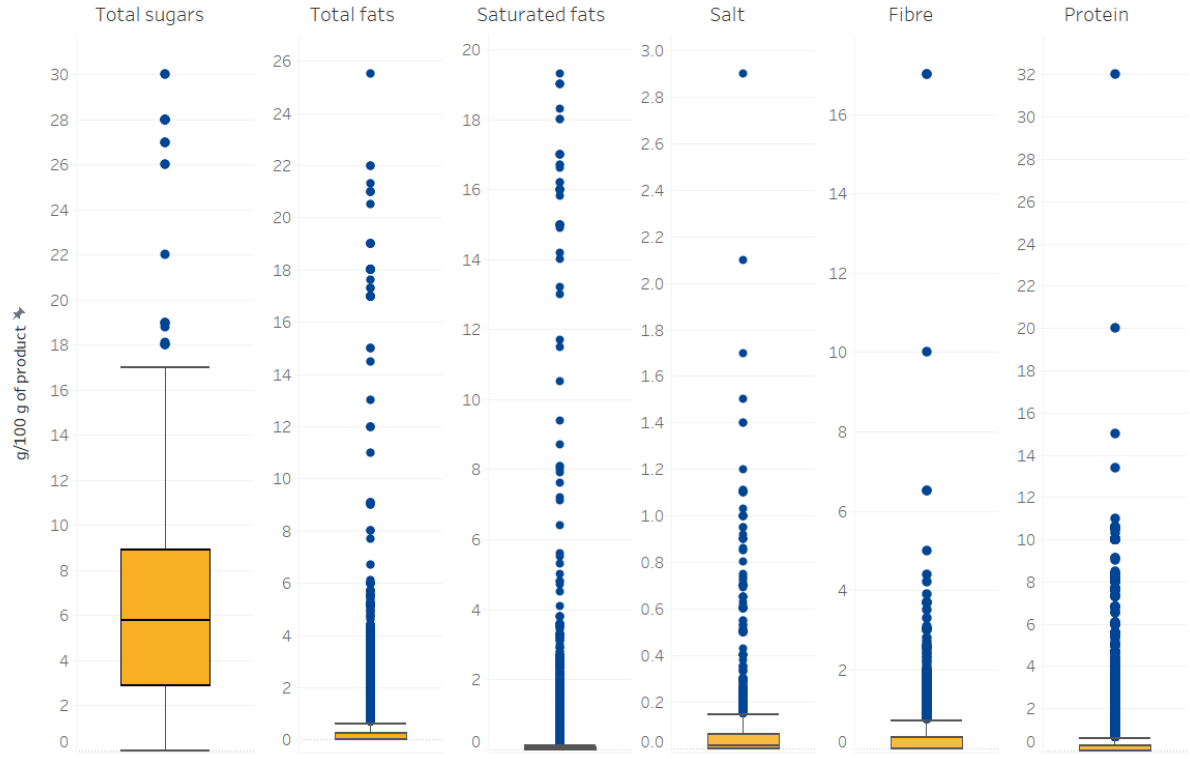
Source: JRC analysis

3.5. Soft drinks

The distribution of the content of key nutrients (total sugars, total fats, saturated fats, salt, fibre and protein) for all soft drinks across different European countries, in grams per 100 grams of product, can be found in **Figure 79**.

Per 100g of product, the average total sugars content is 5.7g, the average total fats content is 0.4g, the average saturated fats content is 0.2g, the average salt content is 0.04g, the average fibre content is 0.3g, and the average protein content is 0.5g. In this food category there is a wide variation for each of the nutrients: 0.0-30.0g of total sugars (IQR: 2.9g-8.9g), 0.0-25.5g of total fats (IQR: 0.0g-0.3g), 0.0-19.3g of saturated fats (IQR: 0.0g-0.1g), 0.00-2.90g of salt (IQR: 0.00g-0.06g), 0.0-17.0g of fibre (IQR: 0.0g-0.3g), and 0.0-32.0g of protein (IQR: 0.0g-0.3g).

Figure 79. Distribution of content of total sugars, total fats, saturated fats, salt, fibre and protein (g/100g product) in soft drinks in 21 European countries



Source: JRC analysis

3.5.1. Total sugars

The average total sugars content per 100g of product for the food category of soft drinks is 5.7g, ranging from 2.3g in the UK to 7.7g in Lithuania (**Figure 80**). The countries with the widest distribution is Slovenia (range: 0.0-30.0g with IQR: 3.3g-9.0g), and the one with the narrowest is the UK (range: 0.0-11.0g with IQR: 0.1g-4.3g).

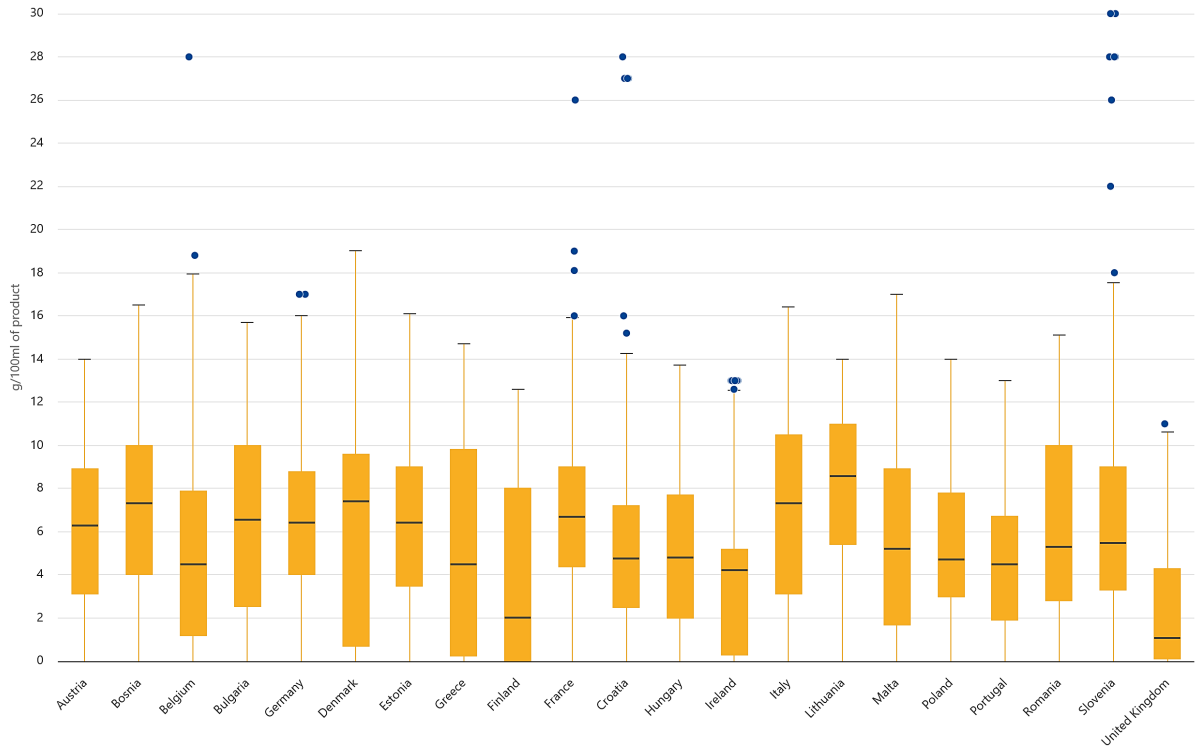
There is no overall explicit direction of total sugars content time trends in soft drinks (**Figure 81**). There were different levels of coverage of the different sub-categories during the first data collection rounds; four countries collected data for more than 20 sub-categories, five countries

collected data for 8-11 sub-categories, and six countries collected data for fewer than six sub-categories. For the last data collection rounds, almost all countries collected data for more than 25 sub-categories. A direct comparison between years at food category level is therefore not possible for soft drinks for all countries.

Seven countries collected a comparable number of sub-categories across at least two time points: Austria (2020 and 2022), Belgium (2018 and 2022), Estonia (2018 and 2022), Finland (2019 and 2022), France (2013 and 2019), Germany (2019 and 2022), and Hungary (2020 and 2022). The following comparisons refer only to these countries and timepoints. An increase was observed for three countries: Finland (from 4.6g to 5.3g), Hungary (from 4.4g to 4.6g), and Germany (from 5.0g to 5.1g). Total sugars content remained the same at 5.5g for France. A decrease was observed for three countries: Belgium (from 6.0g to 5.0g), Austria (from 5.9g to 5.0g), and Estonia (from 6.5g to 6.1g).

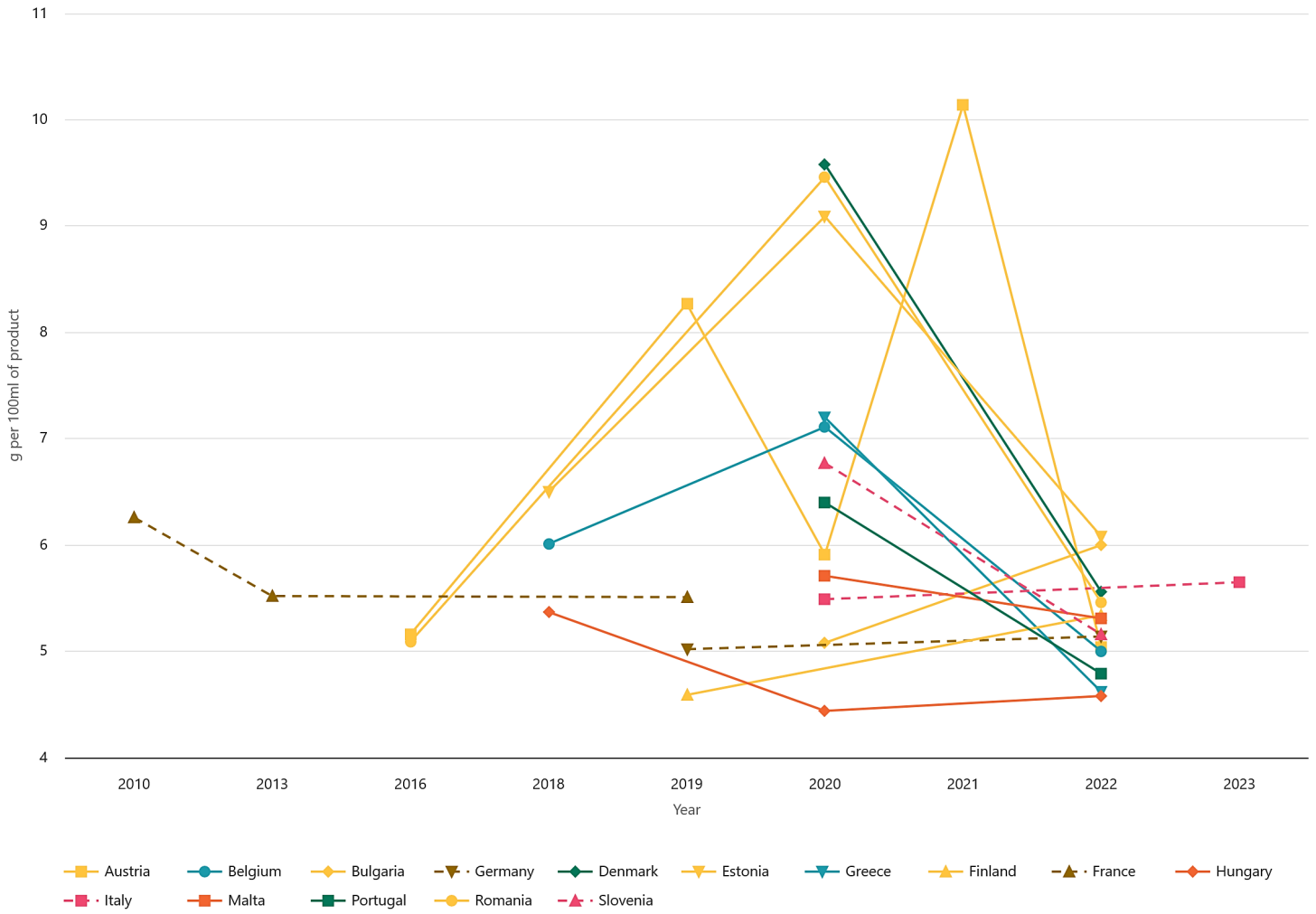
'Sugar-sweetened energy drinks' is the sub-category with the highest median value of country averages for total sugars content with 10.6g per 100g of product. The ones with the lowest median value of country averages for total sugars content are 'Flavoured waters without added sugar', 'Colas without added sugar', and 'Tonics and bitters without added sugar' with 0.0g per 100g of product. Overall, the widest variation of country averages is noted for 'Sugar-sweetened aperitif beverages' (range: 2.6-15.9g), and the narrowest for 'Colas without added sugar' (range: 0.0-0.2g) (**Figure 82**).

Figure 80. Distribution of total sugars content (g/100g product) in soft drinks by country



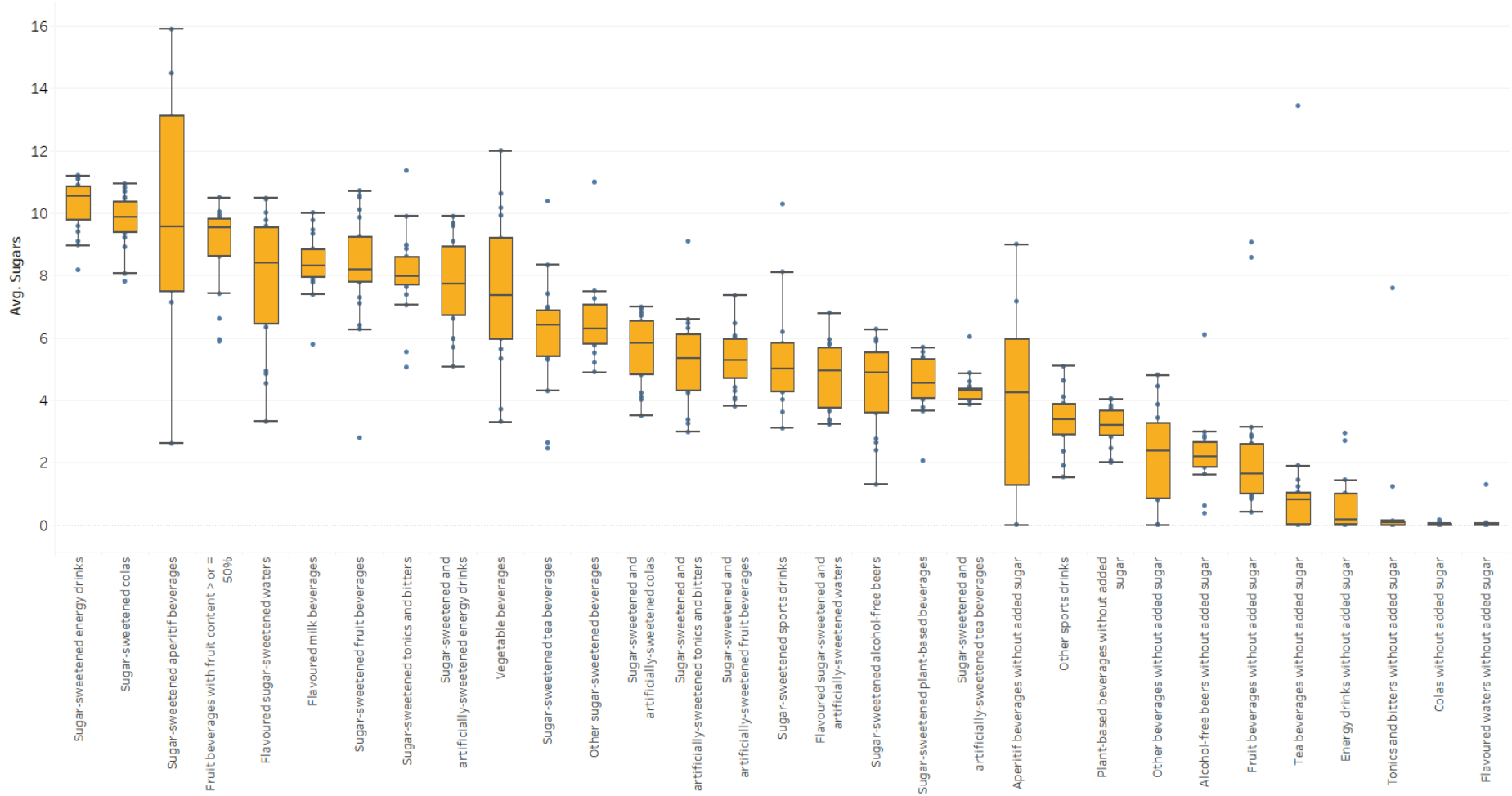
Source: FABLE website

Figure 81. Time trends of total sugars content (g/100g product) in soft drinks by country



Source: FABLE website

Figure 82. Distribution of country averages for total sugars content (g/100g product) in soft drinks across different European countries by food sub-category



Source: JRC analysis

3.5.2. Total fat

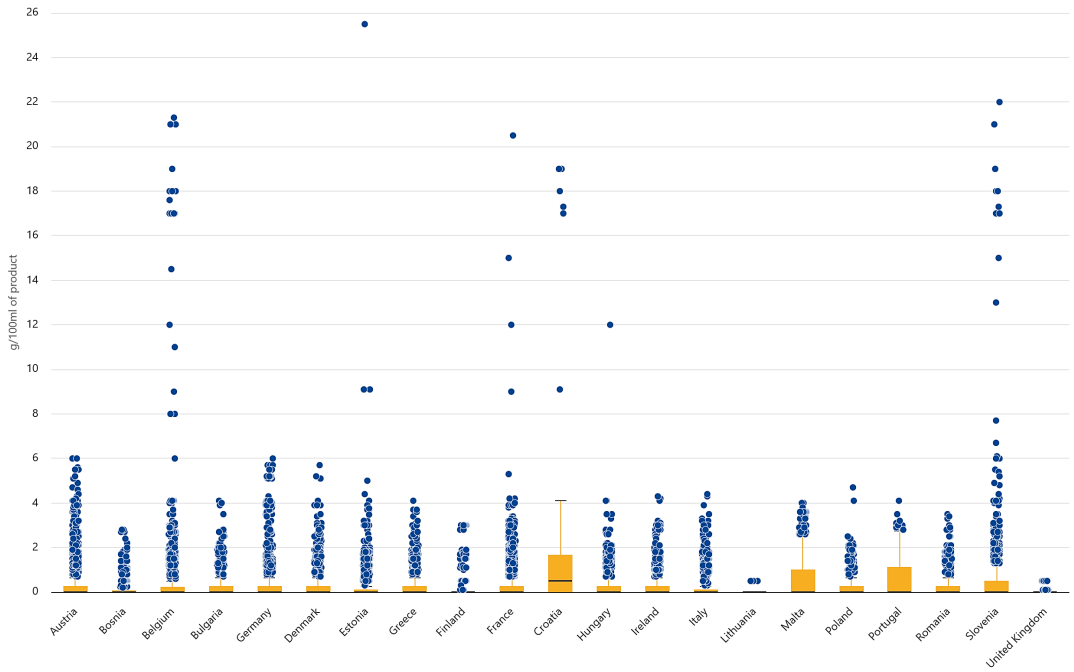
The average total fat content per 100g of product for of soft drinks is 0.4g, ranging from 0.0g in Lithuania to 1.3g in Croatia (**Figure 83**). The country with the widest distribution is Estonia (range: 0.0-25.5g with IQR: 0.0g-0.1g), and the ones with the narrowest are the UK and Lithuania (both range: 0.0-0.5g with IQR: 0.0g-0.0g).

There is an overall increasing trend of total fat in soft drinks that could be explained by the extension of sub-categories collected under this category (**Figure 84**). Coverage levels of the different sub-categories varied in the first data collection rounds; four countries collected data for more than 20 sub-categories, five countries collected data for 8-11 sub-categories, and six countries collected data for fewer than six sub-categories. For the last data collection rounds, almost all countries collected data for more than 25 sub-categories.

A direct comparison between years at food category level is not possible for soft drinks for all countries. Seven countries collected a comparable number of sub-categories across at least two time points: Austria (2020 and 2022), Belgium (2018 and 2022), Estonia (2018 and 2022), Finland (2019 and 2022), France (2013 and 2019), Germany (2019 and 2022), and Hungary (2020 and 2022). The following comparisons refer only to these countries and timepoints. An increase was observed for four countries with the largest increase for total fat for Finland (from 0.02g to 0.6g), and the smallest increase for Estonia (from 0.5g to 0.6g). Total fats content remained stable for three countries: Austria and Belgium at 0.4g, and Germany at 0.3g.

Only three sub-categories have a median value of country averages for total fat content above 0.17g per 100g of product ('Sugar-sweetened plant-based beverages': 1.86g; 'Plant-based beverages without added sugar': 1.61g; and 'Flavoured milk beverages': 1.50g). Overall, the widest variation of country averages is noted for the 'Plant-based beverages without added sugar' (range: 1.3-6.3g), and the narrowest for 'Colas without added sugar' (range: 0.0-0.0g) (**Figure 85**).

Figure 83. Distribution of total fat content (g/100g product) in soft drinks by country



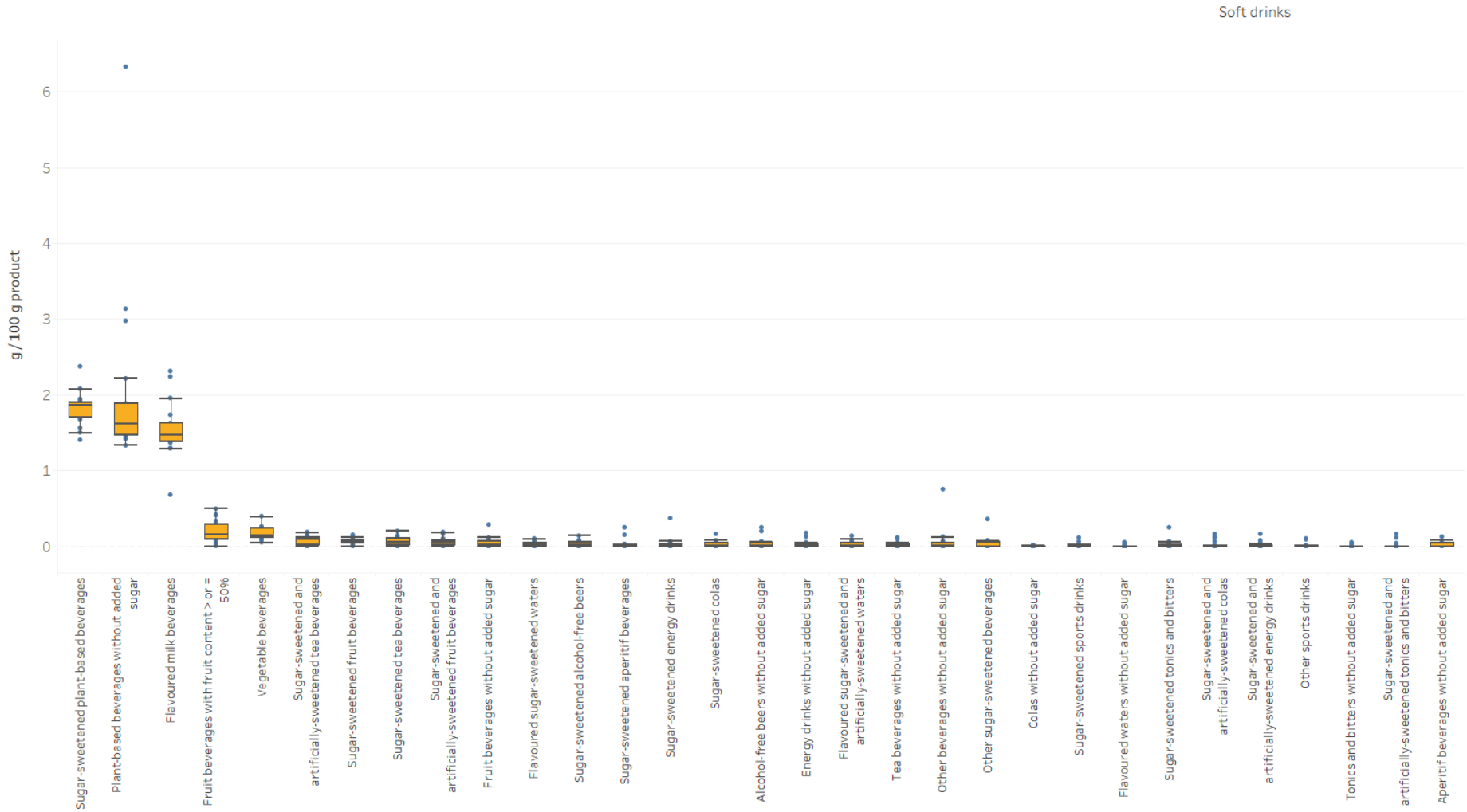
Source: FABLE website

Figure 84. Time trends of total fat content (g/100g product) in soft drinks by country



Source: FABLE website

Figure 85. Distribution of country averages for total fat content (g/100g product) in soft drinks across different European countries by food sub-category



Source: JRC analysis

3.5.3. Saturated fats

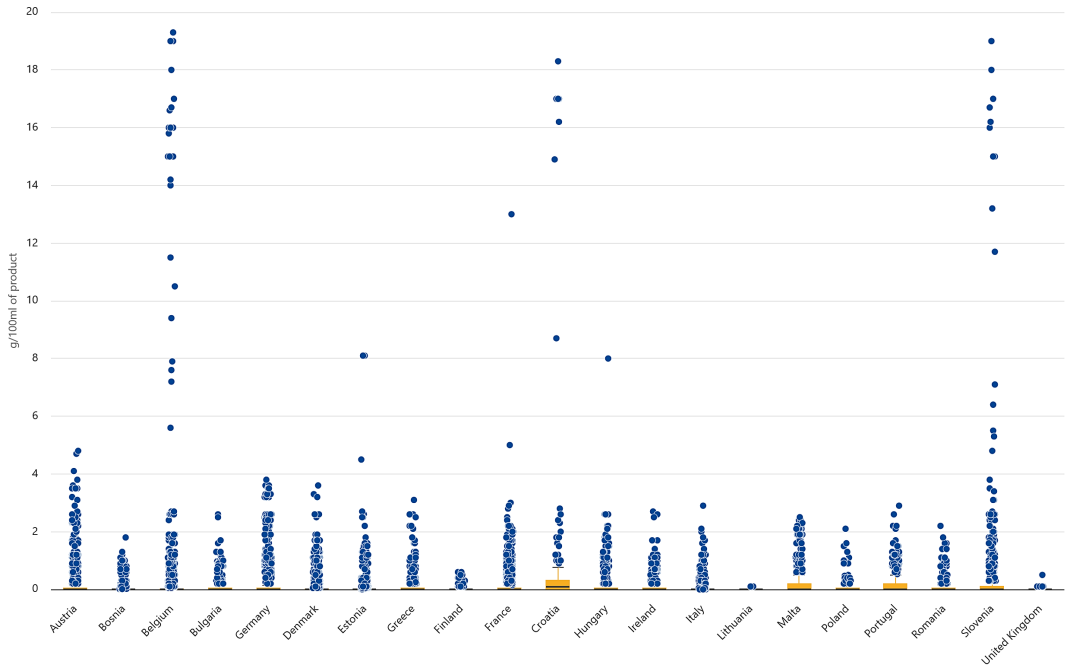
The average saturated fat content per 100g of product for the food category of soft drinks is 0.2g, ranging from 0.0g in Finland, Lithuania and the UK, to 0.6g in Croatia (**Figure 86**). The country with the widest distribution is Belgium (range: 0.0-19.3g with IQR: 0.0g-0.1g), and the one with the narrowest is Lithuania (range: 0.0-0.1g with IQR: 0.0g-0.0g).

