



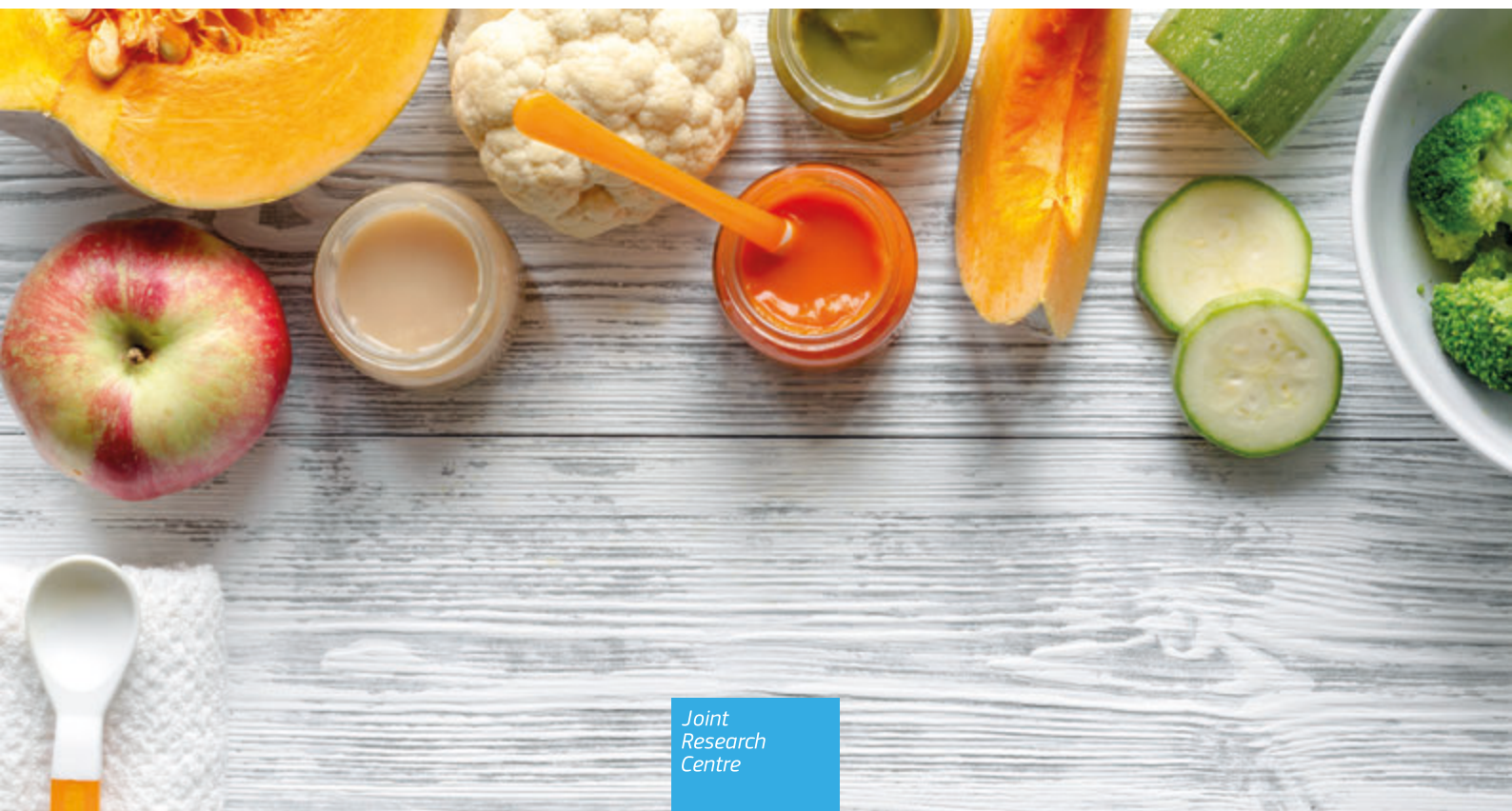
European  
Commission

J R C T E C H N I C A L R E P O R T S

# Feeding infants and young children

*A compilation of national food-based  
dietary guidelines and specific products  
available in the EU market*

New edition, revised and corrected  
**2019**



Joint  
Research  
Centre

### Corrigendum

In the previous edition, for some of the Mintel Global New Products Database products, missing values were inadvertently considered as zero values. This error is now corrected in *Annexes 5 and 8*. All figures where these changes had implications were replotted, the relevant average values were recalculated and text was changed as appropriate. Additional details were added to the methodology, the title and captions of figures and tables, and minor edits were done in various sections of the report.

None of the changes alter any of the conclusions of the previous edition of this report.

This publication is a Technical report by the Joint Research Centre (JRC), the European Commission's science and knowledge service. It aims to provide evidence-based scientific support to the European policymaking process. Parts of the report rely on the use of commercially available data from Mintel Global New Products Database and data collected through a survey; the authors assume no responsibility for errors or omissions on these data sets. The scientific output expressed does not imply a policy position of the European Commission. Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use that might be made of this publication.

### Contact information

Name: Jan Wollgast

Address: Joint Research Centre

Via Enrico Fermi 2749, TP 127, 21027 Ispra (VA), Italy

E-mail: [Jan.Wollgast@ec.europa.eu](mailto:Jan.Wollgast@ec.europa.eu)

### JRC Science Hub

<https://ec.europa.eu/jrc/>

JRC115583

© European Union, 2019

Reuse is authorised provided the source is acknowledged. The reuse policy of European Commission documents is regulated by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

For any use or reproduction of photos or other material that is not under the EU copyright, permission must be sought directly from the copyright holders.

How to cite this report: Evangelia Grammatikaki, Jan Wollgast, Sandra Caldeira, *Feeding infants and young children. A compilation of national food-based dietary guidelines and specific products available in the EU market*; PUBSY No. 115583  
All images © European Union, 2019, except front cover illustration © 279photo.



# Feeding infants and young children

*A compilation of national food-based dietary guidelines and specific products available in the EU market*

Grammatikaki, Evangelia  
Wollgast, Jan  
Caldeira, Sandra

New edition, revised and corrected  
**2019**

# Table of contents

EXECUTIVE SUMMARY	4
<b>1. Introduction</b>	<b>8</b>
<b>2. Methodology</b>	<b>10</b>
2.1. Review of EU nutrient recommendations and food-based dietary guidelines for infants and young children	10
2.2. Overview of branded processed cereal-based food and baby food available in the EU market	12
<b>3. Nutrient and food-based dietary guidelines and recommendations</b>	<b>17</b>
3.1. Nutrient recommendations for infants and young children	17
3.2. Food-Based Dietary Guidelines for infants and young children	20
3.3. Weaning and recommendations on the time of introduction of different foods	21
3.4. Dietary recommendations for infants and young children	22
3.5. Foods that are not recommended to be consumed by infants and young children (or are to be consumed only in moderation)	27
3.6. Feeding practices recommendations	28
<b>4. Analysis of processed cereal-based food and baby food in the EU market</b>	<b>30</b>
<b>5. General discussion</b>	<b>49</b>
<i>List of abbreviations and definitions</i>	54
<i>List of boxes</i>	54
<i>List of figures</i>	55
<i>List of tables</i>	58

ANNEXES	61
Annex 1. List of national food-based dietary guidelines and ages covered in infancy and young childhood (between 6 and 36 mo of age) in EU28, Norway and Switzerland	61
Annex 2. EU Survey questionnaire	64
Annex 3. Detailed review of food-based dietary guidelines (FBDGs) and recommendations by food category	91
Annex 4. Graphical representation of the distribution of energy and nutrient content	129
Annex 5. Summary tables of average energy and nutrient content per 100 g or ml of product	130
Annex 6. Distribution of energy and nutrient content per 100 g (or 100 ml) of product	137
Annex 7. Distribution of country averages for energy and nutrient content per 100 g (or 100 ml) of product	145
Annex 8. Summary tables of average nutrient content per 100 kcal of product	153
Annex 9. Distribution of nutrient content per 100 kcal of product	160
Annex 10. Distribution of country averages for nutrient content per 100 kcal of product	167
ACKNOWLEDGEMENTS	174

## EXECUTIVE SUMMARY

Introducing children to healthy and diverse diets at an early age helps to establish taste preferences and good eating habits later in life. In the EU, processed cereal based food (PCBF) and baby food are defined in Commission Directive 2006/125/EC as food designed to satisfy the nutritional requirements of healthy infants and young children, and are intended for use by infants (children under the age of 12 months) while they are being weaned and by young children (between one and three years) as a supplement to their diet and/or for their progressive adaptation to ordinary food.

The current EU compositional requirements for PCBF and baby food are being updated and will cease to apply from the date of application of a delegated act regulating specific compositional and information requirements.

### The aim of this report

Contrary to the compositional requirements of infant formula and follow-on formula that constitute in most cases the sole source of energy and nutrients for infants and young children, specific compositional requirements for PCBF and baby foods are more complex to define as these foods are not the sole source of energy and nutrients in a child's diet and their intake and intake frequency may vary considerably.

This report aims to support the work needed to prepare a proposal for the new EU compositional requirements regarding PCBF and baby food. It describes current EU nutrient and food based dietary guidelines (FBDGs) and recommendations in the context of infant and young child feeding (from 4-6 months to 3 years old). In addition, it also provides a non-exhaustive analysis of PCBF and baby food products in EU markets; nutrition information on energy, protein, carbohydrates, sugars, fat, saturated fat, sodium and dietary fibre is presented for almost 4 200 PCBF and baby food products using data from the Mintel Global New Products Database (Mintel GNPD).

## Analysis of the national food-based dietary guidelines and a subset of weaning food products available in the market

**Energy** and **protein** intakes of infants and young children living in Europe are generally high compared to their requirements. Although energy intakes above requirements may lead to an unfavourable gain in body mass, most EU Member States do not report major concerns regarding high protein intakes. Milk and dairy products apart, most FBDGs recommend alternating between the other protein sources (meat, fish, eggs, legumes). The analyses for the protein content of Mintel GNPD PCBFs and baby foods analysed, *e.g.* baby savoury meals and dishes, show that, in general, they are below the protein content of recipes suggested for infants and young children by some national FBDGs.

**Total fat** should contribute to a max. 40% of energy intake in these age groups (*i.e.* between 25 g for a 7 month old girl and 52 g for a boy aged 3 years), while the intake of **saturated fat** is to be kept as low as possible. Indeed, most FBDGs also refer to preferring low fat options when it comes to starchy foods (*i.e.* by avoiding frying); preferring lean meat and avoiding processed meat; alternating meat with legumes or eggs which have lower (saturated) fat content; preferring vegetable oils and soft margarines over solid fats; preferring low fat options for milk and dairy products for children aged over two years. The analyses of Mintel GNPD PCBFs and baby foods analysed show that median total and saturated fat values are highest in baby biscuits and rusks, at approximately 12 g and 4 g per 100 g of product, respectively. Although the lack of information on the food products labels did not allow for an evaluation of other types of fatty acids, the European Food Safety Authority (EFSA) highlighted the intakes of alpha-linolenic acid (ALA) and docosahexaenoic acid (DHA) as critical for infants and young children in Europe.

Intake of **carbohydrates** should fall into 45-60% of energy intake in these age groups. The main source of carbohydrates for infants is milk (*i.e.* lactose). However as new foods are introduced during the weaning period, carbohydrates are increasingly coming from other food sources such as starchy foods, fruits or vegetables. For Mintel GNPD PCBF, baby snacks and other baby food analysed the median carbohydrates content is around 70 g per 100 g of product. For the rest of the subcategories it ranges from 8 to 14 g per 100 g of product.

Many FBDGs recommend preferring wholegrain starchy foods although some highlight that their introduction should be done gradually or after the age of 18 months. This recommendation can be seen in conjunction with the EFSA recommendation of 10 g of fibre per day after the age of 1 year old, the equivalent of about 1 g of fibre per 100 kcal consumed for this age group. The median **fibre** content for most Mintel GNPD baby food subcategories analysed is somewhat lower, between 0.5 to 1 g per 100 kcal with the exception of baby fruit products, desserts & yoghurts and baby savoury meals & dishes that have a median content of about 2 g per 100 kcal.

In the context of a balanced diet, most FBDGs emphasize the importance of limited (added or free) **sugars** intake by opting for low sugar starchy foods and dairy products, limiting fruit juice consumption, and preferring unsweetened or sugar free beverages. Nonetheless, the majority of Mintel GNPD baby biscuits and rusks analysed (75% of the products), and roughly 1/3 to 2/3 of baby cereals, baby fruit products, and desserts & yoghurts contain at least one type of added or free sugars as an ingredient. Interestingly, fruit juice, fruit juice concentrates and fruit purees are widely and largely added in most of the baby food subcategories. Fourteen percent of the Mintel GNPD baby drinks analysed (excluding some fruit juices containing fruit juice concentrates) also contain added sugars.

In the case of **sodium**, most EU Member States recommend, for infants and young children, limiting salt intake in general and not adding salt when preparing foods. The variation of sodium content within the Mintel GNPD baby food subcategories analysed was high in many cases indicating that there may be considerable margin to decrease the levels of sodium in some of the products currently on the market.

Further to fulfilling nutrient requirements, there are other aspects of weaning and feeding practices that are important, referred to by EU Member States FBDGs and experts and are relevant to discussions on PCBFs and baby foods.

In general, weaning is recommended between the 5th and the 7th month and FBDGs carefully consider which foods are to be introduced at which age. It is important to note that several FBDGs list specific foods or food categories that



should either be consumed in moderation or not at all by these age groups for reasons that include food safety (such as unpasteurised or raw food), high sugar content (such as sugars-sweetened beverages or sugars), and choking hazard (such as hard pieces of vegetables or whole peanuts). In addition, the FBDGs provide some recommendations regarding specific precautions with regard to allergies, accumulation of heavy metals, exposure to toxic compounds or insufficient intake of protein of high biological value and calcium.

Where feeding practices recommendations exist these are related to, for example, food texture (*e.g.* gradually introducing coarser food), consumption of solid food during weaning (*e.g.* promotion of self-feeding with spoon or avoid use of pouches), consumption of liquid food during weaning (*e.g.* feeding PCBFs through bottles not recommended or stopping the use of bottles with teats by one year of age) and social context of meals.

This report provides an overview of the nutrient recommendations and FBDGs developed by EFSA, EU Member States or, where necessary, other relevant international bodies, in the context of infant and young child feeding (from 4-6 months to 3 years old), complemented by the results of a survey run across EU Member States. In addition, it provides a snapshot of baby food products that were introduced or relaunched in the EU markets in preparation of or after Regulation (EU) No 609/2013 came in place. Although the aim of this work was not to as such recommend specific nutritional or compositional requirements for PCBF and baby food, it supports the revision of and provides the basis for setting such requirements.

# 1. Introduction

In the EU, Regulation (EU) No 609/2013<sup>1</sup> governs food for specific groups (food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control). This framework Regulation sets out only general compositional and labelling requirements for the categories of foods under its scope and empowers the European Commission to further lay down, by means of delegated acts, specific compositional and information requirements. In the case of infants (children under the age of 12 months) and young children (children aged between 1 and 3 years), the foodstuffs considered are infant formulae and follow-on formulae as well as processed cereal-based foods (PCBF) and baby food.

As such, the Commission delegated Regulation (EU) 2016/127,<sup>2</sup> applies to infant formulae and follow-on formulae, formulae designed to satisfy the specific nutritional requirements of healthy infants (children under the age of 12 months).

PCBF and other baby foods are designed to satisfy the specific nutritional requirements of healthy infants and young children and are intended for use by infants while they are being weaned and by young children as a supplement to their diet and/or for their progressive adaptation to ordinary food<sup>3</sup> (see *Table 1* for definitions).

For these foodstuffs, Commission Directive 2006/125/EC<sup>3</sup> currently lays down criteria for their labelling and composition (including a list of vitamins, minerals

1. Regulation (EU) No 609/2013 of the European Parliament and of the Council of 12 June 2013 on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control <http://data.europa.eu/eli/reg/2013/609/oj>.

2. Commission Delegated Regulation (EU) 2016/127 of 25 September 2015 supplementing Regulation (EU) No 609/2013 of the European Parliament and of the Council as regards the specific compositional and information requirements for infant formula and follow-on formula and as regards requirements on information relating to infant and young child [http://data.europa.eu/eli/reg\\_del/2016/127/oj](http://data.europa.eu/eli/reg_del/2016/127/oj). The regulation was adopted on 25 September 2015 and will start to apply on 22 February 2020. Until that date, the rules of the previous Directive 2006/141/EC (<http://data.europa.eu/eli/dir/2006/141/oj>) remain applicable.

3. Commission Directive 2006/125/EC of 5 December 2006 on processed cereal-based foods and baby foods for infants and young children <http://eur-lex.europa.eu/eli/dir/2006/125/oj>.

**Table 1.** Definition of processed cereal-based food (PCBF) and baby food.

Food category	Definition
PCBF	<p>(i) intended to fulfil the particular requirements of infants in good health while they are being weaned, and of young children in good health as a supplement to their diet and/or for their progressive adaptation, to ordinary food; and</p> <p>(ii) pertaining to one of the following categories:</p> <ul style="list-style-type: none"> <li>• simple cereals which are or have to be reconstituted with milk or other appropriate nutritious liquids,</li> <li>• cereals with an added high protein food which are or have to be reconstituted with water or other protein-free liquid,</li> <li>• pastas which are to be used after cooking in boiling water or other appropriate liquids,</li> <li>• rusks and biscuits which are to be used either directly or, after pulverisation, with the addition of water, milk or other suitable liquids;</li> </ul>
baby food	<p>intended to fulfil the particular requirements of infants in good health while they are being weaned, and of young children in good health as a supplement to their diet and/or for their progressive adaptation to ordinary food, excluding:</p> <ul style="list-style-type: none"> <li>• processed cereal-based food; and</li> <li>• milk-based drinks and similar products intended for young children.</li> </ul>

Source: Commission Directive 2006/125/EC.

and other substances) as the European Parliament has objected in January 2016 to a European Commission proposal for a Delegated Regulation<sup>4</sup> to replace it.

### ***Aims and Scope***

This report aims to support the work needed to prepare a proposal for a new delegated act regarding PCBF and baby food. It describes current EU nutrient and food based dietary guidelines (FBDGs) and recommendations in the context of infant and young child feeding (from 4-6 months to 3 years old). In addition, it also provides a non-exhaustive analysis of PCBF and baby food products in EU markets; nutrition information on energy, protein, carbohydrates, sugars, fat, saturated fat, sodium and dietary fibre is presented for almost 4 200 PCBF and baby food products using the Mintel Global New Products Database (GNPD).

4. European Parliament (2016) Objection to a delegated act: specific compositional and information requirements for processed cereal-based food and baby food [8\_TA(2016)0015] <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&reference=P8-TA-2016-0015&language=EN&ring=B8-2016-0067MPER>.

# 2 . Methodology

## 2.1. Review of EU nutrient recommendations and food based dietary guidelines for infants and young children

The nutrient recommendations presented in this report are based on the European Food Safety Authority (EFSA)'s scientific opinions on nutrient requirements and dietary intakes of infants and young children in the European Union,<sup>5,6</sup> except in the cases of sugars and sodium for which the EFSA has not yet developed a scientific opinion. An analysis of EU national and other international recommendations was done instead in these cases.

As for FBDGs, this report presents the result of an analysis of EU national recommendations on FBDGs and feeding recommendations and guidelines for infants and young children (from 4-6 months to 3 years old) from all EU Member States plus Norway and Switzerland as well as the Nordic Nutrition Recommendations (NNR). A complete list of national FBDGs was compiled and confirmed by EU Member States representatives (*Annex 1*). The content of national FBDGs was assessed by native speakers or otherwise translated into English. The information extracted was collated in a dedicated Microsoft Access 2010 form and analysed (*Figure 1*). The most commonly encountered food/nutrient groups were defined as follows: starchy foods; fruit & vegetables; milk & dairy products; legumes; (red) meat, fish & eggs; fats & oils; sweets, desserts & savoury snacks; water and non-alcoholic beverages; salt; and sugars & sweeteners.

An additional survey was developed by the JRC in collaboration with DG SANTE and was run among all EU Member States to complement and validate the review of FBDGs and to provide additional info on available surveys, food fortification, feeding practices and concerns relevant to foods consumed by infants and young

5. EFSA Journal (2013); 11(10):3408 <https://www.efsa.europa.eu/en/efsajournal/pub/3408>.

6. EFSA Journal Virtual Issue 345 (2017). *Dietary reference values (DRVs)*. [https://efsa.onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1831-4732.021217](https://efsa.onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1831-4732.021217).

children. Hereafter, this survey is referred to as the EU survey. Care was taken to ensure consistency and comparability of the analysis; for example, the nutrient and food groups reported here were pre-defined and maintained throughout the FBDGs review, disaggregating further to allow for the most detailed responses possible by the EU Member States. Taste development and preferences were also considered. Twenty-one out of 28 EU Member States responded to the EU survey. The full questionnaire can be found in *Annex 2*.

The following qualitative terminology is used throughout this report to indicate how often a recommendation is part of the national FBDGs analysed: few ( $\leq 4$  FBDGs), several (5-8 FBDGs), many (9-13 FBDGs) and most ( $\geq 14$ ).

**DATABASE Food Based Dietary Guidelines**

General information:  General\_population  Children  Country:  Graphic:

Please include information for the main aspects of the guidelines. If one aspect is not covered, please type n/a. If there is one, add it here

Category	Are there quantitative recommendations? If so, tick the box and then describe.	Add here the qualitative recommendations	Add here the portion sizes
Grains	<input type="checkbox"/>		
Fruit	<input type="checkbox"/>		
Vegetables	<input type="checkbox"/>		
Potatoes	<input type="checkbox"/>		
Legumes	<input type="checkbox"/>		
Milk and dairy products	<input type="checkbox"/>		
Meat	<input type="checkbox"/>		
Fish	<input type="checkbox"/>		
Eggs	<input type="checkbox"/>		
Oils and fats	<input type="checkbox"/>		
Nuts and seeds	<input type="checkbox"/>		
Sweets and desserts	<input type="checkbox"/>		

Are the following aspects included in the guidelines? If yes, tick the corresponding box and describe what the recommendation is:

- Water:  Quantitative   Qualitative   Portion size
- Alcohol:  Quantitative   Qualitative   Portion size
- Sugars:  Quantitative   Qualitative
- Salt:  Quantitative   Qualitative
- Physical activity:  Quantitative   Qualitative
- BMI:
- Varied diet:
- Lifestyle habits:

Citation information: Reference  URL\_Link  Notes

**Figure 1.** Data extraction form; access to the raw information from the food based dietary guidelines contained in the database can be requested.

## 2.2 Overview of branded processed cereal-based food and baby food available in the EU market

### Data collection

To obtain an overview of the composition of processed cereal-based food and baby food that are sold in EU markets, the commercial database Mintel GNPD was used. Mintel GNPD monitors consumer packaged goods in 62 countries and 46 categories, including a category labelled 'baby food'. Each entry in the Mintel GNPD represents a product that is either newly launched or relaunched with different nutrient content, package or label.

The database was searched for all baby foods launched (or re-launched) between January 2012 and March 2017 in 20 EU Member States, Norway and Switzerland. Although the nature of the database does not allow for products that were first introduced before January 2012 and are still in the market to be included in the analysis, the breadth and number of products analysed here gives confidence that the analysis provides a valuable snapshot of the majority of the products that were introduced or relaunched in the EU market in preparation of or after Regulation (EU) No 609/2013<sup>1</sup> came in place. The search strategy and the geographic coverage of the analysis are shown in *Figure 2*.

A) Search strategy	B) Geographic coverage
<p><b>Search for products</b></p> <ul style="list-style-type: none"><li>• where Country matches one or more of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, UK, Romania, Croatia, Slovakia</li><li>• and Category matches Baby Food</li><li>• and Date Published is between January 2012 and March 2017</li></ul>	

**Figure 2.** Search strategy and geographic coverage of products included in the Mintel GNPD as 'baby food'.

The Mintel GNPD contains seven sub-categories under the category ‘baby food’ as described in *Table 2*. Each of the food products identified is thoroughly described in the database, including product information, nutrient content, ingredients used, flavours, allergens and types of claims when available. A total of 149 parameters (or variables) were considered for each product.

A total of 5318 Mintel GNPD products were identified under the category ‘baby food’. As an analysis of milk and follow-on formulas is outside of the scope of this report, these products were excluded from the final analysis (n=789). In addition, some products (n=264) were removed from the analysis when they had incomplete or implausible values for all nutrients examined (for example, missing energy values; over 100 g macronutrients in 100 g of product; 25 g carbohydrates or 25 g of protein or 25 g of total sugars in 100 kcal of product; over 11 g of total or saturated fat in 100 kcal of product). Furthermore, 69 products falling under the Mintel GNPD baby cereals category were removed as they were ready to eat in jars or pots and it was not possible to have comparable nutrient values to the rest of the products which were in powder form. A total of 4196 Mintel GNPD products was analysed.

**Table 2.** ‘Baby Food’ categories as defined in the Mintel GNPD.

**Baby Fruit Products, Desserts & Yoghurts**

Products in this subcategory include single fruits purées, multi fruits purées, fruit and cereal combinations, milky desserts, yoghurts as well as fruit pieces specified for babies & toddlers. Fruit flavoured snacks are categorised under Baby Food-Snacks.

**Baby Savoury Meals & Dishes**

These products range from vegetable purées, soups, meat preparations, mixed vegetable purées, vegetarian menus (complete meals), complete vegetable meals with meat or fish and all other complete meals.

**Baby Cereals**

These products are often a baby’s first introduction to solid food and are commonly in powdered format but may also be ready to eat in jars or pots. Breakfast cereals marketed at babies, like corn flakes for babies are also categorised here. Includes semolina, porridges and creamed rice.

**Baby Juices & Drinks**

Beverages for babies in all formats (including beverage mixes and concentrates). Includes fruit juices and fruit and cereal drinks, as well as drinks that claim to also be a meal.

\*Milk drinks and formulas are not included here.

**Table 2.** (Cont.).

**Baby Snacks**

Items positioned as snacks for babies belong under this subcategory unless they are items that call themselves snacks but are actually puddings, biscuits, etc.

**Baby Biscuits & Rusks**

All biscuits, rusks and crackers positioned for babies and toddlers.

**Other Baby Food**

This category includes food items designated for babies and toddlers that do not fall into the other subcategories. Includes products such as cheese for babies, individual sauces for pasta and separate pasta items, as well as dressings for babies. Excludes products intended to treat dehydration or medical conditions.

GNPD, Global New Products Database; PCBF, processed cereal-based food.

To avoid confusion, the Mintel GNPD products will be mentioned hereafter as Mintel GNPD baby food, differentiating them from what is legally defined as baby food.<sup>3</sup>

### **Data analysis**

The distributions of energy and nutrient content are graphically presented in box-plots, with summary statistics provided in accompanying tables. A guide to the graphical representation of the data is provided in *Annex 4*. For each food-subcategory, the box represents the middle 50% of the data points. The lower edge of the box denotes the 25th percentile (1st quartile, Q<sub>1</sub>) and the upper edge denotes the 75th percentile (3rd quartile, Q<sub>3</sub>). The horizontal verge between the two shades of grey denotes the median value and its position within the box indicates the skewness of the energy or nutrient content values. Whiskers extending from the upper and lower edges of the box indicate data points that are within 1.5 times the interquartile range ( $IQR = Q_3 - Q_1$ ) of the box edges. The whiskers extend to these values or to the closest data point within range. Outlier points are located outside the whisker's range. These points represent products with extreme (high or low) total energy or nutrient content and were included in the calculation of the average values.



To facilitate the interpretation of the results, we used EuroFIR FoodEXplorer database<sup>7</sup> to provide nutrient content values for generic, not fortified, not enriched and non-sweetened version of non-branded foods that could fall under the Mintel GNPD baby food sub-categories examined. The foods were chosen to be illustrative of each relevant food group. More specifically, the nutrient content of: rice flour (commonly used in PCBF), oats, spelt flakes and semolina (commonly suggested in weaning recipes by the EU Member States) is used to illustrate non-branded baby cereals; plain rusk for baby biscuits & rusks; plain whole-fat yoghurt (with no fruits, sugars or flavourings added) for baby fruit products, desserts & yoghurts; and freshly squeezed orange juice and unsweetened apple juice for baby fruit juices and drinks. To account for the inter-country variation, the range of nutrient values from all food composition databases is presented, where the specific food products and nutrients were available.

Microsoft Office Excel 2010 was used to restructure and analyse the data and Tableau 10.1 (<http://www.tableau.com>) to visualise the results and prepare the nutrient content distribution graphs.

The nutrient composition profiles of sample recipes of weaning-appropriate foods recommended by the EU Member States were also used to facilitate the interpretation of those products listed under the sub-category baby savoury meals & dishes. In this case, their nutrient content has been calculated using the national food composition database of the country proposing the recipe. Where recipes mention alternatives (*e.g.* different types of fat, meat or vegetables), the nutrient values presented in the table are averages of the different options. These recipes were compared with products included in the Mintel GNPD with similar main ingredients in the market of the country where the recipes originate from. When more than one food product was retrieved, the average values were used for the comparison.

7. EuroFIR FoodEXplorer database (<http://www.eurofir.org/food-information/foodexplorer/>) was used to obtain nutrient information from national food composition databases in 21 EU Member States, Norway and Switzerland. The Austrian food composition database was used to estimate the nutrient content of German foods.

Finally, given the concerns expressed by the European Parliament<sup>4</sup> regarding the levels of total, free<sup>8</sup> and added<sup>9</sup> sugars in infant or young children's foods, an assessment was also made on the use of ingredients that contribute to the added or free sugars intake of infants and young children through the consumption of marketed [Mintel GNPD] baby foods. The added or free sugars that were identified in the ingredient lists of the Mintel GNPD baby food products are listed in *Box 1* and were chosen based on what the WHO or national FBDGs consider as added or free sugars. Furthermore, as requested by an EU Member State, an additional analysis was run to also include fruit concentrates, fruit powders and fruit purees, as ingredients that contain sugars(s).

**Box 1.** *Added or free sugars identified in the ingredients lists of Mintel GNPD baby food products.*

- Agave syrup
- Barley malt extract/syrup
- Brown sugar
- Cane sugar
- Caramelised sugar
- Fructose
- Fructose and glucose syrup
- Fructose syrup
- Fruit juice (includes e.g. apple juice, multifruit juice, etc) and fruit juice concentrates
- Glucose
- Glucose syrup
- Honey
- Lactose
- Rice syrup
- Unrefined natural sugar
- White sugar

8. WHO (2015) Sugars intake for adults and children: Guideline [http://www.who.int/nutrition/publications/guidelines/sugars\\_intake/en/](http://www.who.int/nutrition/publications/guidelines/sugars_intake/en/). Free sugars include monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

9. EFSA Journal (2010); 8(3)1462 <http://www.efsa.europa.eu/it/efsajournal/pub/1462>. Added sugars included sucrose, fructose, glucose, starch hydrolysates (glucose syrup, high-fructose syrup) and other isolated sugar preparations used as such or added during food preparation and manufacturing.

# 3 Nutrient and food based dietary guidelines and recommendations

## 3.1 Nutrient recommendations for infants and young children

A summary of EFSA’s reference values for energy and most nutrients for infants and young children is presented in *Tables 3-6*.

**Table 3.** Average Requirements (AR) for energy for infants and young children.

Age	Average Requirements for Energy (kcal/d)	
	Male	Female
7 mo	645	573
8 mo	669	597
9 mo	693	621
10 mo	716	645
11 mo	740	669
1 y	788	716
2 y	1027	955
3 y	1170	1099

Source: EFSA<sup>10</sup>

d, day; mo, months; y, year(s).

10. EFSA (2017) *Overview on Dietary Reference Values for the EU population as derived by the EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)* [https://www.efsa.europa.eu/sites/default/files/assets/DRV\\_Summary\\_tables\\_jan\\_17.pdf](https://www.efsa.europa.eu/sites/default/files/assets/DRV_Summary_tables_jan_17.pdf).

**Table 4.** Summary of Population Reference Intakes (PRIs) for protein, Reference Intake Ranges (RI) for total fat and carbohydrates and Adequate Intakes (AIs) for fatty acids, dietary fibre for infants and young children.

Age group (y)	Protein (g/kg bw <sup>a</sup> per day)	Age group (y)	Total fat (E%) <sup>b</sup>	SFA	LA (E%) <sup>c</sup>	ALA (E%) <sup>c</sup>	EPA+ DHA (mg/d) <sup>c</sup>	DHA (mg/d) <sup>c</sup>	TFA	Age group (y)	CHO (E%) <sup>b</sup>	Dietary fibre (g/d) <sup>c</sup>
0.5	1.31	7-11 mo <sup>d</sup>	40	ALAP	4	0.5		100	ALAP			
1	1.14	1	35-40	ALAP	4	0.5		100	ALAP	1-3	45-60	10
1.5	1.03	2-3	35-40	ALAP	4	0.5	250		ALAP			
2	0.97											
3	0.90											

Source: EFSA<sup>10</sup>

ALA,  $\alpha$ -linolenic acid; ALAP, as low as possible; CHO, total carbohydrates; d, day; DHA, docosahexaenoic acid; E%, percentage of energy intake; EPA, eicosapentaenoic acid; LA, linoleic acid; mo, months; SFA, saturated fatty acids; TFA, trans-fatty acids; y, years.

a. to be multiplied by reference body weights to calculate values in g/day.

b. RI

c. AI

d. *i.e.* the second half of the first year of life (from the beginning of the 7th month to the 1st birthday).

**Table 5.** Summary of Population Reference Intakes (PRIs) and Adequate Intakes (AIs) for minerals for infants and young children.

Age (y)	Calcium (mg/d)	Fluoride (mg/d)	Iodine ( $\mu$ g/d)	Iron (mg/d)	Manganese (mg/d)	Phosphorus (mg/d)	Selenium ( $\mu$ g/d)	Zinc (mg/d)	Age (y)	Copper (mg/d)	Magnesium (mg/d)
7-11 mo <sup>a</sup>	280	0.4	70	<b>11</b>	0.02-0.5 <sup>b</sup>	160	15	<b>2.9</b>	7-11 mo <sup>a</sup>	0.4	80
1-3	<b>450</b>	0.6	90	<b>7</b>	0.5	250	15	<b>4.3</b>	1-2	0.7	170
									3	1.0	230

Source: EFSA<sup>10</sup>

d, day; mo, months; y, years.

PRIs are presented in **bold type** and AIs in ordinary type.

a. *i.e.* the second half of the first year of life (from the beginning of the 7th month to the 1st birthday).

b. In view of the wide range of manganese intakes that appear to be adequate, a range is set for the AI of this age group.

**Table 6.** Summary of Population Reference Intakes (PRIs) and Adequate Intakes (AIs) for vitamins for infants and young children.

Age (y)	Biotin (µg/d)	Cobalamin (µg/d)	Folate (µgDFE <sup>a</sup> /d)	Niacin (m NE <sup>b</sup> /MJ)	Rivoflavin (mg/d)	Thiamin (mg/MJ)	Vitamin A (µg RE <sup>c</sup> /d)	Vitamin B6 (mg/d)	Vitamin C (mg/d)	Vitamin D (µg/d)	Magnesium (mg/d)	Age (y)	α-Tocopherol (mg/d)
7-11 mo <sup>d</sup>	6	1.5	80	1.6	0.4	0.1	250	0.3	20	10	10	7-11 mo <sup>d</sup>	5
1-3	20	1.5	120	1.6	0.6	0.1	250	0.6	20	15	12	1-2	6
												3	9

Source: EFSA<sup>10</sup> – d, day; mo, months; y, years. PRIs are presented in **bold type** and AIs in ordinary type.

- DFE: dietary folate equivalents. For combined intakes of food folate and folic acid, DFEs can be computed as follows:  $\mu\text{g DFE} = \mu\text{g food folate} + (1.7 \times \mu\text{g folic acid})$ .
- NE: niacin equivalent (1 mg niacin = 1 niacin equivalent = 60 mg dietary tryptophan).
- RE: retinol equivalent, 1 µg RE equals 1 µg of retinol, 6 µg of β-carotene and 12 µg of other provitamin A carotenoids.
- i.e.* the second half of the first year of life (from the beginning of the 7th month to the 1st birthday)

The data available so far did not allow EFSA to set a population reference intake or upper limit for intake of total or added sugars; however it was concluded that evidence on the relationship between patterns of consumption of sugar-containing foods and dental caries, weight gain and micronutrient intake should be considered when establishing nutrient goals for populations and recommendations for individuals and when developing FBDGs. EFSA is currently working on a request for scientific advice from 5 European countries in relation to a science-based cut-off value for a daily exposure to added sugars from all sources which is not associated with adverse health effects; the opinion is expected to be delivered by 2020.<sup>11</sup> Other European or international bodies have produced recommendations for the consumption of added or free sugars, focusing more on those than on total sugars (which also include sugars naturally present in food, *e.g.* in whole fruit and dairy products).

WHO recommends ‘reducing the intake of free sugars to less than 10% of total energy intake’ and ‘suggests a further reduction of the intake of free sugars to be-

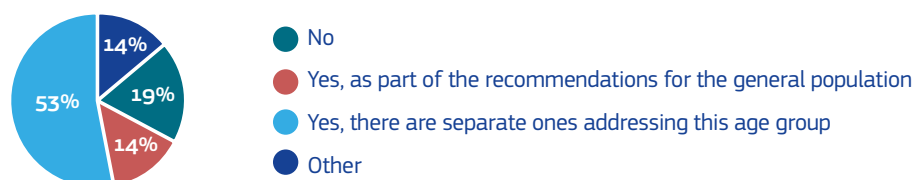
11. EFSA (2018) *Draft protocol for the Scientific Opinion on free sugars from all dietary sources* [<https://www.efsa.europa.eu/sites/default/files/engage/180109.pdf>].

low 5% of total energy intake'.<sup>8</sup> In a recent position paper,<sup>12</sup> the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) recommends 'a desirable upper limit [of free sugars] of < 5% energy intake in children and adolescents aged ≥2-18 years... [with] even lower [intakes] in infants and toddlers < 2 years'. ESPGHAN further considers smoothies and sweetened milk drinks/products as important sources of free sugars and despite not being mentioned in the WHO guideline, recommends limiting their consumption.

As for salt, EFSA has developed a protocol for establishing dietary reference values for sodium (to be implemented in 2018). A public consultation will be organised once the scientific opinion is complete (Spring 2019).<sup>13</sup> A detailed analysis of the results of the review of the national FBDGs and the EU survey regarding sugars and salt/sodium is presented in *Chapter 3.4*.

### 3.2. Food Based Dietary Guidelines for infants and young children

The analysis of the FBDGs of all the EU Member States shows that 24 of these include food-related recommendations that are specific for children between 6 months and 3 years of age. These results are complemented by a survey run among the EU Member States that shows that in a total of 21 countries, about half have separate recommendations for this age group while others include them in the recommendations for the general population (*Figure 3*). About 2/3 of the countries responding to this survey had FBDGs for children over the age of 6 months and only 1/4 of the countries had FBDGs for infants below the age of 6 months.



**Figure 3.** Results of the EU Survey for the question 'Does your country have FBDGs for infants and young children?'

12. JPGN (2017) 65(6):681-696 [[https://journals.lww.com/jpgn/fulltext/2017/12000/Sugar\\_in\\_Infants,\\_Children\\_and\\_Adolescents\\_\\_A.18.aspx](https://journals.lww.com/jpgn/fulltext/2017/12000/Sugar_in_Infants,_Children_and_Adolescents__A.18.aspx)].

13. EFSA. Protocol for the scientific opinion on DRVs for sodium [<https://zenodo.org/record/1116290#.WzoOLC0r-wUG>] [last accessed 27/09/2018].

### 3.3 Weaning and recommendations on the time of introduction of different foods

Table 7 provides a list of the recommendations collected regarding the introduction of each of the food categories in the diet of the weaning infant or child.

In general, the introduction of weaning foods is recommended not earlier than the beginning of the 5th month and no later than the beginning of the 7th month.

**Table 7.** Recommendations on age of introduction of different foods as described in the FBDGs analysed. All alternatives identified are presented in the table. Frequency of replies for each alternative is indicated in a separate column (in a total of 16 countries that have recommendations on age of introduction of foods).

Food category	Age of introduction	Frequency
Starchy foods	After 4 months and no later than 6 months	5
	From 4 months (without gluten) and 6 months (with gluten)	1
	After 5 months	1
	From 6 months	3
	Gradual introduction of wholegrain	1
	Wholegrain from 18 months	1
Fruit and vegetables	Possible from 4 months, recommended from 6 months on	1
	After 4-6 months	1
	From 6 months on	3
	Fruit juices from 12 months on	3
Eggs	Yolk after 4 months; whole egg after 1 year	1
	After 6 months	4
	From 8 months	1
	From 12 months	1
Nuts and seeds	No whole nuts before the age of 4-5 years due to risk of choking	2
	After 6 months	2
	After 12 months	3
Meat	Possible from 4 months, recommended from 6 months	1
	After 5 months	1
	From 6 months	2
	From 8 months	1

Table 7. (Cont.).

Food category	Age of introduction	Frequency
Cow's milk	After 6 months	1
	After 12 months	10
Yoghurt, cheese	After 6 months	2
	After 10-12 months	1
	After 12 months	1
Fish	After 5 months	1
	After 6 months	5
	After 12 months	2
Legumes	From 8 months	1
	From 15-18 months	1

FBDGs, food- based dietary guidelines.

### 3.4. Dietary recommendations for infants and young children

Most FBDGs analysed recommend that infants and young children eat a balanced diet that includes a variety of foods and provide limited amounts of sugars, fat and salt. Many also provide age-specific quantitative recommendations that take into account children's physiological needs and developmental stage. A summary of these recommendations is presented in *Table 8* and detailed results per country and food category are provided in *Annex 3*.

Table 8. Summary of quantitative and qualitative recommendations included in the FBDGs analysed regarding the consumption of different food categories by infants and young children aged 6 months to 3 years.

Food category	Summary of quantitative recommendations	Examples of qualitative recommendations found in FBDGs addressed to infants and young children
Starchy foods	Most FBDGs analysed recommend consuming starchy foods as the basis/every day, few suggest with each meal	<ul style="list-style-type: none"> <li>• Prefer wholegrain</li> <li>• Prefer low fat, low sugar, low salt options</li> <li>• Avoid frying</li> <li>• Consume potatoes as part of a balanced diet</li> </ul>



Table 8. (Cont.).

Food category	Summary of quantitative recommendations	Examples of qualitative recommendations found in FBDGs addressed to infants and young children
Fruit	Most FBDGs analysed recommend 1-2 fruits per day	<ul style="list-style-type: none"> <li>• Consume a variety of different fruits</li> <li>• Prefer regional and seasonal products</li> <li>• Few FBDGs emphasise consumption of berries</li> <li>• No fruit jams</li> <li>• Dilute fruit juice with water</li> <li>• Consume fruit juices without added sugars</li> </ul>
Vegetables	Most FBDGs analysed recommend min. 3 pieces of vegetables per day	<ul style="list-style-type: none"> <li>• Regional and seasonal products</li> <li>• Variety between different types</li> <li>• No hard pieces of vegetables (risk of choking)</li> </ul>
Legumes		<ul style="list-style-type: none"> <li>• Part of a balanced diet</li> <li>• Alternative to meat</li> </ul>
Milk & Dairy products <sup>a</sup>	Recommendations vary between 3-5 servings per day <sup>b,c</sup>	<ul style="list-style-type: none"> <li>• Prefer low fat options for children &gt; 2 years old</li> <li>• Few FBDGs recommend low sugar options</li> <li>• Few FBDGs support fortification or enrichment with calcium or vit D</li> </ul>
Meat, poultry, fish and eggs	<ul style="list-style-type: none"> <li>• Recommendations for meat vary from 10 g-70 g per day up to max. 500 g red meat per week</li> <li>• Most FBDGs recommend to consume fish once or twice per week</li> <li>• Few FBDGs have quantitative recommendations specifically for eggs. When a quantitative recommendation is given, then 1-2 per week.</li> </ul>	<ul style="list-style-type: none"> <li>• Alternate meat with other sources of protein such as fish, eggs, legumes</li> <li>• Prefer lean meat and avoid processed meat</li> <li>• Prefer oily fish</li> </ul>
Oils and fats	Many FBDGs recommend 1-3 teaspoons per day	<ul style="list-style-type: none"> <li>• Prefer vegetable oils and soft margarines over more solid fats</li> </ul>
Nuts and seeds	Few FBDGs recommend 1-3 teaspoons of nuts every day for children aged over 1 year	<ul style="list-style-type: none"> <li>• Consume in small quantities, unsalted or in the form of paste</li> </ul>
Sugars (incl. sweets and desserts)	Few FBDGs included a quantitative recommendation for added sugars <sup>d</sup>	<ul style="list-style-type: none"> <li>• Limit intake of added sugars</li> <li>• Lookout for hidden sources of sugars</li> </ul>
Salt	Many FBDGs recommend to use salt sparingly or not at all	<ul style="list-style-type: none"> <li>• Choose iodised salt when you use it</li> <li>• Avoid products high in salt</li> <li>• Use spices and herbs instead</li> </ul>

Table 8. (Cont.)

