# **Regional Report**

# Monitoring sodium and industriallyproduced trans-fatty acids content in packaged products in four Latin American countries

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## **Table of Contents**

Acl	knowledgement	
Ab	breviations	4
	Introduction	
	Methods	
2	2.1 Data Collection	
	2.1.1 Food Label Information and Price (FLIP) database	
	2.1.2 Data collection in four Latin American countries (2022)	
2	2.2 Food categorization and data validation	8
2	2.3 Analyses	
3.	Results	10
4.	Limitations and Strengths	16
5.	Conclusions and recommendations	17
Rei	ferences	18

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## **Abbreviations**

FIC Argentina Fundación Interamericana del Corazón Argentina

FOPL Front of Package Labelling

IDRC International Development Research Centre (Canada)

INCAP Instituto de Nutrición de Centroamérica y Panamá

INCIENSA Instituto Costarricense de Investigación y Enseñanza en Nutrición y

Salud

FLIP Food Label Information and Price database

iTFA Industrially Produced Trans-Fatty Acids

LAC Latin America and the Caribbean

MOH Minister of Health

NCDs Noncommunicable Diseases

PAHO Pan American Health Organization

SHAKE Surveillance, Harness Industry, Adopt Standards for Labelling and

Marketing, Knowledge, Environment

TAG Technical Advisory Group

WHO World Health Organization

WHO CC World Health Organization Collaborating Centre

## 1. Introduction

The Pan American Health Organization (PAHO) supports Member States in their efforts to reduce population sodium intake to improve health outcomes and to meet the World Health Organization (WHO) global target for noncommunicable diseases (NCDs) of a 30% relative reduction in mean population intake of sodium by 2025 1. Accordingly, in 2009 PAHO launched the Regional Initiative "Preventing Cardiovascular Disease by Reducing Dietary Salt Intake Population-Wide". This initiative was acommpanied by a Regional Technical Advisory Group (TAG) comprised of public health authorities, researchers, and representatives from civil society aiming to translate evidence into policy and action <sup>2</sup>. The work of the PAHO TAG included three phases, focusing on policy development (2009-2011), policy awareness and support (2012-2015), and policy implementation and monitoring (2016–2018). In 2015, as part of the PAHO TAG activities, the first set of PAHO Regional Sodium Reduction Targets was developed and launched <sup>3</sup>. Since then, various studies have shown that most packaged products were already meeting Regional targets, demonstrating the need to update the PAHO Regional Sodium Reduction Targets <sup>4,5</sup>. Thus, in 2021, in collaboration with the WHO Collaborating Centre (WHO CC) on Nutrition Policy for Chronic Disease Prevention at the Department of Nutritional Sciences of the University of Toronto (Canada), Ontario Tech University (Canada), TAG members and Member States representatives, PAHO developed and launched the Updated PAHO Regional Sodium Reduction Targets <sup>6</sup>. These updated targets are comprised of 16 main food categories and 75 subcategories, and targets were set with a phase-wise approach (for 2022 and 2025). These sets of targets are also consistent with the WHO global sodium benchmarks for different food categories 7.

Measuring and monitoring the sodium content of foods is one of the recommendations included in the WHO SHAKE technical package, as part of its Surveillance component <sup>8</sup>. Similarly, the WHO REPLACE technical package <sup>9</sup> and the PAHO Plan of Action for the Elimination of Industrially Produced Trans-Fatty Acids (iTFA) 2020-2025 <sup>10</sup>, recommend Member States have a monitoring and evaluation system in place to assess changes in iTFA in the food supply. Therefore, the purpose of this regional study is to monitor sodium and iTFA contents in packaged foods available in four Latin American countries (Argentina, Costa Rica, Panama, and Peru), as well as to provide a Regional update of the sodium content in packaged foods with respect to Regional <sup>6</sup> and Global <sup>7</sup> sodium reduction targets. This study provides critical evidence to support the adoption and implementation of the Updated Regional Sodium Reduction Targets <sup>6</sup>, WHO global sodium benchmarks <sup>7</sup>, and the WHO REPLACE technical package for iTFA elimination <sup>9</sup>. Main and specific objectives are detailed in **Table 1**.

## Table 1. Overall and specific obejectives

**Objective 1:** To monitor levels of sodium in packaged food products, in alignment with the 2021 PAHO targets and the WHO global sodium benchmarks

- Summary and detailed statistical analyses (mean, median, standard deviation and percentiles, expressed as mg sodium per 100g and per kcal) at the country and regional level; according to 16 PAHO major categories and 75 sub categories of food.
- Summary and detailed statistical analyses (mean, median, standard deviation and percentiles expressed as mg sodium per 100g) at the country and regional level; according to 18 WHO major categories and 97 sub categories of food.

**Objective 2:** To assess progress with respect to the 2021 PAHO targets, WHO global sodium benchmarks and national sodium targets (where applicable)

- Determine the number and proportion of packaged foods meeting the 2021 PAHO regional sodium reduction targets (mg/100g and mg/kcal) for each country and at the regional level.
- Determine the number and proportion of packaged foods meeting the WHO global sodium benchmark (mg/100g) for each country and at the regional level.
- Determine the number and proportion of packaged foods meeting the national sodium target (mg/100g) at the country level, where applicable.

**Objective 3:** To monitor the changes in levels of sodium in packaged food products, using the 2015 PAHO sodium reduction targets

- Summary and detailed statistical analyses for sodium content of packaged food procuts in 2015, 2018 vs 2022, at the country and regional levels; by 18 PAHO 2015 food categories included in the 2015 PAHO sodium targets.
- Determine the number and proportion of packaged foods meeting the 2015 regional targets per mg/100g in 2015, 2018 and 2022, for each category for each country and at the regional level.

**Objective 4:** To monitor levels of iTFA in packaged food products

- Determine the number and proportion of packaged foods with the presence of iTFA information; by food category.
- Summary and detailed statistical analyses (mean, median, standard deviation and percentiles expressed in g per 100g for the foods that declare TFA levels) at the country and regional level; by food category.

## 2. Methods

#### 2.1 Data Collection

#### 2.1.1 Food Label Information and Price (FLIP) database

The Food Label Information and Price (FLIP) database is a comprehensive Canadian brand-specific packaged and restaurant food composition database developed by the University of Toronto and updated every 3-4 years since 2010. FLIP, the only database of its kind in Canada, uses a systematic and comprehensive approach for industry-wide evaluation of the major national and private label brands of packaged and restaurant food and beverages available in Canada.

The development of the smartphone data collector app and web-based software has supported the establishment of FLIP databases in other countries in the Americas region, including Argentina, Costa Rica, Panama, Paraguay, Peru and Trinidad and Tobago, called Food Label Information Program (FLIP) for Latin American Countries or FLIP-LAC. Previous FLIP-LAC data collections were conducted in Argentina (n=3,724) between August 2017 and May 2018 <sup>11</sup>; in Costa Rica (n=6,835) between January-August 2018 <sup>12</sup>, in addition to pilot data collected in the Summer of 2017; in Paraguay (n=4,091) in 2018 <sup>13</sup>; and in Peru (n=1,533) in 2017 <sup>13</sup>. Canadian FLIP and the FLIP-LAC have been used for research in food supply monitoring, policy evaluation, and policy modelling scenarios <sup>14,15</sup>.

#### 2.1.2 Data collection in four Latin American countries (2022)

Data collection of food labels was conducted in four Latin American Countries (Argentina, Costa Rica, Panama, and Peru) during 2022 in collaboration with the WHO CC on Nutrition Policy for Chronic Disease Prevention at the Department of Nutritional Sciences of the University of Toronto (Canada) and with support of PAHO.

The University of Toronto team conducted various training sessions on the use of the FLIP data collector app and web-based software. Periodic meetings, led by PAHO, were held to discuss methodological aspects of the project, as well as to update on progress by each research team. Country teams obtained approval from stores' management and conducted inpeson data collection between March and August 2022. Moreover, several meetings were conducted between the University of Toronto team and each country team to discuss the different food categorization criteria, and data entry and cleaning in order to ensure harmonization and comparability of results between countries. Optical character recognition (OCR) was utilized by the U of T research team in a pilot study to examine the feasibility of extracting nutrient and ingredient information from the food label photos, although the nutrition information reported in this report was based on manually extracted data, due to a delay in the project start date.

#### **Argentina**

The Fundación Interamericana del Corazón (FIC) Argentina research team led data collection and analysis in Argentina. In March 2022, data collection of foods labels of packaged food products was conducted in the City of Buenos Aires in two of the main supermarkets in the

country (n=4,740), one located in a middle and upper middle income neigborhood and the other in a low and low middle income neigbourhood.

FIC Argentina has vast experience in conducting data collection in supermarkets which faciliated in-person collection in stores. The team is also familiarized with the use of the FLIP app used in a previous similar study <sup>11</sup>. The FIC Argentina research team has been monitoring sodium and iTFA content in the food supply for more than ten years and has been successful disseminating findings to key stakeholders and in conducting advocacy.

#### Costa Rica

The Asociacion Costa Rica Saludable and the Instituto Costarricense de Investigación y Enseñanza en Nutrición y Salud (INCIENSA) led this study in Costa Rica. Data collection was conducted in two main supermarkets between July and August 2022 (n=7,000). The INCIENSA research team has extensive experience in monitoring sodium levels in the Costa Rican food supply using the FLIP app <sup>12,13</sup>.

#### Panama

The Instituto de Nutricion de Centro America y Panama (INCAP) led this study, which was the first FLIP-LAC study conducted in Panama. Data collection was conducted in two supermarkets in Panama City, in a low-income and middle-high-income neighborhood to guarantee a better sample of products targeting populations of all socioeconomic status (n=1400).

#### Peru

The Centro de Excelencia en Enfermedades Crónicas (CRONICAS), from the Universidad Peruana Cayetano Heredia Universidad Cayetano Heredia led this work in Peru. Data collection was conducted in June 2022 in the City of Lima in two supermarkets and one minimarket (n=5,529), in neighbourhoods with different socioeconomic status. The research team has vast experience in monitoring changes in the Peruvian food supply from collecting and analyzing food label data, and has previously used the FLIP app for their research <sup>13</sup>.

#### 2.2 Food categorization and data validation

Foods were classified by three category systems: 1) 18 commonly consumed packaged food categories, established by the Pan American Health Organization (PAHO) and endorsed by the multi-sectorial Salt Smart Consortium in 2015 (2015 PAHO targets³), 2) 16 major categories and 75 sub categories described in the updated PAHO regional sodium reduction targets for 2022 and 2025 (2021 PAHO targets⁶) and 3) WHO global sodium reduction benchmarks for different food categories (WHO sodium reduction benchmarks⁶). The 2021 PAHO target and WHO sodium reduction benchmark categorization was individually completed by each country. The U of T team validated the results and resolved discrepancies with country teams. An expanded and updated sodium category description file for the 2021 PAHO targets and WHO sodium benchmarks was created by the University of Toronto team to ensure consistency in categorization between countries (Appendiex A).

For iTFA analysis, the WHO sodium categories were used since they contained a broader range of food categories in comparison to the PAHO categories (e.g. chocolate and confectionaries, beverages). Foods that could not be categorized into WHO sub categories were still categorized into the major category (e.g. unsalted butter was excluded from 15a. 'salted butter, margarine, and butter blends' but was included in 15. 'Fats and oils').

## 2.3 Analyses

The sodium content in foods was obtained from the nutrient declarations in mg/serving and was standardized to mg/100g. Sodium (mg) per kcal was calculated for foods that declared both energy and sodium. To execute the mathematical operation in the analyses for sodium per kcal, different methodologies were utilized by country teams. Products with 0 calories were excluded in the sodium per/kcal analyses for Costa Rica (n=1). Products that declared sodium content but had 0 kcal were attributed 1 kcal in Peru and Argentina (n=12 and 17, respectively). Products that declared sodium content but had 0 kcal were attributed 1.5 kcal in Panama (n=26).

Median, mean, standard deviation, min, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and max percentiles were calculated for sodium as mg per 100g and mg per kcal (where applicable), by country and by food categories. The number and proportion of products meeting sodium targets (in comparison to the 2021 PAHO targets and the WHO sodium reduction benchmarks) were calculated, by country and by food category. The aforementioned analyses as well as the comparison with respect to targets were completed by each country team. The U of T team validated the results and completed a regional summary by combining data from the four countries.

The number and proportion of products that declared TFA information were calculated. The median, mean, standard deviation, min, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup> and max percentiles were calculated for TFA per 100g for foods that declare TFA information. As many foods contained low levels of TFA, an additional analysis reporting on the % of products containing >0.2g TFA/100 g was conducted to indicate the proportion of products with significant amounts of TFA.

Foods collected by Argentina, Costa Rica and Peru in 2015 and 2018 (previous research funded by International Development Research Center (IDRC)) were used in the longitudinal assessment<sup>4</sup>. Products collected in 2022 were re-categorized by the U of T team, based on the eighteen 2015 PAHO categories. Statistical summaries of sodium (mg per 100g) and the number/proportion of food products meeting the 2015 PAHO targets were compared for 2015, 2018 and 2022.

## 3. Results

The following section provides a summary of key regional findings, accompanied by high-level data visualizations. Detailed results are tabulated in 'Appendix B – Tables of Results, by food category, overall, and by country'. Table numbers referred to in this section correspond to those in Appendix B.

## 3.1 Regional sodium levels by PAHO food category

Mean sodium (mg per 100g/mL) at the regional level ranged from 18.0 mg in 'fresh or dried pasta and noodles', to 3309.8 mg in 'sauces, dips, gravy and condiments' (Figure 1). Similarly, mean sodium (mg per kcal) at the regional level ranged from 0.1 mg in 'fresh or dried pasta and noodles', to 204.7 mg in 'sauces, dips, gravy and condiments' (Figure 2). Tables 3.1.1 and 3.1.2 show the distribution of sodium content per 100g/ mL and per kcal by PAHO food category, both at the regional and country level.

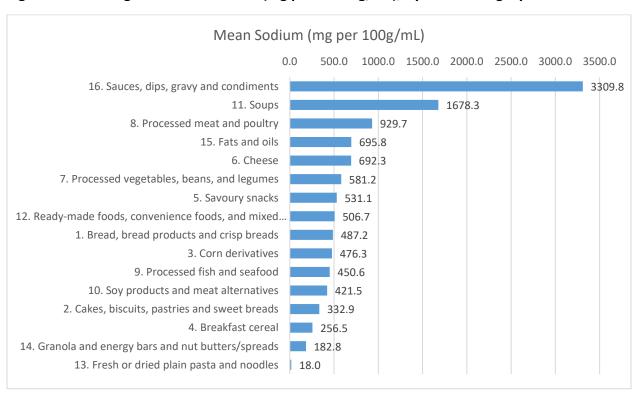


Figure 1. Mean regional sodium levels (mg per 100 mg/mL), by PAHO category

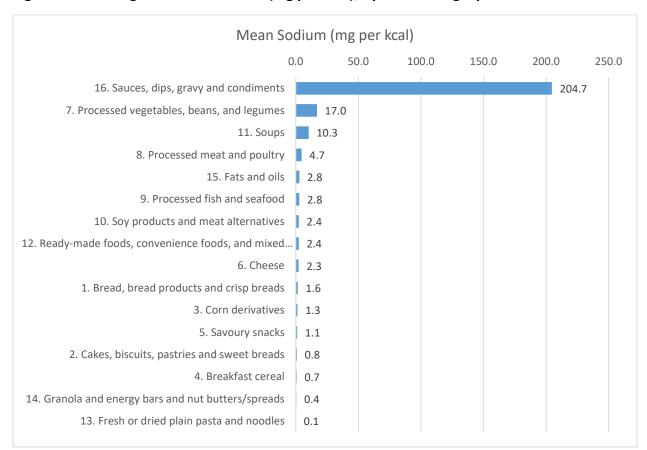


Figure 2. Mean regional sodium levels (mg per kcal), by PAHO category

## 3.2 Regional sodium levels by WHO food category

Mean sodium (mg per 100g/mL) at the regional level ranged from 16.5 mg in 'fresh or dried pasta and noodles', to 2908.1 mg in 'sauces, dips, gravy and condiments' (**Figure 3**). Table 3.1.3 shows the distribution of sodium content per 100g/mL by WHO food category, both at the regional and country level.

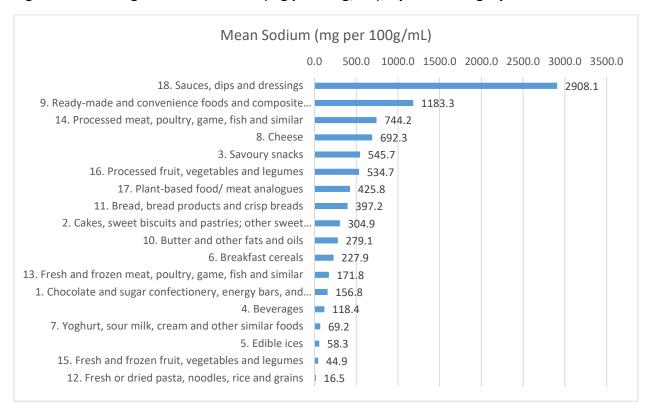


Figure 3. Mean regional sodium level (mg per 100g/mL), by WHO category

## 3.3 Regional summary of PAHO sodium targets

Overall, 46% of products across the region met the 2022 PAHO targets (Figure 4). The proportion of products meeting the targets varied by country, with Peru having 52%, Argentina having 50%, Costa Rica having 44% and Panama having 34% (Figure 5). The proportion of products meeting the targets at the regional level also varied by PAHO food category, from 74% meeting the targets in 'ready-made foods, convenience food, and mixed dishes' to 27% in 'soups' (Figure 6). Tables 3.2.1 and 3.2.2. show the proportion of products meeting the 2022 PAHO Sodium targets (per 100mg/mL and per kcal) at the regional and country level, and by PAHO food category. Table 3.2.3 shows the proportion of products meeting the WHO Sodium Target at the regional and country level.

Figure 4. Regional summary of the overall proportion of products meeting the 2022 PAHO Sodium Targets

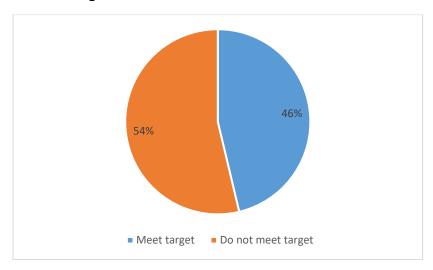
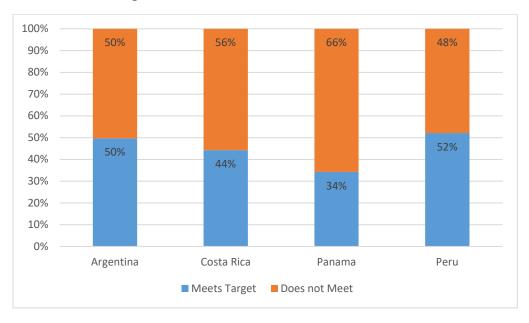
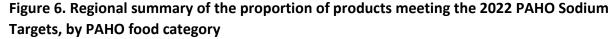


Figure 5. Country-level summary of the overall proportion of products meeting the 2022 PAHO Sodium Targets







# 3.4 Longitudinal regional summary of sodium content and 2015 PAHO sodium targets, 2015-2016, 2017-2018 and 2022

Overall, at the regional level, the proportion of products meeting the 2015 PAHO Sodium targets changed from 83% in 2015-2016, to 89% in 2017-2018, to 88% in 2022 (Figure 7). Sodium contents and the proportion of products meeting the targets varied at the country and food category level, presented in **Table 3.3.1 and 3.3.2**.

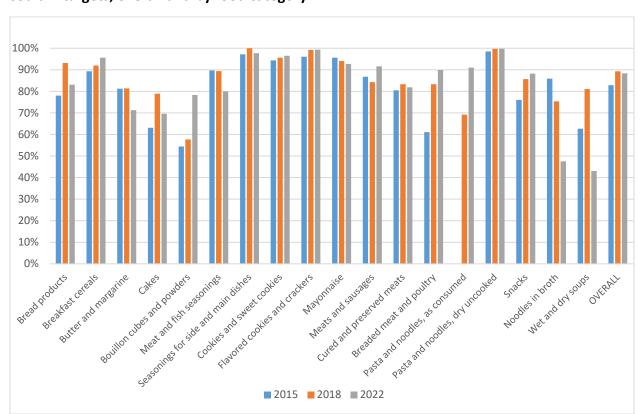
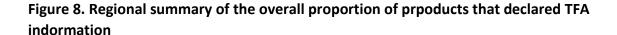
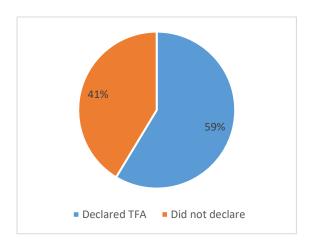


Figure 7. Longitudinal regional summary of the proportion of products that meet the 2015 sodium targets, overall and by food category

## 3.5 Regional summary of TFA analyses

Overall, 9,740 of 16,605 products (58.7%) declared TFA information (Figure 8), with the highest prevalence in 'plant-based food/meat analogues' (Table 3.4.1). Of the 9,740 products that declared TFA, the average TFA content was 0.1g per 100g. Only 380 of the 9,740 (4%) of products contained >0.2g TFA, mainly among the 'cheese', 'cakes, sweet biscuits and pastries' and 'Chocolate and sugar confectionery, energy bars, and sweet toppings and desserts' categories.





## 4. Limitations and Strengths

This study established a large and comprehensive database for packaged foods in four Latin American countries, including nutrient, ingredient and labelling information. This database will allow for future research into other nutrients of concern in addition to sodium and TFA, such as calories, saturated fat and sugars. Considering Peru and Argentina, but not the other two countries, have mandatory front-of-pack labelling policies implemented on declaring high saturated fat, sodium and sugar content<sup>11</sup>, this dataset can be used in evaluating the impact of these policies. Additionally, these data can also be used for assessing levels of these other nutrients of public health concern and provide evidence for adopting nutrition policies and initiatives by more countries.

This study is also the first to examine the declaration of TFA in Nutrition Facts tables and TFA content in packaged foods across four Latin American countries. Since TFA declaration is not mandatory in all countries, this information is useful for future TFA-related guidelines and interventions.

Furthermore, this study provides a longitudinal assessment of sodium content in packaged foods and the progress of foods in meeting the regional targets since 2015. This comparison provides researchers and policymakers with longitudinal data in support of updated and more effective strategies in improving the nutritional quality of the food supply.

There are several limitations to this study. Since no specific TFA food categorization was available and the generation of a comprehensive category list for trans fat was beyond the

scope of this execution, the WHO sodium categories were used in the TFA analysis, since they were more inclusive of products that were not included in the PAHO categories (e.g. beverages). Future studies should reconcile TFA-related categories based on various guidelines so that a more appropriate grouping of products can be conducted in future TFA analyses. Also, optical character recognition (OCR) was developed in this study to help reduce the amount of manual work involved. Although the accuracy of OCR for nutrition and ingredient information was not high enough to replace manual extraction, due to limited image quality and nonstandardized nutrition information, it provides a potential for future automated collections and points to the need and importance of standardized nutrition information on food labels. More advanced OCR models will be needed to extract information from such labels. The research team was not able to re-categorize the 2015 and 2018 food products using the updated 2021 PAHO targets, as this requires country specific expertise of the local food supply. However, the University of Toronto team was able to re-categorize the 2022 data according to the 2015 PAHO targets to provide a longitudinal assessment of progress during the last 7-10 years.

## 5. Conclusions and recommendations

In conclusion, monitoring the processed and ultra-processed food supply helps countries and PAHO understand the effectiveness of the previously developed guidelines and provides insight into potential initiatives that aim at improving population health. The sodium content of some packaged foods were high in sodium and have remained high, particularly among the sauces categories, while in other categories, sodium reduction progress has continued (e.g., breaded meat and poultry). Overall, less than half of the products collected in 2022 meet their respective PAHO or WHO sodium targets, with Peru having the highest compliance and Panama having the lowest. Comparing the sodium content across 2015, 2018 and 2022, the percentage of products meeting the 2015 PAHO targets increased slightly from 2015 to 2018, but has shown little further progress since then for most categories. Overall, about 60% of products declare TFA information, with an average of 0.1g trans fat per 100g for those that declare TFA. The category that contains the highest amount of TFA (i.e. cheese) likely has mostly naturally-occurred TFA. Although the presence of TFA was low on average, these data should be interpreted with caution, as 40% of products did not disclose TFA content on the NFT. TFA declaration would be necessary for fully understanding the prevalence of TFA in packaged foods in Latin American countries. Also, since ingredient information was not available in this study, it is difficult to distinguish the naturally-presented TFA from the iTFA. Therefore, more explicit TFA information including the origin of the TFA needs to be declared in the ingredient lists and on the NFT for policymakers to target the elimination of iTFA. In addition, standardization in the presentation of nutritional information is important for providing improved transparency in nutrition information to consumers, researchers and policymakers, as well as facilitating the use of OCR technology to extract nutrition information from food labels.

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# **Technical Report**

# Monitoring sodium and industriallyproduced trans-fatty acids content in packaged products in four Latin American countries

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#### 1. Introduction

## 1.1 Summary of the LOA objective

The purpose of this collaboration is to provide technical support to Latin American Countries Argentina, Costa Rica, Panama and Peru (LACs) in the collection and analysis of sodium and trans fats (iTFA) contents in processed and ultra-processed food products, and conduct a regional update of the sodium content in food products with respect to the multiple sodium reduction targets: (1) 2021 PAHO targets; and (2) WHO global sodium benchmarks, which together will support the implementation of the Updated Regional Sodium Reduction Targets; and (3) the WHO REPLACE package for iTFA elimination.

## 1.2 Participation of U of T research team in the execution of the LOA

This study was conducted with the use of the Food Label Information Program (FLIP) application developed by the University of Toronto (U of T). The U of T research team conducted video trainings, prepared a user manual, and provided a statistical analysis plan and analysis tools in R studio for LAC teams. R studio was chosen as it is open source and free to use and is becoming the standard statistical package in research. The team also conducted a pilot study using Optical Character Recognition (OCR) technology to extract Nutrition Facts tables (NFT) and ingredient list information from the collected food products. Machine learning used product names and ingredients to predict the Canadian Table of Reference Amount (TRA) categories. The U of T research team validated the PAHO and WHO sodium categorizations completed by countries to ensure consistency and based on this work, provided an updated categorization methodology (i.e. a category dictionary) to countries. The U of T team created an R Studio package for use in the statistical summary and target evaluations, and training sessions on its use were provided.

Sodium contents and iTFA levels of packaged foods were analyzed by each country, and the U of T team validated the results and provided a regional summary which included data for all four countries. Sodium targets published by PAHO and WHO were used to assess the progress of sodium reduction at the country and regional levels. The U of T team recategorized the food products collected in 2022 according to the 2015 sodium reduction categories (4) and used these data to determine longitudinal changes from 2015 to 2022 at the regional and country level.

### 1.3 Problems and shortcoming encountered during the LOA execution

## Project execution timelines:

- U of T could not officially start the project until July 12, 2022, past the original proposed start date of February 2022, as we had to wait for the LOA to be fully executed by both PAHO and U of T.
- There was limited time to execute the project since the countries had delays in data collection, cleaning, categorization and analysis, resulting in a major workload for U of T in the later stages of the project.

#### Food categorization:

- Since the documentation of PAHO/WHO categories were not described with extensive

details, there was ambiguity in the way countries categorized foods. Multiple meetings were held with each country to resolve the discrepancies. Based on this work, a more detailed category description document was prepared with country specific examples added (Appendix A attached).

## Trans fatty acid categories:

- Even though WHO published the REPLACE package, specific trans fat food categorization for packaged products was not available. To generate a comprehensive category list for trans fat was beyond the scope of this execution and therefore the WHO sodium categories were used in the trans fat analysis, since they were more inclusive of products that were not included in the PAHO categories (e.g. beverages).

#### OCR technical concerns:

Due to delay in the project start date, the U of T IT team was not able to use OCR for extracting nutrition facts information and ingredients; therefore, LAC teams manually extracted the data. The U of T IT team conducted a pilot method to use OCR for ingredient extraction in Spanish, which was then translated into English. However, not all of the country food labels showed the correct or complete ingredients information from the manual extraction (e.g. some products had 'CONTIENE LECHE' (CONTAINS MILK) or the word 'INGREDIENT' extracted but not the rest of the ingredient information, even though they were present on the product package). We estimated that at least 60% of all products had the proper ingredients information manually extracted by LACs. When the U of T IT team applied OCR on the packages, accuracy ranging from 59% to 68% was achieved, when compared to the manual extracted nutrient values. The quality of some images was not high enough (e.g., where the texts were on uneven surfaces, photos were of low contrast, or labels used non-standard font, etc.). Development of advanced OCR models will be required to overcome these challenges with the labels on LAC foods.

## Re-categorization of 2018 data into 2021 PAHO categories:

- For longitudinal analysis, data collected from Argentina, Panama and Peru in 2015-2016 and 2017-2018 (5-6) were to be re-categorized based on the 2021 PAHO categories. However, due to the limited time in execution and the large sample size in the current collection (n=16,804), re-categorizing 3,350 products from 2015-2016 and 11,376 products from 2017-2018 was not feasible.
- Instead, longitudinal analyses were conducted by re-categorizing 2022 data according to the 2015 targets.

#### Data validation:

- We used machine learning models based on Health Canada's Table of Reference Amounts (TRA) categorizations to predict the TRA categories for products from Argentina (pilot study) using product name and ingredients. A challenge with this model is that the most common ingredients in Canadian food products and Argentina food products have low overlap (<30%), which could be a result of different food

characteristics or translations. This likely compromised the predictions based on ingredients. Further improvement will be required using country specific ingredient lists. Thus, we were not able to use the predicted TRA categories for sodium category validation since the PAHO and WHO categories are very detailed and specific, and therefore we conducted manual validation.

#### Data analysis:

- Although an R Studio analysis package was built for country teams and a user manual with video training sessions were provided, country teams that had already been using other software (e.g. SPSS, STATA) reported a steep learning curve regarding the coding system in R Studio. Therefore, the data analysis was completed individually in each country and U of T used this package to validate the country results and to generate results at the regional level.

#### 2 Results

#### 2.1 Main activities carried out

- Provided virtual access for the FLIP data collector iPhone App and the FLIP database for use by participating countries for the collection and analysis of information on food labels.
- Conducted web-based training, and provided manuals and technical support for data collection and data processing using FLIP.
- OCR of the ingredients list and nutritional information from the Nutrition Facts table was completed and cross-validated with the data collected manually.
- A protocol for data cleaning (Atwater calculation, as-prepared calculation, etc.) was circulated to the country teams.
- Validated PAHO and WHO categorizations for each country (with >80% agreements in categorization) and revisions made to ensure consistency across countries before final calculations were conducted.
- Created a more detailed and expanded dictionary for the categories, with country specific examples added, based on the above work.
- Provided a detailed statistical analysis plan, which listed the outcome tables aligned with each LOA objective.
- Developed and prepared an R package Nutrient Analysis Tool (NAT) that was available
  for countries to use for descriptive statistical analysis and target comparison calculations.
  Video instruction was provided and training sessions were arranged upon the request of
  country teams. The package was used by the UofT team to validate results against the
  individually completed analyses conducted by each country and to prepare the regional
  analyses.
- Validated data analysis results that were provided by country teams.
- Analyzed sodium and iTFA data at the regional level.
- Organized and attended country team and regional meetings.

#### 2.2 Main results

The following is a summary of the main results stemming from the analysis. Fully detailed tables are presented in **Appendix B.** Table numbers correspond to those in Appendix B and are listed below at the end of the results section.

From the 2022 data collection, mean sodium varied across PAHO food categories, with "Sauces, Dips and Gravies," "Soups," and "Processed Meat and Poultry" containing the highest mean levels of sodium  $(3,310 \pm 6,308 \text{ mg}/100\text{g}, 1,678 \pm 2,152 \text{ mg}/100\text{g}, \text{ and } 930 \pm 679 \text{ mg}/100\text{g}, \text{ respectively})$  (**Table 3.1.1**). **Table 3.1.2.** presents these results as values of mg of sodium per kcal.

Overall, 46% of products (n=3879/8381) exceeded the PAHO sodium targets for 2022 (evaluated using sodium in mg per 100g/mL) (**Table 3.2.1**). The food categories with the highest proportion of products exceeding the 2022 targets were: "Soups" (73%; n=168), "Bread, bread products and crisp bread" (66%; n=360), "Fresh or Dried Plain Pasta and Noodles" (65%; n=350), "Sauces, dips, gravies and condiments" (59%; n=539), "Processed Fish and Seafood" (59%; n=217) and "Processed vegetables, beans and legumes (59%; n=428).

Longitudinal analysis, presented in **Tables 3.3.1. and 3.3.2**, included a total of n=14,133 products (n=3859 collected in 2015-2016, n=5312 collected in 2017-2018, and n=4942 collected in 2022) from four LAC countries (Argentina, Peru and Costa Rica, Paraguay (2015-2016, 2017-2018) and Panama (2022)). Longitudinal analyses were completed using the 2015 PAHO Food Categories. In 16 of 18 categories, fewer foods declared sodium on the nutrition label in 2022 compared to 2015/2018. For example, in "Meats and Sausages," 100%, 88.1% and 55.4% of products declared sodium data in 2015, 2018, and 2022, respectively. Similarly, in "Bread Products," 100%, 87.5% and 77.3% of products declared sodium in 2015, 2018, and 2022, respectively (**Table 3.3.1**).

Changes in sodium levels between data collection years varied by country and by food category, but at the regional level, compared to 2015, in 2022 13/18 food categories had lower sodium content and 5/18 food categories had higher sodium content (**Table 3.3.1**).

The proportion of packaged foods meeting the regional targets varied between 2015, 2018 and 2022, depending on the food category (**Table 3.3.2**). For example, the proportion meeting regional targets was lowest in 2022 in "Wet and Dry Soups" (43.1% in 2022 compared to 81.1% in 2018 and 62.7% in 2015) and "Noodles and Broth" (47.5% in 2022 compared to 75.4% in 2018 and 85.9% in 2015). On the other hand, the proportion meeting regional targets was highest in 2022 in other categories such as "Breaded Meat and Poultry" (89.9% in 2022 compared to 83.3% in 2018 and 61.1% in 2015) and "Bouillon Cubes and Powders" (78.3% in 2022 compared to 57.7% in 2018 and 54.4% in 2015).

Of the total sample considered in 2022 (n=16,605), 59% (n=9740) of the products declared iTFA (**Table 3.4.1**). This proportion varied by WHO major category from 5% in "Fresh and Frozen Meat, Poultry, Game, Fish and Similar" (n=280) to 86% in "Plant-based Food/Meat Analogues" (n=159). The mean iTFA content for all major categories was similar, varying from 0 to 0.2g/100g, with the highest maximum content observed in the "Sauces, Dips and Dressings" (145.7g/100g) followed by "Processed Meat, Poultry, Game, Fish and Similar" (14.8g/100g).