There is an overall increasing trend of saturated fat content in soft drinks that could be explained by the extension of sub-categories collected under this category (**Figure 87**). Coverage of the different sub-categories varied during the first data collection rounds; four countries collected data for more than 20 sub-categories, five countries collected data for 8-11 sub-categories, and six countries collected data for fewer than six sub-categories. For the last data collection rounds, almost all countries collected data for more than 25 sub-categories.

A direct comparison between years at food category level is therefore not possible for soft drinks for all countries. Seven countries collected a comparable number of sub-categories across at least two time points: Austria (2020 and 2022), Belgium (2018 and 2022), Estonia (2018 and 2022), Finland (2019 and 2022), France (2013 and 2019), Germany (2019 and 2022), and Hungary (2020 and 2022). The following comparisons refer only to these countries and timepoints. Saturated fats content remained stable for two countries: Austria and Belgium at 0.2g. An increase was observed for the remaining five countries with the largest increase for saturated fats for Hungary (from 0.1g to 0.4g), and for the rest the observed increase was of 0.1g.

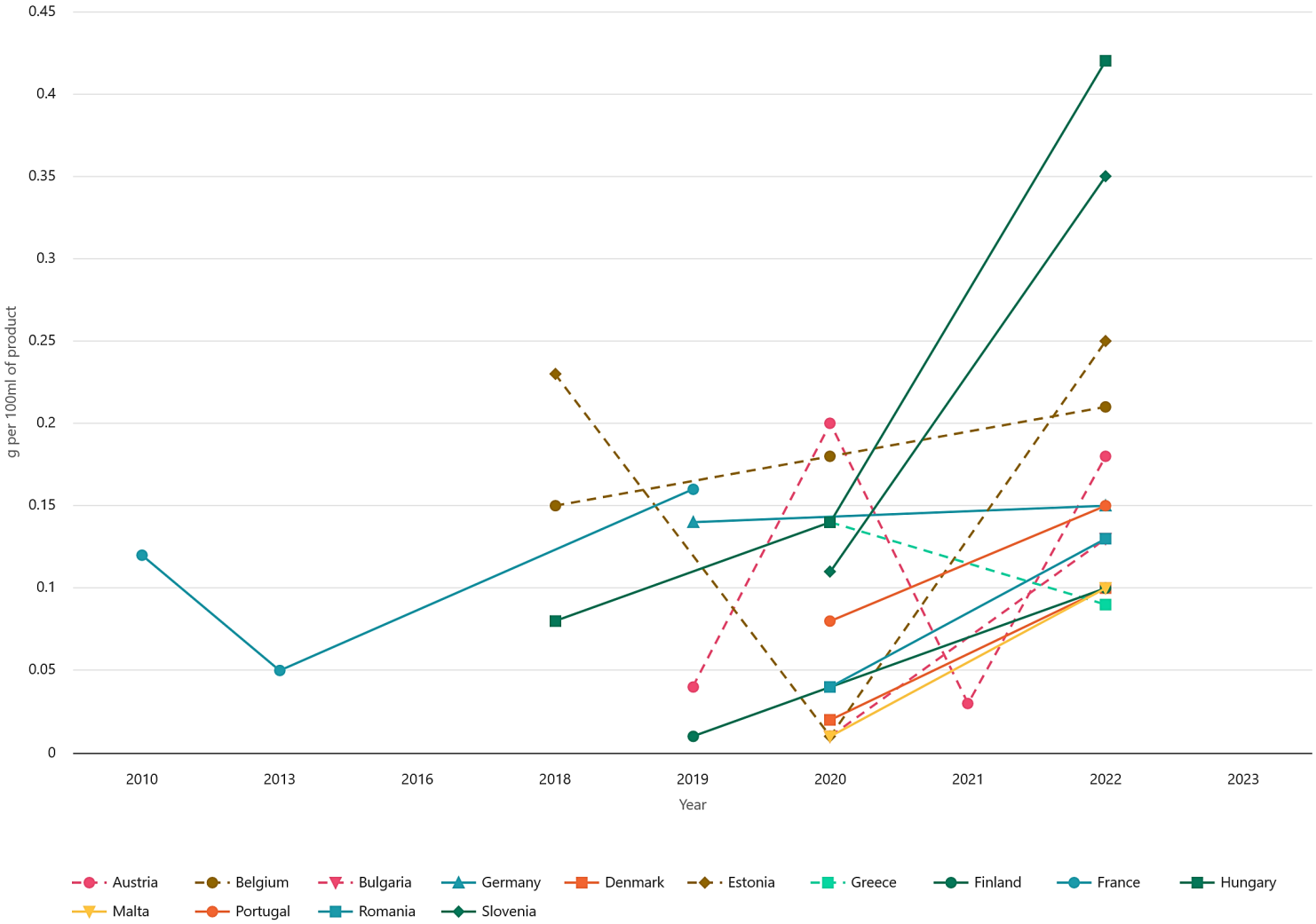
Only three sub-categories have a median value of country averages for saturated fat content above 0.04g per 100g of product ('Flavoured milk beverages': 0.95g; 'Sugar-sweetened plant-based beverages': 0.37g; and 'Plant-based beverages without added sugar': 0.35g). Overall, the widest variation of country averages is noted for the 'Plant-based beverages without added sugar' (range: 0.2-4.9g), and the narrowest for 'Colas without added sugar' (range: 0.000-0.002g) (**Figure 88**).

Figure 86. Distribution of saturated fat content (g/100g product) in soft drinks by country



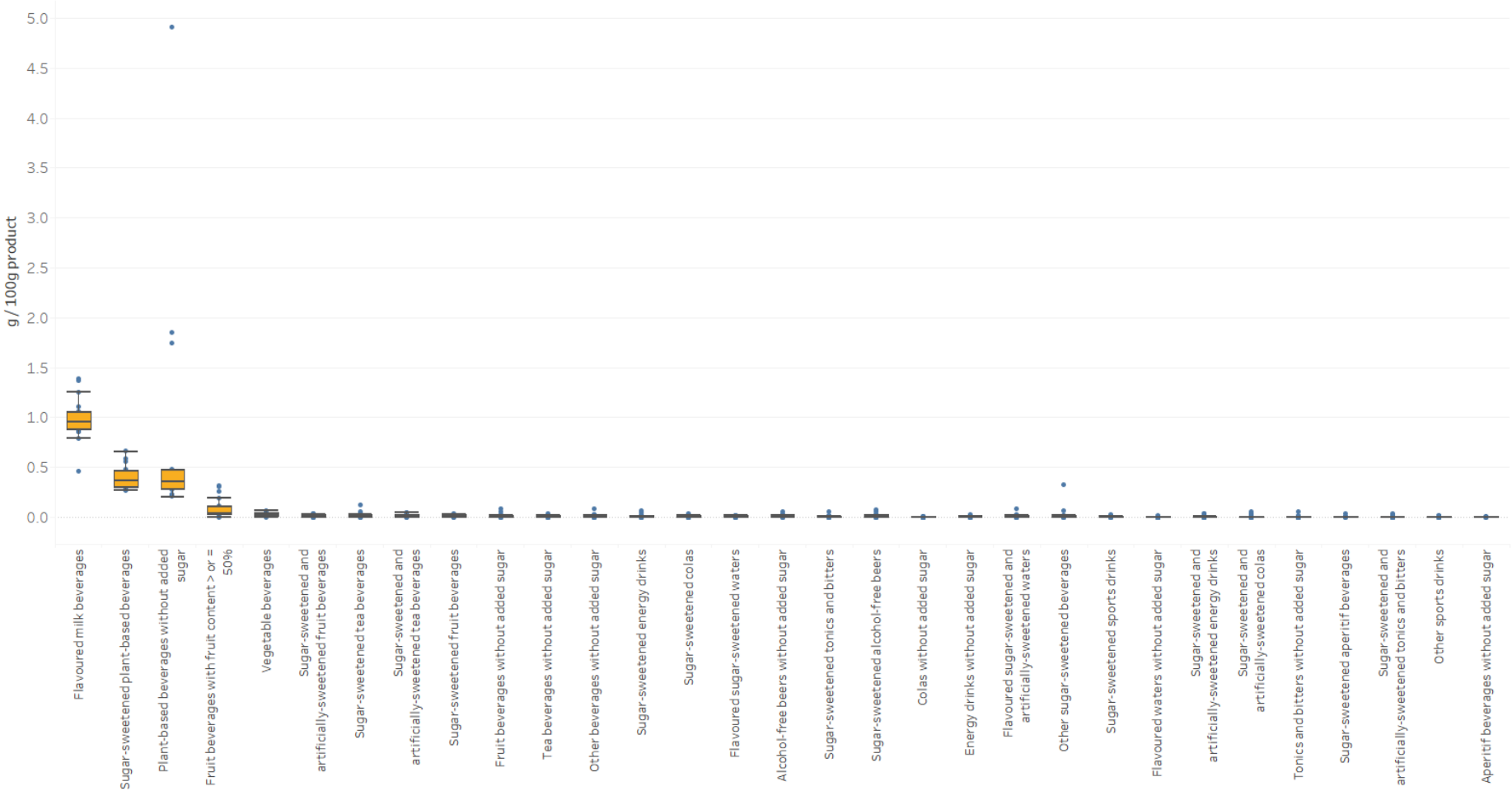
Source: FABLE website

Figure 87. Time trends of saturated fat content (g/100g product) in soft drinks by country



Source: FABLE website

Figure 88. Distribution of country averages for saturated fat content (g/100g product) in soft drinks across different European countries by food sub-category



Source: JRC analysis

3.5.4. Salt

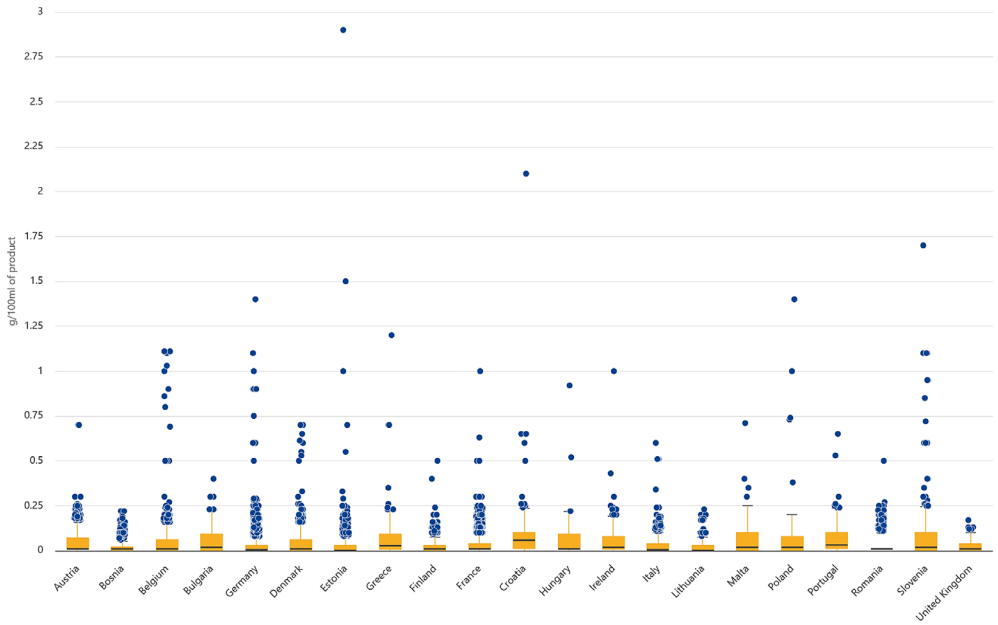
The average salt content per 100g of product for the food category of soft drinks is 0.04g, ranging from 0.02g in Bosnia to 0.08g in Croatia (**Figure 89**). The country with the widest distribution is Estonia (range: 0.00-2.90g with IQR: 0.00g-0.04g), and the one with the narrowest is the UK (range: 0.00-0.17g with IQR: 0.00g-0.04g).

There is no overall explicit direction of salt content time trends in soft drinks (**Figure 90**). There were different levels of coverage of the different sub-categories during the first data collection rounds; four countries collected data for more than 20 sub-categories, five countries collected data for 8-11 sub-categories, and six countries collected data for fewer than six sub-categories. For the last data collection rounds, almost all countries collected data for more than 25 sub-categories.

A direct comparison between years at food category level is therefore not possible for soft drinks for all countries. Seven countries collected a comparable number of sub-categories across at least two time points: Austria (2020 and 2022), Belgium (2018 and 2022), Estonia (2018 and 2022), Finland (2019 and 2022), France (2013 and 2019), Germany (2019 and 2022), and Hungary (2020 and 2022). The following comparisons refer only to these countries and timepoints. A decrease was observed in four countries: France (from 0.06g to 0.04g), Austria (from 0.05g to 0.04g), and Belgium and Hungary (both from 0.06 to 0.05g). Salt content remained stable for Germany at 0.04g. An increase was observed for two countries: Finland (from 0.02g to 0.05g) and Estonia (from 0.04g to 0.05g).

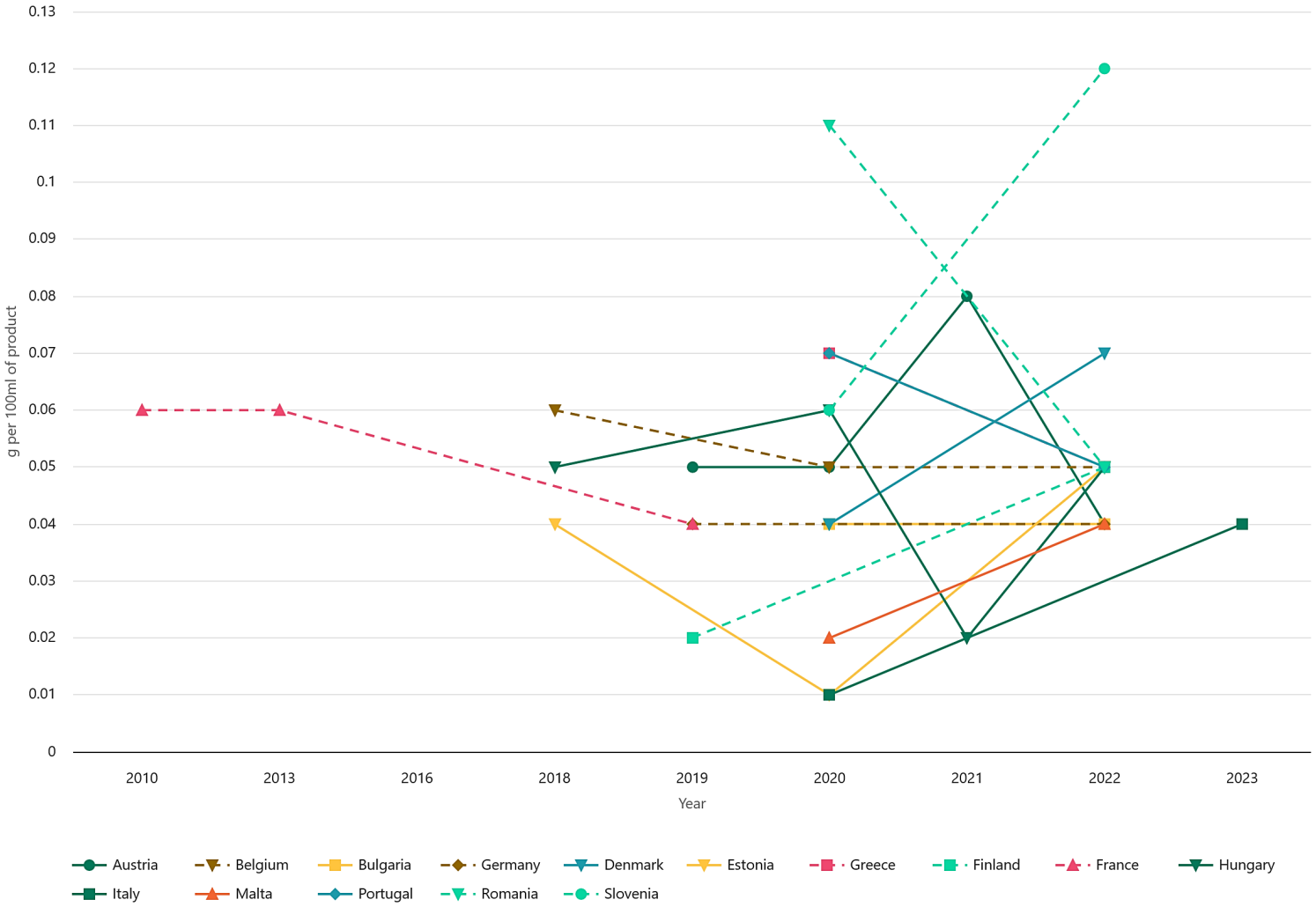
'Flavoured milk beverages' is the sub-category with the highest median value of country averages for salt content with 0.13g per 100g of product. The one with the lowest median value of country averages for salt content is 'Sugar-sweetened tonics and bitters' with 0.004g per 100g of product. Overall, the widest variation of country averages is noted for the 'Sugar-sweetened aperitif drinks' (range: 0.00-0.75g), and the narrowest for 'Sugar-sweetened tonics and bitters' (range: 0.00-0.02g) (**Figure 91**).

Figure 89. Distribution of salt content (g/100g product) in soft drinks by country



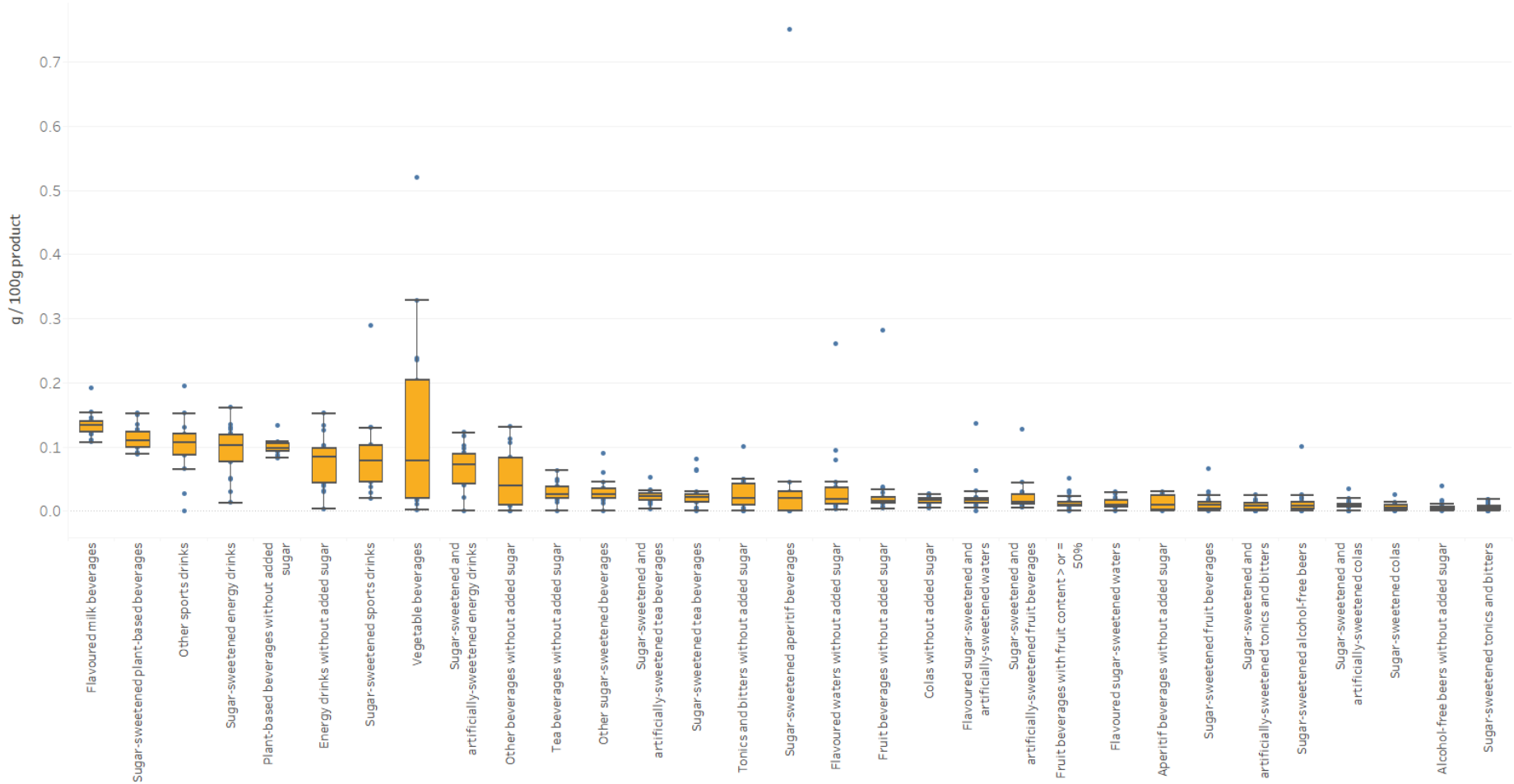
Source: FABLE website

Figure 90. Time trends of salt content (g/100g product) in soft drinks by country



Source: FABLE website

Figure 91. Distribution of country averages for salt content (g/100g product) in soft drinks across different European countries by food sub-category



Source: JRC analysis

3.5.5. Fibre

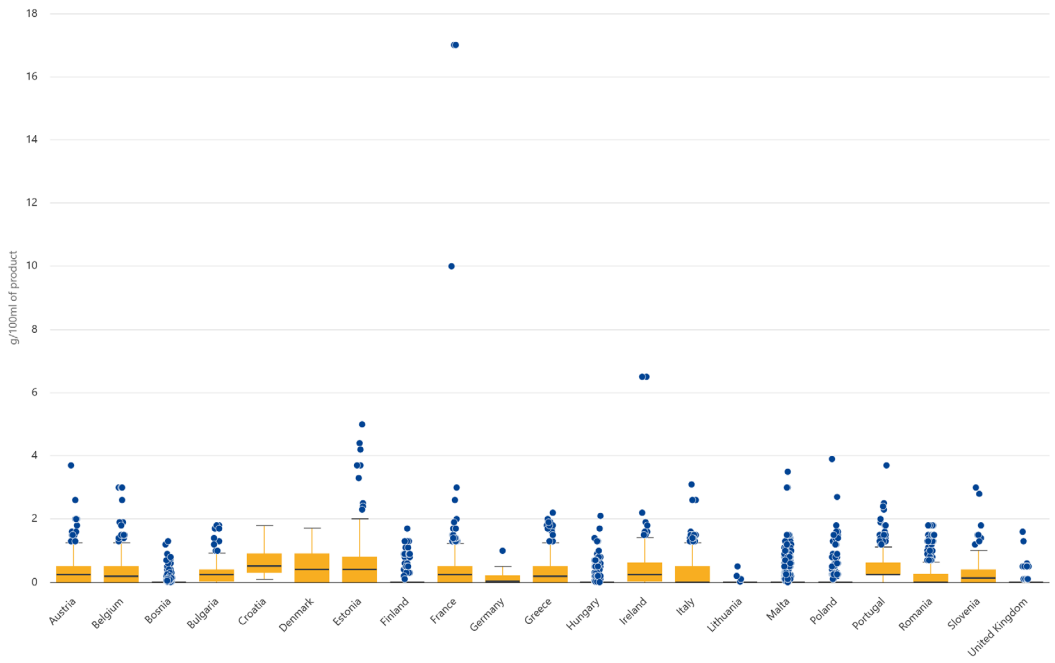
The average fibre content per 100g of product for the food category of soft drinks is 0.3g, ranging from 0.0g in Hungary, Lithuania and Bosnia to 0.6g in Croatia and Estonia (**Figure 92**). The country with the widest distribution is France (range: 0.0-17.0g with IQR: 0.0g-0.5g), and the one with the narrowest is Lithuania (range: 0.0-0.5g with IQR: 0.0g-0.0g).

