REPORT ON THE COMPARATIVE NUTRITIONAL PROFILE OF FOOD AND BEVERAGE PRODUCTS MARKETED BY THE 25 LARGEST GLOBAL COMPANIES IN 25 COUNTRIES

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ABBREVIATIONS

ATNI – Access to Nutrition Index HSR – Health Star Rating NPSC - Nutrient Profile Scoring Criteria WHO – World Health Organization WHO EURO – World Health Organization European Regional Office nutrient profile model WHO SEAR – World Health Organization South-East Asian nutrient profile model WHO AFR - World Health Organization African Region nutrient profile model WHO WPR - World Health Organization Western Pacific Region nutrient profile model PAHO – Pan American Health Organization nutrient profile model

DISCLAIMER

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¹ Euromonitor International is an independent, privately owned global market research firm conducting incountry research in 100 countries worldwide analysing 26 consumer industries including; Hot Drinks, Packaged Food and Soft Drinks. Euromonitor International produces historic and forecast cross-comparable market data and strategic reports to narrate the current and future drivers shaping each one.

² Innova Market Insights is a commercial knowledge supplier for the Food and Beverage industry.

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EXECUTIVE SUMMARY

The overall goal of this report was to provide stakeholders, including companies, government, nutrition experts and others with a fuller understanding of the nutritional quality of packaged food and non-alcoholic beverage products sold by the 25 largest global manufacturers across 25 countries. Nutrient information for 41,071 packaged food and beverage products in selected categories, made by the 25 manufacturers, was included in this analysis. Nutrient information was obtained either from product packaging or directly from the manufacturer and supplemented with imputed data.

Two nutrient profiling methods were selected to evaluate each company's product portfolio. The Australasian Health Star Rating (HSR) system was used to assess the healthiness of company product portfolios. The proportion of products that could be considered 'healthy' using the HSR was calculated using a cut-off of 3.5 out of 5.0 stars and was examined by country, by company and by food category. Each company was then ranked by both the mean HSR of its product portfolio, and the proportion of products receiving 3.5 HSR or above. Locally appropriate nutrient profile models from the World Health Organization were used to assess the proportion of products in each company's portfolio that met the nutritional criteria to be eligible to market to children. This analysis was performed for all products, regardless of the marketing target audience, as a useful supplementary method to assess the healthiness of products.

The mean healthiness of all companies' products was 2.4 stars out of 5.0, with substantial variation between companies observed (from Ferrero with 0.9 to Danone with 3.4). A low proportion (31%) of products met the HSR cut-off for "healthy". Only 9% of products overall were eligible to be marketed to children according to the WHO criteria, and one company had no products eligible for marketing to children at all. When sales-weighting was incorporated into the analysis, the rankings of the companies in relation to healthiness changed and this weighting generally increased the disparities observed between companies. Companies with portfolios dominated by dairy products generally ranked highest (e.g. Danone, Arla and FrieslandCampina), and those with portfolios dominated by confectionery items generally ranked lowest (e.g. Ferrero and Mars).

This is the second Global Product Profile to be completed; the first undertaken in 2018. The 2021 Global Product Profile has a broader scope than the previous 2018 Global Product Profile, with 25 countries now included compared to nine in 2018. For companies and countries included in both the 2018 and 2021 Product Profiles, changes in sales-weighted mean HSR between these years was examined. Nine companies were found to have increased their mean HSR, four a decrease, and five did not change. Nestlé was the company that showed the largest improvement in healthiness between 2018 and 2021, increasing its mean HSR by 0.8 through divestments of its large US confectionery and ice cream businesses. For other companies, the changes in mean HSR were driven by a mixture of changes in product category sales, changes in healthiness of product categories, as well as changes in how data were derived, with increased company engagement in 2021 leading in some cases to improvements in mean HSR.

There were significant strengths and some important weaknesses to the analyses. Product portfolio and nutrition composition data was shared with all 25 companies and 18 reviewed the information to some extent. Although this is a higher level of engagement compared to the response rate in 2018 when a first iteration of this assessment was performed, few companies provided a full list of the products in their portfolio, which limits the ability to determine a more accurate market coverage achieved by the inclusion of these 41,071 products. The wide variation in the percentage of the companies' total global portfolios included in the study also needs to be taken into consideration when interpreting the results. As only 25 countries were included in this analysis, this meant that in some cases a high a proportion of some companies' global sales was not captured. On balance, however, it is reasonable to conclude that the average healthiness of the products provided and sold by the largest global food companies is sub-optimal and has not improved since the 2018 Product Profile.

INTRODUCTION

The George Institute for Global Health's mission is to improve the health of millions of people worldwide. More specifically, the Food Policy Division works to reduce rates of death and disease caused by diets high in salt, saturated fat, sugar and excess energy, by undertaking research and advocating for a healthier food environment. The Division's main areas of activity are quantifying the healthiness of the food supply, encouraging food reformulation, and developing innovative approaches to encourage consumers to make healthier food choices.

In 2020, The George Institute was commissioned by the Access to Nutrition Index (ATNI) to produce the second multi-country *Product Profile* to be incorporated into the 2021 Global Access to Nutrition Index. The Index will score and rank the contribution of the world's 25 largest food and beverage manufacturers to tackling the global rise in diet-related diseases. It will combine an analysis of those companies' policies, practices and disclosures (the Corporate Profile) with an analysis of the nutritional quality of each company's food and beverage products in 25 different country markets (the Product Profile). In contrast to the Global Index 2018, the *2021 Product Profile* was integrated into part of Category B within the Global Index 2021.

The George Institute was selected to undertake this work given its existing global branded food composition database, which contains food composition data for over 450,000 branded products sold in the global food supply, and its successful completion of the first Global Product Profile in 2018. Data for 2021 were supplemented with data from Innova Market Insights. The work was conducted by a team at The George Institute for Global Health. The ATNI team, who had access to sales data from the Euromonitor database, also did a series of subsidiary sales-weighted analyses that have been included in this report.

The <u>first part</u> of this report sets out the objectives, methods, results and interpretation of the Product Profile analysis done in 2020-2021 using data for 25 companies. The <u>second part</u> of this report examines changes in the mean healthiness of products for each company included in both the 2018 and 2021 Product Profiles.

Section 1: Global Index Product Profile 2021

OVERALL GOAL AND SPECIFIC OBJECTIVES

The overall goal of this work was to provide stakeholders, including companies, government, nutrition experts and others with a fuller understanding of the nutritional quality of packaged food and non-alcoholic beverage products (hereafter "foods and beverages") sold by 25 of the world's largest manufacturers globally across a selection of 25 countries.³ Specific objectives were to answer the following questions:

- 1. What is the average nutritional quality of each company's product portfolio and how do companies compare? The metric used was the mean Health Star Rating of the product portfolio.
- 2. What is the average sales-weighted nutritional quality of each company's product portfolio and how do companies compare? The metric used was the sales-weighted mean Health Star Rating of the product portfolio.
- 3. What proportion of each company's products are 'healthy' and how do companies compare? The metric used was the proportion of the product portfolio that had a Health Star Rating of 3.5 stars or above.
- 4. What proportion of each company's product sales are 'healthy' and how do companies compare? The metric used was the sales-weighted proportion of products that had a Health Star Rating of 3.5 stars or above.
- 5. What proportion of each company's products are eligible to be marketed to children according to WHO criteria and how do companies compare? The metric used was the proportion of the product portfolio meeting locally appropriate WHO nutrient profiling criteria for marketing to children.
- 6. What proportion of each company's product sales are eligible to be marketed to children according to WHO criteria and how do companies compare? The metric used was the sales-weighted proportion of products meeting locally appropriate WHO nutrient profiling criteria for marketing to children.

³ Note that nutritional quality for the purposes of this report does not include assessment of whether products have been fortified with micronutrients.

METHODS

Selection of companies

ATNI requested The George Institute to include the products of 25 global food and beverage manufacturers. The included companies, in alphabetical order, with the name used throughout this report in brackets are:

- 1. Ajinomoto Co Inc (Ajinomoto)
- 2. Arla Foods Amba (Arla)
- 3. Brasil Foods (BRF)
- 4. Campbell Soup Co (Campbell)
- 5. China Mengniu (China Mengniu)
- 6. Coca-Cola Co (Coca-Cola)
- 7. ConAgra Brands Inc (ConAgra)
- 8. Danone Groupe (Danone)
- 9. Ferrero Group (Ferrero)
- 10. General Mills Inc (General Mills)
- 11. Grupo Bimbo SAB de CV (Grupo Bimbo)
- 12. Inner Mongolia Yili (Yili)
- 13. Kellogg Co (Kellogg)

- 14. Keurig Dr Pepper (Keurig)
- 15. Kraft Heinz Co (Kraft Heinz)
- 16. Lactalis Groupe (Lactalis)
- 17. Mars Inc (Mars)
- 18. Meiji Holdings Co Ltd (Meiji)
- 19. Mondelez International Inc (Mondelez)
- 20. Nestlé SA (Nestlé)
- 21. PepsiCo Inc (PepsiCo)
- 22. Royal FrieslandCampina NV (FrieslandCampina)
- 23. Suntory Holdings Inc (Suntory)
- 24. Tingyi International Group (Tingyi)
- 25. Unilever Group (Unilever)

It's important to note that not all companies operated in each of the 25 countries examined in this report. Up to 10 countries were selected for each company. **Table A** below outlines which countries were examined for each company.