Food category	Summary of quantitative recommendations	Examples of qualitative recommendations found in FBDGs addressed to infants and young children
Water and other beverages	Recommendations vary between 600 ml to about 1 litre per day	<ul style="list-style-type: none"> <li>• Prefer unsweetened/sugar-free beverages</li> <li>• Fruit juices not essential</li> <li>• Drink water instead of fruit juices</li> </ul>

FBDGs, food-based dietary guidelines.

a. Breastmilk is recommended by most FBDGs, at least until 6 months of age.

b. The average serving size is 100-125 ml; most recommendations do not specify where these servings should come from- it could be milk, yoghurt or cheese.

c. When interpreting the recommendation for milk and dairy products, it should be kept in mind that although the FBDGs include infant formula and follow-on formula in this category, the delegated act under-preparation will not include them. For more information regarding the specific compositional and information requirements for these products please refer to the Commission Delegated Regulation (EU) 2016/127.<sup>2</sup>

d. Although few FBDGs provided quantitative recommendations, the EU survey showed that in several EU Member States there are recommendations regarding the sugars consumption. These can be found in detail in *Figure 5* and *Table 9*.

Many of the countries have detailed recommendations regarding the (limited) consumption of fruit juices, fruit nectars and fruit drinks. These are presented in *Figure 4*; for example, six of the responding countries recommend diluting fruit juices with water before consuming (the dilution suggested varies from 1:1 to 1:10 of fruit juice: water). When specific quantitative recommendations exist, the maximum daily amount suggested also varies from 5-6 teaspoons (*i.e.* 25-30 ml) to 150 ml of fruit juice.

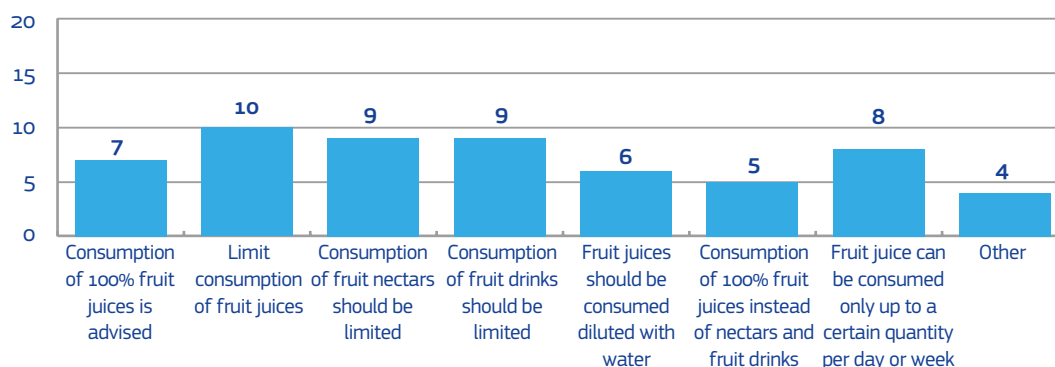
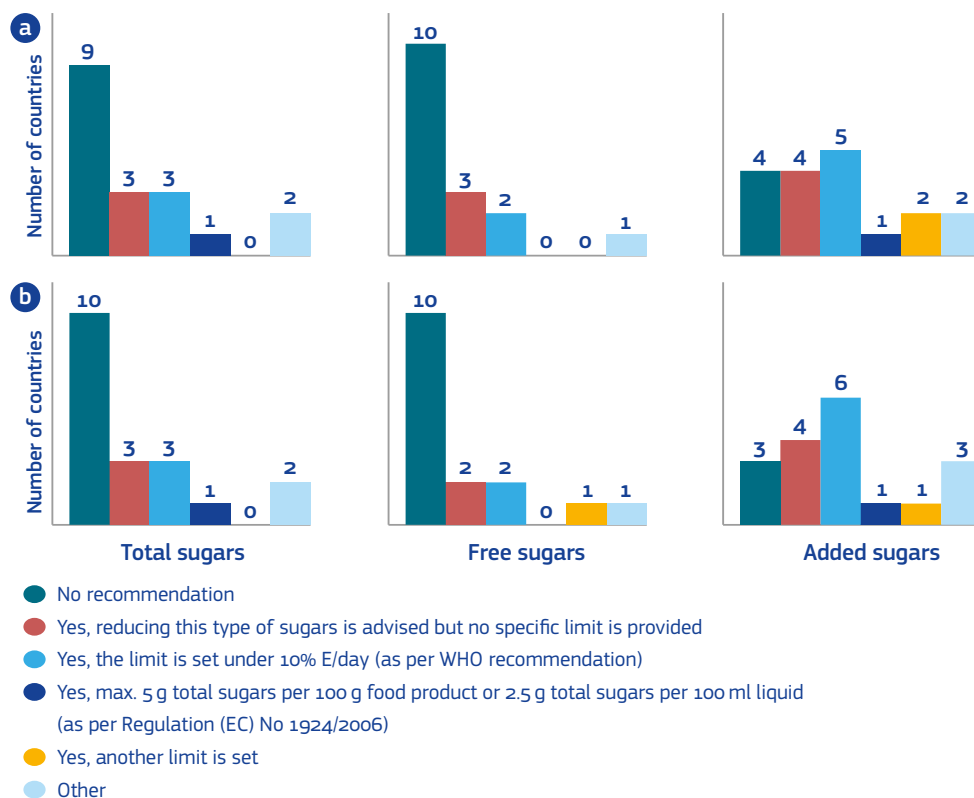


Figure 4. Summary of recommendations regarding consumption of fruit juices. Bars present the number of countries that have each of the recommendations out of the total of 21 countries that responded to the EU survey.

The EU survey also invited EU Member States to indicate any recommendations regarding sugar consumption by infants and young children. The results are presented in *Figure 5* and further detailed in *Table 9*. While most of the responding EU Member States do have some kind of recommendation regarding added sugars, half of them do not have recommendations regarding total and free sugars.<sup>9</sup>



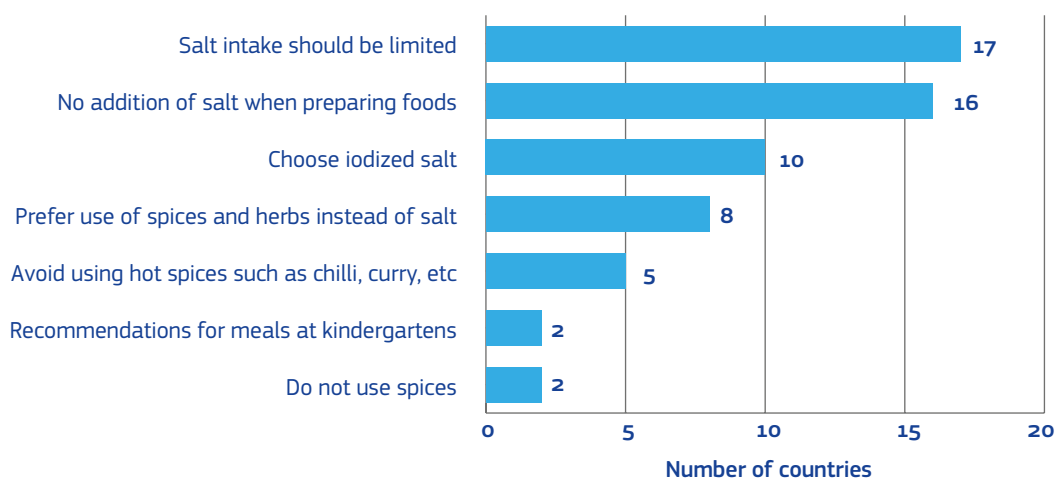
**Figure 5.** Summary of recommendations on intake of sugars for (a) infants (<12 months old) and (b) young children (12-36 months old). Bars reflect the number of countries/FBDGs that have each of the recommendations out of the 21 countries that responded to the EU survey. Regulation (EC) No 1924/2006<sup>14</sup> determines the conditions of use of the nutrition claim ‘low sugars’, setting the limit to max. 5g of total sugars per 100g of food product or 2.5 g of total sugars per 100 ml liquid product. The latest WHO recommendations advise no more than 10% (and preferably even less than 5%) of total energy intake to come from free sugars.<sup>8</sup>

14. Regulation (EC) No 1924/2006 of the European Parliament and of the council of 20 December 2006 on nutrition and health claims made on foods <http://eur-lex.europa.eu/eli/reg/2006/1924/2012-11-29>.

**Table 9.** Overview of detailed responses falling under ‘Other’ recommendations (blue bar in Figure 5) regarding intake of sugars by infants and young children.

Age group	Recommendations
Infants (<12 months old)	<ul style="list-style-type: none"> <li>• No added sugar to home-made baby food</li> <li>• Prefer baby food free of sugar/honey/chocolate</li> <li>• Limit for added sugar at kindergarten (20-25 g/day)</li> <li>• Minimal added sugar</li> </ul>
Young children (12-36 months old)	<ul style="list-style-type: none"> <li>• No addition of sugar to milk and flavoured milk products</li> <li>• Limit for added sugar at kindergarten (20-25 g/day)</li> <li>• Not recommended to replace meals with sugary snacks</li> <li>• Max. 13 g of free sugars per day</li> <li>• Total sugars at max. 10-20% of total energy</li> </ul>

Similarly *Figure 6* presents the outcome of the EU survey regarding recommendations on salt consumption by infants and young children. Limiting salt intake is recommended by most EU Member States; some of them also make qualitative recommendations regarding the use of spices and herbs or the type of salt consumed.



**Figure 6.** Recommendations on salt intake for infants and young children. Bars reflect the number of countries/national FBDGs that have each of the recommendations out of the total of 21 countries that responded to the EU survey.

### 3.5. Foods that are not recommended to be consumed by infants and young children (or are to be consumed only in moderation)

The FBDGs analysed refer to a series of food items that are not recommended for consumption by infants and young children (*Table 10*). The main reasons for these recommendations include food safety (unpasteurised or raw food), high sugar content, and choking hazard. In addition, the FBDGs provide some recommendations regarding specific precautions that should be taken to avoid excessive or insufficient intake of some nutrients or other substances (*Table 11*). Specific precautions are suggested to avoid allergies, accumulation of heavy metals, exposure to toxic compounds or insufficient intake of protein and calcium.

**Table 10.** Food items not recommended for consumption by infants and young children in one or more of the FBDGs analysed.

Age group	Food items
6-12 months	Honey
	Raw meat or fish
	Processed meats
	Cow's milk
	Unpasteurised cheese, e.g. brie, blue cheese
	Sugar-sweetened beverages
	Tea
	Sugar
	Salt
	High-fat and high sugar foods
	Hard pieces of vegetables
	Whole or chopped nuts
12-36 months	Raw meat
	Liver pâté
	Hard pieces of vegetables or whole peanuts
	Processed meats

**Table 11.** Recommendations to avoid excessive/insufficient intake of nutrients or other substances in infants and young children as presented in one or more of the FBDGs analysed.

Issue	Recommendation
<i>Excessive intake of...</i>	
Arsenic	Rice-based porridge should not be consumed every day. Rice-biscuits should be avoided.
	Rice based alternatives to milk should be avoided.
Cadmium	Limit consumption of linseed and sunflower seeds.
Mercury	Avoid consumption of large predatory fish such as tuna (steaks and canned), pike, halibut, swordfish, perch, walleye, oil fish, escolar, ray fish and shark.
Nitrate	Spinach, beetroot, fennel and celery <ul style="list-style-type: none"> <li>• under 6 months: avoid</li> <li>• between 6-12 months: occasionally <i>e.g.</i> once every two weeks.</li> </ul>
Nitrite	No reheated meals containing spinach, lettuce and herbs such as chives and parsley.
	Consume processed poultry and meat (offal) up to 60 g per week.
Ochratoxin A	Children under the age of 3 years should not consume more than 50 g of raisins per week.
Saponins	Porridge containing quinoa after 4 months but not as first choice.
Vitamin A	Avoid liver and spreadable liver pâté.
<i>Insufficient intake of...</i>	
Protein of high biological value Calcium	Rice-, oat- or nut-drinks cannot replace milk, cheese or calcium-rich soy products and should be avoided.

### 3.6. Feeding practices recommendations

Sixty percent of the EU survey respondents have national recommendations regarding feeding practices or methods. These are mostly related to 4 main aspects: food texture, consumption of solid food during weaning, consumption of liquids during weaning and the social context of the meal. A list of recommendations regarding these different aspects of feeding is presented in *Table 12*.

**Table 12.** Recommendations regarding different aspects of feeding of infants and young children as presented in one or more of the FBDGs analysed. Frequency of replies is indicated in a total of 12 countries that responded they have recommendations on feeding practices.

Feeding aspect	Recommendation	Frequency
Food texture	Gradually introduce coarser food, small pieces of bread, cooked cauliflower, etc, baby biscuits.	5
Consumption of solid food during weaning	Promote self-feeding with the use of hands or spoon when possible.	8
	Stop eating pureed food by 10 months of age.	1
	Use of pouches is not recommended.	2
Consumption of liquids during weaning	<ul style="list-style-type: none"> <li>• 6 months onwards: Sippy cup or beaker</li> <li>• By 1 yr old: use of bottles with teats should have stopped.</li> </ul>	2
	Feeding PCBFs through bottles is not recommended.	1
Social context of the meal	Eating with family.	5

## 4 . Analysis of processed cereal-based food and baby food in the EU market

As detailed in the methodology section, a commercial database containing nutrient and ingredient composition of food products marketed as baby food in the EU was used to analyse the composition of these foods in the EU market.

While the analysis is not exhaustive, as it does not include all baby food products in the market, the fact that the > 4 000 products analysed are either newly introduced or products relaunched over the past five years gives confidence that they are illustrative of the current trends in the composition of such type of products (*Table 13* shows a breakdown of all products analysed per country and sub-category). The majority of new baby food products launched falls under the ‘Baby fruit products, desserts & yoghurts’ and ‘baby savoury meals & dishes’ (33.8% and 30.3% of all newly launched products, respectively).

**Table 13.** Products (launched or relaunched) included in the Mintel GNPD database for the period of January 2012 - March 2017 by category of baby food product and country.

	Mintel GNPD baby food categories						
	Baby Fruit Products, Desserts & Yoghurts	Baby Savoury Meals & Dishes	Baby Cereals	Baby Juices & Drinks	Baby Snacks	Baby Biscuits & Rusks	Other Baby Food
<b>Total</b>	<b>1 422</b>	<b>1 276</b>	<b>502</b>	<b>295</b>	<b>318</b>	<b>308</b>	<b>75</b>
Belgium	42	62	6	4	5	10	3
Czechia	56	18	10	19	16	14	0
Denmark	31	20	20	10	5	5	0
Germany	171	126	53	47	41	41	4
Ireland	8	19	5	3	12	7	1
Greece	6	2	19	0	10	6	0
Spain	220	138	58	10	12	22	1
France	154	287	43	28	2	22	7
Croatia	8	0	2	2	0	1	0
Italy	149	129	54	32	7	51	43



Table 13. (Cont.).

	Mintel GNPD baby food categories						
	Baby Fruit Products, Desserts & Yoghurts	Baby Savoury Meals & Dishes	Baby Cereals	Baby Juices & Drinks	Baby Snacks	Baby Biscuits & Rusks	Other Baby Food
Hungary	35	7	6	6	15	12	0
Netherlands	37	51	18	9	5	8	1
Austria	51	29	21	12	10	11	1
Poland	116	87	33	33	10	3	2
Portugal	37	7	7	1	5	3	0
Romania	1	0	11	2	0	1	0
Slovakia	11	9	2	6	2	4	0
Finland	26	6	9	6	4	1	0
Sweden	8	6	5	7	8	2	0
United Kingdom	130	214	68	33	110	67	12
Norway	96	51	42	9	34	12	0
Switzerland	29	8	10	16	5	5	0

A complete analysis plan of the energy and nutrient content for each of the seven baby food subcategories available in the Mintel GNPD database is described in *Box 2*.

**Box 2.** Summary of the analyses presented in this report regarding the composition of Mintel GNPD baby food products available in the EU market.

To provide a complete description of the data and facilitate different modes of data interpretation, data has been analysed in different manners.

A representation of nutrient content per 100 kcal of food product is presented within the body of this report and in annexes as detailed below. This representation allows for comparability with legislation and overcomes potential bias introduced by lack of information on portion sizes within food subcategories.

Energy and nutrient content per 100 g or 100ml of food product are presented in annexes. In addition, because the same product may have been launched in multiple countries and to correct for any over-representation of products that could result from this possibility, country averages are also plotted for nutrient content both per 100 g (or 100 ml) and per 100 kcal of food product.

## Box 2. (Cont.)

More specifically, for each of the Mintel GNPD baby food sub-categories available in the Mintel GNPD, the data is analysed in terms of:

### A) energy and nutrient content per 100 g or ml of product

- Summary tables of average energy and nutrient content per 100 g or ml of product (*Annex 5*)
- Distribution of energy and nutrient content per 100 g (or 100 ml) of product (*Annex 6*). Each blue dot represents the energy (in kcal) or nutrient (in g or mg) content per 100 g (or 100 ml) of an individual product. See *Annex 4* for a guide to the graphical representation of the data.
- Distribution of country averages for energy and nutrient content per 100 g (or 100 ml) of product (*Annex 7*). Each blue dot refers to one of the 22 countries examined and represents the country average of the energy (in kcal) or nutrient (in g or mg) content per 100 g (or 100 ml) of the products marketed under each Mintel GNPD baby food sub-category. See *Annex 4* for a guide to the graphical representation of the data.

### B) nutrient content per 100 kcal of product

- Summary tables of average nutrient content per 100 kcal of product (*Annex 8*).
- Distribution of nutrient content per 100 kcal of product (*Annex 9*). Each blue dot represents the nutrient content per 100 kcal for each of the products analysed. See *Annex 4* for a guide to the graphical representation of the data.
- Distribution of country averages for nutrient content per 100 kcal of product (*Annex 10*). Each blue dot refers to one of the 22 countries examined and represents the country average for the nutrient content (in g or mg) per 100 kcal of the products marketed under each Mintel GNPD baby food sub-category. See *Annex 4* for a guide to the graphical representation of the data.

The nutrient content per 100 kcal of product is presented in figures below, organised by Mintel GNPD baby food sub-categories: baby cereals (*Figure 7*), baby biscuits & rusks (*Figure 8*), baby fruit products, desserts and yoghurts (*Figure 9*), baby fruit juices and drinks (*Figure 10*), baby savoury meals and dishes (*Figure 11*) and baby snacks (*Figure 12*). Data is presented as median values and IQR (interquartile range covering the middle 50% of the products). A guide to the graphical presentation of the data is provided in *Annex 4*.

As can be seen in *Figure 7*, the carbohydrates median content of the Mintel GNPD **baby cereals** analysed is 18.8 g per 100 kcal product, with a large spread of data (IQR: 4.9 g per 100 kcal), while the median content for total sugars and sodium is 5.1 g per 100 kcal and 5.5 mg per 100 kcal, respectively. In both cases, large variations in the content can be observed. As for fat (median 1.0 and IQR 1.9 g per 100 kcal), fibre (me-

dian and IQR 1.0 g per 100 kcal), protein (median 2.8 and IQR 0.9 g per 100 kcal) and saturated fat (median 0.2 and IQR 0.7 g per 100 kcal), the variation between different products within this subcategory is less prominent. To facilitate the interpretation of the results, where possible, the Mintel GNPD products nutrient data was further compared with the nutrient composition of generic, non-branded foods. In this case, the comparison included data on the nutritional composition of rice flour, oats, spelt flour and semolina in different EU countries, as these products are illustrative of this subcategory and are mentioned in the FBDGs concerning this age group. The content and ranges observed are represented in the figure; a visible difference is seen in the case of total sugars, sodium and saturated fat content for which the generic versions had lower values compared to the products marketed as 'baby cereals'.

As for Mintel GNPD **baby biscuits and rusks** (data presented in *Figure 8*), the sodium median content of the products analysed is 26.8 mg per 100 kcal with the largest spread of data observed (IQR: 38.7 mg per 100 kcal). The remaining median nutrient contents are carbohydrates (median 16.9 and IQR 2.0 g per 100 kcal), total sugars (median 4.8 and IQR 2.3 g per 100 kcal), total fat (median 2.8 and IQR 1.1 g per 100 kcal), fibre (median 0.7 and IQR 0.6 g per 100 kcal), protein (median 1.9 and IQR 0.6 g per 100 kcal) and saturated fat (median 1.0 and IQR 1.0 g per 100 kcal) with lower variations overall. The comparison with plain rusk nutritional composition shows higher levels of sugar in the branded products, as well as albeit to a less extent, higher levels of fat and saturated fat.

The nutrient density of Mintel GNPD **baby fruit products, desserts and yoghurts** analysed is presented in *Figure 9*. The median carbohydrates content is 21.5 g per 100 kcal (IQR: 3.9 g per 100 kcal), the median total sugars content is 16.9 g per 100 kcal (IQR: 6.4 g per 100 kcal), the median total fat content is 0.5 g per 100 kcal with IQR 1.2 g per 100 kcal, the median fibre content is 2.3 g per 100 kcal (similar IQR) and the median protein content is 1.0 g per 100 kcal (similar IQR), the median saturated fat content is 0.1 g per 100 kcal with IQR 0.8 g per 100 kcal. Finally, median sodium content is 21.4 mg per 100 kcal with an IQR of 28.8 mg per 100 kcal. The largest spread of the data is observed for sodium and total sugars. In this case, the illustrative product of choice was whole fat, plain yoghurt; a one-to-one comparison is not appropriate as the branded products category also includes baby fruit products and desserts which have a considerably different composition.

The median content of carbohydrates and total sugars in the Mintel GNPD **baby fruit juices and drinks** analysed (*Figure 10*), is 23.1 and 21.3 g per 100 kcal respectively with a large variation observed for total sugars (IQR: 8.1 g per 100 kcal). Median total fat, fibre, protein and saturated fat values are all around 0.5 g per 100 kcal; sodium's median content is 28.9 mg per 100 kcal with a high variation also observed in this case (IQR: 55.3 mg per 100 kcal). The median values are mostly in line with the content of freshly squeezed orange juice or unsweetened apple juice, none of them diluted.

For the Mintel GNPD **baby savoury meals and dishes** analysed (*Figure 11*), a large variation is again observed for sodium (median: 68.5 mg per 100 kcal; IQR: 109.9 mg per 100 kcal). For the rest of the nutrients, the median content in carbohydrates is 12.4 g per 100 kcal (IQR: 2.9 g per 100 kcal), in total sugars 2.8 g per 100 kcal (IQR: 2.4 g per 100 kcal), in total fat 3.3 g per 100 kcal (IQR: 1.4 g per 100 kcal), in saturated fat 0.7 g per 100 kcal (IQR: 0.8 g per 100 kcal), and in fibre 2.1 g per 100 kcal (IQR: 1.6 g per 100 kcal). Seeing that several of the FBDGs analysed have provided sample recipes for weaning-appropriate foods, the nutrient composition profiles of these recommended mixed meals have also been calculated and used to illustrate non-branded meals, easily recognisable and similar to branded baby foods under Mintel GNPD 'baby savoury meals and dishes' (*Table 14*). The recipes used as references are described in *Box 3*. In most cases the branded products had overall lower protein, total and saturated fat content; and higher carbohydrates, fibre, total sugars and sodium content.

For the Mintel GNPD **baby snacks** analysed (*Figure 12*), large variations are observed for all nutrients, likely due to the heterogeneity of products included in this subcategory and their relatively smaller number. The results for this subcategory should therefore be viewed with precaution; as it stands, the median content in carbohydrates is 19.0 g per 100 kcal (IQR: 5.7 g per 100 kcal), in total sugars 3.6 g per 100 kcal (IQR: 9.5 g per 100 kcal), in total fat 1.9 g per 100 kcal (IQR: 2.6 g per 100 kcal), in saturated fat 0.4 g per 100 kcal (IQR: 0.6 g per 100 kcal), and in fibre 1.0 g per 100 kcal (IQR: 0.9 g per 100 kcal). The sodium content is low compared to the rest of the food subcategories (median 8.2 and IQR 15.0 mg per 100 kcal).

When examining the Mintel GNPD **PCBF** (combined Mintel GNPD subcategories 'baby cereal' and 'baby biscuits & rusks', which may contain products that do not fall under the legal definition of PCBF<sup>3</sup>–*Figure 13*), the carbohydrates median

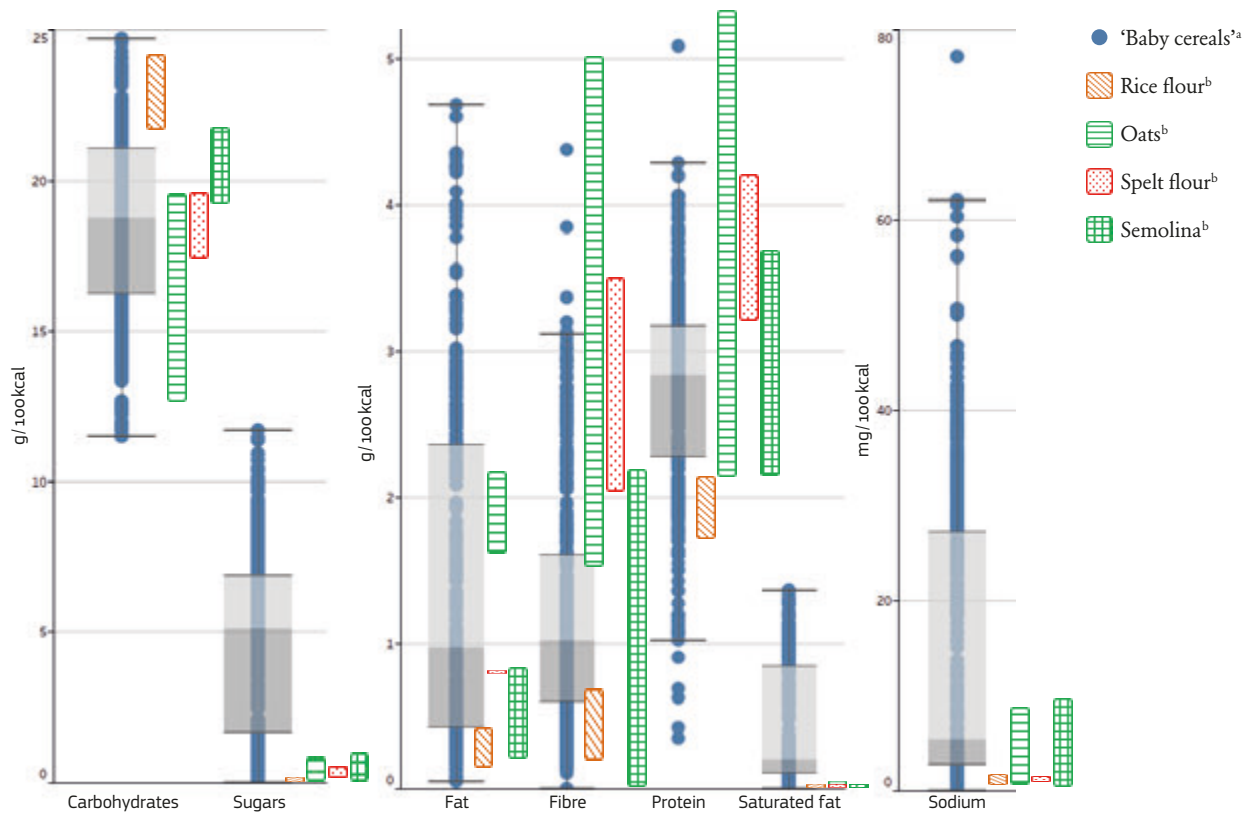
content 17.6 g per 100 kcal product, with an IQR of 4.4 g per 100 kcal, while the median content for total sugars and sodium is 4.9 g per 100 kcal (IQR: 3.5 g per 100 kcal) and 14.5 mg per 100 kcal (IQR: 30.8 mg per 100 kcal), respectively. Large variation is observed for total fat (median 2.0 and IQR 2.2 g per 100 kcal). As for fibre (median 0.9 and IQR 0.9 g per 100 kcal), protein (median 2.5 and IQR 1.1 g per 100 kcal) and saturated fat (median 0.4 and IQR 0.9 g per 100 kcal), the variation between different products within this subcategory is less prominent.

For the Mintel GNPD **baby food** (combined Mintel GNPD subcategories ‘baby fruit products, desserts & yoghurts’, ‘baby fruit juices and drinks’, ‘baby savoury meals and dishes’, ‘baby snacks’ and ‘other baby food’, which may contain products that do not fall under the legal definition of baby food<sup>3</sup>–*Figure 14*), a large variation is again observed for carbohydrates (median: 17.7 g per 100 kcal; IQR: 8.9 g per 100 kcal), total sugars (median: 9.7 g per 100 kcal; IQR: 14.9 g per 100 kcal) and sodium 33.3 mg per 100 kcal (IQR: 53.2 mg per 100 kcal). For the rest of the nutrients, the median content in total fat is 1.4 g per 100 kcal (IQR: 2.9 g per 100 kcal), in fibre 2.0 g per 100 kcal (IQR: 1.9 g per 100 kcal), in protein 2.2 g per 100 kcal (IQR: 2.9 g per 100 kcal), and in saturated fat 0.3 g per 100 kcal (IQR: 0.9 g per 100 kcal).

The boxplots for the totality of food products analysed (combined Mintel GNPD PCBF and Mintel GNPD baby food) (not divided by subcategories) show a large spread in the data for **carbohydrates** (median: 17.7 g per 100 kcal; IQR: 8.1 g per 100 kcal), **total sugars** (median: 6.6 g per 100 kcal; IQR: 13.2 g per 100 kcal) and **sodium** (median: 29.0 mg per 100 kcal; IQR: 47.2 mg per 100 kcal). For the rest of the nutrients examined little variation was observed: for total fat (median: 1.6 g per 100 kcal; IQR: 2.8 g per 100 kcal), for protein (median: 2.3 g per 100 kcal; IQR: 2.5 g per 100 kcal) and for saturated fat (median: 0.4 g per 100 kcal; IQR: 0.9 g per 100 kcal) (data not shown).

Similarly, the distribution of the nutrient content per 100 g (or 100 ml) of food product shows larger variations for **saturated fat**, **total sugars** and **sodium** content within baby biscuits and rusks, baby cereals, baby juices and drinks (only for total sugars) and savoury meals and dishes (only for sodium) (*Annex 6*). Large variations are also observed for baby snacks and other baby food but due to the relatively smaller number of products or the large heterogeneity of products within these food subcategories, these conclusions may not be meaningful.

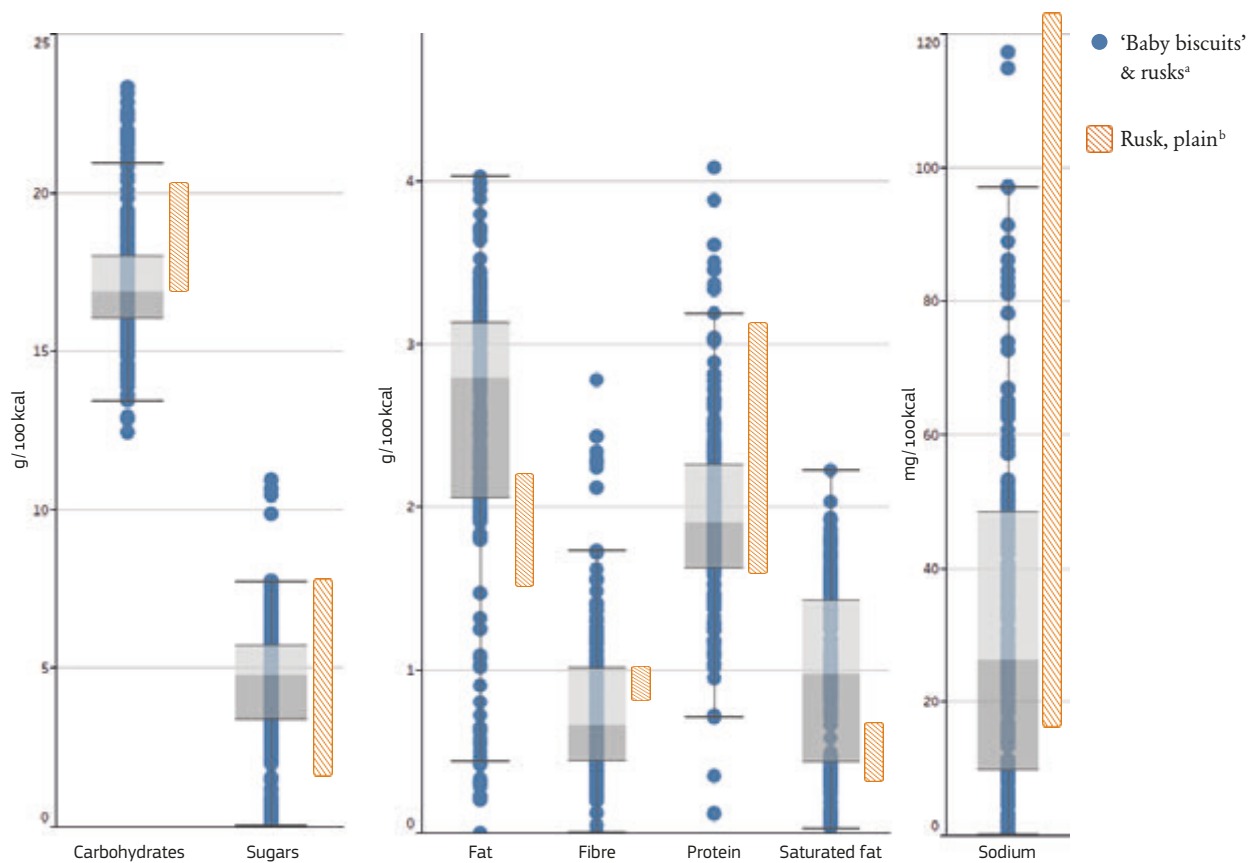
The distribution of country averages for the nutrient content per 100 g (or 100 ml) of food product (*Annex 7*) show large variations within certain subcategories for carbohydrates (baby cereals; baby juices and drinks), protein (baby cereals), saturated fat (baby biscuits and rusks; baby cereals), total sugars (baby biscuit and rusks; baby cereals; baby juices & drinks; baby snacks) and sodium (baby biscuits and rusks). While these results cannot be used to compare countries they may provide an indication of the diversity of offer in the different EU markets.



- a. Source: Mintel GNPD. Each dot represents a product of the relevant Mintel GNPD baby food sub-category.
- b. Source: EuroFIR. Range of nutrient content from all food composition databases in the EU-28, Norway and Switzerland, where the specific food products and nutrients were available.

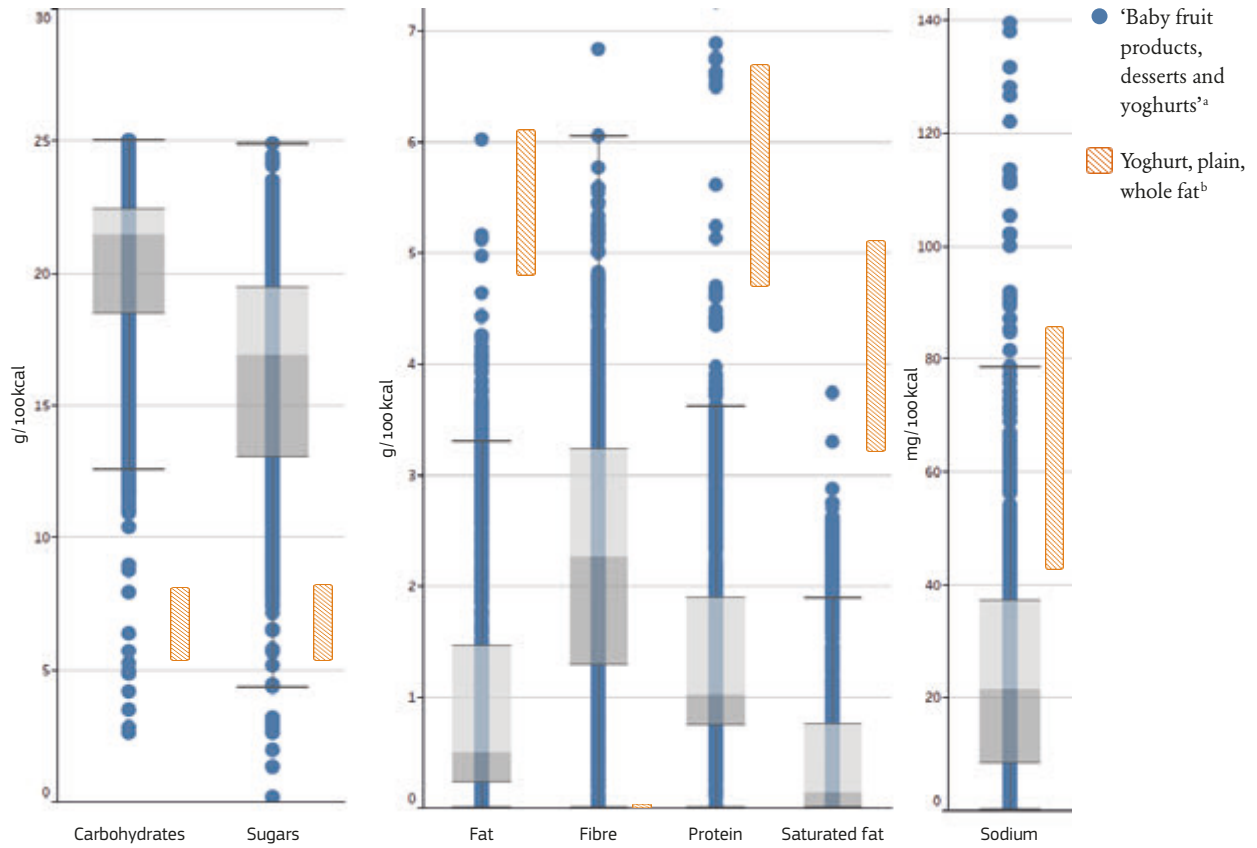
**Figure 7.** Distribution of nutrient content of Mintel GNPD 'baby cereals' and indicative range of nutrient content of generic, non-branded foods that could fall under this category. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for this sub-category.

Summary tables of average nutrient content per 100 kcal of product and distributions of (country averages for) nutrient content per 100 kcal of food product are provided in *Annexes 8-10*.



- a. Source: Mintel GNPD. Each dot represents a product of the relevant Mintel GNPD baby food sub-category.
- b. Source: EuroFIR. Range of nutrient content from all food composition databases in the EU-28, Norway and Switzerland, where the specific food products and nutrients were available.

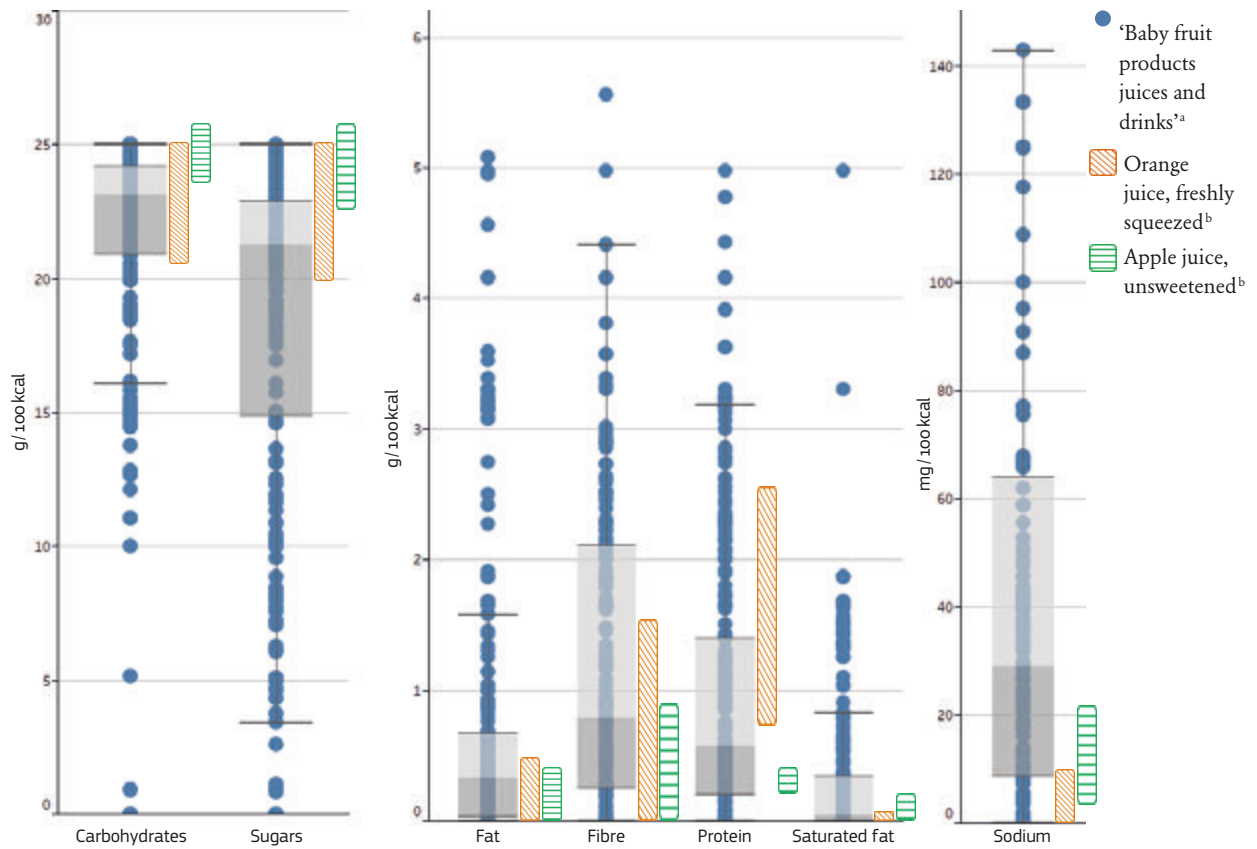
**Figure 8.** Distribution of nutrient content of Mintel GNPD 'baby biscuits & rusks' and indicative range of nutrient content of generic, non-branded foods that could fall under this category. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to Table 13 for an indication on the number of Mintel GNPD products plotted for this sub-category.



- a. Source: Mintel GNPD. Each dot represents a product of the relevant Mintel GNPD baby food sub-category.  
 b. Source: EuroFIR. Range of nutrient content from all food composition databases in the EU-28, Norway and Switzerland, where the specific food products and nutrients were available.

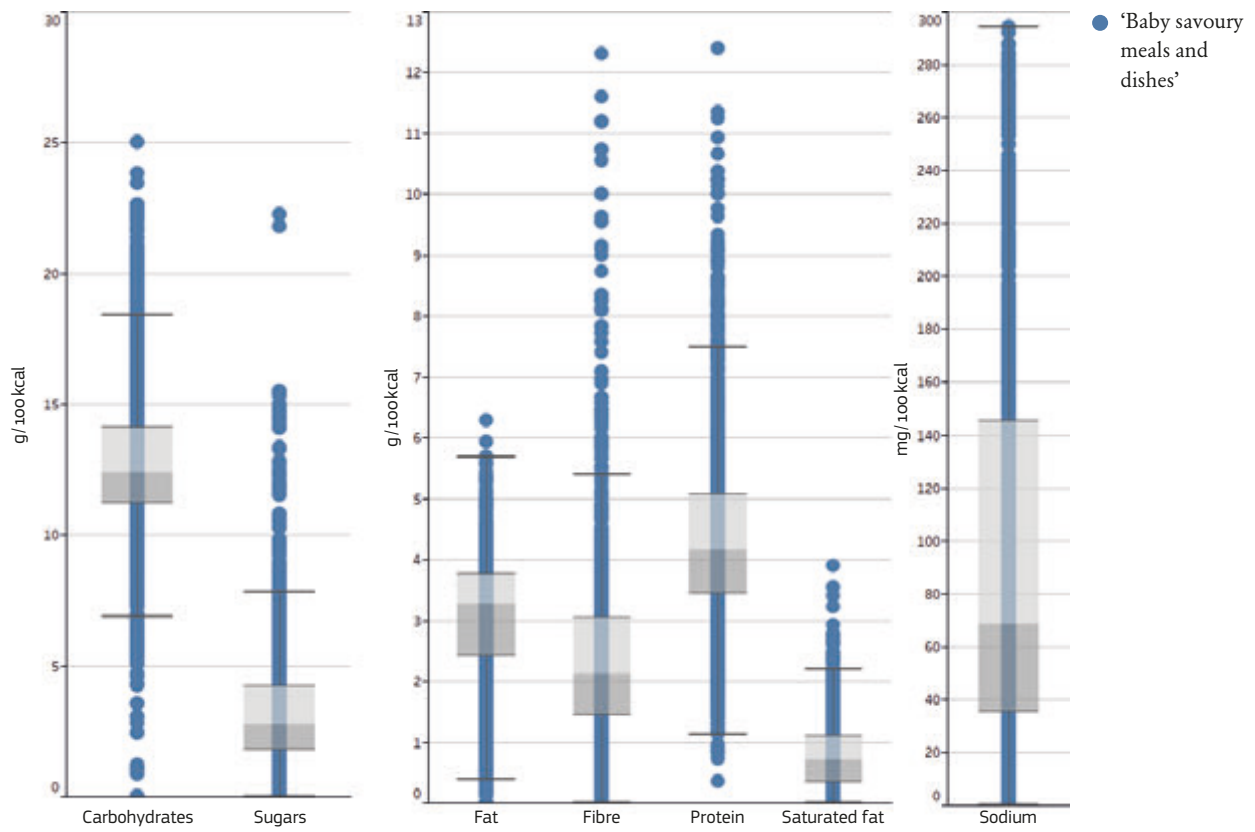
**Figure 9.** Distribution of nutrient content of Mintel GNPD 'baby fruit products, desserts & yoghurts' and indicative range of nutrient content of generic, non-branded foods that could fall under this category. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for this sub-category.