There is a slight increasing trend of fibre content in soft drinks (**Figure 93**),. There were different levels of coverage of the different sub-categories during the first data collection rounds; four countries collected data for more than 20 sub-categories, five countries collected data for 8-11 sub-categories, and six countries collected data for fewer than six sub-categories. For the last data collection rounds, almost all countries collected data for more than 25 sub-categories.

A direct comparison between years at food category level is therefore not possible for soft drinks for all countries. Seven countries collected a comparable number of sub-categories across at least two time points: Austria (2020 and 2022), Belgium (2018 and 2022), Estonia (2018 and 2022), Finland (2019 and 2022), France (2013 and 2019), Germany (2019 and 2022), and Hungary (2020 and 2022). The following comparisons refer only to these countries and timepoints. An increase was observed for three countries: France (from 0.1g to 0.7g), and Estonia and Finland (which had an increase of 0.1g). A decrease of 0.1g was observed for Hungary and Belgium. Fibre content remained stable for Germany and Austria at 0.1g and 0.3g, respectively.

Only five out of 31 sub-categories have a median value of country averages for total fibre content above 0.1g per 100g of product ('Sugar-sweetened plant-based beverages': 0.6g; 'Vegetable beverages': 0.6g; 'Fruit beverages with fruit content > or = 50%': 0.6g; 'Plant-based beverages without added sugar': 0.6g; and 'Flavoured milk beverages': 0.4g). Overall, the widest variation of country averages is noted for 'Fruit beverages with fruit content > or = 50%' (range: 0.0-1.9g), and the narrowest for 'Colas without added sugar' (range: 0.0-0.1g) (**Figure 94**).

Figure 92. Distribution of fibre content (g/100g product) in soft drinks by country



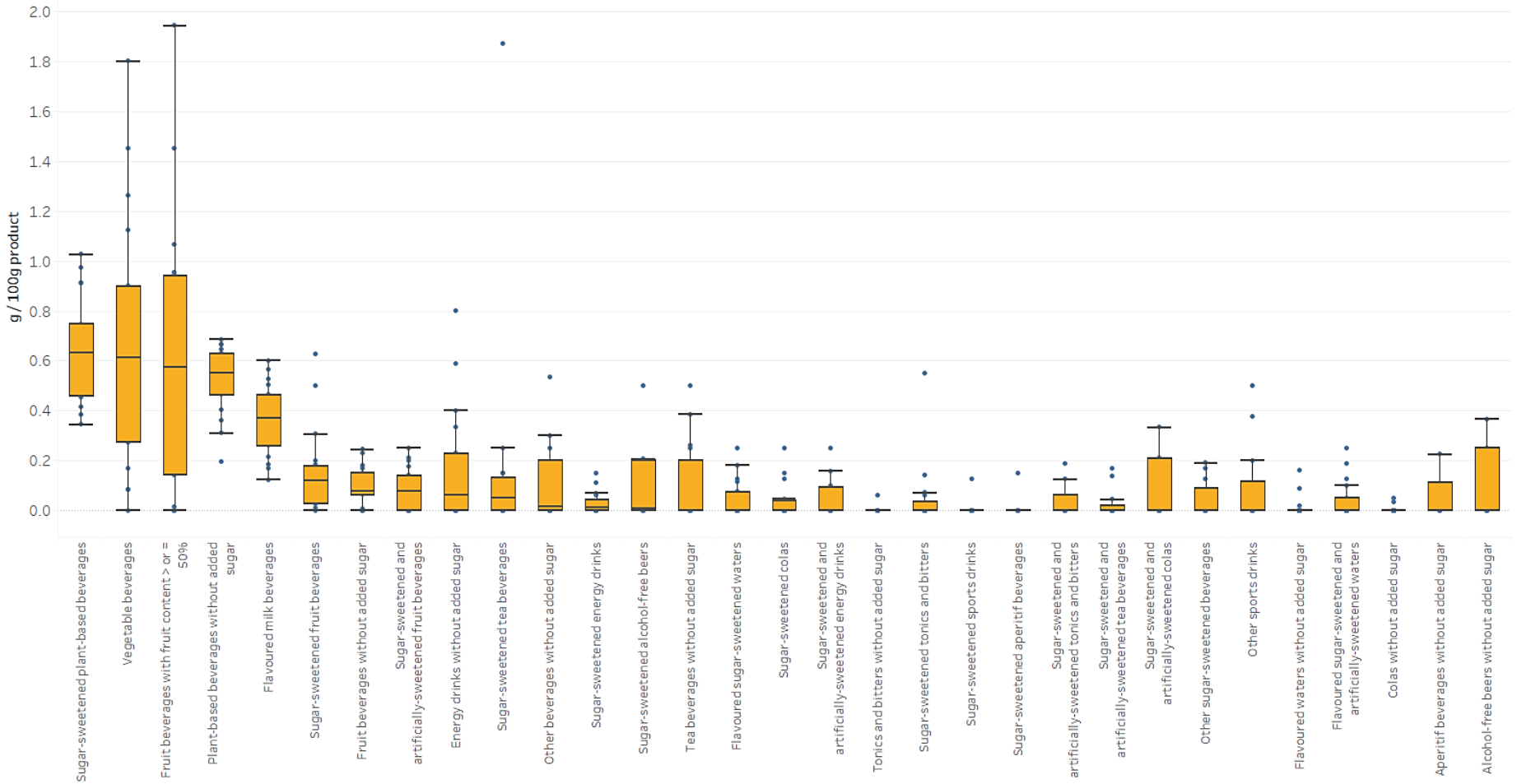
Source: FABLE website

Figure 93. Time trends of fibre content (g/100g product) in soft drinks by country



Source: FABLE website

Figure 94. Distribution of country averages for fibre content (g/100g product) in soft drinks across different European countries by food sub-category



Source: JRC analysis

3.5.6. Protein

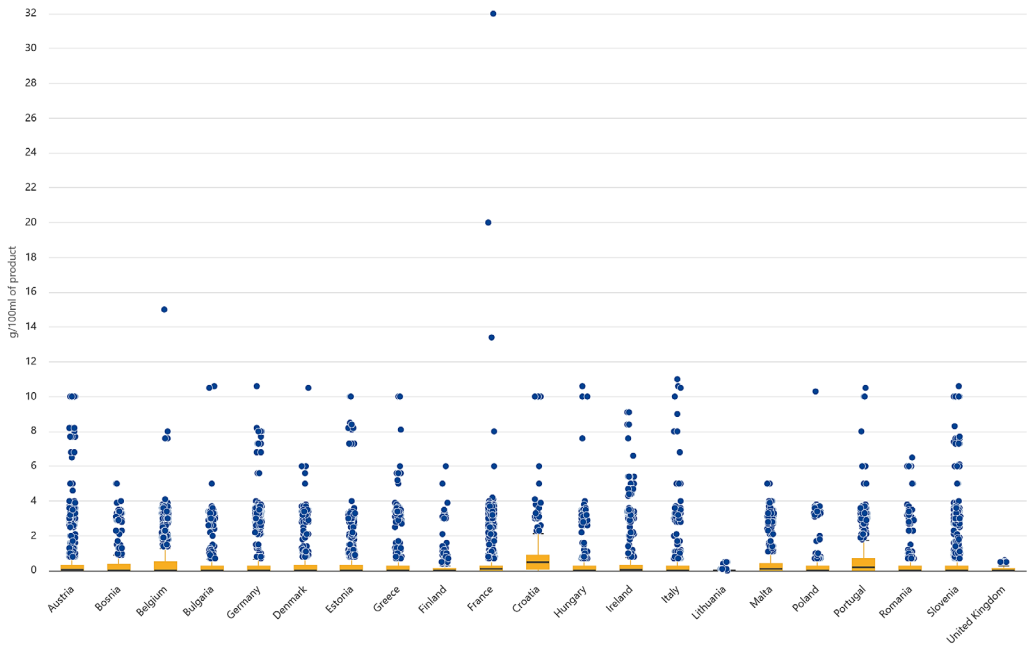
The average protein content per 100g of product for the food category of soft drinks is 0.5g, ranging from 0.0g in Lithuania to 1.0g in Croatia (**Figure 95**). The country with the widest distribution is France (range: 0.0-32.0g with IQR: 0.0g-0.3g), and the one with the narrowest is Lithuania (range: 0.0-0.5g with IQR: 0.0g-0.0g).

There is an overall increasing trend of protein content in soft drinks that could be explained by the extension of sub-categories collected under this category (**Figure 96**). Coverage of the different sub-categories varied during the first data collection rounds; four countries collected data for more than 20 sub-categories, five countries collected data for 8-11 sub-categories, and six countries collected data for fewer than six sub-categories. For the last data collection rounds, almost all countries collected data for more than 25 sub-categories.

A direct comparison between years at food category level is therefore not possible for soft drinks for all countries. Seven countries collected a comparable number of sub-categories across at least two time points: Austria (2020 and 2022), Belgium (2018 and 2022), Estonia (2018 and 2022), Finland (2019 and 2022), France (2013 and 2019), Germany (2019 and 2022), and Hungary (2020 and 2022). The following comparisons refer only to these countries and timepoints. An increase was observed for three countries: Finland (from 0.1g to 0.9g), France (from 0.3g to 0.6g), Hungary (from 0.4g to 0.5g). Protein content remained stable for three countries: Austria, Estonia, and Germany at 0.7g, 0.6g, and 0.4g respectively. A decrease of 0.2g was observed for Belgium.

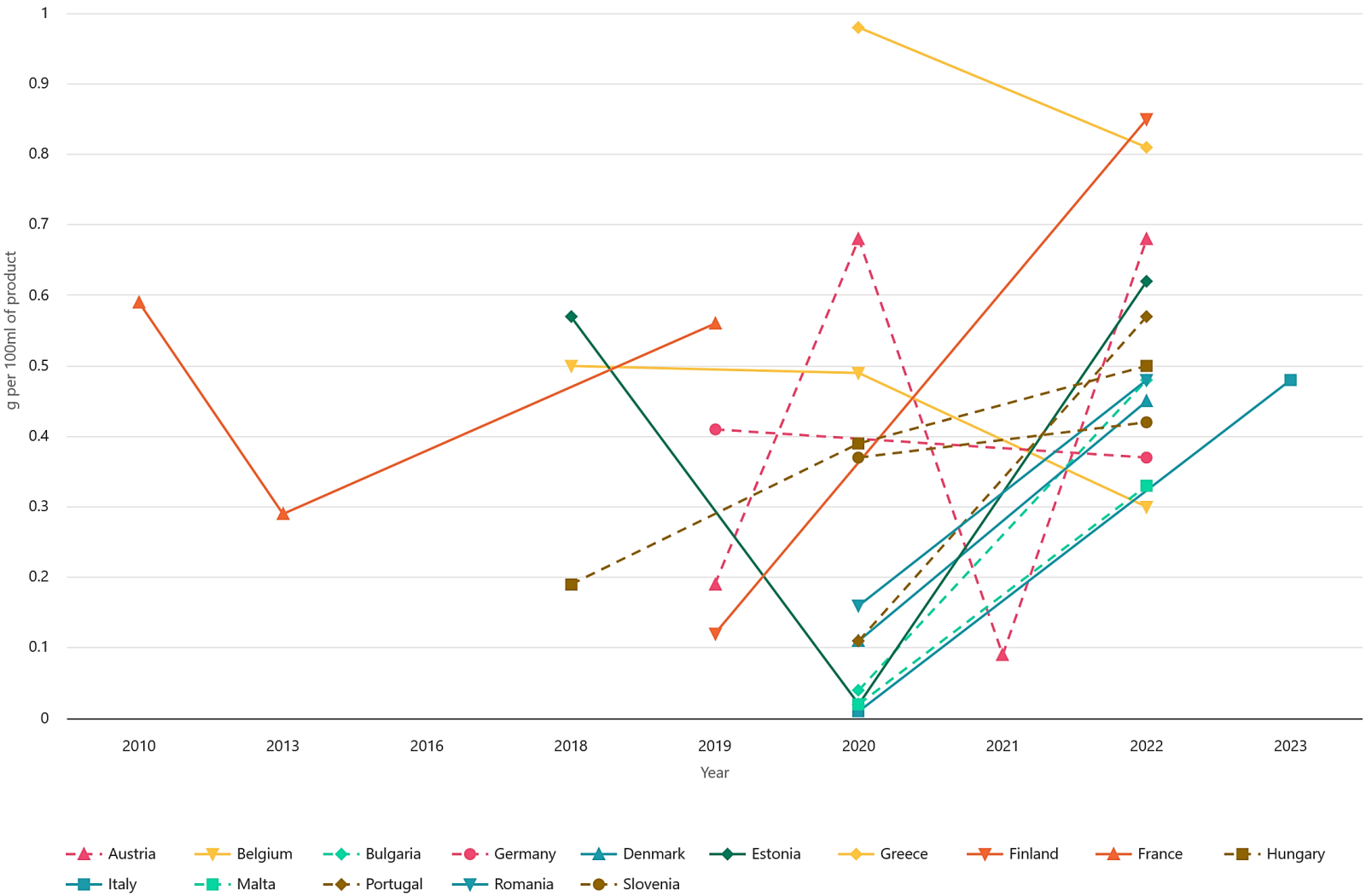
Only three out of 31 sub-categories have a median value of country averages for total protein content above 0.4g per 100g of product ('Flavoured milk beverages': 3.7g; 'Sugar-sweetened plant-based beverages': 1.8g; and 'Plant-based beverages without added sugar': 0.9g). Overall, the widest variation of country averages is noted for the 'Flavoured milk beverages' (range: 2.8-7.7g), and the narrowest for 'Colas without added sugar' (range: 0.00-0.02g) (**Figure 97**).

Figure 95. Distribution of protein content (g/100g product) in soft drinks by country



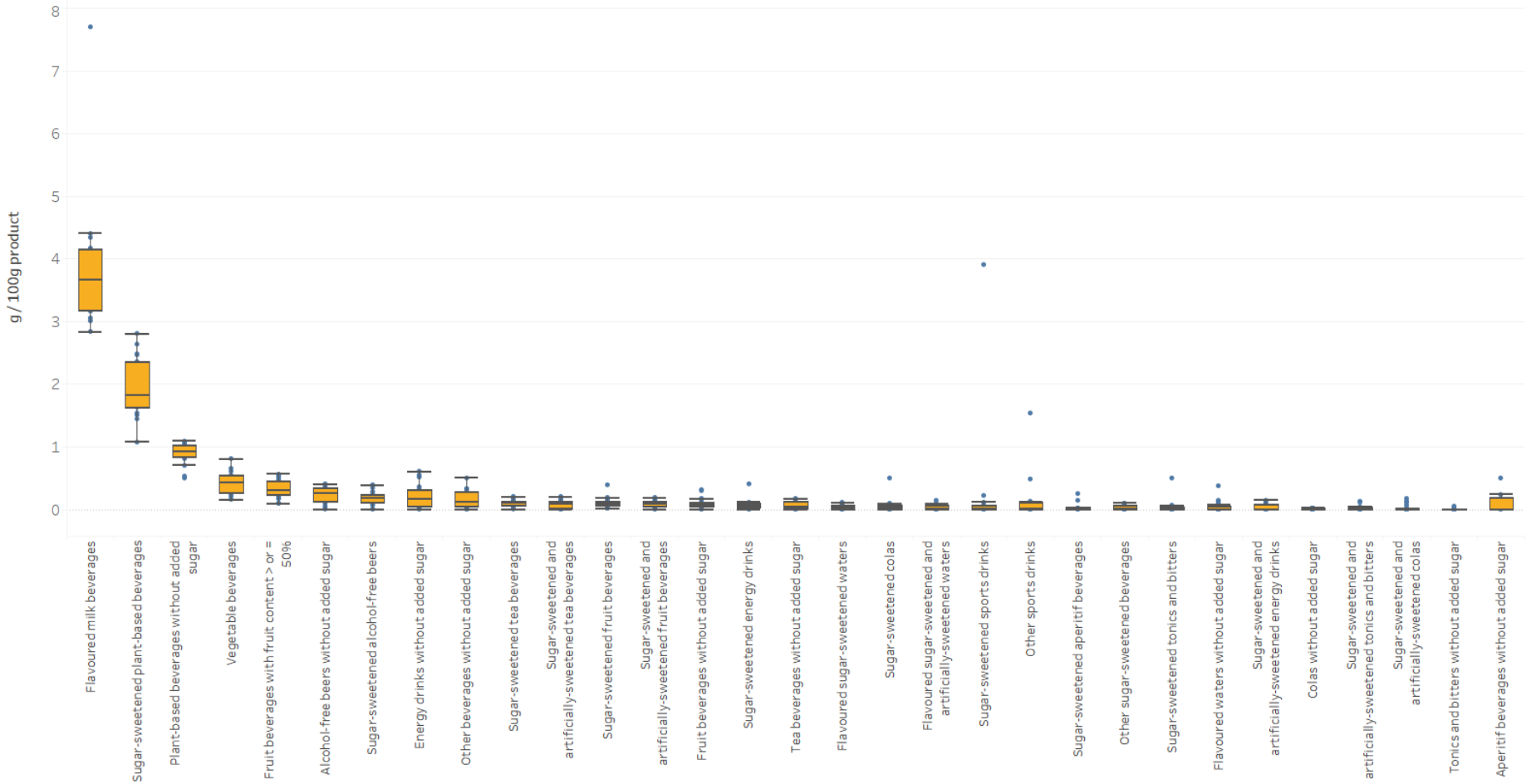
Source: FABLE website

Figure 96. Time trends of protein content (g/100g product) in soft drinks by country



Source: FABLE website

Figure 97. Distribution of country averages for protein content (g/100g product) in soft drinks across different European countries by food sub-category



Source: JRC analysis

4. Discussion

This report describes the status of the nutrition quality of the food offer in Europe, using information available in FABLE. The cross-sectional analyses were done in a sample of 21 countries and the trends analyses in a sample of 16 countries. The report focuses on the five food categories (breakfast cereals, bread products, dairy products, delicatessen meats, and soft drinks) that were prioritised by JA Best-ReMaP (see details on prioritisation process in **Box 1**), but also provides a snapshot of the nutrient content for the rest 27 food categories included in FABLE (see Annex 2). It analyses the content of packaged food and beverages in total sugars, total and saturated fat and salt - that have been identified as important for reformulation purposes for the prioritised food categories (**Table 5**) - as well as fibre and protein.

Similar evaluations have previously been done as part of EUREMO and the JA Best-ReMaP, with smaller coverage compared to this report, in terms of number of products, countries or years examined. EUREMO provided a snapshot of the nutrient content of the food offer across 22 food categories and 16 countries; no information was available on trends (European Commission, 2022). Best-ReMaP performed cross-sectional and trends analyses for the five prioritised food categories, however the selected sample for both included only the eight countries, for which data was available for more than one timepoint (ANSES and Best-ReMaP WP5, 2023).

Table 5. Nutrients for which the prioritised food categories are considered important contributors for at least one population group (children, adolescents or adults).

Food category	Sugars	Total fat	Saturated fat	Salt
Breakfast cereals	yes	yes	yes	yes
Bread products	yes	yes	yes	yes
Fresh dairy products and desserts	yes	yes	yes	no
Delicatessen meats and similar	no	yes	yes	yes
Soft drinks	yes	no	no	no

Source: JRC analysis of ANSES & Best-ReMaP WP5 (2023)

4.1. Nutrient content of products within the same food categories varies widely, across and within countries

There was substantial variability in nutrient content—both across countries, and within individual countries and sub-categories. For example, breakfast cereals ranged from 1.2g to 27.6g of sugars per 100g (**Figure 6**), while delicatessen meats had saturated fat levels spanning 0.7g to 14.2g per 100g (**Figure 69**). Such high nutrient variability indicates that healthier alternatives already exist within the same category, demonstrating that improvement is feasible. Apparent differences between countries (e.g., lower average sugars content in one country vs. another) may reflect discrepancies in sub-category representation within a food category. For instance, a country with a higher proportion of "unleavened breads" (low in sugars/fats) within the “bread products” category might lower the average content for total sugars and total or saturated fats compared to a country

with more "fine bakery wares" (high in sugars/fats) in this food category (see Annex 2 for sub-category definitions). It is therefore important to assess the quality of the food offer also at subcategory level.

Further to the variation of the nutrient content which could highlight the food categories where reformulation is possible, it is also useful to try and understand how these food categories contribute towards the overall nutrient intakes, and therefore how impactful reformulation would be. For this reason, this chapter also refers to the recommended daily nutrient intakes (**Table 6**), as well as the estimated actual intakes from these prioritised food categories combining the average nutrient content from our analyses and the EFSA food consumption data (**Table 7**).

Table 6. Recommended intakes of free sugars, total and saturated fat, salt and fibre in adults.

Nutrient	Source	Recommended intake	Recommended daily intake in 2000 kcal diet
Free sugars	(World Health Organization, 2015)	max. 5-10% of total energy intake	max. 25-50g
Total fat	(EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA), 2010b)	20-35% of total energy intake	44-78g
	(World Health Organization, 2023c)	Less than 30% of total energy intake	Less than ~67g
Saturated fat	(EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA), 2010b)	As little as possible	-
	(World Health Organization, 2023b)	Less than 10% of total energy intake	Less than ~22g
Salt	(EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA) et al., 2019)	5g per day	5g
Fibre	(EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA), 2010a)	25g per day	25g
	(World Health Organization, 2023a)	At least 25g per day of naturally occurring dietary fibre	25g

Source: JRC analysis of cited sources

For sugars content, recommendations exist only for free sugars (**Table 6**), thus not allowing for a direct comparison with the total sugars content that is available on-pack. Taking a rough estimate of the free sugars content (100% of total sugars for soft drinks and 50% of total sugars for the other four prioritised categories (EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA) et al., 2022)), our results (**Figure A3. 1**) reveal that many products could have a free sugars content per 100g that is higher than the daily maximum intake. Country average daily intake of total sugars derived from the five prioritised food categories ranges between 16.2g-37.0g (**Table 7**). Using the same approach for estimating free sugars, as mentioned above, country averages for daily free sugars intakes ranged between 10.1g-29.2g from just these five prioritised categories; thus collectively contributing between 2% and 5.8% of a total energy intake of 2000kcal. However, it is important to take into account that the average values may be masking potential issues for high- or low- consumers. For example, the intake of total sugars from breakfast cereals for those actually consuming breakfast cereals is on average more than double the average of the total population (**Table 7**), and can be close to 10-fold in some countries (results not shown).

When looking at total fat content (**Figure A3. 2**), many delicatessen meats and similar products have a total fat content (per 100g) that surpasses the daily recommendations for total fat intake set by the European Food Safety Authority (EFSA) and WHO (**Table 6)**. A few breakfast cereals products and bread products also exceeded this daily limit. Daily country average intake of total fat derived from the five prioritised food categories ranges between 9.6-25.0g (**Table 7**). Very few products had a saturated fat content per 100g (**Figure A3. 3**) that was above the daily recommended intake (**Table 6**). When looking at the average saturated fat intake at country level, only Denmark and the UK had saturated fat intakes less than 3.5g coming from these five food categories; all the rest had intakes between 5.4g and 10g, accounting for 1/3 to around ½ of the maximum recommended intakes (**Table 7**).

Similarly, for salt content (**Figure A3. 4**), many delicatessen meats and similar products have a salt content (per 100g) that exceeds the daily recommendations for a maximum of 5g of salt intake daily (**Table 6**). Except for the UK, where the country average salt intake from these five food categories is 1.67g (or 1/3 of the maximum recommended intake), for the rest of the countries, just these five priority groups contribute between 40% and 62% of the maximum recommended daily intake, with most of it coming from consumption of bread products (**Table 7**).

When looking at fibre content (**Figure A3. 5**), several breakfast cereals and bread products have a fibre content per 100g that reaches the recommended daily amount of 25g (**Table 6**). However, the WHO's recommendation specifically highlights that those grams of fibre should be attained by naturally occurring dietary fibre, which is something that cannot be assessed using the nutritional declaration information, and would require an evaluation of the ingredients list. Even with this caveat (that would potentially overestimate the intake of desired fibre), bread products is the biggest contributor of dietary fibre intake among these five priority groups across all countries; breakfast cereals seem to contribute less than 2 g daily in the majority of the countries (**Table 7**).

Table 7. Daily consumption of the five prioritised food categories by adults in European countries, and estimated intakes of total sugars, total and saturated fat, salt and fibre coming from these foods.