#### List of Tables

## 3.1 Objective 1

- Table 3.1.1 Distribution of sodium content per 100g/ml of packaged foods per PAHO food category at the regional level and by country
- Table 3.1.2 Distribution of sodium content per kcal of packaged foods, by PAHO category at the regional level and by country
- Table 3.1.3 Distribution of sodium content per 100g/ml of packaged foods by WHO global sodium benchmark categories at the regional level and by country

## 3.2 Objective 2

- Table 3.2.1 Proportion of products meeting the 2022 PAHO Sodium Targets (mg per 100g/mL), at the regional and country level (2022 data collection)
- Table 3.2.2 Proportion of products meeting the 2022 PAHO Sodium Targets (mg/100kcal), at the regional and country level (2022 data collection)
- Table 3.2.3 Proportion of products meeting the 2022 PAHO Sodium Targets (mg/100kcal), at the regional and country level (2022 data collection)

## 3.3 Objective 3

Table 3.3.1 Changes in the sodium content per 100 g/ml of packaged foods in PAHO countries between 2015-2016, 2017-2018 and in 2022.

## 3.4 Objective 4

Table 3.4.1 Number and proportion of products with trans fat data; Distribution of trans fat content per 100g/ml of packaged foods per WHO food category at the regional level and by country

#### 2 Evaluation Statements

#### 2.1 Information on other donors

The FLIP data collector app and FLIP cloud infrastructure and OCR/ML/AI programming was developed for use in Canada with funding from the Canadian Institutes of Health Research (CIHR).

#### 2.2 Summary

What was accomplished:

- A large and representative database on processed and ultra-processed foods was established for the four Latin American countries.
- An updated category dictionary was created for future consistency in PAHO and WHO categorizations.
- An analysis tool was created for statistical analysis and target evaluation.
- We were able to assess data from 2015, 2018 and 2022 for a longitudinal comparison.

#### What was not accomplished:

- Due to limited time, we were not able to re-categorize the 2015 and 2018 food products

using the updated 2021 PAHO targets, as this requires knowledge of the local food supply, which limits the longitudinal assessment. Instead, we were able to re-categorize the 2022 data according to the 2015 PAHO targets to provide a longitudinal assessment of progress during the last 7-10 years.

- The accuracy of OCR was not high enough for the use in extracting nutrient values from food labels in LAC.
- Automation in categorization of LAC foods based on Canadian data was not accomplished due to the large differences in ingredients (<30% overlap), but the current 2022 LAC data can provide a good training data set for future LAC collections.

#### 2.3 Lessons learned

- There is good potential for OCR to be used in collecting Spanish ingredient information from the product packages. There is also potential to recognize Nutrition Facts tables, both of which can save manual extraction effort in future data collections.
- There is good future potential for machine learning models to categorize food products into PAHO and WHO sodium categories, based on the manual categorizations that have been completed for the 2022 dataset, which can be used as a training data set for future collections. This will reduce manual categorization efforts in future data collections.
- Regarding the categorization of packaged products in our sample according to the categories defined by PAHO and WHO: a more thorough and detailed description of categories with specific examples from each country were necessary, since similar products can be consumed in different ways between countries. The dictionary created in this study can be used for better clarification of categories in the future collections.
- A large proportion of products have no respective sodium categories and therefore could not be categorized properly. A more comprehensive PAHO categorization system that captures all food categories, rather than just the priority sodium categories will be necessary to capture these foods.
- This execution validates the NAT package created by the U of T team, which has the potential to be used in future PAHO analyses, where it can save manual work and provides flexibility in various output formats. An easier user training system should be developed for better user experiences.
- One major limitation of this execution was the limited time. With various levels of execution feasibilities in different countries (e.g. political situation in Panama delayed the data collection due to safety concerns), future collaboration should aim at allowing enough time for the country teams and schedule more frequent meetings to closely track progress.

#### 2.4 Conclusions

Considering the importance of sodium and trans fats in the development of non-communicable diseases, it is concerning that the Latin American population is overconsuming these nutrients of concern as well as ultra-processed foods (1,3,7,8). Results from this collaboration show that packaged foods in the 4 countries were high in sodium, and only about half of the products met the respective PAHO and WHO current targets. Although a statistical test was not completed, the longitudinal analyses did not show large differences (<10%) in the sodium content and proportion of products meeting the sodium targets. TFA was declared in about 60% of the products and the average levels

of TFA were low. Monitoring processed and ultra-processed foods in the food supply helps to understand the effectiveness of the previously developed guidelines and to provide insight into potential initiatives that aim at improving population health.

## 2.5 Recommendations

- Standardization in the presentation of nutritional information is important for improved transparency in nutrition information to consumers, researchers and policymakers.
- Mandate the declaration of trans fats and provision of labels that show the origin of trans fat for better understanding of iTFA in the Latin America food supply.

#### 4 References

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## **Appendix A**

Table 1. 2021 PAHO Sodium Categories with Additional Detailed Descriptions

	Category	Official Description	<b>Updated Description</b>	mg sod	ium/100	mg sodi	um/kcal
				_	g	1.2  1.8  1.3	
				2022	2025	2022	2025
				Target	Target	Target	Target
1. Br	ead, bread produc	cts and crisp breads					
1a	Pantry and hearth bread, rolls and buns	Includes whole grain, whole wheat, wholemeal, white bread and buns.	Yolk bread, hamburger buns with sesame, hot dog bread, petit pan, special keto bread, rice flour bread, bread with seeds	340	280		1
1b	Tortillas (wheat), wraps, naan, roti	Includes plain or flavored flatbread, pita, roti, wheat-based tortillas, wraps or naan. Excludes tortillas made with corn (3a) and bread with additions (1c).	Pita bread, Arabic bread, chapla bread, wheat tortillas, wraps, ciabatta	550	450	1.8	1.7
1c	Bread with additions	Includes breads with additions that contain sodium e.g., olives, onion, pieces of ham, raisins, tomatoes, butter/garlic, cheese, pandebono.	Pizza bread, bread with olives, bread with butter, cheese bread, focaccias, exclude sweet bread with chocolate chips (e.g. ID162001 panettone, 2c)	420	350	1.5	1.2
1d	Other bread products	Includes bread products not captured in 1a-c, e.g., English muffins, bagels, dry bread, croutons, croissants, pizza crusts, etc.	Pizza doughs, puff pastry doughs (e.g. empanadas), ground bread, toast, breadsticks, breadcrumbs and breadcrumbs without seasoning (only salt is ok), exclude breading mixtures with seasonings (16m). Exclude kid's items	400	350	1.3	1.1
<b>2.</b> C	akes, biscuits, pas	tries and sweet breads					
2a	Savory biscuits and crackers	Plain or flavored crackers, sandwich crackers, puffed cakes, and graham crackers e.g., cheese crackers, soda crackers, and rice cakes. Excludes dry	Crackers and light cookies, whole grain cookies, chrysins (sticks), rice cracker,	640	580	1.5	1.3
		bread (1d).	*Exclude puff rice cakes that have sweet coating and fillings (2b)				

2b	Cookies and sweet biscuits	Includes filled/coated and unfilled/uncoated sweet cookies and biscuits. Excludes graham crackers (2a)	Sweet cookies, wafers, alfajores, Turron de doña pepa, whole grain cookies with honey or with sweet	225	200	0.5	0.4
		and crackers/savory biscuits (2a).	additives, puff rice with sweet coating, rice or other grain bars with sweet filling (e.g. yogurt bars) and are marketed as snacks (based on size, usually small multi-packages, e.g. FLIP-LAC ID 154407)				
<b>2</b> c	Pastries, squares, and quick/sweet breads	Filled/unfilled pastries, danishes, sweet buns, tea biscuits/scones, muffins, squares, brownies, quick/sweet breads.	Queques, brownies, muffins, panetón, chancay, waffles and pancakes, rolled, pastries that are frozen (e.g. frozen churros) *Premixes for the final product (e.g. pancake premix)	260	215	0.7	0.6
2d	Cakes	Cakes, cheesecakes, snack cakes. Includes prepared products and dry cake mixes (as consumed).	cupcakes	300	240	0.7	0.6
3. Co	orn derivatives						
3a	Tortillas (corn)	Tortillas made from nixtamalized corn flour or cornmeal. Excludes tortillas made with wheat (1b).	Corn wraps, thin tortillas, excluded arepas that are named 'tortillas' (e.g. ID 164103, 164107)	35	30	0.9	0.7
3b	Biscuits (bizcochos)	Flavored and unflavored salty biscuits and crackers made of corn flour, salt and cheese. Excludes extruded corn products.	Corn flour-based elbaorated biscuits	825	800	1.6	1.5
3c	Tostadas	Chips or crisp-type products, made from corn tortillas, flavored and unflavored, that have been either oil fried, air fried, oven fried or baked.	Exclude tortilla chips (5b)	720	600	2.6	2.1

3d	Arepas	Plain or savory flat (usually round), unleavened patty of soaked, ground kernels of corn, corn meal or corn flour that can be grilled, baked, fried, boiled or steamed. It may be savory.	Bollos, buns made with cornmeal (some are named tortillas, e.g. ID164103)	50	40	0.5	0.4
4. Br	eakfast cereal	•					
4a	Ready to eat and hot instant breakfast cereals	Granola, muesli, shredded, flaked, puffed, extruded, and high-fibre compact cereals. Includes plain and flavored hot instant cereals (dry mix, as sold) e.g. oatmeal. Excludes plain oatmeal and other traditional cereals cooked from scratch.	Breakfast cereals UP, granola, flavored oats, instant flavored oats. They are included if they have sweeteners (stevia). Oat-based beverage mix.	260	220	0.6	0.5
5. Sa	voury snacks						
5a	Nuts, seeds, and kernels, seasoned and candied	Seasoned, salted, and candied nuts, seeds, and kernels e.g. salted sunflower seeds, BBQ peanuts, beer nuts, and trail mixes. Excludes unsalted products.	Nuts, seeds, mixtures of nuts with seeds or nuts that include salt in the list of ingredients	265	220	0.9	0.8
5b	Chips, popcorn, and/or extruded snacks	Potato, corn, tortilla, rice, and vegetable chips; extruded and puffed corn snacks; microwave and stovetop ready popcorn, and seasoned or candied ready to eat popcorn. Excludes unseasoned dry popcorn kernels.	French fries, corn snack (Tortees, chizitos, cheesemakers), tortilla chips, popcorn, greaves. Any snack that is described as extruded	530	470	1.4	1.2
5c	Pretzels and snack mixes	Hard pretzels, candied pretzels, sesame sticks, and assorted salty snack mixes. Excludes trail mix (5a).	Pretzels and mixtures of various snacks, pretzel stick-style snacks (e.g. FLIP-LAC ID154321), crissino	800	670	1.8	1.7
5d	Other savory snacks	Includes savory snacks not captured in 5a-c. e.g., plantain/yucca chips, kale chips, chips made with tropical root products.	Chifles, tostones (fried plantain), fried sweet potato, fried cassava, banana chips, pork rinds (Chicharritos),yuquitas	525	430	0.9	0.8

6a	Fresh cheese (i.e., fresh mozzarella and others)	Includes fresh Mozzarella, turrialba and palmito (Costa Rica) and quesillo, queso de hebra, queso oaxaca (Mexican cheese), cheese curds.	Fresh cheese with or without flavorings. Cabaña cheese, ricotta cheese, fresh or unripe mozzarella cheese, feta cheese, plant-based cheese that resembles fresh cheeses	480	400	1.1	0.9
6b	Soft cheese (i.e., unripened goat cheese, cream cheese)	Plain and flavored (sweet or savory) cream cheese, cream cheese spreads, cream cheese-style products and soft unripened goat cheese. Excludes processed cheese (6e) and cream cheese-based dips (16h).	Cream cheese with or without flavorings,	420	380	0.7	0.6
6c	Semi-hard cheese (e.g., mozzarella, cheddar and others)	Includes semi-hard cheese such as mozzarella (including pasta filata), mild, medium and old cheddar, Swiss, Monterey Jack, brick, colby, gouda, brie, camembert, manchego, string cheese, and shredded mixed cheese. Excludes fresh mozzarella and cheese curds (6a).	Mozzarella cheese, cheddar, gouda, camembert, Edam, Swiss, paria cheese, Andean cheese, dambo cheese, manchego, brie, goya, maasdam, blue cheese, fontal cheese, hard goat cheese	650	590	1.7	1.5
6d	Hard cheese, grated and ungrated	Shelf stable and refrigerated hard cheese (moisture content <35%) e.g. parmesan, manchego, pecorino, asiago, romano.	Parmesan, Pecorino, Roman cheese	1300	1200	2	1.6
6e	Processed cheese	Processed cheese products made from an emulsified blend of natural cheese. Includes processed cheese spreads, blocks, and slices with or without added ingredients. Excludes string cheese (6c) and cream cheese spreads (6b).	Melted cheese with a mixture of vegetable ingredients. Cheese-based or cheese-type creams	1000	900	5.4	4.5
7. Pr	ocessed vegetable	s, beans, and legumes					
7a	Tomato paste with additions	Tomato paste with added ingredients e.g. tomato paste with herbs or garlic. Excludes plain tomato paste with no added salt.	Tomato paste with herbs or garlic that are described as such or the first ingredient is not water (in contrast to tomato puree which would be in 16d).	400	320	3.3	2.7

vegetables	Canned vegetables and legumes e.g. potatoes, tomatoes, corn, peas, green beans, mushrooms, mixed vegetables, beets (plain and pickled). Excludes kidney beans, chickpeas, lentils (7c).	Unsoditioned canned vegetables and tubers. Tomato peeled or in pieces or canned plain tomato paste. Excluded frozen and fresh vegetables/fruits	150	100	4	3.3
Canned beans, chickpeas and lentils	Boiled, whole, canned kidney beans, chickpeas, lentils. Excludes dry beans and lentils that are cooked or uncooked.	Cooked or raw canned legumes, exclude if they contain meat (e.g. lentils with bacon) (7d)	220	190	2.5	2.2
Baked and refried beans (mashed)	Shelf stable baked beans and refried beans (mashed beans). Products may include meat.		280	250	2.6	2.4
Frozen potatoes and similar products	Frozen plain and seasoned French fries, sweet potato fries, hash browns, potato patties, green plantain and tropical tubers such as cassava (yuca),	Frozen potatoes for frying	170	140	N/A	N/A
Dry mashed or scalloped potatoes (as consumed)	Dehydrated scalloped or mashed potatoes, as consumed.	Mashed potatoes in sachet	290	270	N/A	N/A
Pickled vegetables	Shelf stable sour pickled vegetables e.g. cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetables e.g., cucumbers, onions, relish.	Onions, peppers, cucumbers, sauerkraut. Foods declared as pickled or with the presence of vinegar in the list of ingredients	680	560	30.1	24.8
Sundried tomatoes	Sundried tomatoes.		900	790	7.8	6.4
Olives		Olives and olive pastes	1300	1100	9.9	8.1
Vegetable juice	Vegetable juice and vegetable juice cocktail e.g. tomato juice, carrot juice, and tomato and clam juice. Excludes vegetable and fruit juice blends.		175	160	4.5	3.7
	chickpeas and lentils  Baked and refried beans (mashed)  Frozen potatoes and similar products  Dry mashed or scalloped potatoes (as consumed)  Pickled vegetables  Sundried tomatoes  Olives  Vegetable juice	Canned beans, chickpeas and lentils  Baked and refried beans (mashed)  Frozen potatoes and similar products  Dry mashed or scalloped potatoes (as consumed)  Pickled vegetables  Pickled vegetables  Sundried tomatoes  Olives  Vegetable juice  Vegetable juice  Vegetable juice  Denickpeas, lentils. Excludes dry beans and lentils that are cooked or uncooked. Shelf stable baked beans and refried beans (mashed beans). Products may include meat.  Frozen potatoes and similar products patties, green plantain and tropical tubers such as cassava (yuca),  Dehydrated scalloped or mashed potatoes, as consumed.  Shelf stable sour pickled vegetables e.g. cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetable juice cocktail e.g. tomato juice, carrot juice, and tomato and clam juice. Excludes	Canned beans, chickpeas, lentils (7c).  Canned beans, chickpeas, lentils. Excludes kidney beans, chickpeas, lentils. Excludes dry beans chickpeas and lentils that are cooked or uncooked.  Baked and refried beans (mashed)  Frozen potatoes and similar products products  Prozen platian and seasoned French fries, sand similar such as cassava (yuca),  Dry mashed or scalloped potatoes (as consumed)  Pickled vegetables  Pickled vegetables  Shelf stable sour pickled vegetables e.g. cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetables e.g., cucumbers, onions, relish.  Sundried tomatoes  Vegetable juice  Vegetable juice  Vegetable juice and vegetable juice cocktail e.g. tomato juice, carrot juice, and tomato and clam juice. Excludes vegetables vegetables and fruit juice blends.  Frozen and fresh vegetables/fruits  Cooked or raw canned legumes, exclude if they contain meat (e.g. lentils with bacon) (7d)  Frozen potatoes for frying  Mashed potatoes in sachet  Mashed potatoes in sachet  Onions, peppers, cucumbers, sauerkraut. Foods declared as pickled or with the presence of vinegar in the list of ingredients  Olives and olive pastes	Canned beans, chickpeas, lentils (7c).  Canned beans, chickpeas, lentils. Excludes dry beans, chickpeas and lentils and lentils that are cooked or uncooked.  Baked and refried beans (mashed)  Frozen potatoes and similar products  Dry mashed or scalloped potatoes (as consumed)  Pickled  Shelf stable sour pickled vegetables e.g. cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetables e.g., cucumbers, onions, relish.  Sundried tomatoes  Olives  Deny mashed beans (plain and pickled). Excludes dry beans (exclude if they contain meat (e.g. lentils with bacon) (7d)  280  Cooked or raw canned legumes, exclude if they contain meat (e.g. lentils with bacon) (7d)  Prozen potatoes may include meat.  Frozen potatoes for frying  170  Mashed potatoes in sachet  290  Onions, peppers, cucumbers, sauerkraut, and other vegetables e.g., cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetables e.g., cucumbers, onions, relish.  Sundried tomatoes  Olives  Vegetable juice  Vegetable juice cocktail e.g. tomato juice, carrot juice, and tomato and clam juice. Excludes vegetable and fruit juice blends.	Canned beans, chickpeas, lentils (7e).  Canned beans, chickpeas and lentils that are cooked or uncooked.  Baked and refried beans (mashed) include meat.  Frozen potatoes and similar products  Prozen platian and seasoned French fries, sweet potato fries, hash browns, potato patties, green plantain and tropical tubers such as cassava (yuea),  Dry mashed or scalloped potatoes (as consumed)  Pickled  Shelf stable sour pickled vegetables e.g. vegetables  Shelf stable sour pickled vegetables e.g., cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetables e.g., cucumbers, onions, relish.  Sundried  Sundried  Vegetable juice  Vegetable juice  Vegetable juice and vegetable juice cocktail e.g. toric wide if they contain meat (e.g. lentils with bacon) (7d)  190  Cooked or raw canned legumes, exclude if they contain meat (e.g. lentils with bacon) (7d)  280  290  250  Frozen potatoes for frying  170  140  Mashed potatoes for frying  170  140  Mashed potatoes in sachet  290  270  Onions, peppers, cucumbers, sauerkraut, and other vegetables e.g., cucumbers, onions, peppers, sauerkraut. Foods declared as pickled or with the presence of vinegar in the list of ingredients  Sundried  Sundried  Sundried  Vegetable juice and vegetable juice cocktail e.g. tomato juice, carrot juice, and tomato and clam juice. Excludes vegetables and fruit juice blends.	beets (plain and pickled). Excludes kidney beans, chickpeas, lentils (7c).  Canned beans, chickpeas, lentils (7c).  Canned beans, Boiled, whole, canned kidney beans, chickpeas and lentils that are cooked or uncooked.  Baked and Shelf stable baked beans and refried beans (mashed)  Frozen potatoes and similar successed or uncooked.  Frozen potatoes and similar successed or uncooked.  Frozen potatoes and similar successed beans (mashed beans). Products may include meat.  Frozen potatoes and similar successed or uncooked.  Frozen potatoes and similar successed beans (mashed beans). Products may include meat.  Frozen potatoes and similar successed bears (mashed beans). Products patties, green plantain and tropical tubers such as cassava (yuca),  Dry mashed or scalloped potatoes, as consumed.  Pickled Shelf stable sour pickled vegetables e.g. cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf stable sweet pickled vegetables e.g., cucumbers, onions, relish.  Sundried Sundried tomatoes.  Olives Olives and olive pastes 1300 1100 9.9  Vegetable juice Vegetable juice cocktail e.g. tomato juice, carrot juice, and tomato and clam juice. Excludes vegetables and fruit juice blends.

8a	Packaged deli meats – fully cooked	Cooked deli meat, e.g., smoked meat, pastrami, mortadella, bologna, corned beef, ham, sliced chicken and turkey, luncheon meat loaf, roast beef, cooked pepperoni, and cooked back bacon	Mortadella, ham york, pastrami, blood sausage, ham, cooked meat	900	800	6.6	5.7
8b	Packaged dry- cured deli meats – dry cured, fermented, no thermal process	Dry cured, fermented deli meats which have not been thermally processed, e.g., salami and dried pepperoni. Excludes prosciutto (8g).	Cured sausages without heat treatment (raw): Salame, dried pepperoni, cabanossi. Exclude raw or cooked chorizo that are not dried (8c/8d)	1350	1200	3.6	3.5
8c	Sausages - uncooked	Uncooked breakfast and dinner sausages e.g. pork, chicken and turkey. Excludes hot dogs and wieners (8d).	Raw chorizo, raw huachana sausage	600	500	2.5	2.4
8d	Sausages - cooked	Cooked breakfast and dinner sausages e.g., pork, chicken and turkey. Includes salchichon, wieners (hot dogs) and smoked or unsmoked sausages with or without cheese.	Smoked sausages, frankfurt, sausage, Viennese, blood sausages, bologna	840	770	3	2.7
8e	Uncooked bacon – belly	Uncooked belly bacon. Excludes back bacon, bacon substitutes, and precooked shelf stable bacon.	Raw bacon	700	590	1.4	1.2
8f	Burgers, meatballs, meatloaf and breaded meat and poultry	Meat and poultry burgers, meatballs and meatloaf, and breaded meat products e.g. products with cheese, breaded and unbreaded burgers, strips, nuggets/fingers, chicken burgers, chicken balls, schnitzel, and cutlets.	Apanados: Burgers, breaded, milanesas, nuggets, breaded chicken wings	540	500	2	1.7
8g	Ham, canned meat and poultry, and uncooked, pickled, cured and smoked meats that are not deli meats	Picnic and roast ham, cottage rolls, prosciutto, back bacon, peameal bacon and turkey-bacon strips. Also includes uncooked pickled, corned, cured or smoked meats. Includes canned meat and poultry. Excludes canned fish (9a), uncooked belly bacon (8e) and deli meats (8a and 8b).	Serrano hams, Iberian, raw, smoked sirloin, smoked jerky. Exclude raw fresh meat.	915	790	4.1	3.4

8h	Patés and meat spreads	Patés and spreads e.g., creton and liverwurst. Excludes fish patés and spreads.	Ham spread	720	600	2.4	2.1
9. Pro	ocessed fish and so	1					
9a	Canned fish	Canned fish or shellfish packed in water, oil or sauce e.g., salmon, tuna, sardines, mackerel, shrimp, crab, clams, smoked oysters, anchovies, fish salad.	Include snails	320	280	2.2	1.9
9b	Frozen plain	Frozen plain fish and seafood with	*Doesn't have to include sodium	350	300	3.1	2.5
	fish and seafood with added sodium phosphate	added sodium phosphate.	phosphate, cooked shrimp				
9c	Fish and seafood cakes, fingers or burgers, seasoned, and breaded or battered or with sauces	Fish and seafood cakes and burgers, seasoned, with sauce or seasoning, breaded or battered, and stuffed fish.	Fish burgers, breaded prawns, fish milanesas	310	280	1.7	1.5
9d	Smoked, salted, pickled and kippered fish	Smoked fish e.g., smoked salmon, smoked rainbow trout; pickled fished; salted fish, and; kippered fish e.g., kippered herring, dried and salted cod.		540	440	2.6	2.1
10. Sc	y products and n	neat alternatives					
10a	Seasoned tofu and tempeh	Savory, marinated, and seasoned tofu and tempeh. Excludes plain tofu, tofu- based desserts and plain tempeh.		350	320	2	1.7
10b	Meat analogues and other meat alternatives	Frozen and refrigerated meat analogues e.g. veggie patties, burgers, veggie dogs, meatballs, and deli-style slices.	Veggie burgers, albondigas, pure soy protein that served as meat alternatives (textured soy protein),	410	370	2.5	2.2
11. Sc	oups						

	Wet and dry	Canned condensed, ready-to-serve, or	Reconstituted vegetable creams. Soups	260	230	9.2	7.7
	soups (as consumed)	dry cream and broth-based soups, broth, stock and consommé. As consumed. Excludes bouillon (16a).	or broths as consumed, chicken noodle soup, minestrone soup (where noodles are not the main ingredient). Dry soup mixes that will require preparation (calculation required, otherwise it will be excluded)				
			be exercised)				
11b	Noodles in broth (as consumed)	Includes fresh and instant noodles with soup, broth or seasoning e.g. instant oriental noodle soups. Excludes shelf stable pasta with sauce or seasonings (12c)	Dried instant noodle packs that require preparation calculation	330	275	5.2	4.9
12. R	eady-made foods	, convenience foods, and mixed dishes					
12a	Canned chili	Shelf stable vegetarian and meat chili.		260	250	2.5	2.4
12b	Canned stew and meatballs	Shelf stable stew, meatballs, and curries.	Wicked cooked meat that can be consumed with starchy mains (e.g. ID167795),	470	440	3.2	2.7
12c	Pasta, noodles, rice or grains with sauce or seasonings	As consumed. Shelf stable pasta (dry mix, as consumed) and ready-to-eat, noodles, and rice or grain mixes with sauce or seasonings, as consumed e.g.	Ready-to-eat pasta that doesn't need refrigeration	330	300	1.9	1.7
	(as consumed)	macaroni with cheese sauce, noodles in tomato sauce, and teriyaki noodles. Excludes refrigerated or frozen pasta dishes (12h), noodles in broth (11b) and plain dry or cooked pasta without additions (13a), and frozen pasta dishes (12h)					
12d	Pasta, noodles, rice or grains with sauce or seasonings (dry mix, as sold)	Dry mixes, as sold. Shelf stable pasta, noodles, and rice or grain mixes with sauce or seasonings e.g. macaroni with cheese sauce, noodles in tomato sauce, and teriyaki noodles. Excludes noodles in broth (11b) and plain dry or cooked pasta without additions (13a).	Instant flavored or seasoned pasta (dry mixtures), instant flavored rice (dry mixtures)	870	800	2.6	2.5

12e	Stuffing mixes (as consumed)	Shelf stable stuffing mixes, as consumed. Excludes refrigerated stuffing.		470	430	N/A	N/A
12f	Pizza and pizza snacks	Frozen and refrigerated pizza, pizza snacks, calzones.		500	470	1.9	1.8
12g	Sandwiches	Fresh or frozen sandwiches with or without meat. Includes sandwich wraps and burritos.	Sandwiches, triples, ready-to-eat burritos	500	470	1.9	1.8
12h	Refrigerated or frozen appetizers, sides and entrees	Refrigerated or frozen entrées, meal sides, meal centers, frozen pasta mains/sides, and appetizers. Includes empanadas. Excludes pizza and pizza snacks (12f) and sandwiches (12g).	Ready-to-eat preparations, marinated meat (e.g. ID172622), cooked and seasoned/bacon stewed, precooked blood, flavored and seasoned frozen seafood, stuffed ready pasta (e.g. ravioli) and atypical pasta (e.g. potato based gnocchi ID162847)	575	480	1.7	1.5
13. F	resh or dried plai	n pasta and noodles					
13a	Plain pasta and noodles (as consumed or dry, uncooked)	Plain dry or uncooked pasta, as consumed. Excludes pasta with sauce or seasonings (12c) and noodles in broth (11b).	Exclude rice, flour	0	0	0	0
<b>14.</b> G		y bars, and nut butters/spreads					
14a	Granola, cereal and energy bars	Granola bars (plain and coated), energy bars, sweet and salty bars, fruit filled bars, and muffin-type bars. Excludes sweet and salty bars (see 1n), and infant and toddler snack bars.	Cereal bars, exclude snack type bars (chocolate rice bar) (2b)	170	150	0.5	0.4
14b	Nut butters and nut spreads	Nut butters and nut spreads e.g., peanut, almond, cashew, soy, hazelnut cocoa spread. Excludes unsalted nut butters and tahini.		330	300	0.3	0.2
15. F	ats and oils						
15a	Salted butter, margarine, and butter blends	Plain and flavored butter, margarine and butter blends. Excludes unsalted butter and margarine.	Butters and margarines that declare salt in the description or include salt in the list of ingredients, including vegetable shortenings	510	460	0.8	0.7

15b	Mayonnaise	Plain and flavored mayonnaise and mayonnaise-type spreads and dressings. Includes low fat and fat-free versions, and oil-based sandwich spreads.	Mayonnaise, flavored mayonnaise (mayoqueso, mayopalta, aceitunesa), tartar sauce, acevichada sauce, mayonnaise-type vegetable dressing	670	600	2.3	1.9
15c	Salad dressing & vinaigrette	Refrigerated and shelf stable oil and vinegar-based dressings, creamy dressings. Includes dry mix salad dressing, as consumed. Includes low fat and fat-free versions.	Vinaigrette with and without flavorings, creamy dressings need to based on the use (e.g. ranch sauce for dressing vs. for cooking)	800	730	2.3	1.9
16. Sa	auces, dips, gravy	and condiments					
16a	Bouillon cubes and powders (as sold)	Bouillon cubes and powders, as sold.	Soup bouillons, exclude dry soup mix (11a)	18000	16000	68	56
16b	Pasta sauce	Shelf stable, refrigerated, frozen, and dry mix pasta sauces including those that are tomato, cream or cheese-based (e.g., alfredo sauce). As consumed. Includes pizza sauce.	Bologñesa sauce, Neapolitan, four cheeses, alfredo, tuco (with meat)	330	300	4.5	4
16c	Pesto	Shelf stable and refrigerated pesto e.g., basil or sun-dried tomato pesto.	Pesto, Peruvian green sauce	800	640	1.9	1.5
16d	Tomato sauce	Shelf stable plain or flavored tomato sauce. Excludes tomato-based pasta sauces (16b) and tomato paste (7a).	Tomato sauces, with and without additives based on description, tomato purees, tomato sauce with chili peppers	300	240	5.7	4.7
16e	Ketchup and similar tomato- type condiments (as consumed)	Shelf stable condiments e.g., ketchup, tomato-based chili sauce, seafood sauce, BBQ sauce, steak sauce, chutney. Excludes relish (7g), mustard (16f) and mayonnaise (15b).	Spicy BBQ sauce	800	780	7.1	6.8
16f	Mustard	Mustards including yellow, Dijon, honey mustard, spicy brown mustard.		1000	890	10.2	8.6

16g	Spicy sauce	Red, green, ranchera sauces, pepper sauce, chilero, salsa picante, sriracha, chili picante, salsa de ají/rocoto.	Chili sauces (huancaina, uchucuta, ocopa, etc.) ready to eat, rocoto sauce, Tabasco sauce, curry paste (e.g. ID168363,157634), paprika relish. Exclude curry with meat (12b). Sauces to reconstitute	1100	900	21.4	17.7
16h	Gravy, cooking sauces, dips, and salsa (as consumed)	Shelf stable, refrigerated and dry mix gravy, cooking sauces, as consumed e.g., hollandaise, curry, and stir-fry sauces, and salsa. Includes vegetable, legume, and dairy-based dips (i.e., cream cheese and sour cream-based dips). As consumed. Excludes curry paste.	Chili sauces or creams for cooking, chimichurri, Mexican sauce, hummus, English sauce	350	300	3.5	2.8
16i	Sweet oriental sauces	Sweet oriental sauces e.g. plum sauce, cherry sauce, pineapple sauce, and sweet and sour sauce. Excludes salty oriental sauces (16j).	Tamarind sauce	220	180	1.3	1.1
16j	Soya and other salty oriental sauces	Oriental sauces e.g. soya, teriyaki, black bean, fish, hoisin, peanut sauce. Excludes stir-fry sauce (16h), marinades (16k), and sweet oriental sauces (16i).	Sillau, salty oriental sauces, oyster sauces	2900	2400	9.9	8.1
16k	Marinades (as consumed)	Shelf stable and dry marinade mixes. As consumed.	Ready-to-use meat and main course dressings	1800	1500	14.2	11.7
16l	Dry seasoning mixes for rice and side dishes	Dry seasoning mixes for side and main dishes, as sold e.g. chili, stew, fajita, and salad seasoning. Includes popcorn seasoning.	Condiments for preparations. Artificial condiments, tuco tallarin, chopstick, seasoning (special dry aji)	10000	8000	13.1	10.8
16m	Dry seasoning mixes for meat and fish	Dry seasoning for meat, poultry and fish e.g., steak spice.	Specific dry seasonings for meats, breading mixtures (e.g. ID 171795)	10000	8000	27.9	23

Note: Official descriptions are in  $Updated\ PAHO\ Regional\ Sodium\ Reduction\ Targets^6.$ 

Table 2. WHO Sodium Reduction Benchmark Categories with Additional Detailed Descriptions

Main food category	Subcategory	Subcategory description	Additional Notes	Global benchmark (mg / 100 g)
1. Chocolate and sugar confectionery,	1a. Granola and cereal type bars	Granola bars (plain and coated), fruit filled bars and muffin-type bars	include protein bars, rice crispies	No target
energy bars, and sweet toppings and desserts	1b. Nut butters	Nut butters (e.g. peanut, almond, cashew and soy). Excludes unsalted nut butters and tahini.		No target
2. Cakes, sweet biscuits and pastries; other sweet bakery wares; and dry- mixes for	2a. Cookies/sweet biscuits	Shelf-stable, frozen and refrigerated products. Filled and unfilled sweet cookies, biscuits, tea biscuits and dough. Excludes crackers/savoury biscuits (see 3a). Excludes dry-mixes (see 2g).	wafer	265
making such	2b. Cakes and sponges	Shelf-stable, frozen and refrigerated products. Cakes, snack cakes (cupcakes), doughnuts (yeast and cake types), brownies and squares, muffins and pastry dough. Excludes dry-mixes (see 2g).		205
	2c. Pies and pastries	Shelf-stable, frozen and refrigerated products. Pies, fruit crisps, pastries, toaster pastries with fruit or other fillings, Danish pastry, cinnamon rolls and pastry dough. Excludes dry-mixes (see 2g).	puff pastries for savoury pies (e.g. empanadas), exclude dough for pizza crust (11b)	120
	2d. Baked and cooked desserts	Shelf-stable, frozen and refrigerated products. Puddings, custards, crème brûlée, flans and cheesecakes. Includes non-baked cheesecakes. Excludes dry-mixes (see 2g).	Include puddings, flans	100
	2e. Pancakes, waffles and French toast	Shelf-stable, frozen and refrigerated products. Includes crumpets. Excludes dry-mixes (see 2g).		330