Selection of countries

The 25 countries included in this report were those that ATNI selected to ensure consistency with the 2018 Product Profile and to expand the scope of global sales represented for each company. The latter was achieved by including up to 10 countries for each company which together accounted for 50% or more of estimated global retail sales. The George Institute holds a branded food database (FoodSwitch) containing comprehensive nutrient information for 10 countries, with country datasets updated regularly. Alongside this, Innova Market Insights owns a database of new-to-market products which was utilized for the remaining 15 countries. The 25 countries included in this analysis were as follows:

- 1. Australia (AU)
- 2. Brazil (BR)
- 3. Canada (CA)
- 4. China (CN)
- 5. Denmark (DK)
- 6. Finland (FI)
- 7. France (FR)
- 8. Germany (DE)
- 9. Hong Kong (HK)
- 10. India (IN)
- 11. Indonesia (ID)
- 12. Italy (IT)
- 13. Japan (JP)

- 14. Mexico (MX)
- 15. Netherlands (NL)
- 16. New Zealand (NZ)
- 17. Nigeria (NG)
- 18. Philippines (PH)
- 19. Russia (RU)
- 20. South Africa (ZA)
- 21. Sweden (SE)
- 22. Thailand (TH)
- 23. UK (UK)
- 24. USA (US)
- 25. Vietnam (VN)

Company	AU	BR	CA	CN	DN	FI	FR	DE	ΗK	IN	ID	IT	JP	MX	NE	NZ	NG	PH	RU	ZA	SE	TH	UK	US	VN	Total
Ajinomoto	-	V	-	-	-	-	-	-	-	-	-	-	٧	-	-	-	-	-	-	-	-	V	-	٧	-	4
Arla	V	-	V	-	V	V	-	V	٧	-	-	-	-	-	-	-	-	-	V	-	V	-	V	V	-	10
BRF	-	V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Campbell	-	-	V	-	-	-	-	-	-	-	-	-	-	٧	-	-	-	-	-	-	-	-	-	V	-	3
C. Mengniu	-	-	-	V	-	-	-	-	٧	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Coca-Cola	V	-	-	V	-	-	-	-	V	٧	-	-	٧	V	-	V	-	-	-	٧	-	-	٧	V	-	10
ConAgra	-	-	-	-	-	-	-	-	٧	٧	-	-	-	٧	-	V	-	-	-	-	-	-	-	٧	-	5
Danone	V	V	-	V	-	-	V	-	V	-	-	-	-	V	-	-	-	-	V	٧	-	-	٧	V	-	10
Ferrero	V	-	-	V	-	-	-	V	٧	٧	-	V	-	٧	-	V	-	-	-	-	-	-	٧	٧	-	10
Friesland	-	-	-	-	-	-	-	V	V	-	V	-	-	-	V	-	V	V	V	-	-	٧	٧	-	V	10
General Mills	V	-	V	V	-	-	-	-	٧	٧	-	-	-	٧	-	V	-	-	-	٧	-	-	٧	V	-	10
Grupo Bimbo	-	V	V	V	-	-	-	-	-	-	-	-	-	٧	-	-	-	-	-	-	-	-	V	V	-	6
Kellogg	V	-	V	-	-	-	-	-	V	٧	-	-	-	٧	-	V	-	-	-	٧	-	-	٧	٧	-	9
Keurig	-	-	-	-	-	-	-	-	V	-	-	-	-	٧	-	-	-	-	-	-	-	-	-	٧	-	3
Kraft Heinz	V	-	V	V	-	-	-	-	V	٧	-	-	-	٧	-	V	-	-	-	-	-	-	٧	٧	-	9
Lactalis	V	V	V	V	-	-	V	-	-	٧	-	-	-	٧	-	-	-	-	-	V	-	-	V	V	-	10
Mars	V	-	-	V	-	-	-	-	٧	٧	-	-	-	٧	-	V	-	-	V	٧	-	-	٧	٧	-	10
Meiji	-	-	-	V	-	-	-	-	٧	-	-	-	٧	-	-	-	-	-	-	-	-	-	-	-	-	3
Mondelez	V	V	-	V	-	-	-	-	٧	٧	-	-	-	٧	-	V	-	-	-	٧	-	-	٧	٧	-	10
Nestlé	V	V	-	V	-	-	V	-	V	٧	-	-	-	٧	-	-	-	-	-	V	-	-	V	٧	-	10
PepsiCo	V	-	-	V	-	-	-	-	V	٧	-	-	-	٧	-	٧	-	-	V	V	-	-	V	٧	-	10
Suntory	V	-	-	V	-	-	V	V	V	-	-	-	٧	-	-	V	-	-	-	٧	-	-	٧	-	-	9
Tingyi	-	-	-	٧	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Unilever	V	V	-	V	-	-	٧	٧	-	٧	-	-	-	٧	-	-	-	-	-	٧	-	-	٧	V	-	10
Yili	-	-	-	V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL	14	8	7	17	1	1	5	5	17	12	1	1	4	16	1	10	1	1	5	11	1	2	16	18	1	

Table A Country datasets used for each company's analysis

Choice of nutrient profile models

Nutrient profiling is the science of classifying or ranking foods according to their nutritional composition for the purpose of preventing disease and promoting health.⁴ Nutrient profile models have been developed by academics, government departments, health-related charities and the food industry for a variety of applications including: to underpin food labelling; to regulate advertising of products to children; and to regulate health and nutrition claims. Although nutrient profiling is a tool to quantify aspects of individual foods, not diets, nutrient profile models are commonly used to underpin policies designed to improve the overall nutritional quality of diets.

The 2018 Global Product Profile utilised two nutrient profile models based on an extensive search of the literature: The Australasian Health Star Rating and the WHO Euro Nutrient Profile Model. For the 2021 Product Profile, the WHO Euro Nutrient Profile Model was substituted (where appropriate) with the WHO Nutrient Profile Model which was most regionally-appropriate. **Table B** shows the countries included under each WHO nutrient profile model.

- 1) The Australasian Health Star Rating (HSR) is a front-of-pack interpretive nutrition labelling system designed to assist consumers in making healthier choices. The underlying nutrient profile model assesses risk nutrients (overall energy, sodium, total sugar, saturated fat) and positive nutrients (fruit and vegetable content, protein, fibre and in some cases, calcium) to score products on the basis of nutritional composition per 100g or 100mL across one of six categories. These scores are then converted to a 'Health Star Rating' from ½ to 5 stars. Development was led by the Australian government in collaboration with industry, public health and consumer groups, and builds upon the Nutrient Profiling Scoring Criteria (NPSC) previously developed by the Australian and New Zealand Governments to regulate health claims.⁵ The NPSC itself was developed from United Kingdom's Ofcom model. The HSR has been implemented in Australia since June 2014 on a voluntary basis. The system has also been adopted in New Zealand. Further detailed information is available <u>online</u>.⁶ In October 2020, updates to the Health Star Rating algorithm were released, however as analysis for the project began in August 2020, the previous version of the Health Star Rating algorithm was used. In future Product Profiles, the updated Health Star Rating algorithm will be utilised.
- 2) The WHO nutrient profile models are nutrient profile models for use and adaptation by Member States of various WHO regions when developing policies to restrict food marketing to children. The EURO, WPR, SEAR and AFR models operate by first requiring foods to be allocated to one of approximately 20 categories. Products are then checked against category-specific compositional thresholds for nutrients and other food components. A product must not exceed on a per 100g/mL basis any of the relevant thresholds for that product category if marketing is to be permitted. Results under this model are simply expressed on a binary basis i.e. 'marketing permitted' or 'marketing not permitted'. Although originally developed in Europe, the model was adapted for the other WHO regions. The PAHO model works differently to the other WHO nutrient profile models. The PAHO model includes all processed and ultraprocessed products and indicates that they must not exceed overall nutrient thresholds and must not contain non-sugar sweeteners to be permitted to market to children.

⁴ World Health Organization, Nutrient Profiling <u>http://www.who.int/nutrition/topics/profiling/en/</u>

⁵ See Australia New Zealand Food Standards Code, Standard 1.2.7

⁶ Department of Health, Australian Health Star Rating website: <u>http://healthstarrating.gov.au</u>

Table B Comparison of the HSR and WHO models

	HSR	WHO EURO	WHO SEAR	WHO WPR	WHO AFR	РАНО
Country/region of origin	Australia	Europe	South-East Asia	Western Pacific	Africa	Americas
Countries included for Global Product Profile 2021	All countries	Denmark, Finland, Sweden, UK, Netherlands, Russia, Germany, France, Italy	India, Thailand	Australia, New Zealand, Hong Kong, China, Philippines, Vietnam, Japan	South Africa, Nigeria	Brazil, USA, Canada, Mexico
Date of development	2014	2015	2016	2016	2019	2016
Scoring method	Negative nutrients score is combined with positive nutrients score to arrive at a final 'score' which is then converted to a Health Star Rating from 0.5 to 5.0.	Products must not exceed category-specific thresholds per 100g/mL to be permitted to market to children.	Products must not exceed category- specific thresholds per 100g/mL to be permitted to market to children.	Products must not exceed category- specific thresholds per 100g/mL to be permitted to market to children.	Products must not exceed category- specific thresholds per 100g/mL to be permitted to market to children.	All processed and ultra- processed products must not exceed established nutrient thresholds and must not contain non-sugar sweeteners to be permitted to market to children.
Nutrients included in model	Energy Saturated fat Total sugars Sodium Fibre Fruit, vegetables, nuts and legumes (FVNL) Calcium	Total fat Saturated fat Total sugars Added sugars Artificial sweeteners Trans fat Sodium	Total fat Total sugar Added sugar. Artificial sweeteners Energy Saturated fat Sodium	Total fat Saturated fat Total sugars Added sugars Artificial sweeteners Trans fat Sodium	Total fat Saturated fat Total Sugars Added Sugars Sodium Energy Artificial sweeteners	Free sugars Sodium Saturated fat Total fat Trans fat Artificial sweeteners
Original purpose	Front-of-pack nutrition labelling.	Regulation of marketing to children.	Regulation of marketing to children.	Regulation of marketing to children.	Regulation of marketing to children.	Regulation of marketing to children.
Original scoring system	Depending on which category the product falls in, the 'score' is converted to a Health Star Rating from 0.5 to 5.0 stars that can be displayed in a logo on the front of pack.	Depending on the product category, marketing to children is either never permitted (e.g. for confectionery), or only permitted if the product does not exceed specified thresholds of negative nutrients per 100g/mL.	Depending on the product category, marketing to children is either never permitted (e.g. for confectionery), or only permitted if the product does not exceed specified thresholds of negative nutrients per 100g/mL.	Depending on the product category, marketing to children is either never permitted (e.g. for confectionery), or only permitted if the product does not exceed specified thresholds of negative nutrients per 100g/mL.	Depending on the product category, marketing to children is either never permitted (e.g. for confectionery), or only permitted if the product does not exceed specified thresholds of negative nutrients per 100g/mL.	