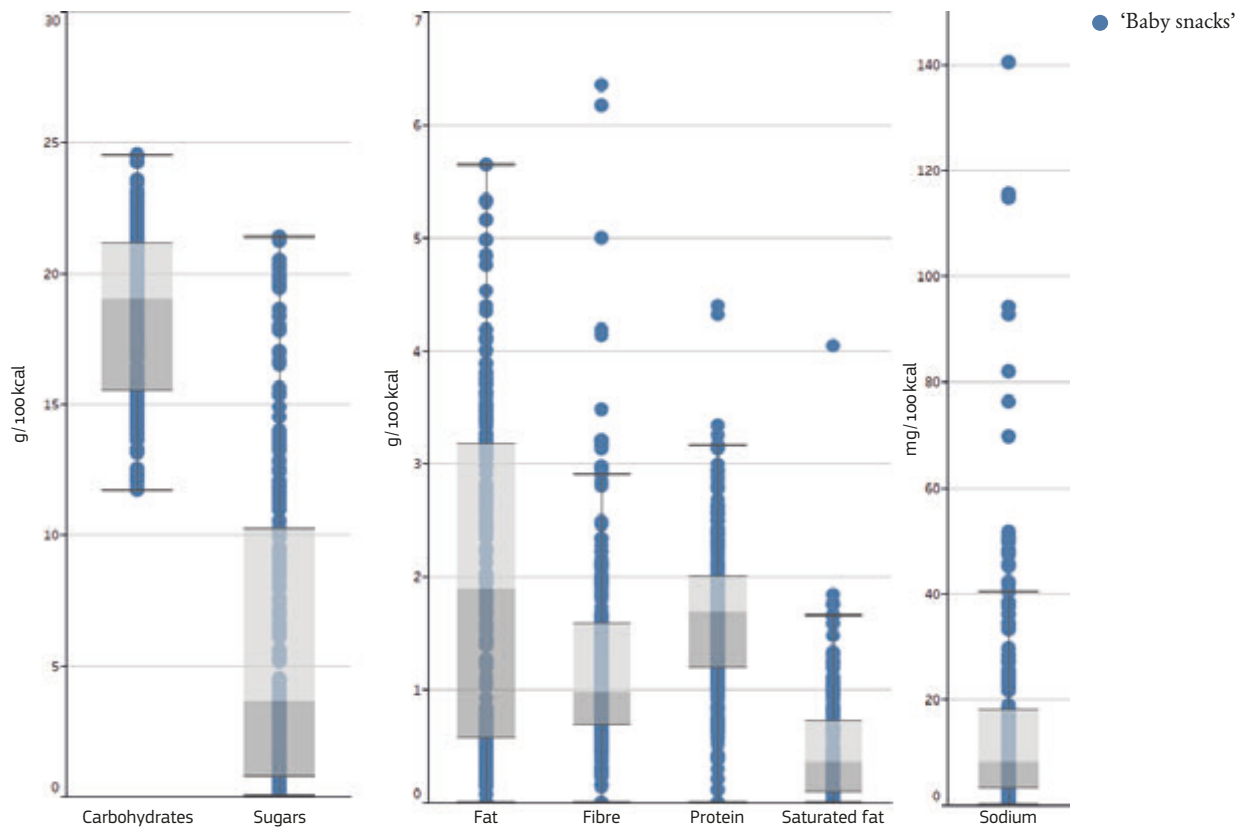


- a. Source: Mintel GNPD. Each dot represents a product of the relevant Mintel GNPD baby food sub-category.
- b. Source: EuroFIR. Range of nutrient content from all food composition databases in the EU-28, Norway and Switzerland, where the specific food products and nutrients were available.

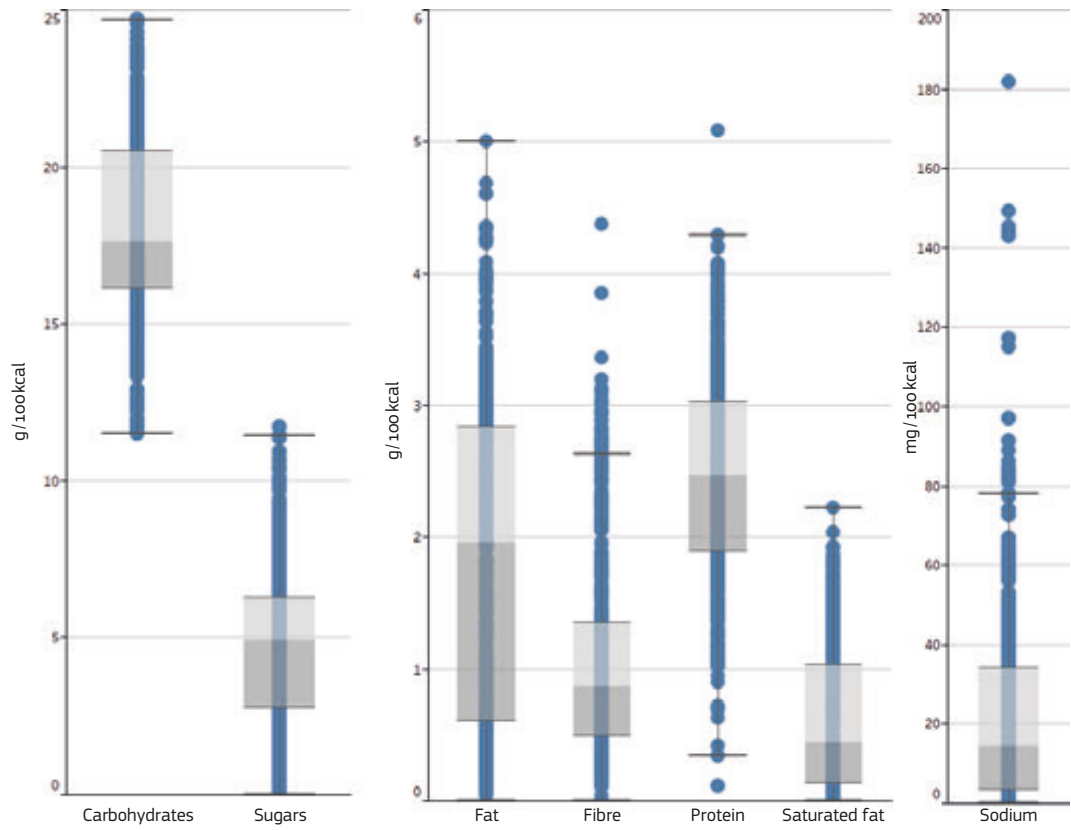
**Figure 10.** Distribution of nutrient content of Mintel GNPD 'baby fruit juices and drinks' and indicative range of nutrient content of generic, non-branded foods that could fall under this category. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to Table 13 for an indication on the number of Mintel GNPD products plotted for this sub-category.



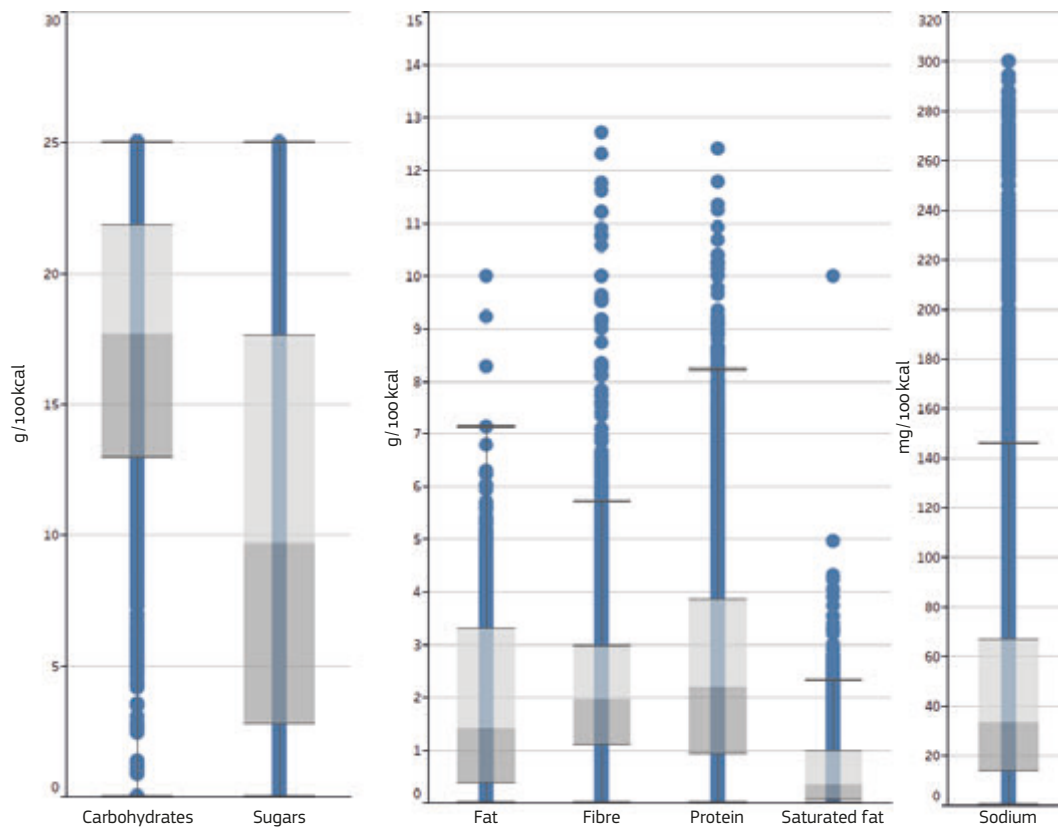
**Figure 11.** Distribution of nutrient content of Mintel GNPD 'baby savoury meals and dishes'. Each dot represents a product of the relevant Mintel GNPD baby food sub-category. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for this sub-category.



**Figure 12.** Distribution of nutrient content of Mintel GNPD 'baby snacks'. Each dot represents a product of the relevant Mintel GNPD baby food sub-category. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for this sub-category.



**Figure 13.** Distribution of nutrient content of Mintel GNPD PCBF (combined Mintel GNPD subcategories 'baby cereal' and 'baby biscuits and rusks'). Products that do not fall under the legal definition of PCBF<sup>3</sup> may be included in this sub-category. Each dot represents a product. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to Table 13 for an indication on the number of Mintel GNPD products plotted for this sub-category.



**Figure 14.** Distribution of nutrient content of Mintel GNPD baby food (combined Mintel GNPD sub-categories ‘baby fruit products, desserts & yoghurts’, ‘baby fruit juices and drinks’, ‘baby savoury meals and dishes’, ‘baby snacks’ and ‘other baby food’). Products that do not fall under the legal definition of baby food<sup>3</sup> may be included in this sub-category. Each dot represents a product. The data is presented as grams of nutrient/100 kcal product (except for sodium mg/100 kcal). Please refer to Table 13 for an indication on the number of Mintel GNPD products plotted for this sub-category.

**Table 14.** Nutrient composition of recipes for weaning dishes recommended by the EU Member States<sup>a</sup> and comparable products from Mintel GNPD ‘baby savoury meals & dishes’.<sup>b</sup> See Box 3 for details on the recipes.

Food <sup>c</sup>	Amount of nutrient per 100 g/100 ml of food								
	Source	Energy (kcal)	Protein (g)	Total fat (g)	Saturated fatty acids (g)	Carbo-hydrates (g)	Total sugars (g)	Fibre (g)	Sodium (mg)
Beans and vegetables	Recipe 1	94.8	6.0	0.7	0.1	13.2	1.8	5.4	1.8
	Mintel GNPD	69.0	3.5	0.9	0.1	9.4	2.8	4.8	-
Chicken, vegetable and couscous	Recipe 2	81.8	8.5	0.8	0.3	9.0	0.2	2.0	13.0
	Mintel GNPD	53.0	2.5	1.5	0.5	6.5	1.5	1.5	-
Meat, vegetables and potato	Recipe 3	53.0	-	-	3.8	-	2.1 <sup>d</sup>	1.5	16.5
	Mintel GNPD	66.0	2.7	2.5	0.8	7.5	1.7	2.0	110.0
Fish and vegetables	Recipe 4	99.7	7.9	7.1	2.5	1.1	1.0	-	117.9
	Mintel GNPD	66.0	4.9	2.4	1.2	4.6	2.1	3.4	50.0
Lamb, beans and vegetables	Recipe 5	79.5	7.5	3.8	9.5	3.9	1.9	-	81.1
	Mintel GNPD	62.0	3.9	0.5	0.1	9.1	3.1	2.5	20.0
Chicken, vegetables and potato	Recipe 6	75.7	9.2	2.1	8.1	4.9	1.2	-	22.1
	Mintel GNPD	70.0	2.6	2.8	0.6	7.9	1.6	1.3	90.0
Potato and carrot	Recipe 7	56.7	1.1	2.7	1.0	8.4	-	1.5	24.8
	Mintel GNPD	51.0	1.1	1.1	0.0	7.4	2.8	2.3	18.0
Turkey and apple	Recipe 8	70.9	3.0	2.8	1.7	9.7	-	1.4	7.9
	Mintel GNPD	61.0	2.7	1.8	0.2	7.9	1.6	1.3	49.7

Table 14. (Cont.).

Food <sup>c</sup>	Amount of nutrient in quantity of food providing 100 kcal								
	Source	Protein (g)	Total fat (g)	Saturated fatty acids (g)	Carbo-hydrates (g)	Total sugars (g)	Fibre (g)	Sodium (mg)	
Beans and vegetables	Recipe 1	6.3	0.7	0.1	13.9	1.9	5.7	1.9	
	Mintel GNPD	5.1	1.3	0.1	13.6	4.1	7.0	-	
Chicken, vegetable and couscous	Recipe 2	10.4	1.0	0.4	11.0	0.2	2.4	15.9	
	Mintel GNPD	4.7	2.8	0.9	12.3	2.8	2.8	-	
Meat, vegetables and potato	Recipe 3	-	-	7.1	-	4.0 <sup>d</sup>	2.9	31.1	
	Mintel GNPD	4.0	3.7	1.2	11.4	2.5	3.0	166.7	
Fish and vegetables	Recipe 4	8.0	7.1	2.5	1.1	1.0	-	118.2	
	Mintel GNPD	7.4	3.6	1.8	7.0	3.2	5.2	75.8	
Lamb, beans and vegetables	Recipe 5	9.4	4.8	11.9	4.9	2.4	-	101.9	
	Mintel GNPD	6.3	0.8	0.2	14.7	5.0	4.0	32.3	
Chicken, vegetables and potato	Recipe 6	12.1	2.8	10.7	6.4	1.6	-	29.1	
	Mintel GNPD	3.7	4.0	0.9	11.3	2.3	1.9	128.6	
Potato and carrot	Recipe 7	1.9	4.8	1.8	14.8	-	2.6	43.7	
	Mintel GNPD	2.2	2.2	0.0	14.5	5.5	4.5	35.3	
Turkey and apple	Recipe 8	4.2	4.0	2.4	13.6	-	2.0	11.1	
	Mintel GNPD	4.5	3.0	0.4	13.0	2.6	2.1	81.5	

Source: EuroFIR, Mintel GNPD

a. Nutrient content has been calculated using the relevant national food composition database, depending on the origin of the recommended recipe. Where the recipe mentions alternatives (*e.g.* different types of fat, meat or vegetables), the nutrient values presented in the table are averages of the different options.

b. Nutrient content of food products with similar ingredients as the recipes selected and marketed in the countries where the recipes originate from. More than one Mintel GNPD food products were retrieved for Recipe 3 (n=2) and Recipe 8 (n=3); in these cases average values were used for the comparison.

c. Foods described with their main ingredients. Products chosen from Mintel GNPD listed similar main ingredients as the dishes recommended by the EU Member States.

d. For this recipe, total sugars were calculated as the sum of total disaccharides, glucose, fructose and galactose.

**Box 3.** *Examples of recommended recipes.*

Recipe 1 <sup>15</sup>	4 tablespoons mashed brown beans 2 tablespoons cooked zucchini Some pieces of skinned tomato
Recipe 2 <sup>15</sup>	1 tablespoon of chicken fillet 3 tablespoons cooked broccoli 2 tablespoons cooked (whole) couscous
Recipe 3 <sup>16</sup>	100 g vegetable (cauliflower, carrots, courgette) 50 g potato 30 g lean meat (beef, pork, lamb, poultry) 1 tablespoon canola oil 1.5 tablespoon fruit juice
Recipe 4 <sup>17</sup>	Few drops of vegetable oil 50 g fillet skinless, boneless salmon, cod or haddock ½ small carrot, peeled and grated ½ small courgette, grated Small pinch dried mixed herbs 15 g Red Leicester or Cheddar cheese, grated
Recipe 5 <sup>17</sup> serves 2/3	1 teaspoon vegetable oil ¼ small onion, chopped 120 g lean lamb rump or leg steak 1 small carrot, peeled, chopped into small chunks 100 g canned chopped tomatoes 50 g mixed beans (canned in non-salted water) 150 ml water
Recipe 6 <sup>17</sup> serves 2/3	1 teaspoon vegetable oil ½ small leek, chopped 150 g skinless, boneless chicken breast 1 small carrot, peeled, chopped into small chunks 1 small potato, chopped into small chunks 250 ml water

15. Voedingscentrum. *Voorbeeld voedingsschema's en recepten voor je baby*. <http://www.voedingscentrum.nl/nl/mijn-kind-en-ik/eerste-hapjes/voorbeeld-voedingsschema-s-en-recepten-voor-je-baby.aspx>.

16. Inform – Deutschlands Initiative fuer gesunde Ernaehrung und mehr Bewegung. *The best food for babies*. [http://shop.aid.de/\\_assets/downloads\\_free/0446\\_2016\\_the\\_best\\_food\\_x000.pdf](http://shop.aid.de/_assets/downloads_free/0446_2016_the_best_food_x000.pdf).

17. NHS – *Start for life*. <https://www.nhs.uk/start4life/recipes>.



### Box 3. (Cont.).

Recipe 7 <sup>18</sup>	25 g carrot 17.5 g potato 7.5 g parsley 3 g butter, olive oil, canola oil 3 g rice gruel 60 ml water
Recipe 8 <sup>18</sup>	100 g apple, peeled 3 g (1 teaspoon) corn gruel 20 g meat turkey (fillet, rare) 5 g butter 50-70 g water

#### *Issues of interest: free and added sugars*

A total of 1359 baby foods analysed (31.9% of the total evaluated) list an added or free sugar in their list of ingredients and 1167 of them (27.4% of the total evaluated) list one or more of them as one of the top 5 ingredients.

As can be seen in *Table 15*, sugars are added mostly to foods belonging to the category of baby biscuits and rusks (3/4 of the products are sweetened). Roughly 1/3 to 2/3 of the products in the other categories analysed (*i.e.* baby cereals; baby juices & drinks; and baby fruit products, desserts & yoghurts; with the exception of baby savoury meals & dishes, baby snacks and other baby food) also contain added sugars.

In baby fruit juices & drinks category, 18 products are identified as fruit juices and contain mainly fruit juice and fruit juice concentrates. Due to the specific rules applying to this category, the number of products that are not subject to the restrictions of Council Directive 2001/112/EC<sup>19</sup> are also provided. Forty-four products

18. Weker H., Barańska M. [ed.]: *Żywnienie niemowląt i małych dzieci. Zasady postępowania w żywieniu zbiorowym*. Institute of Mother and Child, 2014 Warsaw [http://www.imid.med.pl/images/do-pobrania/Zywnienie\\_niemowlat\\_www.pdf](http://www.imid.med.pl/images/do-pobrania/Zywnienie_niemowlat_www.pdf).

19. Council Directive 2001/112/EC of 20 December 2001 relating to fruit juices and certain similar products intended for human consumption <http://data.europa.eu/eli/dir/2001/112/oj>. This Council Directive indicates that the addition of sugars is not authorised in fruit juices, fruit juice from concentrate, concentrated fruit juice, water extracted fruit juice, and dehydrated/powdered fruit juice, and is only allowed in fruit nectars under specific requirements.

do not contain fruit concentrates but rather white sugar, glucose or fructose; these products are mainly baby tea or infusion drinks (n=28), fruit nectars (n=7) or cocoa/cocoa and cereal drink powders (n=6).

**Table 15.** Number of Mintel GNPD baby food products listing added or free sugars as ingredients.

Row A provides the number of food products that include in their ingredients' list added or free sugars, as described in Box 1. Row B provides the sum of products included in row A and products also containing fruit concentrates, fruit purees and fruit powders as ingredients in addition to added or free sugars.

Mintel GNPD Baby food subcategory		At least one type of (A) added or free sugars or (B) added or free sugars, fruit concentrates, fruit purees and fruit powders		(A) added or free sugars or (B) added or free sugars, fruit concentrates, fruit purees and fruit powders listed as ... ingredient					Type of sugar mostly added <sup>b</sup> (in descending order for frequency of use)
		as an ingredient (%) <sup>a</sup>	in the first 5 ingredients (%) <sup>a</sup>	1st	2nd	3rd	4th	5th	
Baby Cereals	A	195 (34.2)	177 (31.0)	1	60	60	48	46	White sugar
	B	240 (42.1)	205 (36.0)	1	64	69	64	52	Fruit juice
Baby Biscuits & Rusks	A	231 (75.0)	216 (70.1)	13	146	31	27	38	White or cane sugar
	B	273 (88.6)	258 (83.8)	15	165	56	38	53	Fruit juice concentrate Barley malt extract syrup [Fruit puree]
Baby Juices & Drinks	A	178 (60.3)	172 (58.3)	74	93	47	28	24	Fruit juice
	B	206 (69.8)	200 (67.8)	101	124	69	51	32	[Fruit puree] Fruit juice concentrate White sugar
Baby Fruit Products, Desserts & Yoghurts	A	544 (38.2)	505 (35.5)	15	160	190	128	81	[Fruit puree]
	B	964 (67.7)	915 (64.3)	316	411	190	267	81	Fruit juice concentrate Fruit juice White sugar
Baby Snacks	A	52 (16.4)	50 (15.7)	4	22	18	10	4	Fruit juice concentrate
	B	169 (53.1)	50 (15.7)	39	87	59	64	26	
Baby Savoury Meals & Dishes	A	156 (12.2)	45 (3.5)	0	4	6	12	24	
	B	156 (12.2)	84 (6.6)	0	6	8	19	55	
Other Baby Food	A	3 (4.0)	2 (2.7)	2	0	0	0	0	
	B	5 (6.7)	4 (5.3)	2	0	1	1	0	

Source: Mintel GNPD

a. Percentage refers to the total number of baby food products included in the overall analysis for the specific Mintel GNPD baby food subcategory.

b. Added or free sugars included in the ingredient lists of more than 5% of the products for each food sub-category. Fruit concentrates, fruit purees and fruit powders are put within brackets as they contain sugars but are not officially defined as added or free sugars.

# 5. General discussion

The European Commission is to adopt, through a delegated act, specific compositional and labelling rules for PCBF and baby food, *i.e.* foods specifically intended for infants and young children as they progress onto a mixed family diet.

Contrary to the compositional requirements of infant formulae and follow-on formulae<sup>5</sup> that constitute in most cases the sole source of energy and nutrients for infants and young children, specific compositional requirements for PCBF and baby foods are more complex to define as these foods are not the sole source of energy and nutrients in a child's diet and their intake and intake frequency may vary considerably.

To support the work needed to prepare the proposal for the compositional requirements of such foods, this report describes the FBDGs that EU Member States consider valid in the context of infant and young child feeding (from 4-6 months to 3 years old) as well as the existing EFSA reference values for energy and nutrients intake for infants and young children. A non-exhaustive analysis of PCBF and baby food products in EU markets is also provided in an attempt to illustrate the current composition of these foods and what the consequences of new composition criteria may be for the market.

## *Nutrient requirements*

The average requirements for **energy** for children between 7 months and 3 years old range from 573 to 1 170 kcal per day (for 7 month old girls and 3 year old boys, respectively, see *Table 3*). In the EFSA opinion, it is mentioned that energy intakes of infants and young children living in Europe are generally high and noted that energy intakes above requirements may lead to an unfavourable gain in body mass.<sup>5</sup> The analyses reported in *Annex 6- Figure 1*, show that, among the products analysed, overall the median energy content of baby fruit products, desserts & yoghurts; baby juices and drinks; and savoury meals & dishes is low (at less than 100 kcal per 100 g or 100 ml of product) relatively to the higher energy content observed for baby biscuits & rusks; baby cereals; and baby snacks (at around 400 kcal

per 100 g or 100 ml of product). Information about portions sizes and consumption data would be needed to clarify how much each of these subcategories may contribute to the infants' or young children's energy intake.

Protein is certainly an essential nutrient in a child's diet; although dietary intakes of **protein** are generally high in infants and young children in Europe<sup>5</sup>, most EU Member States do not report major concerns (results from EU survey *question 4.e*). Milk and dairy products apart, most FBDGs recommend alternating between the other protein sources (meat, fish, eggs, legumes). The analyses reported here for the protein content of Mintel GNPD PCBFs and Mintel GNPD baby foods on the market, *e.g.* baby savoury meals and dishes, show that, in general, they are below the protein content of recipes suggested for infants and young children by some national FBDGs.

**Total fat** should contribute to a max. 40% of energy intake in these age groups (*i.e.* between 25 g for a 7 month old girl and 52 g for a boy aged 3 years), while the intake of **saturated fat** is to be kept as low as possible.<sup>6</sup> Indeed, most FBDGs also refer to preferring low fat options when it comes to starchy foods (*i.e.* by avoiding frying); preferring lean meat and avoiding processed meat; alternating meat with legumes or eggs which have lower (saturated) fat content; preferring vegetable oils and soft margarines over solid fats; preferring low fat options for milk and dairy products for children aged over two years. The analyses of Mintel GNPD PCBFs and Mintel GNPD baby foods in the market show that median total and saturated fat values are highest in baby biscuits and rusks, at approximately 12 g and 4 g per 100 g of product, respectively (*Annex 6- Figure 5*). Within the category of baby savoury meals and dishes, the values are relatively low and within the range of the saturated fats content of recipes suggested for infants and young children by some national FBDGs (*Table 14*). Although the lack of information on the food products labels did not allow for an evaluation of other types of fatty acids, EFSA in their opinion highlighted the intakes of alpha-linolenic acid (ALA) and docosahexaenoic acid (DHA) as critical for infants and young children in Europe.<sup>5</sup>

Intake of **carbohydrates** can fall into 45-60% of energy intake in these age groups.<sup>6</sup> The main source of carbohydrates for infants is milk (*i.e.* lactose). However as new foods are introduced during the weaning period, carbohydrates will increasingly come from other food sources such as starchy foods, fruits or vegetables. For

Mintel GNPD PCBF, baby snacks and other baby food analysed here, the median carbohydrates content is around 70 g per 100 g of product. For the rest of the sub-categories it ranges from 8 to 14 g per 100 g of product.

Many FBDGs recommend preferring wholegrain starchy foods although some highlight that their introduction should be done gradually or after the age of 18 months. This recommendation can be seen in conjunction with the EFSA recommendation of 10 g of **fibre** per day after the age of 1 year old (*Table 4*), the equivalent of about 1 g of fibre per 100 kcal consumed for this age group. Based on the analysis of the Mintel GNPD, the median fibre content for most baby food subcategories is somewhat lower, between 0.5 to 1 g per 100 kcal with the exception of baby fruit products, desserts & yoghurts and baby savoury meals & dishes that have a median content of about 2 g per 100 kcal.

In the context of a balanced diet, most FBDGs emphasize the importance of limited (added or free) **sugars** intake by opting for low sugar starchy foods and dairy products, limiting fruit juice consumption, and preferring unsweetened or sugar free beverages. *Table 16* lists estimated upper limits for free sugars intake based on a 5% or 10% threshold<sup>8,12</sup> and the EFSA Average Requirements for energy<sup>6</sup> for infants and young children.

**Table 16.** *Estimated upper limit for free sugars intake based on a 5% or 10% threshold<sup>8,12</sup> and the EFSA Average Requirements for energy<sup>6</sup> for infants and young children.*

Age	Average Requirements for Energy (kcal/d) <sup>a</sup>	Estimated upper limit for free sugars intake (g)	
		5% energy intake	10% energy intake
7 mo	609	7.6	15.2
8 mo	633	7.9	15.8
9 mo	657	8.2	16.4
10 mo	681	8.5	17.0
11 mo	705	8.8	17.6
1 y	752	9.4	18.8
2 y	991	12.4	24.8
3 y	1 134	14.2	28.4

d, day; mo, months; y, year(s)

a. Mean values estimated for males and females.

The data on total sugars present in the different baby foods analysed shows that some categories and several products could be contributing a considerable amount of total sugars to the children's diets (*Annex 6- Figure 7*). This naturally depends on frequency or the size of the portion consumed but may highlight the importance of establishing criteria of sugars content that should be fulfilled for such products to be appropriate for consumption by this age group. The question becomes more pertinent, in the case of added or free sugars. Most FBDGs recommend limiting added or free sugars intake, nonetheless the majority of baby biscuits and rusks (75% of the products), and roughly 1/3 to 2/3 of baby cereals, baby fruit products, desserts & yoghurts contain at least one type of added or free sugars as an ingredient. Interestingly, fruit juice and fruit juice concentrates are widely and largely added in most of the baby food subcategories (*Table 15*). Fourteen percent of the baby drinks (excluding some fruit juices containing fruit juice concentrates) also contain added sugars. FBDGs clearly recommend water as the preferred source of liquids, or as an alternative, unsweetened or sugar free beverages.

In the case of **sodium**, while a reference value has not yet been proposed by EFSA, most EU Member States recommend, in particular for the age groups discussed here, limiting salt intake in general and not adding salt when preparing foods. The variation of sodium content within the food subcategories analysed was high in many cases indicating that there may be considerable margin to decrease the levels of sodium in some of the products currently on the market. Nonetheless, with the exception of fruit juices and drinks, the median values per 100 kcal were comparable to that of non-branded food items or weaning dishes used to illustrate suitable foods or meals for children.

As for **minerals** and **vitamins**, specific reference values have been issued for this age group (*Table 5* and *Table 6*). How PCBFs and baby foods currently contribute to the intake of these could not be clarified from these analyses as the products database used did not consistently provide values for these nutrients. Some EU Member States have indicated their concerns regarding inadequate intakes of vitamin D, iron and iodine in infants and young children (results from EU survey *question 4.e*), similarly to the EFSA opinion.<sup>5</sup>

## Other requirements

Further to fulfilling nutrient requirements, there are other aspects of weaning and feeding practices that are important, referred to by EU Member States FBDGs and experts and are relevant to discussions on PCBFs and baby foods.

In general, weaning is recommended between the 5th and the 7th month and FBDGs carefully consider which foods are to be introduced at which age (*Table 7*). It is important to note that several FBDGs list specific foods or food categories that should either be consumed in moderation or not at all by these age groups for reasons that include food safety (such as unpasteurised or raw food), high sugar content (such as sugars-sweetened beverages or sugars), and choking hazard (such as hard pieces of vegetables or whole peanuts). In addition, the FBDGs provide some recommendations regarding specific precautions that should be taken to avoid allergies, accumulation of heavy metals, exposure to toxic compounds or insufficient intake of protein of high biological value and calcium (*sub-chapter 3.5*).

Where feeding practices recommendations exist these are related to, for example, food texture (*e.g.* gradually introducing coarser food), consumption of solid food during weaning (*e.g.* promotion of self-feeding with spoon or avoid use of pouches), consumption of liquid food during weaning (*e.g.* feeding PCBFs through bottles not recommended or stopping the use of bottles with teats by one year of age) and social context of meals (*sub-chapter 3.6*).

### Final remark

The current report provides an overview of the nutrient recommendations and FBDGs developed by EFSA, EU Member States or, where necessary, other relevant international bodies, in the context of infant and young child feeding (from 4-6 months to 3 years old), complemented by the results of a survey developed by the JRC in collaboration with DG SANTE and run across EU Member States. In addition, it provides a snapshot of the majority of the baby food products that were introduced or relaunched in the EU markets in preparation of or after Regulation (EU) No 609/2013<sup>1</sup> came in place. Although the aim of this work was not to as such recommend specific nutritional or compositional requirements for PCBF and baby food, it supports the revision of and provides the basis for setting such requirements.

## *List of abbreviations and definitions*

<b>EFSA</b>	European Food Safety Authority
<b>ESPGHAN</b>	European Society for Paediatric Gastroenterology, Hepatology and Nutrition
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FBDGs</b>	Food Based Dietary Guidelines
<b>GNPD</b>	Global New Products Database
<b>IQR</b>	Interquartile range
<b>JRC</b>	Joint Research Centre
<b>NNR</b>	Nordic Nutrition Recommendations
<b>PCBF</b>	Processed Cereal- Based Food
<b>WHO</b>	World Health Organization

**Added sugars** Sucrose, fructose, glucose, starch hydrolysates (glucose syrup, high-fructose syrup) and other isolated sugar preparations used as such or added during food preparation and manufacturing.

**Free sugars** Monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates.

## *List of boxes*

<b>Box 1.</b> Added or free sugars identified in the ingredient lists of Mintel GNPD baby food products.	16
<b>Box 2.</b> Summary of the analyses presented in this report regarding the composition of baby food products available in the EU market.	31
<b>Box 3.</b> Examples of recommended recipes.	46



## List of figures

<b>Figure 1.</b> Access data extraction form.	11
<b>Figure 2.</b> Search strategy and geographic coverage of products included in the Mintel GNPd as ‘baby food’.	12
<b>Figure 3.</b> Results of the EU Survey for the question ‘Does your country have FBDGs for infants and young children?’	20
<b>Figure 4.</b> Summary of recommendations regarding consumption of fruit juices.	24
<b>Figure 5.</b> Summary of recommendations on intake of sugars for (a) infants (<12 months old) and (b) young children (12-36 months old).	25
<b>Figure 6.</b> Recommendations on salt intake for infants and young children.	26
<b>Figure 7.</b> Distribution of nutrient content of Mintel GNPd ‘baby cereals’ and indicative range of nutrient content of generic, non-branded foods that could fall under this category.	36
<b>Figure 8.</b> Distribution of nutrient content of Mintel GNPd ‘baby biscuits & rusks’ and indicative range of nutrient content of generic, non-branded foods that could fall under this category.	37
<b>Figure 9.</b> Distribution of nutrient content of Mintel GNPd ‘baby fruit products, desserts & yoghurts’ and indicative range of nutrient content of generic, non-branded foods that could fall under this category.	38
<b>Figure 10.</b> Distribution of nutrient content of Mintel GNPd ‘baby fruit juices and drinks’ and indicative range of nutrient content of generic, non-branded foods that could fall under this category.	39
<b>Figure 11.</b> Distribution of nutrient content of Mintel GNPd ‘baby savoury meals and dishes’.	40
<b>Figure 12.</b> Distribution of nutrient content of Mintel GNPd ‘baby snacks’.	41
<b>Figure 13.</b> Distribution of nutrient content of Mintel GNPd PCBF (combined Mintel GNPd subcategories ‘baby cereal’ and ‘baby biscuits and rusks’).	42

<b>Figure 14.</b> Distribution of nutrient content of baby food (combined Mintel GNPD subcategories ‘baby fruit products, desserts & yoghurts’, ‘baby fruit juices and drinks’, ‘baby savoury meals and dishes’, ‘baby snacks’ and ‘other baby food’).	43
<b>Annex 6- Figure 1.</b> Distribution of <b>energy</b> content (in kcals) per 100 g (or 100 ml) of product.	137
<b>Annex 6- Figure 2.</b> Distribution of <b>carbohydrate</b> content (in g) per 100 g (or 100 ml) of product.	138
<b>Annex 6- Figure 3.</b> Distribution of <b>protein</b> content (in g) per 100 g (or 100 ml) of product.	139
<b>Annex 6- Figure 4.</b> Distribution of <b>total fat</b> content (in g) per 100 g (or 100 ml) of product.	140
<b>Annex 6- Figure 5.</b> Distribution of <b>saturated fat</b> content (in g) per 100 g (or 100 ml) of product.	141
<b>Annex 6- Figure 6.</b> Distribution of <b>fibre</b> content (in g) per 100 g (or 100 ml) of product.	142
<b>Annex 6- Figure 7.</b> Distribution of <b>total sugars</b> content (in g) per 100 g (or 100 ml) of product.	143
<b>Annex 6- Figure 8.</b> Distribution of <b>sodium</b> content (in mg) per 100 g (or 100 ml) of product.	144
<b>Annex 7- Figure 1.</b> Distribution of country averages for <b>energy</b> content (in kcals) per 100 g (or 100 ml) of product.	145
<b>Annex 7- Figure 2.</b> Distribution of country averages for <b>carbohydrate</b> content (in g) per 100 g (or 100 ml) of product.	146
<b>Annex 7- Figure 3.</b> Distribution of country averages for <b>protein</b> content (in g) per 100 g (or 100 ml) of product.	147
<b>Annex 7- Figure 4.</b> Distribution of country averages for <b>total fat</b> content (in g) per 100 g (or 100 ml) of product.	148
<b>Annex 7- Figure 5.</b> Distribution of country averages for <b>saturated fat</b> content (in g) per 100 g (or 100 ml) of product.	149
<b>Annex 7- Figure 6.</b> Distribution of country averages for <b>fibre</b> content (in g) per 100 g (or 100 ml) of product.	150
<b>Annex 7- Figure 7.</b> Distribution of country averages for <b>total sugars</b> content (in g) per 100 g (or 100 ml) of product.	151

<b>Annex 7- Figure 8.</b> Distribution of country averages for <b>sodium</b> content (in mg) per 100 g (or 100 ml) of product.	152
<b>Annex 9- Figure 1.</b> Distribution of <b>carbohydrate</b> content (in g) per 100 kcal of baby food product.	160
<b>Annex 9- Figure 2.</b> Distribution of <b>protein</b> content (in g) per 100kcal of baby food product.	161
<b>Annex 9- Figure 3.</b> Distribution of <b>total fat</b> content (in g) per 100 kcal of baby food product.	162
<b>Annex 9- Figure 4.</b> Distribution of <b>saturated fat</b> content (in g) per 100 kcal of baby food product.	163
<b>Annex 9- Figure 5.</b> Distribution of <b>fibre</b> content (in g) per 100 kcal of baby food product.	164
<b>Annex 9- Figure 6.</b> Distribution of <b>total sugars</b> content (in g) per 100 kcal of baby food product.	165
<b>Annex 9- Figure 7.</b> Distribution of <b>sodium</b> content (in mg) per 100 kcal of baby food product.	166
<b>Annex 10- Figure 1.</b> Distribution of <b>carbohydrate</b> content (in g) per 100 kcal of baby food product.	167
<b>Annex 10- Figure 2.</b> Distribution of <b>protein</b> content (in g) per 100 kcal of baby food product.	168
<b>Annex 10- Figure 3.</b> Distribution of <b>total fat</b> content (in g) per 100 kcal of baby food product.	169
<b>Annex 10- Figure 4.</b> Distribution of <b>saturated fat</b> content (in g) per 100 kcal of baby food product.	170
<b>Annex 10- Figure 5.</b> Distribution of <b>fibre</b> content (in g) per 100 kcal of baby food product.	171
<b>Annex 10- Figure 6.</b> Distribution of <b>total sugars</b> content (in g) per 100 kcal of baby food product.	172
<b>Annex 10- Figure 7.</b> Distribution of <b>sodium</b> content (in mg) per 100 kcal of baby food product.	173

## List of tables

<b>Table 1.</b> Definition of processed cereal-based food (PCBF) and baby food.	9
<b>Table 2.</b> ‘Baby Food’ categories as defined in the Mintel GNPD.	13
<b>Table 3.</b> Average Requirements (AR) for energy for infants and young children.	17
<b>Table 4.</b> Summary of Population Reference Intakes (PRIs) for protein, Reference Intake Ranges (RI) for total fat and carbohydrates and Adequate Intakes (AIs) for fatty acids, dietary fibre for infants and young children.	18
<b>Table 5.</b> Summary of Population Reference Intakes (PRIs) and Adequate Intakes (AIs) for minerals for infants and young children.	18
<b>Table 6.</b> Summary of Population Reference Intakes (PRIs) and Adequate Intakes (AIs) for vitamins for infants and young children.	19
<b>Table 7.</b> Recommendations on age of introduction of different foods as described in the FBDGs analysed.	21
<b>Table 8.</b> Summary of quantitative and qualitative recommendations included in the FBDGs analysed regarding the consumption of different food categories by infants and young children aged 6 months to 3 years.	22
<b>Table 9.</b> Overview of detailed responses falling under ‘Other’ recommendations regarding intake of sugars by infants and young children.	26
<b>Table 10.</b> Food items not recommended for consumption by infants and young children in one or more of the FBDGs analysed.	27
<b>Table 11.</b> Recommendations to avoid excessive/insufficient intake of nutrients or other substances in infants and young children as presented in one or more of the FBDGs analysed.	28
<b>Table 12.</b> Recommendations regarding different aspects of feeding of infants and young children as presented in one or more of the FBDGs analysed.	29
<b>Table 13.</b> Products (launched or relaunched) included in the Mintel GNPD database for the period of January 2012-March 2017 by category of baby food product and country.	30
<b>Table 14.</b> Nutrient composition of recipes for weaning dishes recommended by the EU Member States <sup>a</sup> and comparable products from Mintel GNPD ‘baby savoury meals & dishes’.	44

<b>Table 15.</b> Number of Mintel GNPD baby food products listing added or free sugars as ingredients.	48
<b>Table 16.</b> Estimated upper limit for free sugars intake based on a 5% or 10% threshold and the EFSA Average Requirements for energy for infants and young children.	51
<b>Annex 3- Table 1.</b> Summary of FBDGs for starchy foods.	91
<b>Annex 3- Table 2.</b> Summary of FBDGs for fruit.	94
<b>Annex 3- Table 3.</b> Summary of FBDGs for vegetables.	97
<b>Annex 3- Table 4.</b> Summary of FBDGs for potatoes.	100
<b>Annex 3- Table 5.</b> Summary of FBDGs for legumes.	102
<b>Annex 3- Table 6.</b> Summary of FBDGs for milk and dairy products.	104
<b>Annex 3- Table 7.</b> Summary of FBDGs for fish.	107
<b>Annex 3- Table 8.</b> Summary of FBDGs for meat.	110
<b>Annex 3- Table 9.</b> Summary of FBDGs for eggs.	113
<b>Annex 3- Table 10.</b> Summary of FBDGs for oils and fats.	115
<b>Annex 3- Table 11.</b> Summary of FBDGs for nuts and seeds.	118
<b>Annex 3- Table 12.</b> Summary of FBDGs on sugars.	120
<b>Annex 3- Table 13.</b> Summary of FBDGs for sweets & desserts and savoury snacks.	122
<b>Annex 3- Table 14.</b> Summary of FBDGs for salt.	124
<b>Annex 3- Table 15.</b> Summary of FBDGs for water and beverages.	126
<b>Annex 5- Table 1.</b> Average nutrient content per 100 grams (or 100 ml) of Mintel GNPD baby cereals.	130
<b>Annex 5- Table 2.</b> Average nutrient content per 100 grams (or 100 ml) of Mintel GNPD baby biscuits & rusks.	131
<b>Annex 5- Table 3.</b> Average nutrient content per 100 grams (or 100 ml) of Mintel GNPD baby juices and drinks.	132
<b>Annex 5- Table 4.</b> Average nutrient content per 100 grams (or 100 ml) of Mintel GNPD baby fruit products, desserts & yoghurts.	133
<b>Annex 5- Table 5.</b> Average nutrient content per 100 grams (or 100 ml) of Mintel GNPD baby snacks.	134
<b>Annex 5- Table 6.</b> Average nutrient content per 100 grams (or 100 ml) of Mintel GNPD baby savoury meals & dishes.	135
<b>Annex 5- Table 7.</b> Average nutrient content per 100 grams (or 100 ml) of other Mintel GNPD baby food.	136

<b>Annex 8- Table 1.</b> Average nutrient content per 100 kcal of product: Mintel GNPD baby cereals.	153
<b>Annex 8- Table 2.</b> Average nutrient content per 100 kcal of product: Mintel GNPD baby biscuits & rusks.	154
<b>Annex 8- Table 3.</b> Average nutrient content per 100 kcal of product: Mintel GNPD baby juices and drinks.	155
<b>Annex 8- Table 4.</b> Average nutrient content per 100 kcal of product: Mintel GNPD baby fruit products, desserts & yoghurts.	156
<b>Annex 8- Table 5.</b> Average nutrient content per 100 kcal of product: Mintel GNPD baby snacks.	157
<b>Annex 8- Table 6.</b> Average nutrient content per 100 kcal of product: Mintel GNPD baby savoury meals & dishes.	158
<b>Annex 8- Table 7.</b> Average nutrient content per 100 kcal of product: Other Mintel GNPD baby food.	159

## ANNEXES

### Annex 1. List of national food based dietary guidelines and ages covered in infancy and young childhood (between 6 and 36 mo of age) in EU28, Norway and Switzerland.