	2f. Scones and soda bread	Shelf-stable, frozen and refrigerated products. Scones (including US biscuits), soda bread and dough.		475
	2g. Dry-mixes for making cakes, sweet biscuits, pastries and other sweet bakery wares	Dry-mixes for cookies/sweet biscuits, cakes, sponges, pies, pastries, baked and cooked desserts, pancakes, waffles, French toast, scones and soda bread. Excludes ready-made products (see 2a-2f).		No target
3. Savoury snacks	3a. Crackers/savoury biscuits	Plain (i.e. flavoured only with salt) or flavoured crackers, sandwich crackers, puffed cakes (e.g. cheese crackers, soda crackers and rice cakes). Includes dry breads such as Melba toast, rusks, breadsticks, pita or baguette chips, and other crisp breads. Excludes unsalted products.		600
	3b. Nuts, seeds and kernels	Popcorn, nuts, peanuts and seeds (seasoned with salt or flavour). Excludes unsalted products.		280
	3c. Potato, vegetable and grain chips	Chips made of potato, vegetables and grains (e.g. corn, wheat, multigrain and rice). Includes all flavours (including salt and vinegar flavours). Includes both reformed chips/crisps and sliced chips.	Lentil chips, quinoa trips	500
	3d. Extruded snacks	Sheeted, reformed, puffed or pelleted snacks made from starch-rich materials (e.g. corn, maize, wheat, rice or potato flour) or legume flours. Includes all flavours (including salt and vinegar flavours). Excludes chips (see 3c) and pretzels (3e).	Lentil chips, quinoa trips	520

	3e. Pretzels	Salted hard pretzels. Includes sweet and savoury flavoured, filled and unfilled pretzel snacks (e.g. chocolate covered pretzels and pretzels filled with cheese).	Sesame stick, salted stick snacks (e.g. crissino)	760
4. Beverages			Cocoa powders that can be used for hot chocolate	
5. Edible ices				
6. Breakfast cereals	6a. Minimally processed breakfast cereals (includes all types – prepared, ready-made and dry-mixes)	Prepared, ready-made or dry-mix minimally processed cereals, such as steel-cut, rolled or instant oats for preparing oatmeal, and muesli (i.e. made with oats and a mixture of unsalted nuts and seeds and/or dried fruit) with no added sodium, fat or sugars (or non-sugar sweeteners). May or may not require cooking. Includes porridge mix and hot instant cereals. Excludes highly processed cereals including granola (see 6b).		100
	6b. Highly processed breakfast cereals	Highly processed, ready-to-eat breakfast cereals including shredded, flaked, puffed or extruded cereals, and cereals with added nutrients such as sodium, fat, sugars (or non-sugar sweeteners), fibre or various vitamins and minerals. Includes granola.		280
			Includes all dairy beverage products, condensed milk, evaporated milk,	

8. Cheese	8a. Fresh unripened cheese	Unripened cheese (e.g. cream cheese, mozzarella, ricotta and cottage cheese)		190
	8b. Soft to medium ripened cheese	All soft to medium firm textured ripened cheese, often with a relatively short ripening period (e.g. Emmental, Colby, Monterey Jack, young Gouda and mild Cheddar).	Camembert cheese	520
	8c. Semi-hard ripened cheese	All semi-hard to hard-textured ripened cheese, often with a relatively long ripening period (e.g. matured Gouda, matured Cheddar, Gruyere and Provolone).	fontal cheese,	625
	8d. Extra-hard ripened cheese	All extra-hard-textured ripened cheese (e.g. Parmesan, Romano and Pecorino).		No target
	8e. Mould ripened cheese, white and red	All white and red mould cheese such as white and red surface-mould cheese (e.g. Brie and Munster).		510
	8f. Mould ripened cheese, blue	All blue mould cheese (e.g. Roquefort and Gorgonzola).		No target
	8g. Processed cheese	All processed and melt cheese, cheese analogues (including plant-based), dairy-free cheese and spreads.		720
	8h. Brine-stored cheese	Cheese stored in brine (e.g. feta and halloumi).		No target
9. Ready-made and convenience foods and composite dishes	9a. Canned foods	Shelf-stable vegetarian and meat chilli, stew, meatballs and curries; and baked beans and refried beans. Excludes canned vegetables and legumes (see 16a).	Canned beans with pork/bacon	225

9bi. Pasta, noodles, and rice or grains with sauce or seasoned (prepared)	Shelf-stable, frozen and refrigerated products. Ready-to- serve pasta, noodles, and rice or grain mixes with sauce or seasonings (e.g. macaroni with cheese sauce, noodles in tomato sauce and teriyaki noodles).		230
9bii. Pasta, noodles, and rice or grains with sauce or seasoned (dry- mix, concentrated)	Dry-mixes for shelf-stable pasta, noodles, and rice or grain mixes with sauce or seasonings sold in concentrated form (e.g. macaroni with cheese sauce, noodles in tomato sauce and teriyaki noodles). Includes instant noodle with soup or seasonings.		770
9c. Pizza and pizza snacks	Frozen and refrigerated pizza, pizza snacks and calzones. Excludes sandwiches and wraps (see 9d)		450
9d. Sandwiches and wraps	Frozen and refrigerated sandwiches, wraps, burritos, tacos, enchiladas, hamburgers and hot dogs.		430
9e. Prepared salads	Frozen and refrigerated prepared salads (e.g. potato salad, coleslaw, pasta salad, vegetable salad, bean salad, couscous and rice salad)		390
9f. Ready-to-eat meals composed of a combination of carbohydrate and either vegetable or meat, or all three combined	Frozen and refrigerated dinner entrées, meal sides, meal centres and appetizers. Excludes all other items listed in the main category 9.		250
9gi. Soups (ready-to- serve, canned and refrigerated soups)	Canned and refrigerated, ready-toserve broth and broth-based soup. Excludes ready-made noodles with sauce (see 9bi), dry soups (9gii), and bouillon and soup stock (not concentrated) (see 18ai).	chicken noodle soup	235

	9gii. Soups (dry soup only) (concentrated)	Dried broth and broth-based soup (concentrated). Excludes instant noodles with soup or seasonings (see 9bii), ready-to-serve soups (9gi), and bouillon and soup stock (concentrated) (see 18aii).		1200
10. Butter and other fats and oils	10a. Salted butter, butter blends, margarine and oil- based spreads	Flavoured butter, butter blends and margarine. Includes vegetable oil spreads such as olive oil spreads. Excludes unsalted butter		400
11. Bread, bread products and crisp breads	11a. Sweet and raisin breads	All types of sweetened bread (e.g. brioche, sweet buns, and raisin breads/toast – i.e. breads with dried fruit and/or nut inclusions). Includes refrigerated and frozen dough.	panettone	310
	11b. Leavened bread	All types of yeast-leavened breads, including sourdough breads. Includes breads made with all types of cereal flours (e.g. white or whole grain wheat, spelt and rye). Includes all types of shapes and baking traditions (e.g. pan baked, hearth baked, large loafs, baguettes, rolls and buns). Includes all types of artisanal, pre-packaged sliced breads, par-baked bread and rolls, bagels, English muffins, pizza crusts, and diet or low-calorie breads. Includes breads with and without additions (e.g. herbs, nuts, olives, onion and cheese). Also includes refrigerated and frozen dough. Excludes dough for cookies (see 2a), cakes and sponges (see 2b), pastries (see 2c) and scones (see 2f). Excludes flatbreads that are leavened such as naan (see 11c)	pie crust	330

	11c. Flatbreads	All types of leavened and nonleavened flat breads. Fresh baked, refrigerated and shelf-stable plain (i.e. flavoured only with salt) or flavoured tortillas, wraps, pita, Greek flatbreads or naan. Includes refrigerated and frozen dough. Excludes pancakes (see 2e)	ciabatta	320
2. Fresh or ried pasta, oodles, rice and rains 3. Fresh and rozen meat, oultry, game,				
poultry, game, fish and similar 14. Processed meat, poultry, game, fish and similar	14a. Canned fish	Canned tuna, canned salmon, water and oil packed fish, sauce packed fish, fish/seafood salad and shellfish (e.g. sardines, mackerel, shrimp, crab, clams and smoked oysters). Includes retort packed products. Excludes canned anchovies (see 14c)	tuna pate, include snails	360
	14b. Processed fish and seafood products, raw	Unprepared fish and seafood products, cakes and burgers; and seasoned (with sauce or seasoning), breaded, battered and stuffed fish. Includes restructured, simulated or imitation seafoods such as surimi. Also includes fish and seafood-based mousse, spread and dips.	fish ceviche	270
	14c. Processed fish and seafood products, nonheat-treated	Fish and seafood products with nonheat preservation methods, such as brining, fermenting and air drying (e.g. smoked fish, kippered fish, salmon jerky, anchovies and dried fish).		800

	14d. Raw meat products and preparations	Unprepared meat products and burgers, and fresh sausages. Includes marinated, flavoured, moisture enhanced and breaded meat products.	Chicken nuggest, chicken fingers, breaded wings, chicken fillet with sauces, seasoned pork cuts, marinated whole chicken, exclude raw meat with no process	230
	14ei. Whole muscle meat products, heat treated (frozen and canned products)	Frozen and canned whole muscle (e.g. beef, lamb, chicken and turkey).		270
	14eii. Whole muscle meat products, heat treated (refrigerated products)	Refrigerated whole muscle (e.g. beef, lamb, chicken and turkey).	Cooked shrimp (E.g. ID164846), cooked chicken	600
	14f. Whole muscle meat products, non-heat preservation	Air-dried, cured, entire meat pieces (e.g. Parma and Serrano ham). Brined meat products (e.g. pastrami and bacon).		950
	14g. Comminuted meat products, heat treated (cooked)	Cooked sausages (including hotdogs), cooked meatloaf balls, corned beef, luncheon meats and pâté. Includes canned sausages and luncheon meats.	bologna, chicken ham, meat spread	540
	14h. Comminuted meat products, non-heat preservation	Air-dried, cured and/or fermented sausages (e.g. salami, jerky and biltong).	pepperoni	830
15. Fresh and frozen fruit, vegetables and legumes				

16. Processed fruit, vegetables and legumes	16a. Canned vegetables and legumes	Canned vegetables and legumes (e.g. potatoes, tomatoes, corn, peas, green beans, mushrooms, mixed vegetables, beets [plain and pickled], kidney beans, chickpeas, lentils and bean salads), tomato puree.		50
	16b. Pickled vegetables	Shelf-stable sour pickled vegetables (e.g. cucumbers, onions, peppers, sauerkraut and other vegetables) and shelf-stable sweet pickled vegetables (e.g. cucumbers, onions, relish and other vegetables).		550
	16c. Olives and sundried tomatoes	Shelf-stable unstuffed and stuffed olives, tapenade and sundried tomatoes.		780
	16d. Vegetable juice and cocktail	Vegetable juice and vegetable juice cocktail (e.g. tomato juice, carrot juice, and tomato and clam juice). Excludes vegetable and fruit juice blends.		200
	16e. Frozen vegetables and legumes	Frozen vegetables and legumes in sauce and/or seasoning. Excludes frozen French fries (see 16f).		180
	16f. Frozen potatoes and other potato products (ready-to-eat)	Plain (i.e. flavoured only with salt) and seasoned French fries/chips, sweet potato fries, hash browns and potato patties.	Mashed potatoes	260
	16g. Battered or breaded vegetables	Fried or baked vegetables (e.g. onion rings, fried jalapeños and fried green beans).	fried plantain	510
17. Plant-based food/ meat analogues	17a. Tofu and tempeh	Savoury, marinated and seasoned tofu and tempeh. Excludes plain tofu, tofubased desserts and plain tempeh.		280

	17b. Meat analogues	Frozen and refrigerated meat analogues (e.g. veggie patties, burgers, veggie dogs, meatballs and deli-style slices). Excludes dairy-free cheese (see 8g).		250
18. Sauces, dips and dressings	18ai. Bouillon and soup stock (not concentrated)	Liquid broth and soup stock. Includes gravy stock. Excludes soups (ready-toserve, canned and refrigerated soups) (see 9gi).		350
	18aii. Bouillon and soup stock (concentrated)	Bouillon cubes and soup stock powders. Includes gravy stock. Excludes concentrated, dry soups (see 9gii).	Dry seasoning mixes, breader with salt and seasoning	15000
	18b. Cooking sauces including pasta sauces and tomato sauces (not concentrated)	All cooking sauces (e.g. pasta sauce, curry and Mexican). These are major characterizing components of a meal and are designed to be added to foods during preparation, rather than at the table. Also includes gravies and finishing sauce products which are designed to be added to food upon serving or as food finishes cooking. Products in this category do not require reconstitution or the addition of liquids. Excludes condiments including pesto (see 18e), soy sauce and fish sauce (see 18f), other Asianstyle cooking sauces (see 18g), and marinades and thick pastes (see 18h).	buffalo wing sauce,	330

18c. Dips and dipping sauces	All dips (e.g. salsa, chutney and guacamole, bean-based dips such as hummus, and sweet sauces such as plum sauce, cherry sauce and pineapple sauce). Excludes cream- and cheese-based dips (see 18d) and fish and seafood-based mousse, spread and dips (see 14b).	jams	360
18d. Emulsion-based dips, sauces and dressings	Cream or cheese dips and sauces, standardized salad dressing (including mayonnaise-based dressing, refrigerated and shelf-stable oil and vinegar-based dressings, and creamy dressings), and mayonnaise. Includes mayo-type spreads. Includes low-fat and fatfree versions.	tartar sauce	500
18e. Condiments	Tomato ketchup, brown sauce (e.g. BBQ sauce, Worcestershire sauce, steak sauce and curry-flavoured sauces), chilli sauce including Sriracha chilli sauce, sweet chilli sauce and mustard. Also includes pesto.		650
18f. Soy sauce and fish sauce	Soy sauce, fish sauce and other fermented sauces.		4840
18g. Other Asian-style sauces	Asian-style sauces and condiments (e.g. teriyaki, black bean, hoisin, stirfry, duck and oyster sauces). Excludes sweet sauces (see 18c) and chilli sauce including Sriracha chilli sauce and sweet chilli sauce (see 18e) and soy sauce and fish sauce (see 18f).	Tamarine sauce	680
18h. Marinades and thick pastes	Shelf-stable marinades, and thick pastes such as curry pastes (e.g. Thai and Indian).		1425

Note: Official descriptions are in WHO global sodium benchmarks for different food categories<sup>7</sup>.

## Appendix B – Tables of results, by food category, overall and by country

## **Table of Contents**

ppendix B — Table of results, by food category, overall and by country	1
bjective 1	3
Table 3.1.1 Distribution of sodium content per 100g/ml of packaged foods per PAHO food category at the regional level and by country	3
Table 3.1.2 Distribution of sodium content per kcal of packaged foods, by PAHO category at the regional level and by country	16
Table 3.1.3 Distribution of sodium content per 100g/ml of packaged foods by WHO global sodium benchmark categories at the regional level and by country	29
.2 Objective 2	45
Table 3.2.1 Proportion of products meeting the 2022 PAHO Sodium Targets (mg per 100g/mL), at the regional and country level (2022 d collection)	
Table 3.2.2 Proportion of products meeting the 2022 PAHO Sodium Targets (mg/100kcal), at the regional and country level (2022 data collection)	49
Table 3.2.3. Proportion of products meeting the WHO Sodium Targets (mg per 100g/mL), at the regional and country level (2022 data collection)	54
.3 Objective 3	62
Table 3.3.1 Changes in the sodium content per 100 g/ml of packaged foods in PAHO countries between 2015-2016, 2017-2018 and in 20	
Table.3.3.2 Number and percentage of products meeting 2015 PAHO regional targets in PAHO countries between 2015-2016, 2017-2018 and in 2022.	
.4 Objective 4	79

Fable 3.4.1 Number and proportion of products with trans fat data; Distribution of trans fat content per 100g/ml of packaged foods per	
WHO food category at the regional level and by country	)

## Objective 1

Table 3.1.1 Distribution of sodium content per 100g/ml of packaged foods per PAHO food category at the regional level and by country

PAHO Categories	Country	Products with sodium data		n (mg per g/ml)	Percentiles (mg per 100g/ml)					
		n	Mean	SD	Min	25th	50 <sup>th</sup>	75 <sup>th</sup>	Max	
1. Bread, bread products, and	Regional	544	487	416	0	333	440	600	5300	
crisp breads	Argentina	226	476	288	0	365	457	608	2902	
	Costa Rica	187	553	616	0	294	475	662	5300	
	Panama	44	527	154	240	444	500	592	1040	
	Peru	87	354	113	40	311	365	396	676	
<ul><li>a) Pantry and hearth</li></ul>	Regional	248	397	172	0	346	413	481	1040	
bread, rolls and buns	Argentina	102	439	139	66	388	435	500	1030	
	Costa Rica	84	322	211	0	119	367	464	720	
	Panama	23	511	156	240	424	501	562	1040	
	Peru	39	382	62	289	350	383	396	676	
b) Tortillas (wheat),	Regional	74	539	258	13	365	526	699	1120	
wraps, naan, roti	Argentina	6	530	102	454	481	496	519	732	
	Costa Rica	42	631	266	13	525	653	784	1120	
	Panama	12	540	186	282	430	502	630	875	
	Peru	14	269	106	120	175	286	365	385	
c) Bread with additions	Regional	29	737	282	310	549	680	914	1200	
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Costa Rica	19	864	258	310	680	880	1120	1200	
	Panama	4	528	62	459	490	525	563	603	
	Peru	6	471	144	333	345	449	601	634	
d) Other bread products	Regional	193	546	624	0	268	484	648	5300	
	Argentina	118	506	375	0	260	521	698	2902	
	Costa Rica	42	796	1144	0	337	513	607	5300	
	Panama	5	573	133	469	478	490	666	760	
	Peru	28	333	132	40	230	341	400	624	
2. Cakes, biscuits, pastries and	Regional	1501	333	250	0	160	273	417	2110	
sweet breads	Argentina	626	316	254	0	129	251	430	2110	

		Costa Rica	511	353	255	0	179	280	443	1214
		Panama	99	415	313	34	201	354	537	1667
		Peru	265	303	190	0	179	267	367	1063
a)	Savory biscuits and	Regional	273	605	297	0	447	650	803	2110
	crackers	Argentina	144	606	311	0	485	647	803	2110
		Costa Rica	64	682	272	109	505	745	875	1167
		Panama	9	668	133	403	625	708	733	837
		Peru	56	505	282	0	349	513	754	1063
b)	Cookies and sweet	Regional	855	237	144	0	137	221	317	967
	biscuits	Argentina	342	210	151	0	110	176	290	967
		Costa Rica	294	243	132	0	152	234	319	775
		Panama	64	331	202	34	198	294	414	962
		Peru	155	247	97	0	175	250	321	444
c)	Pastries, squares, and	Regional	215	372	286	0	187	297	469	1667
	quick/sweet breads	Argentina	80	279	126	23	205	268	343	660
		Costa Rica	85	455	309	0	236	388	536	1214
		Panama	22	600	481	59	217	584	895	1667
		Peru	28	205	91	107	135	173	235	416
d)	Cakes	Regional	158	328	203	6	181	304	430	1116
		Argentina	60	279	152	22	141	269	410	570
		Costa Rica	68	387	247	42	191	331	498	1116
		Panama	4	178	122	100	102	126	202	358
		Peru	26	310	139	6	214	304	359	612
3. Corn	derivatives	Regional	58	476	447	0	103	349	834	1600
		Argentina	N/A	N/A						
		Costa Rica	43	513	487	0	75	396	847	1600
		Panama	8	348	336	15	115	272	479	983
		Peru	7	399	270	63	343	344	368	960
a)	Tortillas (corn)	Regional	15	99	103	20	40	103	112	436
		Argentina	N/A	N/A						
		Costa Rica	13	93	109	20	40	43	104	436
		Panama	2	141	1	140	141	141	141	141
		Peru	N/A	N/A						
	Biscuits (bizcochos)	Regional	27	783	435	48	390	840	1045	1600

		Argentina	N/A	N/A						
		Costa Rica	20	918	404	48	755	853	1172	1600
		Panama	N/A	N/A						
		Peru	7	399	270	63	343	344	368	960
c)	Tostadas	Regional	9	382	297	40	250	272	556	983
		Argentina	N/A	N/A						
		Costa Rica	8	307	207	40	217	261	375	656
		Panama	1	983	N/A	983	983	983	983	983
		Peru	N/A	N/A						
d)	Arepas	Regional	7	222	261	0	23	40	414	640
	-	Argentina	N/A	N/A						
		Costa Rica	2	15	21	0	8	15	23	30
		Panama	5	304	269	15	40	402	425	640
		Peru	N/A	N/A						
4. Brea	kfast cereal	Regional	472	257	202	0	79	260	361	1307
		Argentina	87	232	177	0	77	240	323	810
		Costa Rica	195	285	209	0	113	275	375	1307
		Panama	48	342	215	0	220	350	408	1133
		Peru	142	202	187	0	18	183	347	775
5. Savo	ory snacks	Regional	730	531	362	0	280	467	733	2491
		Argentina	143	602	250	0	429	604	780	1292
		Costa Rica	336	516	390	0	202	445	720	2467
		Panama	92	646	467	27	358	532	842	2491
		Peru	159	434	276	19	266	359	577	1434
a)	Nuts, seeds, and	Regional	201	380	274	6	188	325	500	1960
	kernels, seasoned and	Argentina	36	567	204	145	392	566	762	856
	candied	Costa Rica	95	334	300	6	145	268	404	1960
		Panama	26	297	173	27	164	290	396	833
		Peru	44	376	251	19	240	320	394	1090
b)	Chips, popcorn, and/or	Regional	398	577	293	0	383	567	760	1900
	extruded snacks	Argentina	101	613	262	0	512	604	772	1292
		Costa Rica	172	555	306	0	390	548	720	1900
		Panama	48	674	294	67	453	607	908	1467
		Peru	77	516	287	111	339	393	640	1434

c)	Pretzels and snack	Regional	63	756	440	148	387	720	982	2200
	mixes	Argentina	3	701	351	296	599	903	903	903
		Costa Rica	38	854	449	161	528	775	1074	2200
		Panama	4	1163	432	667	970	1136	1329	1714
		Peru	18	469	269	148	266	369	684	1107
d)	Other savory snacks	Regional	68	503	617	0	123	213	636	2491
		Argentina	3	518	328	307	328	350	623	896
		Costa Rica	31	440	611	0	89	160	440	2467
		Panama	14	1052	781	33	447	765	1560	2491
		Peru	20	214	95	67	145	203	299	377
. Che	ese	Regional	645	692	478	0	403	640	893	7143
		Argentina	256	642	425	0	346	577	877	3300
		Costa Rica	213	720	583	0	506	643	893	7143
		Panama	68	898	423	32	634	780	1253	1800
		Peru	108	629	348	10	398	608	800	1800
a)	Fresh cheese (i.e., fresh	Regional	116	547	423	0	290	500	684	3300
	mozzarella and others)	Argentina	62	566	504	0	240	508	700	3300
		Costa Rica	30	486	324	23	221	463	639	1321
		Panama	3	1020	261	732	911	1089	1165	1240
		Peru	21	510	227	10	380	480	670	865
b)	Soft cheese (i.e.,	Regional	113	428	700	0	157	340	480	7143
	unripened goat cheese,	Argentina	59	384	354	0	150	277	455	1500
	cream cheese)	Costa Rica	23	660	1423	30	271	429	476	7143
		Panama	11	389	229	32	304	333	442	786
		Peru	20	312	215	44	53	366	480	760
c)	Semi-hard cheese (e.g.,	Regional	234	676	324	0	520	643	783	2000
	mozzarella, cheddar	Argentina	64	627	312	80	443	537	785	1800
	and others)	Costa Rica	97	676	327	0	590	643	717	2000
		Panama	27	812	356	182	622	679	853	1667
		Peru	46	665	305	120	520	636	796	1800
d)	Hard cheese, grated	Regional	98	952	379	0	688	896	1140	2190
	and ungrated	Argentina	52	953	325	217	820	928	1110	2190
		Costa Rica	29	906	465	0	607	750	1000	1800
		Panama	6	1353	379	893	1019	1450	1600	1800

		Peru	11	850	251	550	666	840	945	1317
e)	Processed cheese	Regional	84	991	328	314	722	964	1237	1763
		Argentina	19	886	274	427	703	847	1108	1440
		Costa Rica	34	933	339	314	617	917	1206	1524
		Panama	21	1126	307	628	950	1070	1333	1669
		Peru	10	1104	346	747	880	960	1275	1763
7. Prod	essed vegetables, beans,	Regional	728	581	646	0	200	333	755	4400
and leg	gumes	Argentina	151	677	875	0	73	240	1148	2885
		Costa Rica	390	562	551	0	240	351	714	3500
		Panama	109	521	657	0	232	280	460	4400
		Peru	78	577	536	4	200	360	929	2300
a)	Tomato paste with	Regional	90	442	375	0	285	388	508	3200
	additions	Argentina	2	3	5	0	2	3	5	7
		Costa Rica	78	467	391	0	300	396	549	3200
		Panama	6	384	167	61	374	452	477	508
		Peru	4	247	76	200	200	214	261	360
b)	Canned vegetables	Regional	225	241	202	0	135	240	280	1646
		Argentina	74	190	160	4	43	185	250	920
		Costa Rica	85	274	251	0	175	242	300	1646
		Panama	38	243	58	56	232	246	255	444
		Peru	28	276	242	4	127	220	313	930
c)	Canned beans,	Regional	77	287	200	5	181	279	351	1078
	chickpeas and lentils	Argentina	10	138	82	12	101	149	180	291
		Costa Rica	44	339	229	5	223	333	369	1078
		Panama	17	285	120	29	224	315	340	489
		Peru	6	158	96	55	99	127	211	310
d)	Baked and refried	Regional	26	395	81	270	345	395	455	531
	beans (mashed)	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	20	400	79	270	345	422	460	531
		Panama	6	377	92	281	313	362	415	530
		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
e)	Frozen potatoes and	Regional	34	126	171	10	21	49	156	729
	similar products	Argentina	11	136	152	19	52	64	131	432
		Costa Rica	7	102	122	15	28	40	138	329

	Panama	11	177	236	15	18	40	330	729
	Peru	5	25	16	10	16	25	25	52
f) Dry mashed or	Regional	29	650	821	0	37	131	1643	2143
scalloped potato	<b>es (as</b> Argentina	9	74	99	14	29	32	44	320
consumed)	Costa Rica	15	1059	887	0	205	1565	1798	2143
	Panama	4	489	834	37	68	89	510	1739
	Peru	1	360	N/A	360	360	360	360	360
g) Pickled vegetable	es Regional	109	863	779	0	360	607	1033	4400
	Argentina	10	1353	730	326	1009	1162	1837	2593
	Costa Rica	70	739	680	0	313	534	943	3500
	Panama	11	1247	1371	0	336	467	2000	4400
	Peru	18	842	541	337	520	660	950	2200
h) Sundried tomato	es Regional	4	897	329	438	822	967	1042	1218
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	4	897	329	438	822	967	1042	1218
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
i) Olives	Regional	117	1486	595	0	1120	1400	1700	2885
	Argentina	35	2034	564	1065	1490	2045	2460	2885
	Costa Rica	51	1235	444	0	950	1286	1586	2200
	Panama	15	1333	501	395	1067	1400	1550	2600
	Peru	16	1232	347	796	1023	1160	1360	2300
j) Vegetable juice	Regional	17	119	177	0	6	15	186	505
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	16	94	151	0	6	14	109	505
	Panama	1	505	N/A	505	505	505	505	505
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Processed meat and p	oultry Regional	566	930	679	5	565	799	1076	5460
	Argentina	178	962	747	46	593	753	1036	5460
	Costa Rica	184	1071	759	5	722	908	1225	4800
	Panama	91	790	394	96	626	769	969	2495
	Peru	113	763	546	198	335	600	900	2640
a) Packaged deli me	eats – Regional	126	959	518	198	757	900	1107	4700
fully cooked	Argentina	41	845	219	310	740	885	950	1280

		Costa Rica	56	1105	697	345	785	980	1160	4700
		Panama	10	984	196	675	831	982	1149	1263
		Peru	19	760	342	198	397	790	900	1468
b)	Packaged dry-cured	Regional	61	1668	747	217	1400	1536	1740	4570
-	deli meats	Argentina	21	1762	899	365	1350	1490	1780	4295
		Costa Rica	30	1591	753	217	1400	1536	1706	4570
		Panama	1	1357	N/A	1357	1357	1357	1357	1357
		Peru	9	1738	212	1440	1655	1695	1800	2200
c)	Sausages - uncooked	Regional	39	913	371	314	723	866	1035	2495
	-	Argentina	6	885	355	580	711	789	866	1574
		Costa Rica	11	951	206	695	842	895	976	1440
		Panama	17	942	455	352	730	758	1100	2495
		Peru	5	768	431	314	366	790	1069	1300
d)	Sausages - cooked	Regional	69	913	289	324	756	875	1053	2000
		Argentina	16	901	260	440	694	885	1083	1468
		Costa Rica	24	938	175	727	793	900	1043	138
		Panama	13	895	385	378	688	850	975	2000
		Peru	16	904	378	324	796	804	1234	1500
e)	Uncooked bacon – belly	Regional	5	1704	603	1000	1471	1500	1947	260
		Argentina	1	2600	N/A	2600	2600	2600	2600	2600
		Costa Rica	3	1639	267	1471	1485	1500	1724	1947
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Peru	1	1000	N/A	1000	1000	1000	1000	1000
f)	Burgers, meatballs,	Regional	180	505	232	38	330	517	669	1100
	meatloaf and breaded	Argentina	66	586	164	46	472	605	687	850
	meat and poultry	Costa Rica	43	543	292	38	358	611	781	969
		Panama	21	412	311	96	141	338	621	1100
		Peru	50	404	157	222	292	333	515	741
g)	Ham, canned meat and	Regional	63	1411	1177	5	722	929	2019	5460
	poultry, and uncooked,	Argentina	14	2067	1586	274	626	2294	3033	5460
	pickled, cured and	Costa Rica	14	1717	1504	5	929	1185	2232	4800
	smoked meats that are	Panama	26	843	299	400	723	811	934	207
	not deli meats	Peru	9	1556	841	480	547	2000	2000	2640
h)	Patés and meat spreads	Regional	23	726	184	260	654	750	838	990

		Argentina	13	734	226	260	750	750	850	990
		Costa Rica	3	678	44	640	654	668	697	727
		Panama	3	828	112	733	767	800	876	952
		Peru	4	660	124	560	590	620	690	840
9. Prod	cessed fish and seafood	Regional	368	451	639	0	255	350	463	5938
		Argentina	54	541	1085	0	205	303	457	5913
		Costa Rica	176	475	680	22	272	346	491	5938
		Panama	72	366	178	10	271	360	446	985
		Peru	66	403	227	70	269	350	450	1152
a)	Canned fish	Regional	300	441	686	27	261	350	442	5938
		Argentina	36	648	1301	101	255	322	450	5913
		Costa Rica	159	456	698	27	257	346	480	5938
		Panama	62	349	118	109	283	360	445	582
		Peru	43	343	149	70	269	350	390	740
b)	Frozen plain fish and	Regional	24	364	342	0	55	345	540	1204
	seafood with added	Argentina	11	207	259	0	46	55	320	810
	sodium phosphate	Costa Rica	3	547	602	22	218	413	809	1204
		Panama	8	468	332	56	281	388	722	910
		Peru	2	540	0	540	540	540	540	540
c)	Fish and seafood cakes,	Regional	28	372	225	10	241	332	472	955
	fingers or burgers,	Argentina	4	244	140	87	168	235	310	419
	seasoned, and breaded	Costa Rica	9	506	269	75	336	520	657	955
	or battered or with	Panama	1	10	N/A	10	10	10	10	10
	sauces	Peru	14	349	167	128	250	324	410	801
d)	Smoked, salted, pickled	Regional	16	901	349	345	732	919	1038	1786
	and kippered fish	Argentina	3	884	200	653	827	1000	1000	1000
		Costa Rica	5	982	542	345	758	824	1200	1786
		Panama	1	985	N/A	985	985	985	985	985
		Peru	7	838	289	379	673	887	1051	1152
10. So	y products and meat	Regional	158	422	199	0	341	390	498	1375
alterna	atives	Argentina	77	382	120	0	328	376	433	784
		Costa Rica	50	547	236	5	400	539	678	1375
		Panama	5	204	276	6	12	24	360	620
		Peru	26	339	177	15	301	360	386	680

a)	Seasoned tofu and	Regional	10	245	295	5	15	34	547	673
	tempeh	Argentina	1	602	N/A	603	603	603	603	603
		Costa Rica	6	301	308	5	31	266	547	673
		Panama	3	14	9	6	9	12	18	24
		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b)	Meat analogues and	Regional	148	433	187	0	345	393	498	1375
	other meat alternatives	Argentina	76	379	118	0	328	376	431	784
		Costa Rica	44	580	207	310	408	572	686	1375
		Panama	2	490	184	360	425	490	555	620
		Peru	26	339	177	15	301	360	386	680
l1. Sou	ıps	Regional	230	1678	2152	14	299	473	2238	13600
		Argentina	45	319	138	32	259	285	341	702
		Costa Rica	83	2152	2478	14	270	725	4228	13600
		Panama	48	3204	2361	318	987	2480	5470	7940
		Peru	54	727	776	97	328	405	953	4538
a)	Wet and dry soups (as	Regional	130	2295	2616	14	252	658	4904	13600
	consumed)	Argentina	18	238	74	32	208	252	280	336
		Costa Rica	68	2278	2674	14	221	721	4593	13600
		Panama	29	4500	2117	543	3609	5258	5636	7940
		Peru	15	576	1098	170	265	296	344	4538
b)	Noodles in broth (as	Regional	100	877	805	97	327	461	1215	3250
	consumed)	Argentina	27	373	145	98	279	335	375	702
		Costa Rica	15	1578	1156	298	327	1186	2633	3250
		Panama	19	1226	867	318	338	1215	1944	3062
		Peru	39	785	619	97	355	473	1160	3062
<b>12.</b> Rea	ady-made foods,	Regional	349	507	460	0	287	400	586	5470
conver	ience foods, and mixed	Argentina	144	412	174	31	286	397	519	973
dishes		Costa Rica	116	547	400	0	241	469	755	1900
		Panama	24	713	1062	0	323	443	807	5470
		Peru	65	570	589	85	317	380	530	3000
b)	Canned stew and	Regional	4	539	405	300	326	356	569	1145
	meatballs	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