Calculating a nutrient profile score for a product requires values for all data points used by the nutrient profile model and imputation of missing data was therefore required for some countries.

Eligibility of food and beverage products

Foods and beverages eligible for inclusion were defined as *'all packaged foods and non-alcoholic beverages manufactured by the included companies.'* A food or beverage was considered a unique item based upon the brand name and description irrespective of serving size and packaging (i.e. a specific brand of cola sold in 330mL cans was considered to be the same food item as the same specific brand of cola sold in 600mL bottles).

The following products were excluded from analyses:

- 1. Unprocessed meat, poultry, fish and raw agricultural commodities such as plain cereals (on the basis that such foods are not generally required to carry a nutrient declaration)
- 2. Plain tea and coffee (on the basis that these make an inherently low nutritional contribution and are thereby not required to display a nutrient declaration)
- 3. Some condiments such as herbs, salt, pepper, vinegars and spices (on the basis that these make an inherently low nutritional contribution and are thereby not required to display a nutrient declaration)
- 4. Infant formulas, medical nutrition supplements and baby food and baby beverages (excluded because these products are not consumed by the general population and the selected models are not appropriate for their evaluation).

Product identification

For each company, the top five Euromonitor categories (according to sales data) for each country selected were identified by ATNI, and that list was provided to The George Institute. Two data sources were used to create a product list for each manufacturer comprising nutritional information:

- Products in The George Institute's global FoodSwitch database that had previously been used for the 2018 Global Index
- Products from Innova Market Insight's database

The FoodSwitch and Innova Market Insight databases were merged, and where the same product was available in both databases, the most recent entry was retained for the creation of product lists for companies.

Data review

In August 2020, the 25 companies were provided with their data for review (product list and nutrient content) and offered an opportunity to make corrections or additions to information about their product range. Companies were also given the opportunity to instead provide ATNI directly with their data. For products that required additional ingredients to be added before consumption (e.g. a beverage powder), companies were asked to provide information for the product "as consumed" for this project. However, if these values were not available, the "as sold" nutrient values were used in analysis.

Imputation of essential missing data

For many products the available nutritional information was insufficient to apply the selected nutrient profile models. This is due to differences in legislation around what nutrients are required to be displayed on the label (for example, fibre is mandatory in the USA but not in all countries included in our analysis). It was therefore necessary to impute missing data which was done as follows:

• For countries that do not require certain nutrients to be displayed on pack, proxy values for those nutrients (most commonly saturated fat, total sugar, sodium, fibre and 'fruit vegetable nut and legume' (FVNL) content) were used. These proxy values were developed by The George Institute using

the average value of the products with available data. These proxy values were estimated for each category in each country and assigned to those products in that category with missing data.

- For added sugars a standard proportion of total sugars was assumed and was specified at the category level for WHO EURO, WHO AFR, WHO WPR and WHO SEAR:
 - For cakes and desserts, confectionery, sauces and beverages (excluding milk), total sugar values were assigned as 'added sugars'
 - For milks and yoghurts, an amount of sugar of up to 6g/100g and 8g/100g respectively was considered to be naturally occurring. These are reasonable values based upon known concentrations of lactose in these products. Any amount over this was assigned as 'added sugars'.
 - For the PAHO nutrient profile model, free sugars were calculated as per PAHO guidelines.

It is worth noting that some companies provided the required missing information such as added sugar content and FVNL content, so imputation was not necessary in all cases.

Product categorisation

Products were categorised in three ways:

- To either one of The George Institute's country-specific categories or Innova Market Insight's food and beverage categories
- To the appropriate WHO category
- To one of 26 categories within the Euromonitor International food and beverage categorisation system. Euromonitor is a privately-owned market research firm providing data and analysis on total market sizes, market shares and trends in a range of industries, including food. This categorisation was made to enable the nutrition analysis to be combined with sales data.

Groupings of Euromonitor International categories - hereafter called 'Euromonitor subsets' - were made to generate subsets of products of sufficient size to allow nutritional analysis of comparable food products.

Foods	Beverages
Baked Goods	Asian Specialty Drinks
Breakfast Cereals	Bottled Water – Other*
Confectionery	Bottled Water – Pure*
Dairy	Carbonates
Edible Oils	Concentrates
Ice Cream and Frozen Desserts	Energy Drinks
Processed Fruit and Vegetables	Juice
Processed Meat and Seafood	Other Hot Drinks
Ready Meals	RTD Coffee
Rice, Pasta and Noodles	RTD Tea
Sauces, Dressings and Condiments	Sports Drinks
Savoury Snacks	
Soup	
Sweet Biscuits, Snack Bars and Fruit Snacks	
Sweet Spreads	

Table C Euromonitor subsets

*In the 2018 Global Index, one category for Bottled Water was included in analysis. ATNI has divided the category into two: 'Bottled Water – Other' and 'Bottled Water – Pure'.

Application of imputed data in the nutrient profile models

The two nutrient profile models were applied with the following use of proxy information from imputed values:

- For the purposes of generating a Health Star Rating, proxy values were used for saturated fat, sugar, fibre and sodium, but *only* if information was not missing for three or more of four key nutrients (saturated fat, sugar, sodium, protein). If three or more of these nutrients were missing, then the product was excluded from the analysis. Products were not included in the analysis if energy content was missing. Plain packaged water was assigned a Health Star Rating of 5.0 consistent with the Health Star Rating Guidelines.⁷
- For the purposes of generating an outcome under the WHO models, proxy values were used for total fat, saturated fat, sugar and sodium, but *only* if the product was not missing three or more nutrients required for analysis under a similar strategy to that described above for the Health Star Rating. Eligibility was determined category-by-category as per each WHO model which use different nutrient criteria for each category.

These decisions were a pragmatic compromise between enabling analysis of the majority of identified products versus basing analysis on mostly proxy data. Due to differences in the models and nutrients involved, some products were eligible for scoring under one model but not another. The two tables on the following page show the number of products from each country with proxy data used in analysis.

Sales data

Sales data were obtained at the Euromonitor subset level for each company. This was used to generate sales-weighted outcomes for the three sets of analyses. As ATNI held the licence for the Euromonitor data, ATNI did the analyses and provided The George Institute with results. ATNI accepts full responsibility for these components of the report. The sales data were those for the 2019 period. Where a company did not command 1% or more market share in a category in a country, that category for that country was not included.

Sales-weighted HSRs were calculated per company in two steps. As the comparison between companies was the main objective of this assessment, sales weighting was performed from a company perspective and not from a country perspective. Company's sales-weighted mean HSRs in each country were calculated as the first step, based on the category sales relative to the total combined sales for all the company's categories assessed in that country. As a second step, sales-weighted HSRs were calculated per company, based on the country sales relative to the total combined sales of all relevant countries for the company. This approach was taken to apply a weighting that is most relevant for health impact (assuming sales are correlated with consumption) as well as company commercial value.

To calculate the total value of sales at the country-level generated by healthy products, a similar two-step approach was taken. For the first step, total sales of the company within each category in each country was multiplied by the percentage of healthy products (i.e. products with an HSR of 3.5 of more) in the category, a figure generated by TGI. The second step was similar to the second step of the sales-weighted HSRs, to calculate the company's overall weighted value. The same approach was taken to calculate the total values of sales generated by products suitable to be marketed to children under the WHO criteria.

Ideally, sales values of individual products would have been used to generate a more accurate salesweighted data; however, such product-level data were not available for this analysis. Using category sales data was the most accurate available option.

⁷ Australian Government, Health Star Rating System 'Guide for Industry', available at <u>http://www.healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/guide-for-industry</u>

Country	Total products (n)	All data direct from label (n)	Proxy data for 1 component (n)	Proxy data for 2 components (n)	Proxy data for 3 components (n)	Proxy data for >3 components (n)	Insufficient data (n)
Australia	3006	1190	825	991	0	0	170
Brazil	1608	853	344	329	67	18	190
Canada	1763	825	921	17	0	0	32
China	2057	524	161	288	346	738	177
Denmark	233	13	220	0	0	0	0
Finland	141	2	45	94	0	0	0
France	1848	1468	367	13	0	0	133
Denmark	1227	866	79	282	0	0	57
Hong Kong	749	151	375	223	0	0	47
India	1043	449	350	114	83	47	24
Indonesia	32	32	0	0	0	0	0
Italy	161	0	12	149	0	0	26
Japan	1211	1	13	201	193	813	36
Mexico	2471	1056	1402	13	0	0	129
Netherlands	172	172	0	0	0	0	0
New Zealand	1757	333	674	750	0	0	102
Nigeria	15	15	0	0	0	0	0
Philippines	14	14	0	0	0	0	0
Russia	764	716	48	0	0	0	89
South Africa	1018	631	381	6	0	0	107
Sweden	306	2	71	233	0	0	1
Thailand	46	31	15	0	0	0	47
UK	4207	1735	1647	824	1	0	566
USA	12282	3951	7160	1170	1	0	959
Vietnam	35	35	0	0	0	0	0
Total	38176	15065	15110	5697	691	1616	2892

Table D Number of products from each country where proxy values were used in analysis for the Health Star Rating

Country	Total products (n)	All data direct from label (n)	Proxy values used* (n)	Insufficient data (n)
Australia	3004	2351	693	132
Brazil	1618	913	705	183
Canada	1772	359	1413	23
China	2137	1037	1100	97
Denmark	233	195	38	0
Finland	141	130	11	0
France	1927	1793	134	54
Denmark	1229	1182	47	55
Hong Kong	769	563	206	27
India	1061	910	151	6
Indonesia	32	31	0	0
Italy	163	135	28	24
Japan	1227	723	504	30
Mexico	2522	1467	1055	78
Netherlands	172	172	0	0
New Zealand	1799	1067	732	60
Nigeria	15	15	0	0
Philippines	14	14	0	0
Russia	852	838	14	1
South Africa	1072	870	202	53
Sweden	307	253	54	0
Thailand	46	46	0	47
UK	4456	3853	603	317
USA	12598	7155	5443	643
Vietnam	35	35	0	0
Total	39201	26107	13133	1830

Table E Number of products from each country where proxy values were used in analysis for the WHO criteria

* Requirements differ depending on which WHO model and category is being observed.