Food category	Population	Daily consumption (in grams) [a]	Total sugars intake (in grams) [b]	Total fat intake (in grams) [b]	Saturated fat intake (in grams) [b]	Salt intake (in grams) [b]	Fibre intake (in grams) [b]
Breakfast cereals	Total	1.7-72.4	0.3-8.4	0.1-5.9	0.0-1.4	0.01-0.31	0.1-6.9
Breakfast cereals	Consumers only [c]	15.1-162.4	2.4-17.1	1.2-13.2	0.3-3.1	0.07-0.70	1.1-15.4
Bread products	Total	107.9-194.3	4.5-15.2	4.1-14.7	0.8-5.0	1.01-2.31	5.1-15.3
Fresh dairy products	Total	23.1-133.9	2.5-12.4	0.8-5.0	0.6-3.2	0.03-0.16	0.0-0.6
Delicatessen meat	Total	10.1-30.5	0.1-0.2	1.9-6.2	0.7-2.1	0.29-0.74	0.0-0.3
Soft drinks	Total	57.8-349.8	4.0-21.3	0.2-2.1	0.0-1.4	0.02-0.17	0.0-1.4
All five categories	Total		16.2-37.0	9.6-25.0	2.9-10.0	1.67-3.12	6.9-19.3

[a] Daily consumption is based on the EFSA consumption surveys (EFSA, 2026) which are presented by country and not summarised at EU level. Consumption is therefore indicated as a range of the lowest to the highest average consumption at country level. Only countries with available data in both EFSA and FABLE datasets (Austria, Belgium, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Romania, and United Kingdom) have been taken into account.

[b] Nutrient intakes are estimated using the average daily consumption of each food category (in grams) at country level and the average nutrient content of each food category again at country level. It has been assumed that all products consumed are packaged.

[c] Nutrient intakes for people consuming a specific food category could be estimated only for those consuming breakfast cereals. For more details, see Section 2.4.

Source: JRC analysis

4.2. Mixed progress in nutrient reformulation of packaged foods and beverages: advances in some nutrients, setbacks in others

An overview of the direction of the nutrient content changes observed throughout the years, as described in detail in Chapter 3, is presented in **Table 8**. No single food category demonstrated uniform changes across all examined nutrients.

Table 8. Summary of trends in nutrient content of products, by food category

Nutrient	Breakfast cereals	Bread products[1]	Fresh dairy products and desserts	Delicatessen meat & similar	Soft drinks [1]
Sugars	Decreased	Increased	Decreased	Increased	No clear direction
Total fat	Increased	Increased	Increased	No clear direction	Increased
Saturated fat	Increased	Increased	Increased	No clear direction	Increased
Salt	Decreased	Decreased	Increased	Decreased	No clear direction
Protein	Increased	Decreased	Increased	Decreased	Increased
Fibre	Increased	Decreased	No clear direction	Decreased	Increased

[1] Trends could be driven by the inclusion of more sub-categories in the later data collection timepoints.

Source: JRC analysis

Breakfast cereals exhibited a notable decrease in total sugars across most countries (**Figure 5**), with 15 out of 16 countries reducing total sugars content between their earliest and latest data collection points. The largest reduction was observed in Bulgaria (from 26.2g to 17.1g per 100g), while Denmark maintained stable, relatively low total sugars levels (~14.6g). However, this progress was offset by increases in total and saturated fats (**Figure 8** and **Figure 11**). This trend is concerning, as excess saturated fat intake is linked to cardiovascular risks (World Health Organization, 2023b).

Trends in bread products were heavily influenced by the inclusion of bakery sub-categories (e.g., croissants, brioches) in later data collections, which skewed averages upward for total sugars, total and saturated fats (**Figure 24**, **Figure 27** and **Figure 30**). When analysing only bread-related sub-categories (e.g., sandwich breads, rusks), salt content decreased in most countries (**Figure 33**), aligning with EU salt reduction targets (EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA) et al., 2019; European Commission: High Level Group on Nutrition and Physical Activity, 2008). However, fibre and protein content declined, particularly in Finland and Hungary, where fibre in bread dropped by 1-2g/100g (**Figure 36**).

In fresh dairy products and desserts, total sugars reduction is overshadowed by total and saturated fat content increases. While total sugars decreased in 11 out of 15 countries (**Figure 43**), total and saturated fats increased in most (**Figure 46** and **Figure 49**). Salt content also rose in 10 out of 15 countries, counteracting progress in sugars reduction (**Figure 52**).

Salt content decreased in 8 out of 14 countries for delicatessen meats and similar products (**Figure 71**), with Finland achieving the largest reduction (from 2.90g to 2.09g/100g). However, total fat trends were inconsistent: for example, while Slovenia reduced fat content (from 25.3g to 19.2g/100g), Malta saw an increase (from 13g to 18.2g/100g). The protein content declined in 8 countries, including a sharp drop in Finland (from 18.4g to 13.3g/100g), possibly due to dilution with non-meat ingredients (e.g., plant-based analogues to meat). This warrants a better understanding about potential nutritional trade-offs in reformulated or novel products.

Total sugars trends in soft drinks were difficult to interpret due to varying sub-category coverage across data collection rounds. In the later time points the number of sub-categories included for each country was similar, however, in the first data collection rounds it varied from fewer than six sub-categories to over 20. When looking at just the sub-sample of countries with comparable number of food sub-categories collected between at least two data points, then there is no overall explicit direction of the content of total sugars, whereas total and saturated fats increased.

4.3. Analysis of nutrient content at subcategory level highlights opportunities or challenges for reformulation

The extent of nutrient-content differences between food-subcategories belonging in the same food category varied substantially. In addition, large variations observed within food sub-categories indicate healthier alternatives already exist alongside less healthy products in the specific sub-category thus signalling a higher potential for reformulation.

The largest variation for total sugars between food sub-categories (26.4g) was observed in 'breakfast cereals' (**Figure 44**), followed closely by 'fresh dairy products and desserts' (26.1g) (**Figure 6**). The largest variation for total and saturated fat (34.5g and 13.5 g, respectively) was observed in 'delicatessen meat and similar' products (**Figure 66** and **Figure 69**). For salt, the largest variation between country averages for food-subcategories was observed in 'delicatessen meat and similar' products (**Figure 72**) and in 'bread products' (**Figure 34**) (3.20g and 3.03g, respectively).

However as already noted in Chapter 4.2, it is important to get a better understanding of the bigger picture and examine all nutrients together. To facilitate interpretation, food sub-categories were classified into tertiles based on their nutrient content, for each of the examined nutrients (Annex 4).

In breakfast cereals, sub-categories with lower total sugars content, often also scored favourably for total fat, saturated fat and salt, whereas those with higher total sugars content tended to be unfavourable for all nutrients (**Table A4. 1**). Two sub-categories consistently occupied the favourable tertiles for every nutrient: 'high-fibre cereals' and 'cereals without added sugar'. In contrast, 'chocolate and caramel cereals', 'cereal flakes with chocolate/nuts' and 'filled cereals' ranked unfavourably across the board. Only three of the 15 sub-categories had favourable profiles for 4 or more of the nutrients examined.

In bread products, subcategories with the lowest total sugars content generally also had lower total and saturated fat levels and higher fibre, but they tended to be higher in salt – a common issue for

many breads where salt contributes to texture and flavour. On the other hand, sub-categories with a higher total sugars content (mainly bakery products) were similarly high in total and saturated fat, high in salt, and low in fibre (**Table A4. 2**). When all nutrients were assessed, 'unleavened breads' was the best ranking subcategory whereas 'fine bakery wares: croissants' and 'plain brioches' were the two sub-categories that ranked the most unfavourably across the board. Six of the 16 bread-related sub-categories had favourable profiles for 4 or more of the nutrients examined whereas none of the 10 bakery-related ones did. In fact, 8 out of the 10 bakery-related sub-categories had unfavourable profiles for 4 or more of the nutrients examined.

In fresh dairy products and desserts, overall nutrient profiles deteriorated with increasing total sugars content (**Table A4. 3**). Yoghurts, fermented milks and fresh cheeses with no added sugars or that were artificially sweetened also had lower total and saturated fat, and higher protein compared to their sweetened variations; plant-or soy-based products had higher fibre but also higher salt content and lower protein content. Desserts, besides being at the higher end of total sugars content, also had an overall unfavourable profile with higher total and saturated fat, higher salt and lower protein; they also had a higher fibre content, potentially because of other ingredients such as fruit or cereals in their recipes.

In delicatessen meat and similar products, most of the sub-categories on the lowest end for total and saturated fat content, have mid-range content for salt, total sugars, protein and fibre. Those with the highest content of total fat, also are on the highest end for saturated fat and salt content, with some having among the highest content for total sugars and the lowest for fibre (**Table A4. 4**). Only one of the 20 sub-categories ('other cured meats') had favourable profiles for 4 or more of the nutrients examined. However, even this sub-category should be considered for reformulation; its salt content, that is mid-range for this food category, is actually high (median of country averages: 3.30g, range: 1.99g- 4.37g) (**Figure 72**) when compared to the recommendations. Consuming 100g from this sub-category alone could provide around 2/3 of the daily allowed salt intake (range between 40 and 90%, depending on the country).

Soft drinks had a wide variation in total sugars content, but otherwise negligible amounts (close to 0g) for many of the other examined nutrients (total and saturated fat, protein and fibre), as expected. Subcategories with the lowest total sugars content, generally had favourable profiles for the other nutrients as well except for 'plant-based beverages without added sugar' that exhibited a poorer profile for the other nutrients of concern (total and saturated fat, and salt) (**Table A4. 5**).

5. Conclusions

This report describes nutrition quality of packaged food and beverages in Europe, using information available in FABLE on total sugars, total and saturated fat, salt, fibre and protein. It focuses mainly on five food categories (breakfast cereals, bread products, dairy products, delicatessen meats, and soft drinks).

Substantial nutrient-content variation existed both between countries and within food categories, confirming that healthier alternatives already coexist with less healthy options. Analysing nutrients at sub-category level revealed which groups of products reformulation efforts should focus on to maximise their effectiveness. Using this evidence along with data from food consumption or dietary surveys, countries can better define the targets of their reformulation efforts. Time-series data from countries with multiple collection points confirmed that reformulation is already occurring, but often in an unbalanced manner. While, advances have been made for some nutrients, compensatory practices have hindered the progress in others. Our findings underscore that reformulation must be holistic, addressing all nutrients of concern simultaneously to avoid unintended nutrient trade-offs.

This report summarises the latest information on the quality of the food offer across Europe, provides the evidence base for setting targets for reformulation and suggests using FABLE as a benchmark for national policies and monitoring efforts. Ongoing data collection under the JA PreventNCD will enrich the FABLE database, providing more up-to-date evidence to guide future regulatory and industry actions aimed at healthier consumer choices across Europe.

Box 2. Suggestions for future actions regarding food reformulation

- Target the sub-categories with the worst nutrient profiles (e.g., 'filled cereals' for total sugars, 'cured ham' for salt)
- Promote multi-nutrient reformulation rules - avoid 'trading-off' one nutrient for another
- Standardise data collection (same time-points, same methods) to enable clearer cross-country monitoring and better trend analysis
- Use the FABLE database as a benchmark for national reformulation targets and to track progress over time

Curious to dig deeper?

You'll find more information for all 32 food categories and 21 European countries on the FABLE website.

References

Afshin, A., Sur, P. J., Fay, K. A., Cornaby, L., Ferrara, G. et al. (2019), 'Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017', *The Lancet*, Vol. 393, Issue 10184, pp. 1958–1972, https://doi.org/10.1016/S0140-6736(19)30041-8.

ANSES and Best-ReMaP WP5 (2023), 'D5.3: Report on reformulation monitoring: monitoring implementation, nutritional composition comparisons and impacts on nutrient intakes (Grant Agreement Number 951202)', 25 September, https://bestremap.eu/wp-content/uploads/2024/04/D5.3.pdf.

ANSES and Sciensano (2023), 'D5.2: Final guidelines for a European harmonised and sustainable monitoring system of the processed food supply', Project Deliverable, 30 March, https://bestremap.eu/wp-content/uploads/2023/04/Best-ReMaP-Guidelines-D5.2_final.pdf.

Commission of the European Communities (2007), 'White Paper on a Strategy for Europe on Nutrition, Overweight and Obesity related health issues', COM(2007) 279, 30 May, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52007DC0279.

Council of the European Union (2014), 'Council conclusions on nutrition and physical activity', 20 July, https://www.consilium.europa.eu/media/28049/143285.pdf.

Council of the European Union (2016), 'Council conclusions on food product improvement', 23 July, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016XG0723(01).

EFSA (2026), 'Food Consumption', accessed 23 July 2026, https://www.efsa.europa.eu/en/data-report/food-consumption.

EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA) (2010a), 'Scientific Opinion on Dietary Reference Values for carbohydrates and dietary fibre', *EFSA Journal*, Vol. 8, Issue 3, IT, https://doi.org/10.2903/j.efsa.2010.1462.

EFSA Panel on Dietetic Products, Nutrition, and Allergies (NDA) (2010b), 'Scientific Opinion on Dietary Reference Values for fats, including saturated fatty acids, polyunsaturated fatty acids, monounsaturated fatty acids, trans fatty acids, and cholesterol', *EFSA Journal*, Vol. 8, Issue 3, IT, https://doi.org/10.2903/j.efsa.2010.1461.

EFSA Panel on Nutrition, Novel Foods and Food Allergens (NDA), Turck, D., Castenmiller, J., de Henauw, S., Hirsch-Ernst, K. et al. (2019), 'Dietary reference values for sodium', *EFSA Journal*, Vol. 17, Issue 9, IT, https://doi.org/10.2903/j.efsa.2019.5778.

European Commission (2012), 'ANNEX I: SATURATED FAT. EU FRAMEWORK FOR NATIONAL INITIATIVES ON SELECTED NUTRIENTS. Ref. Ares(2012)699700 - 12/06/201', https://health.ec.europa.eu/publications/saturated-fat-eu-framework-national-initiatives-selected-nutrients_en.

European Commission (2018), 'Marketplace workshop on nutrition and physical activities best practices', https://health.ec.europa.eu/events/marketplace-workshop-nutrition-and-physical-activities-best-practices_en.

European Commission (2019), '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', http://data.europa.eu/eli/reg/2019/649/oj.

European Commission (2020), 'Farm to fork strategy. For a fair, healthy and environmentally-friendly food system', https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en.

European Commission (2022), 'EU REformulation MOnitoring (EUREMO) – Feasibility study for a monitoring system on reformulation initiatives for salt, sugars and fat – Final report', Publications Office of the European Union, https://data.europa.eu/doi/10.2925/308861.

European Commission (2025a), 'COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS on an EU cardiovascular health plan: the Safe Hearts Plan', COM(2025) 1024 final, 16 December, https://health.ec.europa.eu/publications/communication-eu-cardiovascular-health-plan-safe-hearts-plan_en.

European Commission (2025b), 'Non-communicable diseases prevention', Health Promotion and Disease Prevention Knowledge Gateway website, 2 April, accessed 23 June 2026, https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/topic/non-communicable-diseases-prevention_en.

European Commission (2026a), 'Dietary Fats', Health Promotion and Disease Prevention Knowledge Gateway website, 13 February, accessed 23 July 2026, https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/dietary-fats_en.

European Commission (2026b), 'Dietary Fibre', Health Promotion and Disease Prevention Knowledge Gateway website, 3 December, accessed 23 July 2026, https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/dietary-fibre_en.

European Commission (2026c), 'Dietary Salt/Sodium', Health Promotion and Disease Prevention Knowledge Gateway website, 16 February, accessed 23 July 2026, https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/dietary-salt/sodium_en.

European Commission (2026d), 'Sugars and Sweeteners', Health Promotion and Disease Prevention Knowledge Gateway website, 16 February, accessed 23 July 2026, https://knowledge4policy.ec.europa.eu/health-promotion-knowledge-gateway/sugars-sweeteners_en.

European Commission: Directorate-General for Health and Food Safety (2014), 'EU Action Plan on Childhood Obesity 2014-2020', https://health.ec.europa.eu/publications/eu-action-plan-childhood-obesity-2014-2020_en.

European Commission: Directorate-General for Health and Food Safety (2016a), 'Netherlands EU Presidency: Roadmap for action on food product improvement', 22 February, https://health.ec.europa.eu/publications/netherlands-eu-presidency-roadmap-action-food-product-improvement_en.

European Commission: Directorate-General for Health and Food Safety (2016b), 'Slovakia EU Presidency: Best practices of the Member States in food reformulation', https://health.ec.europa.eu/publications/slovakia-eu-presidency-best-practices-member-states-food-reformulation_en.

European Commission: Directorate-General for Health and Food Safety (2018), 'Call from the HLG members to the EU Platform members on food reformulation',

https://health.ec.europa.eu/publications/call-hlg-members-eu-platform-members-food-reformulation_en.

European Commission: High Level Group on Nutrition and Physical Activity (2008), 'EU FRAMEWORK FOR NATIONAL SALT INITIATIVES.', https://health.ec.europa.eu/publications/eu-framework-national-salt-initiatives_enf.

European Commission: High Level Group on Nutrition and Physical Activity (2011), 'EU FRAMEWORK FOR NATIONAL INITIATIVES ON SELECTED NUTRIENTS.', https://health.ec.europa.eu/publications/eu-framework-national-initiatives-selected-nutrients_en.

European Commission: High Level Group on Nutrition and Physical Activity (2015), 'Annex II, Added Sugars. EU FRAMEWORK FOR NATIONAL INITIATIVES ON SELECTED NUTRIENTS.', https://health.ec.europa.eu/publications/added-sugars-annex-eu-framework-national-initiatives-selected-nutrients_en.

Galea, G., Ekberg, A., Ciobanu, A., Corbex, M., Farrington, J. et al. (2025), 'Quick buys for prevention and control of noncommunicable diseases', *The Lancet Regional Health - Europe*, Vol. 52, p. 101281, https://doi.org/10.1016/j.lanepe.2025.101281.

Global Burden of Disease Collaborative Network (2024), 'Global Burden of Disease Study 2023 (GBD 2023) Results', Institute for Health Metrics and Evaluation (IHME), Seattle, United States, https://vizhub.healthdata.org/gbd-results?params=gbd-api-2023-permalink/ba3cad1fc486be3a4644809d35b384e8.

Grammatikaki, E., Dias, J., Rovera, M., Bailas, L., Ben, E. et al. (2023), 'Food and Beverages Labels Explorer - FABLE website', No JRC135985, European Commission, https://food-labels-explorer.jrc.ec.europa.eu/sites/default/files/2023-12/JRC135985_FABLE%20website.pdf.

OECD (2026), *The Health and Economic Benefits of Tackling Non-Communicable Diseases*, OECD Health Policy Studies, OECD Publishing, https://doi.org/10.1787/e20cbbc3-en.

World Health Organization (ed.) (2015), *Guideline: Sugars intake for adults and children*, World Health Organization, Geneva, Switzerland, https://www.who.int/publications/i/item/9789241549028.

World Health Organization (ed.) (2023a), *Carbohydrate intake for adults and children: WHO guideline*, World Health Organization, Geneva, https://www.who.int/publications/i/item/9789240073593.

World Health Organization (ed.) (2023b), *Saturated fatty acid and trans-fatty acid intake for adults and children: WHO guideline*, World Health Organization, Geneva, https://www.who.int/publications/i/item/9789240073630.

World Health Organization (2023c), *Total fat intake for the prevention of unhealthy weight gain in adults and children: WHO guideline*, World Health Organization, Geneva, https://www.who.int/publications/i/item/9789240073654.

World Health Organization (ed.) (2024), *Tackling NCDs: best buys and other recommended interventions for the prevention and control of noncommunicable diseases, second edition*, Geneva: ; 2024. Licence: CC BY-NC-SA 3.0 IGO., https://www.who.int/publications/i/item/9789240091078.

World Health Organization (2025), 'Noncommunicable diseases', Fact sheets website, 25 September, accessed 23 July 2026, https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases.

List of abbreviations and definitions

Abbreviations	Definitions
Best-ReMaP	Joint Action on Implementation of Validated Best Practices in Nutrition
EFSA	European Food Safety Authority
EU	European Union
EUREMO	EU REformulation MOnitoring
FABLE	Food and Beverages Labels Explorer
HLG	High-Level Group on Nutrition and Physical Activity
IQR	Interquartile range
JA	Joint Action
JANPA	Joint Action on Nutrition and Physical Activity
JRC	Joint Research Centre
NCDs	Noncommunicable diseases
PreventNCD	Joint Action on Cancer and other NCDs prevention –action on health determinants
WHO	World Health Organization

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Annexes

Annex 1. Definitions of the five categories (breakfast cereals; bread products; fresh dairy products and desserts; delicatessen meats and similar; and soft drinks) presented in the main results and corresponding subcategories

Category Name	Definition	Subcategory Name
Breakfast cereals	All types of breakfast cereals (plain, chocolate, caramel, filled, healthy, whole wheat, etc.), cereal cakes, cereals requiring preparation such as oatflakes, muesli, puffed rice *Products excluded:* Breakfast biscuits	• Cereal flakes with chocolate/nuts • Cereal flakes with fruit • Cereal preparation to drink[2] • Cereals without added sugar • Chocolate and caramel cereals • Chocolate-flavoured cereals • Crunchy chocolate muesli • Crunchy fruit muesli • Crunchy muesli with nuts/seeds • Filled cereals • High-fibre cereals • High-fibre fruit cereals • Honey/caramel cereals • Other ready-to-eat cereals • Sweet cereal flakes • Traditional muesli flakes
Bread products	Rusks, brioches, crackers, croutons, unleavened bread, puffed cakes, savoury muffins, sandwich breads, toasted bread, hamburger buns, hot-dog buns, sandwich buns, pita bread, pre-baked bread, pre-packaged bread, tortilla wraps, cereal specialities (wheat crackers, etc.), filled cereal specialities (filled crackers, filled cereal sticks, etc.), fine bakery wares (croissants, chocolate croissants, apple turnovers, etc.), kouglof, brioche pretzel, fougasse, panettone, pancakes, crispbreads (sweet or savoury) *Products excluded:* Handmade products or cocktail snack products	• Breadcrumbs • Brioches with fruit • Chocolate brioches • Cream-filled brioches • Croutons • Fine bakery wares: chocolate croissants • Fine bakery wares: croissants • Fine bakery wares: other • Other bread products • Other breads • Other rusks

		• Other: sandwich breads / hamburger / hot dog buns • Pancakes • Plain brioches • Plain rusks • Plain toasted breads and toasts • Plain white sandwich breads / hamburger /hot dog buns • Pre-baked breads • Pre-packaged breads • Puffed cakes • Tortilla breads and wraps • Unleavened breads • Wholemeal cereal grains: brioches • Wholemeal cereal grains: rusks • Wholemeal cereal grains: sandwich breads / hamburger / hot dog buns • Wholemeal cereal grains: toasted breads and toasts
Fresh dairy products and desserts	All yoghurts and fermented milks (sugar-sweetened, artificially-sweetened or unsweetened, classic or gourmet), fresh cheeses (sugar-sweetened, artificially-sweetened or unsweetened, classic or gourmet), skyr, fresh desserts (dessert creams, curdled milks, jellied milks, Liégeois desserts, fresh desserts with cereals such as rice pudding, fresh mousse desserts, fresh desserts with eggs such as crème caramel, crème brûlée, custards and flans, floating islands, panna cotta and other dairy-based desserts, desserts such as chocolate fondant, profiteroles, tiramisu, clafoutis, rum babas and cakes, whether sugar-sweetened, light or artificially-sweetened) and fresh plant-based desserts (soy desserts and other plant-based desserts)	• Artificially-sweetened fresh cheeses • Artificially-sweetened yoghurts and fermented milks • Classic plain fresh cheeses with no added sugar • Classic plain yoghurts and fermented milks with no added sugar • Classic sweet yoghurts and fermented milks • Classic sweetened fresh cheeses • Curdled milks • Dessert creams and jellied milks • Egg-based fresh desserts • Fresh cakes • Fresh desserts with cereals • Fresh desserts with fruit