		Peru	4	539	405	300	326	356	569	1145
c)	Pasta, noodles, rice or	Regional	15	467	273	148	297	340	670	1040
	grains with sauce or	Argentina	2	288	12	280	284	288	293	297
	seasonings (as	Costa Rica	6	499	282	326	343	354	523	1040
	consumed)	Panama	3	671	299	326	577	829	843	857
		Peru	4	356	276	148	202	259	414	760
d)	Pasta, noodles, rice or	Regional	76	863	807	0	306	744	1088	5470
	grains with sauce or	Argentina	24	302	66	162	272	288	334	460
	seasonings (dry mix, as	Costa Rica	37	947	397	0	731	920	1120	1900
	sold)	Panama	3	2405	2656	800	872	944	3207	5470
		Peru	12	1340	1014	158	658	1166	1695	3000
f)	Pizza and pizza snacks	Regional	41	471	244	89	312	475	594	990
		Argentina	22	463	285	89	158	514	652	973
		Costa Rica	13	505	228	203	349	487	635	990
		Panama	3	476	47	423	458	494	503	512
		Peru	3	381	18	364	372	380	390	399
g)	Sandwiches	Regional	15	342	225	37	155	388	488	698
		Argentina	3	644	51	598	617	637	667	698
		Costa Rica	12	267	181	37	65	267	424	517
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
h)	Refrigerated or frozen	Regional	198	392	194	0	272	384	505	1200
	appetizers, sides and	Argentina	93	423	147	31	313	411	510	765
	entrees	Costa Rica	48	325	211	8	152	308	491	753
		Panama	15	430	350	0	248	372	555	1200
-		Peru	42	387	180	85	311	374	406	1136
13. Fre	sh or dried plain pasta	Regional	540	18	103	0	0	5	10	2040
and no	odles	Argentina	202	16	35	0	9	10	11	216
		Costa Rica	128	32	193	0	0	0	5	2040
		Panama	39	7	10	0	0	4	11	36
		Peru	171	12	62	0	0	2	5	770
14. Gra	nola and energy bars,	Regional	231	183	156	0	59	167	281	893
and nu	t butters/spreads	Argentina	33	137	119	0	58	104	208	429
		Costa Rica	117	188	170	0	60	182	280	893

		Panama	31	285	138	56	156	281	391	500
		Peru	50	138	122	0	34	83	280	391
a)	Granola, cereal and	Regional	196	167	130	0	60	148	253	571
	energy bars	Argentina	33	137	119	0	58	104	208	429
		Costa Rica	101	186	139	0	67	188	271	571
		Panama	18	213	101	65	140	200	275	400
		Peru	44	125	117	0	22	80	232	370
b)	Nut butters and nut	Regional	35	273	238	0	35	297	407	893
	spreads	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	16	195	307	0	9	30	320	893
		Panama	13	384	121	56	356	391	469	500
		Peru	6	237	119	87	139	272	297	391
15. Fat	s and oils	Regional	352	696	668	0	400	700	884	11000
		Argentina	86	542	472	0	110	629	806	2520
		Costa Rica	144	735	929	0	415	673	900	11000
		Panama	48	835	235	383	692	817	972	1867
		Peru	74	708	334	0	400	700	884	1571
a)	Salted butter,	Regional	108	624	378	0	383	673	864	1571
	margarine, and butter	Argentina	16	262	323	12	86	190	245	1310
	blends	Costa Rica	45	528	326	0	361	607	714	1067
		Panama	17	765	126	593	643	750	886	980
		Peru	30	881	367	0	704	760	996	1571
b)	Mayonnaise	Regional	96	708	209	247	599	733	825	1333
		Argentina	31	753	153	275	672	742	825	1225
		Costa Rica	21	728	245	247	595	667	843	1333
		Panama	16	772	176	500	619	767	903	1067
		Peru	28	608	226	339	400	600	768	1110
c)	Salad dressing &	Regional	148	740	962	0	333	709	1000	11000
	vinaigrette	Argentina	39	489	606	0	87	120	904	2520
		Costa Rica	78	857	1220	0	464	757	1025	11000
		Panama	15	984	315	383	850	972	1067	1867
		Peru	16	558	297	4	400	400	714	1167
	uces, dips, gravy and	Regional	909	3310	6308	0	378	788	2400	34667
condin	nents	Argentina	203	1946	3974	0	275	483	1283	24000

		Costa Rica	330	3595	6541	0	472	1000	3113	32750
		Panama	153	4533	7137	0	528	1110	4550	34667
		Peru	223	3290	6874	0	362	681	1413	32660
a)	Bouillon cubes and	Regional	47	7065	10522	17	280	352	15345	30640
	powders (as sold)	Argentina	35	1951	5076	17	257	316	363	24000
		Costa Rica	1	1000	N/A	1000	1000	1000	1000	1000
		Panama	5	21089	2396	17764	20000	21044	22702	2393
		Peru	6	26221	3372	22209	23408	27022	27929	30640
b)	Pasta sauce	Regional	89	848	1377	0	315	398	681	6400
		Argentina	25	268	127	0	188	290	315	480
		Costa Rica	28	1689	2221	240	359	436	1724	6400
		Panama	5	608	222	385	413	583	758	903
		Peru	31	595	291	147	364	508	720	1309
c)	Pesto	Regional	24	732	420	0	456	698	990	1600
		Argentina	2	37	52	0	18	37	55	73
		Costa Rica	17	879	377	394	480	812	1120	1600
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Peru	5	509	217	345	390	410	520	880
d)	Tomato sauce	Regional	76	315	225	0	148	339	453	1210
		Argentina	26	187	286	0	29	66	198	1210
		Costa Rica	5	325	82	230	240	385	385	385
		Panama	26	425	132	61	346	421	464	638
		Peru	19	339	174	0	200	339	425	653
e)	Ketchup and similar	Regional	105	912	574	18	600	869	1094	4524
	tomato-type	Argentina	29	859	386	18	592	817	1000	1890
	condiments (as	Costa Rica	41	997	562	69	647	900	1250	2595
	consumed)	Panama	12	1005	1141	80	527	719	942	4524
		Peru	23	777	317	19	633	900	980	1117
f)	Mustard	Regional	57	1330	635	0	887	1200	1667	2700
		Argentina	21	1181	631	0	650	1167	1617	2317
		Costa Rica	19	1765	603	900	1200	1700	2250	2700
		Panama	4	1307	536	660	990	1350	1667	1867
									1000	4 4 0 0
		Peru	13	941	314	316	700	1020	1080	1400

		Argentina	14	1811	2015	0	661	1467	2023	8060
		Costa Rica	57	1538	1431	0	642	967	2200	6133
		Panama	14	1410	1240	180	575	920	1900	4200
		Peru	33	766	762	1	346	680	767	3818
h)	Gravy, cooking sauces,	Regional	159	1149	1546	0	393	633	1194	11300
	dips, and salsa (as	Argentina	23	924	523	335	515	800	1100	2200
	consumed)	Costa Rica	65	893	1164	0	345	523	760	5200
		Panama	34	1963	2535	0	607	815	1738	11300
		Peru	37	989	1103	3	347	633	1208	4000
i)	Sweet oriental sauces	Regional	16	1158	1365	3	294	429	1615	4000
		Argentina	2	472	111	393	433	472	511	550
		Costa Rica	10	1653	1536	198	321	1082	3182	4000
		Panama	1	390	N/A	390	390	390	390	390
		Peru	3	225	232	3	105	207	336	465
j)	Soya and other salty	Regional	54	4248	2159	95	2800	4100	5940	8400
	oriental sauces	Argentina	6	4037	1163	2239	3445	4160	4793	5453
		Costa Rica	19	4603	2427	95	3520	4067	6550	8400
		Panama	17	3571	1960	1180	2073	3293	4720	7733
		Peru	12	4748	2321	387	3698	5510	5940	7679
k)	Marinades (as	Regional	31	1395	1445	0	68	700	2365	5280
	consumed)	Argentina	2	2140	368	1880	2010	2140	2270	2400
		Costa Rica	12	2081	1451	0	1400	2133	2533	5280
		Panama	4	175	350	0	0	0	175	700
		Peru	13	1022	1428	20	20	210	2365	4018
I)	Dry seasoning mixes for	Regional	41	15227	8955	0	9160	15000	19600	34667
	rice and side dishes	Argentina	3	3889	6736	0	0	0	5833	11667
		Costa Rica	9	16478	7043	5769	11600	16000	21556	26100
		Panama	15	16571	9577	3778	9080	15800	23656	34667
		Peru	14	15413	8808	286	12300	14000	18700	32660
m)	Dry seasoning mixes for	Regional	92	12303	9995	0	4263	9262	21311	32750
	meat and fish	Argentina	15	11845	5359	445	8208	13500	16160	17120
		Costa Rica	47	13277	11273	0	2450	10146	23583	32750
		Panama	16	9995	7866	349	4455	7375	12155	26400
		Peru	14	12165	11708	333	2095	8667	22205	31667

Table 3.1.2 Distribution of sodium content per kcal of packaged foods, by PAHO category at the regional level and by country

PAHO Categories	Country	Products with sodium data		n (mg per cal)					
		n	Mean	SD	Min	25th	50 <sup>th</sup>	75 <sup>th</sup>	Max
1. Bread, bread products, and	Regional	545	1.6	1.3	0.0	1.1	1.6	2.0	17.7
crisp breads	Argentina	226	1.6	0.8	0.0	1.3	1.7	2.0	5.0
	Costa Rica	187	1.8	2.0	0.0	0.9	1.6	2.2	17.7
	Panama	45	1.8	0.7	0.8	1.5	1.7	2.1	4.7
	Peru	87	1.2	0.5	0.1	0.9	1.3	1.5	2.4
<ul><li>a) Pantry and hearth</li></ul>	Regional	248	1.5	0.7	0.0	1.2	1.6	1.9	5.0
bread, rolls and buns	Argentina	102	1.8	0.6	0.2	1.5	1.7	1.9	5.0
	Costa Rica	84	1.2	0.8	0.0	0.5	1.3	1.7	3.4
	Panama	23	1.7	0.6	0.8	1.4	1.7	2.0	3.5
	Peru	39	1.5	0.4	1.1	1.3	1.4	1.5	2.4
<ul><li>b) Tortillas (wheat),</li></ul>	Regional	74	1.9	1.0	0.1	1.3	1.9	2.5	4.7
wraps, naan, roti	Argentina	6	1.8	0.3	1.5	1.7	1.7	1.8	2.4
	Costa Rica	42	2.2	1.0	0.1	1.7	2.3	2.6	4.5
	Panama	12	1.9	1.0	0.8	1.2	1.9	2.1	4.7
	Peru	14	1.0	0.5	0.4	0.6	1.1	1.4	1.7
c) Bread with additions	Regional	29	1.8	0.6	0.6	1.4	1.8	2.1	3.0
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	19	1.9	0.7	0.6	1.5	1.9	2.6	3.0
	Panama	4	1.9	0.3	1.6	1.6	1.9	2.1	2.1
	Peru	6	1.4	0.5	0.8	1.1	1.2	1.7	1.9
d) Other bread products	Regional	194	1.7	2.0	0.0	0.8	1.5	2.0	17.7
	Argentina	118	1.5	0.9	0.0	0.8	1.7	2.2	3.4
	Costa Rica	42	2.5	3.8	0.0	0.9	1.5	2.0	17.7
	Panama	6	1.9	0.3	1.7	1.7	1.8	1.8	2.4
	Peru	28	0.9	0.3	0.1	0.6	0.9	1.0	1.6
2. Cakes, biscuits, pastries and	d Regional	1500	0.8	0.7	0.0	0.4	0.6	1.1	5.0
sweet breads	Argentina	625	0.8	0.6	0.0	0.3	0.6	1.1	4.6
	Costa Rica	511	0.9	0.7	0.0	0.4	0.7	1.2	3.5

		Panama	99	1.0	0.9	0.1	0.5	0.8	1.3	5.0
		Peru	265	0.7	0.4	0.0	0.4	0.6	0.9	2.3
a)	Savory biscuits and	Regional	273	1.5	0.7	0.0	1.1	1.5	1.9	4.6
	crackers	Argentina	144	1.5	0.7	0.0	1.1	1.5	1.9	4.6
		Costa Rica	64	1.6	0.7	0.3	1.2	1.7	1.9	3.5
		Panama	9	1.5	0.3	1.0	1.4	1.5	1.7	1.8
		Peru	56	1.2	0.6	0.0	0.9	1.1	1.7	2.3
b)	Cookies and sweet	Regional	854	0.5	0.4	0.0	0.3	0.5	0.7	3.6
	biscuits	Argentina	341	0.5	0.4	0.0	0.2	0.4	0.7	3.6
		Costa Rica	294	0.6	0.3	0.0	0.3	0.5	0.7	2.3
		Panama	64	0.7	0.5	0.1	0.4	0.7	0.9	2.3
		Peru	155	0.5	0.2	0.0	0.4	0.5	0.7	1.3
c)	Pastries, squares, and	Regional	215	1.1	0.9	0.0	0.5	0.8	1.3	5.0
	quick/sweet breads	Argentina	80	0.8	0.4	0.1	0.6	0.7	0.9	2.1
		Costa Rica	85	1.4	0.9	0.0	0.6	1.1	2.1	3.4
		Panama	22	1.8	1.3	0.4	0.6	1.9	2.4	5.0
		Peru	28	0.6	0.3	0.3	0.4	0.5	0.7	1.3
d)	Cakes	Regional	158	1.0	0.6	0.0	0.6	0.9	1.4	2.8
		Argentina	60	1.1	0.5	0.2	0.7	1.1	1.5	2.1
		Costa Rica	68	1.1	0.7	0.1	0.5	0.9	1.6	2.8
		Panama	4	0.4	0.3	0.2	0.3	0.3	0.5	0.9
		Peru	26	0.9	0.4	0.0	0.6	0.9	1.0	1.6
3. Corn	derivatives	Regional	58	1.3	1.2	0.0	0.5	1.0	2.0	6.3
		Argentina	N/A							
		Costa Rica	43	1.2	1.0	0.0	0.2	0.8	2.0	3.2
		Panama	8	2.0	2.1	0.1	0.5	1.3	2.7	6.3
		Peru	7	1.1	0.4	0.9	0.9	1.0	1.0	2.1
a)	Tortillas (corn)	Regional	15	0.5	0.4	0.0	0.2	0.5	0.6	1.9
		Argentina	N/A							
		Costa Rica	13	0.5	0.5	0.0	0.2	0.2	0.6	1.9
		Panama	2	0.6	0.1	0.6	0.6	0.6	0.6	0.7
		Peru	N/A							
b)	Biscuits (bizcochos)	Regional	27	1.8	0.8	0.1	1.0	1.9	2.5	3.2
		Argentina	N/A							

		Costa Rica	20	2.0	0.8	0.1	1.6	2.1	2.6	3.2
		Panama	N/A							
		Peru	7	1.1	0.4	0.9	0.9	1.0	1.0	2.1
c)	Tostadas	Regional	9	0.8	0.7	0.1	0.5	0.6	1.4	2.0
-		Argentina	N/A							
		Costa Rica	8	0.7	0.5	0.1	0.4	0.5	0.9	1.6
		Panama	1	2.0	N/A	2.0	2.0	2.0	2.0	2.0
		Peru	N/A							
d)	Arepas	Regional	7	1.8	2.4	0.0	0.1	0.2	3.1	6.3
•	•	Argentina	N/A							
		Costa Rica	2	0.1	0.1	0.0	0.0	0.1	0.1	0.2
		Panama	5	2.5	2.6	0.1	0.1	2.4	3.7	6.3
		Peru	N/A							
1. Brea	ıkfast cereal	Regional	473	0.7	0.5	0.0	0.2	0.7	1.0	3.1
		Argentina	87	0.6	0.5	0.0	0.2	0.6	0.9	2.2
		Costa Rica	195	0.7	0.5	0.0	0.3	0.7	1.1	2.5
		Panama	49	0.9	0.6	0.0	0.5	0.9	1.1	3.1
		Peru	142	0.5	0.5	0.0	0.0	0.5	0.9	2.1
5. Savo	ory snacks	Regional	731	1.1	0.8	0.0	0.5	0.9	1.4	5.4
		Argentina	143	1.2	0.6	0.0	0.8	1.2	1.7	2.9
		Costa Rica	336	1.1	0.9	0.0	0.4	0.9	1.4	5.4
		Panama	93	1.2	0.9	0.0	0.7	1.0	1.6	4.4
		Peru	159	0.9	0.6	0.0	0.5	0.7	1.1	3.2
a)	Nuts, seeds, and	Regional	201	0.7	0.6	0.0	0.3	0.6	0.9	4.7
	kernels, seasoned and	Argentina	36	1.1	0.5	0.3	0.7	1.1	1.4	2.0
	candied	Costa Rica	95	0.6	0.7	0.0	0.2	0.4	0.7	4.7
		Panama	26	0.5	0.3	0.1	0.3	0.5	0.7	1.4
		Peru	44	0.7	0.4	0.0	0.5	0.6	0.9	1.8
b)	Chips, popcorn, and/or	Regional	399	1.2	0.6	0.0	0.8	1.1	1.5	3.5
	extruded snacks	Argentina	101	1.3	0.6	0.0	1.0	1.3	1.7	2.9
		Costa Rica	172	1.1	0.6	0.0	0.7	1.1	1.5	3.5
		Panama	49	1.3	0.6	0.0	0.9	1.2	1.7	3.0
		Peru	77	1.1	0.7	0.2	0.6	0.9	1.3	3.2
		Regional	63	1.7	1.0	0.3	1.1	1.5	2.3	5.4

c)	Pretzels and snack	Argentina	3	1.5	0.7	0.7	1.3	1.9	1.9	1.9
	mixes	Costa Rica	38	2.0	1.1	0.3	1.2	1.6	2.5	5.4
		Panama	4	2.5	1.3	1.3	1.8	2.1	2.8	4.4
		Peru	18	1.1	0.6	0.3	0.6	1.1	1.4	2.8
d)	Other savory snacks	Regional	68	0.9	1.0	0.0	0.2	0.4	1.0	4.6
		Argentina	3	1.3	1.1	0.6	0.6	0.7	1.6	2.5
		Costa Rica	31	0.8	1.1	0.0	0.2	0.4	0.9	4.6
		Panama	14	1.7	1.2	0.1	0.7	1.3	2.8	4.1
		Peru	20	0.4	0.2	0.1	0.2	0.4	0.6	0.8
6. Che	ese	Regional	644	2.3	1.8	0.0	1.4	1.9	2.8	25.0
		Argentina	256	2.1	1.3	0.0	1.3	1.9	2.6	9.7
		Costa Rica	213	2.4	2.4	0.0	1.5	1.9	2.7	25.0
		Panama	68	3.0	1.7	0.2	1.7	2.4	4.1	7.5
		Peru	107	2.1	1.2	0.0	1.3	1.8	2.8	6.4
a)	Fresh cheese (i.e., fresh	Regional	116	2.1	1.5	0.0	1.1	1.8	2.9	9.7
	mozzarella and others)	Argentina	62	1.9	1.6	0.0	0.7	1.6	2.4	9.7
		Costa Rica	30	2.2	1.6	0.3	0.9	1.9	3.0	7.2
		Panama	3	3.5	1.5	2.2	2.6	3.1	4.1	5.2
		Peru	21	2.4	1.0	0.0	1.8	2.6	3.1	3.6
b)	Soft cheese (i.e.,	Regional	113	1.7	2.5	0.0	0.9	1.3	1.9	25.0
	unripened goat cheese,	Argentina	59	1.7	1.5	0.0	0.9	1.4	2.1	6.5
	cream cheese)	Costa Rica	23	2.4	5.0	0.1	1.0	1.3	1.9	25.0
		Panama	11	1.5	0.9	0.2	1.0	1.1	1.8	3.1
		Peru	20	1.1	0.8	0.1	0.2	1.1	1.5	2.8
c)	Semi-hard cheese (e.g.,	Regional	233	2.0	1.1	0.0	1.5	1.8	2.4	7.5
	mozzarella, cheddar	Argentina	64	1.9	1.0	0.2	1.3	1.6	2.4	4.8
	and others)	Costa Rica	97	2.0	1.1	0.0	1.5	1.9	2.4	6.3
		Panama	27	2.6	1.7	0.4	1.7	1.9	2.6	7.5
		Peru	45	1.9	1.0	0.3	1.4	1.8	2.3	4.9
d)	Hard cheese, grated	Regional	98	2.4	0.9	0.0	1.9	2.3	2.9	4.8
	and ungrated	Argentina	52	2.5	0.7	0.5	2.2	2.3	2.9	4.8
		Costa Rica	29	2.2	1.1	0.0	1.5	2.0	2.5	4.5
		Panama	6	3.3	0.9	2.3	2.6	3.2	3.8	4.5
		Peru	11	2.1	0.6	1.3	1.6	2.0	2.3	3.5

e)	Processed cheese	Regional	84	3.8	2.4	1.0	2.4	3.6	4.6	21.3
٠,		Argentina	19	3.2	1.1	1.7	2.4	3.6	3.9	6.3
		Costa Rica	34	3.9	3.5	1.0	2.0	3.0	4.6	21.3
		Panama	21	4.1	1.5	1.4	3.5	4.1	4.9	7.1
		Peru	10	4.4	1.1	3.0	3.6	4.2	5.1	6.4
7. Proc	essed vegetables, beans,	Regional	716	17.0	121.7	0.0	2.7	5.6	10.4	2593.3
	gumes	Argentina	151	44.3	262.0	0.0	1.4	4.2	12.9	2593.3
		Costa Rica	377	8.6	11.8	0.0	3.2	5.3	9.3	114.3
		Panama	110	11.7	27.5	0.0	3.2	5.8	9.0	186.7
		Peru	78	12.1	14.4	0.1	3.0	6.3	17.4	84.6
a)	Tomato paste with	Regional	90	8.0	6.8	0.0	4.1	6.1	9.6	42.7
	additions	Argentina	2	0.2	0.3	0.0	0.1	0.2	0.3	0.4
		Costa Rica	78	8.4	7.0	0.0	4.2	6.2	9.6	42.7
		Panama	6	8.4	6.4	0.7	3.1	8.7	13.4	16.0
		Peru	4	5.4	1.4	3.5	5.0	5.7	6.1	6.9
b)	Canned vegetables	Regional	225	7.1	6.5	0.0	2.8	5.0	9.3	36.0
		Argentina	74	6.2	6.9	0.2	1.9	3.0	8.7	35.6
		Costa Rica	85	7.3	6.7	0.0	2.9	5.0	10.1	36.0
		Panama	38	7.4	3.9	0.4	5.1	6.0	8.9	19.3
		Peru	28	8.5	8.0	0.1	3.0	4.8	14.8	30.8
c)	Canned beans,	Regional	77	3.5	2.7	0.0	2.0	2.9	4.4	17.8
	chickpeas and lentils	Argentina	10	1.6	1.1	0.1	0.9	1.5	1.9	4.2
		Costa Rica	44	4.1	2.9	0.0	2.5	3.3	4.7	17.8
		Panama	17	3.9	2.6	0.5	2.2	3.2	5.4	9.1
		Peru	6	1.4	0.7	0.8	0.9	1.1	2.0	2.3
d)	Baked and refried	Regional	26	3.5	0.9	2.3	3.3	3.5	3.8	5.7
	beans (mashed)	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	20	3.4	0.7	2.3	2.8	3.5	3.8	4.5
		Panama	6	4.1	1.2	3.3	3.3	3.5	5.2	5.7
		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
e)	Frozen potatoes and	Regional	34	0.9	1.2	0.1	0.2	0.4	1.0	5.6
	similar products	Argentina	11	0.9	0.9	0.2	0.5	0.5	0.8	2.6
		Costa Rica	7	0.8	0.9	0.1	0.2	0.3	1.1	2.3
		Panama	11	1.2	1.7	0.1	0.1	0.3	1.8	5.6

		Peru	5	0.2	0.2	0.1	0.1	0.2	0.2	0.5
f)	Dry mashed or	Regional	29	2.2	2.1	0.0	0.4	0.6	4.2	5.5
	scalloped potatoes (as	Argentina	9	0.6	0.4	0.4	0.4	0.4	0.6	1.7
	consumed)	Costa Rica	15	3.2	2.0	0.0	1.8	4.0	4.6	5.5
		Panama	4	1.3	2.1	0.1	0.2	0.3	1.3	4.4
		Peru	1	4.0		4.0	4.0	4.0	4.0	4.0
g)	Pickled vegetables	Regional	98	82.6	322.4	0.0	8.1	18.2	39.9	2593.3
		Argentina	10	571.9	901.1	10.1	51.5	69.1	820.8	2593.3
		Costa Rica	58	20.0	23.8	0.0	4.6	11.7	22.3	114.3
		Panama	12	57.3	69.0	0.0	4.0	30.9	93.1	186.7
		Peru	18	29.3	19.3	3.0	18.4	21.6	36.0	84.6
h)	Sundried tomatoes	Regional	4	6.0	5.5	1.8	2.5	4.3	7.9	13.8
		Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	4	6.0	5.5	1.8	2.5	4.3	7.9	13.8
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
i)	Olives	Regional	117	9.7	4.9	0.0	6.7	8.7	12.8	28.0
		Argentina	35	13.5	4.6	4.5	10.7	13.6	15.3	28.0
		Costa Rica	51	7.4	3.3	0.0	5.8	7.1	8.8	18.5
		Panama	15	9.2	4.7	4.0	8.0	8.6	9.6	24.8
		Peru	16	9.2	5.4	0.6	5.4	8.6	13.3	19.6
j)	Vegetable juice	Regional	16	8.0	9.3	0.0	0.2	3.3	13.3	25.3
		Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	15	6.9	8.4	0.0	0.2	3.2	13.0	25.3
		Panama	1	25.3	N/A	25.3	25.3	25.3	25.3	25.3
		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8. Proc	essed meat and poultry	Regional	568	4.7	3.4	0.0	2.5	3.7	5.9	23.7
		Argentina	178	4.6	3.7	0.3	2.2	3.4	5.5	23.7
		Costa Rica	184	5.3	3.8	0.0	3.1	4.2	7.0	23.4
		Panama	93	4.5	2.6	0.4	2.9	4.2	5.8	12.6
		Peru	113	4.0	2.8	0.8	2.0	3.3	4.6	14.6
a)	Packaged deli meats –	Regional	128	7.5	3.3	1.4	4.6	7.5	9.4	23.4
	fully cooked	Argentina	41	6.5	3.1	1.4	3.7	5.9	9.2	13.4
		Costa Rica	56	8.1	3.4	3.2	6.1	7.8	9.8	23.4

		Panama	12	8.3	3.1	3.4	6.6	7.6	11.4	12.6
		Peru	19	7.0	3.3	3.3	4.4	6.4	8.7	14.6
b)	Packaged dry-cured	Regional	61	5.0	3.1	1.0	3.7	4.4	4.8	20.6
	deli meats	Argentina	21	5.3	3.4	1.0	3.4	4.0	6.7	14.6
		Costa Rica	30	5.1	3.3	1.7	3.8	4.4	4.8	20.6
		Panama	1	4.2	N/A	4.2	4.2	4.2	4.2	4.2
		Peru	9	4.5	0.7	3.7	4.0	4.5	4.8	6.0
c)	Sausages - uncooked	Regional	39	3.9	1.7	1.1	2.8	3.8	4.7	9.0
		Argentina	6	2.5	0.9	1.8	2.0	2.3	2.6	4.3
		Costa Rica	11	3.5	0.9	2.2	2.7	3.9	4.2	4.7
		Panama	17	4.9	1.8	2.8	3.5	4.8	5.8	9.0
		Peru	5	2.7	1.5	1.1	1.2	3.2	3.9	4.2
d)	Sausages - cooked	Regional	69	4.4	1.8	1.7	3.1	4.0	5.4	10.1
		Argentina	16	4.7	1.5	3.1	3.3	4.5	5.5	7.6
		Costa Rica	24	3.9	1.8	2.3	2.9	3.2	4.7	10.1
		Panama	13	4.4	1.5	1.7	3.4	4.3	5.6	6.9
		Peru	16	4.9	2.3	1.8	3.6	4.0	6.8	8.6
e)	Uncooked bacon – belly	Regional	5	4.0	1.4	3.0	3.1	3.7	3.8	6.3
		Argentina	1	6.3	N/A	6.3	6.3	6.3	6.3	6.3
		Costa Rica	3	3.3	0.4	3.0	3.1	3.1	3.4	3.7
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Peru	1	3.8	N/A	3.8	3.8	3.8	3.8	3.8
f)	Burgers, meatballs,	Regional	180	2.4	1.3	0.2	1.6	2.2	3.2	7.9
	meatloaf and breaded	Argentina	66	2.4	0.7	0.3	1.9	2.2	3.0	4.6
	meat and poultry	Costa Rica	43	2.8	1.8	0.2	1.6	3.0	3.9	7.9
		Panama	21	2.1	1.7	0.4	0.6	1.8	2.9	6.7
		Peru	50	2.2	1.0	0.8	1.3	2.0	2.9	4.7
g)	Ham, canned meat and	Regional	63	6.8	5.3	0.0	3.6	5.1	8.3	23.7
	poultry, and uncooked,	Argentina	14	10.0	7.7	0.6	2.1	10.9	13.7	23.7
	pickled, cured and	Costa Rica	14	7.4	6.7	0.0	3.7	5.5	8.3	22.2
	smoked meats that are	Panama	26	4.6	1.6	2.0	3.3	4.7	5.1	8.5
	not deli meats	Peru	9	7.5	2.5	2.2	6.4	7.4	8.4	10.7
h)	Patés and meat spreads	Regional	23	2.9	0.9	0.8	2.3	3.1	3.4	4.3
		Argentina	13	3.1	1.1	0.8	3.0	3.4	3.4	4.3

		Costa Rica	3	2.5	0.6	2.0	2.2	2.3	2.7	3.1
		Panama	3	3.2	0.4	2.8	3.1	3.4	3.4	3.5
		Peru	4	2.3	0.4	2.0	2.0	2.1	2.4	2.8
9. Proc	essed fish and seafood	Regional	366	2.8	3.6	0.0	1.3	2.0	3.2	40.3
		Argentina	54	3.5	6.4	0.0	1.3	2.2	3.0	40.3
		Costa Rica	175	2.7	3.5	0.1	1.2	1.9	3.1	31.7
		Panama	71	2.9	1.9	0.5	1.4	2.4	3.9	12.3
		Peru	66	2.5	1.8	0.2	1.4	2.0	3.2	9.1
a)	Canned fish	Regional	299	2.7	3.8	0.1	1.3	2.0	3.0	40.3
•		Argentina	36	4.2	7.6	0.6	1.7	2.2	3.0	40.3
		Costa Rica	159	2.6	3.6	0.1	1.2	1.7	2.9	31.7
		Panama	61	2.6	1.4	0.6	1.5	2.4	3.2	5.7
		Peru	43	2.0	1.1	0.2	1.2	1.8	2.6	4.2
b)	Frozen plain fish and	Regional	24	3.7	3.6	0.0	0.5	2.6	6.3	12.3
	seafood with added	Argentina	11	1.9	2.6	0.0	0.4	0.6	2.7	8.5
	sodium phosphate	Costa Rica	3	3.1	3.1	0.1	1.5	2.8	4.6	6.3
		Panama	8	5.0	3.8	0.5	2.1	5.4	6.5	12.3
		Peru	2	9.1	0.0	9.1	9.1	9.1	9.1	9.1
c)	Fish and seafood cakes,	Regional	28	2.1	1.3	0.3	1.3	1.6	2.6	5.3
	fingers or burgers,	Argentina	4	1.2	0.6	0.6	0.8	1.1	1.4	1.9
	seasoned, and breaded	Costa Rica	9	2.5	1.2	0.3	1.9	2.4	3.1	4.4
	or battered or with	Panama	1	0.5	N/A	0.5	0.5	0.5	0.5	0.5
	sauces	Peru	14	2.2	1.4	1.1	1.3	1.5	2.4	5.3
d)	Smoked, salted, pickled	Regional	15	4.9	1.8	2.7	3.7	4.8	5.6	10.0
	and kippered fish	Argentina	3	3.5	0.7	2.7	3.3	4.0	4.0	4.0
		Costa Rica	4	5.8	3.0	3.1	4.3	5.0	6.5	10.0
		Panama	1	4.8	N/A	4.8	4.8	4.8	4.8	4.8
		Peru	7	4.9	1.3	2.9	4.2	5.4	5.8	5.9
10. Soy	products and meat	Regional	157	2.4	1.5	0.0	1.5	2.3	2.8	8.2
alterna	atives	Argentina	77	2.2	1.1	0.0	1.3	2.1	2.5	6.5
		Costa Rica	49	3.1	1.8	0.1	2.3	2.7	3.7	8.2
		Panama	5	1.4	2.3	0.1	0.1	0.1	1.3	5.5
		Peru	26	1.9	0.9	0.1	1.6	2.4	2.6	2.8
		Regional	10	2.7	3.0	0.1	0.1	2.0	3.9	8.2

a)	Seasoned tofu and	Argentina	1	6.5	N/A	6.5	6.5	6.5	6.5	6.5
	tempeh	Costa Rica	6	3.3	2.9	0.1	1.2	3.6	3.9	8.2
		Panama	3	0.1	0.0	0.1	0.1	0.1	0.1	0.1
		Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b)	Meat analogues and	Regional	147	2.4	1.3	0.0	1.6	2.3	2.7	8.2
	other meat alternatives	Argentina	76	2.1	1.0	0.0	1.3	2.1	2.5	6.0
		Costa Rica	43	3.1	1.6	1.3	2.3	2.6	3.5	8.2
		Panama	2	3.4	3.0	1.3	2.3	3.4	4.4	5.5
		Peru	26	1.9	0.9	0.1	1.6	2.4	2.6	2.8
11. Sou	ups	Regional	228	10.3	10.0	0.0	4.1	6.5	12.9	66.2
		Argentina	45	10.5	8.0	2.2	3.7	9.9	12.1	40.7
		Costa Rica	83	12.9	13.6	0.0	4.9	8.7	14.8	66.2
		Panama	48	10.7	6.8	2.0	4.4	10.8	16.2	26.5
		Peru	52	5.5	3.7	0.9	3.2	4.5	6.2	17.6
a)	Wet and dry soups (as	Regional	130	14.1	11.6	0.0	6.4	12.1	16.9	66.2
	consumed)	Argentina	18	14.9	9.6	2.2	9.8	12.0	14.2	40.7
		Costa Rica	68	14.7	14.4	0.0	5.3	10.8	16.8	66.2
		Panama	29	14.8	5.6	2.0	12.2	14.8	17.5	26.5
		Peru	15	8.7	5.3	0.9	5.2	6.5	12.6	17.6
b)	Noodles in broth (as	Regional	98	5.2	3.3	1.2	3.4	4.2	5.9	21.4
	consumed)	Argentina	27	7.5	5.1	3.1	3.5	3.9	10.6	21.4
		Costa Rica	15	4.7	1.9	1.2	3.4	4.9	5.8	7.7
		Panama	19	4.4	1.0	2.4	4.1	4.4	4.7	7.7
		Peru	37	4.2	1.7	1.4	2.9	3.6	5.9	7.7
12. Rea	ady-made foods,	Regional	347	2.4	1.6	0.0	1.5	2.2	2.7	16.9
conver	nience foods, and mixed	Argentina	144	2.0	0.8	0.2	1.4	2.1	2.5	4.8
dishes		Costa Rica	115	2.3	1.4	0.0	1.3	2.1	3.0	6.7
		Panama	24	2.6	3.2	0.0	2.0	2.2	2.5	16.9
		Peru	64	3.2	2.2	0.3	1.9	2.7	3.7	14.1
b)	Canned stew and	Regional	4	6.3	5.2	3.3	3.4	4.0	6.9	14.1
	meatballs	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Peru	4	6.3	5.2	3.3	3.4	4.0	6.9	14.1

c)	Pasta, noodles, rice or	Regional	15	2.5	0.8	0.8	2.1	2.3	3.0	3.8
-	grains with sauce or	Argentina	2	2.0	0.0	2.0	2.0	2.0	2.0	2.0
	seasonings (as	Costa Rica	6	3.1	0.7	1.8	2.9	3.4	3.4	3.8
	consumed)	Panama	3	2.3	0.1	2.2	2.3	2.3	2.4	2.5
		Peru	4	1.9	0.8	0.8	1.8	2.2	2.4	2.5
d)	Pasta, noodles, rice or	Regional	75	3.1	2.1	0.0	2.2	2.6	3.1	16.9
	grains with sauce or	Argentina	24	2.4	0.4	1.8	2.2	2.5	2.6	3.4
	seasonings (dry mix, as	Costa Rica	37	2.7	1.2	0.0	2.1	2.7	3.1	5.6
	sold)	Panama	3	7.3	8.2	2.2	2.6	2.9	9.9	16.9
		Peru	11	4.3	2.3	2.0	2.8	3.3	5.7	8.1
f)	Pizza and pizza snacks	Regional	41	2.0	0.9	0.5	1.2	2.1	2.7	3.4
		Argentina	22	2.1	1.1	0.5	0.9	2.5	2.7	3.4
		Costa Rica	13	1.9	0.8	0.8	1.2	1.8	2.5	3.0
		Panama	3	2.1	0.1	2.0	2.0	2.1	2.2	2.2
		Peru	3	1.8	0.1	1.7	1.7	1.8	1.8	1.9
g)	Sandwiches	Regional	14	1.4	0.7	0.3	1.1	1.6	1.9	2.4
		Argentina	3	2.0	0.3	1.7	1.8	1.9	2.1	2.4
		Costa Rica	11	1.2	0.6	0.3	0.8	1.1	1.7	2.1
		Panama	N/A							
		Peru	N/A							
h)	Refrigerated or frozen	Regional	198	2.2	1.3	0.0	1.2	2.1	2.6	8.5
	appetizers, sides and	Argentina	93	1.9	0.8	0.2	1.2	1.9	2.3	4.8
	entrees	Costa Rica	48	2.2	1.7	0.1	1.1	1.8	3.1	6.7
		Panama	15	1.9	1.2	0.0	0.9	2.2	2.4	3.8
		Peru	42	2.8	1.5	0.3	1.8	2.6	3.5	8.5
3. Fre	sh or dried plain pasta	Regional	539	0.1	0.3	0.0	0.0	0.0	0.0	5.1
nd no	odles	Argentina	201	0.0	0.1	0.0	0.0	0.0	0.0	0.8
		Costa Rica	128	0.1	0.6	0.0	0.0	0.0	0.0	5.1
		Panama	39	0.1	0.2	0.0	0.0	0.0	0.0	0.7
		Peru	171	0.0	0.2	0.0	0.0	0.0	0.0	2.1
4. Gra	nola and energy bars,	Regional	231	0.4	0.5	0.0	0.1	0.4	0.7	4.1
nd nu	t butters/spreads	Argentina	33	0.3	0.3	0.0	0.1	0.3	0.5	0.9
		Costa Rica	117	0.5	0.6	0.0	0.1	0.4	0.7	4.1
		Panama	32	0.6	0.2	0.1	0.4	0.6	0.8	0.9