Some countries required proxy data for a larger proportion of products due to differences in labelling requirements in these countries. See Table 1 in <u>Appendix A</u> for a breakdown of each country's nutrients that are mandated to appear on nutrition labels.

Analysis strategy

Six research questions were addressed:

- 1. What is the average nutritional quality of each company's product portfolio and how do companies compare? This question was addressed by calculating the mean HSR of the product portfolio for each company and ranking companies accordingly. Separate analyses (included as <u>Appendices</u> in this report) were also done by Euromonitor subset and by country.
- What is the average sales-weighted nutritional quality of each company's product portfolio and how do companies compare? The metric used was the sales-weighted mean HSR of the product portfolio. ATNI calculated this for each company by: (1) calculating the mean HSR for each Euromonitor subset; (2) multiplying the mean HSR of the food category by the percentage sales for the subset; (3) summing the values obtained for all subsets.
- 3. What proportion of each company's products are 'healthy' and how do companies compare? The metric used was the proportion of the product portfolio that had an HSR of 3.5 stars or above. Separate analyses (included as <u>Appendices</u>) were also done by Euromonitor subset and by country.
- 4. What proportion of each company's product sales are 'healthy' and how do companies compare? The metric used was the proportion of a company's sales that were products with an HSR of 3.5 or above. ATNI estimated this for each company by: (1) calculating the percentage of products in each Euromonitor subset with an HSR of 3.5 or above; (2) multiplying that percentage by the percentage sales for the subset; (3) summing these values for all subsets.
- What proportion of each company's products is eligible to be marketed to children and how do companies compare? The metric used was the proportion of the product portfolio meeting relevant WHO criteria for marketing to children. Separate analyses (included as <u>Appendices</u>) were also done by Euromonitor subset and by country.
- 6. What proportion of each company's product sales is eligible to be marketed to children and how do companies compare? The metric used was the proportion of a company's sales that were products eligible to be marketed to children under the relevant WHO model. ATNI estimated this for each company by: (1) calculating the percentage of eligible products in each Euromonitor subset; (2) multiplying that percentage by the percentage sales for the subset; (3) summing these values for all subsets.

The data were analysed using STATA statistical software version 16.

OVERALL RESULTS

Out of the 41,071 products included in analysis, there was sufficient nutrient information for 38,176 products to generate a Health Star Rating and 39,241 had sufficient nutrient data to be assessed under the WHO models. **Table F** shows the number of products in each country by company.

The US had the largest number of products included in analysis overall (n=13,241), followed by the UK (n=4,773) and Australia (n=3,176). The Philippines had the lowest with 14 products (only one company had The Philippines as an included country), followed by Nigeria (n=15) and Indonesia (n=32). The company with the largest number of products across the 25 countries included was Unilever (n=3,930) followed by Mondelez (n=3,925) and Kraft Heinz (n=3,923), with BRF the lowest number of products (n=150).

Company	AU	BR	CA	CN	DN	FI	FR	DE	НК	IN	ID	IT	JP	MX	NE	NZ	NG	PH	RU	ZA	SE	TH	UK	US	VN
Ajinomoto	-	116	-	-	-	-	-	-	-	-	-	-	260	-	-	-	-	-	-	-	-	62	-	56	-
Arla	17	-	50	-	233	141	-	107	12	-	-	-	-	-	-	-	-	-	7	-	307	-	140	59	-
BRF	-	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Campbell	-	-	144	-	-	-	-	-	-	-	-	-	-	82	-	-	-	-	-	-	-	-	-	933	-
C. Mengniu	-	-	-	275	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coca-Cola	57	-	-	68	-	-	-	-	51	48	-	-	46	327	-	82	-	-	-	73	-	-	305	324	-
ConAgra	-	-	-	-	-	-	-	-	2	91	-	-	-	108	-	17	-	-	-	-	-	-	-	2044	-
Danone	49	151	-	34	-	-	312	-	2	-	-	-	-	223	-	-	-	-	168	76	-	-	183	444	-
Ferrero	60	-	-	26	-	-	-	236	28	47	-	187	-	56	-	28	-	-	-	-	-	-	438	369	-
Friesland	-	-	-	-	-	-	-	105	16	-	32	-	-	-	172	-	15	14	63	-	-	31	11	-	35
General Mills	210	-	483	156	-	-	-	-	103	47	-	-	-	121	-	61	-	-	-	22	-	-	239	1200	-
Grupo Bimbo	-	87	114	91	-	-	-	-	-	-	-	-	-	349	-	-	-	-	-	-	-	-	16	335	-
Kellogg	93	-	153	-	-	-	-	-	36	25	-	-	-	94	-	93	-	-	-	37	-	-	196	623	-
Keurig	-	-	-	-	-	-	-	-	7	-	-	-	-	66	-	-	-	-	-	-	-	-	-	428	-
Kraft Heinz	342	-	624	37	-	-	-	-	79	6	-	-	-	151	-	583	-	-	-	-	-	-	238	1863	-
Lactalis	311	203	227	29	-	-	352	-	-	33	-	-	-	30	-	-	-	-	-	124	-	-	138	178	-
Mars	666	-	-	174	-	-	-	-	101	95	-	-	-	191	-	263	-	-	70	183	-	-	755	1190	-
Meiji	-	-	-	53	-	-	-	-	30	-	-	-	702	-	-	-	-	-	-	-	-	-	-	-	-
Mondelez	623	393	-	248	-	-	-	-	116	202	-	-	-	172	-	311	-	-	-	145	-	-	884	831	-
Nestlé	213	498	-	85	-	-	567	-	79	127	-	-	-	85	-	-	-	-	-	97	-	-	265	934	-
PepsiCo	181	-	-	161	-	-	-	-	101	153	-	-	-	299	-	180	-	-	545	88	-	-	349	824	-
Suntory	67	-	-	12	-	-	105	34	29	-	-	-	249	-	-	241	-	-	-	10	-	-	179	-	-
Tingyi	-	-	-	355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unilever	287	203	-	241	-	-	645	802	-	193	-	-	-	246	-	-	-	-	-	270	-	-	437	606	-
Yili	-	-	-	189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	3176	1801	1795	2234	233	141	1981	1284	796	1067	32	187	1257	2600	172	1859	15	14	853	1125	307	93	4773	13241	35

Table F Number of products included in analysis by company and country

<u>ANALYSIS 1 and 2</u>: Corporate and country rankings based upon mean nutrient profile of products and sales-weighted mean nutrient profile of products



Figure A: Mean Health Star Rating by company – overall product portfolio

Danone and FrieslandCampina had the highest mean overall HSR of 3.4 out of 5.0. Ferrero had the lowest mean HSR of 0.9 out of 5.0 followed by Mondelez and Ajinomoto with a mean HSR of 1.3. When results were weighted by product sales, the overall company rankings changed slightly, with 10 companies increasing their mean HSR (Ferrero, Mondelez, Ajinomoto, Meiji, Suntory, Nestlé, Grupo Bimbo, Yili, Arla and Danone). Seven companies had a decrease in mean HSR when product sales were taken into account (Mars, Tingyi, Keurig, Coca-Cola, PepsiCo, Lactalis and FrieslandCampina). The remaining eight companies had the same mean HSR with and without sales-weighting applied. Overall, mean HSR was low at only 2.4 stars out of 5.0 for all companies combined.

Company	% global sales represented	% sales represented across included
Aiinomoto	0.2%	829/
Ajilolloto	910/	100%
PDE	02%	100%
DRF	93%	01%
Chine Mengniu	0770	51% 100%
	100%	100%
Coca-Cola	56%	97%
ConAgra	97%	81%
Danone	58%	100%
Ferrero	59%	95%
FrieslandCampina	70%	97%
General Mills	76%	87%
Grupo Bimbo	85%	100%
Kellogg	72%	100%
Keurig	95%	99%
Kraft Heinz	81%	90%
Lactalis	59%	100%
Mars	67%	100%
Meiji	92%	98%
Mondelez	52%	98%
Nestlé	52%	93%
PepsiCo	68%	92%
Suntory	91%	90%
Tingyi	98%	98%
Unilever	51%	99%
Yili	100%	100%

Table G Proportion of sales that each country represented for each company

Note: ATNI estimates derived from Euromonitor International.

The first column in **Table G** shows the proportion of global retail sales that the included countries represented in this analysis for each company. The second column shows the proportion of sales within the 25 countries that were captured with our product data. The range of global sales that the 25 countries represented in this analysis ranged from 51% of the portfolio for Unilever being included, as the selected 10 countries for the company did not cover a substantial proportion of the market, to 100% of China Mengniu and Yili's portfolios. This is an important consideration when interpreting results, as in a number of cases we have not included countries in the analysis which are significant markets. By including the top five categories by sales for each company within each of the 25 countries, we captured more than 80% of products sold by each company in the selected countries.





When examining foods separately from beverages (**Figure B**), Coca-Cola moved from the bottom half of the rankings for companies to ranking first overall. FrieslandCampina and Danone remained high in the rankings, due to the high proportion of dairy products sold by these companies. Coca-Cola however had products in both the 'Dairy' and 'Processed Fruit and Vegetable' categories, leading to its high ranking when examining its results without beverages included. It is important to note that these results are not sales-weighted.



Figure C: Mean Health Star Rating by Company – beverages only

When examining beverage products separately (**Figure C**), Lactalis and Campbell had the highest mean HSR of all companies, due to their range comprising 100% fruit juices, bottled waters or dairy-based beverages. ConAgra had the lowest mean HSR for beverages, due to its beverages range consisting of hot chocolate mixes.