[Links last accessed 27/09/2018]

Country	Citation	Age groups
Belgium-Flanders	<ul style="list-style-type: none"> <li>Guidelines for breastfeeding and weaning for infants from 0 to 12 months (2012) [Richtlijnen over borstvoeding en kunstvoeding voor zuigelingen van 0 tot 12 maand, versie 2012]</li> <li>Food and movement advice for toddlers and preschoolers (2014) [Voedings- en bewegingstips voor peuters en kleuters]</li> <li>Recommendations for future moms and parents with children up to 3 years old (2006) [Lekker aanbevolen voor toekomstige mama's en ouders met kinderen tot 3 jaar]</li> </ul>	From 6 to 12 mo 1.5 to 3 yrs
Belgium-Wallonia	<ul style="list-style-type: none"> <li>Nice, let's go to the table! (2014) [Chouette, on passe à table!]</li> <li>Gently into new foods (2016) [De nouveaux aliments en douceur...]</li> <li>Water in the mouth (2008) [Avoir l'eau à la bouche]</li> </ul>	6 to 18 mo
Bulgaria	<ul style="list-style-type: none"> <li>Recommendations for healthy nutrition 2008 [ПРЕПОРЪКИ ЗА ЗДРАВΟΣЛОВНО ХРАНЕНО НА КЪРМАЧЕТА]</li> <li>Recommendations for healthy nutrition for children 3-6 years old in Bulgaria 2008 [ПРЕПОРЪКИ ЗА ЗДРАВΟΣЛОВНО ХРАНЕНО ЗА ДЕКА НА 3-6 ГОДЦИЦ В БЪЛГАРЦА]</li> </ul>	6 to 12 mo 3 to 6 yrs
Czechia	<ul style="list-style-type: none"> <li>Recommendations for introducing complementary nutrition in infants [Doporučení k zavádění komplementární výživy (příkrmu)u kojenců]</li> <li>Nutritional recommendations for the population of the Czech Republic 2012 [Výživová doporučení pro obyvatelstvo České republiky]</li> </ul>	6 to 12 mo 1 to 3 yrs
Denmark	<ul style="list-style-type: none"> <li>De officielle kostråd</li> <li>Handbook for health professionals regarding food for children 0-2 years old. 2015 [Ernæring til spædbørn og småbørn – håndbog for sundhedspersonale]</li> </ul>	>2 yrs 6 mo to 2 yrs
Germany	<ul style="list-style-type: none"> <li>Nutrition and Exercise of Infants and Breastfeeding Women – Updated recommendations (2016) [Ernährung und Bewegung von Säuglingen und stillenden Frauen – Aktualisierte Handlungsempfehlungen]</li> <li>The best Nutrition for young children – Nutrition recommendations for children aged 1-3 years. 2018 [Das beste Essen für Kleinkinder – Empfehlungen für die Ernährung von 1- bis 3-Jährigen]</li> </ul>	6 to 12 mo 1 to 3 yrs

Country	Citation	Age groups
Estonia	<ul style="list-style-type: none"> <li>Food recommendations for children and youth (2009) [Laste ja noorte toidusoovitused]</li> <li>Estonian diet and exercise tips (2015) [Eesti toitumis- ja liikumissoovitused]</li> </ul>	6 mo to 3 yrs
Ireland	<ul style="list-style-type: none"> <li>Scientific recommendations for a national infant feeding policy, 2nd edition (2011)</li> </ul>	6 to 12 mo
Greece	<ul style="list-style-type: none"> <li>Dietary guidelines for adults in Greece. Ministry of Health and Welfare. Supreme Scientific Health Council 1999</li> <li>National dietary guidelines for infants, children and adolescents (2014) [Διατροφικοί οδηγοί για βρέφη, παιδιά κι εφήβους]</li> </ul>	1 to 3 yrs
Spain	<ul style="list-style-type: none"> <li>Feeding your children. Healthy nutrition from infancy to adolescence. (2010) [La alimentación de tus niños y niñas. Nutrición saludable de la infancia a la adolescencia]</li> <li>Healthy nutrition for all (2010) [Una alimentación sana para todos]</li> </ul>	6 mo to 3 yrs
France	<ul style="list-style-type: none"> <li>Nutrition recommendations for young children (2015) [Recommandations nutritionnelles pour la petite enfance]</li> </ul>	8 to 12 mo 12 to 15-18 mo 15-18 mo to 3 yrs
Croatia <sup>a</sup>	–	
Italy	<ul style="list-style-type: none"> <li>Guidelines for a healthy nutrition in Italy (2003) [Linee guida per una sana alimentazione Italiana]</li> <li>Proper nutrition and nutrition education in young childhood [Corretta alimentazione ed educazione nutrizionale nella prima infanzia]</li> </ul>	6 mo to 3 yrs
Cyprus	–	
Latvia	<ul style="list-style-type: none"> <li>Nutrition recommendations for infants (2003) [Veselīga uztura ieteikumi zīdaiņu barošanai]</li> <li>Healthy nutrition recommendations for 2 to 18 years old children (2003) [Ieteikumi veselīga uztura pagatavošanai bērniem vecumā no diviem līdz astoņpadsmit gadiem]</li> </ul>	6 mo to 2 yrs 2 to 3 yrs
Lithuania	–	
Luxembourg	<ul style="list-style-type: none"> <li>Feeding your baby from 0 to 12 months (2013) [L'alimentation du bébé de 0-12 mois]</li> <li>Eating and drinking between 12 and 36 months (2013) [Manger et bouger entre 12 et 36 mois]</li> </ul>	6 to 12 mo 12 to 36 mo
Hungary <sup>b</sup>	–	
Malta	–	
Netherlands	<ul style="list-style-type: none"> <li>Guidelines Disk of Five (2016) [Richtlijnen Schijf van Vijf 2016]</li> </ul>	1 to 3 yrs



Country	Citation	Age groups
Austria	<ul style="list-style-type: none"> <li>The nutrition of infants in the first year of life [Die Ernährung des Säuglings im ersten Lebensjahr]</li> <li>Nutrition recommendations for children from 1 to 3 years old (2014) [Ernährungsempfehlungen fuer 1-3 jaehrige Kinder]</li> <li>Nutrition pyramid designed for children [Ernährungspyramide illustriert für Kinder]</li> </ul>	6 to 12 mo 1 to 3 yrs
Poland	<ul style="list-style-type: none"> <li>Nutrition of infants and young children (2014) [Żywienie niemowląt i małych dzieci]</li> </ul>	1 to 3 yrs
Portugal	<ul style="list-style-type: none"> <li>The new food wheel ... a guide to daily food choices (2003) [A nova roda dos alimentos... um guia para a escolha alimentar diária]</li> </ul>	1 to 3 yrs
Romania	–	
Slovenia	<ul style="list-style-type: none"> <li>A healthy diet and movement towards health (2015) [Z zdravo prehrano in gibanjem do zdravja]</li> </ul>	>2 yrs
Slovakia	–	
Finland	<ul style="list-style-type: none"> <li>Eating together - food recommendations for families with children (2016) [Julkaisun pysyvää osoite on]</li> <li>Finnish nutrition recommendations 2014 (2014) [Suomalaiset ravitsemussuosituksset 2014]</li> </ul>	6 to 12 mo 1 to 3 yrs
Sweden	<ul style="list-style-type: none"> <li>Good food for infants under one year (2012) [Bra mat för spädbarn under ett år]</li> <li>Good food for children between one and two years (2012) [Bra mat för barn mellan ett och två år]</li> <li>Find your way to eat greener, not too much and be active (2015) [Hitta ditt sätt att äta grönare, lagom mycket och röra på dig!]</li> </ul>	6 mo to 1 yr 1 to 2 yr >2yrs
United Kingdom	<ul style="list-style-type: none"> <li>The Eatwell Guide (2016)</li> </ul>	>2 yrs
Norway	<ul style="list-style-type: none"> <li>Recommendations about diet, nutrition and physical activity (2014) [Anbefalinger om kosthold, ernæring og fysisk aktivitet]</li> </ul>	>2 yrs
Switzerland	<ul style="list-style-type: none"> <li>Nutrition of the infant during the first year of life (2012) [L'alimentation du nourrisson durant la première année de vie]</li> <li>Nutrition of children (2016) [L'alimentation des enfants]</li> </ul>	6 to 12 mo 1 to 3 yrs

FBDGs, food based dietary guidelines; mo, months; yr(s), year(s)

a. Croatia does not have FBDGS for infants and young children. They have the following in place Amendments of Healthcare Program, Hygiene and Proper Nutrition for Children in Kindergartens (2007) [Izmjene i dopune Programa zdravstvene zaštite djece, higijene i pravilne prehrane djece u dječjim vrtićima]

b. Hungary does not have FBDGS for infants and young children. They have the following in place Decree of Ministry of Human Capacities 37/2014. (IV.30) EMMI on the nutritional regulations of public catering (2014) [37/2014. (IV. 30.) EMMI rendelet a köztéteztetésre vonatkozó táplálkozás-egészségügyi előírásokról]

## Annex 2. EU Survey questionnaire

### Survey on national recommendations regarding infant and young child feeding in the EU

Fields marked with \* are mandatory.

#### 1 Survey on national recommendations regarding infant and young child feeding in the EU

---

Dear colleague, as you may know Article 11 of Regulation (EU) No 609/2013 of the European Parliament and of the Council on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control requires the Commission to lay down in a delegated act, specific information and compositional requirements for processed cereal-based food (PCBF) and baby food.

In order to comply with the abovementioned requirements of Regulation (EU) No 609/2013, two services of the European Commission, the Joint Research Centre (JRC) and DG SANTE are reviewing the food and nutrient recommendations for infants and young children in Europe. The questionnaire below aims to validate and complement our initial review.

To process your questionnaire as fast as possible, we kindly ask you to ensure your replies and, whenever possible, any documents uploaded are in one of the working languages of the European Commission (English, French or German).

Your responses to the questionnaire are expected by the **31st of August 2017**. Should you require support on the content of the survey please contact [fruzina.nyemecz@ec.europa.eu](mailto:fruzina.nyemecz@ec.europa.eu) or [sandra.caldeira@ec.europa.eu](mailto:sandra.caldeira@ec.europa.eu).

Thank you in advance for your time, support and contribution.

#### Acronyms

**FBDGs:** Food Based Dietary Guidelines

**PCBF:** Processed Cereal-Based Food

#### Definitions

**Infants and young children:** all children from birth up to 36 months of age

**Added sugars:** sucrose, fructose, glucose, starch hydrolysates (glucose syrup, high-fructose syrup) and other isolated sugar preparations used as such or added during food preparation and manufacturing [1]

**Free sugars:** they include monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook or consumer, and sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates [2]

**Intrinsic sugars:** those incorporated within the structure of intact fruit and vegetables [2]

**Total sugars:** the sum of added sugars and endogenous sugars present in fruits, vegetables, cereals, as well as lactose in milk products [1]; the sum of free sugars, intrinsic sugars and milk sugars [2]

[1] EFSA Journal (2010); 8(3)1462

[2] Guideline: Sugars intake for adults and children. Geneva: World Health Organization; 2015

## 2 Personal information

---

### \* 2.a Date of completion

### \* 2.b Please select your country

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- United Kingdom

### \* 2.c Affiliation

*The information you provide here is in case we need to follow up with you and will not be published*

**\*2.d Name**

*The information you provide here is in case we need to follow up with you and will not be published*

**\*2.e Email**

*The information you provide here is in case we need to follow up with you and will not be published*

**\*2.f Do you consent to the publication of your reply?**

*Please note: in case of non-consent, the European Commission cannot use this reply or any of its parts to inform the specific delegated act or any future policy initiatives*

- We / I consent to the publication of this reply (with reference, if necessary, to my country)
- We / I consent to the publication of this reply in an anonymous form (no reference to my country)
- We / I do not consent to the publication of this reply.

### 3 Questions about nutrition and food intake data surveys in your country

---

#### 3.1 Surveys assessing nutrient intakes

• 3.1.a Are there surveys assessing **nutrient** intakes of infants and young children in your country?

- Yes  
 No

3.1.b The intakes of which nutrients were assessed by the survey(s)?

*Please select all that apply.*

- |   |                                     |  |                                     |
|---|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> Energy         | <input type="checkbox"/> Vitamin A  | <input type="checkbox"/> Vitamin B12         | <input type="checkbox"/> Zinc       |
| <input type="checkbox"/> Protein        | <input type="checkbox"/> Vitamin D  | <input type="checkbox"/> Biotin              | <input type="checkbox"/> Copper     |
| <input type="checkbox"/> Carbohydrates  | <input type="checkbox"/> Vitamin E  | <input type="checkbox"/> Pantothenic acid    | <input type="checkbox"/> Manganese  |
| <input type="checkbox"/> Total Fat      | <input type="checkbox"/> Vitamin K  | <input type="checkbox"/> Potassium           | <input type="checkbox"/> Fluoride   |
| <input type="checkbox"/> Saturated Fat  | <input type="checkbox"/> Vitamin C  | <input type="checkbox"/> Chloride            | <input type="checkbox"/> Selenium   |
| <input type="checkbox"/> Total sugars   | <input type="checkbox"/> Thiamin    | <input type="checkbox"/> Calcium             | <input type="checkbox"/> Chromium   |
| <input type="checkbox"/> Added sugars   | <input type="checkbox"/> Riboflavin | <input type="checkbox"/> Phosphorus          | <input type="checkbox"/> Molybdenum |
| <input type="checkbox"/> Free sugars    | <input type="checkbox"/> Niacin     | <input type="checkbox"/> Magnesium           | <input type="checkbox"/> Iodine     |
| <input type="checkbox"/> Salt or Sodium | <input type="checkbox"/> Vitamin B6 | <input type="checkbox"/> Iron                | <input type="checkbox"/> Other      |
| <input type="checkbox"/> Fibre          | <input type="checkbox"/> Folic acid | <input type="checkbox"/> Omega 3 fatty acids |                                     |

3.1.c if other, please detail

3.1.d Please summarise the results (if available, stratified by age and sex)

3.1.e Are there any issues that need to be addressed based on the results of these surveys? Please describe.

*For example, insufficient or excessive nutrient intakes*

3.1.f When was the latest year the survey ran?

**3.1.g Please provide reference(s) for latest version(s) and web link**

**3.1.h Please upload your file(s) with the results of the survey(s)**

*If the documents are available in one of the working languages of the European Commission (English, French or German), please upload these versions. If not, then upload the ones in your national language.*

**3.2 Surveys assessing food intakes**

**\*3.2.a Are there surveys assessing food intakes of infants and young children in your country?**

- Yes
- No

**3.2.b The intakes of which foods / food groups were assessed by the survey(s)?**

*Please select all that apply.*

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> Grains or starchy food | <input type="checkbox"/> Milk                        | <input type="checkbox"/> Vegetables   | <input type="checkbox"/> Sugars                       |
| <input type="checkbox"/> Pasta                  | <input type="checkbox"/> Yoghurt                     | <input type="checkbox"/> Vegetable juice  | <input type="checkbox"/> Sugar-sweetened beverages    |
| <input type="checkbox"/> Rusks and biscuits     | <input type="checkbox"/> Cheese                      | <input type="checkbox"/> Nuts or seeds  | <input type="checkbox"/> Desserts                     |
| <input type="checkbox"/> Wholegrain products    | <input type="checkbox"/> Non-dairy alternative milks | <input type="checkbox"/> Legumes  | <input type="checkbox"/> Puddings                     |
| <input type="checkbox"/> Red meat               | <input type="checkbox"/> Fruit                       | <input type="checkbox"/> Oils and fats  | <input type="checkbox"/> Dairy-based sweet dishes     |
| <input type="checkbox"/> Processed meat         | <input type="checkbox"/> Fruit-only dishes           | <input type="checkbox"/> Water  | <input type="checkbox"/> Non dairy-based sweet dishes |
| <input type="checkbox"/> Poultry                | <input type="checkbox"/> Fruit juices                | <input type="checkbox"/> Tea  | <input type="checkbox"/> Salt                         |
| <input type="checkbox"/> Fish                   | <input type="checkbox"/> Fruit nectars               | <input type="checkbox"/> Herbal infusions   | <input type="checkbox"/> Savoury/salty snacks         |
| <input type="checkbox"/> Offal                  | <input type="checkbox"/> Fruit drinks                | <input type="checkbox"/> Meals with one or more of the following protein sources (meat, poultry, fish, offal) | <input type="checkbox"/> Other                        |

**3.2.c If other, please detail**

**3.2.d Please summarise the results (if available, stratified by age and sex)**

**3.2.e Are there any issues that need to be addressed based on the results of these surveys? Please describe.**

*For example, insufficient or excessive consumption of specific foods/ food groups*

**3.2.f When was the latest year the survey ran?**

**3.2.g Please provide reference(s) for latest version(s) and web link**

**3.2.h Please upload your file(s) with the results of the survey(s)**

*If the documents are available in one of the working languages of the European Commission (English, French or German), please upload these versions. If not, then upload the ones in your national language.*

**3.2.i Has there been an evaluation of the commercially available food products in your country?**

Yes  No

**3.2.j If yes, then please describe the results and provide a reference**

## 4 Questions about Nutrient Recommendations in your country

---

\* 4.a Does your country have national recommendations on nutrient intakes of infants and young children?

Yes  No

4.b Which are the bodies or organisations that are mandated or responsible for setting nutrient recommendations in your country? Please list all.

4.c For which of the following nutrients are there recommendations for infants and young children in your country?

*Please select all that apply.*



<input type="checkbox"/> A. Infants (4/6 – 8 months)	<input type="checkbox"/> B. Infants (9-11 months)	<input type="checkbox"/> C. Children (12-17 months)	<input type="checkbox"/> D. Children (18-36 months)
<input type="checkbox"/> A01. Energy	<input type="checkbox"/> B01. Energy	<input type="checkbox"/> C01. Energy	<input type="checkbox"/> D01. Energy
<input type="checkbox"/> A02. Protein	<input type="checkbox"/> B02. Protein	<input type="checkbox"/> C02. Protein	<input type="checkbox"/> D02. Protein
<input type="checkbox"/> A03. Carbohydrates	<input type="checkbox"/> B03. Carbohydrates	<input type="checkbox"/> C03. Carbohydrates	<input type="checkbox"/> D03. Carbohydrates
<input type="checkbox"/> A04. Total Fat	<input type="checkbox"/> B04. Total Fat	<input type="checkbox"/> C04. Total Fat	<input type="checkbox"/> D04. Total Fat
<input type="checkbox"/> A05. Saturated Fat	<input type="checkbox"/> B05. Saturated Fat	<input type="checkbox"/> C05. Saturated Fat	<input type="checkbox"/> D05. Saturated Fat
<input type="checkbox"/> A06. Total sugars	<input type="checkbox"/> B06. Total sugars	<input type="checkbox"/> C06. Total sugars	<input type="checkbox"/> D06. Total sugars
<input type="checkbox"/> A07. Added sugars	<input type="checkbox"/> B07. Added sugars	<input type="checkbox"/> C07. Added sugars	<input type="checkbox"/> D07. Added sugars
<input type="checkbox"/> A08. Free sugars	<input type="checkbox"/> B08. Free sugars	<input type="checkbox"/> C08. Free sugars	<input type="checkbox"/> D08. Free sugars
<input type="checkbox"/> A09. Salt or Sodium	<input type="checkbox"/> B09. Salt or Sodium	<input type="checkbox"/> C09. Salt or Sodium	<input type="checkbox"/> D09. Salt or Sodium
<input type="checkbox"/> A10. Fibre	<input type="checkbox"/> B10. Fibre	<input type="checkbox"/> C10. Fibre	<input type="checkbox"/> D10. Fibre
<input type="checkbox"/> A11. Vitamin A	<input type="checkbox"/> B11. Vitamin A	<input type="checkbox"/> C11. Vitamin A	<input type="checkbox"/> D11. Vitamin A
<input type="checkbox"/> A12. Vitamin D	<input type="checkbox"/> B12. Vitamin D	<input type="checkbox"/> C12. Vitamin D	<input type="checkbox"/> D12. Vitamin D
<input type="checkbox"/> A13. Vitamin E	<input type="checkbox"/> B13. Vitamin E	<input type="checkbox"/> C13. Vitamin E	<input type="checkbox"/> D13. Vitamin E
<input type="checkbox"/> A14. Vitamin K	<input type="checkbox"/> B14. Vitamin K	<input type="checkbox"/> C14. Vitamin K	<input type="checkbox"/> D14. Vitamin K
<input type="checkbox"/> A15. Vitamin C	<input type="checkbox"/> B15. Vitamin C	<input type="checkbox"/> C15. Vitamin C	<input type="checkbox"/> D15. Vitamin C
<input type="checkbox"/> A16. Thiamin	<input type="checkbox"/> B16. Thiamin	<input type="checkbox"/> C16. Thiamin	<input type="checkbox"/> D16. Thiamin
<input type="checkbox"/> A17. Riboflavin	<input type="checkbox"/> B17. Riboflavin	<input type="checkbox"/> C17. Riboflavin	<input type="checkbox"/> D17. Riboflavin
<input type="checkbox"/> A18. Niacin	<input type="checkbox"/> B18. Niacin	<input type="checkbox"/> C18. Niacin	<input type="checkbox"/> D18. Niacin
<input type="checkbox"/> A19. Vitamin B6	<input type="checkbox"/> B19. Vitamin B6	<input type="checkbox"/> C19. Vitamin B6	<input type="checkbox"/> D19. Vitamin B6
<input type="checkbox"/> A20. Folic acid	<input type="checkbox"/> B20. Folic acid	<input type="checkbox"/> C20. Folic acid	<input type="checkbox"/> D20. Folic acid
<input type="checkbox"/> A21. Vitamin B12	<input type="checkbox"/> B21. Vitamin B12	<input type="checkbox"/> C21. Vitamin B12	<input type="checkbox"/> D21. Vitamin B12
<input type="checkbox"/> A22. Biotin	<input type="checkbox"/> B22. Biotin	<input type="checkbox"/> C22. Biotin	<input type="checkbox"/> D22. Biotin
<input type="checkbox"/> A23. Pantothenic acid	<input type="checkbox"/> B23. Pantothenic acid	<input type="checkbox"/> C23. Pantothenic acid	<input type="checkbox"/> D23. Pantothenic acid
<input type="checkbox"/> A24. Potassium	<input type="checkbox"/> B24. Potassium	<input type="checkbox"/> C24. Potassium	<input type="checkbox"/> D24. Potassium
<input type="checkbox"/> A25. Chloride	<input type="checkbox"/> B25. Chloride	<input type="checkbox"/> C25. Chloride	<input type="checkbox"/> D25. Chloride
<input type="checkbox"/> A26. Calcium	<input type="checkbox"/> B26. Calcium	<input type="checkbox"/> C26. Calcium	<input type="checkbox"/> D26. Calcium
<input type="checkbox"/> A27. Phosphorus	<input type="checkbox"/> B27. Phosphorus	<input type="checkbox"/> C27. Phosphorus	<input type="checkbox"/> D27. Phosphorus
<input type="checkbox"/> A28. Magnesium	<input type="checkbox"/> B28. Magnesium	<input type="checkbox"/> C28. Magnesium	<input type="checkbox"/> D28. Magnesium
<input type="checkbox"/> A29. Iron	<input type="checkbox"/> B29. Iron	<input type="checkbox"/> C29. Iron	<input type="checkbox"/> D29. Iron
<input type="checkbox"/> A30. Zinc	<input type="checkbox"/> B30. Zinc	<input type="checkbox"/> C30. Zinc	<input type="checkbox"/> D30. Zinc
<input type="checkbox"/> A31. Copper	<input type="checkbox"/> B31. Copper	<input type="checkbox"/> C31. Copper	<input type="checkbox"/> D31. Copper
<input type="checkbox"/> A32. Manganese	<input type="checkbox"/> B32. Manganese	<input type="checkbox"/> C32. Manganese	<input type="checkbox"/> D32. Manganese
<input type="checkbox"/> A33. Fluoride	<input type="checkbox"/> B33. Fluoride	<input type="checkbox"/> C33. Fluoride	<input type="checkbox"/> D33. Fluoride
<input type="checkbox"/> A34. Selenium	<input type="checkbox"/> B34. Selenium	<input type="checkbox"/> C34. Selenium	<input type="checkbox"/> D34. Selenium
<input type="checkbox"/> A35. Chromium	<input type="checkbox"/> B35. Chromium	<input type="checkbox"/> C35. Chromium	<input type="checkbox"/> D35. Chromium
<input type="checkbox"/> A36. Molybdenum	<input type="checkbox"/> B36. Molybdenum	<input type="checkbox"/> C36. Molybdenum	<input type="checkbox"/> D36. Molybdenum
<input type="checkbox"/> A37. Iodine	<input type="checkbox"/> B37. Iodine	<input type="checkbox"/> C37. Iodine	<input type="checkbox"/> D37. Iodine
<input type="checkbox"/> A38. Omega 3 fatty acids	<input type="checkbox"/> B38. Omega 3 fatty acids	<input type="checkbox"/> C38. Omega 3 fatty acids	<input type="checkbox"/> D38. Omega 3 fatty acids
<input type="checkbox"/> A39. Other	<input type="checkbox"/> B39. Other	<input type="checkbox"/> C39. Other	<input type="checkbox"/> D39. Other

**4.d If other, please detail**

**4.e Are there nutrients for which, in your country, there are concerns regarding excessive or insufficient intakes by infants and young children? Please list them in the table below.**

	Infants	Young children
Insufficient intakes		
Excessive intakes		

**4.f Please provide reference(s) for latest version(s) of the nutrient recommendations and relevant web link(s). Remember to include the year when they were released/published.**

**4.g Please upload here your file(s)**

*If the documents are available in one of the working languages of the European Commission (English, French or German), please upload these versions. If not, then upload the ones in your national language.*

## 5 Questions about food-related recommendations in your country

---

### 5.1 Food-Based Dietary Guidelines (FBDGs)

\* 5.1.a Does your country have national FBDGs for the general population?

- Yes
- No

\* 5.1.b Does your country have FBDGs for infants and young children?

- Yes, there are separate ones addressing this age group
- Yes, as part of the recommendations for the general population
- No
- Other

5.1.c If other, please detail

5.1.d Which are the bodies or organisations that are mandated or responsible for setting FBDGs in your country?  
Please list all.

5.1.e Which ages are covered by the current FBDGs (either the ones for the general population or child-specific ones)?

*Please select all that apply.*

- |                                       |                                       |                                       |
|---------------------------------------|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> 6-8 months   | <input type="checkbox"/> 9- 11 months | <input type="checkbox"/> 12-17 months |
| <input type="checkbox"/> 18-23 months | <input type="checkbox"/> 24-35 months | <input type="checkbox"/> 36-47 months |
| <input type="checkbox"/> 48-60 months | <input type="checkbox"/> Other        |                                       |

5.1.f If other, please describe which other age groups are covered?

5.1.g For which of the following foods / food groups, are there FBDGs for infants and young children? Please complete the table below and provide details on the relevant recommendations. Make sure to mention the age range each recommendation is targeted at.

Please do not leave any cells empty: put **n/a** when no recommendation is available.

*If available in the FBDGs, please mention in the Comments the recommended age of introduction of these foods in children's diet*

	Quantitative	Qualitative	Portion size	Comments
Grains or starchy food				
Pasta				
Rusks and biscuits				
Wholegrain products				
Simple cereals which are or have to be reconstituted with milk or other nutritious liquids				
Cereals with added high protein food which are or have to be reconstituted with water or other protein-free liquid				
Red meat				
Processed meat				
Poultry				
Fish				
Offal				
Meals with one or more of the following protein sources (meat, poultry, fish, offal)				
Milk				
Yoghurt				
Cheese				
Non-dairy alternative milks				
Fruit				
Fruit-only dishes				
Fruit juices				
Fruit nectars				
Fruit drinks				
Vegetables				
Vegetable juice				
Nuts or seeds				
Legumes				
Oils and fats				
Water				
Tea				
Herbal infusions				
Sugar-sweetened beverages				
Sugar (total sugars)				
Sugar (free sugars)				
Sugar (added sugars)				
Desserts				
Puddings				
Dairy-based sweet dishes				
Non dairy-based sweet dishes				
Salt				
Savoury/salty snacks				
Other				

**5.1.h Are there recommendations regarding age of introduction of potentially allergenic food products?**

	Indicate which specific food items	Age of introduction	Recommendation
Gluten-containing foods such as grains and PCBF			
Peanuts or other nuts			
Fish			
Egg			
Milk			
Other			

**5.1.i Are there foods or versions of foods that are NOT recommended for consumption by infants and young children?**

*If there are any such cases, please also indicate the age group for which they are not recommended.*

**5.1.j Please provide reference(s) for latest version(s) of the FBDGs and relevant web link(s). Remember to include the year when they were released/published.**

**5.1.k Please upload your file(s) containing the FBDGs**

*If the documents are available in one of the working languages of the European Commission (English, French or German), please upload these versions. If not, then upload the ones in your national language.*

**5.2 Other relevant recommendations**

**5.2.a Apart from FBDGs, there are usually additional resources providing guidance for parents or health professionals or even guidance for the type of food that can be offered in the crèches or kindergartens. Which of the following resources addressing infants and young children’s nutrition exist in your country? You can select all that apply.**

- Guidance documents for health professionals
- Guidance documents for parents
- Guidance documents on feeding practices
- Guidance documents on foods that can be offered at crèches and kindergartens
- Other

**5.2.b Please provide a summary of the main points of the *guidance documents for health professionals*.**

Please include which different age groups they address.

**5.2.c Please provide a summary of the main points of the *guidance documents for parents*.**

Please include which different age groups they address.

**5.2.d Please provide a summary of the main points of the *guidance documents on feeding practices*.**

Please include which different age groups they address.

**5.2.e Please provide a summary of the main points of the *guidance documents regarding foods that can be offered in the crèches or kindergartens*.**

Please include which different age groups they address.

**5.2.f If other, please explain what they are and provide a summary of the main points.**

Please include which different age groups they address.

**5.2.g Please provide reference(s) for latest version(s) of all above resources and relevant web link (s). Please include the year these were published/released.**

**5.2.h Please upload your file(s) containing these relevant guidance documents**

*If the documents are available in one of the working languages of the European Commission (English, French or German), please upload these versions. If not, then upload the ones in your national language.*

### 5.3 Recommendations by other Scientific Bodies

**5.3.a** Are there nutrient- or food- related recommendations by other Scientific Bodies such as Pediatric Associations, Gastroenterology Associations, Dental Associations, etc?

- Yes  
 No

**5.3.b** Please provide a summary of the recommendations

**5.3.c** Please upload your file(s) with such recommendations

*If the documents are available in one of the working languages of the European Commission (English, French or German), please upload these versions. If not, then upload the ones in your national language.*

## 6 Food Supplements

---

**6.a** Are there food supplements intended for use by infants and young children placed on the market in your country?

Yes

No

**6.b** How are such products classified as in your country?

Medicines

Food supplements

Baby foods

Other

**6.c** If they are otherwise classified, please detail

**6.d** Is the intake of specific food supplements recommended/ encouraged by national supplementation policies?

Yes

No

**6.e** If yes, please detail

**6.f** Is the intake of specific food supplements NOT recommended/ encouraged by national supplementation policies?

Yes

No

**6.g** If yes, please detail



## 7 Fortification

7.a Please complete the table below regarding fortification of food products suitable for infants and young children.

*Check all that apply.*

	EXISTING recommendations on fortification with this nutrient	This nutrient is considered CRITICAL in this country and should be added via fortification	This nutrient is NOT NECESSARY to be added via fortification	This nutrient SHOULD NOT be added via fortification
Calcium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phosphorus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Magnesium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zinc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Copper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Selenium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Iodine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin D	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin K	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thiamin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Riboflavin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Niacin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin B6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folic acid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin B12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biotin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pantothenic acid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$\alpha$ -linolenic acid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

omega 3 fatty acids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Linoleic acid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
omega 6 fatty acids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Probiotics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fibre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other nutrient	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7.b Please see which nutrients you marked in question 7a as having EXISTING recommendations. Can you please provide the actual recommendation for each of them?

7.c For which other nutrients are there EXISTING recommendations on food fortification? Please describe.

7.d Please see which nutrients you marked as CRITICAL to be added via fortification in question 7a. What are the main reasons for this? Please detail.

7.e Which other nutrients are CRITICAL and should be added via fortification? Please describe.

7.f Please see which nutrients you marked as NOT NECESSARY to be added via fortification in question 7a. What are the main reasons for this? Please detail.

7.g Which other nutrients are NOT NECESSARY to be added via fortification? Please describe.

7.h Please see for which nutrients you marked they SHOULD NOT be added via fortification in question 7a. What are the main reasons for this? Please detail.

7.i Which other nutrients SHOULD NOT be added via fortification? Please describe.

7.j Are there instances where fortification of a food product suitable for infants and young children has been marketed in a way that could mislead the consumers?

- Yes
- No

7.k Please explain why and, if possible, provide examples

7.l Do you think that the use of health/ nutrition claims made on nutrients added on a mandatory basis to food can be misleading to the consumers?

- Yes
- No

7.m Do you think that the use of health/nutrition claims made on nutrients added on a voluntary basis to food should be allowed?

- Yes
- No

## 8 Sugars and salt

Please refer to the **Introduction Section** for the definitions of total, free and added sugars.

**8.a Are there recommendations for infants (aged up to 12 months) regarding different types of sugars in your country?**

	No	Yes reducing this type of sugars is advised but no specific limit is provided	Yes the limit is set under 10%E /day (as in <a href="#">WHO recommendation</a> )	Yes max. 5g total sugars per 100g food product or 2.5 g total sugars per 100ml liquid (as in <a href="#">Regulation (EC) No 1924/2006</a> , conditions of use of the nutrition claim "low sugars")	Yes another limit is set	Other
Total sugars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Free sugars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Added sugars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**8.b Please describe if another limit is set or a different type of recommendation.**

**8.c Are there recommendations for young children (aged between 12 and 36 months) regarding different types of sugars in your country?**

	No	Yes reducing this type of sugars is advised but no specific limit is provided	Yes the limit is set under 10%E /day (as in <a href="#">WHO recommendation</a> )	Yes max. 5g total sugars per 100g food product or 2.5 g total sugars per 100ml liquid (as in <a href="#">Regulation (EC) No 1924/2006</a> , conditions of use of the nutrition claim "low sugars")	Yes another limit is set	Other
Total sugars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Free sugars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Added sugars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8.d Please describe if another limit is set or if a different type of recommendation exists.

8.e Are there recommendations regarding consumption of fruit juices and fruit-based drinks for infants and young children?

Check all that apply.

- Consumption of 100% fruit juices is advised
- Limit consumption of fruit juices
- Fruit *nectars* should be limited
- Fruit *drinks* should be limited
- Fruit juices should be consumed diluted with water
- Consumption of 100% fruit juices instead of nectars and fruit drinks
- Fruit juice can be consumed only up to a certain quantity per day or week  Other

8.f If you recommend to dilute fruit juices, what is the recommended dilution?

8.g Can you please define what is the recommended maximum quantity and/or frequency ?

8.h If other, please describe

8.i Are there recommendations regarding consumption of salt and spices for infants and young children?

Check all that apply.

- Salt intake should be limited
- No addition of salt when preparing foods
- Prefer use of spices and herbs instead of salt
- Avoid using hot spices such as chilli, curry, etc
- Do not use spices
- Choose iodized salt
- Other

8.j If other, please describe

8.k Which of the following do you consider as a better recommendation for salt for infants and young children?

- No consumption of salt
- Max. 0.12g of sodium /0.3g of salt per 100g of food product (as in [Regulation \(EC\) No 1924/2006](#), conditions of use of the nutrition claim "low sodium/salt")
- Other

8.l if other, please describe

## 9 Weaning and feeding practices during early childhood

---

9.a Are there recommendations in your country on how liquids/drinks can be consumed during weaning ? For example, by use of bottle, sippy cup, normal cup or glass, etc.

- Yes  
 No

9.b Please describe all available recommendations regarding ways of consuming liquids/drinks during weaning. Please make sure to include the age groups these recommendations refer to.

9.c In the recent years, there is a variety of products, such as fruit/vegetable purees, yoghurts, etc, that are available in the form of pouches. Are there recommendations in your country regarding self-feeding with such products?

- Yes  
 No

9.d Please describe these recommendations on self-feeding with products in pouches.

9.e Nowadays there are several foods such as processed cereal-based foods (PCBFs) that can be added in the child's last evening feeding with the bottle . Are there recommendations in your country on consumption of foods such as PCBFs through bottle-feeding ?

- Yes  
 No

9.f Please describe

9.g Are there recommendations in your country regarding water consumption by infants and young children?

- Yes  
 No

9.h Please describe (including the age of introduction, if available)

9.i Are there recommendations for infants and young children regarding number of meals per day?

- Yes  
 No

9.j Please describe (if available, by age group)

**9.k Are there recommendations for infants and young children regarding portion sizes?**

- Yes
- No

**9.l Please describe (if available, by age group)**

**9.m Are there recommendations regarding energy or fat content of food products suitable for infants and young children in your country?**

- Yes
- No

**9.n Please describe (if available, by age group)**

**9.o Which of the following aspects related to the composition of meals are available in your national recommendations?**

*Please check all that apply.*

- Recipes for homemade baby meals/snacks
- Ready-made baby meals
- Addition of fats/oils in meals
- Suggested liquids for PCBF reconstitution

**9.p Please describe the available recipes for homemade baby meals/snacks.**

*Indicate if there is a recommended proportion of ingredients, a recommended number of total and/or new ingredients per recipe, if they are recommended vs. ready-made baby meals, etc.*

**9.q Please upload some indicative recipes**



**9.r Please describe any recommendations regarding ready-made baby meals.**

*Indicate if they are recommended or not and from what age onwards, if there are recommendations about when they should be consumed, if they are recommended during normal meals with the family or just as meals on-the-go.*

**9.s Please describe any recommendations regarding adding fats or oils in meals.**

*Indicate recommended and not recommended types, recommended quantity and if possible indicate age groups that these recommendations concern.*

**9.t Please describe the recommendations regarding the liquids to be used for reconstituting PCBF.**

*Include type of liquid (e.g. breastmilk, FOF, water, etc) and which age group each recommendation concerns*

**9.u Infants and young children are still developing their fine motor skills and eye-hand coordination. Proper feeding practices can help to practice and evolve these skills. Are there any national recommendations regarding feeding practices?**

- Yes
- No

**9.v Please describe the recommendations on feeding practices**

*Include information on whether the food should be spoon-fed or as finger-food, mashed, pureed, if the use of foods packaged in pouches is recommended, etc and provide the relevant age groups that each recommendation concerns.*

**9.w Taste formation takes place at an early age. It has been hypothesised that children that have been exposed to specific tastes (for example, vanilla or chocolate) early in life, tend to prefer similar tastes as they grow older. Are there recommendations regarding flavourings in ready- or homemade meals?**

- Yes
- No

**9.x Please describe the recommendations on use of flavourings and include source and, if available, a link**

*Is the use of flavoured ready-made meals recommended or not, is the addition of flavourings recommended in homemade meals or during weaning, which flavourings are recommended/not recommended*

9.y Is there national legislation in your country regarding the use of flavourings on food and beverages for infants and young children?

Yes

No

9.z Please describe the content of the legislation, include source and, if available, a link

## 10 Timing and suggestions for upcoming recommendations

10.a For which of the following nutrients do you expect updated recommendations for infants and young children to come out in the next 2 years?

Please select all that apply.

- |   |                                     |  |                                     |
|---|-------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> Energy         | <input type="checkbox"/> Vitamin A  | <input type="checkbox"/> Vitamin B12         | <input type="checkbox"/> Zinc       |
| <input type="checkbox"/> Protein        | <input type="checkbox"/> Vitamin D  | <input type="checkbox"/> Biotin              | <input type="checkbox"/> Copper     |
| <input type="checkbox"/> Carbohydrates  | <input type="checkbox"/> Vitamin E  | <input type="checkbox"/> Pantothenic acid    | <input type="checkbox"/> Manganese  |
| <input type="checkbox"/> Total Fat      | <input type="checkbox"/> Vitamin K  | <input type="checkbox"/> Potassium           | <input type="checkbox"/> Fluoride   |
| <input type="checkbox"/> Saturated Fat  | <input type="checkbox"/> Vitamin C  | <input type="checkbox"/> Chloride            | <input type="checkbox"/> Selenium   |
| <input type="checkbox"/> Total sugars   | <input type="checkbox"/> Thiamin    | <input type="checkbox"/> Calcium             | <input type="checkbox"/> Chromium   |
| <input type="checkbox"/> Added sugars   | <input type="checkbox"/> Riboflavin | <input type="checkbox"/> Phosphorus          | <input type="checkbox"/> Molybdenum |
| <input type="checkbox"/> Free sugars    | <input type="checkbox"/> Niacin     | <input type="checkbox"/> Magnesium           | <input type="checkbox"/> Iodine     |
| <input type="checkbox"/> Salt or Sodium | <input type="checkbox"/> Vitamin B6 | <input type="checkbox"/> Iron                | <input type="checkbox"/> Other      |
| <input type="checkbox"/> Fibre          | <input type="checkbox"/> Folic acid | <input type="checkbox"/> Omega 3 fatty acids |                                     |

10.b If other, please detail

10.c For which aspects of FBDGs do you expect updated recommendations for infants and young children to come out in the next 2 years?

Please select all that apply.

- |   |  |   |   |
|---|--|---|---|
| <input type="checkbox"/> Grains or starchy food | <input type="checkbox"/> Milk                        | <input type="checkbox"/> Vegetables   | <input type="checkbox"/> Sugars                       |
| <input type="checkbox"/> Pasta                  | <input type="checkbox"/> Yoghurt                     | <input type="checkbox"/> Vegetable juice  | <input type="checkbox"/> Sugar-sweetened beverages    |
| <input type="checkbox"/> Rusks and biscuits     | <input type="checkbox"/> Cheese                      | <input type="checkbox"/> Nuts or seeds  | <input type="checkbox"/> Desserts                     |
| <input type="checkbox"/> Wholegrain products    | <input type="checkbox"/> Non-dairy alternative milks | <input type="checkbox"/> Legumes  | <input type="checkbox"/> Puddings                     |
| <input type="checkbox"/> Red meat               | <input type="checkbox"/> Fruit                       | <input type="checkbox"/> Oils and fats  | <input type="checkbox"/> Dairy-based sweet dishes     |
| <input type="checkbox"/> Processed meat         | <input type="checkbox"/> Fruit-only dishes           | <input type="checkbox"/> Water  | <input type="checkbox"/> Non dairy-based sweet dishes |
| <input type="checkbox"/> Poultry                | <input type="checkbox"/> Fruit juices                | <input type="checkbox"/> Tea  | <input type="checkbox"/> Salt                         |
| <input type="checkbox"/> Fish                   | <input type="checkbox"/> Fruit nectars               | <input type="checkbox"/> Herbal infusions   | <input type="checkbox"/> Savoury/salty snacks         |
| <input type="checkbox"/> Offal                  | <input type="checkbox"/> Fruit drinks                | <input type="checkbox"/> Meals with one or more of the following protein sources (meat, poultry, fish, offal) | <input type="checkbox"/> Other                        |

10.d If other, please detail

**10.e Are there any additional aspects that could/ should be added in your national recommendations on feeding infants and young children?**

*Please note that the replies to this question will be treated in an anonymised way.*

- Yes
- No

**10.f Please describe what could/ should be added.**

*Please note that the replies to this question will be treated in an anonymised way*

**Thank you for your participation !**

### Annex 3. Detailed review of food-based dietary guidelines (FBDGs) and recommendations by food category

**Annex 3- Table 1.** *Summary of FBDGs for starchy foods.* Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders	6 to 12 mo		Gradually start gluten containing food from the age of 4 mo and before 7 mo. Between 8 and 12 mo introduce bread, low-sugar biscuits and pasta.	
	1.5 to 3 yrs	<ul style="list-style-type: none"> <li>• 1-3 slices/d bread.</li> <li>• 50-100 g/d potatoes.</li> </ul>	Introduce whole grain products from the age of 18 mo and as soon as the child can chew. Rusks and biscuits not a necessity; could be added to the liquid (milk) or fruit meal, but not recommended on a daily basis.	
Belgium-Wallonia	18 mo to 3 yrs	4 times/d.	At each meal.	
Bulgaria	6 to 12 mo	4-8 tbspd iron-enriched cereal grains (rice, barley, oat).		
Czechia	1 to 3 yrs	3-4 servings/d of bread and cereals.		
Denmark	6 mo to 2 yrs*		Porridge and mash in the beginning, later bread and potatoes in small pieces.	
Germany	4-6 mo to 3 yrs	<ul style="list-style-type: none"> <li>• 4-6 to 12 mo: 40 g/d</li> <li>• 12 to 24 mo: 80 g/d</li> <li>• 24 to 36 mo: 120 g/d</li> </ul>	Prefer wholegrain products. Do not serve bread with whole or crushed nuts (risk of choking). Serve deep-fried or other high-fat potato dishes sparingly (chips, potato fritters).	
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	Teaspoons from 6 mo increasing with age.	Gradual introduction. Mixture of refined and fibre-rich grains/starchy foods.	
Greece	1 to 3 yrs	<ul style="list-style-type: none"> <li>• 1-2y: 2 portions/d.</li> <li>• 2-3y: 3 portions/d.</li> </ul>		1 slice of bread, ½ cup cooked pasta or rice, 1 medium potato.

Annex 3- Table 1. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs		No need to add infant flour to baby bottles. If you wish to give between 4 and 6 mo, use gluten-free flours. Bread, pasta, semolina, rice: after 7 mo.	
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs	At every meal- 1 slice bread.	At 6 mo, start with porridge. From 9 mo give bread.	
Luxembourg	6 to 12 mo	Introduce the cereal gradually: begin with one bottle and add one, then two teaspoons of cereal for 100 ml of liquid.	Avoid gluten before 4 mo. After introduce in small quantities. Do not give cereal powders or flakes until 5th mo. Give the same quantity of starchy foods as vegetables. At 8 mo, introduce rice and pasta. Bread after 8/10 mo.	
Netherlands	1 to 3 yrs	Bread and grain products: 126 g/d.	Only whole grain.	
Austria	1 to 3 yrs	5 servings/d.	Choose among a diverse selection. Prefer wholegrain products as they are rich in fibre and contain important micronutrients.	1 serving = 30 g bread/pastry, 30 g muesli/cereals, 120 g cooked pasta (40 g raw), 90 g boiled rice (30 g raw rice), 120 g cooked potatoes.
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	4 servings/d.		
Finland	6 mo to 3 yrs		> 5 mo; whole grain is recommended. Porridge is recommended, but gruels are not.	
Sweden	1 to 2 yrs		Vary between wholegrain products and types less rich in fibre.	
	2 yrs and older	About 70 g/d for women and 90g for men is about the right amount.	Switch to wholemeal; choose wholegrain varieties when you eat pasta, bread, grain and rice.	70-90 g is equivalent to two pieces of crispbread and a portion of wholegrain pasta, for example.