		Peru	49	0.3	0.3	0.0	0.1	0.2	0.5	1.1
a)	Granola, cereal and	Regional	195	0.4	0.3	0.0	0.1	0.4	0.7	1.4
	energy bars	Argentina	33	0.3	0.3	0.0	0.1	0.3	0.5	0.9
		Costa Rica	101	0.5	0.4	0.0	0.2	0.4	0.7	1.4
		Panama	18	0.5	0.2	0.1	0.4	0.5	0.7	0.9
		Peru	43	0.3	0.3	0.0	0.1	0.2	0.6	1.1
b)	Nut butters and nut	Regional	36	0.6	0.9	0.0	0.0	0.5	0.7	4.1
	spreads	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Costa Rica	16	0.7	1.4	0.0	0.0	0.0	0.6	4.1
		Panama	14	0.6	0.2	0.1	0.6	0.7	0.8	0.8
		Peru	6	0.4	0.2	0.1	0.2	0.5	0.5	0.7
5. Fat	s and oils	Regional	345	2.8	4.4	0.0	0.9	1.8	3.1	44.0
		Argentina	86	2.0	2.0	0.0	0.4	1.4	3.0	10.5
		Costa Rica	140	3.4	5.7	0.0	1.1	2.0	3.3	44.0
		Panama	45	2.9	4.3	0.6	1.2	2.0	3.3	28.0
		Peru	74	2.7	3.3	0.0	1.0	1.6	2.7	22.7
a)	Salted butter,	Regional	106	1.3	1.2	0.0	0.7	1.2	1.7	8.9
	margarine, and butter	Argentina	16	0.5	0.5	0.0	0.1	0.4	0.5	1.9
	blends	Costa Rica	43	1.4	1.4	0.0	0.7	1.2	1.7	8.9
		Panama	17	1.5	0.6	0.8	1.2	1.3	1.7	3.4
		Peru	30	1.7	1.0	0.0	1.1	1.3	1.8	4.3
b)	Mayonnaise	Regional	94	2.4	1.6	0.3	1.0	2.3	3.2	8.7
		Argentina	31	2.9	1.1	0.5	2.4	2.8	3.4	6.1
		Costa Rica	21	2.0	1.2	0.3	1.2	2.0	2.6	4.4
		Panama	14	2.2	1.1	0.6	1.2	2.3	2.9	4.3
		Peru	28	2.1	2.3	0.6	0.7	0.9	2.0	8.7
c)	Salad dressing &	Regional	145	4.2	6.3	0.0	1.1	2.5	4.0	44.0
	vinaigrette	Argentina	39	1.9	2.5	0.0	0.5	0.6	2.5	10.5
		Costa Rica	76	4.9	7.3	0.0	1.6	2.7	4.3	44.0
		Panama	14	5.5	7.0	1.0	2.2	3.3	4.8	28.0
		Peru	16	5.5	5.5	0.1	2.1	2.7	7.9	22.7
	ices, dips, gravy and	Regional	866	204.7	1762.0	0.0	3.5	8.4	35.1	31666.7
condin	nents	Argentina	203	142.5	550.4	0.0	3.4	9.2	48.8	4320.0
		Costa Rica	291	23.6	42.9	0.0	2.9	8.0	22.2	335.0

		Panama	153	45.9	70.1	0.0	5.5	14.2	50.0	352.5
		Peru	219	613.8	3435.0	0.0	2.7	6.7	21.4	31666.7
a)	Bouillon cubes and	Regional	47	115.9	103.4	1.4	52.8	67.2	153.4	455.0
	powders (as sold)	Argentina	35	93.4	87.4	6.7	44.8	61.2	122.4	455.0
		Costa Rica	1	1.4	N/A	1.4	1.4	1.4	1.4	1.4
		Panama	5	187.7	101.8	104.1	111.0	134.9	255.3	333.3
		Peru	6	206.6	129.8	86.5	107.7	164.3	305.8	383.0
b)	Pasta sauce	Regional	89	8.6	5.4	0.0	5.5	7.7	10.9	28.3
		Argentina	25	7.9	3.6	0.0	6.1	8.4	9.2	17.1
		Costa Rica	28	9.4	5.3	1.9	5.8	7.9	11.8	21.0
		Panama	5	12.2	7.7	5.8	7.0	10.1	13.0	25.0
		Peru	31	7.9	6.2	1.0	2.3	6.4	10.7	28.3
c)	Pesto	Regional	24	2.5	2.5	0.0	1.2	2.1	2.8	12.8
		Argentina	2	0.1	0.1	0.0	0.1	0.1	0.2	0.2
		Costa Rica	17	2.4	1.1	1.0	1.5	2.6	2.8	4.4
		Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		Peru	5	3.8	5.0	1.0	1.7	1.7	1.9	12.8
d)	Tomato sauce	Regional	76	6.1	3.8	0.0	3.5	5.9	8.2	17.1
		Argentina	26	4.6	4.5	0.0	0.8	3.0	7.4	15.8
		Costa Rica	5	7.1	4.2	1.9	3.2	10.1	10.1	10.1
		Panama	26	6.8	2.5	0.7	4.3	8.0	8.4	11.2
		Peru	19	6.9	4.0	0.0	5.0	5.6	8.1	17.1
e)	Ketchup and similar	Regional	104	8.0	6.7	0.1	4.7	6.0	8.8	46.8
	tomato-type	Argentina	29	6.1	3.6	1.6	3.0	5.9	8.1	17.1
	condiments (as	Costa Rica	40	10.5	9.3	2.5	5.2	7.3	10.0	46.8
	consumed)	Panama	12	6.8	4.4	1.4	3.7	5.6	8.7	18.1
		Peru	23	6.7	3.3	0.1	5.7	6.3	8.2	16.3
f)	Mustard	Regional	53	36.2	163.2	0.0	7.0	13.5	18.0	1200.0
		Argentina	21	67.2	259.7	0.0	4.1	9.2	16.3	1200.0
		Costa Rica	15	15.4	6.0	4.5	11.8	14.4	20.0	25.0
		Panama	4	27.8	22.1	2.4	14.6	27.7	40.8	53.3
		Peru	13	12.7	5.3	4.4	7.0	15.5	16.6	21.0
g)	Spicy sauce	Regional	104	157.0	597.6	0.0	2.2	6.7	34.0	3818.2
		Argentina	14	496.6	991.2	0.0	1.8	10.2	58.7	3000.0

		Costa Rica	43	21.0	23.4	0.0	2.6	12.2	31.8	101.3
		Panama	14	39.9	40.1	1.5	12.7	28.4	53.0	140.0
		Peru	33	239.7	812.7	0.1	1.9	2.3	6.7	3818.2
h)	Gravy, cooking sauces,	Regional	157	45.1	203.6	0.0	2.0	4.0	17.1	1960.0
	dips, and salsa (as	Argentina	23	213.7	501.3	0.9	2.0	2.8	38.0	1960.0
	consumed)	Costa Rica	63	7.7	12.1	0.0	1.8	3.2	9.6	84.8
		Panama	34	38.1	63.5	0.0	3.8	14.2	41.9	261.3
		Peru	37	10.2	12.1	0.0	2.6	4.0	16.1	40.0
i)	Sweet oriental sauces	Regional	16	8.2	10.6	0.0	2.3	3.2	9.1	35.4
		Argentina	2	6.6	6.2	2.3	4.5	6.6	8.8	11.0
		Costa Rica	10	11.1	12.4	1.3	3.0	5.0	15.4	35.4
		Panama	1	2.3	N/A	2.3	2.3	2.3	2.3	2.3
		Peru	3	1.7	1.7	0.0	0.9	1.7	2.5	3.3
j)	Soya and other salty	Regional	54	222.0	782.4	1.9	38.9	58.9	120.6	4320.0
	oriental sauces	Argentina	6	1426.8	2119.8	14.4	49.9	94.9	3024.8	4320.0
		Costa Rica	19	69.4	74.5	1.9	27.7	58.0	82.7	335.0
		Panama	17	60.4	44.5	12.2	39.0	41.2	84.0	177.0
		Peru	12	90.1	57.9	2.0	42.8	127.3	132.0	144.9
k)	Marinades (as	Regional	26	235.1	763.8	0.0	1.6	14.6	43.0	3200.0
	consumed)	Argentina	2	1218.8	1670.5	37.6	628.2	1218.8	1809.4	2400.0
		Costa Rica	11	26.7	23.2	0.0	10.4	27.6	33.3	76.1
		Panama	4	3.5	7.0	0.0	0.0	0.0	3.5	14.0
		Peru	9	374.0	1060.0	0.5	1.5	3.3	56.4	3200.0
I)	Dry seasoning mixes for	Regional	38	108.3	126.8	0.0	42.1	70.0	110.0	653.2
	rice and side dishes	Argentina	3	10.1	17.6	0.0	0.0	0.0	15.2	30.4
		Costa Rica	6	104.0	70.3	36.5	52.9	81.1	146.2	213.9
		Panama	15	122.5	111.0	13.3	42.6	98.0	173.3	352.5
		Peru	14	115.9	167.5	1.6	43.6	70.0	93.5	653.2

Table 3.1.3 Distribution of sodium content per 100g/ml of packaged foods by WHO global sodium benchmark categories at the regional level and by country

WHO Categories	Country	Products with sodium data	Sodium 100g	/ml)	Percentiles (mg per 100g/ml)				
		n	Mean	SD	Min	25th	50 <sup>th</sup>	75 <sup>th</sup>	Max
1. Chocolate and	Regional	1890	157	468	0	12	60	126	5500
sugar	Argentina	556	273	724	0	19	89	155	5500
confectionery, energy bars, and	Costa Rica	858	115	356	0	4	40	100	5000
sweet toppings and	Panama	32	276	144	0	144	281	391	500
desserts	Peru	444	83	77	0	28	66	118	480
a) Granola and	Regional	200	168	137	0	60	144	253	783
cereal-type bars	Argentina	35	153	159	0	58	104	209	783
	Costa Rica	102	185	139	0	67	187	271	571
	Panama	19	202	109	0	140	200	270	400
	Peru	44	125	117	0	22	80	232	370
b) Nut butters	Regional	34	279	239	0	32	297	416	893
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	15	204	316	0	8	30	344	893
	Panama	13	384	121	56	356	391	469	500
	Peru	6	237	119	87	139	272	297	391
c) Other	Regional	1656	153	497	0	8	54	115	5500
	Argentina	521	281	746	0	17	88	148	5500
	Costa Rica	741	103	376	0	3	33	86	5000
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	394	77	66	0	28	63	107	480
2. Cakes, sweet biscuits and	<b>Regional</b> Argentina	<b>1269</b> 480	<b>305</b> 300	<b>236</b> 239	<b>0</b> 0	<b>161</b> 153	<b>260</b> 253	<b>377</b> 386	<b>2902</b> 2902
	, a geriana	400	300	233	U	133	233	300	2302

pastries; other	Costa Rica	473	307	250	0	152	265	380	2760
sweet bakery	Panama	108	416	305	34	201	356	610	1667
wares; and dry mixes	Peru	208	253	103	0	180	244	323	612
a) Cookies/sweet	Regional	789	242	139	0	150	230	320	967
biscuits	Argentina	283	224	153	0	120	203	307	967
	Costa Rica	291	241	133	0	148	232	317	775
	Panama	61	311	175	34	191	290	406	900
	Peru	154	248	97	0	179	250	321	444
b) Cakes and	Regional	176	287	135	23	199	281	363	790
sponges	Argentina	86	294	126	23	225	285	386	660
	Costa Rica	59	292	147	39	176	279	370	790
	Panama	7	270	235	103	125	150	315	760
	Peru	23	265	84	118	213	260	345	416
c) Pies and	Regional	84	508	379	59	230	500	658	2902
pastries	Argentina	55	625	406	97	484	628	767	2902
	Costa Rica	15	266	142	59	143	252	384	480
	Panama	2	596	500	242	419	596	773	950
	Peru	12	261	110	219	230	230	230	612
d) Baked and	Regional	22	193	277	6	58	125	141	1333
cooked desserts	Argentina	N/A							
	Costa Rica	19	210	295	39	76	130	146	1333
	Panama	1	125	N/A	125	125	125	125	125
	Peru	2	62	80	6	34	62	91	119
e) Pancakes,	Regional	18	370	154	107	238	429	513	536
waffles and French	Argentina	3	261	35	223	245	268	280	292
toast	Costa Rica	10	462	95	229	443	480	529	536
	Panama	1	500	N/A	500	500	500	500	500

	Peru	4	191	137	107	125	131	197	396
f) Scones and	Regional	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
soda bread	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
g) Dry mixes	Regional	171	491	372	0	209	424	716	2760
	Argentina	44	274	158	22	150	253	428	570
	Costa Rica	78	580	419	0	299	516	814	2760
	Panama	36	620	381	42	305	659	773	1667
	Peru	13	333	139	172	200	307	473	527
h) Other	Regional	9	106	81	13	25	103	174	213
	Argentina	9	106	81	13	25	103	174	213
	Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3. Savory snacks	Regional	1142	546	350	0	310	517	760	2491
	Argentina	309	617	260	0	480	627	783	2110
	Costa Rica	491	525	395	0	200	472	767	2467
	Panama	106	642	444	17	366	544	831	2491
	Peru	236	452	269	0	295	377	618	1434
a) Crackers/savory	Regional	385	627	290	0	444	636	813	2110
biscuits	Argentina	174	630	266	0	496	639	783	2110
	Costa Rica	122	705	324	0	490	706	900	1600
	Panama	12	689	174	403	592	713	809	962
	Peru	77	490	252	0	353	400	651	1063
	Regional	250	433	314	0	200	350	607	1960

b) Nuts, seeds and	Argentina	41	538	250	0	387	540	772	864
kernels	Costa Rica	121	383	313	6	161	320	516	1960
	Panama	34	409	309	17	170	338	500	1212
	Peru	54	482	341	19	263	335	650	1267
c) Potato,	Regional	259	443	294	0	217	400	571	2491
vegetable and grain	Argentina	40	531	241	0	460	552	664	1023
chips	Costa Rica	102	400	257	0	200	400	571	1400
	Panama	44	638	439	33	384	543	735	2491
	Peru	73	338	173	67	211	325	377	1000
d) Extruded	Regional	169	728	381	0	540	720	889	2467
snacks	Argentina	54	700	234	172	590	752	884	1292
	Costa Rica	81	716	431	0	467	679	900	2467
	Panama	14	1074	490	536	776	932	1238	2367
	Peru	20	610	271	216	392	600	720	1434
e) Pretzels	Regional	43	810	471	185	432	711	1076	2200
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	29	896	474	185	515	880	1120	2200
	Panama	2	1393	455	1071	1232	1393	1554	1714
	Peru	12	507	274	213	315	387	628	1107
f) Other	Regional	36	21	49	0	0	0	9	189
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	36	21	49	0	0	0	9	189
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4. Beverages	Regional	1706	118	378	0	4	14	46	6400
	Argentina	523	183	472	0	4	17	62	3733
	Costa Rica	582	130	401	0	2	15	54	6400

	Panama	148	24	37	0	4	11	39	294
	Peru	453	59	252	0	5	11	38	2778
5. Edible Ices	Regional	352	58	58	0	25	52	75	508
	Argentina	83	51	58	0	16	49	63	489
	Costa Rica	216	59	62	0	25	50	72	508
	Panama	1	18		18	18	18	18	18
	Peru	52	69	36	0	57	71	82	197
6. Breakfast cereals	Regional	533	228	206	0	24	215	350	1307
	Argentina	93	220	178	0	53	223	316	810
	Costa Rica	208	267	214	0	100	250	372	1307
	Panama	51	322	223	0	197	333	397	1133
	Peru	181	161	184	0	6	50	302	775
a) Minimally	Regional	90	36	101	0	0	4	20	733
processed	Argentina	8	43	86	0	0	5	34	250
	Costa Rica	32	26	52	0	0	7	21	200
	Panama	11	156	237	0	0	24	270	733
	Peru	39	10	25	0	0	3	9	150
b) Highly	Regional	443	266	200	0	101	268	367	1307
processed	Argentina	85	236	176	0	86	240	325	810
	Costa Rica	176	309	204	0	150	300	405	1307
	Panama	40	368	199	0	246	350	426	1133
	Peru	142	202	187	0	18	183	347	775
7. Yoghurt, sour	Regional	813	69	86	0	46	60	77	2200
milk, cream and	Argentina	299	64	27	0	47	62	78	147
similar foods	Costa Rica	219	77	159	11	40	48	69	2200
	Panama	45	69	32	35	48	58	70	150
	Peru	250	69	26	0	50	61	87	140

8. Cheese	Regional	645	692	478	0	403	640	893	7143
	Argentina	256	642	425	0	346	577	877	3300
	Costa Rica	213	720	583	0	506	643	893	7143
	Panama	68	898	423	32	634	780	1253	1800
	Peru	108	629	348	10	398	608	800	1800
a) Fresh	Regional	203	422	292	0	212	373	630	1500
unripened cheese	Argentina	116	438	323	0	182	367	641	1500
	Costa Rica	38	356	191	23	221	388	505	786
	Panama	14	510	341	32	323	398	681	1240
	Peru	35	405	244	10	345	397	658	865
b) Soft to medium	Regional	26	722	1327	44	355	480	629	7143
ripened cheese	Argentina	8	412	290	53	259	361	448	1000
	Costa Rica	4	2074	3380	286	396	433	2110	7143
	Panama	6	673	79	607	614	640	731	786
	Peru	8	393	169	44	348	480	490	520
c) Semi-hard	Regional	201	656	322	0	500	633	740	2000
ripened cheese	Argentina	63	638	331	80	442	540	760	1800
	Costa Rica	89	629	299	0	545	643	700	2000
	Panama	13	803	408	182	607	679	920	1667
	Peru	36	703	325	120	531	657	810	1800
d) Exta-hard	Regional	96	965	373	0	713	905	1140	2190
ripened cheese	Argentina	50	970	318	217	845	943	1130	2190
	Costa Rica	28	927	460	0	607	821	1054	1800
	Panama	7	1257	430	679	909	1300	1600	1800
·	Peru	11	850	251	550	666	840	945	1317
	Regional	10	575	88	383	530	583	634	679
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

e) Mould ripened	Costa Rica	4	620	46	567	592	621	650	672
cheese, white and	Panama	2	643	51	607	625	643	661	679
red	Peru	4	496	77	383	486	520	530	560
f) Mould ripened	Regional	12	1404	625	800	1214	1309	1333	3300
cheese, blue	Argentina	5	1657	932	973	1320	1320	1370	3300
	Costa Rica	5	1309	117	1214	1214	1297	1320	1500
	Panama	1	1214	N/A	1214	1214	1214	1214	1214
	Peru	1	800	N/A	800	800	800	800	800
g) Processed	Regional	93	973	346	80	694	960	1237	1763
cheese	Argentina	14	943	298	427	804	1012	1113	1440
	Costa Rica	42	876	351	80	607	900	1118	1524
	Panama	24	1139	313	628	943	1153	1342	1669
	Peru	13	1012	347	680	760	880	1200	1763
h) Brine-stored	Regional	4	1121	232	786	1080	1189	1230	1321
cheese	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	3	1233	77	1179	1189	1200	1261	1321
	Panama	1	786	N/A	786	786	786	786	786
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9. Ready-made and	Regional	603	1183	1661	0	321	506	1086	13600
convenience foods	Argentina	202	1097	1451	9	374	549	978	8400
and composite dishes	Costa Rica	205	1190	1787	0	252	517	1016	13600
uisiies	Panama	79	2194	2304	0	371	944	4702	7940
	Peru	117	638	685	85	320	380	557	4538
a) Canned foods	Regional	7	442	312	270	300	335	373	1145
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	3	313	51	270	285	300	335	369
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	4	539	405	300	326	356	569	1145

b) i) Pasta,	Regional	18	455	335	80	244	333	575	1200
noodles, and rice or	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
grains with sauce or seasoned	Costa Rica	8	394	307	80	264	347	410	1040
(prepared)	Panama	4	685	487	226	292	657	1050	1200
(p. opa. oa)	Peru	6	384	231	148	240	308	499	760
b) ii) Pasta,	Regional	177	1017	693	0	472	920	1360	3250
noodles, and rice or	Argentina	41	1090	379	9	798	978	1428	1837
grains with sauce or seasoned (dry-mix,	Costa Rica	57	1067	745	0	648	920	1200	3250
concentrated)	Panama	27	1002	833	0	327	829	1840	3062
,	Peru	52	913	751	97	360	538	1222	3062
c) Pizza and pizza	Regional	41	471	244	89	312	475	594	990
snacks	Argentina	22	463	285	89	158	514	652	973
	Costa Rica	13	505	228	203	349	487	635	990
	Panama	3	476	47	423	458	494	503	512
	Peru	3	381	18	364	372	380	390	399
d) Sandwiches	Regional	15	342	225	37	155	388	488	698
and wraps	Argentina	3	644	51	598	617	637	667	698
	Costa Rica	12	267	181	37	65	267	424	517
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
e) Prepared salads	Regional	8	134	134	8	54	86	168	397
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	6	67	46	8	34	73	88	133
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	2	335	88	273	304	335	366	397
f) Ready-to-eat	Regional	193	381	168	15	275	384	497	765
meals composed of	Argentina	105	392	171	19	275	407	505	765
a combination of	Costa Rica	38	369	200	18	209	384	523	753

carb and either veg	Panama	15	406	177	15	321	372	443	732
or meat, or all 3 combined	Peru	35	350	112	85	299	354	394	644
g) i) Soups (ready-	Regional	49	659	1153	18	212	320	658	6058
to-serve, canned,	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
refrigerated)	Costa Rica	39	719	1284	18	204	292	677	6058
	Panama	4	665	113	543	599	654	720	808
	Peru	6	268	60	187	232	265	307	350
g) ii) Soups (dry,	Regional	95	2896	2762	14	280	2298	5414	13600
concentrated)	Argentina	31	254	69	32	227	276	291	336
	Costa Rica	29	4375	2632	14	2960	4600	5470	13600
	Panama	26	5128	1514	1089	4878	5470	5678	7940
	Peru	9	781	1410	170	295	309	388	4538
10. Butter and	Regional	287	279	395	0	0	0	627	1571
other fats and oils	Argentina	16	262	323	12	86	190	245	1310
	Costa Rica	158	235	346	0	0	0	563	1333
	Panama	16	763	130	593	639	732	888	980
	Peru	97	274	456	0	0	0	700	1571
a) Salted butter,	Regional	125	639	359	0	400	667	857	1571
outter blends,	Argentina	16	262	323	12	86	190	245	1310
margarine and oil- based spreads	Costa Rica	64	579	311	0	393	620	767	1333
baseu spreaus	Panama	16	763	130	593	639	732	888	980
	Peru	29	911	333	384	714	770	1000	1571
b) Other	Regional	162	2	11	0	0	0	0	86
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	94	1	10	0	0	0	0	86
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	68	2	12	0	0	0	0	75

11. Bread, bread	Regional	448	397	236	0	254	403	521	1120
products and crisp	Argentina	151	400	234	0	313	430	500	1060
breads	Costa Rica	176	396	275	0	140	411	597	1120
	Panama	48	503	190	40	420	494	588	1040
	Peru	73	326	116	120	255	352	387	676
a) Sweet and	Regional	40	225	145	0	129	194	314	675
raisin breads	Argentina	1	675	N/A	675	675	675	675	675
	Costa Rica	25	226	143	0	123	236	334	445
	Panama	2	372	123	286	329	372	416	459
	Peru	12	163	48	120	129	150	172	259
b) Leavened bread	Regional	310	400	204	0	332	420	501	1060
	Argentina	148	397	235	0	301	423	500	1060
	Costa Rica	84	376	214	0	256	428	529	761
	Panama	31	500	95	240	441	500	550	706
	Peru	47	385	77	230	348	373	396	676
c) Flatbreads	Regional	98	459	318	0	142	442	688	1120
	Argentina	2	467	18	454	461	467	474	480
	Costa Rica	67	484	341	0	112	579	720	1120
	Panama	15	526	312	40	329	454	745	1040
	Peru	14	269	106	120	175	286	365	385
12. Fresh or dried	Regional	683	16	100	0	0	4	10	2040
pasta, noodles, rice and grains	Argentina	242	14	33	0	0	10	11	216
	Costa Rica	232	27	167	0	0	0	9	2040
	Panama	39	7	10	0	0	4	11	36
	Peru	170	8	22	0	0	2	5	129
13. Fresh and	Regional	24	172	206	0	54	79	272	870
frozen meat,	Argentina	9	154	183	0	38	54	264	510

poultry, game, fish	Costa Rica	15	182	224	42	62	90	197	870
and similar	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14. Processed	Regional	937	744	701	5	346	590	900	5938
meat, poultry,	Argentina	226	894	853	46	462	703	940	5913
game, fish and similar	Costa Rica	363	775	778	5	336	591	951	5938
Sillillal	Panama	162	604	381	10	347	528	815	2495
	Peru	186	624	483	63	318	396	790	2640
a) Canned fish	Regional	292	387	412	27	259	346	440	5778
	Argentina	31	344	130	128	255	303	442	680
	Costa Rica	157	422	548	27	255	346	480	5778
	Panama	61	348	119	109	280	357	446	582
	Peru	43	343	149	70	269	350	390	740
b) Processed fish	Regional	44	425	291	10	241	347	578	1204
and seafood	Argentina	7	281	264	78	94	195	347	810
products, raw	Costa Rica	15	510	310	40	340	517	645	1204
	Panama	9	479	395	10	88	345	910	985
	Peru	13	366	161	200	250	328	420	801
c) Processed fish	Regional	22	1477	1845	128	464	855	1152	5938
and seafood	Argentina	7	2173	2566	338	526	1000	3453	5913
products, non head-treated	Costa Rica	6	1808	2080	345	774	1012	1639	5938
ileau-ti eateu	Panama	1	430	N/A	430	430	430	430	430
	Peru	8	749	367	128	519	834	1001	1152
d) Raw meat	Regional	222	602	418	38	352	587	750	4425
products and	Argentina	71	612	202	46	494	610	717	1574
preparations	Costa Rica	54	753	642	38	410	688	899	4425
	Panama	38	649	462	96	293	697	868	2495
	Peru	59	421	219	63	292	330	523	1300

e) i) Whole muscle	Regional	6	727	252	480	497	706	953	1007
meat products,	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
heat treated (frozen and canned	Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
products)	Panama	2	994	17	982	988	994	1001	1007
producto	Peru	4	593	184	480	480	514	627	865
e) ii) Whole	Regional	8	522	304	22	460	510	546	1136
muscle meat	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
products, heat treated	Costa Rica	2	218	276	22	120	218	315	413
(refrigerated	Panama	2	522	60	480	501	522	543	564
products)	Peru	4	673	310	476	524	540	689	1136
f) Whole muscle	Regional	29	2268	1166	217	1560	2038	2680	5460
meat products,	Argentina	12	3062	1245	590	2475	2915	3692	5460
non-heat	Costa Rica	10	1533	794	217	1261	1504	1759	3321
preservation	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	7	1957	535	1000	1780	2000	2250	2640
g) Comminuted	Regional	261	929	470	5	734	850	1040	4700
meat products,	Argentina	83	892	403	260	703	844	1010	2600
heat treated (cooked)	Costa Rica	90	1023	605	5	758	943	1136	4700
(cookea)	Panama	48	892	301	378	746	815	966	2071
	Peru	40	838	391	198	590	796	902	2000
h) Comminuted	Regional	53	1565	764	5	1215	1536	1695	4800
meat products,	Argentina	15	1337	326	365	1203	1478	1511	1695
non-heat preservation	Costa Rica	29	1658	992	5	1036	1536	1740	4800
preservation	Panama	1	1357	N/A	1357	1357	1357	1357	1357
	Peru	8	1680	130	1440	1631	1688	1800	1812
15. Fresh and	Peru <b>Regional</b>	8 <b>45</b>	1680 <b>45</b>	130 <b>69</b>	1440 <b>0</b>	1631 <b>0</b>	1688 <b>22</b>	1800 <b>60</b>	1812 <b>330</b>
15. Fresh and frozen fruit,									

vegetables, and	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
legumes	Peru	1	4	N/A	4	4	4	4	4
16. Processed fruit,	Regional	722	535	678	0	60	260	720	4400
vegetables, and	Argentina	155	659	870	0	66	229	1080	2885
legumes	Costa Rica	394	474	602	0	22	279	632	4400
	Panama	99	537	686	0	232	256	455	4400
	Peru	74	595	545	4	190	370	953	2300
a) Canned	Regional	327	261	199	0	160	244	330	1646
vegetables and	Argentina	93	185	145	4	98	180	244	920
legumes	Costa Rica	143	310	237	0	203	279	351	1646
	Panama	57	264	93	29	232	248	304	530
	Peru	34	255	227	4	104	200	304	930
b) Pickled	Regional	121	792	778	0	300	534	1000	4400
vegetables	Argentina	10	1353	730	326	1009	1162	1837	2593
	Costa Rica	81	659	677	0	200	472	892	3500
	Panama	11	1247	1371	0	336	467	2000	4400
	Peru	18	842	541	337	520	660	950	2200
c) Olives and	Regional	120	1468	599	0	1077	1400	1675	2885
sundried tomatoes	Argentina	35	2034	564	1065	1490	2045	2460	2885
	Costa Rica	54	1209	447	0	937	1224	1562	2200
	Panama	15	1333	501	395	1067	1400	1550	2600
	Peru	16	1232	347	796	1023	1160	1360	2300
d) Vegetable juice	Regional	17	119	177	0	6	15	186	505
and cocktail	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	16	94	151	0	6	14	109	505
	Panama	1	505	N/A	505	505	505	505	505
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

e) Frozen	Regional	1	15	N/A	15	15	15	15	15
vegetables and	Argentina	N/A	N/A						
legumes	Costa Rica	1	15	N/A	15	15	15	15	15
	Panama	N/A	N/A						
	Peru	N/A	N/A						
f) Frozen potatoes	Regional	41	511	731	0	35	91	376	2143
and other potato	Argentina	N/A	N/A						
products (ready-to- eat)	Costa Rica	21	790	863	0	46	320	1696	2143
eatj	Panama	14	276	470	15	24	59	349	1739
	Peru	6	81	137	10	18	25	45	360
g) Other	Regional	78	72	499	0	0	0	10	4400
	Argentina	17	8	8	0	5	6	9	25
	Costa Rica	78	72	499	0	0	0	10	4400
	Panama	N/A	N/A						
	Peru	N/A	N/A						
17. Plant-based	Regional	159	426	219	0	339	389	501	1500
food/meat	Argentina	77	377	127	0	328	376	433	784
analogues	Costa Rica	50	565	269	5	400	563	681	1500
	Panama	5	204	276	6	12	24	360	620
	Peru	26	339	177	15	301	360	386	680
a) Tofu and	Regional	4	302	326	12	24	296	574	603
tempeh	Argentina		315	407	28	171	315	459	603
	Costa Rica	1	565	N/A	565	565	565	565	565
	Panama	1	12	N/A	12	12	12	12	12
	Peru	N/A	N/A						
b) Meat	Regional	154	422	198	0	341	388	498	1375
analogues	Argentina	75	379	119	0	328	376	432	784
	Costa Rica	49	546	239	5	400	515	680	1375