	H	lealth St	ar Ratin	g: 3.5 sta	ars or mo	ore = hea	althy pro	oduct			
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	All
Ajinomoto	178	67	68	14	16	44	20	3	0	0	410
Arla	100	66	97	76	63	83	89	147	95	256	1,072
BRF	21	11	20	19	8	25	29	6	3	1	143
Campbell	33	25	59	90	112	271	395	113	26	34	1,158
China Mengniu	4	0	5	28	101	52	6	20	29	13	258
Coca-Cola	24	316	250	362	8	18	30	41	24	205	1,278
ConAgra	92	45	115	131	127	294	589	307	116	75	1,891
Danone	95	30	25	162	106	211	288	236	197	276	1,626
Ferrero	753	217	114	62	4	60	22	0	0	0	1,232
FrieslandCampina	7	36	19	24	48	81	63	89	47	80	494
General Mills	73	153	287	390	378	375	416	256	123	127	2,578
Grupo Bimbo	76	66	161	124	29	127	209	140	47	12	991
Kellogg	16	63	262	250	229	135	113	166	79	34	1,347
Keurig	15	189	75	128	0	10	22	2	1	31	473
Kraft Heinz	244	189	545	525	341	423	707	448	209	189	3,820
Lactalis	153	87	66	79	122	217	199	167	156	222	1,468
Mars	1,138	403	274	85	136	283	550	243	9	3	3,124
Meiji	326	53	38	102	58	80	40	15	15	17	744
Mondelez	1,642	553	510	197	197	222	150	46	12	11	3,540
Nestlé	926	166	204	314	79	277	391	234	92	77	2,760
PepsiCo	137	323	391	490	293	320	344	261	61	159	2,779
Suntory	47	160	114	238	9	42	53	16	15	157	851
Tingyi	136	25	45	5	38	19	43	17	1	6	335
Unilever	421	300	635	471	525	604	535	116	5	4	3,616
Yili	0	1	8	14	85	26	12	13	21	8	188
Total no. of products	6,657	3,544	4,387	4,380	3,112	4,299	5,315	3,102	1,383	1,997	38,176
% of total products	17%	9%	12%	11%	8%	11%	14%	8%	4%	5%	100%

Table H: Number of products with each Health Star Rating overall and by company

Table H above shows the spread of results achieved by all companies in the 25 included countries across the HSR spectrum. The 25 companies assessed offered products with a range of HSRs but a large number scored poorly. Half (50%) of all products on the market scored 2.0 stars or below. The products that scored 3.5 and above totalled 11,797, accounting for only 31% of all products.



Figure E: Mean Health Star Rating by Country – overall product portfolio

Figure E shows that the Netherlands had the highest mean HSR of the 25 countries included in the analysis (4.0) followed by Nigeria (3.8). Italy had the lowest mean HSR (1.2) by far. However, results by country are to be interpreted cautiously. Most of the top-scoring countries only had data for one company (Arla or FrieslandCampina; dairy companies). Limiting results to those countries with data in >5 companies (indicated with an * in **Figure E** above), Canada and New Zealand had the highest mean HSR (2.7) and India the lowest (1.8).

When results were examined by foods (**Figure F**), rankings and results for countries in >5 companies did not change substantially, with Canada, New Zealand and the USA scoring the highest, and India scoring the lowest. New Zealand also had the highest mean HSR for beverages (**Figure G**).



Figure F: Mean Health Star Rating by Country – foods only

Figure G: Mean Health Star Rating by Country – beverages only



	AU	BR	CA	CN	НК	IN	MX	NZ	ZA	UK	US
Asian Specialty Drinks					1.5						
Baked Goods	1.7	3.4	2.4	2.5		1.9	2.2			1.8	3.2
Bottled Water - Other	2.0			2.0			2.0	1.9	2.0	2.1	2.0
Bottled Water - Pure	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Breakfast Cereals	3.6	3.6	3.1	3.5	3.3	2.9	3.2	3.5	3.2	3.6	2.9
Carbonates	1.7			1.5	1.4	1.3	1.6	1.4	1.8	1.8	1.3
Concentrates		0.5	1.1	0.5		0.5	0.8	1.5		1.7	
Confectionery	1.0	0.8		1.2	1.2	0.8	1.2	1.3	1.3	0.8	1.5
Dairy	3.2	3.1	3.1	3.0	2.8	3.2	3.1	3.8	3.0	3.4	3.1
Edible Oils						4.0	4.8				
Energy Drinks	1.0				0.9			1.0	1.5	1.3	
Ice Cream and Frozen Desserts	2.0	2.2		2.1	1.7	2.1	2.2		2.2	1.9	2.1
Juice	3.6		4.8	3.1	2.3	1.9	2.2	4.4	4.3	3.9	2.4
Other Hot Drinks	1.6	2.0		1.4	1.0	1.1	3.9	0.5	3.1	0.5	2.6
Processed Fruit and Vegetables	4.1	5.0			4.3	4.2		4.2		4.3	3.9
Processed Meat and Seafood	3.7	1.8							4.1		2.7
RTD Coffee	4.1			1.6	1.6						3.9
RTD Tea				1.6	1.7		1.4				1.7
Ready Meals	2.9	2.8	2.5	2.8	3.0		2.6	3.5	2.6	3.2	3.1
Rice, Pasta and Noodles	3.7			0.6		2.4		3.6	3.5	3.5	3.1
Sauces, Dressings and Condiments	2.6	1.4	2.2	1.4	2.6	2.0	2.4	2.6	2.2	2.6	2.2
Savoury Snacks	2.9	1.7	1.9	1.8	2.3	2.2	2.3	2.1	1.8	2.9	2.6
Soup	2.2	1.3	3.2	0.5	3.5	2.3	2.7	3.6	2.5	3.4	3.3
Sports Drinks	1.7			1.5	1.7		1.7	1.6	1.6	1.9	1.6
Sweet Biscuits, Snack Bars and Fruit Snacks	1.9	2.0	2.4	1.7	1.1	0.8	1.6	2.4	2.0	1.8	2.0
Sweet Spreads	1.0	3.0	3.3		0.5	2.9	1.0	2.1		2.0	0.7

Table I: Mean Health Star Rating by Euromonitor subset for each country (not sales-weighted)

* Results shown for countries that were included in >5 companies only.

Table I shows the mean HSR when examining results by Euromonitor subset within each country.

Euromonitor Subset	No. products	Mean (range) HSR
Bottled Water – Pure	155	5.0 (5.0-5.0)
Edible Oils	22	4.3 (2.0-5.0)
Processed Fruit and Vegetables	571	4.1 (1.5-5.0)
Breakfast Cereal	1150	3.2 (0.5-5.0)
Dairy	7324	3.2 (0.5-5.0)
Ready Meals	3027	3.0 (0.5-5.0)
Juice	1528	2.9 (0.5-5.0)
Soup	1396	2.9 (0.5-4.5)
RTD Coffee	177	2.8 (0.5-5.0)
Processed Meat and Seafood	525	2.7 (0.5-5.0)
Baked Goods	1283	2.6 (0.5-5.0)
Rice, Pasta and Noodles	565	2.5 (0.5-4.5)
Savoury Snacks	3142	2.5 (0.5-5.0)
Sweet Spreads	98	2.4 (0.5-5.0)
Sauces, Dressings and Condiments	3564	2.2 (0.5-5.0)
Other Hot Drinks	198	2.1 (0.5-5.0)
Ice Cream and Frozen Desserts	2080	2.1 (0.5-4.5)
Bottled Water - Other	390	2.0 (1.0-5.0)
Sweet Biscuits, Snack Bars and Fruit Snacks	2393	1.9 (0.5-5.0)
RTD Tea	245	1.8 (1.0-4.5)
Sports Drinks	267	1.7 (0.5-3.5)
Asian Speciality Drinks	2	1.5 (1.5-1.5)
Carbonates	1130	1.5 (0.5-5.0)
Energy Drinks	130	1.1 (0.5-2.0)
Confectionery	6579	1.1 (0.5-5.0)
Concentrates	235	0.8 (0.5-4.5)

Table J: Mean and range HSR of food products by Euromonitor subsets

Table J shows the mean and range of HSRs in each Euromonitor subset overall for the 25 companies.

<u>ANALYSIS 3 and 4:</u> Corporate and country rankings based upon proportion of 'healthy' products with HSR \geq 3.5



Figure H: Proportion of products with \geq 3.5 HSR by company

Danone overall had the highest sales-weighted proportion of products achieving an HSR of 3.5 or more (61%; **Figure H**), followed by Arla (60%), FrieslandCampina (59%) and Lactalis (50%). Likely reasons for these results are the fact that the top ranked companies had portfolios dominated by 'Dairy' products which fare well under the HSR algorithm. When results were examined separately by foods and beverages (**Figures I and J** respectively), Coca-Cola moved up the rankings to have the highest proportion of foods with an HSR≥3.5, mainly due to its range of 'Dairy' and 'Processed Fruit and Vegetables' products receiving high HSRs. Companies such as Ferrero, Tingyi, Mondelez and Ajinomoto had the lowest proportion of food products with an HSR≥3.5 due to their products ranges being dominated by confectionery items. Lactalis by far had the highest proportion of beverage products receiving an HSR≥3.5, mainly due to its product range products receiving an HSR≥3.5 due to its product range products receiving an HSR≥3.5, mainly due to its product range products receiving an HSR≥3.5, mainly due to its product range products receiving an HSR≥3.5, mainly due to its product range consisting of predominantly dairy beverages which score highly under the HSR algorithm. Conversely, Unilever had no beverage products receiving an HSR≥3.5 due to its beverage product range mainly consisting of RTD Teas.



Figure I: Proportion of 'healthy' products by company – foods only



Figure J: Proportion of 'healthy' products by company – beverages only



Figure K: Proportion of 'healthy' products by country

Only 31% of products in all countries were classified as 'healthy' by this metric. Nigeria had the highest proportion of products achieving an HSR of 3.5 or above (**Figure K**). Italy had the lowest proportion of products available that achieved an HSR of 3.5 or above. Out of the countries (marked with a * in the figures) that were present in >5 countries, developed countries such as New Zealand and the USA were at the top of the rankings, with less developed countries such as China and India ranked lower. Interestingly, when foods and beverages were examined separately the results changed somewhat, with China having a low proportion of food products considered 'healthy' (**Figure L**) yet a relatively higher proportion of beverage products considered 'healthy' (**Figure M**).