Annex 3- Table 1. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
Slovenia	> 2 yrs	9-17 servings/d.	Prefer whole grain products.	One serving = half a piece of bread, half a small bun, 2 large tablespoons of flakes/muesli/cooked porridge/cooked rice/cooked pasta, 1 medium-large boiled potato.
United Kingdom	> 2 yrs	<ul style="list-style-type: none"> <li>• Should make up just over a third of the food we eat.</li> <li>• 2-3 servings/d for 6-9 mo; 3-4 servings for 9-12 mo; 4+ servings after 1 yr.</li> </ul>	Base meals on potatoes, bread, rice, pasta or other starchy carbohydrates; choosing wholegrain versions where possible. Check the labels and choose the products lowest in fat, salt and sugar.	
Norway	0-1 yr		Start with porridge. Choose wholegrain products.	
	1 yr and older	<ul style="list-style-type: none"> <li>• At least 4 portions/d.</li> <li>• 70-90 g/d wholemeal flour or whole grain.</li> </ul>	Select cereal products preferably whole grains, and low in fat, sugar and salt. Always choose boiled or baked potatoes.	
Switzerland	2-3 yrs	3-4 portions/d.	Opt for wholegrain products.	1 portion = 45 g bread, 35 g dry legumes, 140 g potatoes, 30 g uncooked oats, pasta, rice etc.

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tbsp, tablespoons; yrs, years.

\* Earlier introduction might be advised, but not earlier than 4 mo.

**Annex 3- Table 2. Summary of FBDGs for fruit.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders	6 to 12 mo		<ul style="list-style-type: none"> <li>• Introduce in form of puree after 4-6 mo of age. Some fruit (pineapple, grapes etc) after 12 mo.</li> <li>• Limit or even avoid fruit juice as a substitute for breast milk or formula.</li> </ul>	
	1.5 to 3 yrs	1-2 pieces/d.	Choose soft, fresh and ripe fruit. Do not add sugar or honey.	1 piece = 100 g.
Belgium-Wallonia	6 to 18 mo	250g fruit/d.	Vary the fruit of the season, fresh or frozen. Prefer local products. Do not offer canned fruit often as they contain lots of sugar. Pay attention to seeds and cores. Fruit juices do not replace [whole] fruit.	
Bulgaria	6 to 12 mo	<ul style="list-style-type: none"> <li>• <i>Whole fruit</i> 6 to 10 mo: 4 to 8 tbsp/d; 10 to 12 mo: 6-8 tbsp/d.</li> <li>• <i>Fruit juices</i> 6-8 months: 60 to 100 ml/d; 8-12 months: 90-120 ml/d.</li> </ul>	<ul style="list-style-type: none"> <li>• Start with apples, pears and other fruit in the form of puree. After 8 mo start offering them as finger food.</li> <li>• Prefer 100% fruit or vegetable juice – freshly squeezed. Offer juices in a cup (not bottle). Start with apple juice. Grape juice should be diluted with some water.</li> </ul>	
Czechia	1 to 3 yrs	4-5 servings/d of vegetables and fruit.		
Denmark	6 mo to 2 yrs*		Choose a variety of fruits; first mashed, later soft fruits. Fruit and vegetables should be given at most meals. Fruit can be used as dessert, added onto porridge or given in between meals. Prefer seasonal.  Fruit juices, fruit nectars, fruit drinks are not recommended. However they can be given diluted occasionally <i>e.g.</i> when the child is ill, in order to supply the child with enough liquids during fever.	



Annex 3- Table 2. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
Germany	4-6 mo to 3 yrs	6 to 24 mo: 120 g/d; 24 to 36 mo: 150 g/d.	Consume plenty of fruit and vegetables, legumes, and salad. Fruit is best served raw. Only serve frozen berries when they have been thoroughly heated.	
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	Fruit: Some tsp for infants increasing with age.	Consume fresh and stewed fruit with minimal sugar added. From 12 mo, introduce fruit juices, heavily diluted with water. Fruit nectars and drinks are not recommended.	
Greece	1 to 3 yrs	1 portion/d.	Fruit juice only once a day.	120-200 g (or 1 medium fruit, 2 small fruits, 125 ml fresh fruit juice).
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs		Consume homemade compote, made of mixed fruit, raw or cooked – without added sugar.	
Italy	6 mo to 3 yrs		Moderate use of fruit juices/nectars/ drinks to avoid sugar excess.	
Latvia	6 mo to 3 yrs	Start with 1 tsp (5 g) at 6 mo and increase to 5-6 tsp/d.	Gradually introduce after 6 mo. Consume fruit at every meal. Choose among a variety; prefer local, seasonal fresh fruit.	
Luxembourg	6 to 12 mo	Begin with 2 to 3 tsp of purée and complete this small meal with breast milk or formula. Increase the quantity to 12 to 15 tsp (full meal).	Start with pureed fruit. Give preference to regional and seasonal products. After 7 mo, replace second breast or bottle-feed with a fruit or vegetable meal.	
Netherlands	1 to 3 yrs	150 g/d.		
Austria	1 to 3 yrs	2 servings/d.	Toddlers should eat plenty of vegetables, pulses, and fruit every day. Prefer regional and seasonal products.	1 serving = 50 g of fruit (1 handful fruit/2 handful with small fruit or berries).
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	3 servings/d.		

Annex 3- Table 2. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
Finland	6 mo to 3 yrs		Start complementary feeding with tiny tasting portions of fruit between 4-6 mo. Fruit juices are not recommended for infants.	
Sweden	1 to 2 yrs		Consume fruit every day. Vary the colour and form. Mashed bananas, apples, and pears can easily be prepared by carefully scraping the fruit with a spoon.	
	2 yrs and older	Eat at least 500 g/d of vegetables and fruit.		
Slovenia	> 2 yrs	2-4 servings of fruit twice/d (150-250 g).		1 serving = 1 small banana, 1 medium-sized peach, 15 berries, 1 pear, 1 medium apple, 1 slice of watermelon, 1 orange.
United Kingdom	> 2 yrs	Eat at least 5 portions/d of a variety of fruit and vegetables. Fruit and vegetables should make up just over a third of the food we eat each day.	Choose from fresh, frozen, tinned, dried or juiced. Try to eat as many different types of fruit and vegetables as possible.	1 portion = 80 g fresh fruit (1 apple, 1 banana, 1 pear, 1 orange or other similar-size fruit), 1 dessert bowl of salad, 30 g dried fruit (which should be kept to mealtimes), 150 ml fruit juice/smoothie (counts as max. one portion a day), 30 g dried fruit.
Norway	0-1 yr		Dilute fruit juice with water.	
	1 yr and older	Min. 300 g/d of fruit and berries.	Vary between different types of fruit and vegetables.	
Switzerland	2-3 yrs	2 portions of fruit/d. Per day it is possible to substitute 1 portions with 1 dl fruit juice (without added sugars).	Eat a variety of different colours. Prefer regional and seasonal products.	<ul style="list-style-type: none"> <li>• Fruit: 60 g (1 to 2 yrs) or 75 g (2 to 3 yrs)</li> <li>• Fruit juice: 1 dl.</li> </ul>

d, day; dl, decilitres; FBDGs, food based dietary guidelines; g, grams; ml, millilitres; mo, months; tbsp, tablespoons; tsp, teaspoons; yrs, years.

\* Earlier introduction might be advised, but not earlier than 4 mo.

**Annex 3- Table 3. Summary of FBDGs for vegetables.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders	6 to 12 mo	150 g/d at 6 mo until 300 g/d at 12 mo.	Introduce in form of puree after 4-6 mo. Some after 12 mo.	
	1.5 to 3 yrs	50 to 100 g/d.	From 4 to 6 mo. Opt for fresh vegetables. Remove weak and decayed leaves vegetables. Rinse the vegetables under cold water. Limit the use of nitrate-rich vegetables to max. twice a week. Replace cooked vegetables occasionally with raw vegetables.	
Belgium-Wallonia	18 mo to 3 yrs	100-125 g.		
Bulgaria	6 to 12 mo	6 to 10 mo: 4 to 8 tbsp/d; 10 to 12 mo: 6-8 tbsp/d.	From 6-8 mo, introduce carrots and other vegetables (cauliflower, peppers, tomatoes, potatoes, etc) in the form of puree. After 8 mo, offer them slightly boiled as finger food.	
Czechia	1 to 3 yrs	4-5 servings/d of vegetables and fruit.		
Denmark	6 mo to 2 yrs*		Fruit and vegetables should be given at most meals. Vary between different kinds and prefer seasonal.	
Germany	4-6 mo to 3 yrs		Consume plenty of fruit and vegetables, legumes, and salad. Prepare vegetables without much fat, raw, or cooked.	
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	From 6 mo consume tsp increasing with age.	Prepared without added fat or salt.	
Greece	1 to 3 yrs	1 serving/d.		150-200 g (raw or cooked).
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs		Avoid at this age vegetables rich in fibre, more difficult to digest. Vegetables must be mixed.	

Annex 3- Table 3. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs		Gradually introduce after 6 mo and eat at every meal. Choose a variety, prefer local, seasonal fresh vegetables.	
Luxembourg	6 to 12 mo	Begin with 2 to 3 tsp of purée and complete this small meal with breast milk or formula. Increase the quantity to 12 to 15 tsp (full meal).	Start with pureed vegetables. Give preference to regional and seasonal products.	
Netherlands	1 to 3 yrs	75 g/d of vegetables.		
Austria	6 to 12 mo 1 to 3 yrs	3 servings/d of vegetables and/or legumes.	Toddlers should eat plenty of vegetables, pulses, and fruit every day. Prefer regional and seasonal products.	1 serving = 90 g cooked vegetables, 50 g raw food, 30 g salad, 60 g cooked legumes.
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	3 servings/d.		
Finland	6 mo to 3 yrs			
Sweden	1 to 2 yrs		Introduce leafy green vegetables like lettuce, rocket, and spinach after 12 mo. Then increase the amount of vegetables with every meal.	
	2 yrs and older	Eat at least 500 g/d of vegetables and fruit.		
Slovenia	> 2 yrs	3-5 servings of vegetables (2-3 times/d) (250-400 g).		1 serving = 1 cup of cooked broccoli/cauliflower/beetroots/cabbage/green beans, 1 bowl of green salad, 1 large carrot, 2 small tomatoes.

Annex 3- Table 3. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
United Kingdom	> 2 yrs	Eat at least 5 portions/d of a variety of fruit and vegetables. Fruit and vegetables should make up just over a third of the food we eat each day.	Choose from fresh, frozen, tinned, dried or juiced. Try to eat as many different types of fruit and vegetables as possible.	Three heaped tablespoons of vegetables, a dessert bowl of salad.
Norway	0-1 yr		Mash vegetables as a starter. Small quantities of nitrite rich vegetables.	
	1 yr and older	Min. 300-450 g/d of vegetables.	Vary between different types of vegetables.	Min. 100 g, such as a small bowl of salad, a carrot.
Switzerland	2-3 yrs	3 portions of vegetables/d. Per day it is possible to substitute 1 portion with 1 dl vegetable or fruit juice (without added sugars).	Eat a variety of different colours. Prefer regional and seasonal products.	Vegetables: 40 g (1 to 2 yrs) or 50 g (2 to 3 yrs) Vegetable juice: 1 dl.

d, day; dl, decilitres; FBDGs, food based dietary guidelines; g, grams; ml, millilitres; mo, months; tbsp, tablespoons; tsp, teaspoons; yrs, years.

\* Earlier introduction might be advised, but not earlier than 4 mo.

**Annex 3- Table 4. Summary of FBDGs for potatoes.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Only potato-specific recommendations are included; when potatoes are included in other food groups, then please refer to the relevant table. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders*	6 to 12 mo		Gradually introduce after 6-8 mo.	
	1.5 to 3 yrs	1-2 pieces/d.	Alternate with boiled rice or pasta.	1 piece = 50 gr.
Belgium-Wallonia*	18 mo to 3 yrs			
Bulgaria**	6 to 12 mo			
Czechia	1 to 3 yrs			
Denmark**	6 mo to 2 yrs***			
Germany*	4-6 mo to 3 yrs			
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo			
Greece*	1 to 3 yrs			1 medium potato.
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs	40-60 g/d (4-12 mo), 100g/d (12-24 mo), 120 g/d (24-36 mo).	Low-fat potato dishes should be preferred.	
Italy	6 mo to 3 yrs			
Latvia*	6 mo to 3 yrs			
Luxembourg	6 to 12 mo			
Netherlands	1 to 3 yrs	53 g/d potatoes.		
Austria*	6 to 12 mo 1 to 3 yrs			1 serving = 120 g cooked potatoes.
Poland	1 to 3 yrs			
Portugal*	1 to 3 yrs			

Annex 3- Table 4. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
Finland	6 mo to 3 yrs			
Sweden*	1 to 2 yrs		Both children and adults should avoid green potatoes.	
	2 yrs and older		Both children and adults should avoid green potatoes.	
Slovenia*	> 2 yrs			1 medium-large boiled potato.
United Kingdom*	> 2 yrs			
Norway*	0-1 yr		Start with mashed potatoes.	
	1 yr and older		Potatoes are not included in the 'five a day', but belong to a varied diet. Potatoes contain more dietary fibre, vitamins and minerals than usual rice and pasta. You should always choose boiled or baked potatoes.	
Switzerland*	2-3 yrs			1 portion = 140 g.

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; yrs, years.

\* included in starchy foods.

\*\* included in vegetables.

\*\*\* Earlier introduction might be advised, but not earlier than 4 mo.

**Annex 3- Table 5. Summary of FBDGs for legumes.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Only legume-specific recommendations are included; when legumes are included in other food groups, then please refer to the relevant table. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders***	6 to 12 mo	10 g/d	Introduce chickpeas, lentils etc after 6 mo.	
	1.5 to 3 yrs	1 tbsp dry legumes (15 g)/d or 3 tbsp (50 g) /d cooked legumes.		
Belgium-Wallonia*	18 mo to 3 yrs			
Bulgaria**	6 to 12 mo			
Czechia	1 to 3 yrs			
Denmark	6 mo to 2 yrs	Dried beans in small amounts.	Consume as part of a varied diet.	
Germany*	4-6 mo to 3 yrs			
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	Some tsp from 6 mo increasing with age.	Prepared without added fat or salt.	
Greece	1 to 3 yrs	<ul style="list-style-type: none"> <li>• 1 to 2 yrs: 1-2 servings/week.</li> <li>• 2 to 3 yrs: up to 3 servings/week.</li> </ul>		<ul style="list-style-type: none"> <li>• 1 to 2 yrs: 40-60 g cooked, drained</li> <li>• 2 to 3 yrs: 60-90 g cooked, drained</li> </ul>
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs		Before 15-18 mo, pulses (lentils, beans, ...) not recommended. After that in limited amounts.	
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs		Gradually introduce after 8 mo.	
Luxembourg	6 to 12 mo		Raw vegetables and dried legumes should not be introduced before the age of 1 yr.	
Netherlands	1 to 3 yrs	8 g/d.		



Annex 3- Table 5. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
Austria**	1 to 3 yrs			1 serving = 60 g cooked legumes.
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	1 serving/d.		
Finland**	6 mo to 3 yrs			
Sweden	1 to 2 yrs			
	> 2 yrs			
Slovenia***	> 2 yrs			4 tbsp of boiled beans, beans, lentils, soybeans, chickpeas.
United Kingdom**	> 2 yrs		Eat more beans and pulses. Pulses can be part of the 5 a day (fruit & vegetables).	80 g pulses.
Norway	0-1 yr			
	1 yr and older		Pulses such as beans and lentils, seeds, spices and herbs are not included in the 'five a day'. These often have a high content of nutrients and belong to a varied diet.	
Switzerland*	2-3 yrs			1 portion = 35 g dry legumes.

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tbsp, tablespoons; tsp, teaspoons; yrs, years.

\* included in starchy foods.

\*\* included in vegetables.

\*\*\* substitute for meat.

**Annex 3- Table 6. Summary of FBDGs for milk and dairy products.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders	6 to 12 mo	500 ml/d breast milk or follow-on formula.	Skimmed milk is not recommended. Soy or rice drinks are unsuitable for children.	
	1.5 to 3 yrs	2 to 3 cups milk and 1/2 slice cheese/d.	From (12 to) 18 mo can be switched to growth milk. After 18 mo switch to cow milk. From 12 mo until 3 years: by preference unsweetened and unflavoured follow on formulae or growing up milk as they contain less protein compared to whole milk. Prefer milk without added sugar and flavourings and/or supplemented with whole milk.	<ul style="list-style-type: none"> <li>• 1 cup = 160-175 ml</li> <li>• 1/2 slice cheese = 10 gr</li> </ul>
Belgium-Wallonia	18 mo to 3 yrs	Until 12 mo: 500 to 600 ml of breast milk or 3 x 200 ml milk or 3 feeds/d. After 18 mo: 2-3 times/d.	Adding dairy products to the fruit meal is not recommended. Cow's milk and products ( <i>i.e.</i> cheese) after 18 mo.	
Bulgaria	6 to 12 mo	Yoghurt and soft unsalted cheese in small quantities.		
Czechia	1 to 3 yrs	5 servings (at least 500 ml) milk or milk products/d.		
Denmark	6 mo to 2 yrs	After 9 mo max. 100 ml of cow's milk or yoghurt/d. From one yr milk and yoghurt products should constitute about 350 ml to max. 500 ml/d. Cheese in small amounts, e.g. as topping on bread.	From 9 mo small amounts of cow's milk can be introduced. The products should contain 3,5% fat. From the age of one year, the products should contain 1,5% fat. From 2 yrs switch to 0,5% fat or less. No sour milk products with high protein before 2 yrs.	
Germany	4-6 mo to 3 yrs	3 times/d.	Prefer pasteurised and UHT low-fat milk and dairy products (1.5% fat) and cheese with less than 50% fat. No unpasteurised milk and milk products. Alternate between products, avoid those with sugar or cocoa.	

Annex 3- Table 6. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	Some tsp of cheese and yoghurt increasing with age.	Cow's milk from 12 months.	
Greece	1 to 3 yrs	2 servings/d.		1 glass of milk (250 ml), 1 cup of yoghurt (200 g), 30 g hard natural cheese, 60 g soft cheese.
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs	500 ml/d. After 1 yr, do not exceed 800 ml.	Preferably breast milk or substitute. No cow milk in the first yr. Between 1-3 yrs, prefer growth milk. Milk of other animals (donkey, etc.) should be avoided. Avoid unpasteurised or raw milk.	
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs	Max. 600 ml/d milk.	Breast-milk up to the age of 2 yrs. From 1 yr introduce cow's milk and products (yoghurt, cottage cheese, cheese).	
Luxembourg	6 to 12 mo	Volume increases from 7-6 (100-400 ml) feeds/d (first week) to 5-4 times (780-850 ml)/d (4 mo).	Do not replace fruit meals with a dairy product. Breastmilk remains the best. Up to 6 mo breastfeeding or infant formula. After 6 mo follow-up formula. Dairy products should not be introduced before the age of 1 yr.	
Netherlands	1 to 3 yrs	Milk and milk products: 300 g/d.		
Austria	1 to 3 yrs	3 servings milk and dairy products/d.	The best is to use 2 servings of 'white' (e.g. milk, yoghurt, buttermilk, cottage cheese) preferably unsweetened and 1 serving 'yellow' (cheese). Low-fat products are not suitable for toddlers. Raw milk products also not suitable in this age.	1 serving = 125 ml milk/ buttermilk (0.5 glass), 100 g yoghurt (0.5 cup), 50 g cottage cheese, 20 g cheese (1 slice).
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	3 servings/d.		

Annex 3- Table 6. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
Finland	6 mo to 3 yrs		Introduce cow's milk after 12 mo, fat free milk is recommended; yoghurt after 10-12 mo, natural/not sweetened, low fat products are recommended; cheese after 1 yr (cottage cheese after 10 mo); no salty products before 12 mo.	
Sweden	1 to 2 yrs	A half-litre/d of milk, sour milk, or yoghurt.	Introduce milk as a drink and larger amounts of sour milk or yoghurt after 1 yr. Prefer low-fat dairy products. Do not give unpasteurised milk and curd cheese from unpasteurised milk to children.	
	2 yrs and older		Switch to low-fat dairy products. Choose low-fat, unsweetened products enriched with vitamin D.	
Slovenia	> 2 yrs	2-4 servings/d.	Use low fat options.	1 serving = 1 cup (2 dl) partially skimmed milk or 1 cup yoghurt or 1/2 slice reduced-fat cheese or 3 tbsp low fat cottage cheese.
United Kingdom*	> 2 yrs		Have some dairy or dairy alternatives (such as soya drinks); choosing lower fat, lower sugar and calcium-fortified options.	
Norway	0-1 yr	Yoghurt max. 2-3 tbsp/d.	After 6 mo breastmilk/formula should be main part of diet. Do not give regular cow's milk as a beverage or porridge. After 10 mo yoghurt and curdled milk (preferably types with little or no added sugar).	
	1 yr and older		Limit the use of dairy products with much saturated fats, whole milk, cream, fatty cheese and butter. Choose (lean) dairy products with low fat, salt and small added sugar as part of daily diet.	
Switzerland	2-3 yrs	3-4 portions/d.	After 12 mo introduction of cow milk products possible, before just small quantities recommended.	1 portion = 1 dl milk, 100 g yoghurt, 15 g cheese or 30 g soft cheese.

d, day; dl, decilitres; FBDGs, food based dietary guidelines; g, grams; ml, millilitres; mo, months; tbsp, tablespoons; tsp, teaspoons; yrs, years

\* Butters and creams are not included in this group as they are high in saturated fat and so they fit into the 'foods to eat less often and in small amounts' section.

**Annex 3- Table 7. Summary of FBDGs for fish.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders	6 to 12 mo	20 g/week. Starting at 12 mo, increase the amount of fish to 30 g/week.	Introduce after 6 mo. Tuna fish not more than once a week, certain fishes to be avoided due to high concentrations with heavy metals.	
	1.5 to 3 yrs	Start with about 20 g/d fish. At 1 yr, 30 g/d fish sufficient to reach 50 g/d at 3 yrs. Replace meat 1 to 2 times/week with fish.	All fresh sea fish, such as cod, skate, haddock, tongue, tuna and salmon, is suitable for babies. Prefer filleted fish and beware of bones. Vary in the fresh fish from fat, semi-fat and lean fish.	
Belgium-Wallonia	6 to 18 mo	10 to 15 g (2 tsp) meat, fish or egg/d.		
Bulgaria	6 to 12 mo			
Czechia	1 to 3 yrs			
Denmark	6 mo to 2 yrs	Daily intake of meat or fish as part of an iron-containing weaning diet.	Alternate between different types of fish, both fatty and lean fish.	
Germany	4-6 mo to 3 yrs		Prefer fish fillet without bones (low-fat and high-fat saltwater fish). Serve high-fat dishes rarely (e.g. breaded or deep fat fried). No raw fish.	
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	From 6 months some tsp; increasing with age.	Prepared without added fat or salt.	
Greece	1 to 3 yrs	2 servings/week.		<ul style="list-style-type: none"> <li>• 1 to 2 yrs: 60 g cooked.</li> <li>• 2 to 3 yrs: 60-90 g cooked.</li> </ul>
Spain	6 mo to 3 yrs			

Annex 3- Table 7. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
France	8 mo to 3 yrs	10-20 g/d, or 1/4-1/2 of hard-boiled egg (6-8 and 8-12 mo). After 1 yr, 30 g/d.	All fish: fat, lean, fresh or frozen, but not the breaded fish. Think about varying them. In the beginning, mix or crush very finely all these foods.	
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs	Twice/week.	Start after 1 yr old.	
Luxembourg	6 to 12 mo	Max. quantity of meat or fish is 10 to 25 g/day.	Introduce progressively meat, fish and eggs (after 6/7 mo). Avoid processed meat or fish products.	
Netherlands	1 to 3 yrs	7 g/d.		
Austria	1 to 3 yrs	1-2 servings of fish/week.	Preferably 1 serving of local fish such as char or trout and 1 portion of rich marine fish such as salmon, herring or mackerel. Care must be taken to carefully remove the bones (danger of suffocation!). Check for quality labels. Raw fish not suitable under 5 yrs.	1 serving = 50 g
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	1.5 servings/d of meat, fish, eggs.		
Finland	6 mo to 3 yrs			
Sweden	1 to 2 yrs	2-3 times/week.	Try to vary among different kinds of fish; this is good for both health and the environment. Avoid fish that may contain environmental pollutants.	
	2 yrs and older	Eat fish and shellfish 2-3 times/week.	Vary your intake of fatty and low-fat varieties.	
Slovenia	> 2 yrs	3-5 servings of meat, fish or substitutes. Eat fish once or twice a week. At least once a week, include oily marine fish in the menu (source of essential fatty acids).		One serving = 1 pilchard, half a medium-sized trout.

Annex 3- Table 7. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
United Kingdom*	> 2 yrs	2 portions of sustainably sourced fish/week, one of which is oily.	Vary between fish species.	140 g
Norway	0-1 yr			
	1 yr and older	Eat fish 2-3 times/week. 300-450 g of pure fish/week. At least 200 g should be oily fish.		150 g
Switzerland	7 to 12 mo	Once/d meat or fish (10-20 g) or 1/4-1/2 egg.		
	1 to 2 yrs	1 portion (40 g)/d meat, poultry, fish, tofu, eggs, quorn, seitan, cheese.	Alternate between products.	
	2-3 yrs	1 portion (50 g)/d meat, poultry, fish, tofu, eggs, quorn, seitan, cheese.	Alternate between products.	

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tsp, teaspoon; yrs, years.

\* Included in 'Beans, pulses, fish, eggs, meat and other proteins'.

**Annex 3- Table 8. Summary of FBDGs for meat.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders	6 to 12 mo	15 g/d. Starting at 12 mo, increase the amount of meat to 25 g/d.	Introduce after 6 mo.	
	1.5 to 3 yrs	25-50 g/d meat (products), poultry, fish (raw weight) meat substitute (tofu, tempeh, mycoprotein, seitan) or 50 g/d mushrooms.	Alternate between meat, poultry, egg, fish, legumes. Opt for fresh meat with no visible excess fat, such as chicken, turkey, horse, veal, beef or pork. Provide variety.	
Belgium-Wallonia	6 to 18 mo	10 to 15 g (2 tsp)/d meat, fish or egg once/d.	All meat suitable and must be well cooked. Avoid all kinds of processed meat. Avoid excess protein-rich foods.	
	18 mo to 3 yrs	Depending on the age, 30 to 50 g/d.	Meat is only necessary in small quantities. Limit meat high in fat. Alternate with other protein products.	
Bulgaria	6 to 12 mo	Initially 1 to 6 tbsp/d. From 10 mo, 2-8 tbsp/d.		
Czechia	1 to 3 yrs	2 servings/d of meat.	Prefer less fatty meats, e.g. poultry, fish and rabbit. No sausages for children.	
Denmark	6 mo to 2 yrs	Daily intake of meat or fish as part of an iron-containing weaning diet.	Alternate between different types of meat. Red meat should be cooked, not raw inside.	
Germany	4-6 mo to 3 yrs		Prefer lean pieces of meat, lean sausage. No raw meat or sausages. Serve high-fat dishes rarely (e.g. breaded or deep fat fried). Better without bones.	
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo	From 6 mo some tsp; increasing with age.	Prepared without added fat or salt. Offal and processed meat not recommended.	



Annex 3- Table 8. (Cont.).

Country	Age	Quantitative	Qualitative	Portion size
Greece	1 to 3 yrs	1 to 2 yrs: 3-4 servings/week. 2 to 3 yrs: 2-3 servings/week.		1 to 2 yrs: 40-60 g cooked 2 to 3 yrs: 60 g cooked
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs	10-20g/d, or 1/4-1/2 of hard-boiled egg (6-8 and 8-12 mo). After 1 yr, 30 g/d.	All meats, including cooked ham without rind, limiting offal and sausages. In the beginning, mix or crush very finely all these foods.	
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs		Opt for lean meat. Gradually introduce after 8 mo.	
Luxembourg	6 to 12 mo	Max. quantity of meat or fish is 10 to 25 g/d.	Introduce progressively meat, fish and eggs (after 6/7 mo). Avoid processed meat or fish products.	
Netherlands	1 to 3 yrs			
Austria	6 to 12 mo 1 to 3 yrs	Up to 3 servings of meat (including sausage, ham, etc.)/week.	Lean meats and a low-salt and low-fat preparation are ideal, pay attention especially with processed meats (eat sparingly). Raw meats are not suitable for children below 5 yrs.	
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	1.5 servings/d of meat, fish, eggs.		
Finland	6 mo to 3 yrs	Starting from 1 tsp to 1-1,5 tbsp/d.	Processed meat should be avoided up to 1 yr.	
Sweden	6 to 12 mo		Don't give salted meats, like sausage and smoked pork, as often.	
	1 to 2 yrs		Meat, chicken, eggs, beans, lentils, or tofu every day. Do not give raw minced meat and raw meat to children; cook minced meat and chicken thoroughly.	
	2 yrs and older	Eat less red and processed meat, no more than 500 g/week.		

Annex 3- Table 8. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
Slovenia	> 2 yrs	3-5 servings of meat, fish or substitute/d.	Use lean meat. Limit consumption of meat products. Due to the diversity of diet, include red meat (beef, pork, sheep meat, horse meat, game, etc.) in the weekly menu from 2-3 times and from 1-3 times poultry.	one serving = half a small steak, 2 to 3 slices of lean fat-free meat products only occasionally, 4 slices of ham.
United Kingdom	> 2 yrs	No more than 70 g of red or processed meat/d.	Eat less red and processed meat. Choose lean cuts of meat, go for leaner minced meat and remove any visible fat.	
Norway	0-1 yr			
	1 yr and older	Max. 2-3 times/week. Max. 500g red meat/processed meat/week.	Choose lean meats. Choose white meat, pure meat and lean meat with little salt. Limit the amount of processed meat which is smoked, salted or preserved with nitrates or nitrites, such as bacon or sausage.	
Switzerland	7 to 12 mo	Once/d meat or fish (10-20 g) or 1/4-1/2 egg/d.		
	1 to 2 yrs	1 portion (40 g) meat, poultry, fish, tofu, eggs, quorn, seitan, cheese/d.	Alternate between products.	
	2-3 yrs	1 portion (50 g) meat, poultry, fish, tofu, eggs, quorn, seitan, cheese/d.	Alternate between products.	

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tbsp., tablespoon; tsp, teaspoon; yrs, years.

**Annex 3- Table 9. Summary of FBDGs for eggs.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative	Portion size
Belgium-Flanders*	6 to 12 mo	½ egg/week From 12 mo, increase to 1 egg/week.	Introduce after 6 mo.	
	1.5 to 3 yrs	Max. 1 egg/week.		
Belgium-Wallonia	18 mo to 3 yrs	10 to 15 g (2 tsp) meat, fish or egg/d.	Cook egg well.	
Bulgaria	6 to 12 mo			
Czechia	1 to 3 yrs			
Denmark	6 mo to 2 yrs		Eggs can be given as part of a varied diet from the age of 6 mo. Eggs can be boiled or in minced meat dishes, pies, egg pancakes and cakes. It is advised that eggs are always sufficiently cooked. Alternatively pasteurised eggs should be used.	
Germany	4-6 mo to 3 yrs		Avoid raw eggs and foods made with eggs that have not been sufficiently cooked.	
Estonia	6 mo to 3 yrs			
Ireland	6 to 12 mo		Fully cooked for food safety.	
Greece	1 to 3 yrs	4-7/week.		
Spain	6 mo to 3 yrs			
France	8 mo to 3 yrs	10 g/d, the equivalent of ¼ of hard-boiled egg. After 1 yr, 30 g/d.	An element of the group meat or fish or egg/d is sufficient. Eggs should be hard boiled. In the beginning, mix or crush very finely all these foods.	
Italy	6 mo to 3 yrs			
Latvia	6 mo to 3 yrs		Start after 1 yr old.	
Luxembourg	6 to 12 mo		First start with the yolks, then the whites of the egg (after 6/7 mo). The egg should always be thoroughly cooked.	
Netherlands	1 to 3 yrs	18 g/d.		

Annex 3- Table 9. (Cont.)

Country	Age	Quantitative	Qualitative	Portion size
Austria	6 to 12 mo 1 to 3 yrs	1-2 eggs/week are appropriate for toddlers.	Also processed eggs in pasta, pastry and food are to be considered. Food with non-roasted eggs (eg soft egg, fried egg, tiramisu) are not suitable for children under five yrs. Only boiled eggs.	
Poland	1 to 3 yrs			
Portugal	1 to 3 yrs	1.5 servings/d of meat, fish, eggs.		
Finland	6 mo to 3 yrs			
Sweden**	1 to 2 yrs		Meat, chicken, eggs, beans, lentils, or tofu every day.	
	2 yrs and older		Prefer chicken or egg to red and processed meat.	
Slovenia*	> 2 yrs	3-5 servings of vegetables (2-3 times) (250-400 g)/d.	From one to two times a week, have a meat-free day, which should include dairy products, eggs, legumes or leguminous products.	
United Kingdom	> 2 yrs			
Norway	0-1 yr			
	1 yr and older			
Switzerland	7 to 12 mo	Once/d meat or fish (10-20 g) or 1/4-1/2 egg/d.		
	1 to 2 yrs	1 portion (40 g) meat, poultry, fish, tofu, eggs, quorn, seitan, cheese/d.	Alternate between products.	
	2 to 3 yrs	1 portion (50 g) meat, poultry, fish, tofu, eggs, quorn, seitan, cheese/d.	Alternate between products.	

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tsp, teaspoon; yrs, years.

\* included in meat, fish, or substitutes.

\*\* Included in Red and Processed Meat.

\*\*\* Included in 'Beans, pulses, fish, eggs, meat and other proteins'.

**Annex 3- Table 10. Summary of FBDGs for oils and fats.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative
Belgium-Flanders	6 to 12 mo	3 tsp oil or butter/d with the vegetables.	Vary the oils (canola, soy, nuts, sunflower, corn ...).
	1.5 to 3 yrs	1 tsp of oil or fat; 5 g margarine per slice of bread; max. 15 g for the preparation of meals/d.	Soft margarine on bread; or soft margarine or oil for the preparation.
Belgium-Wallonia	18 mo to 3 yrs	3 tsp oils (rapeseed, olive, ...) or 2 tsp of butter/d.	Add fat in the vegetable meal and on bread. Vary between oils and butter. Avoid light fat versions; give a sufficiently high fat diet. From the age of 3 yrs, decrease fat in all food. It is recommended to vary the choice of fat and to regularly use oils (peanut, olive oil) because their composition is better balanced.
Bulgaria	6 to 12 mo		
Czechia	1 to 3 yrs		
Denmark	6 mo to 2 yrs*	Until the age of 1 yr: vegetable oils and fats are recommended on bread and recommended to be added to homemade meals in quantities corresponding to 1/2-1 tsp per portion (depending on the type of puree or porridge).	Vegetable oils and fats are recommended on bread and to be added to homemade meals until the age of 1 yr. After that, it is recommended to reduce the intake of saturated fatty acids and to choose vegetable oils, such as rapeseed oil or olive oil, or liquid margarine products as alternatives.
Germany	4-6 mo to 3 yrs	Max. 2 tbsp/d.	Use vegetable oils (e.g. canola oil) (omega-3 and omega-6 fatty acids).
Estonia	6 mo to 3 yrs		
Ireland	6 to 12 mo		
Greece	1 to 3 yrs	<ul style="list-style-type: none"> <li>• 1 to 2 yrs; 1 serving/d</li> <li>• 2 to 3 yrs: 1-2 servings/d (1 serving= 1 tbsp olive oil or other vegetable oils, 1 handful nuts, 10-12 olives, 1 tbsp butter or margarine).</li> </ul>	
Spain	6 mo to 3 yrs		

Annex 3- Table 10. (Cont.).

Country	Age	Quantitative	Qualitative
France	8 mo to 3 yrs	A tsp of oil or a knob of butter in every meal.	No added fats before 6 mo. Choose rather vegetable oils. Avoid frying. Avoid food high in fats.
Italy	6 mo to 3 yrs		
Latvia	6 mo to 3 yrs		Do not exceed the recommended intake. Do not use dressings or mayonnaise cream with a high fat content. Cook vegetables/salad using vegetable oil, yoghurt or fruit (e.g., lemon) juice.
Luxembourg	6 to 12 mo	Add 1-3 tsp/d.	Introduce into cooking, once vegetables and starchy foods have been introduced. It is best to vary the source of fat: oils of different types or butter. Foods rich in hidden fats are forbidden. Rapeseed oil is recommended. No walnut or peanut oil.
Netherlands	1 to 3 yrs	30 g/d.	
Austria	1 to 3 yrs	A daily consumption of up to 25 g of vegetable oils and finely grated nuts (processed in food) (a total of 5 tsp) is suitable for toddlers, of which 3 tsp (14 g) in the form of vegetable oils.	Prefer high-quality vegetable oils, mainly rapeseed oil, but also olive, walnut, soy, linseed, sesame and grape seed oil. For frying and cooking, rapeseed oil is particularly suitable. Butter, margarine, fat-rich milk products (e.g. cream) sparingly.
Poland	1 to 3 yrs		
Portugal	1 to 3 yrs		
Finland	6 mo to 3 yrs	Preschoolers: oils and margarines (> 60% fat); recommended amount 20-30 g/d.	For infants, rapeseed oil is recommended if additional fat is needed.
Sweden	1 to 2 yrs		Choose margarine on bread and liquid margarine or oil in cooked food. Choose rapeseed oil and edible fats that contain rapeseed oil for sandwiches and when cooking.
	2 yrs and older		Choose healthy oils when cooking, such as rapeseed oil or liquid fats made from rapeseed oil, and healthy sandwich spreads.
Slovenia	> 2 yrs		Control fat intake and replace most saturated fats (animal fats) with unsaturated vegetable oils.

Annex 3- Table 10. (Cont.).

Country	Age	Quantitative	Qualitative
United Kingdom**	> 2 yrs		Choose unsaturated oils and spreads and eat in small amounts. All fat should be limited. Cut down on your saturated fat intake, and choose foods that contain unsaturated fats instead, such as vegetable oils, oily fish and avocados.
Norway	0-1 yr	45-60% E.	Opt for products low in fat. Infants need fat, and there should be a balance between unsaturated and saturated fatty acids in the diet.
	1 yr and older		Select edible oils, liquid margarine and soft margarine, rather than hard margarine and butter. Replace saturated fats with more favourable unsaturated fatty acids.
Switzerland	7 to 12 mo	1-2 tsp/d.	Choose rapeseed oil.
	1 to 2 yr	10g vegetable oils (2 tsp), additionally 5 g butter, margarine possible/d.	Choose vegetable oils, especially rapeseed oil.
	2 to 3 yrs	15 g vegetable oils (3 tsp), additionally 5 g butter, margarine possible/d.	Choose vegetable oils, especially rapeseed oil.

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tbsp, tablespoons; tsp, teaspoon; yrs, years.

\* Earlier introduction might be advised, but not earlier than 4 mo.

\*\* Butters are not included in this section as these are high in saturated fat and are included in the 'foods to eat less often and in small amounts' section.

**Annex 3- Table 11. Summary of FBDGs for nuts and seeds.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative
Belgium-Flanders****	6 to 12 mo		Ground seeds and nuts are possible as from 6 mo.
	1.5 to 3 yrs	2x 15 g nut cream or puree/d.	
Belgium-Wallonia	6 mo to 3 yrs		
Bulgaria	6 to 12 mo		
Czechia	1 to 3 yrs		
Denmark	6 mo to 2 yrs		Children under 3 yrs should not get the whole almonds and nuts, but can get these in triturated/blended form. Linseed and sunflower seeds in moderation.
Germany	4-6 mo to 3 yrs		Nuts, almonds, and other hard foods in 'peanut size' should not be made accessible to young children.
Estonia	6 mo to 3 yrs		
Ireland	6 to 12 mo		Not recommended.
Greece*	1 to 3 yrs		
Spain	6 mo to 3 yrs		
France	8 mo to 3 yrs		
Italy	6 mo to 3 yrs		
Latvia	6 mo to 3 yrs	Small quantities.	Unsalted nuts and dried fruit.
Luxembourg	6 to 12 mo		
Netherlands	1 to 3 yrs	19 g/d.	
Austria*	6 mo to 3 yrs		
Poland	1 to 3 yrs		
Portugal	1 to 3 yrs		
Finland	6 mo to 3 yrs	At most 1 tbsp (6-8 g/d) using a variety of oil plant seeds.	



Annex 3- Table 11. (Cont.).

Country	Age	Quantitative	Qualitative
Sweden**	1 to 2 yrs		Small pieces are OK.
	2 yrs and older		Source of healthy fats and fibre. Choose the unsalted variety.
Slovenia*	> 2 yrs		In moderate quantity.
United Kingdom***	> 2 yrs		
Norway	0-1 yr		Avoid whole nuts.
	1 yr and older	A small handful of unsalted nuts during the day.	
Switzerland	2-3 yrs	1 tsp nuts/d.	Until 2 yrs old milled nuts and seeds, unsalted nuts and seeds.

d, day; FBDGs, food based dietary guidelines; g, grams; mo, months; tbsp., tablespoons; tsp, teaspoon; yrs, years.

\* included in Fats.

\*\* Mentioned in 'Healthy Fats' for their lipid profile and 'Maintain a Balance' for their fibre content.

\*\*\* Nuts (plain) included in protein food group (beans, pulses, fish, eggs, meat and other proteins), but no specific recommendation about quantity or frequency of consumption.

\*\*\*\* Included in meat category. Alternative (protein) to meat products.

**Annex 3- Table 12. Summary of FBDGs on sugars.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative
Belgium-Flanders	6 to 12 mo		
	1.5 to 3 yrs		No sweeteners, sugar or honey. Limit the use of soft drinks. Sugar is not good for the teeth and inhibits appetite.
Belgium-Wallonia	6 mo to 3 yrs		
Bulgaria	6 to 12 mo		
Czechia	1 to 3 yrs		
Denmark	6 mo to 2 yrs	Less than 10% E from added sugars.	Limit the intake of added sugar.
Germany	4-6 mo to 3 yrs		Limited amounts of sugar.
Estonia	6 mo to 3 yrs		
Ireland	6 to 12 mo		Added or free sugars not recommended.
Greece	1 to 3 yrs		Limit added sugar intake, especially avoid consumption of beverages, commercial juices, and energy drinks with added sugar.
Spain	6 mo to 3 yrs		
France	8 mo to 3 yrs		Sugar as little as possible. Avoid sugary drinks.
Italy	6 mo to 3 yrs		
Latvia	6 mo to 3 yrs		Do not add any sugar.
Luxembourg	6 to 12 mo		Never add sugar. All other drinks such as soft drinks, syrups, sweetened herbal teas or fruit juices should be forbidden.
Netherlands	1 to 3 yrs		
Austria	6 mo to 3 yrs		Use sugar and other sweetening substances sparingly.
Poland	1 to 3 yrs		
Portugal	1 to 3 yrs		
Finland	6 mo to 3 yrs		Sugars in milk, fruits and berries are not needed to restrict. Added sugar or products sweetened with sugar are not recommended.

Annex 3- Table 12. (Cont.).

Country	Age	Quantitative	Qualitative
Sweden	6 to 12 mo		Avoid sweetened foods as much as possible. Don't give your child drinks like juice mixes, fruit juices, sodas.
	1 to 2 yrs		Watch out for hidden sugar, try to avoid added sugar as much as possible.
	2 yrs and older		Hold back on the sweets, pastries, ice creams and other products containing lots of sugar. Cut back on sweet drinks in particular.
Slovenia	> 2 yrs	Added sugars should not exceed 5-10% E, or no more than 3 tsp per 1000 kcal/d.	Limit consumption of sugar and sugary foods. Choose foods that contain little sugar. Also take into account hidden sugars.
United Kingdom	> 2 yrs		Cut down added sugar.
Norway	0-1 yr		Opt for products low in sugar. Honey should not be given to children under one yr.
	1 yr and older	Limit the intake of added sugar to less than 50-70 g/d depending on age and gender.	Avoid consuming foods and drinks with lots of sugar every day. Soft drinks, juices and sweets are the biggest sources of added sugar in the diet.
Switzerland	2-3 yrs		Avoid adding sugars.

d, day; E, energy intake; FBDGs, food based dietary guidelines; g, grams; mo, months; tsp, teaspoon; yrs, years.

**Annex 3- Table 13.** *Summary of FBDGs for sweets & desserts and savoury snacks.* Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative
Belgium-Flanders	6 to 12 mo		Limit intake of deep-fried dishes, fizzy drinks (including diet drinks), syrups, excessive sweets, salted snacks, peanuts (choking hazard), high-fat foods (sausage, pate, potato chips, biscuits, ...).
	1.5 to 3 yrs		Do not give candy between meals. Keep candy, cookies and soft drinks for special occasions. Limit snacking. Avoid energy-rich snacks. No sweetened drinks like grenadine, fruit syrups, lemonade, cola, sweetened tea derivatives, sweetened milk drinks etc. Reward as little as possible with candy.
Belgium-Wallonia	18 mo to 3 yrs		Honey can be introduced. Limit sweet and savoury snacks.
Bulgaria	6 to 12 mo		Do not add sugar to food and beverages. Do not give candy, chocolate cakes and pies to children up to 1 yr old.
Czechia	1 to 3 yrs		
Denmark	6 mo to 2 yrs		Savoury snacks should be limited or avoided. Sugar sweetened beverages, fruit juices, fruit nectars and fruit drinks are not recommended. Diluted fruit juices and fruit-based drinks can be given to infants and young children occasionally, e.g. when the child is ill in order to supply the child with enough liquids during fever. Honey not to be offered to children under 1 yr. Children should only eat raisins in small portions and not more than 50 g of raisins/week. Fresh fruit or mash is recommended as dessert, in combination with porridge, and as part of in between meals.
Germany	4-6 mo to 3 yrs		
Estonia	6 mo to 3 yrs		
Ireland	6 to 12 mo		Not recommended.
Greece	1 to 3 yrs		Limit added sugar intake, especially avoid consumption of beverages, commercial juices, and energy drinks with added sugar.
Spain	6 mo to 3 yrs		
France	8 mo to 3 yrs		Limit consumption of cakes, biscuits and desserts (custards, dessert creams, ice cream, etc.).
Italy	6 mo to 3 yrs		

Annex 3- Table 13. (Cont.).