	Panama	4	252	294	6	20	192	425	620
	Peru	26	339	177	15	301	360	386	680
18. Sauces, dips	Regional	1272	2908	5924	0	366	733	1733	34667
and dressings	Argentina	259	3640	6205	0	379	817	2067	25333
	Costa Rica	508	2570	5479	0	383	750	1827	32750
	Panama	190	3805	6572	0	530	922	3994	34667
	Peru	314	2309	5872	0	235	546	997	32660
a) ii) Bouillon and	Regional	188	10761	10321	0	366	8354	19134	34667
soup stock	Argentina	52	4732	6791	17	273	356	10794	24000
(concentrated)	Costa Rica	66	11982	10790	0	2288	8174	21533	32750
	Panama	35	13674	8864	349	5556	10040	20156	34667
	Peru	35	14505	11572	147	1895	14000	24729	32660
b) Cooking sauces	Regional	281	779	1186	0	303	400	638	7840
including pasta	Argentina	46	409	530	0	48	289	436	2200
sauces and tomato sauces (not	Costa Rica	124	972	1464	0	327	400	700	6400
concentrated)	Panama	37	641	1227	61	350	460	529	7840
•	Peru	74	755	839	0	353	490	720	4000
c) Dips and	Regional	135	353	374	0	24	283	633	1867
dipping sauces	Argentina	7	582	329	0	392	800	800	892
	Costa Rica	47	391	339	0	14	387	641	1450
	Panama	20	833	344	300	599	794	976	1867
	Peru	61	140	214	0	20	28	159	758
d) Emulsion-based	Regional	239	688	767	0	400	667	858	11000
dips, sauces and	Argentina	71	612	479	0	110	708	825	2520
dressings	Costa Rica	98	777	1105	0	400	695	915	11000
	Panama	26	732	223	275	607	767	946	1067
	Peru	44	590	252	4	400	600	759	1167
e) Condiments	Regional	314	1135	948	0	600	904	1410	8060

	Argentina	77	1103	1013	0	590	870	1300	8060
	Costa Rica	133	1299	1028	0	668	1022	1700	6133
	Panama	35	1274	917	80	624	1100	1678	4200
	Peru	69	786	577	1	400	700	1020	3818
f) Soy sauce and	Regional	37	5076	1921	95	3867	5444	6400	8400
fish sauce	Argentina	5	4397	848	3260	4000	4320	4950	5453
	Costa Rica	13	5432	2284	95	3867	6200	7067	8400
	Panama	9	4482	2027	1420	3293	4133	6167	7733
	Peru	10	5486	1691	1867	4742	5727	5940	7679
g) Other Asian-	Regional	35	3546	5302	0	580	2239	4067	23938
style sauces	Argentina	1	2239	N/A	2239	2239	2239	2239	2239
	Costa Rica	14	2261	1692	95	611	2656	3735	4721
	Panama	15	5828	7412	0	1205	4067	5744	23938
	Peru	5	559	680	3	207	387	465	1733
h) Marinades and	Regional	42	1314	1289	0	157	835	2250	5280
thick pastes	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	13	2100	1391	0	1667	2200	2533	5280
	Panama	13	974	822	0	693	730	1333	2800
	Peru	16	953	1296	20	91	218	1300	4018

## 3.2 Objective 2

Table 3.2.1 Proportion of products meeting the 2022 PAHO Sodium Targets (mg per 100g/mL), at the regional and country level (2022 data collection)

PAHO 2021 Major and Sub Category	RE	GIONAL	AR	GENTINA	CO	STA RICA	P	ANAMA		PERU
	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target
Bread, bread products and crisp breads	544	34% (184)	226	27% (60)	187	36% (67)	44	20% (9)	87	55% (48)
1a. Pantry and hearth bread, rolls and buns	248	25% (62)	102	12% (12)	84	49% (41)	23	9% (2)	39	18% (7)
1b. Tortillas (wheat), wraps, naan, roti	74	51% (38)	6	83% (5)	42	29% (12)	12	58% (7)	14	100% (14)
1c. Bread with additions	29	14% (4)	0	N/A	19	5% (1)	4	0% (0)	6	50% (3)
1d. Other bread products	193	41% (80)	118	36% (43)	42	31% (13)	5	0% (0)	28	86% (24)
2. Cakes, biscuits, pastries and sweet breads	1501	49% (736)	626	56% (351)	511	42% (217)	99	34% (34)	265	51% (134)
2a. Savory biscuits and crackers	273	48% (132)	144	49% (70)	64	38% (24)	9	33% (3)	56	62% (35)
2b. Cookies and sweet biscuits	855	51% (433)	342	61% (210)	294	48% (140)	64	30% (19)	155	41% (64)
2c. Pastries, squares, and quick/sweet breads	215	43% (92)	80	46% (37)	85	28% (24)	22	41% (9)	28	79% (22)
2d. Cakes	158	50% (79)	60	57% (34)	68	43% (29)	4	75% (3)	26	50% (13)
3. Corn derivatives	58	47% (27)	0	N/A	43	44% (19)	8	25% (2)	7	86% (6)
3a. Tortillas (corn)	15	13% (2)	0	N/A	13	15% (2)	2	0% (0)	0	N/A
3b. Biscuits (bizcochos)	27	48% (13)	0	N/A	20	35% (7)	0	N/A	7	86% (6)
3c. Tostadas	9	89% (8)	0	N/A	8	100% (8)	1	0% (0)	0	N/A
3d. Arepas	7	57% (4)	0	N/A	2	100% (2)	5	40% (2)	0	N/A
4. Breakfast cereal	472	50% (238)	87	56% (49)	195	48% (93)	48	35% (17)	142	56% (79)
4a. Ready to eat and hot instant breakfast cereals	472	50% (238)	87	56% (49)	195	48% (93)	48	35% (17)	142	56% (79)

5. Savoury snacks	730	46% (339)	143	23% (33)	336	52% (174)	92	36% (33)	159	62% (99)
5a. Nuts, seeds, and kernels, seasoned and candied	201	37% (75)	36	6% (2)	95	49% (47)	26	46% (12)	44	32% (14)
5b. Chips, popcorn, and/or extruded snacks	398	44% (176)	101	28% (28)	172	48% (83)	48	33% (16)	77	64% (49)
5c. Pretzels and snack mixes	63	60% (38)	3	33% (1)	38	53% (20)	4	25% (1)	18	89% (16)
5d. Other savory snacks	68	74% (50)	3	67% (2)	31	77% (24)	14	29% (4)	20	100% (20)
6. Cheese	645	61% (391)	256	69% (176)	213	56% (120)	68	44% (30)	108	60% (65)
6a. Fresh cheese (i.e., fresh mozzarella and others)	116	49% (57)	62	48% (30)	30	53% (16)	3	0% (0)	21	52% (11)
6b. Soft cheese (i.e., unripened goat cheese, cream cheese)	113	66% (75)	59	75% (44)	23	43% (10)	11	73% (8)	20	65% (13)
6c. Semi-hard cheese (e.g., mozzarella, cheddar and others)	234	56% (131)	64	67% (43)	97	55% (53)	27	37% (10)	46	54% (25)
6d. Hard cheese, grated and ungrated	98	85% (83)	52	90% (47)	29	79% (23)	6	50% (3)	11	91% (10)
6e. Processed cheese	84	54% (45)	19	63% (12)	34	53% (18)	21	43% (9)	10	60% (6)
7. Processed vegetables, beans, and	728	41% (300)	151	41% (62)	390	43% (166)	109	28% (30)	78	54% (42)
legumes										
7a. Tomato paste with additions	90	62% (56)	2	100% (2)	78	62% (48)	6	33% (2)	4	100% (4)
7b. Canned vegetables	225	25% (57)	74	41% (30)	85	20% (17)	38	5% (2)	28	29% (8)
7c. Canned beans, chickpeas and lentils	77	35% (27)	10	90% (9)	44	23% (10)	17	24% (4)	6	67% (4)
7d. Baked and refried beans (mashed)	26	4% (1)	0	N/A	20	5% (1)	6	0% (0)	0	N/A
7e. Frozen potatoes and similar products	34	74% (25)	11	73% (8)	7	71% (5)	11	64% (7)	5	100% (5)
7f. Dry mashed or scalloped potatoes (as consumed)	29	52% (15)	9	89% (8)	15	27% (4)	4	75% (3)	1	0% (0)
7g. Pickled vegetables	109	54% (59)	10	20% (2)	70	59% (41)	11	55% (6)	18	56% (10)
7h. Sundried tomatoes	4	25% (1)	0	N/A	4	25% (1)	0	N/A	0	N/A
7i. Olives	117	40% (47)	35	9% (3)	51	53% (27)	15	40% (6)	16	69% (11)
7j. Vegetable juice	17	71% (12)	0	N/A	16	75% (12)	1	0% (0)	0	N/A

8. Processed meat and poultry	566	44% (249)	178	42% (75)	184	31% (57)	91	47% (43)	113	65% (74)
8a. Packaged deli meats – fully cooked	126	52% (66)	41	66% (27)	56	38% (21)	10	30% (3)	19	79% (15)
8b. Packaged dry-cured deli meats – dry cured, fermented, no thermal process	61	21% (13)	21	29% (6)	30	23% (7)	1	0% (0)	9	0% (0)
8c. Sausages - uncooked	39	10% (4)	6	17% (1)	11	0% (0)	17	6% (1)	5	40% (2)
8d. Sausages - cooked	69	43% (30)	16	38% (6)	24	29% (7)	13	46% (6)	16	69% (11)
8e. Uncooked bacon – belly	5	0% (0)	1	0% (0)	3	0% (0)	0	N/A	1	0% (0)
8f. Burgers, meatballs, meatloaf and breaded meat and poultry	180	54% (98)	66	41% (27)	43	40% (17)	21	67% (14)	50	80% (40)
8g. Ham, canned meat and poultry, and uncooked, pickled, cured and smoked meats that are not deli meats	63	49% (31)	14	43% (6)	14	21% (3)	26	73% (19)	9	33% (3)
8h. Patés and meat spreads	23	30% (7)	13	15% (2)	3	67% (2)	3	0% (0)	4	75% (3)
9. Processed fish and seafood	368	41% (151)	54	54% (29)	176	42% (74)	72	36% (26)	66	33% (22)
9a. Canned fish	300	41% (124)	36	50% (18)	159	44% (70)	62	34% (21)	43	35% (15)
9b. Frozen plain fish and seafood with added sodium phosphate	24	54% (13)	11	73% (8)	3	33% (1)	8	50% (4)	2	0% (0)
9c. Fish and seafood cakes, fingers or burgers, seasoned, and breaded or battered or with sauces	28	43% (12)	4	75% (3)	9	22% (2)	1	100% (1)	14	43% (6)
9d. Smoked, salted, pickled and kippered fish	16	12% (2)	3	0% (0)	5	20% (1)	1	0% (0)	7	14% (1)
10. Soy products and meat	158	59% (93)	77	69% (53)	50	28% (14)	5	80% (4)	26	85% (22)
alternatives										
10a. Seasoned tofu and tempeh	10	60% (6)	1	0% (0)	6	50% (3)	3	100% (3)	0	N/A
10b. Meat analogues and other meat alternatives	148	59% (87)	76	70% (53)	44	25% (11)	2	50% (1)	26	85% (22)
11. Soups	230	27% (62)	45	53% (24)	83	31% (26)	48	8% (4)	54	15% (8)
11a. Wet and dry soups (as consumed)	130	28% (36)	18	61% (11)	68	31% (21)	29	0% (0)	15	27% (4)
11b. Noodles in broth (as consumed)	100	26% (26)	27	48% (13)	15	33% (5)	19	21% (4)	39	10% (4)

12. Ready-made foods, convenience foods, and mixed dishes	349	74% (259)	144	81% (116)	116	65% (75)	24	62% (15)	65	82% (53)
12a. Canned chili	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
12b. Canned stew and meatballs	4	75% (3)	0	N/A	0	N/A	0	N/A	4	75% (3)
12c. Pasta, noodles, rice or grains with sauce or seasonings (as consumed)	15	47% (7)	2	100% (2)	6	17% (1)	3	33% (1)	4	75% (3)
12d. Pasta, noodles, rice or grains with sauce or seasonings (dry mix, as sold)	76	57% (43)	24	100% (24)	37	35% (13)	3	33% (1)	12	42% (5)
12e. Stuffing mixes (as consumed)	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
12f. Pizza and pizza snacks	41	56% (23)	22	50% (11)	13	54% (7)	3	67% (2)	3	100% (3)
12g. Sandwiches	15	73% (11)	3	0% (0)	12	92% (11)	0	N/A	0	N/A
12h. Refrigerated or frozen appetizers, sides and entrees	198	87% (172)	93	85% (79)	48	90% (43)	15	73% (11)	42	93% (39)
13. Fresh or dried plain pasta and noodles	540	35% (190)	202	16% (33)	128	55% (71)	39	41% (16)	171	41% (70)
13a. Plain pasta and noodles (as consumed or dry, uncooked)	540	35% (190)	202	16% (33)	128	55% (71)	39	41% (16)	171	41% (70)
14. Granola and energy bars and nut butters/spreads	231	54% (125)	33	67% (22)	117	50% (58)	31	35% (11)	50	68% (34)
14a. Granola, cereal and energy bars	196	54% (105)	33	67% (22)	101	46% (46)	18	44% (8)	44	66% (29)
14b. Nut butters and nut spreads	35	57% (20)	0	N/A	16	75% (12)	13	23% (3)	6	83% (5)
15. Fats and oils	352	47% (165)	86	57% (49)	144	50% (72)	48	19% (9)	74	47% (35)
15a. Salted butter, margarine, and butter blends	108	32% (35)	16	81% (13)	45	40% (18)	17	0% (0)	30	13% (4)
15b. Mayonnaise	96	45% (43)	31	26% (8)	21	52% (11)	16	38% (6)	28	64% (18)
15c. Salad dressing & vinaigrette	148	59% (87)	39	72% (28)	78	55% (43)	15	20% (3)	16	81% (13)
16. Sauces, dips, gravy and condiments	909	41% (370)	203	57% (116)	330	34% (113)	153	34% (52)	223	40% (89)
16a. Bouillon cubes and powders (as sold)	47	77% (36)	35	97% (34)	1	100% (1)	5	20% (1)	6	0% (0)
16b. Pasta sauce	89	29% (26)	25	80% (20)	28	11% (3)	5	0% (0)	31	10% (3)

16c. Pesto	24	58% (14)	2	100% (2)	17	47% (8)	0	N/A	5	80% (4)
16d. Tomato sauce	76	43% (33)	26	85% (22)	5	40% (2)	26	12% (3)	19	32% (6)
16e. Ketchup and similar tomato-type condiments (as consumed)	105	44% (46)	29	48% (14)	41	39% (16)	12	58% (7)	23	39% (9)
16f. Mustard	57	30% (17)	21	38% (8)	19	11% (2)	4	25% (1)	13	46% (6)
16g. Spicy sauce	118	62% (73)	14	50% (7)	57	56% (32)	14	57% (8)	33	79% (26)
16h. Gravy, cooking sauces, dips, and salsa (as consumed)	159	20% (32)	23	4% (1)	65	26% (17)	34	12% (4)	37	27% (10)
16i. Sweet oriental sauces	16	19% (3)	2	0% (0)	10	10% (1)	1	0% (0)	3	67% (2)
16j. Soya and other salty oriental sauces	54	26% (14)	6	17% (1)	19	16% (3)	17	41% (7)	12	25% (3)
16k. Marinades (as consumed)	31	55% (17)	2	0% (0)	12	33% (4)	4	100% (4)	13	69% (9)
16l. Dry seasoning mixes for rice and side dishes	41	29% (12)	3	67% (2)	9	22% (2)	15	40% (6)	14	14% (2)
16m. Dry seasoning mixes for meat and fish	92	51% (47)	15	33% (5)	47	47% (22)	16	69% (11)	14	64% (9)

Table 3.2.2 Proportion of products meeting the 2022 PAHO Sodium Targets (mg/100kcal), at the regional and country level (2022 data collection)

PAHO 2021 Major and Sub Category	RE	GIONAL	AR	GENTINA	COS	STA RICA	P.	ANAMA		PERU
	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target
Bread, bread products and crisp breads	545	36% (195)	226	27% (62)	187	40% (74)	45	24% (11)	87	55% (48)
1a. Pantry and hearth bread, rolls and buns	248	25% (61)	102	11% (11)	84	46% (39)	23	22% (5)	39	15% (6)
1b. Tortillas (wheat), wraps, naan, roti	74	49% (36)	6	83% (5)	42	26% (11)	12	50% (6)	14	100% (14)
1c. Bread with additions	29	31% (9)	0	N/A	19	26% (5)	4	0% (0)	6	67% (4)

1d. Other bread products	194	46% (89)	118	39% (46)	42	45% (19)	6	0% (0)	28	86% (24)
2. Cakes, biscuits, pastries and sweet breads	1500	48% (713)	625	52% (326)	511	41% (210)	99	38% (38)	265	52% (139)
2a. Savory biscuits and crackers	273	49% (135)	144	48% (69)	64	39% (25)	9	44% (4)	56	66% (37)
2b. Cookies and sweet biscuits	854	51% (436)	341	61% (207)	294	46% (135)	64	34% (22)	155	46% (72)
2c. Pastries, squares, and quick/sweet breads	215	40% (87)	80	42% (34)	85	28% (24)	22	41% (9)	28	71% (20)
2d. Cakes	158	35% (55)	60	27% (16)	68	38% (26)	4	75% (3)	26	38% (10)
3. Corn derivatives	58	67% (39)	0	N/A	43	65% (28)	8	62% (5)	7	86% (6)
3a. Tortillas (corn)	15	93% (14)	0	N/A	13	92% (12)	2	100% (2)	0	N/A
3b. Biscuits (bizcochos)	27	44% (12)	0	N/A	20	30% (6)	0	N/A	7	86% (6)
3c. Tostadas	9	100% (9)	0	N/A	8	100% (8)	1	100% (1)	0	N/A
3d. Arepas	7	57% (4)	0	N/A	2	100% (2)	5	40% (2)	0	N/A
4. Breakfast cereal	473	47% (220)	87	48% (42)	195	43% (84)	49	33% (16)	142	55% (78)
4a. Ready to eat and hot instant breakfast cereals	473	47% (220)	87	48% (42)	195	43% (84)	49	33% (16)	142	55% (78)
5. Savoury snacks	731	71% (522)	143	57% (82)	336	73% (245)	93	66% (61)	159	84% (134)
5a. Nuts, seeds, and kernels, seasoned and candied	201	75% (151)	36	44% (16)	95	80% (76)	26	92% (24)	44	80% (35)
5b. Chips, popcorn, and/or extruded snacks	399	70% (281)	101	62% (63)	172	72% (124)	49	63% (31)	77	82% (63)
5c. Pretzels and snack mixes	63	63% (40)	3	33% (1)	38	58% (22)	4	25% (1)	18	89% (16)
5d. Other savory snacks	68	74% (50)	3	67% (2)	31	74% (23)	14	36% (5)	20	100% (20)
6. Cheese	644	40% (256)	256	36% (92)	213	43% (91)	68	43% (29)	107	41% (44)
6a. Fresh cheese (i.e., fresh mozzarella and others)	116	24% (28)	62	27% (17)	30	30% (9)	3	0% (0)	21	10% (2)
6b. Soft cheese (i.e., unripened goat cheese, cream cheese)	113	20% (23)	59	20% (12)	23	13% (3)	11	9% (1)	20	35% (7)
6c. Semi-hard cheese (e.g., mozzarella, cheddar and others)	233	44% (102)	64	55% (35)	97	38% (37)	27	33% (9)	45	47% (21)
6d. Hard cheese, grated and ungrated	98	30% (29)	52	19% (10)	29	48% (14)	6	0% (0)	11	45% (5)

6e. Processed cheese	84	88% (74)	19	95% (18)	34	82% (28)	21	90% (19)	10	90% (9)
7. Processed vegetables, beans, and legumes	653	44% (286)	131	46% (60)	355	45% (160)	95	33% (31)	72	49% (35)
7a. Tomato paste with additions	90	12% (11)	2	100% (2)	78	9% (7)	6	33% (2)	4	0% (0)
7b. Canned vegetables	225	41% (93)	74	58% (43)	85	44% (37)	38	11% (4)	28	32% (9)
7c. Canned beans, chickpeas and lentils	77	43% (33)	10	90% (9)	44	25% (11)	17	41% (7)	6	100% (6)
7d. Baked and refried beans (mashed)	26	15% (4)	0	N/A	20	20% (4)	6	0% (0)	0	N/A
7e. Frozen potatoes and similar products	0	N/A	0	N/A	0	N/A (0)	0	N/A	0	N/A
7f. Dry mashed or scalloped potatoes (as consumed)	0	N/A	0	N/A	0	N/A (0)	0	N/A	0	N/A
7g. Pickled vegetables	98	65% (64)	10	10% (1)	58	79% (46)	12	50% (6)	18	61% (11)
7h. Sundried tomatoes	4	75% (3)	0	N/A	4	75% (3)	0	N/A	0	N/A
7i. Olives	117	59% (69)	35	14% (5)	51	84% (43)	15	80% (12)	16	56% (9)
7j. Vegetable juice	16	56% (9)	0	N/A	15	60% (9)	1	0% (0)	0	N/A
8. Processed meat and poultry	568	32% (183)	178	33% (59)	184	30% (55)	93	28% (26)	113	38% (43)
8a. Packaged deli meats – fully cooked	128	41% (53)	41	54% (22)	56	32% (18)	12	25% (3)	19	53% (10)
8b. Packaged dry-cured deli meats – dry cured, fermented, no thermal process	61	18% (11)	21	29% (6)	30	17% (5)	1	0% (0)	9	0% (0)
8c. Sausages - uncooked	39	18% (7)	6	67% (4)	11	9% (1)	17	0% (0)	5	40% (2)
8d. Sausages - cooked	69	22% (15)	16	0% (0)	24	33% (8)	13	23% (3)	16	25% (4)
8e. Uncooked bacon – belly	5	0% (0)	1	0% (0)	3	0% (0)	0	N/A	1	0% (0)
8f. Burgers, meatballs, meatloaf and breaded meat and poultry	180	39% (70)	66	30% (20)	43	37% (16)	21	52% (11)	50	46% (23)
8g. Ham, canned meat and poultry, and uncooked, pickled, cured and smoked meats that are not deli meats	63	32% (20)	14	36% (5)	14	36% (5)	26	35% (9)	9	11% (1)
8h. Patés and meat spreads	23	30% (7)	13	15% (2)	3	67% (2)	3	0% (0)	4	75% (3)
9. Processed fish and seafood	366	53% (194)	54	52% (28)	175	57% (100)	71	41% (29)	66	56% (37)
9a. Canned fish	299	56% (167)	36	47% (17)	159	61% (97)	61	41% (25)	43	65% (28)

9b. Frozen plain fish and seafood with added sodium phosphate	24	54% (13)	11	73% (8)	3	67% (2)	8	38% (3)	2	0% (0)
9c. Fish and seafood cakes, fingers or burgers, seasoned, and breaded or battered or with sauces	28	50% (14)	4	75% (3)	9	11% (1)	1	100% (1)	14	64% (9)
9d. Smoked, salted, pickled and kippered fish	15	0% (0)	3	0% (0)	4	0% (0)	1	0% (0)	7	0% (0)
10. Soy products and meat alternatives	157	61% (95)	77	73% (56)	49	37% (18)	5	80% (4)	26	65% (17)
10a. Seasoned tofu and tempeh	10	50% (5)	1	0% (0)	6	33% (2)	3	100% (3)	0	N/A
10b. Meat analogues and other meat alternatives	147	61% (90)	76	74% (56)	43	37% (16)	2	50% (1)	26	65% (17)
11. Soups	228	48% (110)	45	40% (18)	83	43% (36)	48	44% (21)	52	67% (35)
11a. Wet and dry soups (as consumed)	130	34% (44)	18	17% (3)	68	41% (28)	29	10% (3)	15	67% (10)
11b. Noodles in broth (as consumed)	98	67% (66)	27	56% (15)	15	53% (8)	19	95% (18)	37	68% (25)
12. Ready-made foods, convenience foods, and mixed dishes	347	41% (144)	144	48% (69)	115	47% (54)	24	25% (6)	64	23% (15)
12a. Canned chili	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
12b. Canned stew and meatballs	4	0% (0)	0	N/A	0	N/A	0	N/A	4	0% (0)
12c. Pasta, noodles, rice or grains with sauce or seasonings (as consumed)	15	13% (2)	2	0% (0)	6	17% (1)	3	0% (0)	4	25% (1)
12d. Pasta, noodles, rice or grains with sauce or seasonings (dry mix, as sold)	75	51% (38)	24	83% (20)	37	41% (15)	3	33% (1)	11	18% (2)
12e. Stuffing mixes (as consumed)	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A
12f. Pizza and pizza snacks	41	46% (19)	22	36% (8)	0	N/A	3	0% (0)	3	100% (3)
12g. Sandwiches	14	71% (10)	3	33% (1)	11	82% (9)	0	N/A	0	N/A
12h. Refrigerated or frozen appetizers, sides and entrees	198	38% (75)	93	43% (40)	48	44% (21)	15	33% (5)	42	21% (9)
13. Fresh or dried plain pasta and noodles	539	35% (190)	201	16% (33)	128	55% (71)	39	41% (16)	171	41% (70)
13a. Plain pasta and noodles (as consumed or dry, uncooked)	539	35% (190)	201	16% (33)	128	55% (71)	39	41% (16)	171	41% (70)

14. Granola and energy bars and nut butters/spreads	231	63% (145)	33	76% (25)	117	63% (74)	32	38% (12)	49	69% (34)
14a. Granola, cereal and energy bars	195	67% (131)	33	76% (25)	101	62% (63)	18	61% (11)	43	74% (32)
14b. Nut butters and nut spreads	36	39% (14)	0	N/A	16	69% (11)	14	7% (1)	6	33% (2)
15. Fats and oils	345	42% (144)	86	52% (45)	140	41% (57)	45	29% (13)	74	39% (29)
15a. Salted butter, margarine, and butter blends	106	27% (29)	16	75% (12)	43	35% (15)	17	0% (0)	30	7% (2)
15b. Mayonnaise	94	50% (47)	31	16% (5)	21	52% (11)	14	64% (9)	28	79% (22)
15c. Salad dressing & vinaigrette	145	47% (68)	39	72% (28)	76	41% (31)	14	29% (4)	16	31% (5)
16. Sauces, dips, gravy and condiments	866	42% (361)	203	51% (103)	291	40% (116)	153	27% (42)	219	46% (100)
16a. Bouillon cubes and powders (as sold)	47	51% (24)	35	66% (23)	1	100% (1)	5	0% (0)	6	0% (0)
16b. Pasta sauce	89	20% (18)	25	20% (5)	28	11% (3)	5	0% (0)	31	32% (10)
16c. Pesto	24	46% (11)	2	100% (2)	17	35% (6)	0	N/A	5	60% (3)
16d. Tomato sauce	76	50% (38)	26	65% (17)	5	40% (2)	26	35% (9)	19	53% (10)
16e. Ketchup and similar tomato-type condiments (as consumed)	104	60% (62)	29	69% (20)	40	50% (20)	12	58% (7)	23	65% (15)
16f. Mustard	53	38% (20)	21	52% (11)	15	20% (3)	4	25% (1)	13	38% (5)
16g. Spicy sauce	104	62% (65)	14	57% (8)	43	56% (24)	14	43% (6)	33	82% (27)
16h. Gravy, cooking sauces, dips, and salsa (as consumed)	157	43% (67)	23	52% (12)	63	51% (32)	34	21% (7)	37	43% (16)
16i. Sweet oriental sauces	16	6% (1)	2	0% (0)	10	0% (0)	1	0% (0)	3	33% (1)
16j. Soya and other salty oriental sauces	54	9% (5)	6	0% (0)	19	16% (3)	17	0% (0)	12	17% (2)
16k. Marinades (as consumed)	26	50% (13)	2	0% (0)	11	36% (4)	4	100% (4)	9	56% (5)
16l. Dry seasoning mixes for rice and side dishes	38	11% (4)	3	67% (2)	6	0% (0)	15	0% (0)	14	14% (2)
16m. Dry seasoning mixes for meat and fish	78	42% (33)	15	20% (3)	33	55% (18)	16	50% (8)	14	29% (4)

Table 3.2.3. Proportion of products meeting the WHO Sodium Targets (mg per 100g/mL), at the regional and country level (2022 data collection)

WHO Major and		REGION	AL	ARGEN	ITINA	COSTA	RICA	PANA	MA	PERU	
Sub Categories	WHO Target (mg/100g)	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target	n	% (n) Meeting Target
1. Chocolate and sugar confectionery, energy bars, and sweet toppings and desserts	_	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1a. Granola and cereal-type bars	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1b. Nut butters	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2. Cakes, sweet biscuits and pastries; other sweet bakery wares; and drymixes for making such	-	1089	50% (540)	427	49% (211)	395	51% (200)	72	43% (31)	195	50% (98)
2a. Cookies/sweet biscuits	265	789	60% (473)	283	66% (186)	291	59% (171)	61	44% (27)	154	58% (89)
2b. Cakes and sponges	205	176	27% (47)	86	22% (19)	59	31% (18)	7	57% (4)	23	22% (5)
2c. Pies and pastries	120	84	8% (7)	55	5% (3)	15	27% (4)	2	0% (0)	12	0% (0)
2d. Baked and cooked desserts	100	22	27% (6)	0	N/A	19	26% (5)	1	0% (0)	2	50% (1)

2e. Pancakes, waffles and	330	18	39% (7)	3	100% (3)	10	10% (1)	1	0% (0)	4	75% (3)
French toast											
2f. Scones and soda bread	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2g. Dry-mixes for making cakes, sweet biscuits, pastries and other sweet bakery wares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3. Savoury	-	1106	44% (491)	309	34% (104)	455	45% (207)	106	33% (35)	236	61% (145)
snacks											
3a. Crackers/savour y biscuits	600	385	45% (173)	174	44% (77)	122	35% (43)	12	25% (3)	77	65% (50)
3b. Nuts, seeds and kernels	280	250	37% (93)	41	12% (5)	121	47% (57)	34	41% (14)	54	31% (17)
3c. Potato, vegetable and grain chips	500	259	63% (163)	40	32% (13)	102	70% (71)	44	41% (18)	73	84% (61)
3d. Extruded snacks	520	169	23% (39)	54	17% (9)	81	28% (23)	14	0% (0)	20	35% (7)
3e. Pretzels	760	43	53% (23)	0	N/A	29	45% (13)	2	0% (0)	12	83% (10)
4. Beverages	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5. Edible ices	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6. Breakfast cereals	-	533	60% (320)	93	66% (61)	208	53% (110)	51	39% (20)	181	71% (129)
6a. Minimally processed breakfast cereals (includes all types –	100	90	90% (81)	8	88% (7)	32	91% (29)	11	64% (7)	39	97% (38)

prepared, ready- made and dry- mixes)											
6b. Highly processed breakfast cereals	280	443	54% (239)	85	64% (54)	176	46% (81)	40	32% (13)	142	64% (91)
7. Yoghurt, sour milk, cream and other similar foods	-	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8. Cheese	-	533	35% (391)	201	39% (78)	177	37% (65)	59	15% (9)	96	35% (34)
8a. Fresh unripened cheese	190	203	24% (48)	116	27% (31)	38	18% (7)	14	14% (2)	35	23% (8)
8b. Soft to medium ripened cheese	520	26	65% (17)	8	75% (6)	4	75% (3)	6	0% (0)	8	100% (8)
8c. Semi-hard ripened cheese	625	201	47% (95)	63	60% (38)	89	43% (38)	13	31% (4)	36	42% (15)
8d. Extra-hard ripened cheese	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8e. Mould ripened cheese, white and red	510	10	10% (1)	0	N/A	4	0% (0)	2	0% (0)	4	25% (1)
8f. Mould ripened cheese, blue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8g. Processed cheese	720	93	27% (25)	14	21% (3)	42	40% (17)	24	12% (3)	13	15% (2)
8h. Brine-stored cheese	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9. Ready-made and convenience	-	603	31% (187)	202	20% (40)	205	38% (77)	79	20% (16)	117	46% (54)

foods and composite dishes											
9a. Canned foods	225	7	0% (0)	0	N/A	3	0% (0)	0	NA	4	0% (0)
9bi. Pasta, noodles, and rice or grains with sauce or seasoned (prepared)	230	18	28% (5)	0	N/A	8	25% (2)	4	25% (1)	6	33% (2)
9bii. Pasta, noodles, and rice or grains with sauce or seasoned (dry- mix, concentrated)	770	177	42% (74)	41	22% (9)	57	37% (21)	27	44% (12)	52	62% (32)
9c. Pizza and pizza snacks	450	41	46% (19)	22	41% (9)	13	46% (6)	3	33% (1)	3	100% (3)
9d. Sandwiches and wraps	430	15	60% (9)	3	0% (0)	12	75% (9)	0	N/A	0	NaN% (0)
9e. Prepared salads	390	8	88% (7)	0	N/A	6	100% (6)	0	N/A	2	50% (1)
9f. Ready-to-eat meals composed of a combination of carbohydrate and either vegetable or meat, or all three combined	250	193	21% (40)	105	19% (20)	38	34% (13)	15	7% (1)	35	17% (6)
9gi. Soups (ready-toserve,	235	49	37% (18)	0	N/A	39	41% (16)	4	0% (0)	6	33% (2)

canned and refrigerated											
soups)											
9gii. Soups (dry soup only) (concentrated)	1200	95	16% (15)	31	6% (2)	29	14% (4)	26	4% (1)	9	89% (8)
10. Butter and other fats and oils	-	125	26% (32)	16	81% (13)	64	28% (18)	16	0% (0)	29	3% (1)
10a. Salted butter, butter blends, margarine and oil-based spreads	400	125	26% (32)	16	81% (13)	64	28% (18)	16	0% (0)	29	3% (1)
11. Bread, bread products and crisp breads	-	448	32% (143)	151	26% (40)	176	41% (72)	48	12% (6)	73	34% (25)
11a. Sweet and raisin breads	310	40	75% (30)	1	0% (0)	25	68% (17)	2	50% (1)	12	100% (12)
11b. Leavened bread	330	310	25% (77)	148	27% (40)	84	36% (30)	31	3% (1)	47	13% (6)
11c. Flatbreads	320	98	37% (36)	2	0% (0)	67	37% (25)	15	27% (4)	14	50% (7)
12. Fresh or dried pasta, noodles, rice and grains	•	0	35% (190)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13. Fresh and frozen meat, poultry, game, fish and similar	-	0	70% (7)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14. Processed meat, poultry,	-	937	27% (250)	226	18% (40)	363	31% (113)	162	30% (48)	186	26% (49)