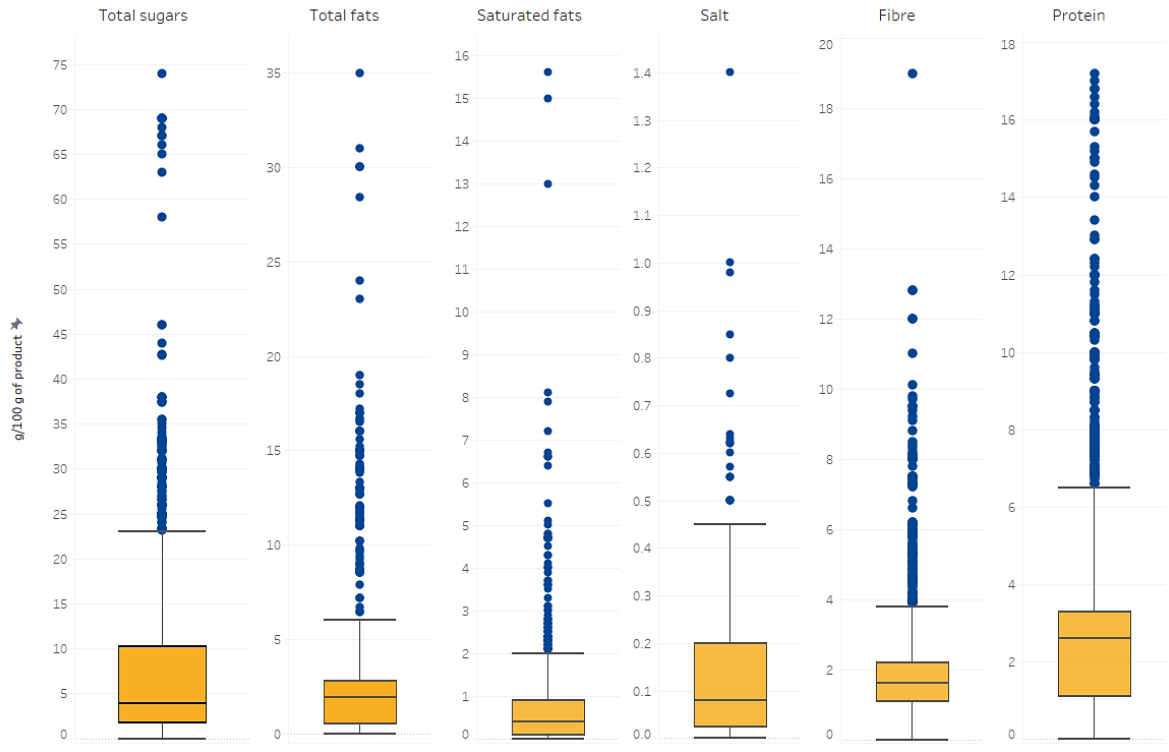
	Products excluded: Dairy products to be stored at room temperature; Milk; Fresh cream, butter, Cottage cheese	• Fresh desserts without fruit • Fresh light and/or artificially-sweetened desserts • Fresh mousse-type desserts • Fresh plain unsweetened soy desserts • Fresh sweetened soy desserts • Gourmet plain fresh cheeses with no added sugar • Gourmet plain yoghurts and fermented milks with no added sugar • Gourmet sweet fresh cheeses • Gourmet sweet yoghurts and fermented milks • Liégeois desserts and similar • Other dairy products • Other fresh desserts • Other fresh plant-based desserts
Delicatessen meats and similar	Delicatessen meats and alternative meat-free products (containing tofu, soy, etc.), found in the room-temperature, chilled and frozen, pre-packed sections (excluding foods cut to order). Cooked ham and shoulder, ham knuckle, roast poultry, ham, raw-cured ham, dry-cured ham, sausages, cooked sausages, duck mousse, country-style pâté, pâté, pork liver mousse or terrine, pâtés or terrines of game, pork, poultry or rabbit, preserved liver, rillettes, lardons, pork belly, dry sausages, sausage specialities, chorizo, pavé, rosette, salami, preparation of cooked ham and shoulder, preparation of poultry, preparation of raw- or dry-cured ham, boudin (white or blood sausage), uncooked andouille and andouillette (chitterling sausage), head cheese, brawn, ham in parsley aspic, roast pork, alternative meat-free products (containing tofu, soy, etc.), sausage specialities such as chipolatas, cachir sausage, merguez or sausages with Provençal herbs, coarse minced sausages (Morteau, Montbéliard, Figatelli, etc.), dried, smoked or cured pork (bacon, coppa, Alsatian Kassler, Corsican Lonzu and other regional specialities of this type), dried, smoked or cured beef (Bündnerfleisch, bresaola), preserved uncooked meat (such as	• Alternative products without animal protein • Assortment of delicatessen meats • Boudin, andouille and andouillette • Chorizo • Cooked beef (packaged) • Cooked pork ham and roast (packaged) • Cured ham • Dried, smoked or cured beef • Dried, smoked or cured pork • Dry sausage • Other cooked meats (packaged) • Other cured meats • Other delicatessen meats based on offal • Pâté • Pepperoni • Pork belly and bacon (packaged) • Poultry ham and roast (packaged) • Poultry lardons • Preserved pork or poultry liver (canned) • Sausages

	canned sausages), corned beef, corned lamb or other (canned or not)" *Products excluded:* Delicatessen meats in pastry, delicatessen meat products included in complete dishes (such as sauerkraut, cassoulet, couscous, etc.), canned cooked meats (meats cooked in sauce, special meat recipes, etc.), foie gras, gizzards, poultry liver, delicatessen meat assortments with cheese.	
Soft drinks	All beverages with tea, fruit beverages, energy drinks, colas, flavoured waters, lemonades, tonics and bitters, sports drinks, plant-based beverages, flavoured milk beverages (chocolate, vanilla, strawberry, etc.), alcohol-free beers, alcohol-free aperitif beverages, in liquid or powder/granule form to be reconstituted, as well as fruit and/or vegetable beverages that resemble juices or nectars but contain unauthorised ingredients for this type of product (e.g. fibre, colourings, etc., see la Directive 2012/12/EU), juices containing coconut milk (coconut milk is not a juice according to the Codex Alimentarius). *Products excluded:* Syrups and concentrated beverages to be diluted (squashes and cordials); Unflavoured mineral and spring waters; Complete meal substitute beverages	• Alcohol-free beers without added sugar • Aperitif beverages without added sugar • Classic sweet yoghurts and fermented milks • Colas without added sugar • Energy drinks without added sugar • Flavoured milk beverages • Flavoured sugar-sweetened and artificially-sweetened waters • Flavoured sugar-sweetened waters • Flavoured waters without added sugar • Fruit beverages with fruit content > or = 50% • Fruit beverages without added sugar • Other beverages without added sugar • Other sports drinks • Other sugar-sweetened beverages • Plant-based beverages without added sugar • Sugar-sweetened alcohol-free beers • Sugar-sweetened and artificially-sweetened colas • Sugar-sweetened and artificially-sweetened energy drinks • Sugar-sweetened and artificially-sweetened fruit beverages • Sugar-sweetened and artificially-sweetened tea beverages • Sugar-sweetened and artificially-sweetened tonics and bitters • Sugar-sweetened aperitif beverages • Sugar-sweetened colas

		• Sugar-sweetened energy drinks • Sugar-sweetened fruit beverages • Sugar-sweetened plant-based beverages • Sugar-sweetened sports drinks • Sugar-sweetened tea beverages • Sugar-sweetened tonics and bitters • Tea beverages without added sugar • Tonics and bitters without added sugar • Vegetable beverages

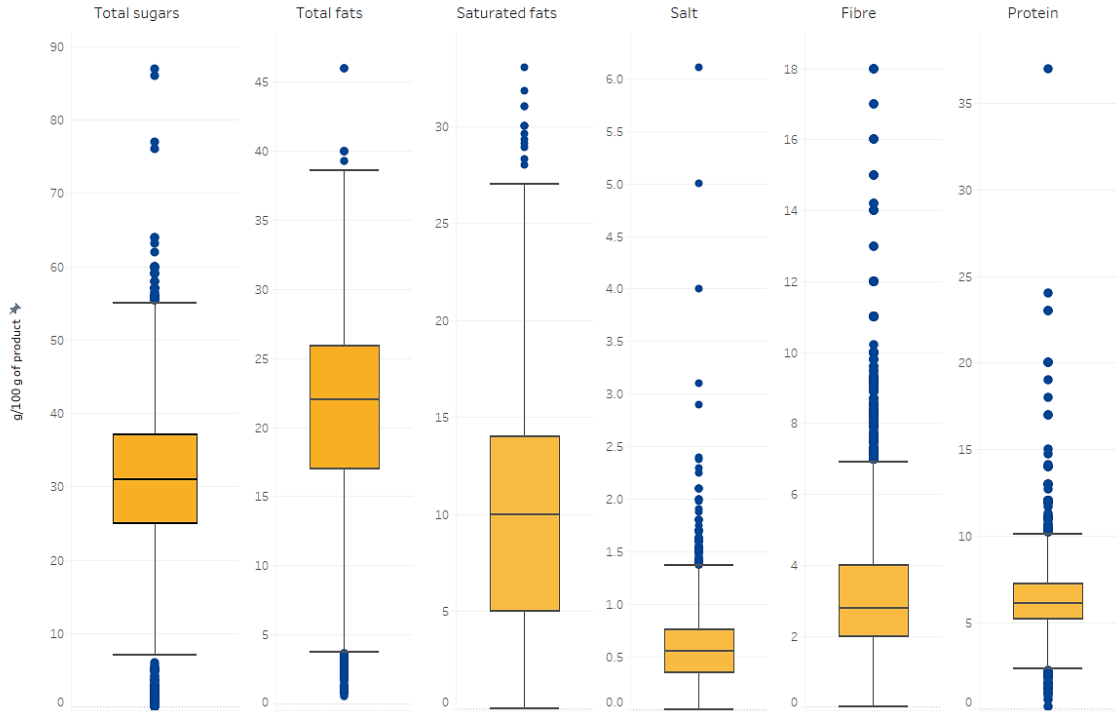
Annex 2. Nutrient content for the rest of the food categories included in FABLE

Figure A2. 1 Distribution of nutrient content (g/100g product) in baby food across different European countries



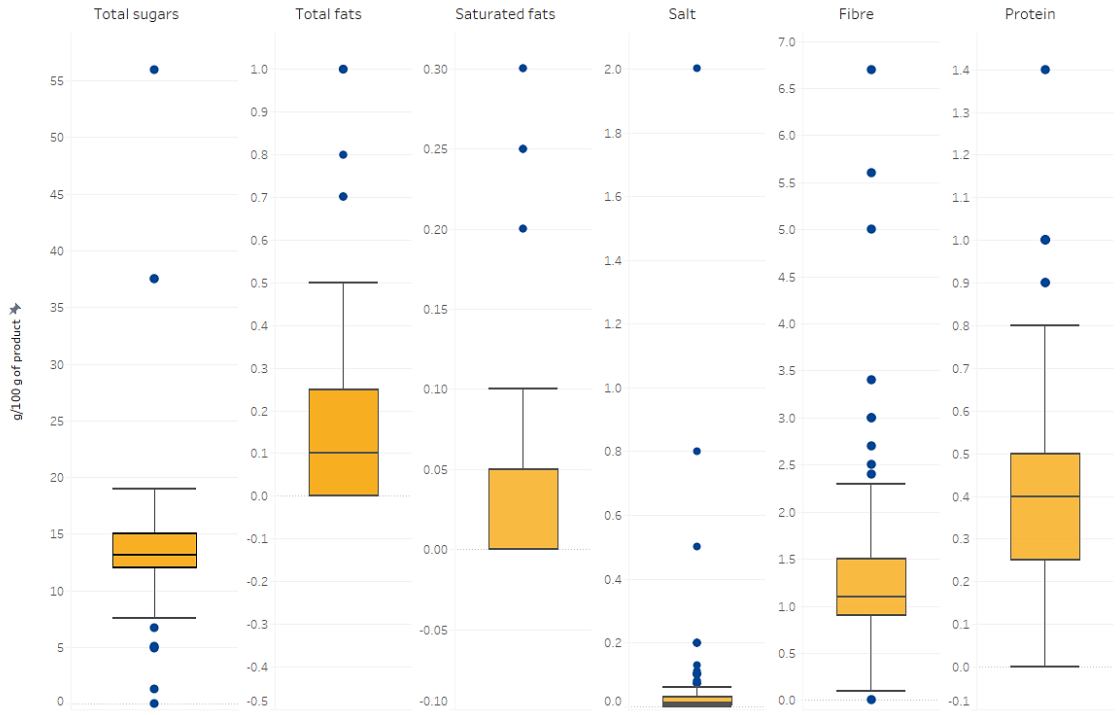
Source: JRC analysis

Figure A2. 2 Distribution of content of total sugars, total fats, saturated fats, salt, fibre and protein (g/100g product) in cakes and biscuits across different European countries



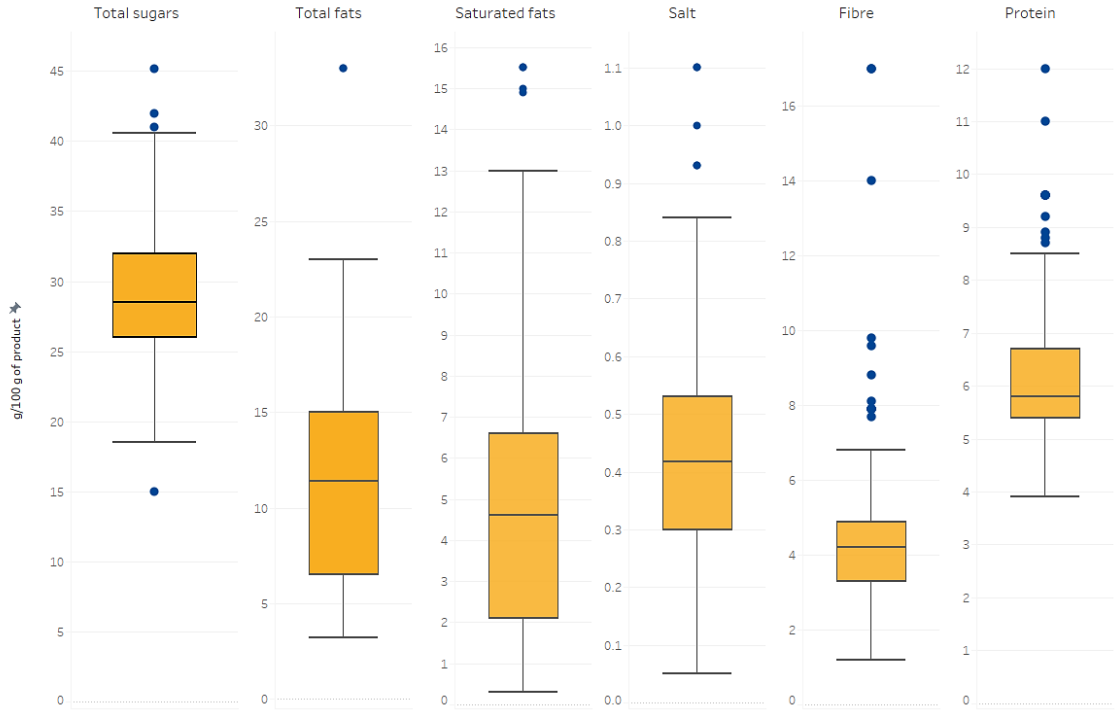
Source: JRC analysis

Figure A2. 3 Distribution of nutrient content (g/100g product) in canned fruits across different European countries



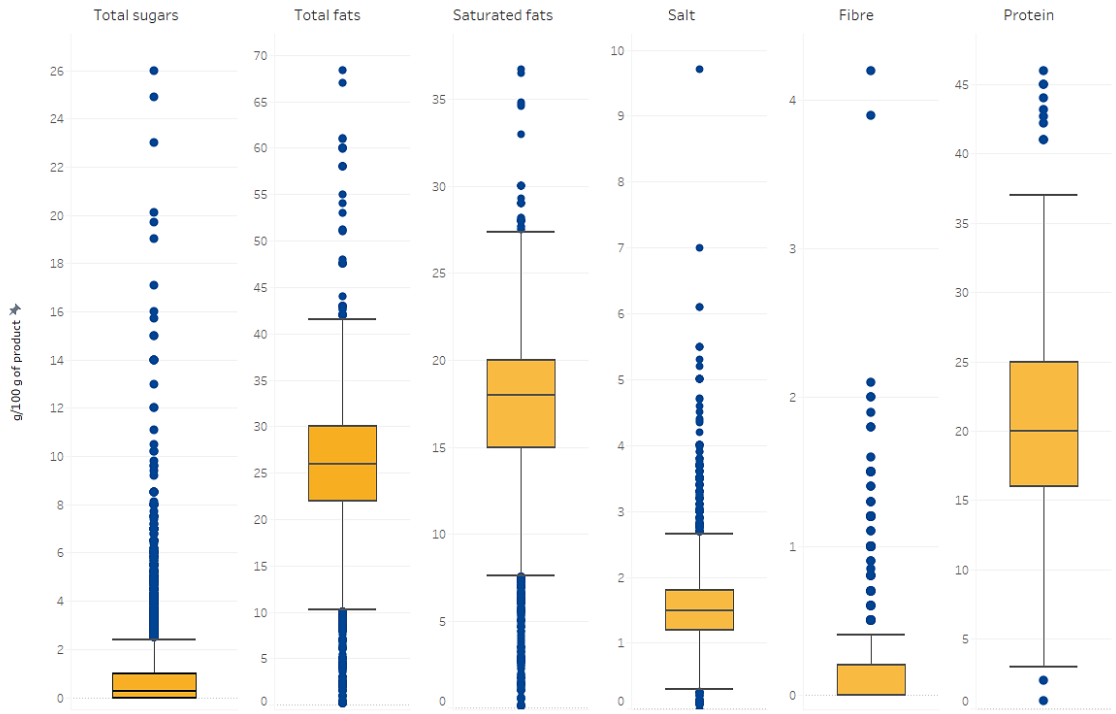
Source: JRC analysis

Figure A2. 4 Distribution of nutrient content (g/100g product) in cereal bars across different European countries



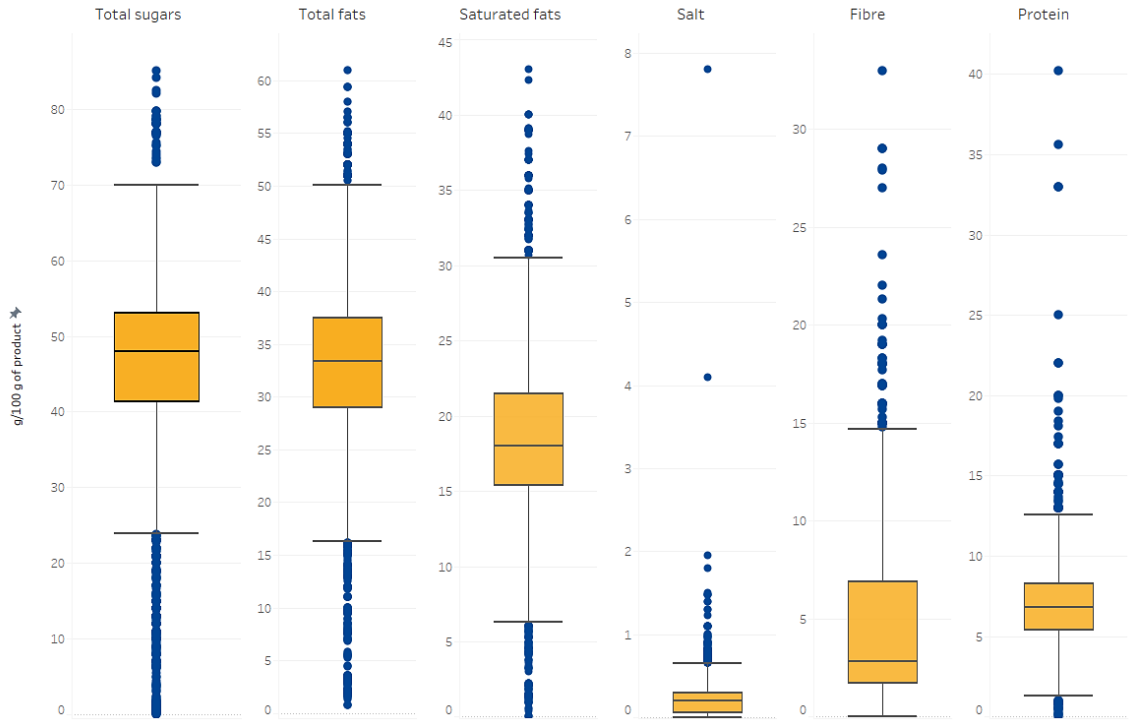
Source: JRC analysis

Figure A2. 5 Distribution of nutrient content (g/100g product) in cheeses across different European countries



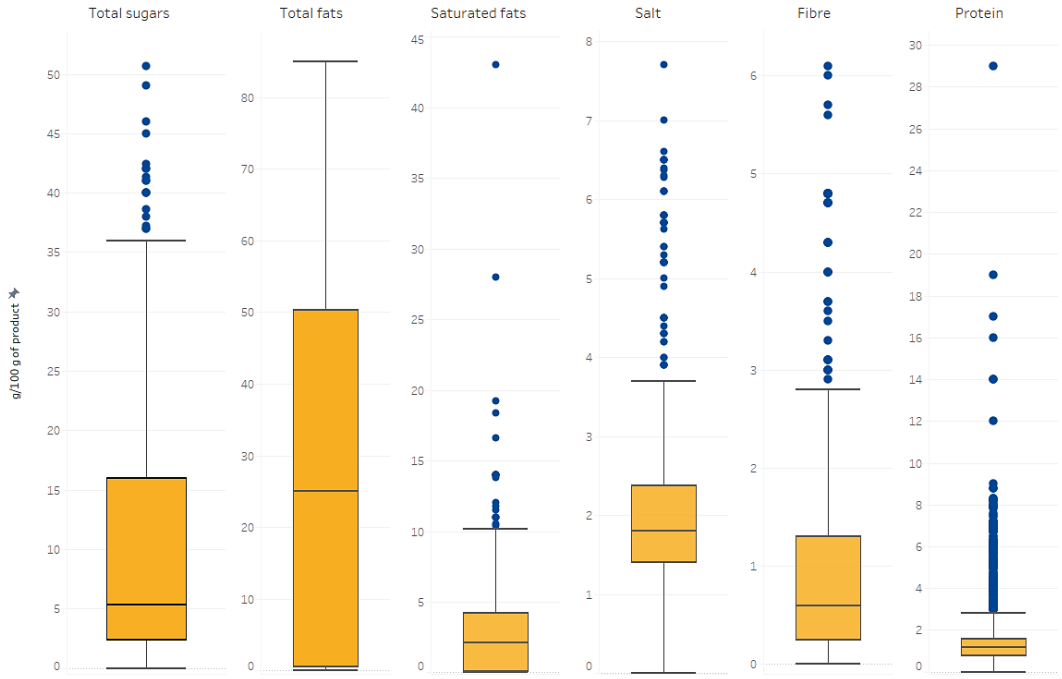
Source: JRC analysis

Figure A2. 6 Distribution of nutrient content (g/100g product) in chocolate products across different European countries



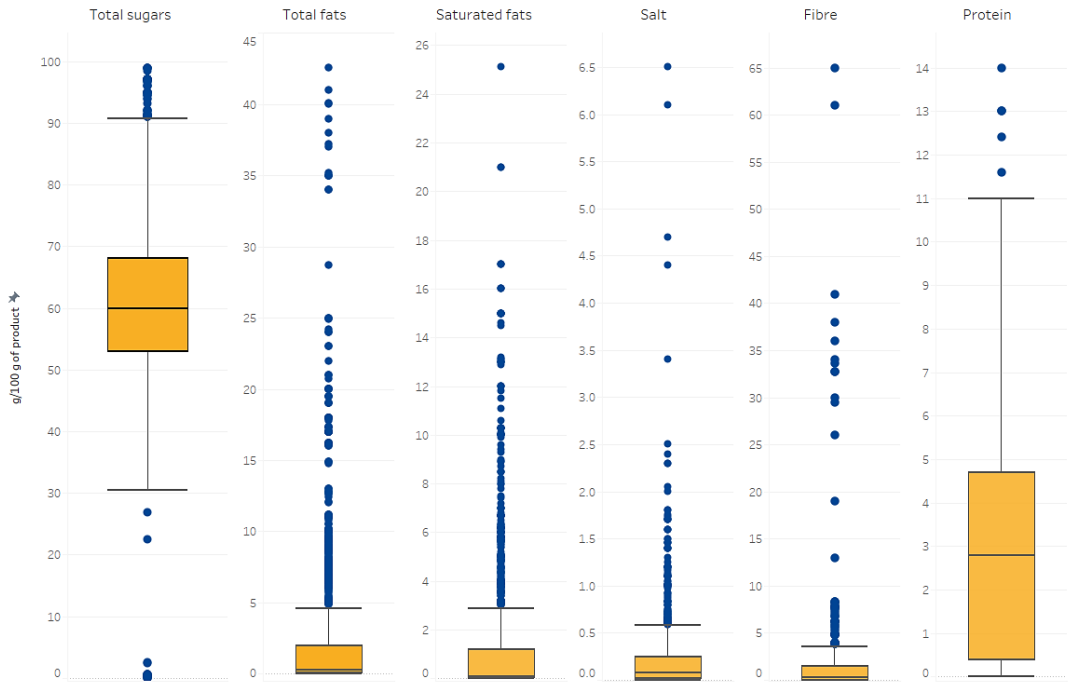
Source: JRC analysis

Figure A2. 7 Distribution of nutrient content (g/100g product) in cold sauces across different European countries