Figure L: Proportion of 'healthy' products by country – foods only

Figure M: Proportion of 'healthy' products by country – beverages only



	AU	BR	CA	CN	НК	IN	MX	NZ	ZA	UK	US
Asian Specialty Drinks					0%						
Baked Goods	13%	67%	38%	24%		7%	36%			23%	56%
Bottled Water - Other	0%			0%			0%	0%	0%	3%	2%
Bottled Water - Pure	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%
Breakfast Cereals	71%	100%	43%	54%	49%	39%	49%	68%	42%	70%	28%
Carbonates	5%			0%	0%	0%	1%	0%	0%	4%	0%
Concentrates		0%	0%	0%		0%	2%	0%		0%	
Confectionery	4%	1%		7%	14%	6%	10%	8%	19%	5%	11%
Dairy	53%	59%	47%	30%	44%	60%	54%	77%	45%	62%	54%
Edible Oils						86%	100%				
Energy Drinks	0%				0%			0%	0%	0%	
Ice Cream and Frozen Desserts	12%	6%		3%	0%	2%	9%		0%	4%	8%
Juice	67%		100%	75%	29%	25%	18%	84%	71%	68%	25%
Other Hot Drinks	11%	15%		0%	0%	0%	100%	0%	75%	0%	59%
Processed Fruit and Vegetables	99%	100%			100%	100%		100%		100%	84%
Processed Meat and Seafood	94%	19%							100%		48%
RTD Coffee	100%			0%	7%						96%
RTD Tea				0%	0%		0%				0%
Ready Meals	52%	35%	28%	8%	14%		50%	80%	25%	61%	57%
Rice, Pasta and Noodles	96%			0%		11%		94%	100%	81%	58%
Sauces, Dressings and Condiments	30%	5%	21%	19%	33%	20%	31%	28%	28%	30%	23%
Savoury Snacks	47%	0%	0%	2%	14%	25%	17%	15%	4%	49%	31%
Soup	43%	19%	51%	0%	100%	39%	40%	93%	46%	84%	68%
Sports Drinks	0%			0%	0%		4%	0%	0%	0%	0%
Sweet Biscuits, Snack Bars and Fruit Snacks	18%	13%	14%	1%	2%	0%	5%	33%	0%	10%	12%
Sweet Spreads	0%	0%	53%		0%	50%	0%	19%		33%	0%

Table K: Proportion of products with HSR≥3.5 by Euromonitor subset for each country (not sales-weighted)

* Results shown for countries that were included in >5 companies only.

Table K above shows the proportion of products in each country considered 'healthy' by Euromonitor subset.

<u>ANALYSIS 5 and 6:</u> Corporate and country rankings based upon proportions of products meeting WHO criteria





A very low proportion of products offered by the 25 companies overall could be marketed to children using the WHO criteria (**Figure N**). It is, however, important to note here that each WHO region's nutrient profile model uses a different set of nutrient and ingredient criteria to determine whether a product is eligible for marketing to children. Dairy companies such as Arla, FrieslandCampina and Danone scored well using this
metric. Not surprisingly, companies such as Ferrero and Ajinomoto ranked low due to their product range consisting largely of confectionery items.

Note that these results do not imply that any of the companies marketed (or did not market) these products to children. Rather, the model provides a useful supplementary method to assess the healthiness of products.



Figure O: Proportions of products meeting WHO criteria for marketing to children – by company, foods only

When results were examined by foods (**Figure O**), FrieslandCampina had the highest proportion of products eligible for marketing to children (32%). When results were examined by beverages (**Figure P**), Nestlé had the highest proportion of food products eligible for marketing to children (48%) followed by Danone with 27%. A higher proportion of beverage products (12%) compared to food products (8%) were eligible for marketing to children overall.



Figure P: Proportions of products meeting WHO criteria for marketing to children – by company, beverages only



Figure Q: Proportions of products meeting WHO criteria for marketing to children by country

A low proportion of products across all countries in this analysis overall (9%) would be eligible for marketing to children under WHO criteria (**Figure Q**). No country that was included in >5 companies scored well using this nutrient profiling method. The country that had the highest proportion overall of products that could be marketed to children was Nigeria at 67%, followed by the Netherlands at 52%. The Philippines, Italy and Indonesia were the only countries with zero products eligible for marketing to children. Country rankings changed somewhat when results were examined separately for foods (**Figure R**) and beverages (**Figure S**), with Nigeria the country with the highest proportions of food products eligible for marketing to children, yet zero beverages. The USA showed the opposite trend, with the highest proportion of beverage products eligible (23%) yet a relatively lower proportion of food products (3%).

Figure R: Proportions of products meeting WHO criteria for marketing to children – by country, foods only



Figure S: Proportions of products meeting WHO criteria for marketing to children – by country, beverages only



	AU	BR	CA	CN	НК	IN	MX	NZ	ZA	UK	US
Asian Specialty Drinks					0%						
Baked Goods	3%	0%	2%	23%		0%	3%			20%	1%
Bottled Water - Other	0%			0%			23%	22%	0%	17%	71%
Bottled Water - Pure	100%	100%		100%	100%	100%	100%	100%	100%	100%	100%
Breakfast Cereals	28%	11%	0%	27%	22%	22%	0%	20%	0%	24%	1%
Carbonates	0%			0%	0%	12%	0%	0%	0%	4%	2%
Concentrates		0%	0%	0%		0%	4%	0%		0%	
Confectionery	0%	0%		0%	0%	0%	0%	0%	0%	0%	0%
Dairy	18%	8%	3%	12%	18%	31%	3%	65%	17%	30%	13%
Edible Oils						100%	0%				
Energy Drinks	0%				0%			0%	0%	0%	
Ice Cream and Frozen Desserts	0%	2%		0%	0%	1%	0%		0%	0%	0%
Juice	11%		0%	0%	3%	3%	11%	6%	0%	0%	24%
Other Hot Drinks	5%	0%		0%	0%	13%	0%	0%	0%	10%	0%
Processed Fruit and Vegetables	14%	0%			0%	0%		33%		0%	9%
Processed Meat and Seafood	94%	3%							0%		0%
RTD Coffee	0%			0%	0%						22%
RTD Tea				0%	0%		0%				1%
Ready Meals	63%	0%	0%	7%	25%		0%	75%	0%	43%	0%
Rice, Pasta and Noodles	99%			0%		6%		83%	0%	99%	21%
Sauces, Dressings and Condiments	1%	0%	1%	2%	18%	14%	3%	1%	6%	3%	2%
Savoury Snacks	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	3%
Soup	52%	0%	0%	0%	100%	43%	1%	100%	55%	89%	0%
Sports Drinks	10%			0%	0%		0%	0%	0%	3%	0%
Sweet Biscuits, Snack Bars and Fruit Snacks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Sweet Spreads	0%	0%	0%		0%	0%	0%	0%		0%	0%

Table L: Proportion of products eligible for marketing to children using the WHO criteria by Euromonitor subset for each country (not sales-weighted)

* Results shown for countries that were included in >5 companies only.

RESULTS BY COMPANY

COMPANY 1: AJINOMOTO

Products included

There were 494 identified products manufactured by Ajinomoto in four countries. Out of the 494 products included in analysis, there was sufficient nutrient information for 410 products to generate a Health Star Rating and for 403 to generate results for the WHO analysis. There were 73 products (15%) with insufficient nutrient information to calculate either an HSR or a WHO result (mainly from Thailand). **Table 1.1** shows the breakdown of products in each category by country.

	Brazil	Japan	Thailand	USA	Total
Concentrates	38	0	0	0	38
Processed Meat and Seafood	0	11	0	0	11
RTD Coffee	0	6	5	0	11
Ready Meals	0	43	0	56	99
Rice, Pasta and Noodles	0	0	26	0	26
Sauces, Dressings and Condiments	63	123	31	0	217
Soup	15	77	0	0	92
Total	116	260	62	56	494
% sales*	100%	87%	48%	100%	83%

Table 1.1 Number of Ajinomoto products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR and PAHO models were used in the WHO analysis.

The four countries used in this analysis represented 92% of Ajinomoto's global food and beverage sales in 2019. Of these four countries, the USA represented by far the lowest revenue (<\$70 million). Its main and home market (Japan) by comparison has the highest revenue with almost \$3 billion. Within each country, the included categories represented between 48% (Thailand) and 100% (Brazil and USA) of product sales, however it is unknown whether we have captured every product for sale in every category. Of the seven product categories that are covered, 'Sauces, Dressings and Condiments' represented the largest number of products and the highest sales value.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Ajinomoto products and sales-weighted mean nutrient profile of Ajinomoto products



Figure 1.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Ajinomoto products

Figure 1.2 Mean Health Star Rating by category for Ajinomoto products



Ajinomoto had a low overall mean HSR of 1.3 which increased to 1.7 when results were weighted by sales (**Figure 1.1**) illustrating that its products with slightly higher HSRs account for a relatively larger proportion of sales than those with lower HSRs. Out of the four countries included in Ajinomoto's analysis, the USA had the highest mean HSR both before and after results were weighted by sales (3.1). Thailand's mean HSR increased more than two-fold when sales-weighting was applied, from 0.8 to 3.1. When Ajinomoto's results were examined by category (**Figure 1.2**), the highest mean HSR was seen in the 'Ready Meals' and 'RTD Coffee' categories (2.6), followed by 'Processed Meat and Seafood' (2.2), with 'Rice, Pasta and Noodles' and 'Concentrates' having the lowest mean HSR of all Ajinomoto product categories (0.5).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Ajinomoto products considered "healthy" and sales-weighted proportion of Ajinomoto products considered "healthy"





Figure 1.4 Proportion of products considered "healthy" using the Health Star Rating by category for Ajinomoto



Overall, Ajinomoto had a low proportion of sales in all four countries with an HSR of 3.5 or greater (6%), which increased slightly to 8% when results were weighted by sales (**Figure 1.3**). Ajinomoto USA had the highest proportion of products receiving an HSR of 3.5 or more (31%) before sales-weighting was applied, with Thailand coming out on top once sales-weighting was applied (36%). No products in Brazil received an HSR of 3.5 or above. The USA's strong result is likely fuelled by the product types available within that country. For example, **Figure 1.4** shows that the 'Ready Meals' category had the highest proportion of products receiving an HSR of 3.5 or more, and this was the only category included in Ajinomoto USA's analysis.