Country	Age	Quantitative	Qualitative
Latvia	6 mo to 3 yrs		Sweets should not be used as a prize for good performance or punishment.
Luxembourg	6 to 12 mo		Foods rich in hidden fats are forbidden such as biscuits, pastries, snack foods, crisps, cured meats and fat-rich dairy products. These foods provide poorer quality fats.
Netherlands	1 to 3 yrs		
Austria	1 to 3 yrs	Max. 1 small portion, preferably not daily.	Fat, sugar and salt-rich foods (e.g. sweets, flour desserts, nibbles) and sugary beverages (e.g. sodas) should be seldom.
Poland	1 to 3 yrs		
Portugal	1 to 3 yrs		
Finland	6 mo to 3 yrs		
Sweden	6 to 12 mo		Do not give honey to children under 1 yr old.
	1 to 2 yrs		Avoid or be careful with candy, drink mixes, and soft drinks for as long as possible and be frugal with coffee cakes, buns, and sweet snacks.
	2 yrs and older		Hold back on the sweets, pastries, ice creams and other products containing lots of sugar. Cut back on sweet drinks in particular.
Slovenia	> 2 yrs		Limit consumption of sugar and sugary foods.
United Kingdom	> 2 yrs		Foods and drinks high in fat, salt or sugar are not needed in the diet and so, if included, should only be eaten infrequently and in small amounts. Eat less often and in small amounts.
Norway	0-1 yr		Honey should not be given to children under 1 yr.
	1 yr and older		Avoid foods and drinks with lots of sugar. Limit the intake of foods and beverages with high energy content and low in nutrients, such as soda, candy and snacks.
Switzerland	2-3 yrs	Max. 1 small portion (1 small piece cake, 3 pieces petit beurre, 20g chips, 1dl sweetened drink)/d.	

FBDGs, food based dietary guidelines; g, grams; mo, months; yrs, years.

**Annex 3- Table 14. Summary of FBDGs for salt.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative
Belgium-Flanders	6 to 12 mo		Limit salt intake.
	1.5 to 3 yrs	Max. 1.25 g/d.	Adding salt is not necessary; use herbs or spices instead. If you choose to still use salt, replace it by iodized salt.
Belgium-Wallonia	6 mo to 3 yrs		Limit salt intake. Adding salt is not recommended. Add non-spicy herbs or spices.
Bulgaria	6 to 12 mo	Up to 1 g salt/d.	Do not add salt when preparing food.
Czechia	1 to 3 yrs		Avoid seasoning with hot spices like pepper, chilli, curry. Products high in salt are not appropriate.
Denmark	6 mo to 2 yrs*	Below 0.5 g/MJ.	Limit salt intake from the early yrs on. Avoid actively salting food. Avoid processed food high in salt.
Germany	4-6 mo to 3 yrs		Use sparingly.
Estonia	6 mo to 3 yrs		
Ireland	6 to 12 mo		Not recommended.
Greece	1 to 3 yrs		Limit salt intake.
Spain	6 mo to 3 yrs		
France	8 mo to 3 yrs		Cook without adding salt. Limit total salt intake.
Italy	6 mo to 3 yrs		Moderate use of salt.
Latvia	6 mo to 3 yrs		Do not add salt or spices to food.
Luxembourg	6 to 12 mo		Do not add salt, salt-based products or spices.
Netherlands	1 to 3 yrs		
Austria	1 to 3 yrs	Use salt sparingly (max. 2 g/d).	Avoid using strong seasoning. Use iodized salt if at all.
Poland	1 to 3 yrs		
Portugal	1 to 3 yrs		

Annex 3- Table 14. (Cont.).

Country	Age	Quantitative	Qualitative
Finland	6 mo to 3 yrs	<ul style="list-style-type: none"> <li>• Up to 1yr: no added salt or salted products.</li> <li>• 1 to 2 yrs: 2 g salt/d.</li> <li>• &gt; 2 yrs: 3-4 g salt/d.</li> </ul>	Salty products should be avoided. All salt used should be iodized.
Sweden	6 to 12 mo		Be careful with salt for children under one yr old. Use herbs like dill, parsley, coriander, and others.
	1 to 2 yrs		Choose iodized salt for your food, but don't use too much of it. Avoid salty snacks for as long as possible.
	2 yrs and older		Choose food with less salt. Use less salt when you cook, but choose salt with iodine when you do use it.
Slovenia	> 2 yrs	Up to 5 g (1 tsp)/d.	Processed, semi-prepared and prepared foods contain a lot of salt: meat products, pies, pizzas, canned foods, salty snack, salad dressing, instant soup, sauce, soup cubes and seasoning blends with added salt. Instead of salt, use fresh, dried, or frozen spices.
United Kingdom	> 2 yrs	No more than 6 g/day.	Try replacing salt with pepper, herbs and spices to add flavour to your favourite dishes. Check the label and choose foods that are lower in salt.
Norway	0-1 yr		Foods with little salt recommended for children.
	1 yr and older	Under 2 yrs: 0.5 g/MJ. 2 to 3 yrs: 3-4 g/d.	Choose foods with a low salt content and limit the use of salt. Use spices and herbs without adding extra salt.
Switzerland	7 to 12 mo		Avoid adding salt and salty products, season with mild herbs and spices.

d, day; FBDGs, food based dietary guidelines; g, grams; MJ, megajoule; mo, months; tsp, teaspoon; yrs, years.

\* Earlier introduction might be advised, but not earlier than 4 mo.

**Annex 3- Table 15. Summary of FBDGs for water and beverages.** Information presented in the table is based both on the FBDGs review and the responses of the EU Member States to the EU survey. Responses may have been edited for clarity and brevity.

Country	Age	Quantitative	Qualitative
Belgium-Flanders	6 to 12 mo		Herbal tea or other beverages are inappropriate. Try to use bottled water to prepare food. Juice should be limited; avoid it as a substitute for breast milk or formula.
	1.5 to 3 yrs	0,5 l/d. No SSBs.	Opt for low mineral non-sparkling bottled water, light herbal or fruit tea (chamomile, lime, fennel, rosehip, etc.) without sugar or honey. Limit the amount of fruit or vegetable juice to a max. of 1 glass/d. Drinking is preferable after a meal or as a snack. Milk should not be used as a thirst-quencher. Diluted tea may be consumed. Coffee is not recommended. Artificial sweetened beverages are not recommended below 3 yrs.
Belgium-Wallonia	6 to 18 mo		Only natural water is indispensable. Only small quantities because child's diet is already very rich in water (milk, fruit, vegetables ...). Small amount of water with each meal. Avoid flavoured waters, herbal teas, juices, sodas reinforce the preference for sweet taste.
	18 mo to 3 yrs		Drink water throughout the day. Prefer tap water or bottled water. Drink water to quench thirst. Fruit juices and milk are to be considered as food.
Bulgaria	6 to 12 mo	120 to 240 ml/d.	Do not add sugar to food and beverages. Do not give soft drinks, drinks with artificial sweeteners, black or green tea to children up to 1 yr old.
Czechia	1 to 3 yrs		
Denmark	6 mo to 2 yrs		Infants and young children should get used to consuming water instead of sweetened drinks. Children should not drink energy drinks, and they should only consume tea and coffee in very limited amounts. SSBs are not recommended.
Germany	4-6 mo to 3 yrs	6 glasses/d.	Young children should drink preferably water (or other unsweetened/sugar-free drinks like herbal teas) from a glass, cup or an open mug with each meal and between meals. Unsweetened/sugar-free beverages whenever they like.
Estonia	6 mo to 3 yrs		
Ireland	6 to 12 mo		
Greece	1 to 3 yrs		5 glasses of fluids/d. 3-4 glasses of water/d.



Annex 3- Table 15. (Cont.).

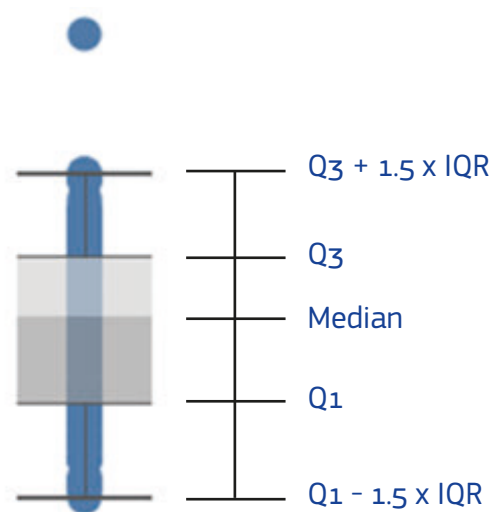
Country	Age	Quantitative	Qualitative
Spain	6 mo to 3 yrs		
France	8 mo to 3 yrs		Drink water when thirsty. Fruit juices not advisable before 4-6 mo and even after not essential. Do not give herbal teas or beverages with plant extracts (chamomile, linden, orange blossom ...) without doctor advice.
Italy	6 mo to 3 yrs		SSBs not recommended under 35 months.
Latvia	6 mo to 3 yrs		Quench thirst with water instead of sweetened, coloured and carbonated drinks, kefir, milk etc. Access to drinking water always recommended. Freshly squeezed juice at the beginning may be diluted with water.
Luxembourg	6 to 12 mo		Regularly offer water (between 50 and 150 ml/d). When the baby no longer wants milk after the meal, offer some water to drink. From time to time also unsweetened juices or herbal teas.
Netherlands	1 to 3 yrs	650 ml.	
Austria	1 to 3 yrs	6 to 7 servings/d, preferably in the form of drinking water. 1 serving = 125 ml.	Prefer sugar-free or unsweetened beverages. Fruit juices are a possible alternative when they are consumed seldom and diluted (3 parts of water, 1 part of juice).
Poland	1 to 3 yrs		
Portugal	1 to 3 yrs	1.5 l.	
Finland	6 mo to 3 yrs		Water is the recommended thirst quencher. Herbal teas are not recommended for infants or children aged 1-6 yrs. SSBs are not recommended.
Sweden	6 to 12 mo		Get child to drink water. Sweet drinks like juice mixes or sweet tea in feeding bottles should be avoided completely. If you have your own well, the water quality should be analysed before it is given to children.
	1 to 2 yrs		Water or milk as a mealtime drink. Avoid coffee, black tea, and energy drinks.
	2 yrs and older		Water is by far the best drink for quenching thirst – cut back on fizzy drinks, juice, soft drinks and sports drinks.
Slovenia	> 2 yrs	1.5-3 l/day.	

Annex 3- Table 15. (Cont.).

Country	Age	Quantitative	Qualitative
United Kingdom	> 2 yrs	Drink 6-8 cups or glasses of fluids/d. Limit fruit juices and smoothies to a max. of 150 ml/d.	
Norway	0-1 yr		Cow's milk just an occasional drink.
	1 yr and older	Average daily water intake via drinks and food 2-2.5 l/d.	
Switzerland	7 to 12 mo		
	1 to 2 yrs	6 dl/d.	Water as main thirst quencher. Unsweetened drinks, especially water or unsweetened fruit or herbal tea. No caffeinated drinks.
	2-3 yrs	7 dl/d.	Water as main thirst quencher. Unsweetened drinks, especially water or unsweetened fruit or herbal tea. No caffeinated drinks.

d, day; dl, decilitres; FBDGs, food based dietary guidelines; g, grams; l, litre(s); ml, millilitres; mo, months; SSBs, sugar(s)-sweetened beverages; tbsp, tablespoons; yrs, years.

#### Annex 4. Graphical representation of the distribution of energy and nutrient content



Each blue dot represents the energy (in kcal) or nutrient (in g or mg) content (per 100 g, 100 ml or 100 kcal) of either an individual product (*Annexes 5, 6, 8 and 9*) or the country average of all products in the specified food subcategory (*Annexes 7 and 10*).

- The box represents the middle 50% of the data. The lower edge of the box denotes the 25th percentile (1st quartile,  $Q_1$ ) and the upper edge denotes the 75th percentile (3rd quartile,  $Q_3$ ).
- The horizontal verge between the two shades of grey denotes the median value and its position within the box indicates the skewness of the energy or nutrient content values.
- The whiskers extend from the upper and lower edges of the box and indicate data points that are within 1.5 times the interquartile range ( $IQR = Q_3 - Q_1$ ) of the box edges. The whiskers extend to these values or to the closest data point within range.
- Outliers are points representing products with extreme (high or low) energy or nutrient content and are located outside the whisker's range.

## Annex 5. Summary tables of average energy and nutrient content per 100 g or ml of product

**Annex 5- Table 1.** Average nutrient content per 100 g (or 100 ml) of Mintel GNPD baby cereals.

Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>g</i>
Belgium	382	10.2	74.4	19.6	3.9	1.2	35.4	4.4
Czechia	391	10.8	70.7	15.3	6.5	1.9	48.3	5.1
Denmark	445	13.0	59.0	23.7	16.7	4.5	162.1	3.4
Germany	386	11.4	69.1	15.3	5.5	1.6	48.8	6.1
Ireland	361	10.5	73.9	14.0	4.7	1.2	35.0	5.8
Greece	384	9.5	74.6	6.7	3.1	0.6	29.6	4.7
Spain	382	8.2	80.9	22.1	1.8	0.4	25.2	4.4
France	382	8.3	81.8	16.3	1.6	0.4	16.8	3.5
Croatia	406	8.4	75.5	37.0	7.0	3.4		3.8
Italy	382	9.3	79.0	6.9	2.4	0.5	27.8	3.4
Hungary	410	12.2	68.2	25.7	8.9	2.4	105.0	3.9
Netherlands	381	10.9	71.5	16.0	5.0	1.5	64.3	5.6
Austria	394	11.8	67.7	23.0	7.1	2.5	53.1	6.1
Poland	409	12.1	70.6	25.8	7.9	3.0	80.5	4.1
Portugal	406	11.7	74.7	31.6	6.0	2.3	68.8	2.8
Romania	411	12.4	71.5	27.9	7.7	2.5	99.7	3.4
Slovakia	414	12.4	68.8	30.2	9.1	3.7	120.0	3.7
Finland	404	11.7	67.1	20.1	8.6	2.0	64.2	5.6
Sweden	436	14.6	61.3	24.5	13.9	3.8	160.0	3.3
United Kingdom	392	11.5	70.3	20.2	6.3	2.1	71.9	5.7
Norway	428	14.2	61.7	23.6	12.7	3.5	130.6	4.5
Switzerland	391	11.5	72.1	21.4	5.2	1.6	43.5	5.3

**Annex 5- Table 2.** Average nutrient content per 100 g (or 100 ml) of Mintel GNPD baby biscuits & rusks. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>g</i>
Belgium	439	6.4	75.8	21.6	11.8	5.0	186.7	2.2
Czechia	416	7.8	74.7	22.7	8.9	4.3	193.8	2.4
Denmark	417	8.0	69.3	19.3	11.4	5.0		3.9
Germany	423	9.2	72.3	15.0	10.2	4.1	133.6	3.7
Ireland	402	7.4	62.8	18.8	14.0	4.2	147.1	4.1
Greece	442	8.4	68.0	14.7	14.3	4.0	245.0	4.6
Spain	438	6.7	76.1	24.4	11.4	4.3	153.8	2.2
France	428	7.9	78.2	21.5	9.0	3.2	78.7	2.0
Croatia	427	9.0	73.0	21.0	11.0	6.5		
Italy	423	8.4	74.6	22.4	9.5	4.0	173.2	2.6
Hungary	420	8.5	72.1	19.1	10.1	4.2	199.9	3.1
Netherlands	413	6.5	71.5	18.5	10.9	4.7	133.1	2.8
Austria	424	9.0	74.1	14.1	9.7	4.5	149.3	2.7
Poland	415	7.5	81.0	9.2	7.2	4.0	194.7	3.9
Portugal	447	8.5	72.1	25.0	13.0	4.5	133.9	3.2
Romania	424	8.0	68.7	18.8	11.5	3.8	150.0	6.6
Slovakia	415	8.6	72.1	21.4	9.7	3.5	122.2	3.5
Finland	351		55.5	17.8	10.9	5.0	100.0	3.3
Sweden	414	6.8	66.7	15.2	12.6	6.5		3.6
United Kingdom	426	8.9	70.0	15.8	11.6	3.8	127.1	4.4
Norway	424	8.4	68.6	18.8	12.4	5.2	120.2	3.4
Switzerland	415	8.5	75.4	14.8	8.3	4.9	50.7	4.4

**Annex 5- Table 3.** Average nutrient content per 100 g (or 100 ml) of Mintel GNPD baby juices and drinks. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>g</i>
Belgium	53	0.5	11.0	9.0	0.7	0.2	15.0	0.2
Czechia	113	0.9	25.4	20.5	0.3	0.3	26.3	6.0
Denmark	65	0.7	13.6	10.5	0.5	0.1	50.0	1.6
Germany	121	1.6	26.5	12.9	0.6	0.3	27.2	3.1
Ireland	31	0.4	6.8	6.5	0.2	0.1	20.0	0.7
Greece								
Spain	83	1.6	17.2	13.0	0.6	0.2	25.0	1.3
France	107	2.3	19.1	13.5	2.1	0.6	26.0	2.9
Croatia	31	0.2	7.3	6.5	0.1	0.0	20.0	0.3
Italy	145	1.8	33.6	10.3	0.4	0.3	17.7	2.6
Hungary	132	1.0	30.6	25.3	0.2	0.2	12.2	2.4
Netherlands	212	3.0	38.5	36.0	3.6	0.6	53.5	6.8
Austria	186	3.0	39.7	21.0	1.0	0.6	21.6	5.0
Poland	95	0.6	21.9	19.4	0.3	0.1	15.9	2.0
Portugal	87	2.8	14.0	7.7	2.1	0.9	27.7	0.5
Romania	235	5.8	46.9	26.0	2.3	1.2	30.0	1.9
Slovakia	61	0.1	14.5	7.3	0.0	0.0	16.8	0.2
Finland	56	1.1	9.8	8.1	1.4	0.7	26.5	0.7
Sweden	41	0.2	9.5	8.4	0.3	0.3	18.3	0.9
United Kingdom	30	0.2	6.0	5.3	0.1	0.0	7.3	0.3
Norway	54	0.8	10.3	6.6	0.8	0.4	16.5	0.5
Switzerland	173	0.6	42.1	40.4	0.5	0.4	12.5	1.0

**Annex 5- Table 4.** Average nutrient content per 100 g (or 100 ml) of Mintel GNPD baby fruit products, desserts & yoghurts. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>g</i>
Belgium	71	1.0	13.8	11.1	0.9	0.4	20.1	1.5
Czechia	73	0.9	15.6	12.8	0.5	0.2	22.5	1.8
Denmark	62	0.5	13.5	10.6	0.3	0.1	13.1	1.7
Germany	84	1.3	15.4	12.0	1.0	0.5	18.4	2.1
Ireland	184	2.6	20.3	15.9	1.7	1.1	47.4	2.1
Greece	88	1.6	15.4	12.1	1.1	0.7	18.0	1.3
Spain	76	1.3	15.1	11.9	1.0	0.5	22.0	1.3
France	69	1.3	12.6	10.1	1.2	0.7	19.1	1.3
Croatia	63	0.5	13.7	11.7	0.3	0.1	8.8	2.1
Italy	74	1.0	15.0	11.8	0.8	0.5	18.9	1.5
Hungary	118	2.6	22.3	15.5	1.6	0.8	28.7	2.2
Netherlands	69	1.2	13.0	10.6	1.0	0.5	22.4	1.6
Austria	71	1.3	13.5	10.6	1.0	0.5	24.3	1.4
Poland	75	1.1	14.0	10.8	0.7	0.3	16.0	1.4
Portugal	70	1.1	14.2	12.5	0.8	0.4	25.5	1.5
Romania	80	0.2	19.1	15.4	0.1	0.0		
Slovakia	93	1.3	20.2	10.9	0.6	0.3	40.3	1.9
Finland	69	1.0	13.8	10.8	0.8	0.4	15.6	1.4
Sweden	62	0.9	13.3	10.5	0.3	0.1	24.7	1.3
United Kingdom	97	1.8	18.1	13.7	1.6	0.7	29.5	1.9
Norway	66	0.9	13.4	11.1	0.6	0.3	19.5	1.8
Switzerland	95	1.7	18.2	13.9	0.8	0.2	14.4	3.3

**Annex 5- Table 5.** Average nutrient content per 100 g (or 100 ml) of Mintel GNPD baby snacks. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>g</i>
Belgium	402	7.3	74.4	11.7	8.5	2.3	56.0	4.9
Czechia	383	4.4	71.7	25.9	6.5	2.1	41.3	5.2
Denmark	412	8.0	71.1	3.1	9.6	1.2	16.0	4.5
Germany	383	5.4	70.6	32.0	7.1	2.1	66.5	4.5
Ireland	394	7.2	71.5	19.2	7.7	2.6	75.6	5.1
Greece	386	6.0	75.1	24.8	6.9	1.6	185.0	4.3
Spain	417	8.1	75.0	10.6	9.7	1.9	81.5	2.2
France	356	3.6	73.8	44.5	4.4	2.1	20.0	3.3
Croatia								
Italy	382	6.7	75.5	15.6	5.0	2.1	24.4	3.9
Hungary	379	6.2	75.4	27.2	5.1	1.5	36.5	3.6
Netherlands	384	6.2	74.5	38.2	6.1	1.5	70.0	5.8
Austria	380	8.1	72.5	30.4	5.7	2.3	59.3	3.9
Poland	392	5.5	70.2	26.3	7.6	2.3	27.8	3.4
Portugal	429	3.1	57.2	37.9	21.5	6.5		3.2
Romania								
Slovakia	390	4.1	78.6	18.1	4.7	1.8		3.1
Finland	342	9.2	69.5	1.4	2.1	0.3	30.0	12.4
Sweden	411	8.3	73.1	6.6	9.6	1.3	36.3	4.3
United Kingdom	392	6.7	69.4	18.4	9.0	1.7	105.1	4.6
Norway	386	7.1	71.3	22.8	7.5	1.5	46.2	5.2
Switzerland	383	8.0	67.7	20.3	7.9	1.2	19.7	5.7



**Annex 5- Table 6.** Average nutrient content per 100 g (or 100 ml) of Mintel GNPD baby savoury meals & dishes. Please refer to Table 13 for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

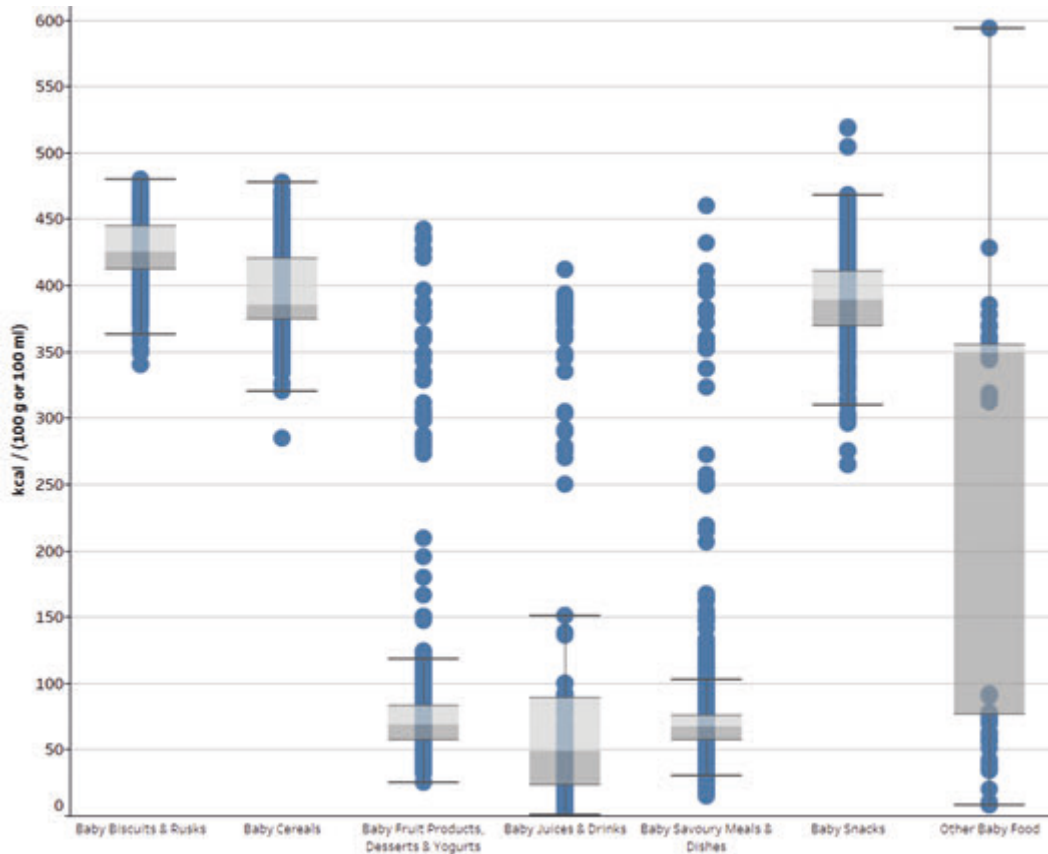
Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>	<i>g</i>
Belgium	61	2.8	7.6	2.2	1.8	0.4	66.2	1.7
Czechia	58	2.2	8.1	1.5	1.5	0.3	49.5	1.5
Denmark	70	2.3	8.7	2.1	2.5	0.5	25.6	1.6
Germany	77	3.2	10.4	2.4	2.1	0.5	79.1	1.8
Ireland	87	4.1	10.9	2.8	2.7	1.2	41.4	1.9
Greece	67	3.6	7.0	0.7	2.5	0.6		1.1
Spain	75	2.9	9.5	1.7	2.1	0.5	75.1	1.1
France	61	2.5	7.9	1.9	1.8	0.5	73.3	1.6
Croatia								
Italy	88	5.6	9.8	1.0	2.8	0.9	53.9	0.9
Hungary	169	3.6	16.6	7.0	3.2	1.0	102.3	1.6
Netherlands	76	3.1	8.4	2.9	2.2	0.6	53.8	1.7
Austria	71	2.7	8.9	2.1	2.5	0.6	123.8	1.4
Poland	64	2.8	7.6	2.0	1.9	0.4	55.3	1.6
Portugal	63	2.7	8.5	1.5	1.8	0.6	64.5	1.0
Romania								
Slovakia	63	2.6	8.8	3.6	1.8	0.4	42.9	1.3
Finland	62	1.9	8.5	2.9	2.2	0.8	26.8	0.7
Sweden	74	3.6	8.8	1.9	2.5	0.6	60.7	1.3
United Kingdom	82	3.7	11.0	2.9	2.2	0.8	59.6	1.7
Norway	76	3.1	9.4	2.5	2.7	0.7	58.2	1.2
Switzerland	91	2.9	14.9	3.0	1.5	0.4	62.8	2.9

**Annex 5- Table 7. Average nutrient content per 100 g (or 100 ml) of other Mintel GNPD baby food.**

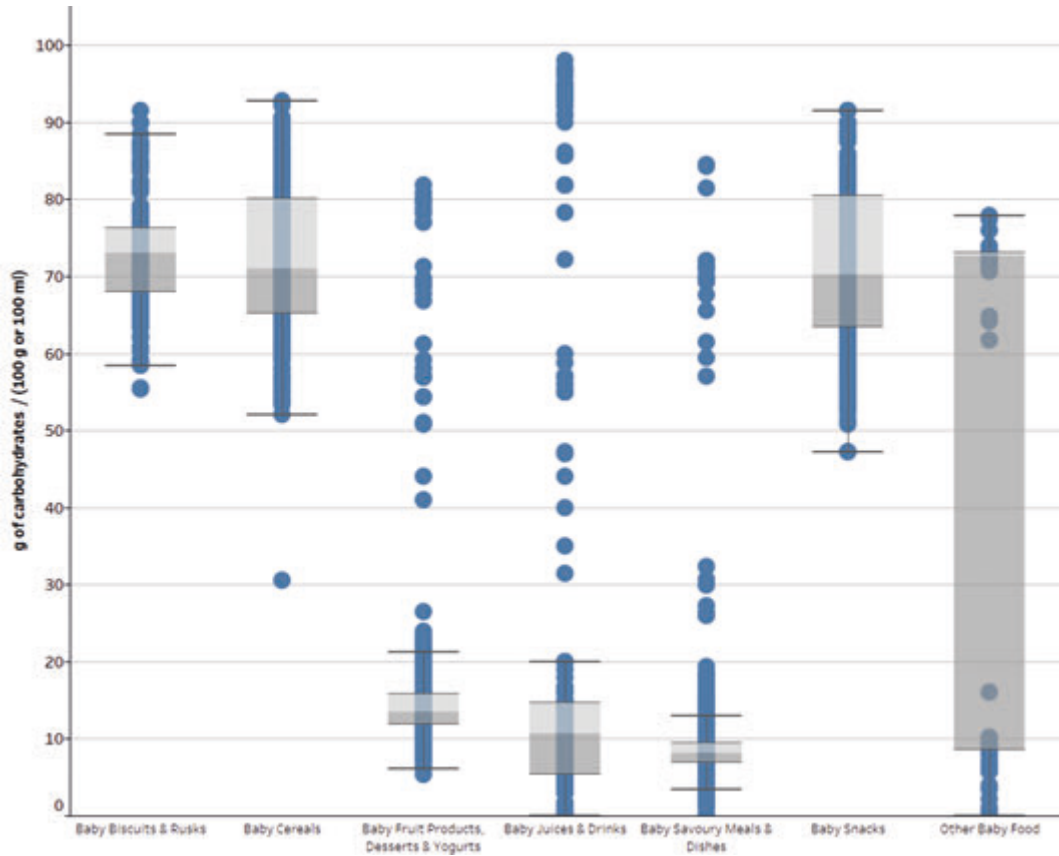
Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Energy	Protein	Carbohydrates	Sugars	Fat	Saturated fat	Sodium	Fibre
	<i>kcal</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>
Belgium	161	5.6	29.0	2.7	2.0	0.6	20.0	1.9
Czechia								
Denmark								
Germany	301	9.8	57.2	2.1	1.8	0.3	64.2	4.5
Ireland	352	10.3	73.5	3.0	1.3	0.3	10.0	2.4
Greece								
Spain	428	7.1	77.9	1.1	9.8	1.0	200.0	2.1
France	229	8.5	42.1	2.5	1.6	0.5	25.1	7.2
Croatia								
Italy	323	10.2	66.5	2.4	1.5	0.4	14.5	2.8
Hungary								
Netherlands	594	25.8	16.1	4.7	49.2	6.3		8.5
Austria	378	12.5	76.0	0.9	1.2	0.2	20.0	6.5
Poland	91	5.0	9.7	0.9	3.4	1.7		1.7
Portugal								
Romania								
Slovakia								
Finland								
Sweden								
United Kingdom	63	2.2	9.6	2.7	1.7	0.8	22.9	1.4
Norway								
Switzerland								

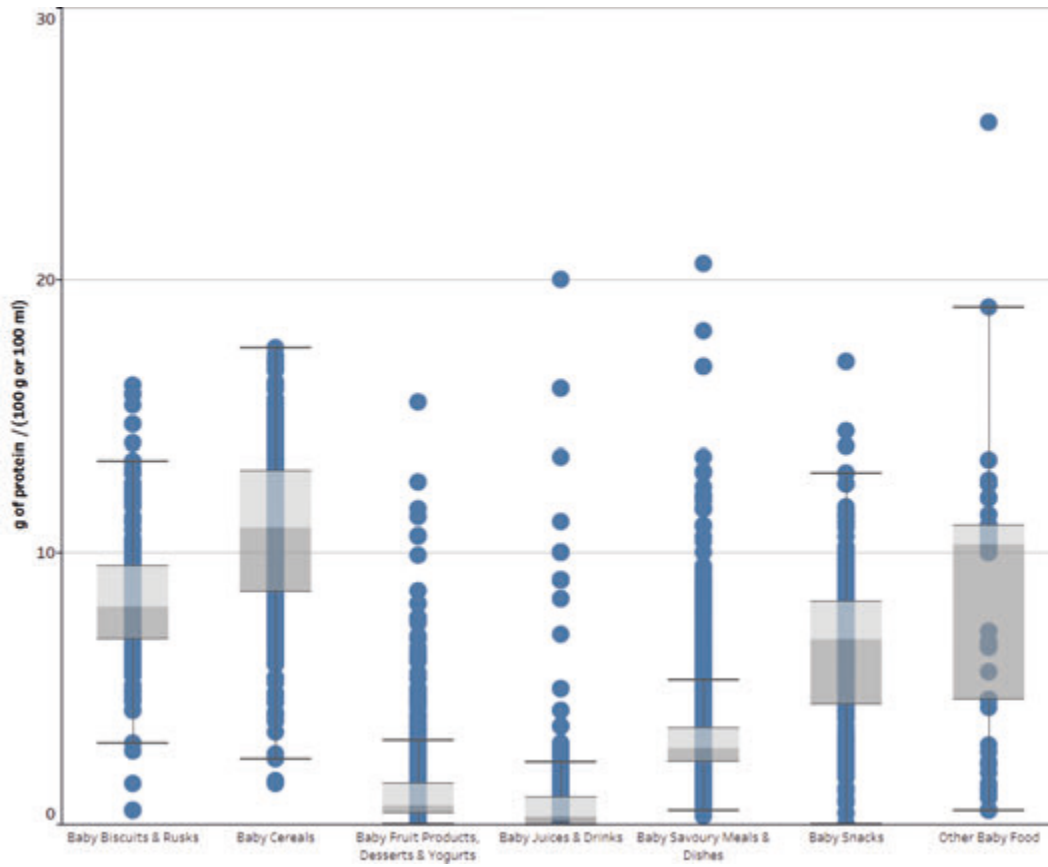
**Annex 6. Distribution of energy and nutrient content per 100 g (or 100 ml) of product**



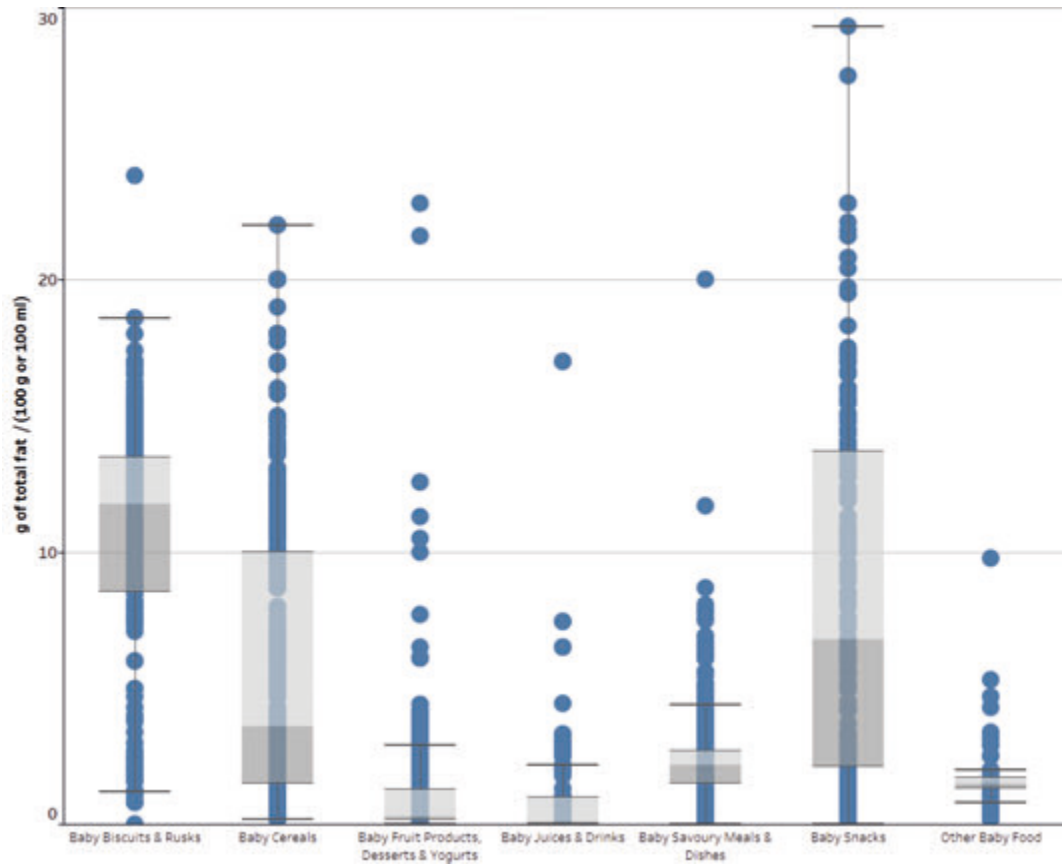
**Annex 6- Figure 1.** *Distribution of energy content (in kcal) per 100 g (or 100 ml) of product.* Each blue dot represents the energy content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



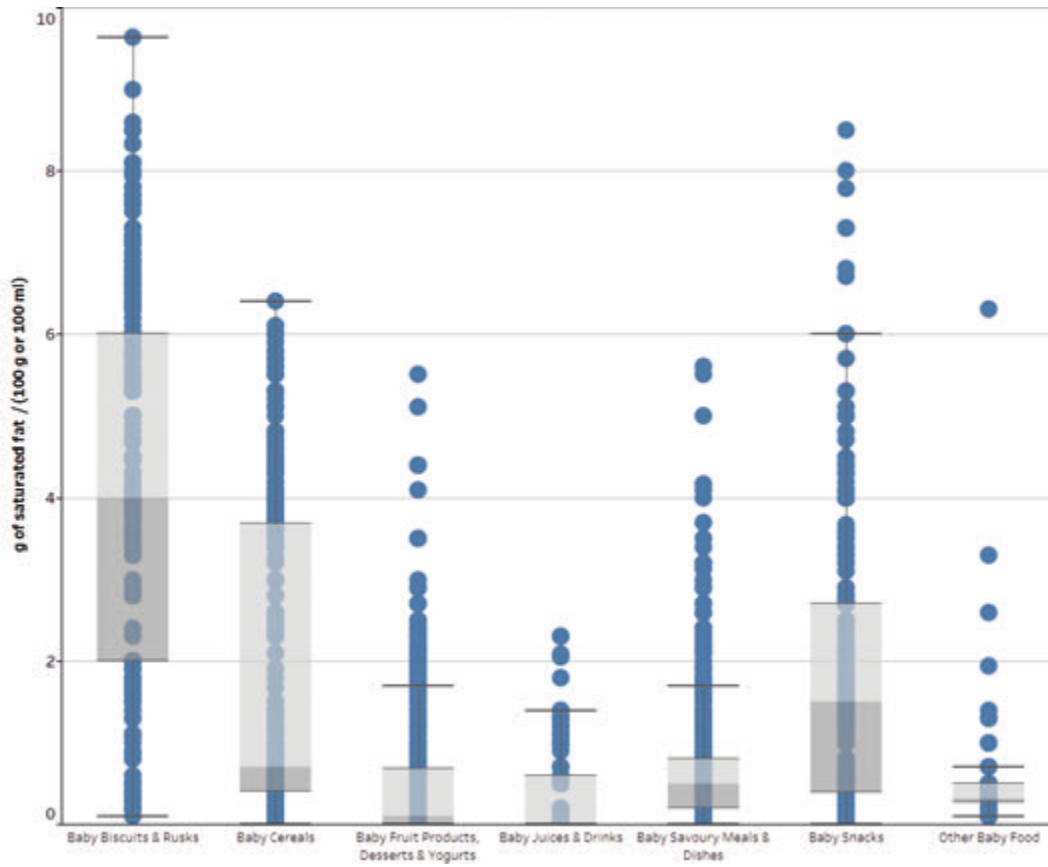
**Annex 6- Figure 2.** Distribution of *carbohydrate* content (in g) per 100 g (or 100 ml) of product. Each blue dot represents the carbohydrate content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



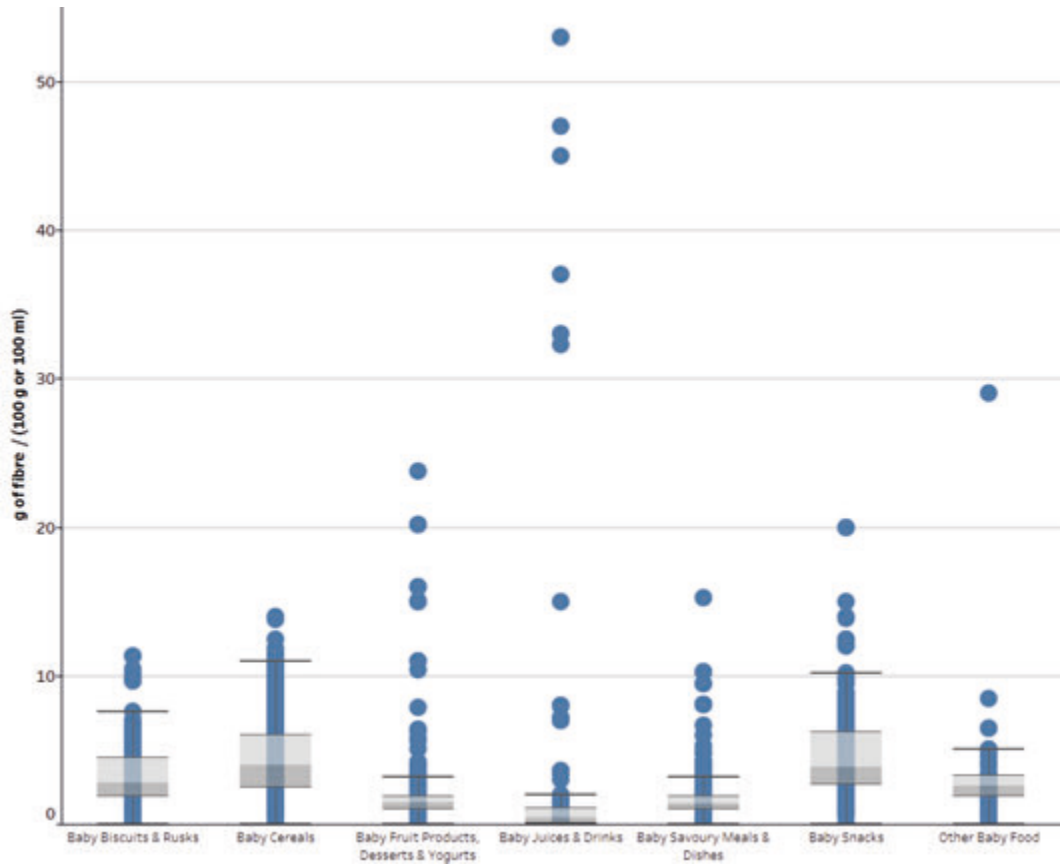
**Annex 6- Figure 3.** Distribution of *protein* content (in g) per 100 g (or 100 ml) of product. Each blue dot represents the protein content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



**Annex 6- Figure 4.** Distribution of **total fat** content (in g) per 100 g (or 100 ml) of product. Each blue dot represents the fat content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.

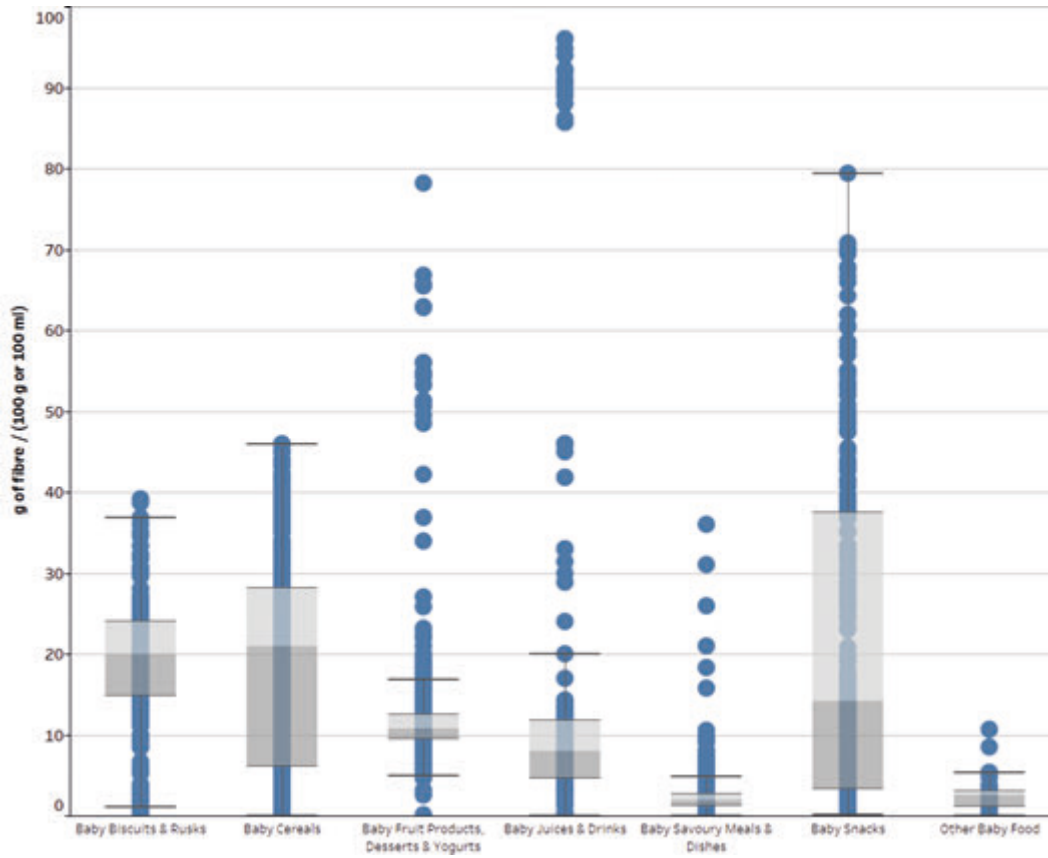


**Annex 6- Figure 5.** Distribution of **saturated fat** content (in g) per 100 g (or 100 ml) of product. Each blue dot represents the saturated content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.