C. 1											
game, fish and similar											
14a. Canned fish	360	292	57% (167)	31	65% (20)	157	58% (91)	61	51% (31)	43	58% (25)
14b. Processed fish and seafood products, raw	270	44	30% (13)	7	57% (4)	15	13% (2)	9	33% (3)	13	31% (4)
14c. Processed fish and seafood products, nonheat-treated	800	22	45% (10)	7	43% (3)	7	43% (3)	1	100% (1)	8	50% (4)
14d. Raw meat products and preparations	230	222	9% (21)	71	1% (1)	54	13% (7)	38	24% (9)	59	7% (4)
14ei. Whole muscle meat products, heat treated (frozen and canned products)	270	6	0% (0)	0	N/A	0	N/A	2	0% (0)	4	0% (0)
14eii. Whole muscle meat products, heat treated (refrigerated products)	600	8	88% (7)	0	N/A	2	100% (2)	2	100% (2)	4	75% (3)
14f. Whole muscle meat products, non-heat preservation	950	29	10% (3)	12	8% (1)	10	20% (2)	0	N/A	7	0% (0)
14g. Comminuted meat products,	540	261	10% (27)	83	12% (10)	90	7% (6)	48	4% (2)	40	22% (9)

heat treated (cooked)											
14h. Comminuted meat products, non-heat	830	53	4% (2)	15	7% (1)	29	3% (1)	1	0% (0)	8	0% (0)
preservation											
15. Fresh and frozen fruit, vegetables and legumes	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16. Processed fruit, vegetables and legumes	-	627	24% (148)	138	14% (20)	316	29% (93)	99	19% (19)	74	22% (16)
16a. Canned vegetables and legumes	50	327	11% (37)	93	19% (18)	143	10% (14)	57	2% (1)	34	12% (4)
16b. Pickled vegetables	550	121	52% (63)	10	20% (2)	81	58% (47)	11	55% (6)	18	39% (7)
16c. Olives and sundried tomatoes	780	120	9% (11)	35	0% (0)	54	17% (9)	15	13% (2)	16	0% (0)
16d. Vegetable juice and cocktail	200	17	76% (13)	0	N/A	16	81% (13)	1	0% (0)	0	N/A
16e. Frozen vegetables and legumes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16f. Frozen potatoes and other potato products (ready- to-eat)	260	41	56% (23)	0	N/A	21	43% (9)	14	64% (9)	6	83% (5)

16g. Battered or breaded vegetables	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17. Plant-based food/ meat analogues	-	158	13% (20)	77	13% (10)	50	6% (3)	5	60% (3)	26	15% (4)
17a. Tofu and tempeh	280	4	50% (2)	2	50% (1)	1	0% (0)	1	100% (1)	0	NA
17b. Meat analogues	250	154	12% (18)	75	12% (9)	49	6% (3)	4	50% (2)	26	15% (4)
18. Sauces, dips and dressings	-	1271	38% (479)	259	41% (107)	508	33% (169)	190	31% (58)	314	46% (145)
18ai. Bouillon and soup stock (not concentrated)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
18aii. Bouillon and soup stock (concentrated)	15000	188	52% (97)	52	40% (21)	66	58% (38)	35	57% (20)	35	51% (18)
18b. Cooking sauces including pasta sauces and tomato sauces (not concentrated)	330	281	30% (85)	46	67% (31)	124	27% (34)	38	18% (7)	74	19% (14)
18c. Dips and dipping sauces	360	135	54% (73)	7	14% (1)	47	43% (20)	20	5% (1)	61	84% (51)
18d. Emulsion- based dips, sauces and dressings	500	239	35% (83)	71	37% (26)	98	33% (32)	26	15% (4)	44	48% (21)
18e. Condiments	650	314	28% (88)	77	32% (25)	133	24% (32)	35	26% (9)	69	32% (22)
18f. Soy sauce and fish sauce	4840	37	46% (17)	5	60% (3)	13	38% (5)	9	67% (6)	10	30% (3)

18g. Other Asian-style	680	35	31% (11)	1	0% (0)	14	36% (5)	15	13% (2)	5	80% (4)
sauces											
18h. Marinades and thick pastes	1425	42	60% (25)	0	N/A	13	23% (3)	13	77% (10)	16	75% (12)

## 3.3 Objective 3

Table 3.3.1 Changes in the sodium content per 100 g/ml of packaged foods in PAHO countries between 2015-2016, 2017-2018 and in 2022.

PAHO categories	Collection	Region/ Country	All		ıcts with ım data	Sodi (mg per 1		P		s (mg per		1)
	year		n	n	%	Mean	SD	Min	25 <sup>th</sup>	50 <sup>th</sup>	75 <sup>th</sup>	Max
Bread	2015-2016	Regional	350	350	100.0%	446	260	0	306	475	580	1300
products		Argentina	123	123	100.0%	452	255	0	279	480	610	1200
		Costa Rica	83	83	100.0%	435	314	0	180	473	603	1240
		Paraguay	76	76	100.0%	398	199	0	292	439	536	76
		Peru	68	68	100.0%	503	249	1	404	486	590	1300
	2017-2018	Regional	353	309	87.5%	385	192	0	316	432	500	1030
		Argentina	111	110	99.1%	443	126	1	396	443	500	1030
		Costa Rica	124	85	68.5%	368	228	0	197	402	500	947
		Paraguay	95	91	95.8%	354	200	0	224	410	500	95
		Peru	23	23	100.0%	291	215	1	1	359	440	623
	2022	Regional	459	355	77.3%	442	213	0	356	432	550	1200
		Argentina	134	133	99.3%	460	178	0	393	444	552	1030
		Costa Rica	177	132	74.6%	431	282	0	263	432	600	1200
		Panama	33	30	90.9%	510	138	240	438	497	551	1040
		Peru	115	60	52.2%	396	98	40	351	384	400	676
Breakfast	2015-2016	Regional	392	392	100.0%	307	247	0	100	283	468	1395
cereals		Argentina	88	88	100.0%	318	253	0	113	277	518	1100
		Costa Rica	115	115	100.0%	433	185	44	313	400	567	1067
		Paraguay	98	98	100.0%	201	210	0	68	125	275	977
		Peru	91	91	100.0%	251	276	0	6	229	383	1395

	2017-2018	Regional	432	427	98.8%	318	262	0	137	290	437	2700
		Argentina	85	85	100.0%	283	196	0	130	250	417	810
		Costa Rica	135	135	100.0%	410	277	0	246	371	517	2500
		Paraguay	130	128	98.5%	232	277	0	74	199	315	2700
		Peru	82	79	96.3%	338	222	0	159	337	430	955
	2022	Regional	522	472	90.4%	256	202	0	79	260	361	1307
		Argentina	87	87	100.0%	232	177	0	77	240	323	810
		Costa Rica	195	195	100.0%	285	209	0	113	275	375	1307
		Panama	49	48	98.0%	342	215	0	220	350	408	1133
		Peru	191	142	25.7%	202	187	0	18	183	347	775
Butter and	2015-2016	Regional	101	101	100.0%	554	652	0	140	480	670	5000
margarine		Argentina	23	23	100.0%	199	228	0	45	120	260	720
		Costa Rica	43	43	100.0%	553	362	0	308	600	692	2000
		Paraguay	17	17	100.0%	484	339	96	200	470	670	1110
		Peru	18	18	100.0%	1079	1238	20	405	786	1207	5000
	2017-2018	Regional	145	140	96.6%	486	347	0	140	571	707	1571
		Argentina	38	38	100.0%	272	239	0	92	190	540	810
		Costa Rica	49	44	89.8%	594	265	0	509	643	732	1067
		Paraguay	40	40	100.0%	487	371	0	140	555	670	1110
		Peru	18	18	100.0%	673	442	0	450	761	1000	1571
	2022	Regional	113	108	95.6%	624	378	0	383	673	864	1571
		Argentina	16	16	100%	262	323	12	86	190	245	1310
		Costa Rica	45	45	100%	528	326	0	361	607	714	1067
		Panama	18	17	94%	765	126	593	643	750	886	980
		Peru	34	30	88%	881	367	0	704	760	996	1571
Cakes	2015-2016	Regional	312	312	100.0%	374	233	0	212	310	508	1465
		Argentina	127	127	100.0%	323	204	3	212	260	435	820
		Costa Rica	117	117	100.0%	385	244	22	195	297	572	971
		Paraguay	35	35	100.0%	472	176	120	368	496	578	765
		Peru	33	33	100.0%	425	301	0	200	344	677	1465
	2017-2018	Regional	334	237	71.0%	275	218	0	129	230	371	1739
		Argentina	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Costa Rica	194	102	52.6%	358	269	4	172	330	456	1739
		-			-		-					

		Paraguay	140	135	96.4%	212	142	0	108	167	275	597
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	528	358	67.8%	357	257	0	187	301	444	1667
		Argentina	145	143	98.6%	279	136	22	186	268	386	660
		Costa Rica	206	138	67.0%	436	289	0	221	365	536	1214
		Panama	29	27	93.1%	544	462	59	137	358	850	1667
		Peru	148	50	33.8%	264	128	6	155	241	345	612
Bouillon	2015-2016	Regional	79	79	100.0%	19018	7356	263	16667	20000	23120	33810
cubes and		Argentina	23	23	100.0%	18466	8584	1800	14000	19852	22300	33810
powders		Costa Rica	26	26	100.0%	17063	7638	1000	10000	19400	21600	27500
		Paraguay	6	6	100.0%	19396	1054	17642	18905	19594	19880	20760
		Peru	24	24	100.0%	21571	6159	263	19225	22353	26176	29613
	2017-2018	Regional	83	78	94.0%	19579	6801	139	18800	19880	22300	33813
		Argentina	38	38	100.0%	20482	7224	1778	18989	20745	24267	33813
		Costa Rica	18	13	72.2%	17834	7858	1000	18800	20000	21200	25400
		Paraguay	27	27	100.0%	19149	5596	139	18421	19760	20760	33120
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	49	46	93.9%	7197	10599	17	277	351	16555	30640
		Argentina	35	35	100.0%	1951	5076	17	257	316	363	24000
		Costa Rica	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Panama	5	5	100.0%	21089	2396	17764	20000	21044	22702	23938
		Peru	9	6	66.7%	26221	3372	22209	23408	27022	27929	30640
Meat and	2015-2016	Regional	58	58	100.0%	12130	9834	17	3900	11371	19710	38000
fish		Argentina	26	26	100.0%	16630	6349	4250	12990	16610	19810	28906
seasonings		Costa Rica	15	15	100.0%	4860	4071	17	767	3900	6073	12600
		Paraguay	6	6	100.0%	27203	11697	10000	19800	29280	36860	38000
		Peru	11	11	100%	3186	1618	20	1964	3615	4343	4790
	2017-2018	Regional	90	85	94.4%	11209	8892	4	3667	10146	16340	36140
		Argentina	19	19	100.0%	14423	4309	7829	10167	15500	17100	23493
		Costa Rica	50	45	90.0%	8284	9138	4	1333	5517	12500	33636
		Paraguay	21	21	100.0%	14567	9525	20	9420	15640	18520	36140
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	132	85	64.4%	11435	10616	0	2500	6903	21320	32750
		1108101101										

		Argentina	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Costa Rica	68	54	79.4	11876	11147	0	2288	6336	22084	32750
		Panama	19	16	84.2%	9995	7866	349	4455	7375	12155	26400
		Peru	45	15	33.3%	11383	11682	333	1295	8333	21910	31667
Seasonings	2015-2016	Regional	145	145	100.0%	9475	10739	0	767	3889	18200	37280
for side and		Argentina	22	22	100.0%	2921	3648	0	745	1054	3240	10390
main dishes		Costa Rica	44	44	100.0%	11855	10970	0	1375	9000	19380	33000
		Paraguay	28	28	100.0%	19313	9180	5600	13020	18660	20500	37280
		Peru	51	51	100.0%	4847	8811	0	500	1360	3778	32670
	2017-2018	Regional	77	74	96.1%	5872	7974	0	400	1067	8444	28000
		Argentina	27	26	96.3%	5935	6840	0	1008	3164	12611	21707
		Costa Rica	9	8	88.9%	16269	9755	6000	7556	14622	25900	28000
		Paraguay	41	40	97.6%	3752	6721	74	240	400	1656	20600
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	69	43	62.3%	14546	9280	0	9063	14000	19250	34667
		Argentina	3	3	100.0%	3889	6736	0	0	0	5833	11667
		Costa Rica	16	10	62.5%	14930	8249	1000	9744	15742	20417	26100
		Panama	15	15	100.0%	16571	9577	3778	9080	15800	23656	34667
		Peru	25	15	57.7%	14396	9357	158	11850	14000	18700	32660
<b>Cookies and</b>	2015-2016	Regional	432	432	100.0%	283	223	0	177	260	343	3433
sweet		Argentina	98	98	100.0%	279	365	0	134	214	331	3433
cookies		Costa Rica	127	127	100.0%	292	162	0	193	273	362	1000
		Paraguay	116	116	100.0%	253	103	20	180	246	300	642
		Peru	91	91	100%	315	204	0	186	300	357	1111
	2017-2018	Regional	976	930	95.3%	289	529	0	177	240	313	9000
		Argentina	237	235	99.2%	241	130	0	153	231	313	1120
		Costa Rica	326	286	87.7%	269	242	0	168	252	320	3419
		Paraguay	382	381	99.7%	336	790	0	187	240	310	9000
		Peru	31	28	90%	270	174	0	200	232	352	714
	2022	Regional	950	856	90.1%	237	144	0	135	221	317	967
		Argentina	342	342	100.0%	210	151	0	110	176	290	967
		Costa Rica	346	295	85.3%	243	132	0	150	232	318	775
		Panama	64	64	100.0%	331	202	34	198	294	414	962

		Peru	198	155	78.2%	247	97	0	175	250	321	444
Flavored	2015-2016	Regional	180	180	100.0%	651	352	0	498	657	804	1929
cookies and		Argentina	67	67	100.0%	522	340	12	120	620	733	1496
crackers		Costa Rica	43	43	100.0%	866	375	55	650	793	1045	1929
		Paraguay	32	32	100.0%	559	310	0	372	597	766	1197
		Peru	38	38	100.0%	712	237	277	603	679	800	1643
	2017-2018	Regional	243	243	100.0%	591	275	0	473	594	759	2000
		Argentina	76	76	100.0%	500	239	0	433	547	633	861
		Costa Rica	81	81	100.0%	701	222	5	552	702	848	1433
		Paraguay	85	85	100.0%	567	316	0	430	573	729	2000
		Peru	1	1	100.0%	600	n/a	600	600	600	600	600
	2022	Regional	224	217	96.9%	631	296	0	489	660	833	2110
		Argentina	145	144	99.3%	606	311	0	485	647	803	2110
		Costa Rica	70	64	91.4%	682	272	109	505	745	875	1167
		Panama	9	9	100.0%	668	133	403	625	708	733	837
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mayonnaise	2015-2016	Regional	90	90	100.0%	814	230	96	700	850	942	2000
		Argentina	18	18	100.0%	856	145	558	765	903	950	1067
		Costa Rica	34	34	100.0%	754	162	373	567	833	867	933
		Paraguay	18	18	100.0%	915	120	610	867	942	1000	1075
		Peru	20	20	100.0%	789	388	96	597	733	1000	2000
	2017-2018	Regional	139	136	97.8%	897	630	1	767	850	942	7698
		Argentina	35	35	100.0%	862	91	550	842	850	925	1042
		Costa Rica	32	32	100.0%	1064	1262	487	668	767	896	7698
		Paraguay	56	56	100.0%	877	126	333	850	925	942	1025
		Peru	16	13	81.3%	666	335	1	505	633	1000	1133
	2022	Regional	100	96	96.0%	708	209	247	599	733	825	1333
		Argentina	31	31	100.0%	753	153	275	672	742	825	1225
		Costa Rica	21	21	100.0%	728	245	247	595	667	843	1333
		Panama	17	16	94.1%	772	176	500	619	767	903	1067
		Peru	31	28	90.3%	608	226	339	400	600	768	1110
Meats and	2015-2016	Regional	378	378	100.0%	865	587	0	640	818	1030	7000
sausages		Argentina	162	162	100.0%	925	349	30	750	875	1050	2420

		Costa Rica	60	60	100.0%	976	676	31	533	859	1240	4200
		Paraguay	109	109	100.0%	755	427	38	520	710	856	3000
		Peru	47	47	100.0%	766	1147	0	72	560	1036	7000
	2017-2018	Regional	565	498	88.1%	890	412	2	658	834	1076	2720
		Argentina	207	207	100.0%	940	370	46	746	850	1084	2200
		Costa Rica	169	107	63.3%	932	459	2	701	929	1198	2321
		Paraguay	182	177	97.3%	800	403	54	570	728	920	2720
		Peru	7	7	100.0%	1026	684	301	304	1320	1650	1708
	2022	Regional	536	297	55.4%	844	432	63	663	820	980	4700
		Argentina	110	110	100.0%	791	227	260	664	788	897	1574
		Costa Rica	155	93	60.0%	987	594	63	773	900	1107	4700
		Panama	108	49	45.4%	879	388	110	717	850	1000	2495
		Peru	163	45	27.6%	639	362	222	329	560	797	1500
Cured and	2015-2016	Regional	41	41	100.0%	1433	962	0	596	1540	1700	3500
preserved		Argentina	28	28	100.0%	1631	1047	310	810	1540	2125	3500
meats		Costa Rica	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Paraguay	12	12	100.0%	1090	511	0	798	1118	1599	1657
		Peru	1	1	100%	0	n/a	0	0	0	0	0
	2017-2018	Regional	142	84	59.2%	1580	1761	153	822	1403	1764	15400
		Argentina	14	14	100.0%	2011	769	1380	1405	1763	2250	3623
					100.070		703	1300	1 103	1703		3023
		Costa Rica	105	48	45.7%	1570	2105	273	822	1350	1717	15400
			105 23	48 22	45.7% 95.7%	1570 1328	2105 1339	273 153	822 471	1350 1039	1717 1658	15400 6475
		Costa Rica	105 23 n/a	48 22 n/a	45.7% 95.7% n/a	1570 1328 n/a	2105 1339 n/a	273 153 n/a	822 471 n/a	1350 1039 n/a	1717 1658 n/a	15400 6475 n/a
	2022	Costa Rica Paraguay	105 23 n/a <b>309</b>	48 22 n/a <b>160</b>	45.7% 95.7% n/a <b>51.8%</b>	1570 1328 n/a 1398	2105 1339 n/a <b>939</b>	273 153 n/a <b>5</b>	822 471 n/a <b>790</b>	1350 1039 n/a 1206	1717 1658 n/a 1700	15400 6475 n/a <b>5460</b>
	2022	Costa Rica Paraguay Peru Regional Argentina	105 23 n/a <b>309</b> 36	48 22 n/a <b>160</b> 36	45.7% 95.7% n/a <b>51.8%</b> 100.0%	1570 1328 n/a 1398 1904	2105 1339 n/a <b>939</b> 1197	273 153 n/a <b>5</b> 274	822 471 n/a <b>790</b> 1175	1350 1039 n/a <b>1206</b> 1535	1717 1658 n/a <b>1700</b> 2559	15400 6475 n/a <b>5460</b> 5460
	2022	Costa Rica Paraguay Peru Regional Argentina Costa Rica	105 23 n/a <b>309</b> 36 109	48 22 n/a <b>160</b> 36 59	45.7% 95.7% n/a <b>51.8%</b> 100.0% 54.1%	1570 1328 n/a 1398 1904 1470	2105 1339 n/a <b>939</b> 1197 955	273 153 n/a <b>5</b> 274	822 471 n/a <b>790</b> 1175 906	1350 1039 n/a 1206 1535 1440	1717 1658 n/a <b>1700</b> 2559 1697	15400 6475 n/a <b>5460</b> 5460 4800
	2022	Costa Rica Paraguay Peru Regional Argentina	105 23 n/a <b>309</b> 36 109 30	48 22 n/a <b>160</b> 36 59 27	45.7% 95.7% n/a <b>51.8%</b> 100.0% 54.1% 90.0%	1570 1328 n/a 1398 1904 1470 862	2105 1339 n/a <b>939</b> 1197 955 310	273 153 n/a <b>5</b> 274 5 400	822 471 n/a <b>790</b> 1175 906 723	1350 1039 n/a <b>1206</b> 1535 1440 815	1717 1658 n/a <b>1700</b> 2559 1697 946	15400 6475 n/a <b>5460</b> 5460 4800 2071
		Costa Rica Paraguay Peru Regional Argentina Costa Rica Panama Peru	105 23 n/a <b>309</b> 36 109 30 134	48 22 n/a <b>160</b> 36 59 27	45.7% 95.7% n/a <b>51.8%</b> 100.0% 54.1% 90.0% 28.4%	1570 1328 n/a 1398 1904 1470 862 1186	2105 1339 n/a 939 1197 955 310 649	273 153 n/a <b>5</b> 274 5 400 198	822 471 n/a <b>790</b> 1175 906 723 790	1350 1039 n/a 1206 1535 1440 815 953	1717 1658 n/a <b>1700</b> 2559 1697 946 1691	15400 6475 n/a <b>5460</b> 5460 4800 2071 2640
Breaded	2022	Costa Rica Paraguay Peru Regional Argentina Costa Rica Panama Peru Regional	105 23 n/a 309 36 109 30 134 72	48 22 n/a 160 36 59 27 38 72	45.7% 95.7% n/a <b>51.8%</b> 100.0% 54.1% 90.0% 28.4% <b>100.0%</b>	1570 1328 n/a 1398 1904 1470 862 1186 <b>756</b>	2105 1339 n/a 939 1197 955 310 649 440	273 153 n/a 5 274 5 400 198 71	822 471 n/a <b>790</b> 1175 906 723 790 <b>511</b>	1350 1039 n/a 1206 1535 1440 815 953 617	1717 1658 n/a 1700 2559 1697 946 1691	15400 6475 n/a <b>5460</b> 5460 4800 2071 2640 <b>2110</b>
meat and		Costa Rica Paraguay Peru Regional Argentina Costa Rica Panama Peru Regional Argentina	105 23 n/a <b>309</b> 36 109 30 134 <b>72</b> 22	48 22 n/a 160 36 59 27 38 72 22	45.7% 95.7% n/a <b>51.8%</b> 100.0% 54.1% 90.0% 28.4% <b>100.0%</b>	1570 1328 n/a 1398 1904 1470 862 1186 <b>756</b> 541	2105 1339 n/a 939 1197 955 310 649 440 102	273 153 n/a 5 274 5 400 198 71	822 471 n/a <b>790</b> 1175 906 723 790 <b>511</b> 466	1350 1039 n/a 1206 1535 1440 815 953 617 555	1717 1658 n/a 1700 2559 1697 946 1691 900 610	15400 6475 n/a <b>5460</b> 5460 4800 2071 2640 <b>2110</b> 709
		Costa Rica Paraguay Peru Regional Argentina Costa Rica Panama Peru Regional Argentina Costa Rica	105 23 n/a 309 36 109 30 134 72 22 41	48 22 n/a 160 36 59 27 38 72 22 41	45.7% 95.7% n/a 51.8% 100.0% 54.1% 90.0% 28.4% 100.0% 100.0%	1570 1328 n/a 1398 1904 1470 862 1186 <b>756</b> 541 853	2105 1339 n/a 939 1197 955 310 649 440 102 500	273 153 n/a 5 274 5 400 198 71 317	822 471 n/a <b>790</b> 1175 906 723 790 <b>511</b> 466 511	1350 1039 n/a <b>1206</b> 1535 1440 815 953 <b>617</b> 555 785	1717 1658 n/a 1700 2559 1697 946 1691 900 610 917	15400 6475 n/a <b>5460</b> 5460 4800 2071 2640 <b>2110</b> 709 2110
meat and		Costa Rica Paraguay Peru Regional Argentina Costa Rica Panama Peru Regional Argentina Costa Rica Paraguay	105 23 n/a 309 36 109 30 134 72 22 41	48 22 n/a 160 36 59 27 38 72 22 41 8	45.7% 95.7% n/a <b>51.8%</b> 100.0% 54.1% 90.0% 28.4% <b>100.0%</b> 100.0% 100.0%	1570 1328 n/a 1398 1904 1470 862 1186 <b>756</b> 541 853 862	2105 1339 n/a 939 1197 955 310 649 440 102 500 540	273 153 n/a 5 274 5 400 198 71 317 71 153	822 471 n/a <b>790</b> 1175 906 723 790 <b>511</b> 466 511 445	1350 1039 n/a 1206 1535 1440 815 953 617 555 785 723	1717 1658 n/a 1700 2559 1697 946 1691 900 610 917 1405	15400 6475 n/a <b>5460</b> 5460 4800 2071 2640 <b>2110</b> 709 2110 1600
meat and		Costa Rica Paraguay Peru Regional Argentina Costa Rica Panama Peru Regional Argentina Costa Rica	105 23 n/a 309 36 109 30 134 72 22 41	48 22 n/a 160 36 59 27 38 72 22 41	45.7% 95.7% n/a 51.8% 100.0% 54.1% 90.0% 28.4% 100.0% 100.0%	1570 1328 n/a 1398 1904 1470 862 1186 <b>756</b> 541 853	2105 1339 n/a 939 1197 955 310 649 440 102 500	273 153 n/a 5 274 5 400 198 71 317	822 471 n/a <b>790</b> 1175 906 723 790 <b>511</b> 466 511	1350 1039 n/a <b>1206</b> 1535 1440 815 953 <b>617</b> 555 785	1717 1658 n/a 1700 2559 1697 946 1691 900 610 917	15400 6475 n/a <b>5460</b> 5460 4800 2071 2640 <b>2110</b> 709 2110

	2017-2018	Regional	134	108	80.6%	474	272	1	284	446	620	1139
		Argentina	10	10	100.0%	524	209	152	398	498	590	843
		Costa Rica	26	20	76.9%	732	240	375	531	740	908	1139
		Paraguay	41	40	97.6%	449	311	54	119	452	668	1030
		Peru	57	38	66.7%	352	139	1	269	357	446	630
	2022	Regional	122	109	89.3%	477	219	38	308	485	621	935
		Argentina	32	32	100.0%	486	127	46	448	494	610	632
		Costa Rica	37	32	86.4%	577	267	38	384	619	772	935
		Panama	15	15	100.0%	371	275	96	126	278	621	830
		Peru	38	30	78.9%	413	167	225	285	360	526	721
Pasta and	2015-2016	Regional	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
noodles, as		Argentina	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
consumed		Costa Rica	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Paraguay	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2017-2018	Regional	271	263	97.0%	517	288	0	340	553	664	2496
		Argentina	134	129	96.3%	494	237	0	360	536	640	1075
		Costa Rica	9	7	77.8%	325	70	250	283	300	354	462
		Paraguay	128	127	99.2%	552	333	0	351	593	711	2496
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	168	111	66.0%	409	196	0	283	384	509	1200
		Argentina	72	72	100.0%	431	148	31	313	419	520	765
		Costa Rica	44	20	45.5%	354	202	18	249	328	361	1040
		Panama	5	5	100.0%	509	562	0	0	343	1000	1200
		Peru	47	14	29.8%	342	178	85	229	325	396	760
Pasta and	2015-2016	Regional	337	337	100.0%	445	628	0	10	190	735	7000
noodles,		Argentina	96	96	100.0%	296	412	0	10	14	685	1572
dry		Costa Rica	48	48	100.0%	840	640	0	456	810	1045	2800
uncooked		Paraguay	120	120	100.0%	545	513	0	35	494	766	2035
		Peru	73	73	100%	218	843	0	0	5	129	7000
	2017-2018	Regional	770	738	95.8%	84	270	0	0	7	16	2283
		Argentina	140	138	98.6%	46	139	0	7	10	17	916
		Costa Rica	203	179	88.2%	124	312	0	0	0	14	2040

		Paraguay	424	419	98.8%	80	283	0	0	10	20	2283
		Peru	3	2	66.7%	1	1	0	0	1	1	1
	2022	Regional	593	576	97.1%	57	193	0	0	5	11	2040
		Argentina	214	214	100.0%	33	79	0	9	10	13	445
		Costa Rica	148	148	100.0%	138	330	0	0	2	14	2040
		Panama	46	42	91.3%	66	214	0	0	4	12	857
		Peru	185	172	93.0%	15	71	0	0	2	5	770
Snacks	2015-2016	Regional	604	604	100.0%	715	648	0	399	609	891	8000
		Argentina	123	123	100.0%	863	1043	0	420	608	900	8000
		Costa Rica	206	206	100.0%	735	579	0	394	643	957	5013
		Paraguay	159	159	100.0%	670	425	0	400	610	944	2333
		Peru	116	116	100.0%	584	399	0	375	537	700	3000
	2017-2018	Regional	765	749	97.9%	583	353	0	361	596	760	2667
		Argentina	165	165	100.0%	634	231	0	500	608	752	1237
		Costa Rica	361	347	96.1%	580	410	0	272	536	780	2667
		Paraguay	239	237	99.2%	552	328	0	420	600	720	1237
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	823	730	88.7%	531	362	0	280	467	733	2491
		Argentina	143	143	100.0%	602	250	0	429	604	780	1292
		Costa Rica	338	336	99.4%	516	390	0	202	445	720	2467
		Panama	94	92	97.9%	646	467	27	358	532	842	2491
		Peru	248	159	64.1%	434	276	19	266	359	577	1434
Noodles in	2015-2016	Regional	71	71	100.0%	349	92	108	304	345	396	640
broth		Argentina	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		Costa Rica	13	13	100.0%	427	110	322	345	376	483	640
		Paraguay	3	3	100.0%	272	40	227	227	283	305	305
		Peru	55	55	100.0%	335	79	108	300	344	386	502
	2017-2018	Regional	65	65	100.0%	381	114	156	308	365	424	900
		Argentina	9	9	100.0%	488	113	330	385	550	570	625
		Costa Rica	13	13	100.0%	411	64	308	369	406	448	528
		Paraguay	23	23	100.0%	322	80	156	273	306	367	507
		Peru	20	20	100.0%	381	135	291	308	336	401	900
	2022	Regional	116	101	87.1%	885	806	97	327	463	1215	3250

		Argentina	27	27	100.0%	373	145	98	279	335	375	702
		Costa Rica	16	16	100.0%	1589	1117	298	327	1465	2633	3250
		Panama	27	19	70.4%	1226	867	318	338	1215	1944	3062
		Peru	46	39	84.8%	785	619	97	355	473	1160	3062
Wet and	2015-2016	Regional	217	217	100.0%	564	899	2	260	322	621	5900
dry soups		Argentina	79	79	100.0%	884	1417	2	245	327	975	5900
		Costa Rica	71	71	100.0%	416	220	17	238	370	654	737
		Paraguay	28	28	100.0%	339	149	205	257	298	310	766
		Peru	39	39	100.0%	345	151	18	270	320	373	885
	2017-2018	Regional	151	148	98.0%	298	92	40	255	299	330	725
		Argentina	49	49	100.0%	266	61	40	228	282	303	415
		Costa Rica	80	77	96.3%	322	112	47	288	325	365	725
		Paraguay	22	22	100.0%	290	30	223	282	288	305	351
		Peru	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2022	Regional	143	131	91.6%	2294	2615	14	252	658	4904	13600
		Argentina	18	18	100.0%	238	74	32	208	252	280	336
		Costa Rica	71	68	95.8%	2278	2674	14	221	721	4593	13600
		Panama	30	29	96.7%	4496	2115	543	3609	5258	5636	7940
		Peru	24	15	62.5%	576	1098	170	265	296	344	4538

Note: The 2015-2016 and 2017-2018 data collections include Argentina, Costa Rica, Paraguay and Peru. The 2022 data collection includes Argentina, Costa Rica, Panama and Peru.

Table.3.3.2 Number and percentage of products meeting 2015 PAHO regional targets in PAHO countries between 2015-2016, 2017-2018 and in 2022.