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Ajinomoto products meeting WHO criteria





Figure 1.6 Proportions of Ajinomoto products meeting WHO criteria for marketing to children – *by Category*



Overall a very low proportion of Ajinomoto products (2%) were eligible for marketing to children (**Figure 1.5**), with no change when results were weighted by sales. Japan had the highest proportion of products eligible for marketing to children (3%) with all remaining countries selling zero products that were eligible for marketing to children. The 'Processed Meat and Seafood' category was the only category to have a substantial proportion of products eligible for marketing to children (45%), well above the category average for all companies in the analysis (**Figure 1.6**).

More specific results broken down by company and country for Ajinomoto can be seen in Appendix B.

COMPANY 2: ARLA

Products included

There were 1,073 identified products manufactured by Arla in 10 countries. Out of the 1,073 products included in analysis, there was sufficient nutrient information for 1,072 products to generate a Health Star Rating and for 1,073 to generate results for the WHO analysis. There were zero products with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 2.1** shows the breakdown of products in each category by country.

	Dairy	Sauces, Dressings and Condiments	Soup	Total	% sales*
Australia	17	0	0	17	100%
Canada	50	0	0	50	100%
Denmark	222	6	5	233	100%
Finland	141	0	0	141	100%
Germany	107	0	0	107	100%
Hong Kong	12	0	0	12	100%
Russia	7	0	0	7	100%
Sweden	283	15	9	307	100%
UK	140	0	0	140	100%
USA	59	0	0	59	100%
Total	1,038	21	14	1,073	100%

Table 2.1 Number of Arla products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WPR, EURO and PAHO models were used in the WHO analysis

The 10 countries used in this analysis represented 81% of Arla's global food and beverage sales in 2019. Of these four countries, Sweden represented the largest revenue (>\$1.6 billion) and Hong Kong the lowest revenue (~\$3 million). Within each country, the included categories represented 100% of product sales, however it is unknown whether we have captured every product for sale in every country.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Arla products and sales-weighted mean nutrient profile of Arla products



Figure 2.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Arla products



Figure 2.2 Mean Health Star Rating by category for Arla products

Arla's overall mean HSR was 3.2, which increased slightly to 3.3 when results were weighted by sales (**Figure 2.1**). Out of the 10 countries included in Arla's analysis, Denmark had the highest mean HSR both before and after results were weighted by sales (3.5), followed by the UK and Sweden (3.4), with Hong Kong and Australia having the lowest mean HSR of 1.0. 'Dairy' was the category with the highest mean HSR (3.2) followed by 'Soup' (**Figure 2.2**).

<u>ANALYSIS 3 and 4:</u> Country rankings based upon proportion of Arla products considered "healthy" and sales-weighted proportion of Arla products considered "healthy"



Figure 2.3 Proportion of products considered "healthy" using the Health Star Rating by country for Arla

Figure 2.4 Proportion of products considered "healthy" using the Health Star Rating by category for Arla



Overall, Arla had a high proportion of sales overall with an HSR of 3.5 or greater (55%), which increased to 60% when results were weighted by sales (**Figure 2.3**) illustrating that products of higher nutritional quality contributed more to annual 2019 sales than products of lower nutritional quality. Although Arla Denmark had the highest mean HSR, Arla in Russia had the highest proportion of products receiving an HSR of 3.5 or more (71%). When results were weighted by sales, Russia still ranked highest in terms of the country with the highest proportion of products considered 'healthy'. No products in Australia or Hong Kong received an HSR of 3.5 or above. European countries generally had a better result, likely fuelled by the healthier dairy product types (yoghurt and milk) available compared to countries such as Australia and Hong Kong which had product lists dominated by cheese products which contain higher levels of sodium and saturated fat than other types of dairy products. 'Dairy' was the category with largest proportion of Arla products considered 'healthy' (**Figure 2.4**).

ANALYSIS 5 and 6: Country and company rankings based upon proportion of Arla products meeting WHO criteria



Figure 2.5 Proportions of Arla products meeting WHO criteria for marketing to children – by Country

Overall a high proportion of Arla products (31%) was eligible for marketing to children (**Figure 2.5**), which increased to 34% when results were weighted by sales. A much higher proportion than the mean for all companies (9%). Russia had the highest proportion of products eligible for marketing to children (43%) followed by Denmark (42%) with Australia, Canada, the USA and Hong Kong all selling zero products that were eligible for marketing to children. Once again, these results were driven by the fact that Arla in Russia sold products such as yoghurts and dairy milk whereas Australia, USA, Canada and Hong Kong sold mainly cheese products.

Figure 2.6 Proportions of Arla products meeting WHO criteria for marketing to children – by Category



Although 'Dairy' had the highest mean HSR for Arla, 'Soup' was the category with the highest proportion of products receiving an HSR of \geq 3.5 (**Figure 2.6**). Arla had a higher proportion of products receiving an HSR of \geq 3.5 in all categories compared to all companies combined.

More specific results broken down by company and country for Arla can be seen in Appendix B.

COMPANY 3: BRF

Products included

There were 150 identified products manufactured by BRF in one country (Brazil). There was sufficient nutrient information for 143 products to generate a Health Star Rating and for 147 to generate results for the WHO analysis. There were 3 products (2%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 3.1** shows the breakdown of products in each category.

Table 3.1 Number of BRF products in Euromonitor subsets

	Brazil
Dairy	11
Ice Cream and Frozen Desserts	2
Processed Fruit and Vegetables	1
Processed Meat and Seafood	77
Ready Meals	59
Total	150
% sales*	100%

* Note that this value indicates % sales from included categories for Brazil. The PAHO model was used for the WHO analysis.

The one country (Brazil) used in this analysis represented 93% of BRF's global food and beverage sales in 2019. The included categories represented 100% of product sales in Brazil, however it is unknown whether we have captured every product for sale in the country. Of the five product categories included in analysis, 'Processed Meat and Seafood' represented the highest sales value.

<u>ANALYSIS 1 and 2:</u> Category rankings based upon mean nutrient profile of BRF products and sales-weighted mean nutrient profile of BRF products

Figure 3.1 Mean Health Star Rating by country for BRF products





Figure 3.2 Mean Health Star Rating by category for BRF products

BRF had an overall mean HSR of 2.3 which remained the same when results were weighted by sales (**Figure 3.1**). Brazil was the only country included in BRF's analysis. When examining results by category, 'Processed Fruit and Vegetables' had the highest mean HSR of 5.0, followed by 'Ready Meals' with 2.8 and 'Dairy' with 2.7 (**Figure 3.2**).

<u>ANALYSIS 3 and 4:</u> Category rankings based upon proportion of BRF products considered "healthy" and sales-weighted proportion of BRF products considered "healthy"

Figure 3.3 Proportion of products considered "healthy" using the Health Star Rating by country for BRF



Just over a quarter of BRF products were considered "healthy" with an HSR of \geq 3.5 (**Figure 3.3**), which increased by 2% when sales-weighting was applied. 'Processed Fruit and Vegetables' had the highest proportion of products with an HSR \geq 3.5 (100%) followed by 'Dairy' (44%; **Figure 3.4**). Not surprisingly, 'Ice Cream and Frozen Desserts' was the category with the lowest proportion of products with an HSR \geq 3.5 (0%).

Figure 3.4 Proportion of products considered "healthy" using the Health Star Rating by category for BRF products



<u>ANALYSIS 5 and 6:</u> Category rankings based upon proportion of BRF products meeting WHO criteria

Figure 3.5 Proportions of BRF products meeting WHO criteria for marketing to children – by Country



Figure 3.6 Proportions of BRF products meeting WHO criteria for marketing to children – by Category



The proportion of BRF products eligible for marketing to children (**Figure 3.5**) was low (3%) and was lower than the proportion considered "healthy" under the HSR (27%). The proportion increased to 5% when sales-weighting was applied. The 'Dairy' category had the highest proportion of products eligible for marketing to children using the WHO criteria (18%), with zero products in the 'Ice Cream and Frozen Desserts', 'Processed Fruit and Vegetables' and 'Ready Meals' categories eligible (**Figure 3.6**).

More specific results broken down by company and country for BRF can be seen in Appendix B.

COMPANY 4: CAMPBELL

Products included

There were 1,159 identified products manufactured by Campbell in three countries. There was sufficient nutrient information for 1,158 products to generate a Health Star Rating and for 1,159 to generate results for the WHO analysis. There were zero products with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 4.1** shows the breakdown of products in each category by country.

Table 4.1 Number of Co	mpbell products by	country in each	Euromonitor subset
------------------------	--------------------	-----------------	--------------------

	Baked Goods	Juice	Sauces, Dressings and Condiments	Savoury Snacks	Soup	Total	% sales*
Canada	0	3	14	17	110	144	98%
Mexico	0	18	15	0	49	82	100%
USA	126	70	107	314	316	933	91%
Total	126	91	136	331	475	1,159	91%

* Note that this value indicates % sales from included categories for each country. The PAHO model was used for the WHO analysis.