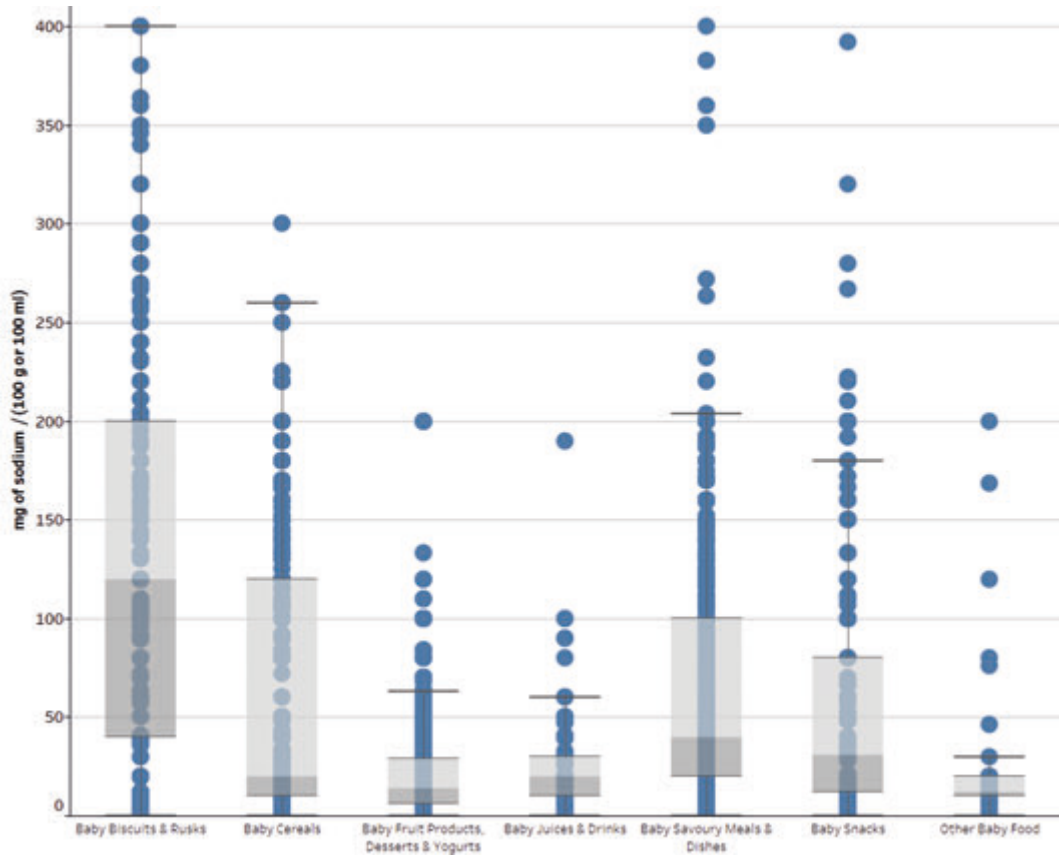


**Annex 6- Figure 6.** Distribution of **fibre** content (in g) per 100 g (or 100 ml) of product. Each blue dot represents the fibre content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



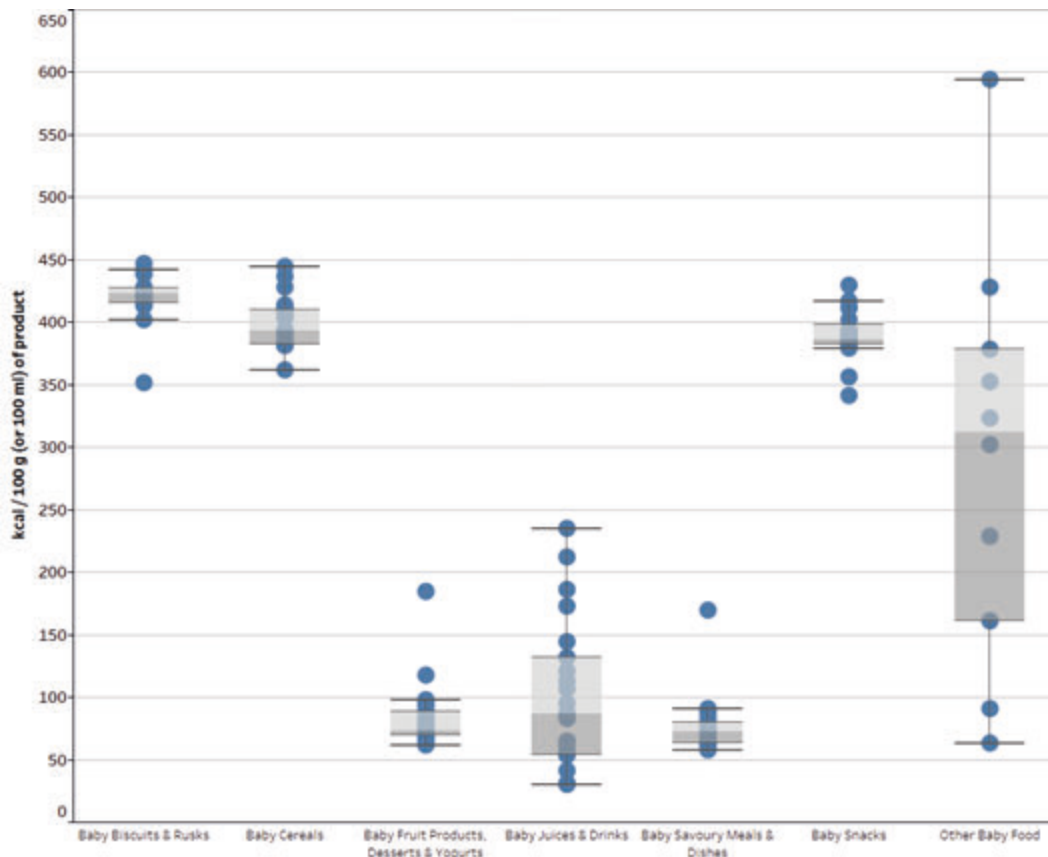


**Annex 6- Figure 7.** Distribution of **total sugars** content (in g) per 100 g (or 100 ml) of product. Each blue dot represents the total sugars content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.

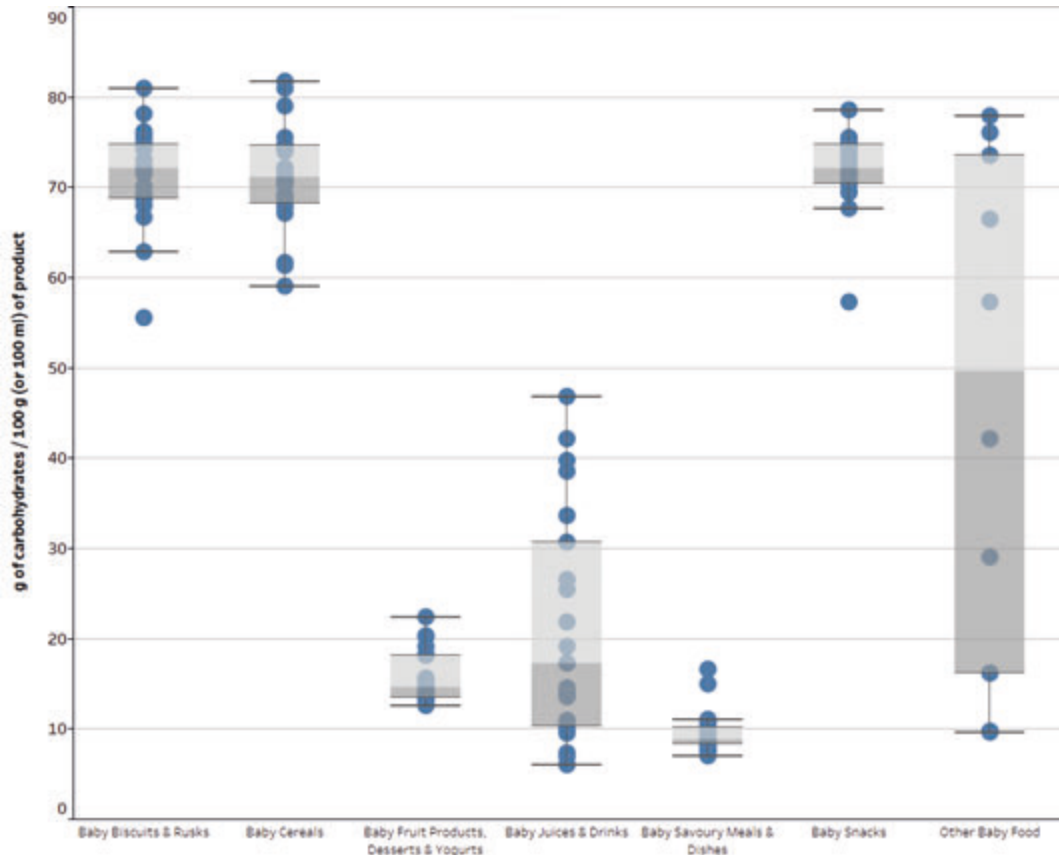


**Annex 6- Figure 8.** *Distribution of sodium content (in mg) per 100 g (or 100 ml) of product.* Each blue dot represents the sodium content of an individual product. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.

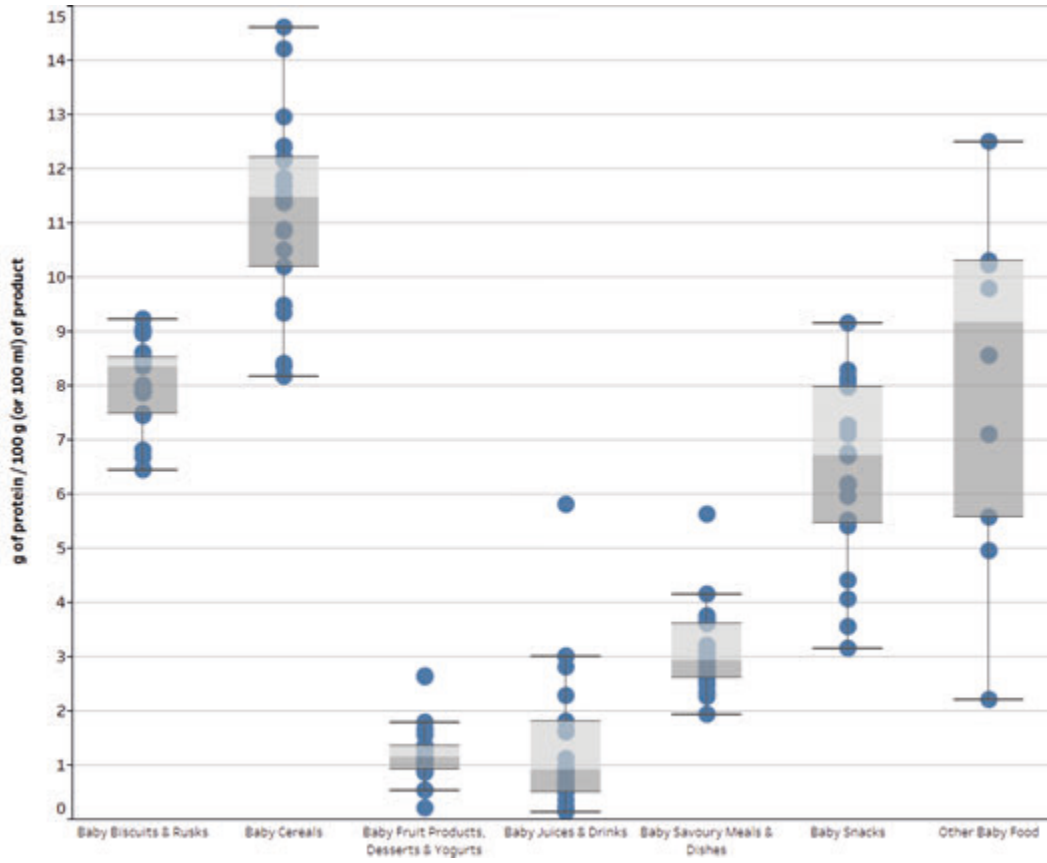
**Annex 7. Distribution of country averages for energy and nutrient content per 100 g (or 100 ml) of product**



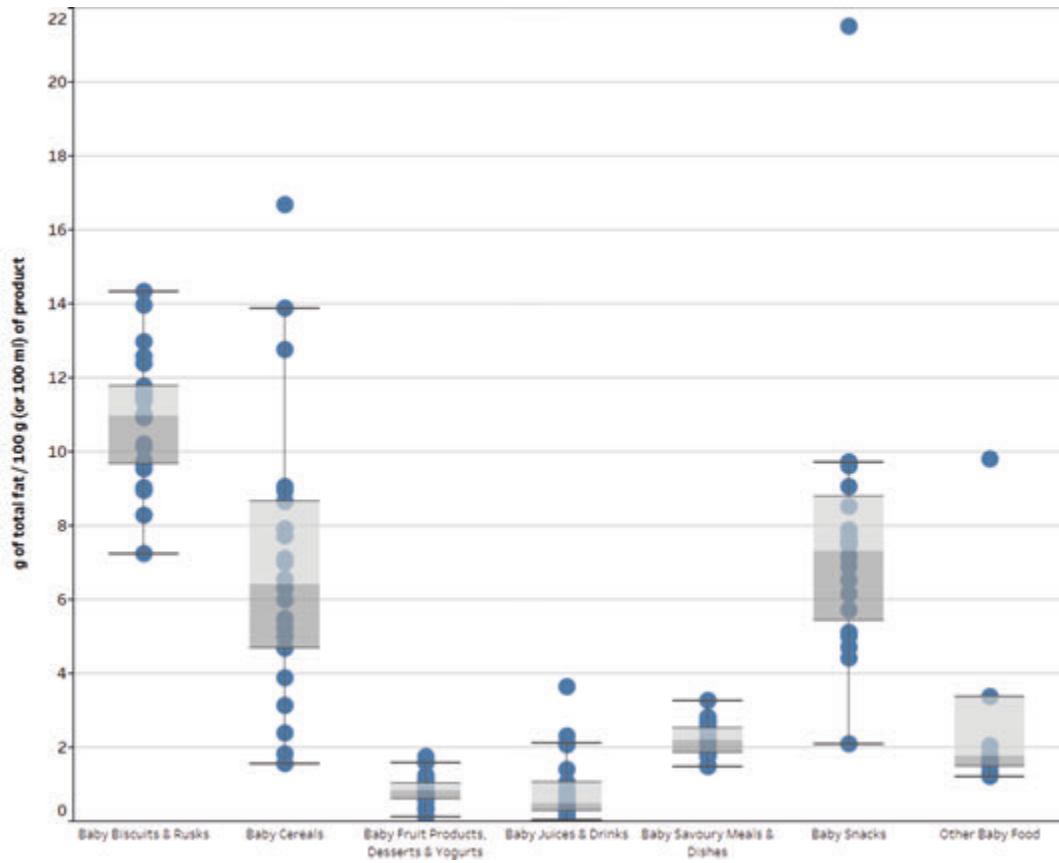
**Annex 7- Figure 1.** *Distribution of country averages for energy content (in kcals) per 100 g (or 100 ml) of product.* Each blue dot refers to one of the 22 countries examined and represents the country average energy content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



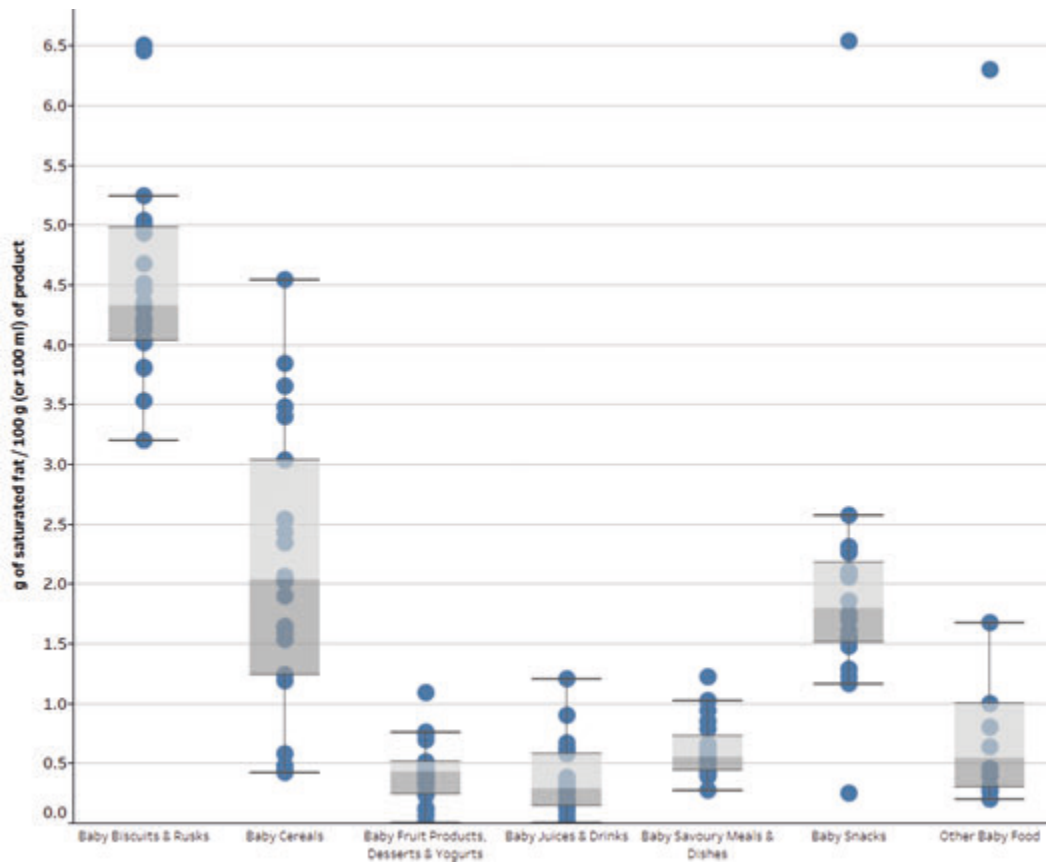
**Annex 7- Figure 2.** *Distribution of country averages for carbohydrate content (in g) per 100 g (or 100 ml) of product.* Each blue dot refers to one of the 22 countries examined and represents the country average carbohydrate content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



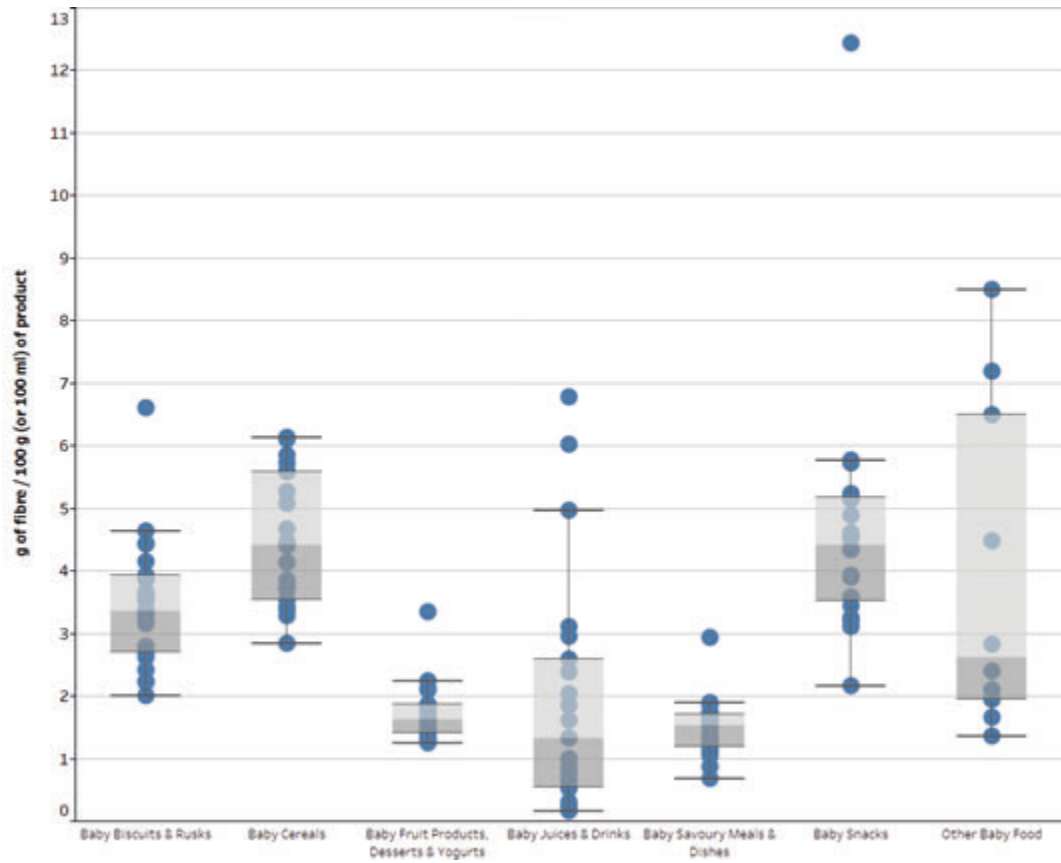
**Annex 7- Figure 3.** Distribution of country averages for **protein content (in g) per 100 g (or 100 ml) of product**. Each blue dot refers to one of the 22 countries examined and represents the country average protein content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



**Annex 7- Figure 4.** Distribution of country averages for **total fat** content (in g) per 100 g (or 100 ml) of product. Each blue dot refers to one of the 22 countries examined and represents the country average fat content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.

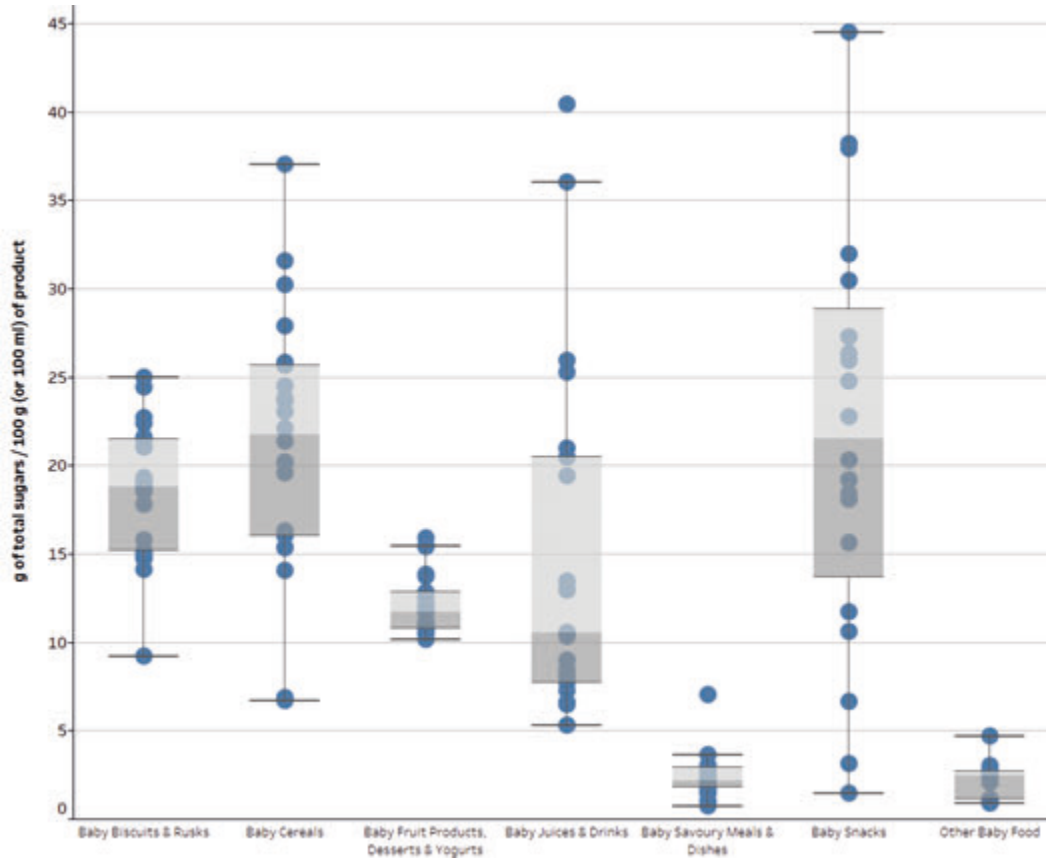


**Annex 7- Figure 5.** *Distribution of country averages for **saturated fat** content (in g) per 100 g (or 100 ml) of product.* Each blue dot refers to one of the 22 countries examined and represents the country average saturated fat content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.

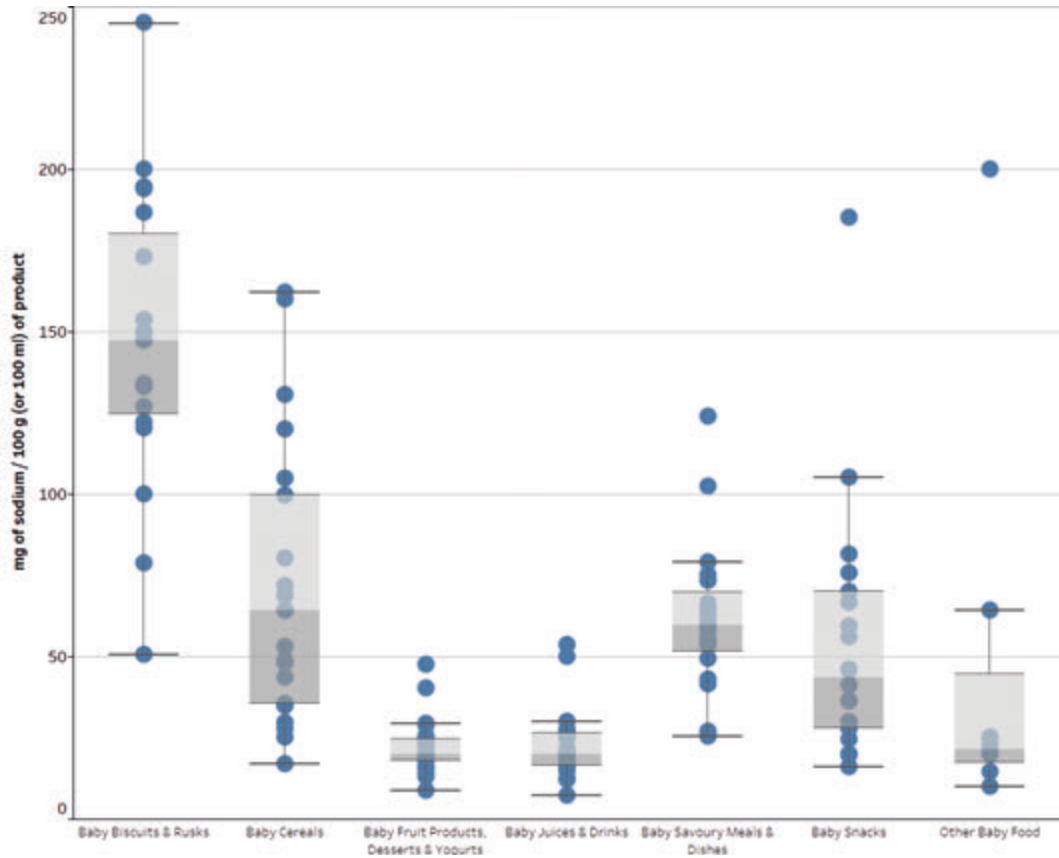


**Annex 7- Figure 6.** Distribution of country averages for **fibre** content (in g) per 100 g (or 100 ml) of product. Each blue dot refers to one of the 22 countries examined and represents the country average fibre content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.





**Annex 7- Figure 7.** Distribution of country averages for **total sugars** content (in g) per 100 g (or 100 ml) of product. Each blue dot refers to one of the 22 countries examined and represents the country average total sugars content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



**Annex 7- Figure 8.** *Distribution of country averages for sodium content (in mg) per 100 g (or 100 ml) of product.* Each blue dot refers to one of the 22 countries examined and represents the country average sodium content of the products marketed under each baby food sub-category. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.

## Annex 8. Summary tables of average nutrient content per 100 kcal of product

**Annex 8- Table 1.** Average nutrient content per 100 kcal of product: Mintel GNPD baby cereals.

Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	2.7	1.0	0.3	19.6	5.1	1.2	8.8
Czechia	2.8	1.6	0.5	18.3	3.9	1.3	11.6
Denmark	2.9	3.7	1.0	13.4	5.3	0.8	36.2
Germany	2.9	1.4	0.4	18.0	3.8	1.6	11.8
Ireland	2.9	1.2	0.3	20.8	3.5	1.6	9.2
Greece	2.5	0.8	0.2	19.5	1.8	1.2	7.3
Spain	2.1	0.5	0.1	21.2	5.8	1.2	6.6
France	2.2	0.4	0.1	21.4	4.3	0.9	4.4
Croatia	2.1	1.7	0.8	18.7	9.2	0.9	
Italy	2.5	0.6	0.1	20.7	1.8	0.9	7.3
Hungary	3.0	2.2	0.6	16.7	6.1	1.0	24.8
Netherlands	2.9	1.3	0.4	19.0	3.9	1.5	15.8
Austria	3.0	1.7	0.6	17.3	5.6	1.6	12.7
Poland	3.0	1.9	0.7	17.4	6.1	1.0	18.9
Portugal	2.9	1.4	0.6	18.5	7.8	0.7	16.6
Romania	3.0	1.8	0.6	17.6	6.7	0.9	23.5
Slovakia	3.0	2.2	0.9	16.6	7.3	0.9	29.0
Finland	2.9	2.0	0.5	16.8	4.9	1.4	14.7
Sweden	3.4	3.2	0.9	14.1	5.6	0.8	36.6
United Kingdom	2.9	1.6	0.5	18.1	5.0	1.5	17.5
Norway	3.3	2.9	0.8	14.5	5.5	1.1	30.0
Switzerland	2.9	1.3	0.4	18.5	5.4	1.4	10.8

**Annex 8- Table 2.** Average nutrient content per 100 kcal of product: Mintel GNPD baby biscuits & rusks. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	1.5	2.7	1.1	17.4	4.9	0.5	42.1
Czechia	1.9	2.1	1.0	18.1	5.5	0.6	45.1
Denmark	1.9	2.7	1.2	16.6	4.7	1.0	
Germany	2.2	2.4	1.0	17.2	3.5	0.9	31.5
Ireland	1.9	3.4	1.1	15.8	4.6	1.0	35.9
Greece	2.0	3.2	0.9	15.4	3.3	1.1	55.8
Spain	1.5	2.6	1.0	17.5	5.5	0.5	35.1
France	1.9	2.0	0.7	18.4	4.9	0.5	18.3
Croatia	2.1	2.6	1.5	17.1	4.9		
Italy	2.0	2.2	1.0	17.6	5.3	0.6	41.1
Hungary	2.0	2.4	1.0	17.3	4.6	0.8	48.2
Netherlands	1.6	2.6	1.1	17.4	4.5	0.7	32.4
Austria	2.1	2.2	1.0	17.6	3.3	0.6	35.4
Poland	1.8	1.7	1.0	19.7	2.2	0.9	46.1
Portugal	1.9	2.9	1.0	16.1	5.6	0.7	30.5
Romania	1.9	2.7	0.9	16.2	4.4	1.6	35.4
Slovakia	2.1	2.3	0.8	17.5	5.4	0.8	29.4
Finland		3.1	1.4	15.8	5.1	0.9	28.5
Sweden	1.6	3.0	1.6	16.1	3.7	0.9	
United Kingdom	2.1	2.7	0.9	16.6	3.7	1.0	29.3
Norway	2.0	2.9	1.2	16.2	4.5	0.8	28.1
Switzerland	2.1	1.9	1.1	18.2	3.4	1.2	11.6

**Annex 8- Table 3.** Average nutrient content per 100 kcal of product: Mintel GNPD baby juices and drinks. Please refer to Table 13 for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	0.6	0.8	0.2	22.1	19.8	0.2	26.5
Czechia	0.5	0.2	0.1	21.3	18.6	2.2	37.3
Denmark	1.1	0.7	0.2	21.1	16.8	2.5	90.9
Germany	1.3	0.9	0.6	21.7	17.3	2.1	57.3
Ireland	0.9	0.6	0.2	22.3	21.4	1.3	133.3
Greece							
Spain	1.4	0.6	0.1	21.4	19.7	1.7	31.2
France	1.8	1.7	0.6	19.0	13.9	1.3	33.5
Croatia	0.4	0.4	0.0	23.7	21.0	0.6	87.9
Italy	0.7	0.2	0.1	23.3	19.9	1.6	37.0
Hungary	0.7	0.1	0.1	23.3	19.2	1.0	48.0
Netherlands	1.4	1.7	0.3	18.7	16.9	2.3	29.7
Austria	1.6	0.7	0.3	22.2	16.5	2.2	34.4
Poland	0.7	0.4	0.2	23.0	20.7	1.7	47.4
Portugal	3.2	2.4	1.0	16.1	8.9	0.6	31.8
Romania	2.7	1.8	0.8	17.8	9.5	0.6	17.3
Slovakia	0.5	0.1	0.0	23.1	18.1	0.9	66.6
Finland	1.7	2.3	1.1	18.3	15.5	1.2	57.2
Sweden	0.4	0.8	0.5	23.3	20.8	1.6	65.9
United Kingdom	0.8	0.6	0.3	22.2	20.7	0.9	68.6
Norway	1.2	1.2	0.5	20.5	14.2	1.0	49.6
Switzerland	0.9	0.7	0.4	22.0	20.2	1.5	14.5

**Annex 8- Table 4.** Average nutrient content per 100 kcal of product: Mintel GNPD baby fruit products, desserts & yoghurts. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	1.3	1.1	0.5	20.0	16.3	2.3	26.7
Czechia	1.1	0.6	0.3	21.9	18.0	2.3	37.9
Denmark	0.8	0.5	0.2	21.8	17.2	2.7	22.9
Germany	1.5	1.1	0.5	19.4	15.2	2.5	22.8
Ireland	2.0	1.2	0.8	14.5	12.1	1.5	30.3
Greece	1.7	1.2	0.7	18.2	14.4	1.7	20.0
Spain	1.5	1.1	0.5	20.4	16.5	1.9	27.9
France	1.7	1.4	0.8	19.1	15.8	2.3	24.3
Croatia	0.8	0.5	0.1	21.9	18.8	3.5	16.1
Italy	1.2	0.9	0.5	20.8	16.5	2.4	24.1
Hungary	1.8	1.0	0.4	20.3	15.8	2.3	20.9
Netherlands	1.5	1.2	0.6	19.4	16.1	2.6	29.1
Austria	1.7	1.2	0.6	19.5	15.6	2.2	33.2
Poland	1.4	0.9	0.4	20.2	16.1	2.3	22.2
Portugal	1.4	1.0	0.5	20.9	18.6	2.3	38.7
Romania	0.3	0.1	0.0	23.9	19.3		
Slovakia	0.8	0.7	0.3	21.9	16.4	2.8	49.7
Finland	1.4	1.0	0.4	20.7	16.1	2.1	20.7
Sweden	1.4	0.5	0.2	21.7	17.4	2.1	39.0
United Kingdom	1.9	1.5	0.8	19.0	15.1	2.3	37.3
Norway	1.2	0.8	0.4	20.7	17.3	2.8	29.8
Switzerland	1.4	0.9	0.3	20.2	16.3	2.8	19.2

**Annex 8- Table 5.** Average nutrient content per 100 kcal of product: Mintel GNPD baby snacks. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	1.9	2.0	0.6	18.8	2.9	1.3	14.5
Czechia	1.2	1.7	0.5	18.9	7.3	1.4	10.4
Denmark	2.0	2.3	0.3	17.4	0.7	1.1	0.2
Germany	1.4	1.8	0.6	18.6	8.7	1.2	17.2
Ireland	1.8	1.9	0.6	18.2	5.1	1.3	18.8
Greece	1.5	1.7	0.4	19.6	7.0	1.2	46.1
Spain	2.0	2.2	0.4	18.2	2.4	0.5	19.2
France	1.0	1.2	0.6	20.7	12.5	0.9	5.6
Croatia							
Italy	1.8	1.3	0.6	19.8	4.2	1.0	6.4
Hungary	1.6	1.3	0.4	19.9	7.5	1.0	9.6
Netherlands	1.6	1.5	0.4	19.6	10.4	1.6	17.7
Austria	2.1	1.5	0.6	19.2	8.1	1.0	15.8
Poland	1.4	1.9	0.6	18.2	7.1	0.9	7.4
Portugal	0.7	5.0	1.5	13.3	8.7	0.7	
Romania							
Slovakia	1.0	1.2	0.5	20.2	4.8	0.8	
Finland	2.7	0.6	0.1	20.3	0.4	3.8	8.9
Sweden	2.0	2.2	0.3	18.1	1.6	1.1	9.4
United Kingdom	1.7	2.2	0.4	18.0	5.2	1.2	24.9
Norway	1.8	1.8	0.4	18.8	6.6	1.4	11.8
Switzerland	2.1	2.0	0.3	17.8	5.4	1.5	5.2

**Annex 8- Table 6.** Average nutrient content per 100 kcal of product: Mintel GNPD baby savoury meals & dishes. Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	4.5	2.7	0.6	12.6	3.9	3.2	107.6
Czechia	3.8	2.3	0.4	14.8	2.6	2.9	82.1
Denmark	3.3	3.5	0.7	12.7	3.4	2.8	37.3
Germany	4.2	3.0	0.7	12.9	3.6	2.5	111.4
Ireland	4.9	3.1	1.4	12.6	3.6	2.4	46.6
Greece	5.4	3.7	0.9	10.5	1.0	1.7	
Spain	4.1	3.1	0.8	13.0	2.2	1.6	110.5
France	4.0	2.9	0.7	13.2	3.5	3.0	117.4
Croatia							
Italy	6.6	3.4	1.1	10.4	1.1	0.9	67.3
Hungary	2.7	2.1	0.5	12.0	4.0	1.5	102.3
Netherlands	4.3	2.8	0.7	12.4	4.7	2.8	80.1
Austria	3.7	3.5	0.9	12.4	3.0	2.0	173.4
Poland	4.5	2.8	0.6	12.4	3.9	3.1	86.0
Portugal	4.1	2.8	0.8	13.6	2.6	1.8	101.0
Romania							
Slovakia	4.0	2.8	0.7	13.9	5.5	2.3	63.0
Finland	3.0	3.3	1.2	14.1	4.5	1.1	41.4
Sweden	4.9	3.3	0.7	12.0	2.5	1.9	80.1
United Kingdom	4.7	2.7	1.0	13.4	4.2	2.5	67.7
Norway	4.0	3.3	0.8	12.7	3.5	2.0	77.8
Switzerland	3.7	2.2	0.5	14.2	4.5	4.3	89.8

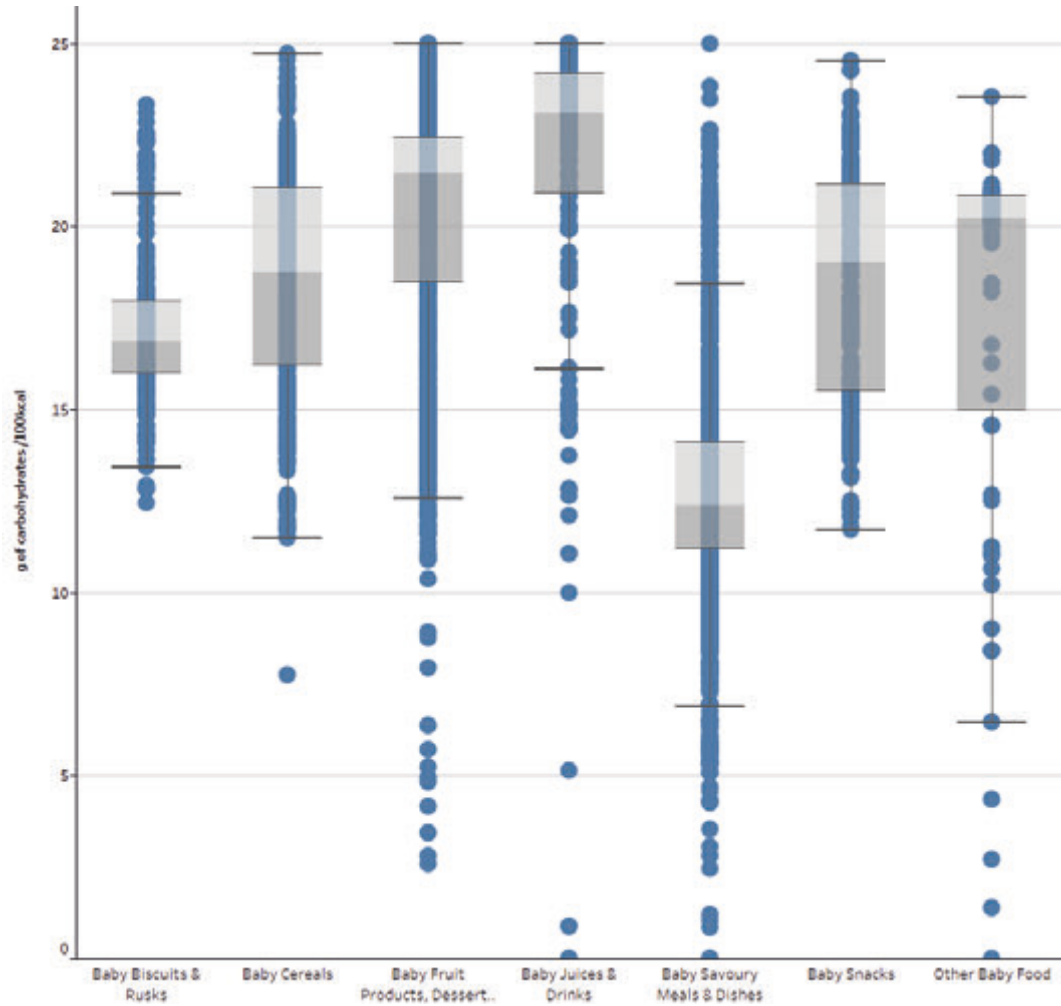


**Annex 8- Table 7. Average nutrient content per 100 kcal of product: Other Mintel GNPD baby food.**

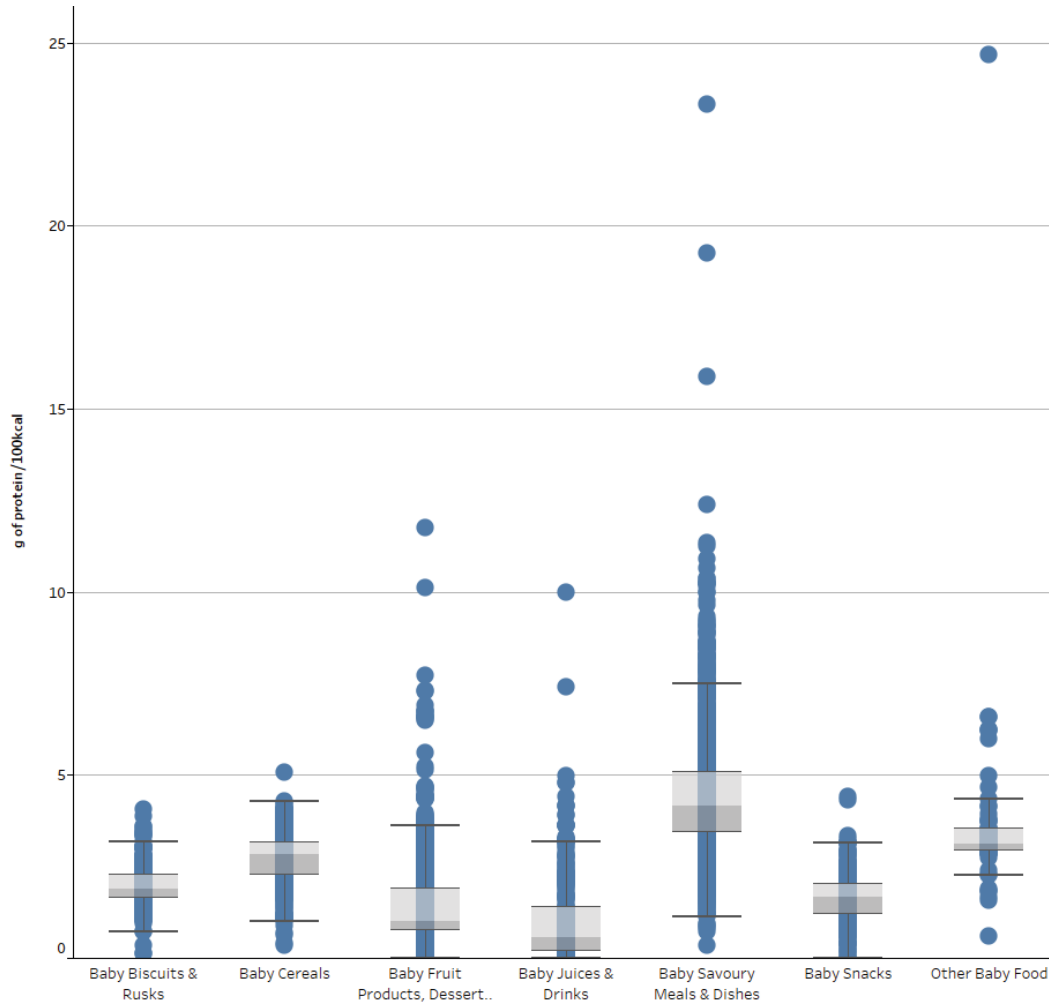
Please refer to *Table 13* for an indication on the number of Mintel GNPD products used to calculate the averages. Direct comparisons between countries are not possible.