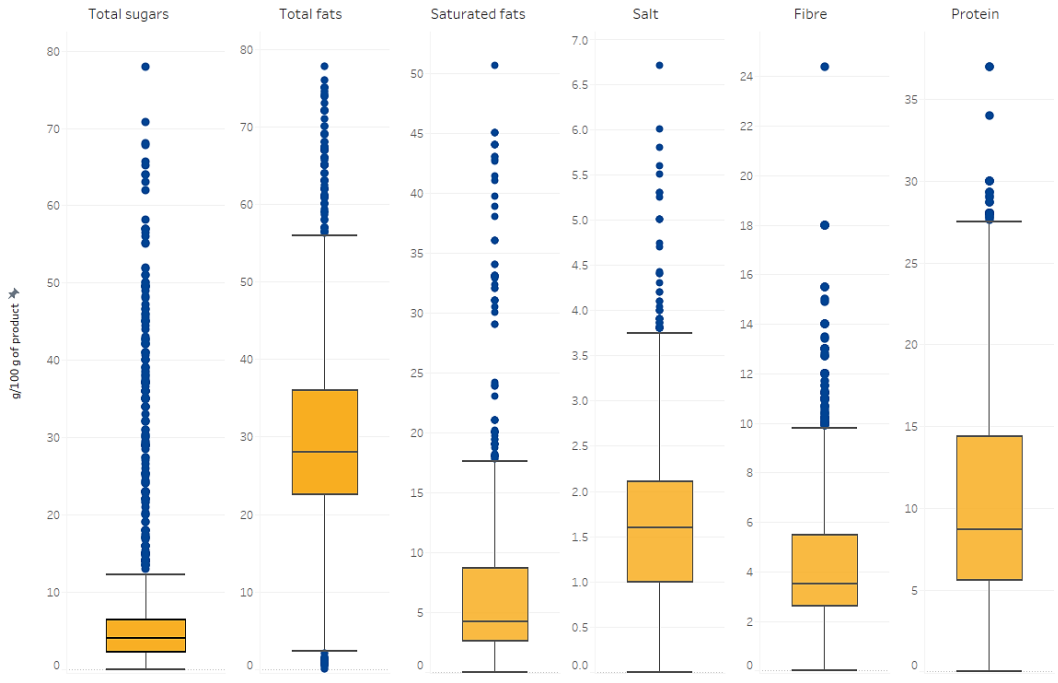
Source: JRC analysis

Figure A2. 8 Distribution of nutrient content (g/100g product) in confectionery across different European countries



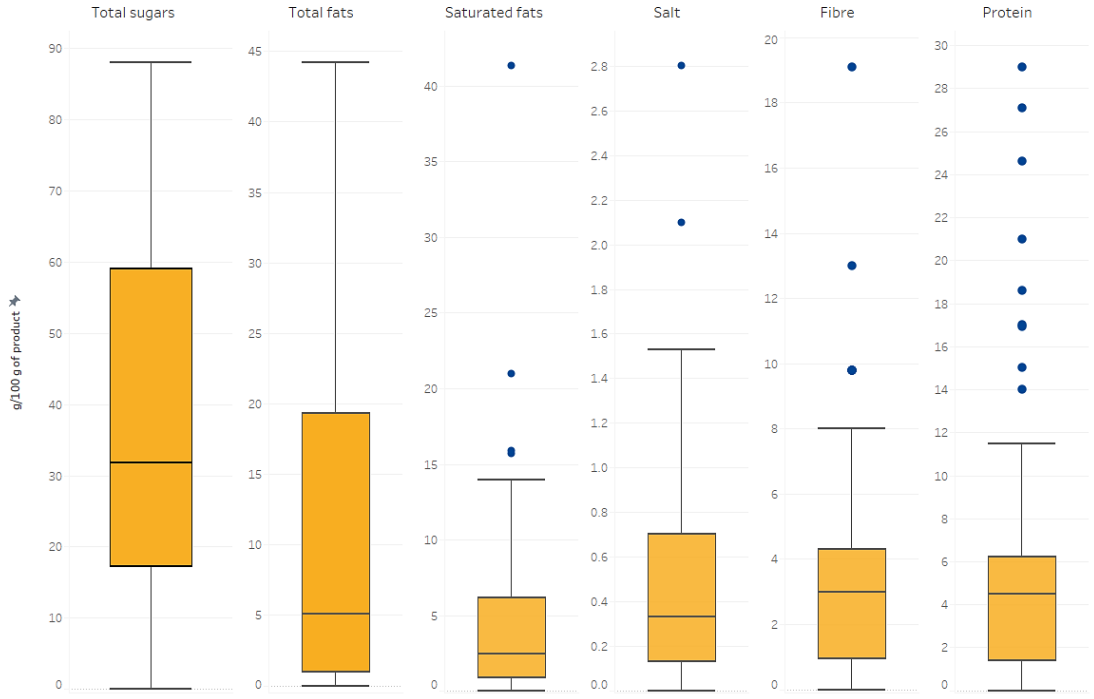
Source: JRC analysis

Figure A2. 9 Distribution of nutrient content (g/100g product) in crackers across different European countries



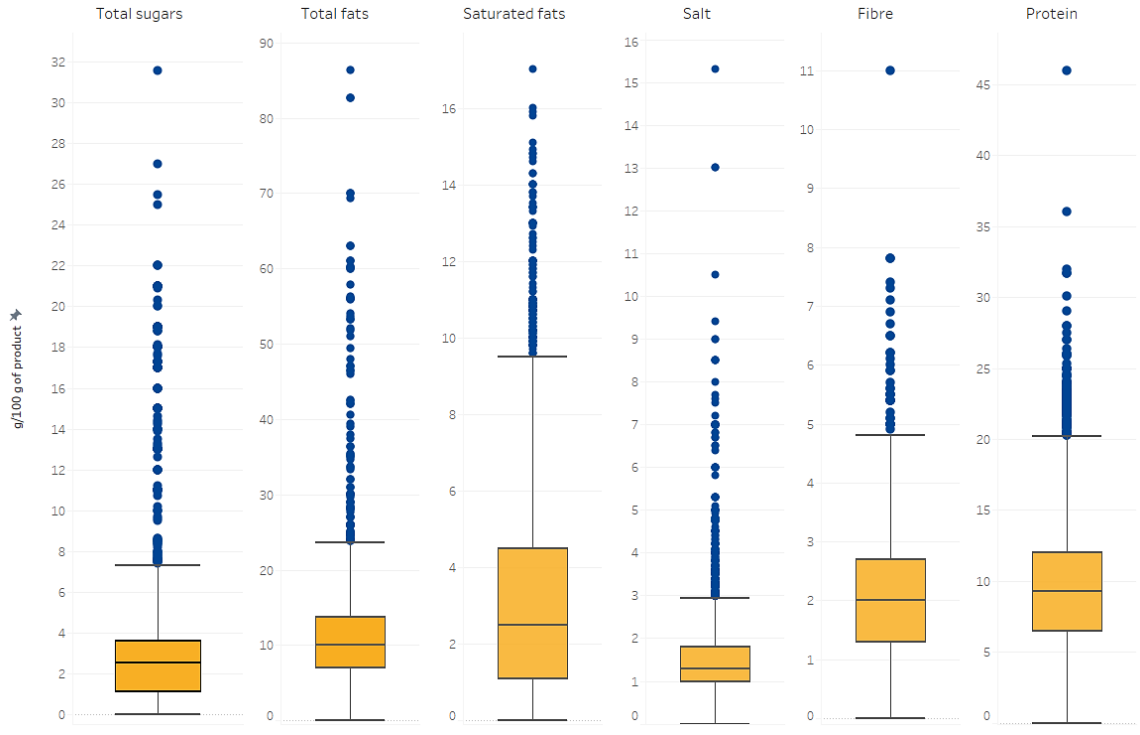
Source: JRC analysis

Figure A2. 10 Distribution of nutrient content (g/100g product) in dessert mixes across different European countries



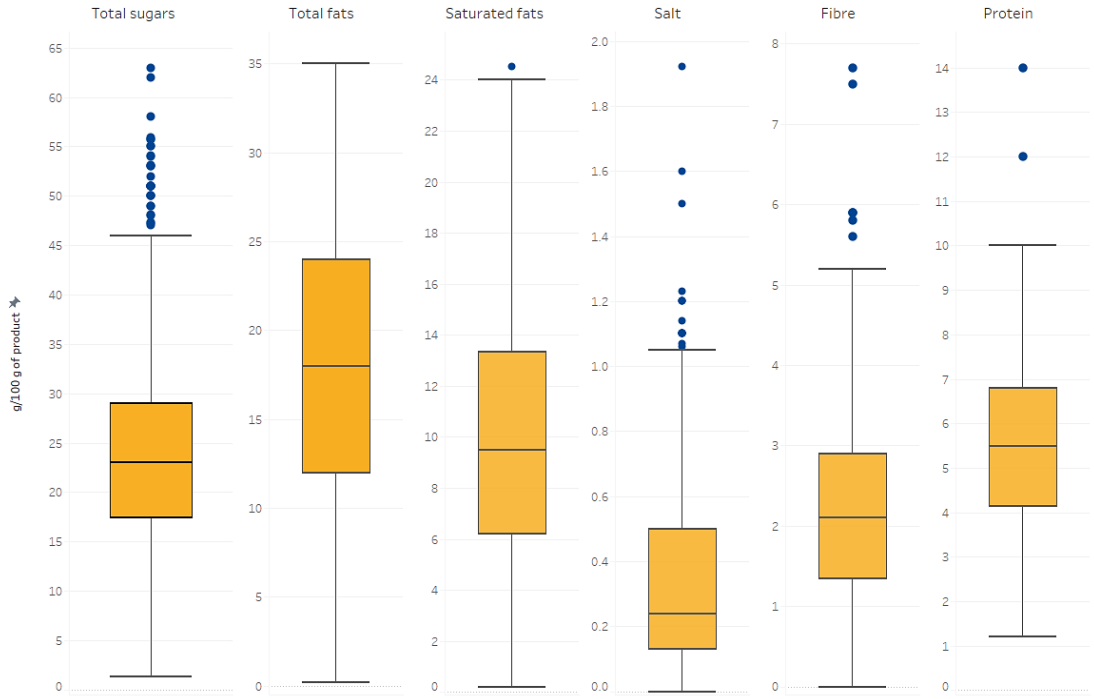
Source: JRC analysis

Figure A2. 11 Distribution of nutrient content (g/100g product) in fresh delicatessen products across different European countries



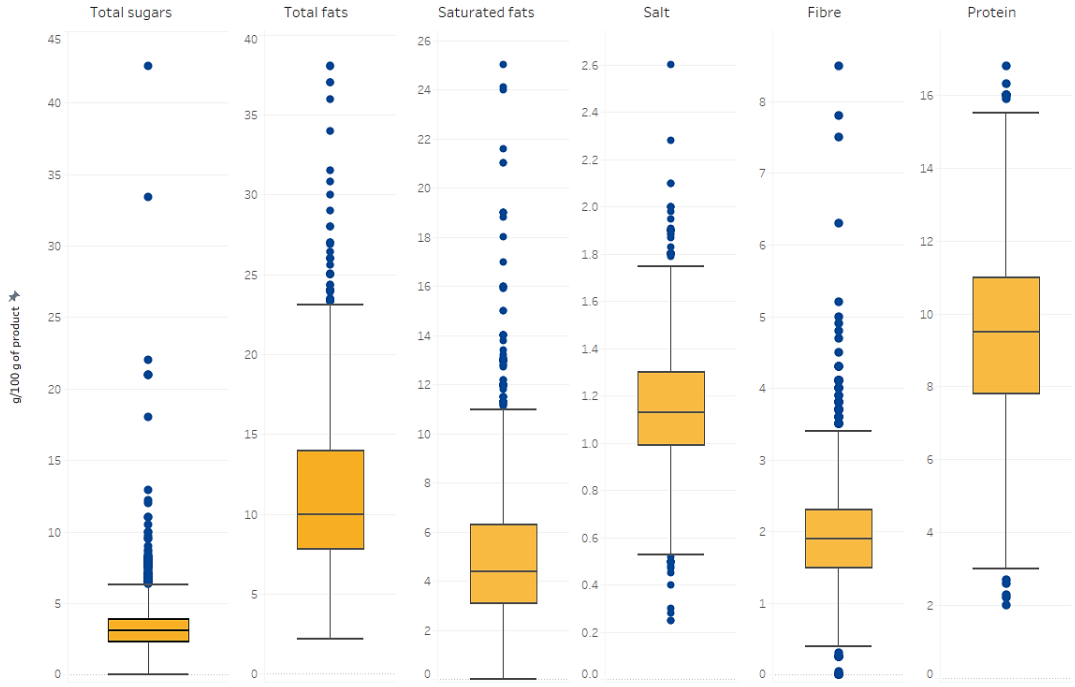
Source: JRC analysis

Figure A2. 12 Distribution of nutrient content (g/100g product) in frozen pastries and desserts across different European countries



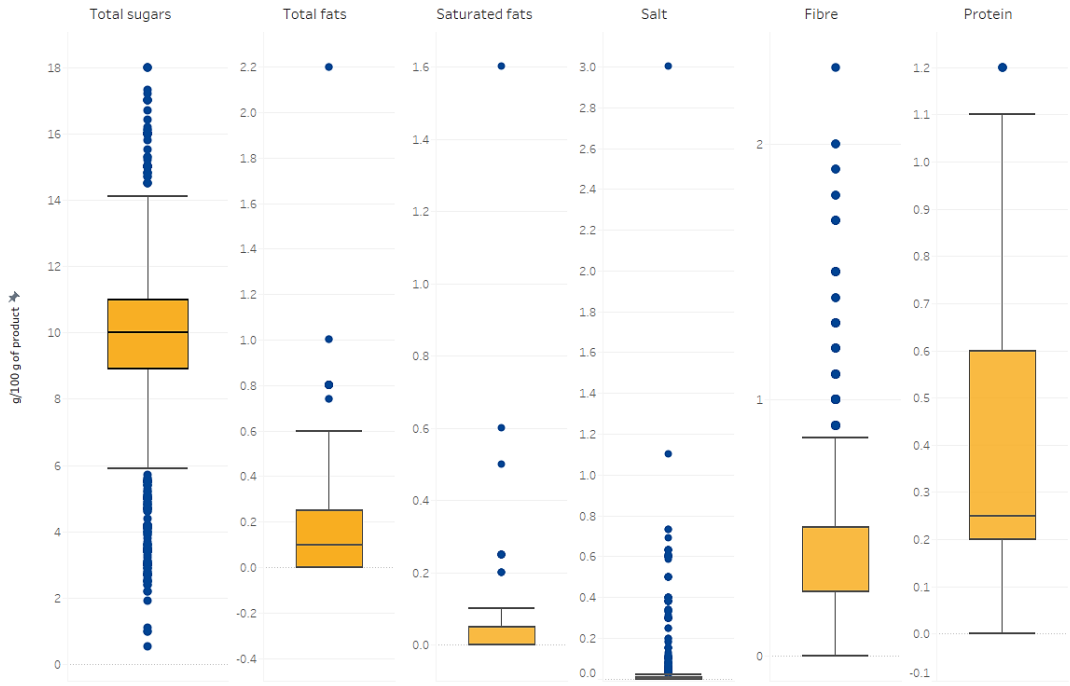
Source: JRC analysis

Figure A2. 13 Distribution of nutrient content (g/100g product) in frozen snacking products across different European countries



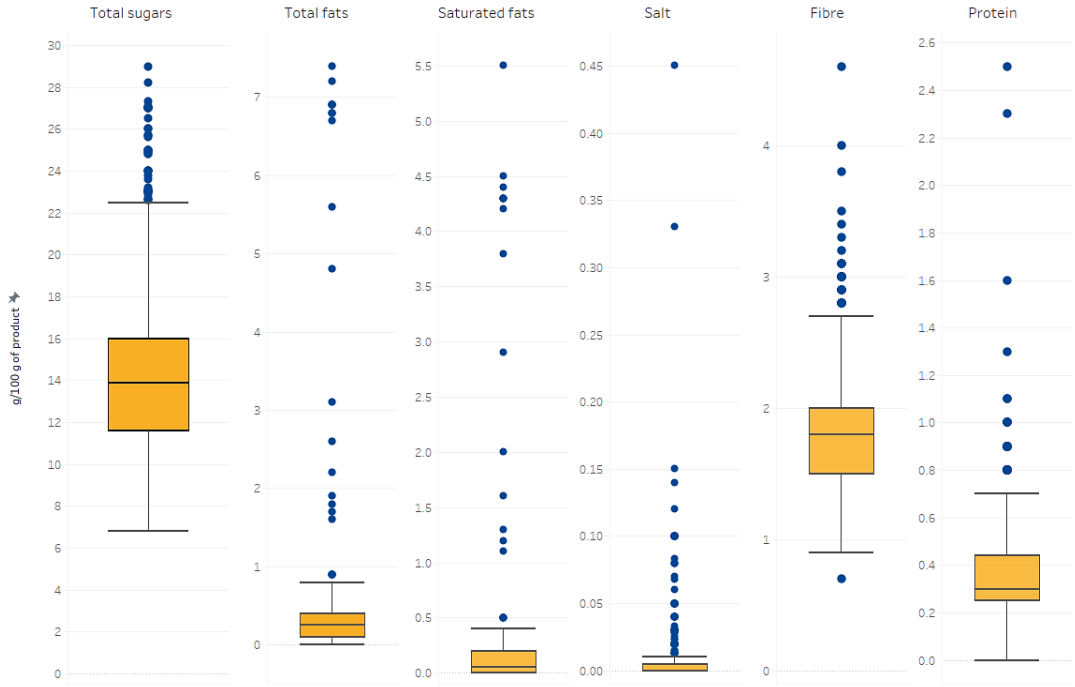
Source: JRC analysis

Figure A2. 14 Distribution of nutrient content (g/100g product) in fruit juices and nectars across different European countries



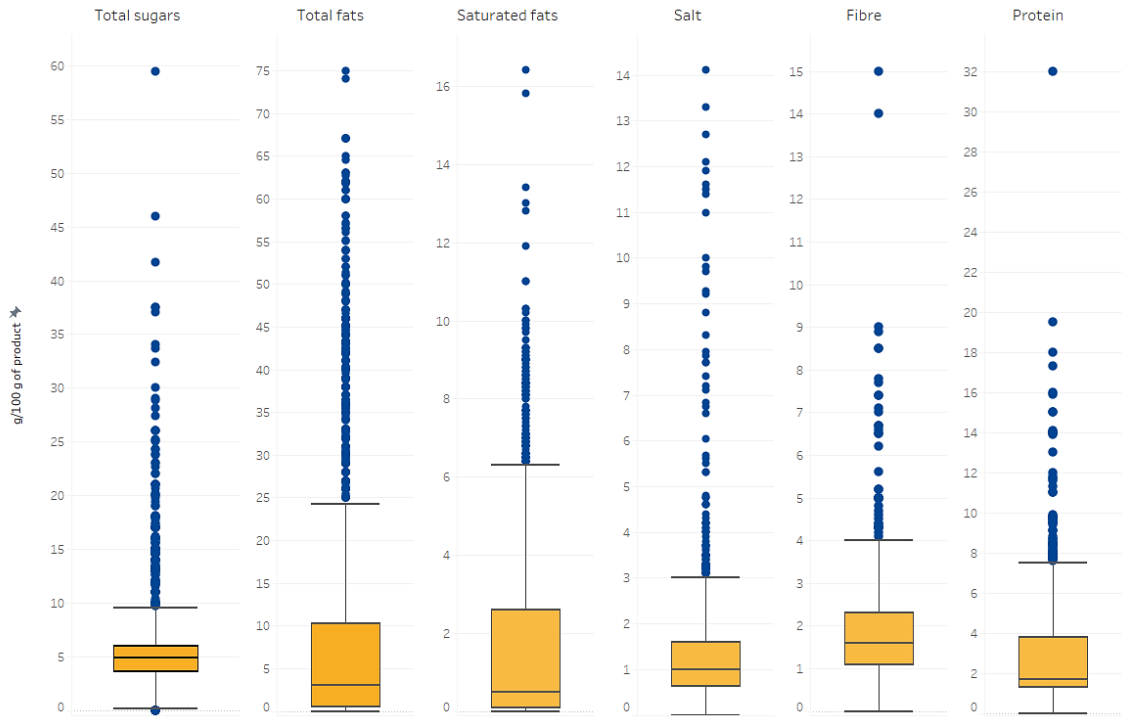
Source: JRC analysis

Figure A2. 15 Distribution of nutrient content (g/100g product) in fruit purees, compotes and desserts across different European countries



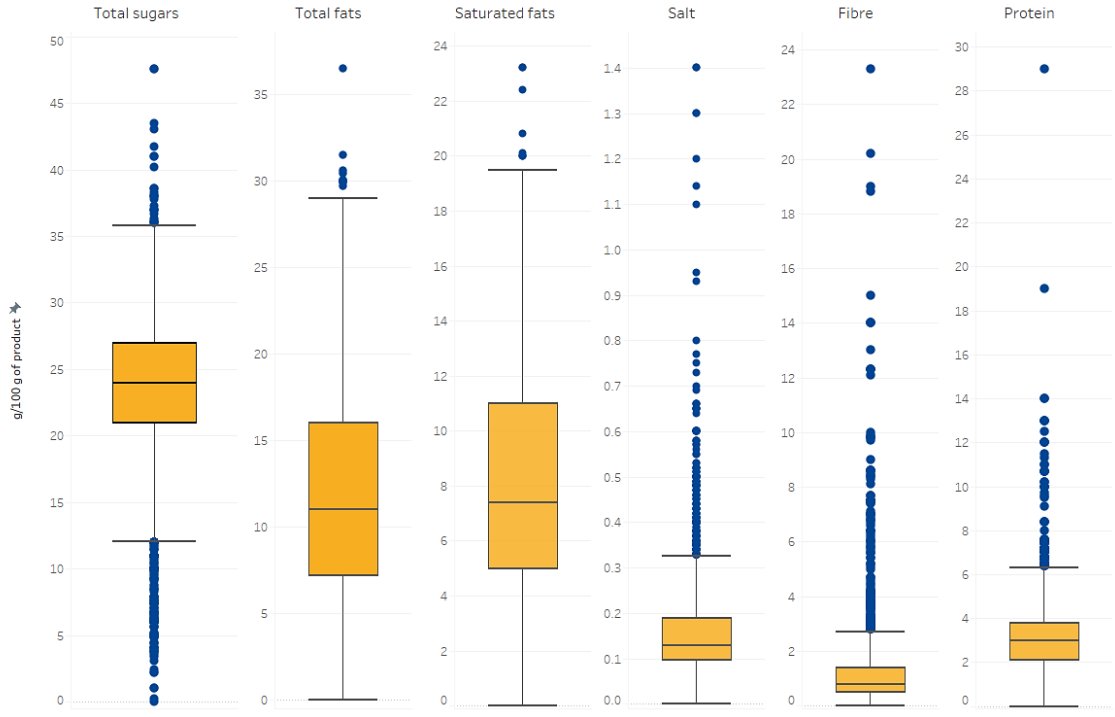
Source: JRC analysis

Figure A2. 16 Distribution of nutrient content (g/100g product) in hot sauces across different European countries



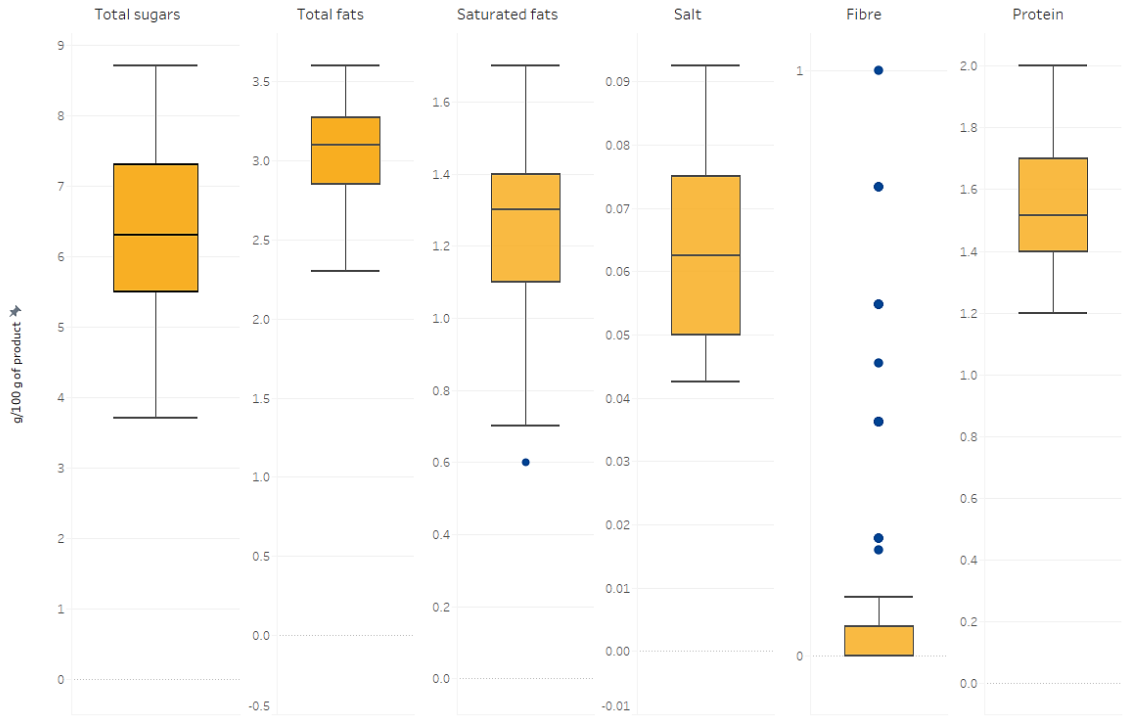
Source: JRC analysis

Figure A2. 17 Distribution of nutrient content (g/100g product) in ice creams and sorbets across different European countries