PAHO categories	Collection	Region/Country	Products with sodium data	Meeting Regional Targets	
	year		n	n	%
Bread products	2015-2016	Regional	350	273	78.0%
		Argentina	123	91	74.0%
		Costa Rica	83	62	74.7%
		Paraguay	76	67	88.2%
		Peru	68	53	77.9%

	2017-2018	Regional	309	288	93.2%
		Argentina	110	103	93.6%
		Costa Rica	85	76	89.4%
		Paraguay	91	87	95.6%
		Peru	23	22	95.7%
	2022	Regional	355	295	83.1%
		Argentina	133	112	84.2%
		Costa Rica	132	102	77.3%
		Panama	30	26	86.7%
_		Peru	60	55	91.7%
Breakfast cereals	2015-2016	Regional	392	350	89.3%
		Argentina	88	76	86.4%
		Costa Rica	115	99	86.1%
		Paraguay	98	93	94.9%
		Peru	91	82	90.1%
	2017-2018	Regional	427	393	92.0%
		Argentina	85	79	92.9%
		Costa Rica	135	117	86.7%
		Paraguay	128	125	97.7%
		Peru	79	72	91.1%
	2022	Regional	472	451	95.6%
		Argentina	87	84	96.6%
		Costa Rica	195	184	94.4%
		Panama	48	44	91.7%
		Peru	142	139	97.9%
<b>Butter and margarine</b>	2015-2016	Regional	101	82	81.2%
		Argentina	23	23	100.0%
		Costa Rica	43	35	81.4%
		Paraguay	17	14	82.4%
		Peru	18	10	55.6%
	2017-2018	Regional	140	114	81.4%
		Argentina	38	37	97.4%
		Costa Rica	44	34	77.3%

		Paraguay	40	32	80.0%
		Peru	18	11	61.1%
	2022	Regional	108	77	71.3%
		Argentina	16	15	93.8%
		Costa Rica	45	35	77.8%
		Panama	17	11	64.7%
		Peru	30	16	53.3%
Cakes	2015-2016	Regional	312	197	63.1%
		Argentina	127	89	70.1%
		Costa Rica	44	34	77.3%
		Paraguay	35	11	31.4%
		Peru	33	19	57.6%
	2017-2018	Regional	237	187	78.9%
		Argentina	N/A	N/A	N/A
		Costa Rica	102	71	69.6%
		Paraguay	135	116	85.9%
		Peru	N/A	N/A	N/A
	2022	Regional	358	249	69.6%
		Argentina	143	111	77.6%
		Costa Rica	138	80	58.0%
		Panama	27	14	51.9%
		Peru	50	44	88.0%
Bouillon cubes and	2015-2016	Regional	79	43	54.4%
powders		Argentina	23	14	60.9%
		Costa Rica	26	16	61.5%
		Paraguay	6	5	83.3%
		Peru	24	8	33.3%
	2017-2018	Regional	78	45	57.7%
		Argentina	38	18	47.4%
		Costa Rica	13	7	53.8%
		Paraguay	27	20	74.1%
		Peru	N/A	N/A	N/A
	2022	Regional	46	36	78.3%
		_			

		Argentina	35	34	97.1%
		Costa Rica	N/A	N/A	N/A
		Panama	5	2	40.0%
		Peru	6	0	0.0%
Meat and fish	2015-2016	Regional	58	52	89.7%
seasonings		Argentina	26	23	88.5%
		Costa Rica	15	15	100.0%
		Paraguay	6	3	50.0%
		Peru	11	11	100.0%
	2017-2018	Regional	85	76	89.4%
		Argentina	19	18	94.7%
		Costa Rica	45	40	88.9%
		Paraguay	21	18	85.7%
		Peru	N/A	N/A	N/A
	2022	Regional	121	104	80.0%
		Argentina	36	36	100.0%
		Costa Rica	54	41	75.9%
		Panama	16	15	93.8%
		Peru	15	12	80.0%
Seasonings for side	2015-2016	Regional	145	141	97.2%
and main dishes		Argentina	22	22	100.0%
		Costa Rica	44	44	100.0%
		Paraguay	28	24	85.7%
		Peru	51	51	100.0%
	2017-2018	Regional	74	74	100.0%
		Argentina	26	26	1
		Costa Rica	8	8	100.0%
		Paraguay	40	40	100.0%
		Peru	N/A	N/A	N/A
	2022	Regional	43	42	97.7%
		Argentina	3	3	100.0%
		Costa Rica	10	10	100.0%
		Panama	15	14	93.3%

		Peru	15	15	100.0%
Cookies and sweet	2015-2016	Regional	432	408	94.4%
cookies		Argentina	98	94	95.9%
		Costa Rica	127	118	92.9%
		Paraguay	116	114	98.3%
		Peru	91	82	90.1%
	2017-2018	Regional	930	889	95.6%
		Argentina	235	230	97.9%
		Costa Rica	286	272	95.1%
		Paraguay	381	362	95.0%
		Peru	28	25	89.3%
	2022	Regional	856	826	96.5%
		Argentina	342	329	96.2%
		Costa Rica	295	287	97.3%
		Panama	64	55	85.9%
		Peru	155	155	100.0%
Flavored cookies and	2015-2016	Regional	180	173	96.1%
crackers		Argentina	67	66	98.5%
		Costa Rica	43	38	88.4%
		Paraguay	32	32	100.0%
		Peru	38	37	97.4%
	2017-2018	Regional	243	241	99.2%
		Argentina	76	76	100.0%
		Costa Rica	81	80	98.8%
		Paraguay	85	84	98.8%
		Peru	1	1	100.0%
	2022	Regional	273	271	99.3%
		Argentina	144	142	98.6%
		Costa Rica	64	64	100.0%
		Panama	9	9	100.0%
		Peru	56	56	100.0%
Mayonnaise	2015-2016	Regional	90	86	95.6%
		Argentina	18	17	94.4%

		Costa Rica	34	34	100.0%
		Paraguay	18	17	94.4%
		Peru	20	18	90.0%
	2017-2018	Regional	136	128	94.1%
		Argentina	35	35	100.0%
		Costa Rica	32	26	81.3%
		Paraguay	56	56	100.0%
		Peru	13	11	84.6%
	2022	Regional	96	89	92.7%
		Argentina	31	30	96.8%
		Costa Rica	21	18	85.7%
		Panama	16	15	93.8%
		Peru	28	26	92.9%
Meats and sausages	2015-2016	Regional	378	328	86.8%
		Argentina	162	143	88.3%
		Costa Rica	60	42	70.0%
		Paraguay	109	101	92.7%
		Peru	47	42	89.4%
	2017-2018	Regional	498	420	84.3%
		Argentina	207	174	84.1%
		Costa Rica	107	83	77.6%
		Paraguay	177	160	90.4%
		Peru	7	3	42.9%
	2022	Regional	297	272	91.6%
		Argentina	110	106	96.4%
		Costa Rica	93	80	86.0%
		Panama	49	46	93.9%
		Peru	45	40	88.9%
Cured and preserved	2015-2016	Regional	41	33	80.5%
meats		Argentina	28	20	71.4%
		Costa Rica	N/A	N/A	N/A
		Paraguay	12	12	100.0%
		Peru	1	1	100.0%

	2017-2018	Regional	84	70	83.3%
		Argentina	14	9	64.3%
		Costa Rica	48	43	89.6%
		Paraguay	22	18	81.8%
		Peru	N/A	N/A	N/A
	2022	Regional	160	131	81.9%
		Argentina	36	22	61.1%
		Costa Rica	59	51	86.4%
		Panama	27	26	96.3%
		Peru	38	32	84.2%
Breaded meat and	2015-2016	Regional	72	44	61.1%
poultry		Argentina	22	22	100.0%
		Costa Rica	41	17	41.5%
		Paraguay	8	4	50.0%
		Peru	1	1	100.0%
	2017-2018	Regional	108	90	83.3%
		Argentina	10	8	80.0%
		Costa Rica	20	10	50.0%
		Paraguay	40	34	85.0%
		Peru	38	38	100.0%
	2022	Regional	109	98	89.9%
		Argentina	32	32	100.0%
		Costa Rica	32	23	71.9%
		Panama	15	13	86.7%
		Peru	30	30	100.0%
Pasta and noodles, as	2015-2016	Regional	N/A	N/A	N/A
consumed		Argentina	N/A	N/A	N/A
		Costa Rica	N/A	N/A	N/A
		Paraguay	N/A	N/A	N/A
		Peru	N/A	N/A	N/A
	2017-2018	Regional	263	182	69.2%
	2017-2018	- regional			
	2017-2018	Argentina	129	97	75.2%

		Paraguay	127	78	61.4%
		Peru	N/A	N/A	N/A
	2022	Regional	111	101	91.0%
		Argentina	72	66	91.7%
		Costa Rica	20	19	95.0%
		Panama	5	3	60.0%
		Peru	14	13	92.9%
Pasta and noodles,	2015-2016	Regional	337	332	98.5%
dry uncooked		Argentina	96	96	100.0%
		Costa Rica	48	45	93.8%
		Paraguay	120	119	99.2%
		Peru	73	72	98.6%
	2017-2018	Regional	738	736	99.7%
		Argentina	138	138	100.0%
		Costa Rica	179	178	99.4%
		Paraguay	419	418	99.8%
		Peru	2	2	100.0%
	2022	Regional	576	575	99.8%
		Argentina	214	214	100.0%
		Costa Rica	148	147	99.3%
		Panama	42	42	100.0%
		Peru	172	172	100.0%
Snacks	2015-2016	Regional	604	459	76.0%
		Argentina	123	93	75.6%
		Costa Rica	206	149	72.3%
		Paraguay	159	115	72.3%
		Peru	116	102	87.9%
	2017-2018	Regional	749	642	85.7%
		Argentina	165	150	90.9%
		Costa Rica	347	284	81.8%
		COSTA KICA	J <del>4</del> /	204	02.070
		Paraguay	237	208	87.8%
		-			

		Argentina	143	136	95.1%
		Costa Rica	336	291	86.6%
		Panama	92	71	77.2%
		Peru	159	146	91.8%
Noodles in broth	2015-2016	Regional	71	61	85.9%
		Argentina	N/A	N/A	N/A
		Costa Rica	13	8	61.5%
		Paraguay	3	3	100.0%
		Peru	55	50	90.9%
	2017-2018	Regional	65	49	75.4%
		Argentina	9	4	44.4%
		Costa Rica	13	7	53.8%
		Paraguay	23	21	91.3%
		Peru	20	17	85.0%
	2022	Regional	101	48	47.5%
		Argentina	27	21	77.8%
		Costa Rica	16	5	31.3%
		Panama	19	8	42.1%
		Peru	39	14	35.9%
Wet and dry soups	2015-2016	Regional	217	136	62.7%
		Argentina	79	51	64.6%
		Costa Rica	71	34	47.9%
		Paraguay	28	22	78.6%
		Peru	39	29	74.4%
	2017-2018	Regional	148	120	81.1%
		Argentina	49	47	95.9%
		Costa Rica	77	51	66.2%
		Paraguay	22	22	100.0%
		Peru	N/A	N/A	N/A
	2022	Regional	130	56	43.1%
		Argentina	18	18	100.0%
		Costa Rica	68	26	38.2%
		Panama	29	0	0.0%
					·

Peru	15	12	80.0%

Note: The 2015-2016 and 2017-2018 data collections include Argentina, Costa Rica, Paraguay and Peru. The 2022 data collection includes Argentina, Costa Rica, Panama and Peru.

## 3.4 Objective 4

Table 3.4.1 Number and proportion of products with trans fat data; Distribution of trans fat content per 100g/ml of packaged foods per WHO food category at the regional level and by country

WHO Categories	Country	Products	Products with trans fat data	Perentage	Products with > 0.2g per 100g	Trans (mg   100g/	per	Per	centiles	s (mg po	er 100g	/ml)
		n	n	n	n	Mean	SD	Min	25th	50 <sup>th</sup>	75 <sup>th</sup>	Max
1. Chocolate and	Regional	2053	1335	65%	34	0.0	0.2	0.0	0.0	0.0	0.0	4.0
sugar confectionery,	Argentina	557	556	100%	23	0.0	0.2	0.0	0.0	0.0	0.0	1.2
energy bars, and	Costa Rica	937	418	45%	6	0.0	0.4	0.0	0.0	0.0	0.0	4.0
sweet toppings and desserts	Panama	34	27	79%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	525	334	64%	5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
a) Granola and	Regional	213	167	78%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
cereal-type bars	Argentina	35	35	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	107	79	74%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Panama	19	18	95%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	52	35	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) Nut butters	Regional	39	29	74%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	15	14	93%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	15	9	60%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	9	6	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Regional	1550	1076	69%	91	0.1	0.5	0.0	0.0	0.0	0.0	5.6

2. Cakes, sweet	Argentina	482	482	100%	83	0.2	0.6	0.0	0.0	0.0	0.0	5.6
biscuits and pastries;	Costa Rica	604	300	50%	7	0.0	0.4	0.0	0.0	0.0	0.0	5.2
other sweet bakery	Panama	110	101	92%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
wares; and dry mixes	Peru	354	193	55%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
a) Cookies/sweet	Regional	888	658	74%	68	0.1	0.5	0.0	0.0	0.0	0.0	5.3
biscuits	Argentina	283	283	100%	63	0.2	0.6	0.0	0.0	0.0	0.0	5.3
	Costa Rica	347	176	51%	5	0.1	0.5	0.0	0.0	0.0	0.0	5.2
	Panama	61	58	95%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	197	141	72%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
b) Cakes and	Regional	254	155	61%	14	0.1	0.7	0.0	0.0	0.0	0.0	5.6
sponges	Argentina	88	88	100%	11	0.2	0.9	0.0	0.0	0.0	0.0	5.6
	Costa Rica	106	38	36%	3	0.0	0.1	0.0	0.0	0.0	0.0	0.3
	Panama	9	6	67%	0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
	Peru	51	23	45%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c) Pies and	Regional	161	76	47%	6	0.1	0.2	0.0	0.0	0.0	0.0	1.5
pastries	Argentina	55	55	100%	6	0.1	0.2	0.0	0.0	0.0	0.0	1.5
	Costa Rica	38	7	18%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	2	2	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	66	12	18%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d) Baked and	Regional	31	16	52%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
cooked desserts	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	19	13	68%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	11	2	18%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e) Pancakes,	Regional	20	17	85%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
waffles and French	Argentina	3	3	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
toast	Costa Rica	12	9	75%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Peru	4	4	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g) Dry mixes	Regional	186	145	78%	1	0.0	0.1	0.0	0.0	0.0	0.0	1.3
	Argentina	44	44	100%	1	0.0	0.2	0.0	0.0	0.0	0.0	1.3
	Costa Rica	81	57	70%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	36	33	92%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	25	11	44%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Savory snacks	Regional	1275	1012	79%	21	0.0	0.2	0.0	0.0	0.0	0.0	2.0
	Argentina	310	309	100%	18	0.1	0.3	0.0	0.0	0.0	0.0	2.0
	Costa Rica	517	401	78%	3	0.0	0.1	0.0	0.0	0.0	0.0	2.0
	Panama	108	100	93%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Peru	340	202	59%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
a) Crackers/savory	Regional	422	339	80%	9	0.0	0.2	0.0	0.0	0.0	0.0	1.7
biscuits	Argentina	175	174	99%	8	0.1	0.2	0.0	0.0	0.0	0.0	1.7
	Costa Rica	142	85	60%	1	0.0	0.1	0.0	0.0	0.0	0.0	1.1
	Panama	12	12	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	93	68	73%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) Nuts, seeds and	Regional	294	213	72%	3	0.0	0.2	0.0	0.0	0.0	0.0	2.0
kernels	Argentina	41	41	100%	2	0.1	0.4	0.0	0.0	0.0	0.0	2.0
	Costa Rica	122	102	84%	1	0.0	0.2	0.0	0.0	0.0	0.0	2.0
	Panama	35	31	89%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	96	39	41%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c) Potato,	Regional	301	248	82%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
vegetable and grain	Argentina	40	40	100%	0	0.0	0.1	0.0	0.0	0.0	0.0	0.4
chips	Costa Rica	103	97	94%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	45	41	91%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Peru	113	70	62%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
d) Extruded	Regional	172	158	92%	5	0.0	0.2	0.0	0.0	0.0	0.0	1.6
snacks	Argentina	54	54	100%	5	0.1	0.3	0.0	0.0	0.0	0.0	1.6
	Costa Rica	81	75	93%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Panama	14	14	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	23	15	65%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e) Pretzels	Regional	46	28	61%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	29	16	55%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	2	2	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	15	10	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4. Beverages	Regional	2061	838	41%	13	0.0	0.2	0.0	0.0	0.0	0.0	3.3
	Argentina	528	526	100%	2	0.0	0.1	0.0	0.0	0.0	0.0	1.3
	Costa Rica	819	144	18%	10	0.1	0.6	0.0	0.0	0.0	0.0	3.3
	Panama	149	28	19%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	Peru	565	140	25%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
5. Edible Ices	Regional	443	234	53%	12	0.0	0.2	0.0	0.0	0.0	0.0	2.0
	Argentina	83	83	100%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	Costa Rica	247	106	43%	6	0.0	0.2	0.0	0.0	0.0	0.0	2.0
	Panama	6	1	17%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	107	44	41%	5	0.0	0.1	0.0	0.0	0.0	0.0	0.4
6. Breakfast cereals	Regional	612	471	77%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.5
	Argentina	93	93	100%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.5
	Costa Rica	209	172	82%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	52	39	75%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	258	167	65%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a) Minimally	Regional	119	73	61%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
processed	Argentina	8	8	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	32	24	75%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	12	10	83%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	67	31	46%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) Highly	Regional	492	397	81%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.5
processed	Argentina	85	85	100%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.5

	Costa Rica	176	147	84%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	40	29	73%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	191	136	71%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. Yoghurt, sour	Regional	888	614	69%	16	0.0	0.2	0.0	0.0	0.0	0.0	2.0
milk, cream and	Argentina	299	299	100%	6	0.0	0.2	0.0	0.0	0.0	0.0	2.0
similar foods	Costa Rica	230	63	27%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	65	9	14%	1	0.2	0.7	0.0	0.0	0.0	0.0	2.0
	Peru	294	243	83%	9	0.1	0.1	0.0	0.0	0.1	0.1	1.3
8. Cheese	Regional	898	459	51%	102	0.2	0.5	0.0	0.0	0.0	0.0	2.0
	Argentina	256	255	100%	54	0.3	0.5	0.0	0.0	0.0	0.0	2.0
	Costa Rica	344	90	26%	11	0.1	0.3	0.0	0.0	0.0	0.0	1.0
	Panama	75	44	59%	3	0.0	0.2	0.0	0.0	0.0	0.0	1.0
	Peru	223	70	31%	34	0.4	0.5	0.0	0.0	0.2	0.6	1.8
a) Fresh	Regional	269	173	64%	33	0.2	0.4	0.0	0.0	0.0	0.0	1.7
unripened cheese	Argentina	116	116	100%	19	0.2	0.4	0.0	0.0	0.0	0.0	1.7
	Costa Rica	69	14	20%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	18	9	50%	1	0.1	0.2	0.0	0.0	0.0	0.0	0.5
	Peru	66	34	52%	13	0.2	0.2	0.0	0.0	0.0	0.3	1.0
b) Soft to medium	Regional	37	14	38%	2	0.1	0.4	0.0	0.0	0.0	0.0	1.3
ripened cheese	Argentina	8	8	100%	1	0.1	0.2	0.0	0.0	0.0	0.0	0.7
	Costa Rica	9	0	0%	0	N/A						
	Panama	6	5	83%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	14	1	7%	1	1.3	0.0	1.3	1.3	1.3	1.3	1.3
c) Semi-hard	Regional	321	124	39%	32	0.3	0.5	0.0	0.0	0.0	0.4	2.0
ripened cheese	Argentina	63	62	98%	15	0.3	0.6	0.0	0.0	0.0	0.0	2.0
	Costa Rica	160	35	22%	3	0.1	0.2	0.0	0.0	0.0	0.0	1.0
	Panama	13	10	77%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	85	17	20%	14	0.7	0.5	0.0	0.5	0.6	0.9	1.8
	Regional	127	73	57%	14	0.3	0.6	0.0	0.0	0.0	0.0	2.0

d) Exta-hard	Argentina	50	50	100%	11	0.3	0.6	0.0	0.0	0.0	0.0	2.0
ripened cheese	Costa Rica	44	10	23%	2	0.2	0.4	0.0	0.0	0.0	0.0	0.9
	Panama	9	6	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	24	7	29%	1	0.2	0.4	0.0	0.0	0.0	0.0	1.0
e) Mould ripened	Regional	15	7	47%	2	0.3	0.4	0.0	0.0	0.0	0.4	1.0
cheese, white and	Argentina	N/A	N/A	N/A	2	N/A						
red	Costa Rica	6	4	67%	0	0.5	0.5	0.0	0.0	0.4	0.9	1.0
	Panama	2	2	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	7	1	14%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f) Mould ripened	Regional	16	11	69%	3	0.3	0.5	0.0	0.0	0.0	0.5	1.3
cheese, blue	Argentina	5	5	100%	1	0.3	0.6	0.0	0.0	0.0	0.0	1.3
	Costa Rica	6	4	67%	2	0.5	0.6	0.0	0.0	0.5	1.0	1.0
	Panama	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	4	1	25%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g) Processed	Regional	109	54	50%	15	0.3	0.5	0.0	0.0	0.0	0.6	1.6
cheese	Argentina	14	14	100%	7	0.6	0.6	0.0	0.0	0.3	1.2	1.3
	Costa Rica	47	21	45%	1	0.0	0.2	0.0	0.0	0.0	0.0	0.7
	Panama	25	10	40%	2	0.2	0.4	0.0	0.0	0.0	0.0	1.0
	Peru	23	9	39%	5	0.5	0.6	0.0	0.0	0.3	1.0	1.6
h) Brine-stored	Regional	109	54	50%	1	0.3	0.5	0.0	0.0	0.0	0.6	1.6
cheese	Argentina	14	14	100%	1	0.6	0.6	0.0	0.0	0.3	1.2	1.3
	Costa Rica	47	21	45%	0	0.0	0.2	0.0	0.0	0.0	0.0	0.7
	Panama	25	10	40%	0	0.2	0.4	0.0	0.0	0.0	0.0	1.0
	Peru	23	9	39%	0	0.5	0.6	0.0	0.0	0.3	1.0	1.6
9. Ready-made and	Regional	886	479	54%	13	0.0	0.2	0.0	0.0	0.0	0.0	3.0
convenience foods	Argentina	202	202	100%	9	0.1	0.3	0.0	0.0	0.0	0.0	3.0
and composite dishes	Costa Rica	293	118	40%	3	0.0	0.1	0.0	0.0	0.0	0.0	1.2
G.31103	Panama	98	62	63%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.5

	Peru	293	97	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
a) Canned foods	Regional	7	3	43%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	3	1	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	4	2	50%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) i) Pasta,	Regional	31	9	29%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
noodles, and rice or	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
grains with sauce or	Costa Rica	17	3	18%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
seasoned (prepared)	Panama	7	1	14%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	7	5	71%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) ii) Pasta,	Regional	193	145	75%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.5
noodles, and rice or	Argentina	41	41	100%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.5
grains with sauce or	Costa Rica	58	39	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
seasoned (dry-mix, concentrated)	Panama	35	25	71%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
concentratedy	Peru	59	40	68%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c) Pizza and pizza	Regional	64	38	59%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
snacks	Argentina	22	22	100%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.2
	Costa Rica	15	9	60%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	3	3	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	24	4	17%	0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
d) Sandwiches	Regional	46	13	28%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.4
and wraps	Argentina	3	3	100%	1	0.1	0.2	0.0	0.0	0.0	0.2	0.4
	Costa Rica	25	10	40%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	18	0	0%	0	N/A						
e) Prepared salads	Regional	22	2	9%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	9	0	0%	0	N/A						

	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	13	2	15%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f) Ready-to-eat	Regional	366	164	45%	6	0.0	0.3	0.0	0.0	0.0	0.0	3.0
meals composed of	Argentina	105	105	100%	5	0.1	0.4	0.0	0.0	0.0	0.0	3.0
a combination of	Costa Rica	95	18	19%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.3
carb and either veg or meat, or all 3	Panama	22	11	50%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
combined	Peru	144	30	21%	0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
g) i) Soups (ready-	Regional	56	28	50%	3	0.1	0.2	0.0	0.0	0.0	0.0	1.2
to-serve, canned,	Argentina	N/A	N/A	N/A	2	N/A						
refrigerated)	Costa Rica	42	19	45%	1	0.1	0.3	0.0	0.0	0.0	0.0	1.2
	Panama	5	4	80%	0	0.1	0.2	0.0	0.0	0.0	0.1	0.5
	Peru	9	5	56%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g) ii) Soups (dry,	Regional	101	77	76%	1	0.0	0.3	0.0	0.0	0.0	0.0	2.9
concentrated)	Argentina	31	31	100%	1	0.1	0.5	0.0	0.0	0.0	0.0	2.9
	Costa Rica	29	19	66%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	26	18	69%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	15	9	60%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10. Butter and other	Regional	323	209	65%	15	0.1	0.7	0.0	0.0	0.0	0.0	8.0
fats and oils	Argentina	16	16	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	164	112	68%	6	0.1	0.8	0.0	0.0	0.0	0.0	8.0
	Panama	17	11	65%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	126	70	56%	9	0.2	0.6	0.0	0.0	0.0	0.0	2.6
a) Salted butter,	Regional	130	109	84%	11	0.2	0.9	0.0	0.0	0.0	0.0	8.0
butter blends,	Argentina	16	16	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
margarine and oil-	Costa Rica	64	53	83%	5	0.2	1.2	0.0	0.0	0.0	0.0	8.0
based spreads	Panama	17	11	65%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	33	29	88%	6	0.4	0.9	0.0	0.0	0.0	0.0	2.6
	Regional	578	376	65%	3	0.0	0.1	0.0	0.0	0.0	0.0	1.6
	Argentina	152	152	100%	1	0.0	0.1	0.0	0.0	0.0	0.0	1.6

11. Bread, bread	Costa Rica	226	115	51%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
products and crisp	Panama	65	38	58%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
breads	Peru	135	71	53%	2	0.0	0.1	0.0	0.0	0.0	0.0	0.6
a) Sweet and	Regional	56	28	50%	2	0.0	0.2	0.0	0.0	0.0	0.0	0.6
raisin breads	Argentina	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	36	15	42%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	4	1	25%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	15	11	73%	2	0.1	0.3	0.0	0.0	0.0	0.0	0.6
b) Leavened bread	Regional	392	273	70%	1	0.0	0.1	0.0	0.0	0.0	0.0	1.6
	Argentina	149	149	100%	1	0.0	0.1	0.0	0.0	0.0	0.0	1.6
	Costa Rica	115	58	50%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	33	24	73%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	95	42	44%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c) Flatbreads	Regional	130	75	58%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Argentina	2	2	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	75	42	56%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	28	13	46%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	25	18	72%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12. Fresh or dried	Regional	724	479	66%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
pasta, noodles, rice	Argentina	242	242	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
and grains	Costa Rica	256	111	43%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	43	26	60%	1	0.0	0.1	0.0	0.0	0.0	0.0	0.4
	Peru	183	100	55%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. Fresh and frozen	Regional	280	15	5%	1	0.1	0.2	0.0	0.0	0.0	0.0	0.9
meat, poultry, game, fish and similar	Argentina	9	9	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
iisii anu similar	Costa Rica	271	6	2%	1	0.2	0.4	0.0	0.0	0.0	0.0	0.9
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Regional	1418	651	46%	53	0.1	0.7	0.0	0.0	0.0	0.0	14.8

14. Processed meat,	Argentina	226	226	100%	38	0.2	1.0	0.0	0.0	0.0	0.0	14.8
poultry, game, fish	Costa Rica	534	181	34%	3	0.1	0.6	0.0	0.0	0.0	0.0	7.3
and similar	Panama	226	106	47%	1	0.0	0.1	0.0	0.0	0.0	0.0	1.1
	Peru	432	138	32%	11	0.0	0.2	0.0	0.0	0.0	0.0	1.5
a) Canned fish	Regional	304	195	64%	1	0.0	0.5	0.0	0.0	0.0	0.0	7.3
	Argentina	31	31	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	162	87	54%	1	0.1	0.8	0.0	0.0	0.0	0.0	7.3
	Panama	62	37	60%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	49	40	82%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) Processed fish	Regional	70	33	47%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
and seafood	Argentina	7	7	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
products, raw	Costa Rica	36	12	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	9	8	89%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	18	6	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c) Processed fish	Regional	25	18	72%	0	0.0	0.1	0.0	0.0	0.0	0.0	0.2
and seafood	Argentina	7	7	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
products, non head-	Costa Rica	9	4	44%	0	0.1	0.1	0.0	0.0	0.0	0.1	0.2
treated	Panama	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	8	6	75%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
d) Raw meat	Regional	385	172	45%	46	0.2	0.4	0.0	0.0	0.0	0.2	1.5
products and	Argentina	71	71	100%	32	0.4	0.4	0.0	0.0	0.0	0.8	1.4
preparations	Costa Rica	104	25	24%	2	0.1	0.3	0.0	0.0	0.0	0.0	1.3
	Panama	65	20	31%	1	0.1	0.2	0.0	0.0	0.0	0.0	1.1
	Peru	145	56	39%	11	0.1	0.3	0.0	0.0	0.0	0.0	1.5
e) i) Whole muscle	Regional	6	2	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
meat products, heat	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
treated (frozen and	Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
canned products)	Panama	2	2	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	4	0	0%	0	N/A						

e) ii) Whole	Regional	42	4	10%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
muscle meat	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
products, heat	Costa Rica	21	0	0%	0	N/A						
treated (refrigerated products)	Panama	4	1	25%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
products	Peru	17	3	18%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f) Whole muscle	Regional	61	16	26%	1	0.1	0.3	0.0	0.0	0.0	0.0	1.0
meat products, non-	Argentina	12	12	100%	1	0.1	0.3	0.0	0.0	0.0	0.0	1.0
heat preservation	Costa Rica	23	3	13%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	26	1	4%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g) Comminuted	Regional	453	179	40%	3	0.0	0.1	0.0	0.0	0.0	0.0	0.8
meat products, heat	Argentina	83	83	100%	3	0.0	0.1	0.0	0.0	0.0	0.0	0.8
treated (cooked)	Costa Rica	143	36	25%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	80	36	45%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	147	24	16%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
h) Comminuted	Regional	72	32	44%	2	0.5	2.6	0.0	0.0	0.0	0.0	14.8
meat products, non-	Argentina	15	15	100%	2	1.0	3.8	0.0	0.0	0.0	0.0	14.8
heat preservation	Costa Rica	36	14	39%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	3	1	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	18	2	11%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15. Fresh and frozen	Regional	141	41	29%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
fruit, vegetables,	Argentina	35	35	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
and legumes	Costa Rica	102	6	6%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	4	0	0%	0	N/A						
16. Processed fruit,	Regional	810	485	60%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
vegetables, and	Argentina	155	155	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
logumos	Costa Rica	439	233	53%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Panama	103	59	57%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Peru	113	38	34%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a) Canned	Regional	334	234	70%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
vegetables and	Argentina	93	93	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
legumes	Costa Rica	145	83	57%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	59	36	61%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	37	22	59%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b) Pickled	Regional	153	66	43%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
vegetables	Argentina	10	10	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	102	47	46%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	13	4	31%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	28	5	18%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c) Olives and	Regional	149	70	47%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
sundried tomatoes	Argentina	35	35	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	59	23	39%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Panama	15	7	47%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	40	5	13%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d) Vegetable juice	Regional	19	6	32%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
and cocktail	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	18	6	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	1	0	0%	0	N/A						
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
e) Frozen	Regional	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
vegetables and	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
legumes	Costa Rica	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	1	0	0%	0	N/A						
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
f) Frozen	Regional	43	28	65%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
potatoes and other												

potato products	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(ready-to-eat)	Costa Rica	21	10	48%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	14	12	86%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	8	6	75%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h) Other	Regional	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Panama	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17. Plant-based	Regional	160	137	86%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
food/meat	Argentina	77	77	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
analogues	Costa Rica	51	37	73%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	5	5	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	27	18	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a) Tofu and	Regional	4	4	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
tempeh	Argentina	2	2	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
b) Meat	Regional	155	132	85%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
analogues	Argentina	75	75	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	49	35	71%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	4	4	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	27	18	67%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18. Sauces, dips and	Regional	1505	829	55%	4	0.2	5.1	0.0	0.0	0.0	0.0	145.7
dressings	Argentina	259	259	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	565	246	44%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
	Panama	210	103	49%	3	1.5	14.4	0.0	0.0	0.0	0.0	145.7
	Peru	471	221	47%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

a)   ii) Bouillon and Regional   252   141   56%   2   1.0   12.3   0.0   0.													
Costa Rica   R	soup stock	and Region	al 252	141	56%	2	1.0	12.3	0.0	0.0	0.0	0.0	145.7
Costa Rica   S9   44   43%   0   0.0   0		Argent	ina 52	52	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Peru   73   28   38%   0   0.0   0		Costa F	Rica 89	44	49%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D   Cooking sauces   Regional   313   168   54%   1   0.0   0.3   0.0		Panam	a 38	17	45%	2	8.6	35.3	0.0	0.0	0.0	0.0	145.7
Including pasta   Argentina   A6   A6   A6   A9%   O   O.0   O.		Peru	73	28	38%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Sauces and tomato   Costa Rica   125   61   49%   0   0.0	o) Cooking s	auces Region	al 313	168	54%	1	0.0	0.3	0.0	0.0	0.0	0.0	4.0
Sauces (not concentrated)         Panama         38         17         45%         1         0.2         1.0         0.0 <td></td> <td>_</td> <td>ina 46</td> <td>46</td> <td>100%</td> <td>0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td>		_	ina 46	46	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Part   104   104   44   42%   0   0.0		a <b>to</b> Costa F	Rica 125	61	49%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Peru   104   44   42%   0   0.0	•	Panam	a 38	17	45%	1	0.2	1.0	0.0	0.0	0.0	0.0	4.0
dipping sauces         Argentina         7         7         100%         0         0.0		Peru	104	44	42%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Costa Rica   49   15   31%   0   0.0   0	•	Region	ial 149	78	52%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Panama   P		Argent	ina 7	7	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Peru   72   41   57%   0   0.0   0		Costa F	Rica 49	15	31%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d) Emulsion-based dips, sauces and dressings         Regional         261         160         61%         0         0.0 </td <td></td> <td>Panam</td> <td>a 21</td> <td>15</td> <td>71%</td> <td>0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td>		Panam	a 21	15	71%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
dips, sauces and dressings         Argentina         71         71         100%         0         0.		Peru	72	41	57%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Costa Rica   108   33   31%   0   0.0	d) Emulsion	based Region	al 261	160	61%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Panama   27   16   59%   0   0.0	•	<b>d</b> Argent	ina 71	71	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Peru         55         40         73%         0         0.0	dressings	Costa I	Rica 108	33	31%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e)         Condiments         Regional         389         213         55%         1         0.0 <t< td=""><td>Panam</td><td>a 27</td><td>16</td><td>59%</td><td>0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></t<>		Panam	a 27	16	59%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Argentina 77 77 100% 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		Peru	55	40	73%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Costa Rica 149 70 47% 1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Panama 43 17 40% 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	e) Condiments	ts Region	al 389	213	55%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Panama         43         17         40%         0         0.0		Argent	ina 77	77	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Peru         120         49         41%         0         0.0		Costa F	Rica 149	70	47%	1	0.0	0.0	0.0	0.0	0.0	0.0	0.3
f)         Soy sauce and fish sauce         Regional         45         22         49%         0         0.0         0.0         0.0         0.0         0.0           fish sauce         Argentina         5         5         100%         0         0.0         0		Panam	a 43	17	40%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
fish sauce Argentina 5 5 100% 0 0.0 0.0 0.0 0.0 0.0		Peru	120	49	41%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Algeriana 3 3 100% 0 0.0 0.0 0.0 0.0 0.0	Soy sauce	and Region	ial 45	22	49%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Costa Rica 16 8 50% 0 0.0 0.0 0.0 0.0 0.0	fish sauce	Argent	ina 5	5	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Costa F	Rica 16	8	50%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Panama 12 5 42% 0 0.0 0.0 0.0 0.0 0.0		Panam	a 12	5	42%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	Peru	12	4	33%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g) Other Asian-	Regional	40	21	53%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
style sauces	Argentina	1	1	100%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Costa Rica	14	5	36%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	18	11	61%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Peru	7	4	57%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h) Marinades and	Regional	54	25	46%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
thick pastes	Argentina	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Costa Rica	13	9	69%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Panama	13	5	38%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peru	28	11	39%	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0