Country	Protein	Fat	Saturated fat	Carbohydrates	Sugars	Fibre	Sodium
	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>g</i>	<i>mg</i>
Belgium	4.0	2.5	0.8	14.5	3.0	1.7	23.1
Czechia							
Denmark							
Germany	3.3	1.3	0.1	17.3	1.4	2.0	77.4
Ireland	2.9	0.4	0.1	20.9	0.9	0.7	2.8
Greece							
Spain	1.7	2.3	0.2	18.2	0.3	0.5	46.7
France	6.2	1.4	0.4	14.8	1.7	2.7	25.6
Croatia							
Italy	3.0	0.7	0.2	20.0	1.1	1.0	13.1
Hungary							
Netherlands	4.3	8.3	1.1	2.7	0.8	1.4	
Austria	3.3	0.3	0.1	20.1	0.2	1.7	5.3
Poland	5.5	3.7	1.8	10.7	1.0	1.8	
Portugal							
Romania							
Slovakia							
Finland							
Sweden							
United Kingdom	4.3	4.1	1.8	12.5	7.6	4.0	73.3
Norway							
Switzerland							

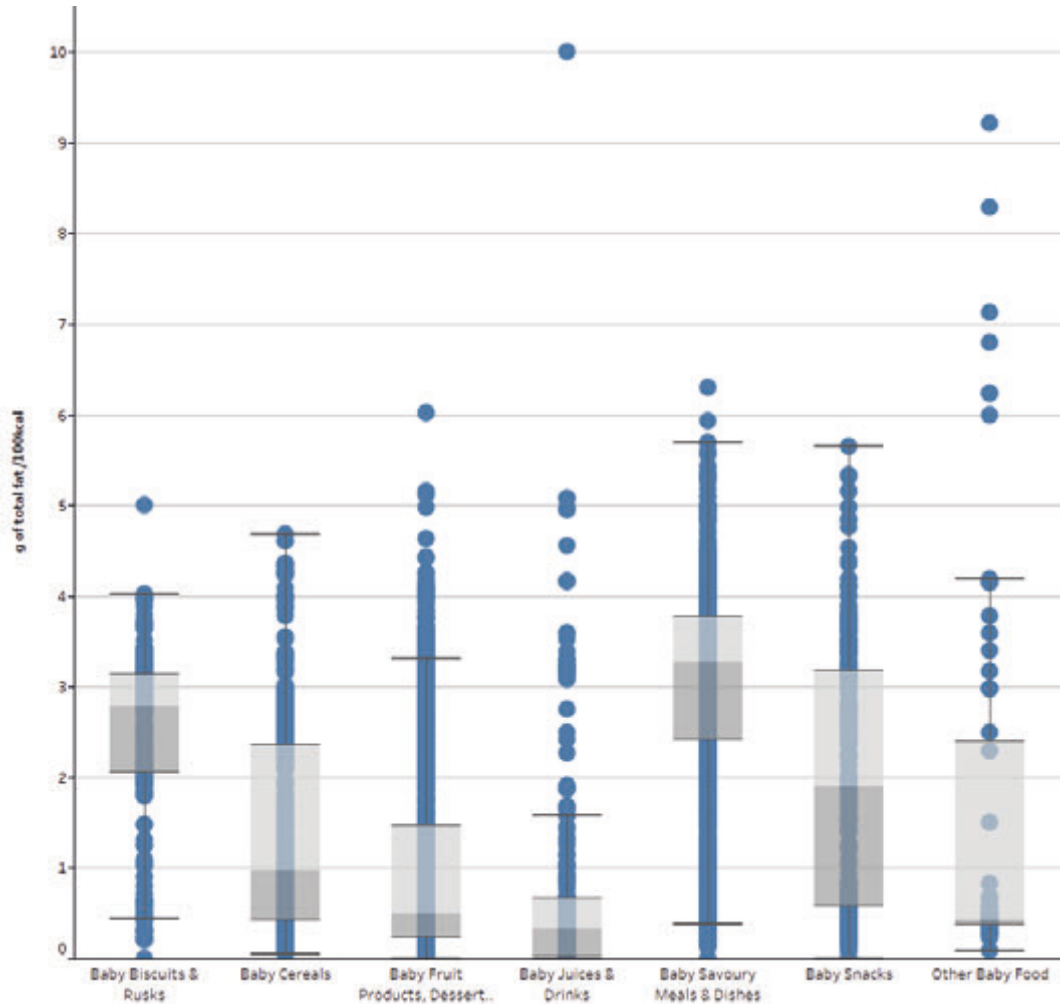
## Annex 9. Distribution of nutrient content per 100 kcal of product



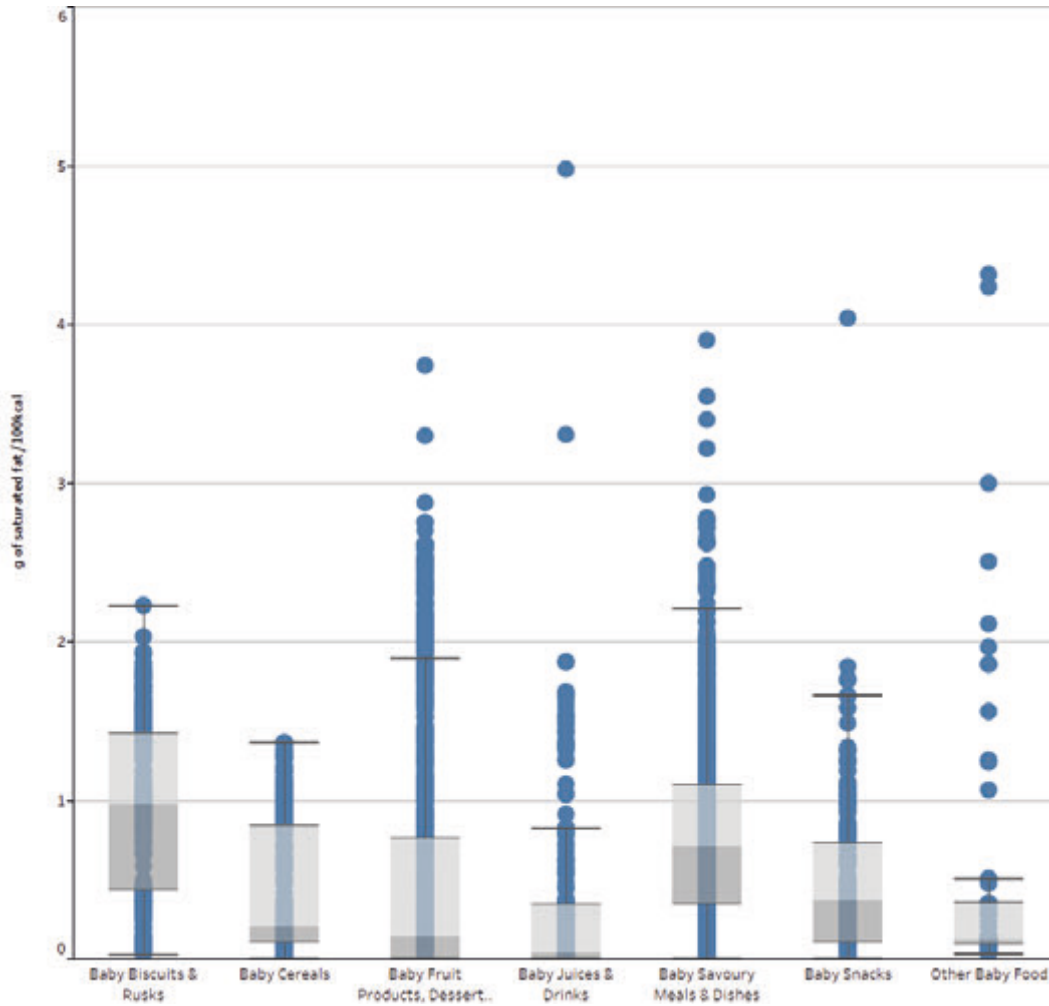
**Annex 9- Figure 1.** Distribution of *carbohydrate* content (in g) per 100 kcal of baby food product. Each blue dot represents the carbohydrate content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



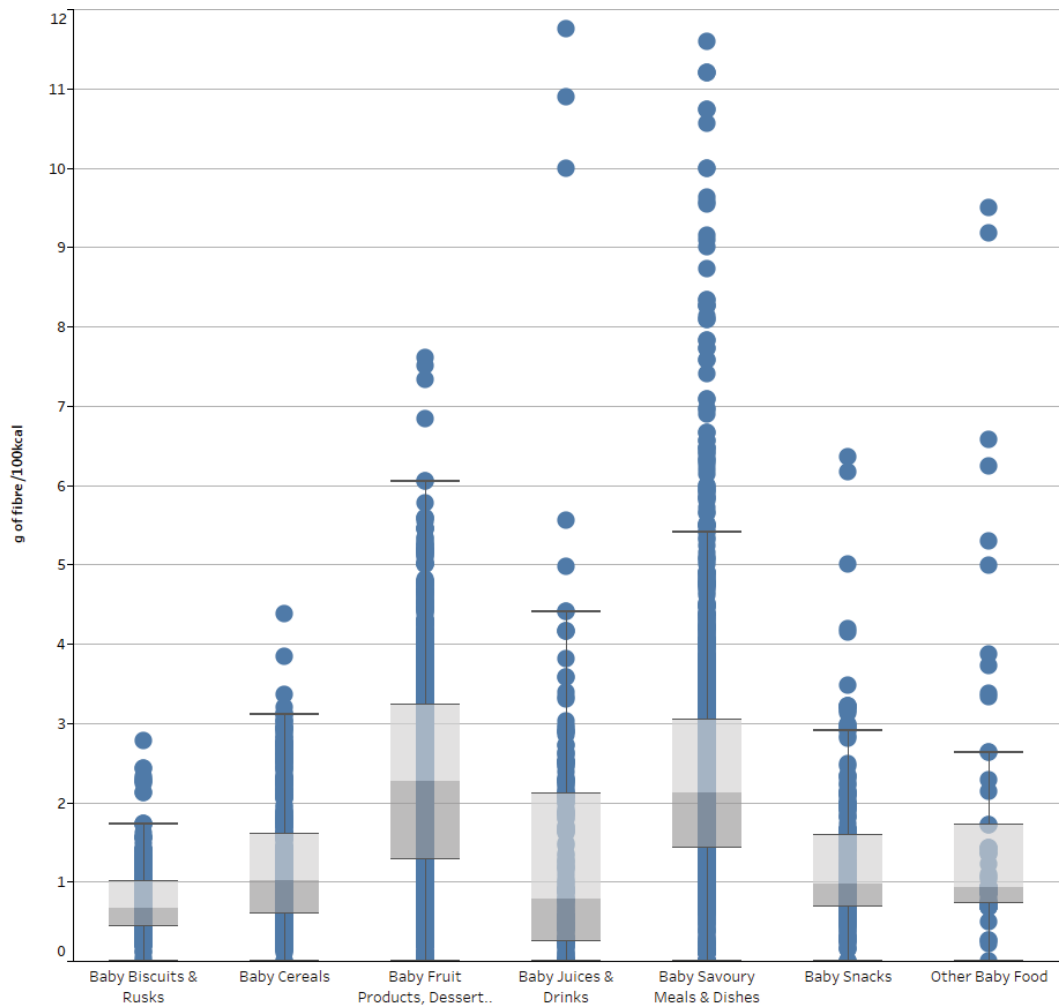
**Annex 9- Figure 2.** Distribution of *protein* content (in g) per 100 kcal of baby food product. Each blue dot represents the protein content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



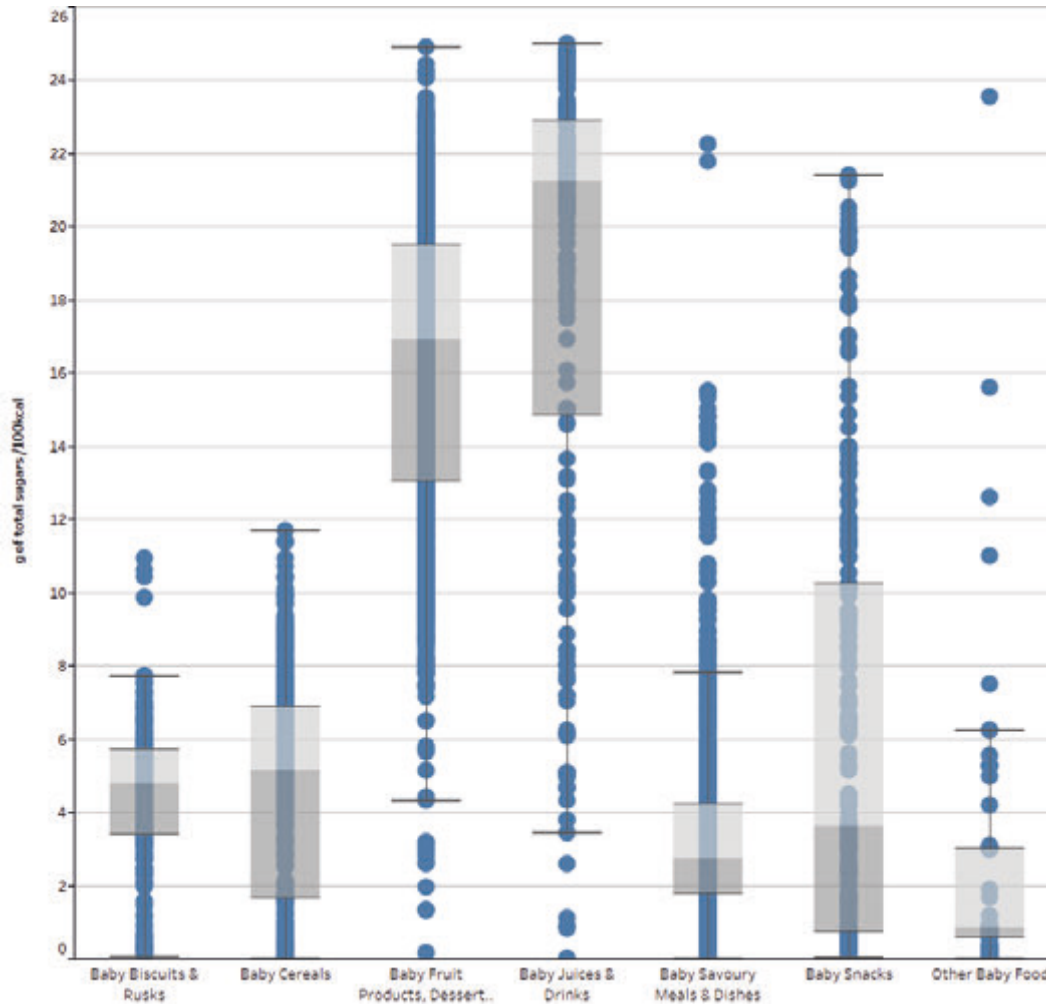
**Annex 9- Figure 3.** Distribution of **total fat** content (in g) per 100 kcal of baby food product. Each blue dot represents the fat content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



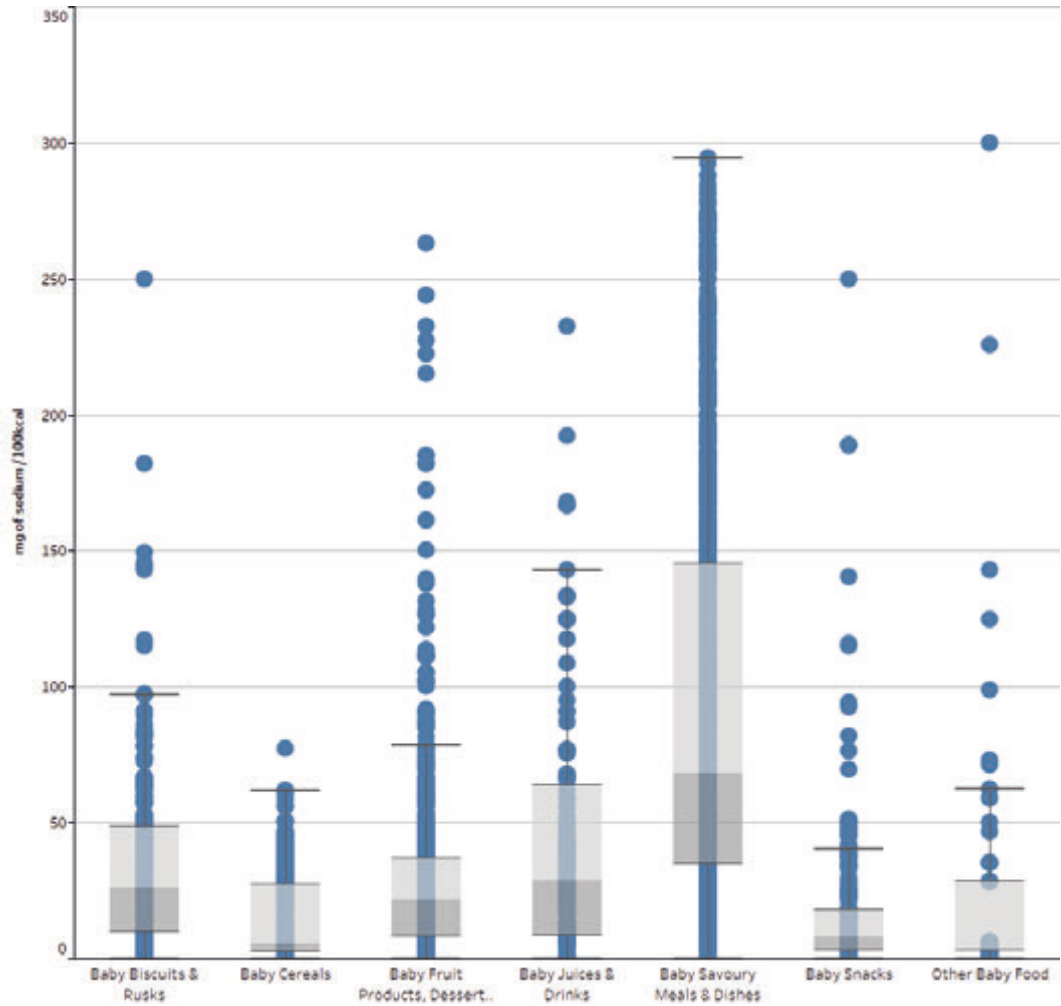
**Annex 9- Figure 4.** Distribution of *saturated fat* content (in g) per 100 kcal of baby food product. Each blue dot represents the saturated fat content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



**Annex 9- Figure 5.** Distribution of **fibre** content (in g) per 100 kcal of baby food product. Each blue dot represents the fibre content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



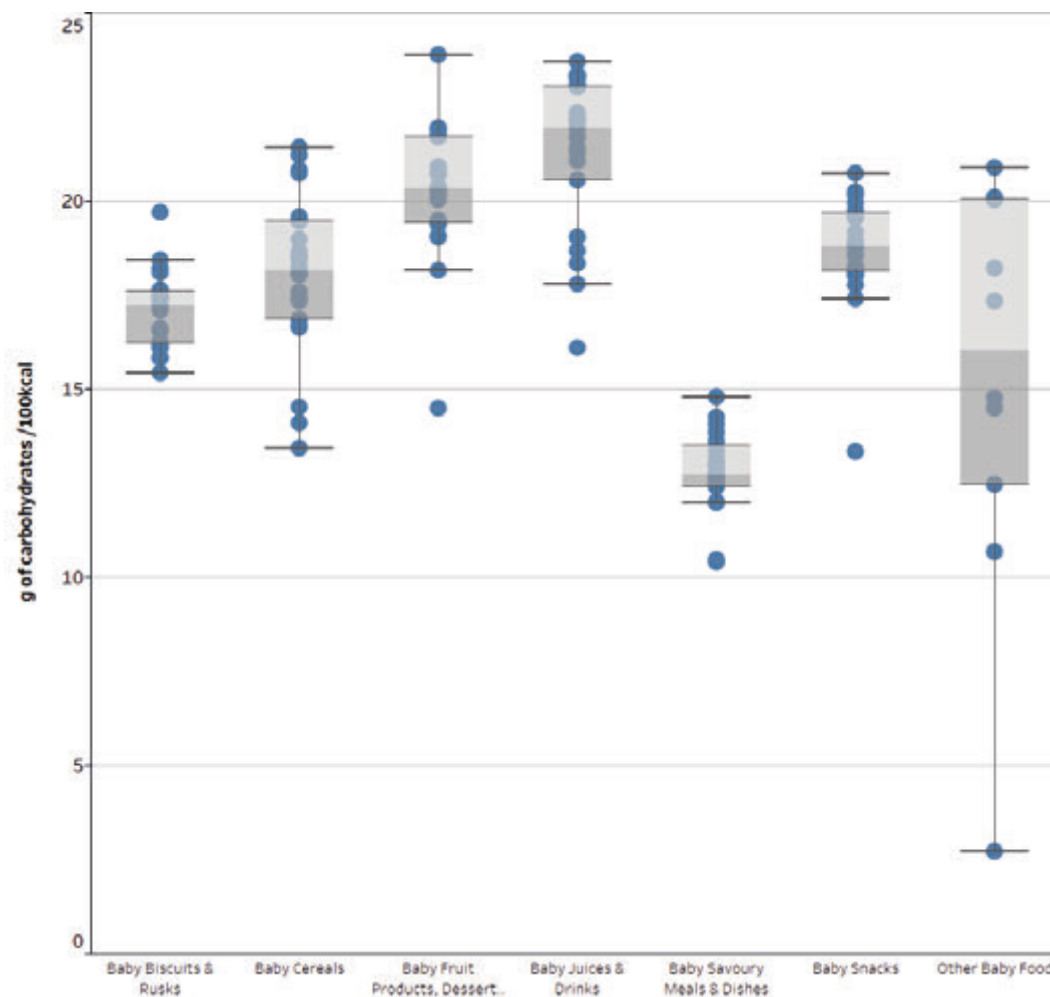
**Annex 9- Figure 6.** Distribution of *total sugars* content (in g) per 100 kcal of baby food product. Each blue dot represents the total sugars content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



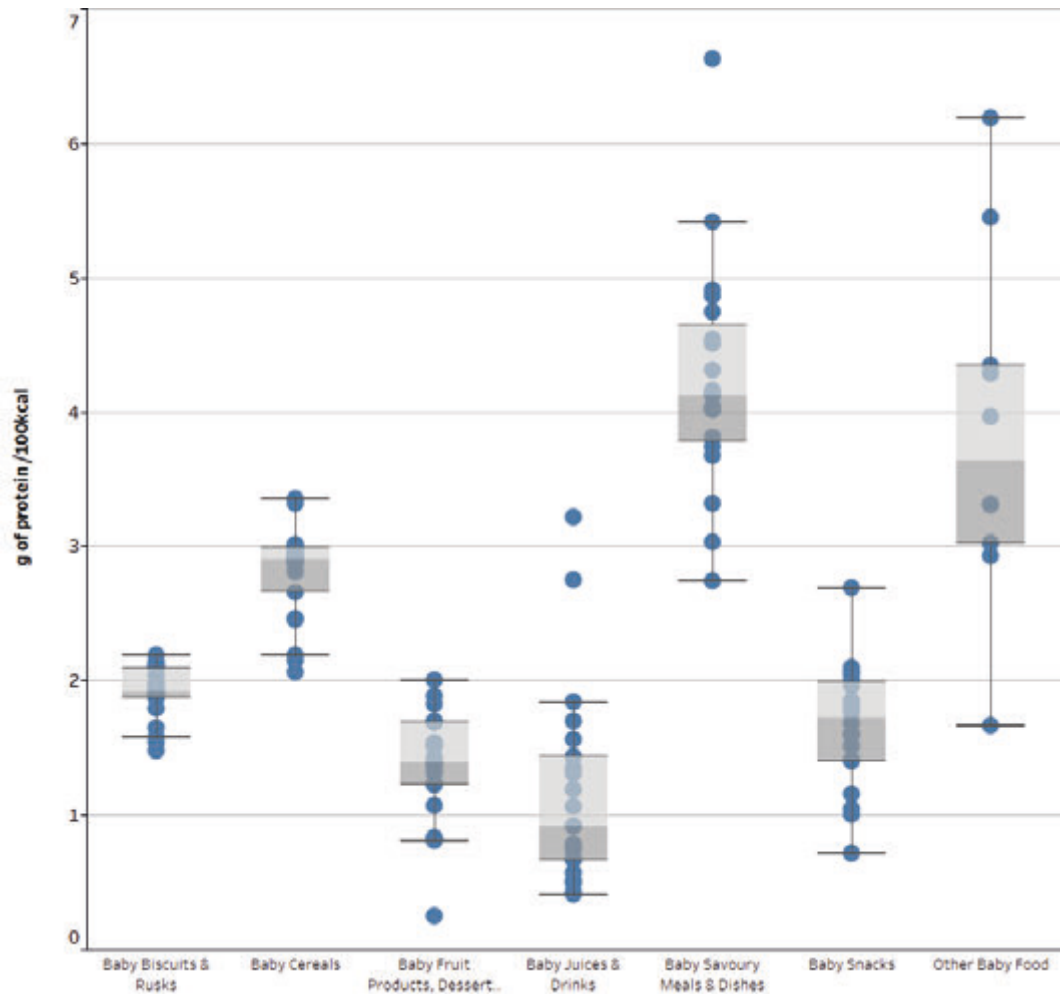
**Annex 9- Figure 7.** Distribution of *sodium* content (in mg) per 100 kcal of baby food product. Each blue dot represents the sodium content per 100 kcal for each of the products analysed. See Annex 4 for a guide to the graphical representation of the data. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category.



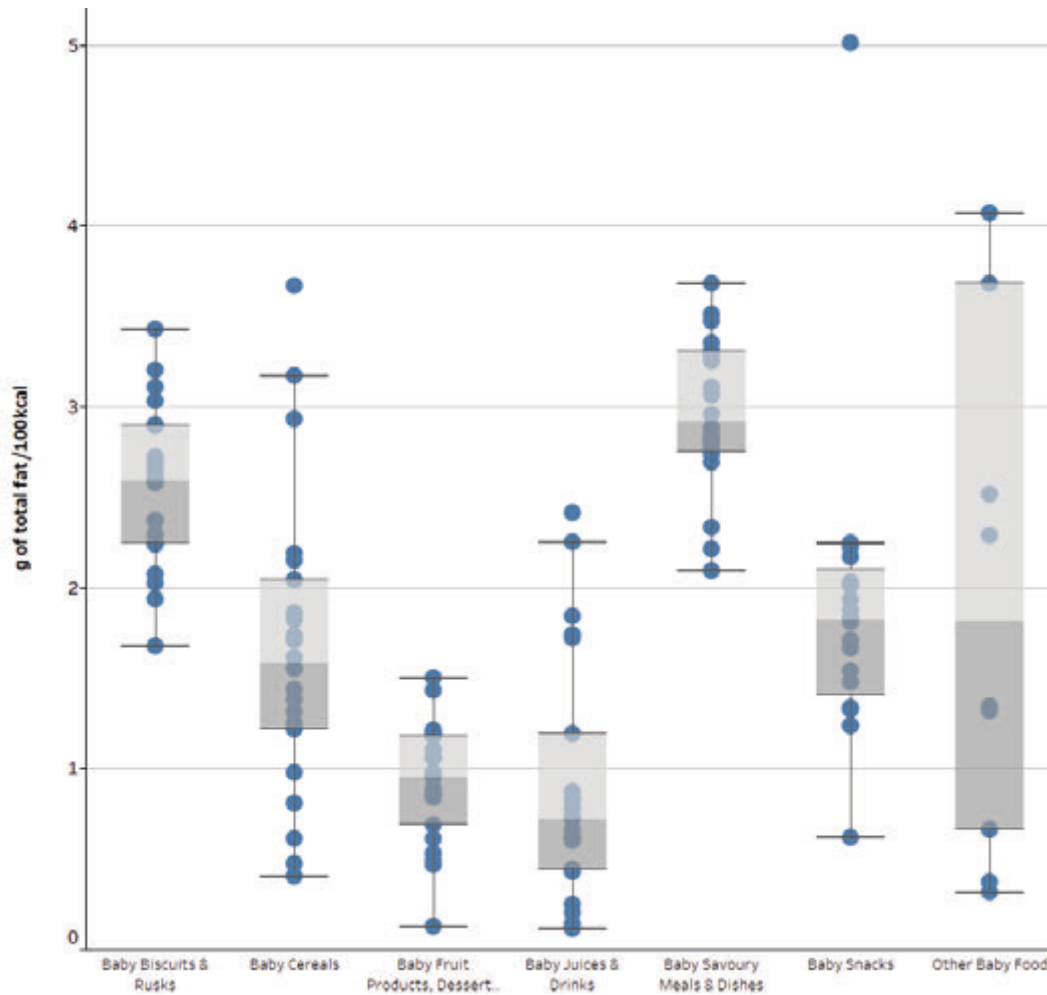
## Annex 10. Distribution of country averages for nutrient content per 100 kcal of product



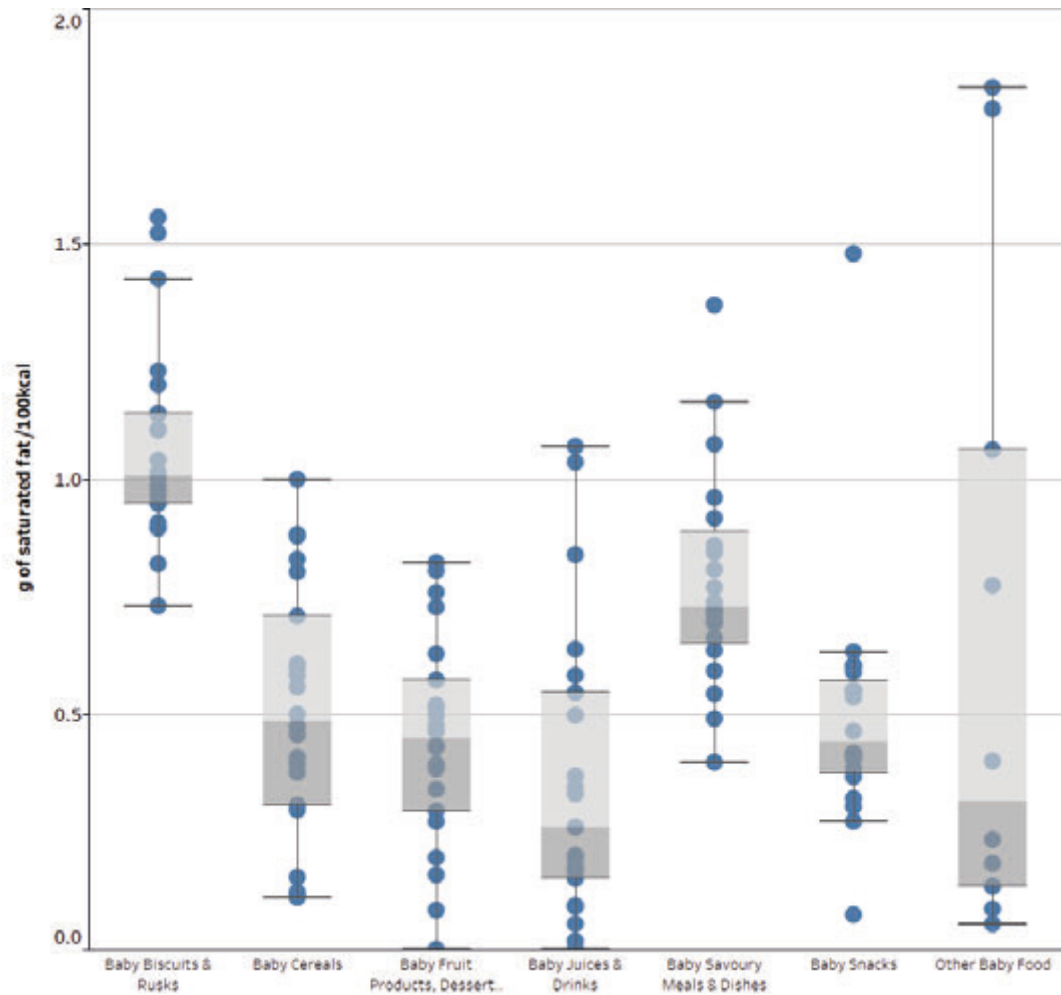
**Annex 10- Figure 1.** Distribution of *carbohydrate* content (in g) per 100 kcal of baby food product. Each blue dot refers to one of the 22 countries examined and represents the country average for the carbohydrate content (in g) per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



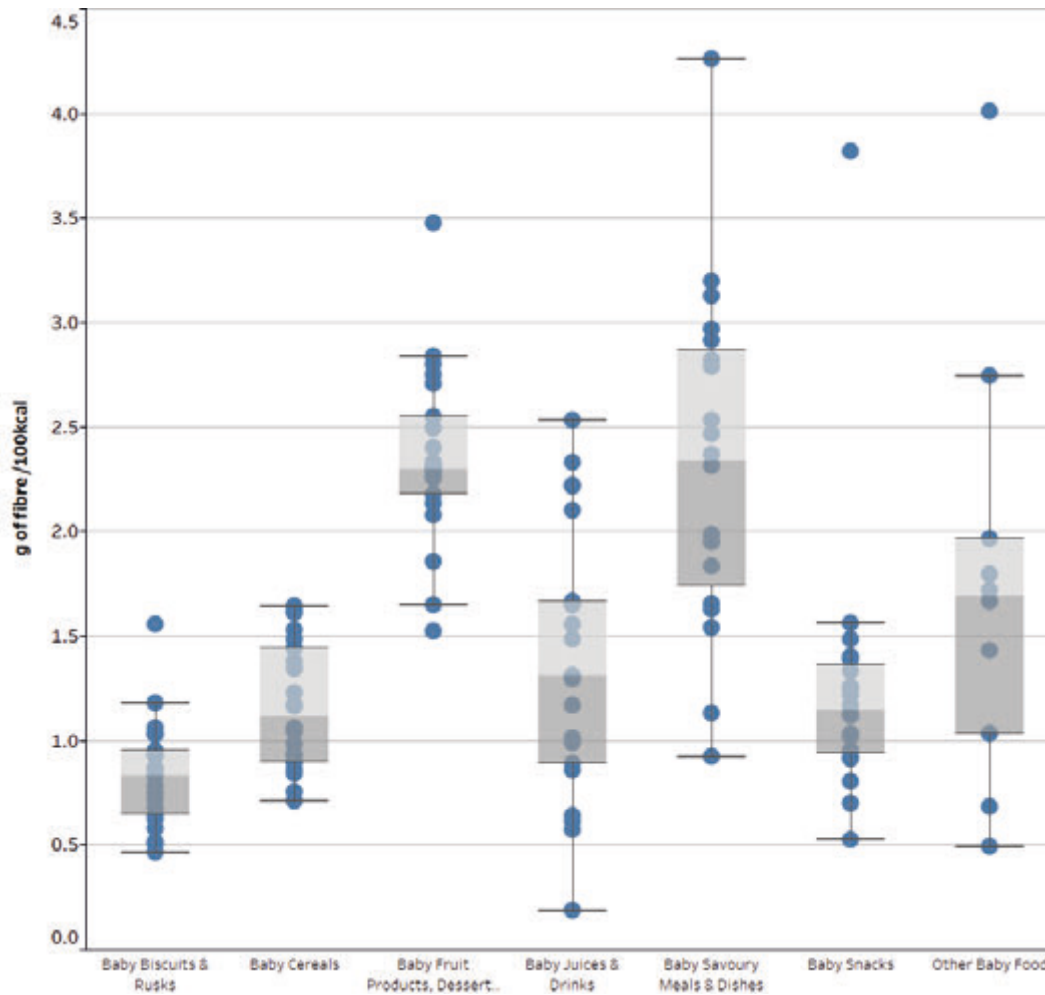
**Annex 10- Figure 2.** *Distribution of protein content (in g) per 100 kcal of baby food product.* Each blue dot refers to one of the 22 countries examined and represents the country average for the protein content (in g) per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



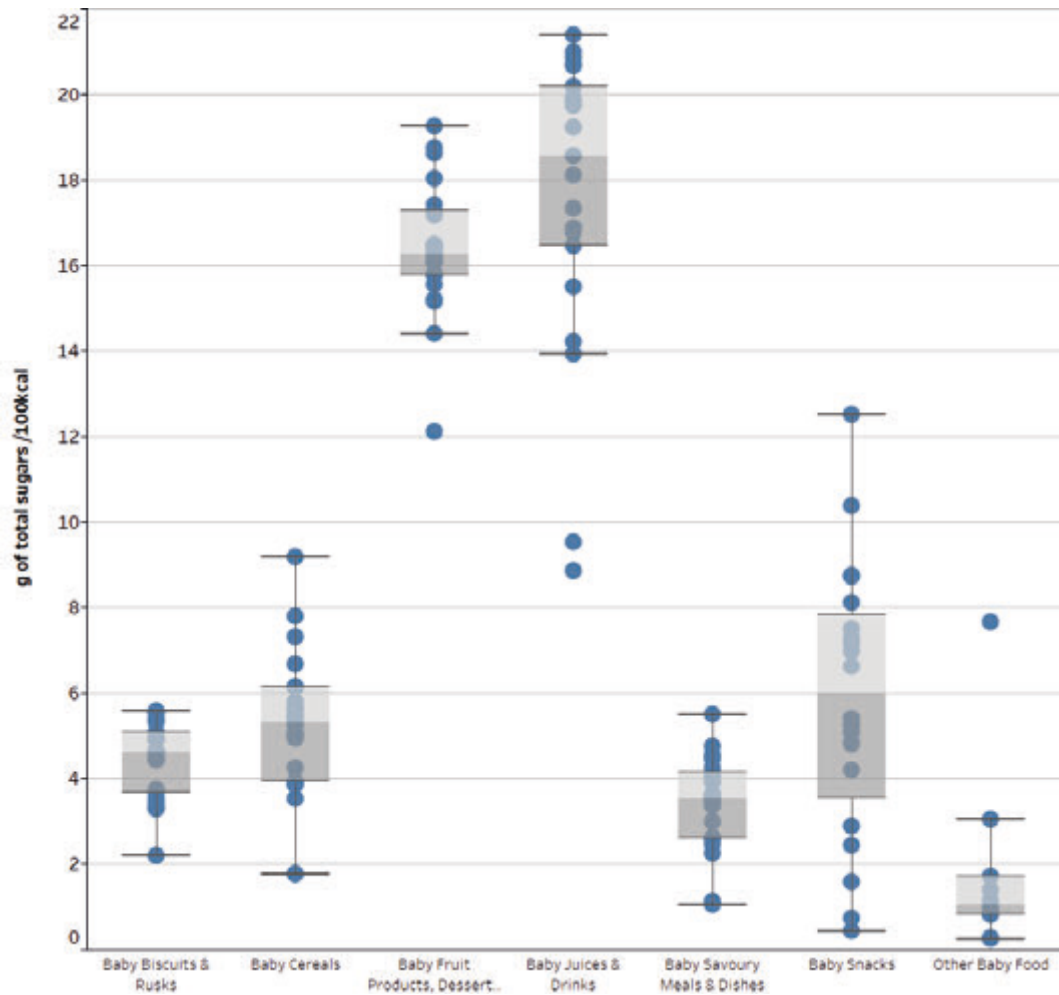
**Annex 10- Figure 3.** Distribution of *total fat* content (in g) per 100 kcal of baby food product. Each blue dot refers to one of the 22 countries examined and represents the country average for the fat content (in g) per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



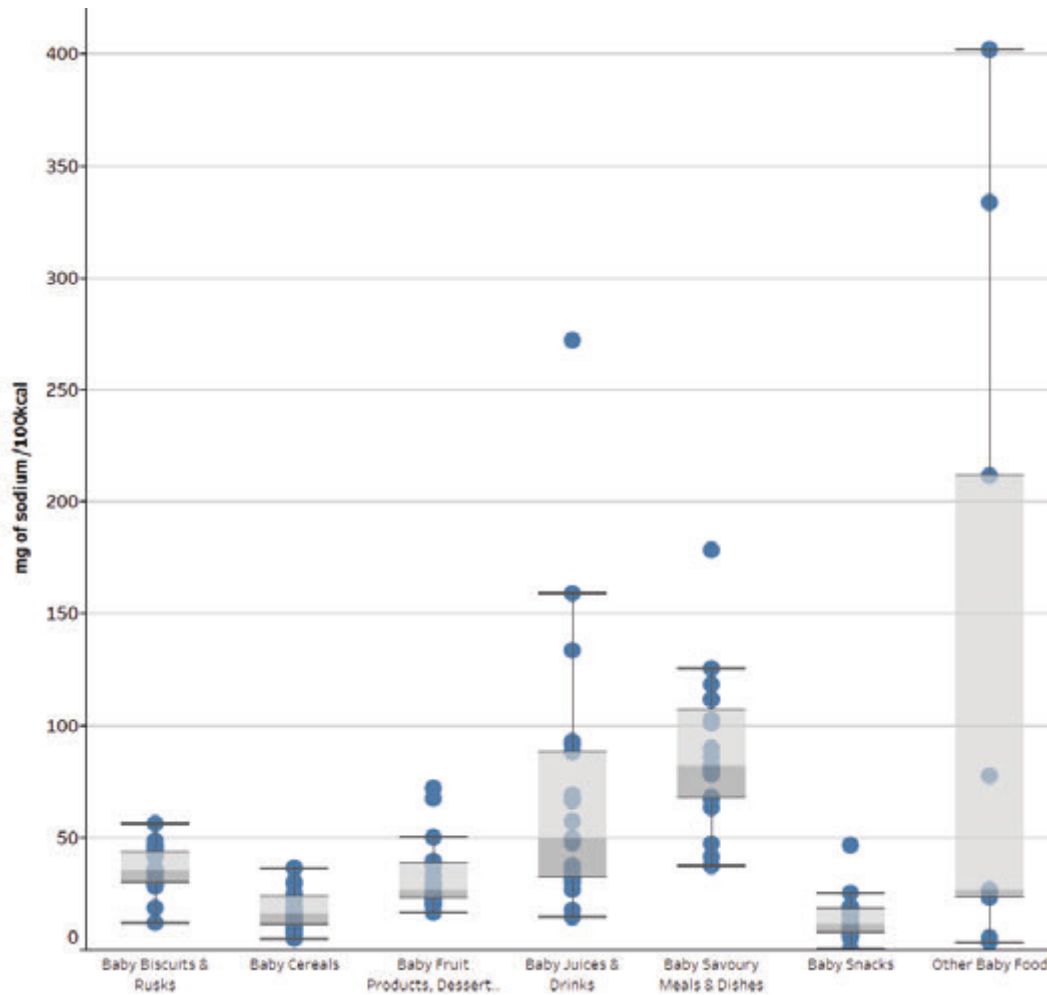
**Annex 10- Figure 4.** *Distribution of saturated fat content (in g) per 100 kcal of baby food product.* Each blue dot refers to one of the 22 countries examined and represents the country average for the saturated fat content (in g) per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



**Annex 10- Figure 5.** Distribution of *fibre* content (in g) per 100 kcal of baby food product. Each blue dot refers to one of the 22 countries examined and represents the country average for the fibre content (in g) per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



**Annex 10- Figure 6.** Distribution of *total sugars* content (in g) per 100 kcal of baby food product. Each blue dot refers to one of the 22 countries examined and represents the country average for the total sugars content (in g) per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.



**Annex 10- Figure 7.** *Distribution of sodium content (in mg) per 100 kcal of baby food product.* Each blue dot refers to one of the 22 countries examined and represents the country average for the sodium content per 100 kcal of the products marketed under each baby food sub-category. Please refer to *Table 13* for an indication on the number of Mintel GNPD products plotted for each category per country.

## ACKNOWLEDGEMENTS

The authors would like to thank all the members of the European Commission ‘Expert Group on food intended for infants and young children, food for special medical purposes and total diet replacement for weight control’ and the respondents of the EU survey conducted during this study for their invaluable feedback and contributions.

Davide Arcella, European Food Safety Authority (EFSA), offered support to run the baby food products market analysis with the use of Mintel Global New Products Database; Fruzsina Nyemecz and Stephanie Bodenbach (European Commission DG SANTE) provided critical and constructive feedback through the different stages of the project; finally, Vera Meusel, Ioanna Bakogianni and Monique Tan, former JRC colleagues, contributed in the review of national food-based dietary guidelines and nutrient recommendations.

### Authors

Grammatikaki Evangelia, Wollgast Jan, Caldeira Sandra.



Europe Direct is a service to help you find answers to your questions about the European Union  
Free phone number (\*): 00 800 6 7 8 9 10 11

(\*): Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

A great deal of additional information on the European Union is available on the Internet.  
It can be accessed through the Europa server <http://europa.eu>

#### **How to obtain EU publications**

Our publications are available from EU Bookshop ([http://publications.europa.eu/howto/index\\_en.htm](http://publications.europa.eu/howto/index_en.htm)),  
where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents.  
You can obtain their contact details by sending a fax to (352) 29 29-42758.

## JRC Mission

As the science and knowledge service of the European Commission, the Joint Research Centre's mission is to support EU policies with independent evidence throughout the whole policy cycle.



**EU Science Hub**  
[ec.europa.eu/jrc](https://ec.europa.eu/jrc)



@EU\_ScienceHub



EU Science Hub - Joint Research Centre



Joint Research Centre



EU Science Hub