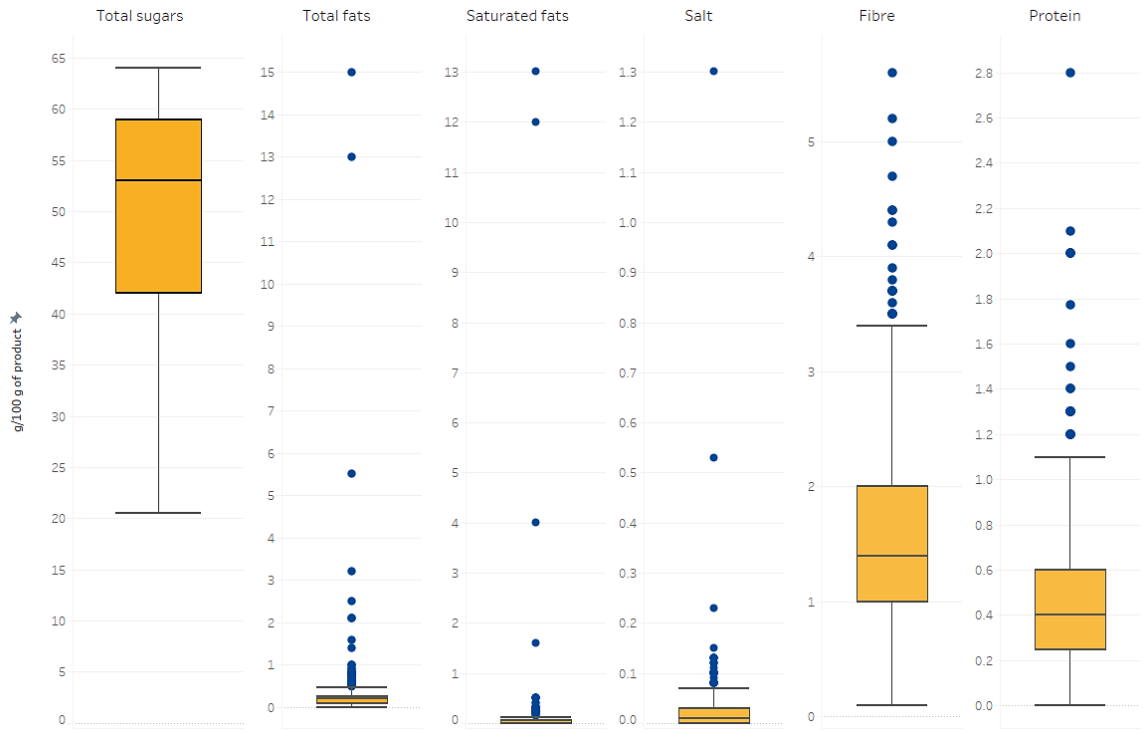
Source: JRC analysis

Figure A2. 18 Distribution of nutrient content (g/100g product) in infant milks across different European countries



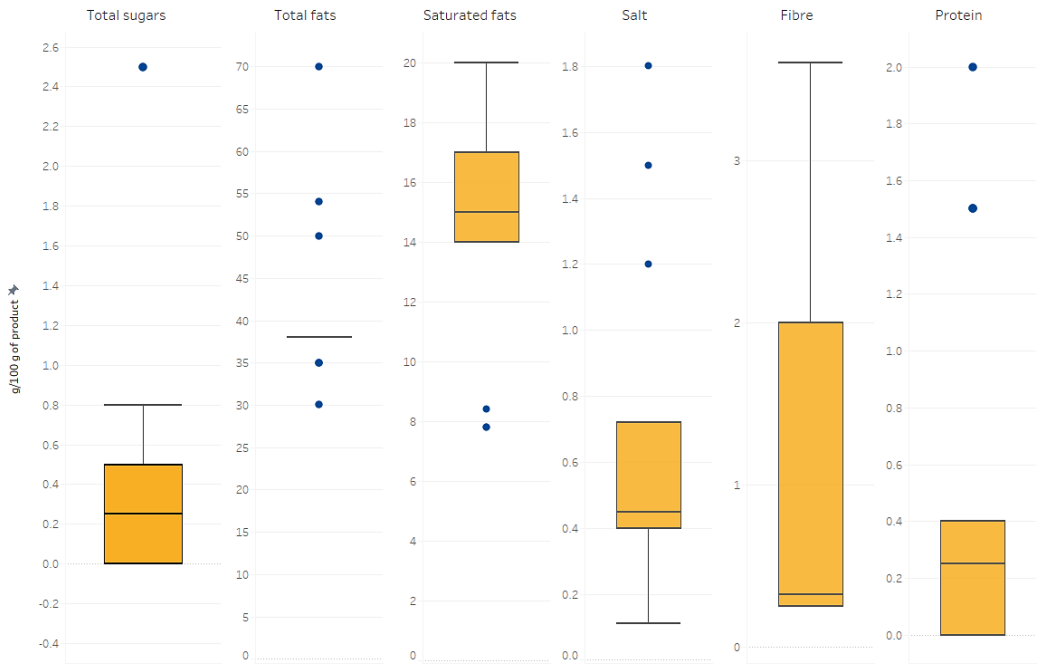
Source: JRC analysis

Figure A2. 19 Distribution of nutrient content (g/100g product) in jams across different European countries



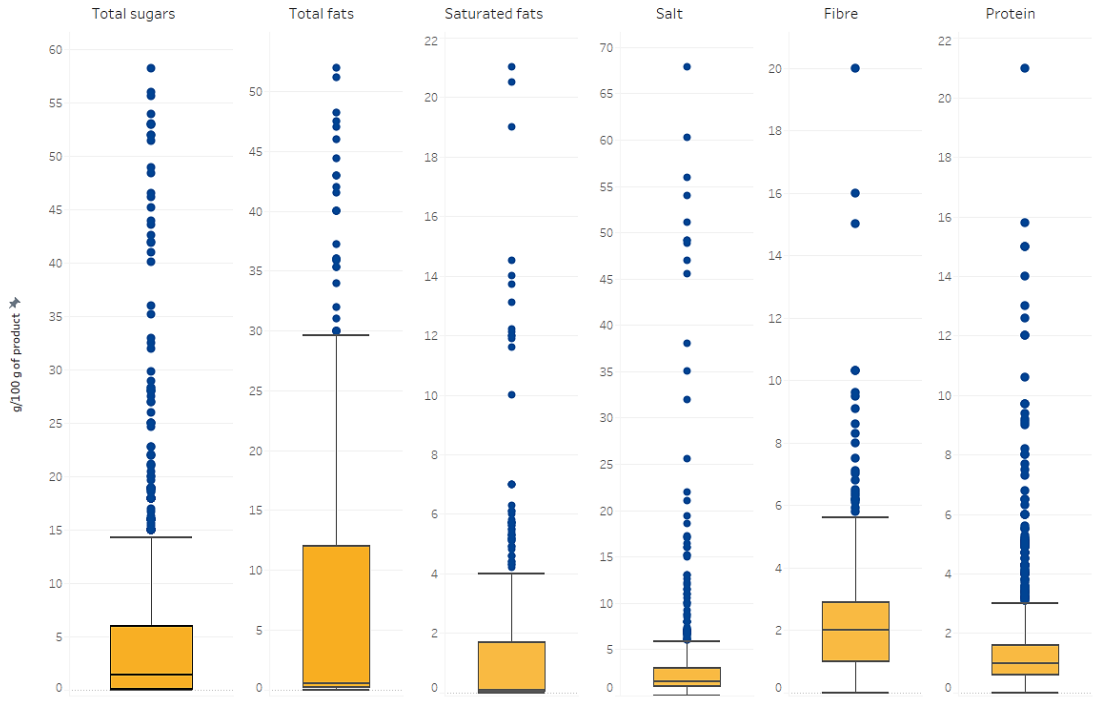
Source: JRC analysis

Figure A2. 20 Distribution of nutrient content (g/100g product) in margarines across different European countries



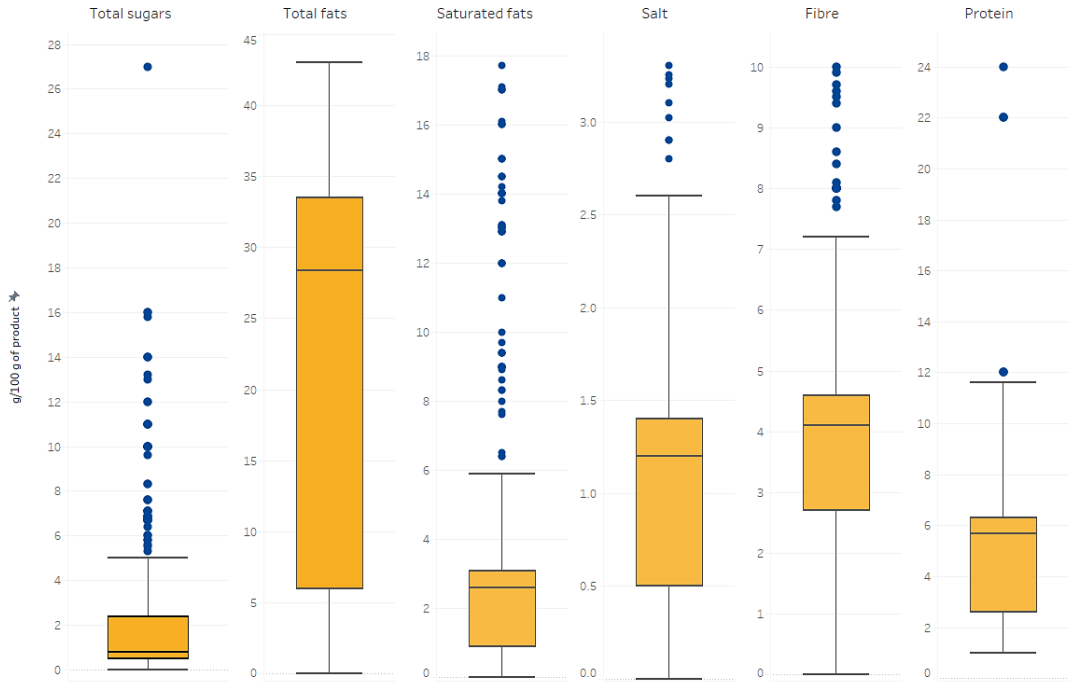
Source: JRC analysis

Figure A2. 21 Distribution of nutrient content (g/100g product) in other products across different European countries



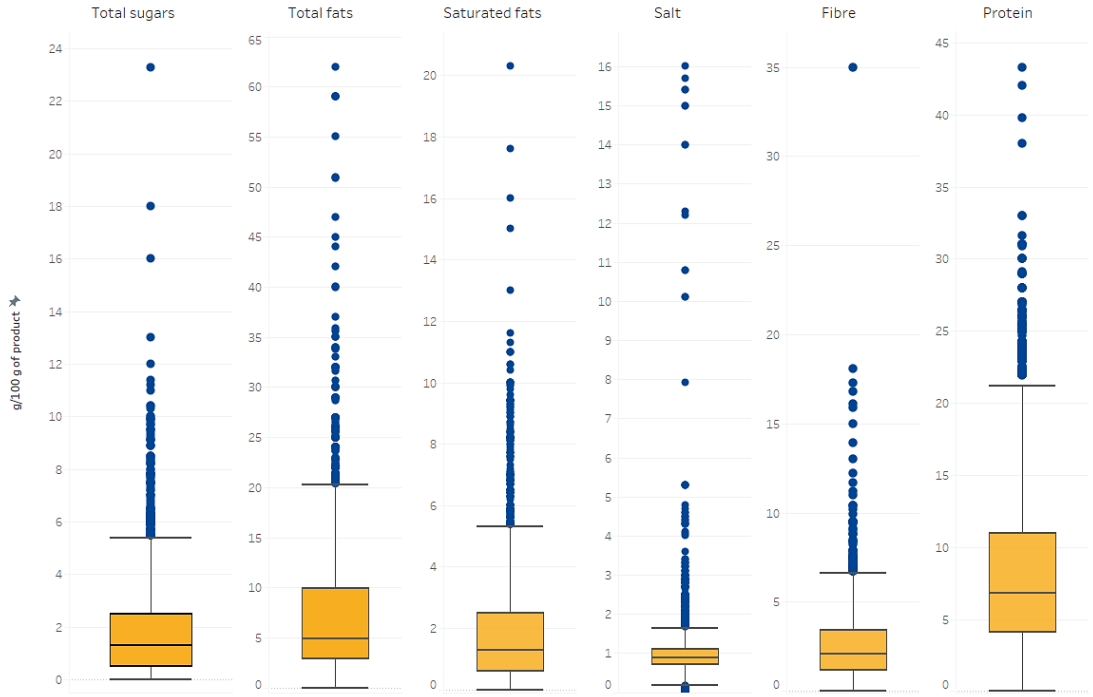
Source: JRC analysis

Figure A2. 22 Distribution of nutrient content (g/100g product) in processed potato products across different European countries



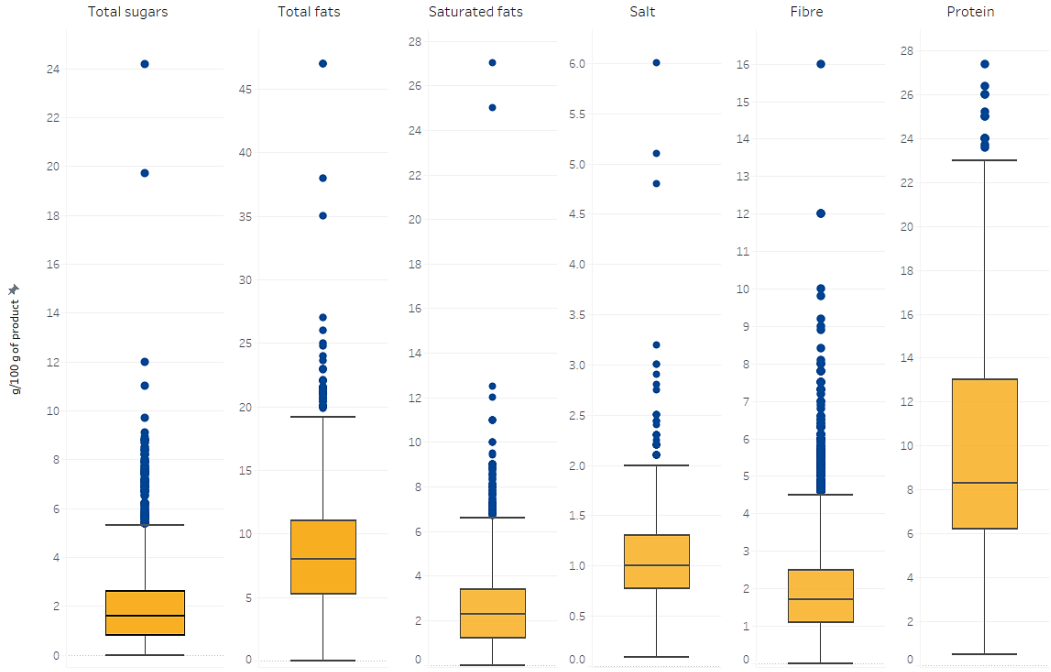
Source: JRC analysis

Figure A2. 23 Distribution of nutrient content (g/100g product) in ready-to-eat canned meals across different European countries



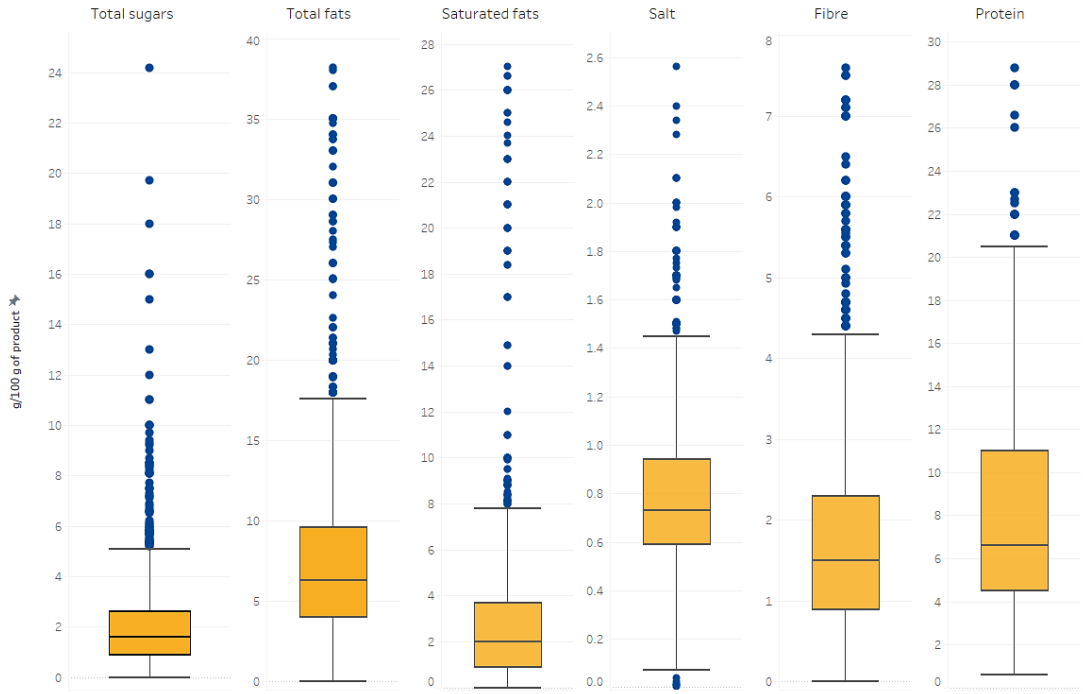
Source: JRC analysis

Figure A2. 24 Distribution of nutrient content (g/100g product) in ready-to-eat fresh meals across different European countries



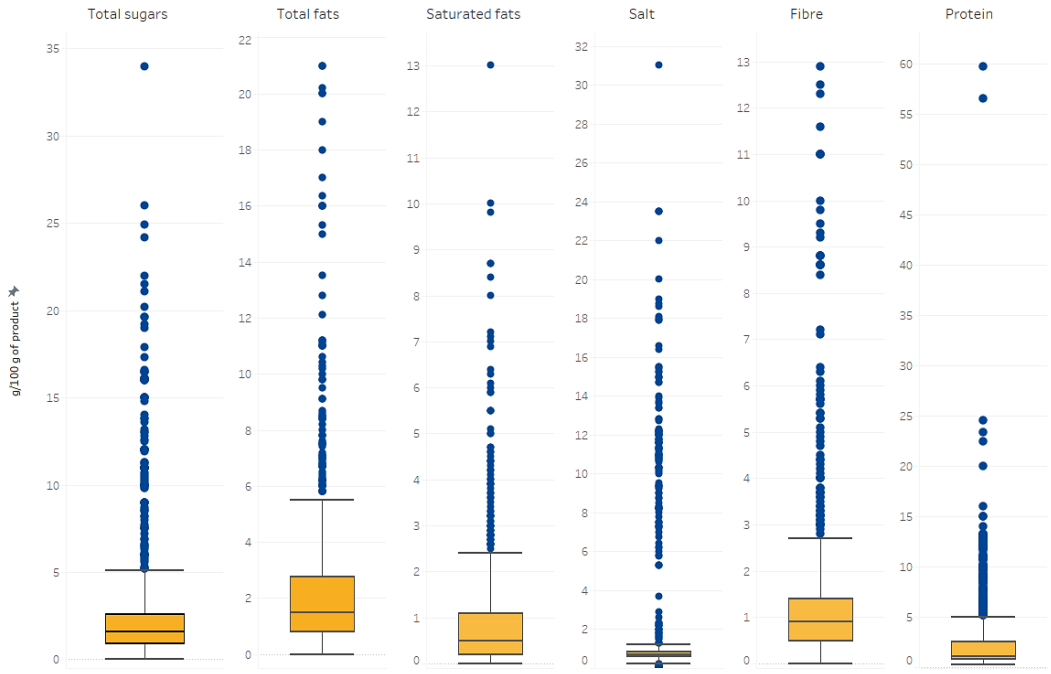
Source: JRC analysis

Figure A2. 25 Distribution of nutrient content (g/100g product) in ready-to-eat frozen meals across different European countries



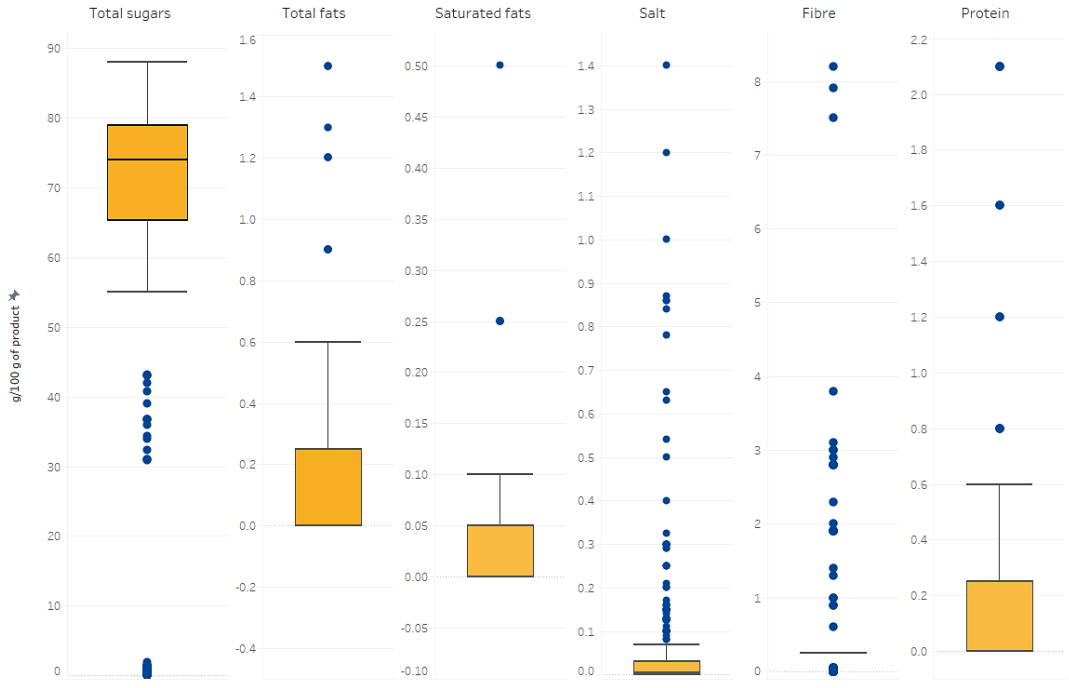
Source: JRC analysis

Figure A2. 26 Distribution of nutrient content (g/100g product) in soups and broths across different European countries



Source: JRC analysis

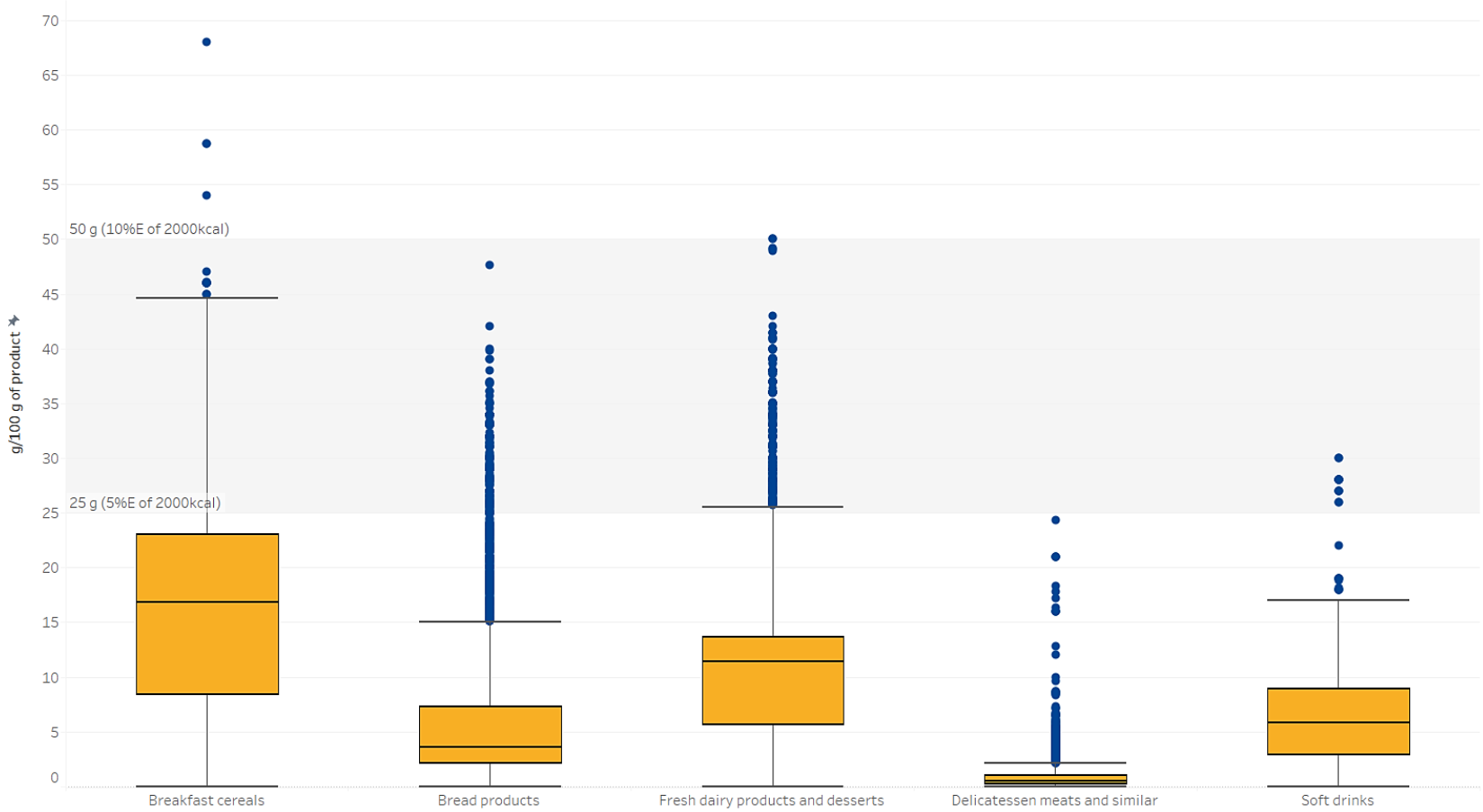
Figure A2. 27 Distribution of nutrient content (g/100g product) in syrups across different European countries



Source: JRC analysis

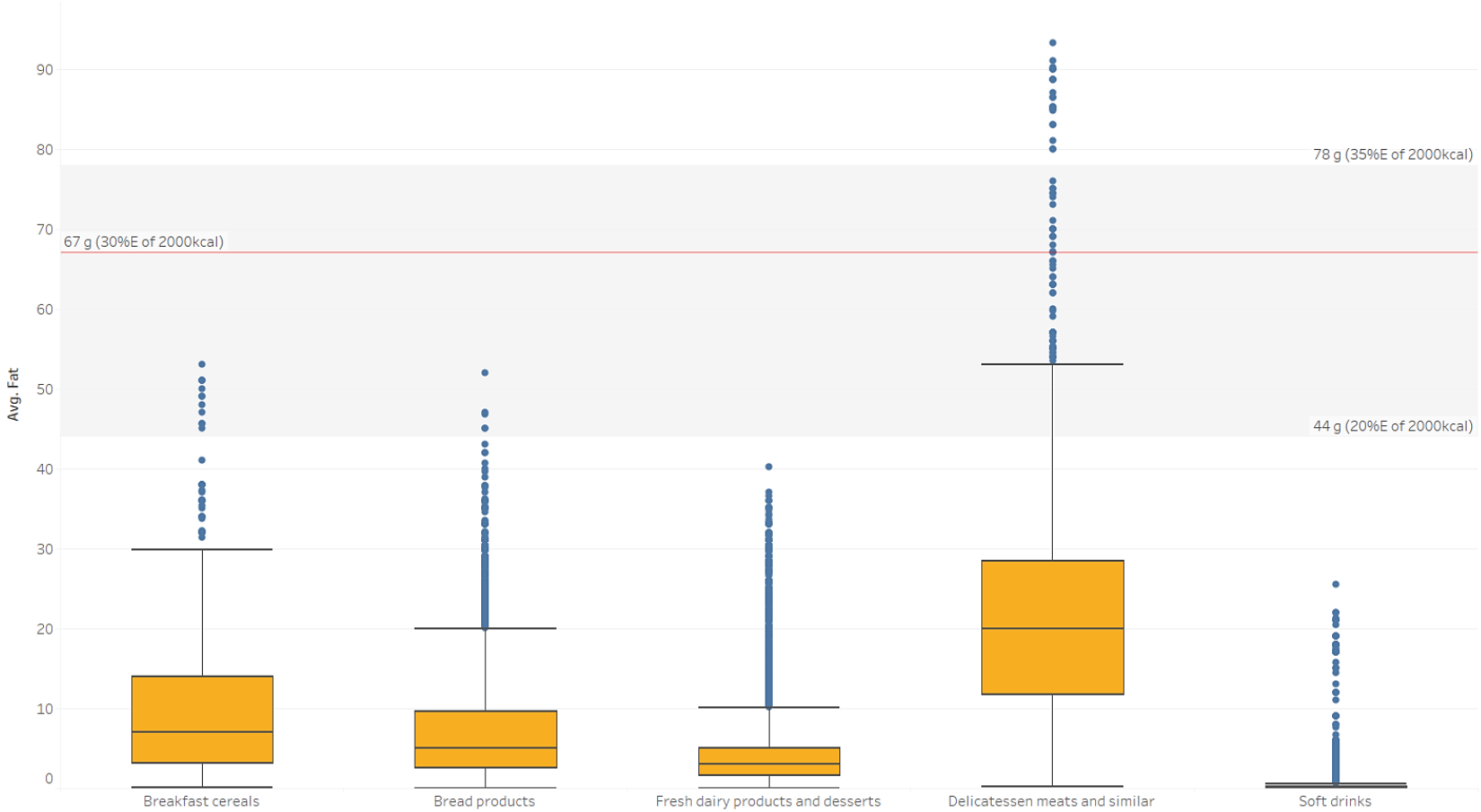
Annex 3. Nutrient content across the five prioritised food categories, compared to the recommendations

Figure A3. 1. Summary of distribution of total sugars content (g per 100g of product) across the five prioritised food categories, compared to the recommendations for daily intake of free sugars (less than 10% of energy intake and ideally below 5%) by the WHO.



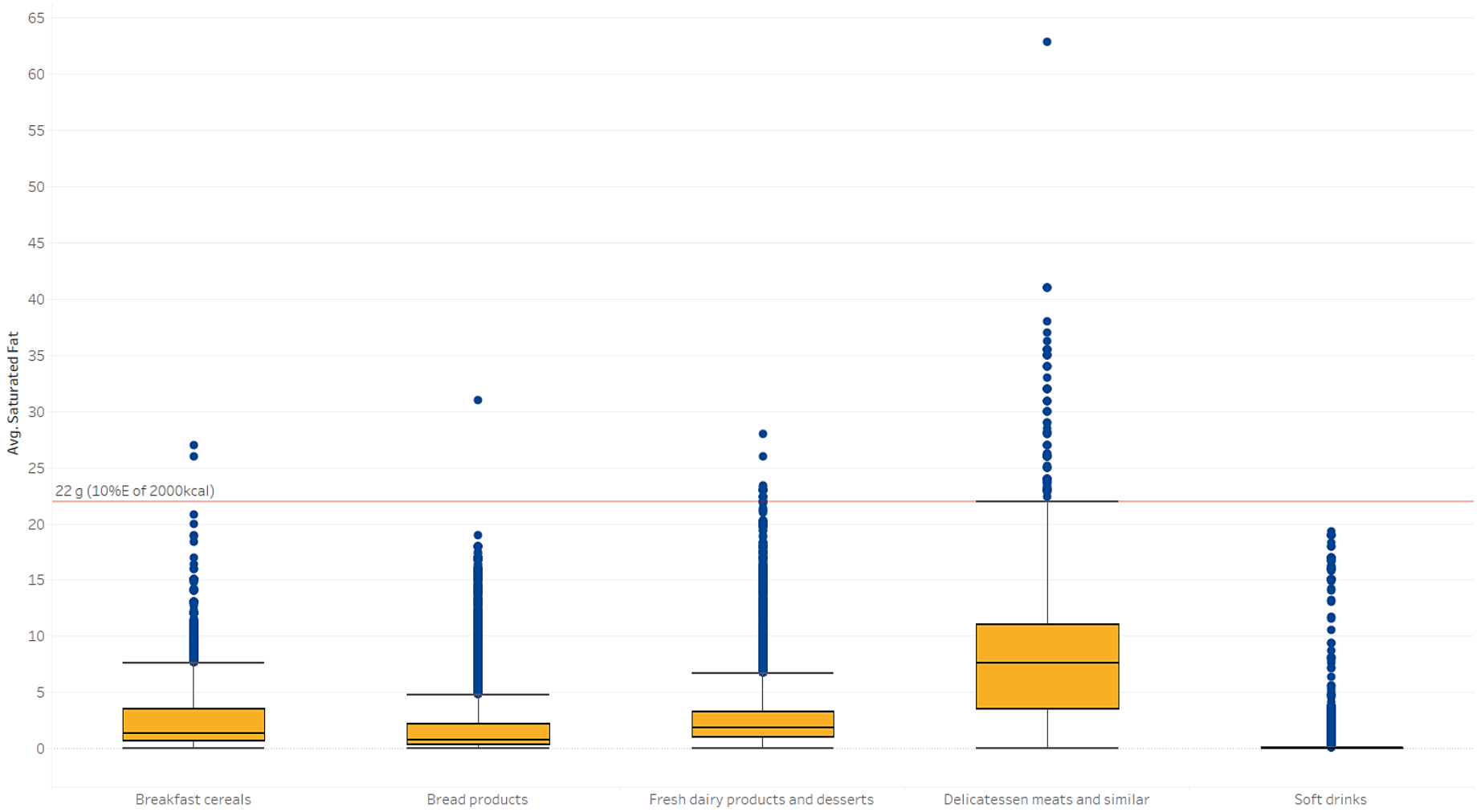
Source: JRC analysis (Figure 4, Figure 23, Figure 42, Figure 61, Figure 80), and WHO (2015)

Figure A3. 2. Summary of distribution of total fat content (g per 100g of product) across the five prioritised food categories, compared to the recommendations for daily total fat intake by EFSA (20-35% of total energy intake) and WHO (30% of total energy intake).



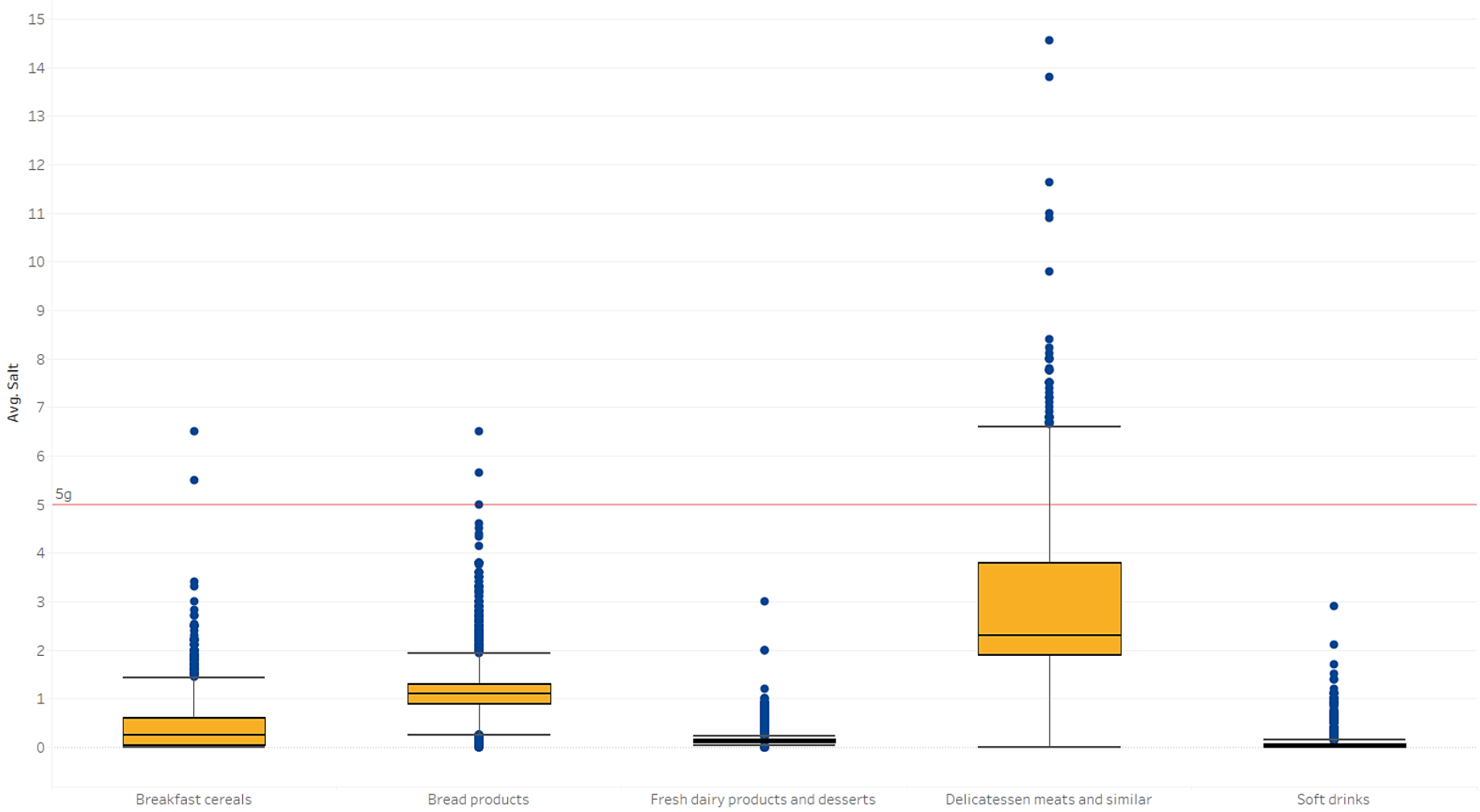
Source: JRC analysis (Figure 7, Figure 26, Figure 45, Figure 64, Figure 83), EFSA (2010b), WHO (2023c)

Figure A3. 3. Summary of distribution of saturated fat content (g per 100g of product) across the five prioritised food categories, compared to the recommendations for daily saturated fat intake by the WHO (less than 10% of total energy intake).



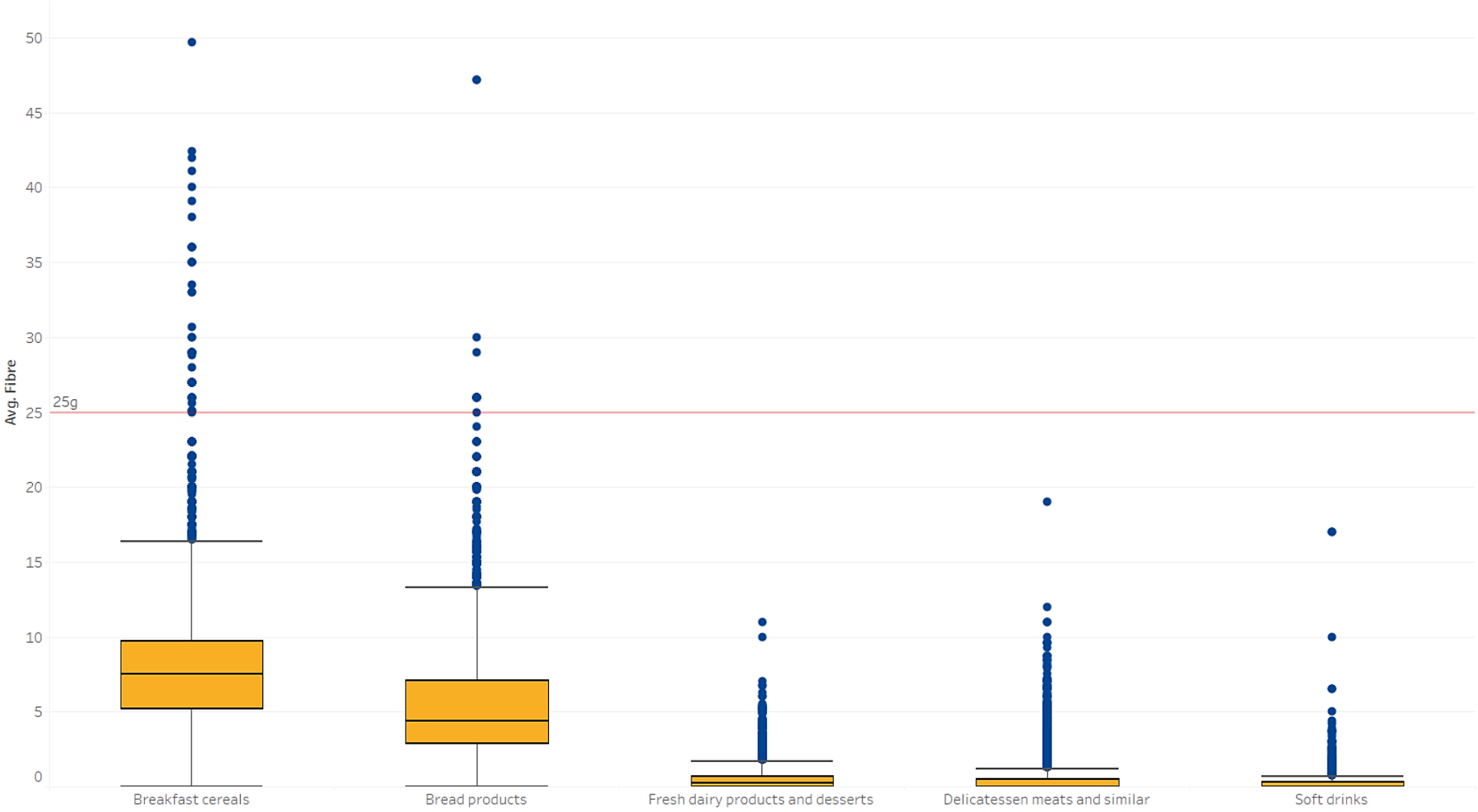
Source: JRC analysis (Figure 10, Figure 29, Figure 48, Figure 67, Figure 86) and WHO (2023b)

Figure A3. 4. Summary of distribution of salt content (g per 100g of product) across the five prioritised food categories, compared to the recommendations for daily salt intake by EFSA (less than 5g daily).



Source: JRC analysis (Figure 13, Figure 32, Figure 51, Figure 70, Figure 89) and EFSA (2019)

Figure A3. 5. Summary of distribution of dietary fibre content (g per 100g of product) across the five prioritised food categories, compared to the recommendations for daily dietary fibre intake by EFSA and WHO (at least 25g daily).



Source: JRC analysis (Figure 16, Figure 35, Figure 54, Figure 73, Figure 92), EFSA (2010a) and WHO (2023a)

Annex 4. Overall evaluation of nutrition content by food sub-category

Table A4. 1. Nutrient levels for breakfast-cereal sub-categories (based on country-average values).

Breakfast cereals sub-categories [1]	**Total sugars**	**Total fat**	**Saturated fat**	**Salt**	**Protein**	**Fibre**
High-fibre cereals						
Sweet cereal flakes						
Cereals without added sugar						
Other ready-to-eat cereals						
Traditional muesli flakes						
Cereal flakes with fruit						
High-fibre fruit cereals						
Crunchy fruit muesli						
Crunchy chocolate muesli						
Crunchy muesli with nuts/seeds						
Chocolate-flavoured cereals						
Honey/caramel cereals						
Chocolate and caramel cereals						
Cereal flakes with chocolate/nuts						
Filled cereals						

1 Sub-categories are grouped into tertiles; colour intensity reflects the nutrient profile—darker shades denote higher content of nutrients to limit (total sugars, total fat, saturated fat, salt) or lower content of nutrients to encourage (protein, fibre). The sub-categories are sorted in the table to reflect the primary nutritional concern for this food category, i.e. in ascending order first for total sugars, then total fat and then salt.

Source: JRC analysis

Table A4. 2. Nutrient levels for bread products sub-categories (based on country-average values).

Bread products sub-categories [1]	**Total sugars**	**Total fat**	**Saturated fat**	**Salt**	**Protein**	**Fibre**
Unleavened breads						
Pre-baked breads						
Other breads						
Wholemeal cereal grains: sandwich breads/ hamburger/ hot dog buns						
Pre-packaged breads						
Breadcrumbs						
Tortilla breads and wraps						
Other rusks						
Plain white sandwich breads/ hamburger/ hot dog buns						
Plain toasted breads and toasts						
Plain rusks						
Other: sandwich breads/ hamburger/ hot dog buns						
Wholemeal cereal grains: rusks						
Wholemeal cereal grains: toasted breads and toasts						
Other bread products						
Croutons						
Wholemeal cereal grains: brioches						
Cream-filled brioches						
Puffed cakes						

Bread products sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Brioches with fruit						
Fine bakery wares: other						
Fine bakery wares: chocolate croissants						
Chocolate brioches						
Pancakes						
Fine bakery wares: croissants						
Plain brioches						

[1] Sub-categories are grouped into tertiles; colour intensity reflects the nutrient profile—darker shades denote higher content of nutrients to limit (total sugars, total fat, saturated fat, salt) or lower content of nutrients to encourage (protein, fibre). The sub-categories are sorted in the table to reflect the primary nutritional concern for this food category, i.e. in ascending order first for total sugars, then total fat and then salt.

Source: JRC analysis

Table A4. 3. Nutrient levels for fresh dairy products and desserts sub-categories (based on country-average values).

Fresh dairy products and desserts sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Classic plain fresh cheeses with no added sugar						
Artificially-sweetened fresh cheeses						
Classic plain yoghurts and fermented milks with no added sugar						
Artificially-sweetened yoghurts and fermented milks						
Fresh light and/or artificially-sweetened desserts						

Fresh dairy products and desserts sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Fresh plain unsweetened soy desserts						
Gourmet plain fresh cheeses with no added sugar						
Gourmet plain yoghurts and fermented milks with no added sugar						
Classic sweetened fresh cheeses						
Classic sweet yoghurts and fermented milks						
Fresh sweetened soy desserts						
Gourmet sweet fresh cheeses						
Other fresh plant-based desserts						
Gourmet sweet yoghurts and fermented milks						
Curdled milks						
Fresh desserts with cereals						
Liégeois desserts and similar						
Dessert creams and jellied milks						
Other fresh desserts						
Other dairy products						
Egg-based fresh desserts						
Fresh mousse-type desserts						
Fresh desserts with fruit						
Fresh cakes						

Fresh dairy products and desserts sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Fresh desserts without fruit						

1 Sub-categories are grouped into tertiles; colour intensity reflects the nutrient profile—darker shades denote higher content of nutrients to limit (total sugars, total fat, saturated fat, salt) or lower content of nutrients to encourage (protein, fibre). The sub-categories are sorted in the table to reflect the primary nutritional concern for this food category, i.e. in ascending order first for total sugars, then total fat and then salt.

Source: JRC analysis

Table A4. 4. Nutrient levels for delicatessen meat and similar sub-categories (based on country-average values).

Delicatessen meat and similar sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Other delicatessen meats based on offal						
Other cured meats						
Poultry ham and roast (packaged)						
Cooked pork ham and roast (packaged)						
Poultry lardons						
Dried, smoked or cured beef						
Cooked beef (packaged)						
Boudin, andouille and andouillette						
Alternative products without animal protein						
Other cooked meats (packaged)						
Sausages						
Cured ham						
Dried, smoked or cured pork						

Delicatessen meat and similar sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Preserved pork or poultry liver (canned)						
Pâté						
Pork belly and bacon (packaged)						
Assortment of delicatessen meats						
Dry sausage						
Pepperoni						
Chorizo						

1 Sub-categories are grouped into tertiles; colour intensity reflects the nutrient profile—darker shades denote higher content of nutrients to limit (total sugars, total fat, saturated fat, salt) or lower content of nutrients to encourage (protein, fibre). The sub-categories are sorted in the table to reflect the primary nutritional concern for this food category, i.e. in ascending order first for total fat, then on salt, and finally on sugars, given the intrinsically high fat and salt content of these products.

Source: JRC analysis

Table A4. 5. Nutrient levels for soft drinks sub-categories (based on country-average values).

Soft drinks sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Flavoured waters without added sugar						
Colas without added sugar						
Tonics and bitters without added sugar						
Tea beverages without added sugar						
Energy drinks without added sugar						

Soft drinks sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Alcohol-free beers without added sugar						
Fruit beverages without added sugar						
Plant-based beverages without added sugar						
Other beverages without added sugar						
Other sports drinks						
Aperitif beverages without added sugar						
Flavoured sugar-sweetened and artificially-sweetened waters						
Sugar-sweetened alcohol-free beers						
Sugar-sweetened and artificially-sweetened fruit beverages						
Sugar-sweetened and artificially-sweetened tea beverages						
Sugar-sweetened plant-based beverages						
Sugar-sweetened sports drinks						
Sugar-sweetened and artificially-sweetened tonics and bitters						
Sugar-sweetened and artificially-sweetened colas						
Other sugar-sweetened beverages						
Sugar-sweetened colas						

Soft drinks sub-categories [1]	Total sugars	Total fat	Saturated fat	Salt	Protein	Fibre
Sugar-sweetened energy drinks						
Sugar-sweetened aperitif beverages						
Flavoured sugar-sweetened waters						
Sugar-sweetened fruit beverages						
Sugar-sweetened tea beverages						
Vegetable beverages						
Fruit beverages with fruit content > or = 50%						
Flavoured milk beverages						
Sugar-sweetened and artificially-sweetened energy drinks						
Sugar-sweetened tonics and bitters						

1 Sub-categories are grouped into tertiles; colour intensity reflects the nutrient profile—darker shades denote higher content of nutrients to limit (total sugars, total fat, saturated fat, salt) or lower content of nutrients to encourage (protein, fibre). Tertiles were created for the sugars country averages because there was a good spread of values. For the other nutrients, values were very low and variation very narrow; to improve interpretation of the results, cells with the lightest colour refer to content between 0.01g and 0.09g; values above 0.09g are denoted with the darker colour. Cells that are left blank indicate that the average value for the specific nutrient is close to 0.0g and with very narrow distributions for the country averages; they have been treated separately for this food category to be able to draw meaningful conclusions. The sub-categories are sorted in the table to reflect the primary nutritional concern for this food category, i.e. in ascending order for total sugars only.

Source: JRC analysis

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