The three countries used in this analysis represented 87% of Campbell's global food and beverage sales in 2019. Of these three countries, the USA represented the highest revenue (>\$9 billion) and Mexico the lowest revenue (~\$110 million). Within each country, the included categories represented between 91% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Campbell products and sales-weighted mean nutrient profile of Campbell products

Figure 4.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Campbell products





Figure 4.2 Mean Health Star Rating by category for Campbell products

Campbell had an overall mean HSR of 3.0 which remained the same when results were weighted by sales (**Figure 4.1**). Out of the three countries included in Campbell's analysis, Mexico had the highest mean HSR before and after results were weighted by sales (3.7 and 3.9). The USA had the lowest HSR both before and after sales-weighting was applied (3.0 and 2.9). When Campbell's results were examined by category (**Figure 4.2**), the highest mean HSR was seen in the 'Juice' and 'Soup' categories (3.3), with 'Savoury Snacks' having the lowest mean HSR of all Campbell product categories (2.5). Campbell products were either equal to or greater than the HSR for all companies combined.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Campbell products considered "healthy" and sales-weighted proportion of Campbell products considered "healthy"



Figure 4.3 Proportion of products considered "healthy" using the Health Star Rating by country for Campbell





Overall, just under half (49%) of all Campbell products across the three countries had an HSR of 3.5 or greater, which decreased to 42% when results were weighted by sales (**Figure 4.3**) illustrating that products of lower nutritional quality may have contributed more to annual 2019 sales than products of higher nutritional quality. Campbell Mexico had far and above the highest proportion of products receiving an HSR of 3.5 or more (62%), increasing to 72% when results were weighted by sales. The USA had a large decrease in the proportion of products with HSR≥3.5 once sales-weighting of results was undertaken (48% to 41%), indicating that product sales in the USA derive mainly from less healthy items than in Mexico and Canada. When results were examined by category, 'Baked Goods' had the highest proportion of products considered "healthy", with 'Savoury Snacks' the lowest (**Figure 4.4**). As with mean HSR, Campbell in all countries and categories had a higher proportion of healthy products compared to the average of all companies combined.

<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of Campbell products meeting WHO criteria



Figure 4.5 Proportions of Campbell products meeting WHO criteria for marketing to children – *by Country*

Figure 4.6 Proportions of Campbell products meeting WHO criteria for marketing to children – *by Category*



Overall a very low proportion of Campbell products (2%) were eligible for marketing to children (**Figure 4.5**), both before and after results were weighted by sales. Mexico had the highest proportion of products eligible for marketing to children (11%) increasing to 21% when results were weighted by sales, indicating that sales in Mexico were driven by healthier products. When results were examined by food category, very different results to the previous finding for products receiving ≥3.5 HSR were observed, with 'Juice' and 'Savoury Snacks' having the highest proportion of products eligible under the WHO criteria (**Figure 4.6**).

More specific results broken down by company and country for Campbell can be seen in Appendix B.

COMPANY 5: CHINA MENGNIU

Products included

There were 279 identified products manufactured by China Mengniu in two countries. There was sufficient nutrient information for 258 products to generate a Health Star Rating and for 261 to generate results for the WHO analysis. There were 18 products (6%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 5.1** shows the breakdown of products in each category by country.

Table 5.1 Number of China Mengniu products by country in each Euromonitor subset

	China	Hong Kong	Total
Dairy	265	4	269
Ice Cream and Frozen Desserts	10	0	10
Total	275	4	279
% sales*	100%	100%	100%

* Note that this value indicates % sales from included categories for each country. The WHO WPR model was used in the WHO analysis.

The two countries used in this analysis represented 100% of China Mengniu's global food and beverage sales in 2019. Of these two countries, China by far represented the highest revenue (>\$13 billion) and Hong Kong the lowest revenue (~\$9 million). Within each country, the included categories represented 100% of product sales, however it is unknown whether we have captured every product for sale in each country.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of China Mengniu products and sales-weighted mean nutrient profile of China Mengniu products





5.0 Mean for all companies 4.5 4.0 3.5 3.0 3.0 Mean HSR 3.0 2.3 2.5 2.0 1.5 1.0 0.5 Dairy Ice Cream and Frozen Total Desserts

Figure 5.2 Mean Health Star Rating by category for China Mengniu products

China Mengniu had an overall mean HSR of 3.0 which remained the same when results were weighted by sales (**Figure 5.1**). Out of the two countries included in China Mengniu analysis, Hong Kong had the highest mean HSR before and after results were weighted by sales (4.0), with China close behind with 3.0. When China Mengniu results were examined by category (**Figure 5.2**), the highest mean HSR was seen in the 'Dairy' category (3.0) with 'Ice Cream and Frozen Desserts' having the lowest mean HSR (2.3).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of China Mengniu products considered "healthy" and sales-weighted proportion of China Mengniu products considered "healthy"

Figure 5.3 Proportion of products considered "healthy" using the Health Star Rating by country for China Mengniu



Figure 5.4 Proportion of products considered "healthy" using the Health Star Rating by category for China Mengniu



Overall, 26% of all China Mengniu products across the two countries had an HSR of 3.5 or greater, remaining the same when results were weighted by sales (**Figure 5.3**). China Mengniu Hong Kong had 100% of products receiving an HSR of 3.5 or more, although there were only four products included in analysis for Hong Kong. When results were examined by category, 27% of 'Dairy' products were considered "healthy" (below the average for all companies of 51%), and 0% of 'Ice Cream and Frozen Desserts' (**Figure 5.4**). China Mengniu had a lower proportion of healthy products compared to the average of all companies combined.

<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of China Mengniu products meeting WHO criteria





Figure 5.6 Proportions of China Mengniu products meeting WHO criteria for marketing to children – by Category



Overall only 11% of China Mengniu products were eligible for marketing to children (**Figure 5.5**), both before and after results were weighted by sales. Hong Kong had the highest proportion of products eligible for marketing to children (25%) and China the lowest (11%). When results were examined by food category, as with the HSR results, 'Dairy' performed better than 'Ice Cream and Frozen Desserts' (**Figure 5.6**).

More specific results broken down by company and country for China Mengniu can be seen in <u>Appendix</u> <u>B</u>.

COMPANY 6: COCA-COLA

Products included

There were 1,381 identified products manufactured by Coca-Cola in 10 countries. There was sufficient nutrient information for 1,278 products to generate a Health Star Rating and for 1,346 to generate results for the WHO analysis. There were 35 products (3%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 6.1** shows the breakdown of products in each category by country.

	AU	CN	НК	IN	JP	MX	NZ	ZA	UK	US	Total
Asian Speciality Drinks	0	0	2	0	0	0	0	0	0	0	2
Bottled Water - Other	8	0	0	0	0	0	0	14	23	43	88
Bottled Water - Pure	4	4	3	3	3	3	6	8	4	2	40
Carbonates	28	30	26	20	15	74	34	42	130	110	509
Concentrates	0	0	0	0	0	0	3	0	0	0	3
Dairy	0	9	0	0	0	96	0	0	0	0	105
Energy Drinks	0	0	0	0	0	0	0	1	0	0	1
Juice	1	16	9	25	0	123	31	0	143	132	480
RTD Coffee	0	0	0	0	13	0	0	0	0	0	13
RTD Tea	0	9	11	0	12	0	0	0	0	0	32
Sports Drinks	16	0	0	0	3	31	8	8	5	37	108
Total	57	68	51	48	46	327	82	73	305	324	1,381
% sales*	99%	99%	96%	100%	98%	97%	98%	99%	100%	94%	97%

Table 6.1 Number of Coca-Cola products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR, AFR, EURO and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 56% of Coca-Cola's global food and beverage sales in 2019. Of these 10 countries, the USA represented by far the highest revenue (>\$20 billion), and New Zealand the lowest with <\$300 million. Within each country, the included categories represented between 94% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 11 product categories that are covered in this report, 'Carbonates' represented the largest number of products and the highest sales value.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Coca-Cola products and sales-weighted mean nutrient profile of Coca-Cola products



Figure 6.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Coca-Cola products

Figure 6.2 Mean Health Star Rating by category for Coca-Cola products



Coca-Cola products had an overall mean HSR of 2.3 which decreased to 1.8 when results were weighted by sales (**Figure 6.1**) illustrating that its products with lower HSRs account for a relatively larger proportion of sales than those with higher HSRs. Of the 10 countries included in Coca-Cola's analysis, the UK had the highest mean HSR (3.1) followed by New Zealand and Mexico (2.3). However, when results were weighted by sales the ranking of countries changed, with Hong Kong having the highest mean HSR (2.3) followed by the UK (2.2). India had the lowest mean HSR both before (1.5) and after (1.6) sales-weighting was applied. Six of the 10 countries had their overall mean HSR decrease following sales-weighting, indicating that the majority of product sales in those countries derived from less healthy products. When Coca-Cola's results were examined by category (**Figure 6.2**), the highest mean HSR was seen in the 'Bottled Water – Pure' category (5.0), followed by 'Dairy' (3.6) and 'Juice' (2.7), with 'Energy Drinks' having the lowest mean HSR of all Coca-Cola product categories (1.0). Note that all analyses were done using data per 100g/mL, which is an important consideration for Coca-Cola as their soft drink products are likely consumed in amounts much greater than this by the consumer. Carbonates represented the largest selling category 'Bottle Water – Pure' which represented <\$5 billion in sales across these 10 countries in 2019.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Coca-Cola products considered "healthy" and sales-weighted proportion of Coca-Cola products considered "healthy"





Figure 6.4 Proportion of products considered "healthy" using the Health Star Rating by category for Coca-Cola products



Overall, Coca-Cola had a relatively low proportion of sales in all nine countries with an HSR of 3.5 or greater (23%), which more than halved to 10% when results were weighted by sales (**Figure 6.3**) again illustrating that products of lower nutritional quality account contributed more to annual 2019 sales than products of higher nutritional quality. Coca-Cola UK had both the highest mean HSR of all countries as well as the highest proportion of products receiving an HSR of 3.5 or more (43%). However, when results were weighted by sales, results changed dramatically, with all countries except Australia, India and Hong Kong showing a large decrease in the proportion of healthy products being sold. Hong Kong had the highest proportion of sales deriving from healthy products when results were weighted by sales (20%). 100% of products in the 'Bottled Water - Pure' category achieved an HSR of \geq 3.5 (**Figure 6.4**), however five of the 11 categories included had zero healthy products.

<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of Coca-Cola products meeting WHO criteria



Figure 6.5 Proportions of Coca-Cola products meeting WHO criteria for marketing to children – *by Country*

Figure 6.6 Proportions of Coca-Cola products meeting WHO criteria for marketing to children – *by Category*



Overall a very low proportion of Coca-Cola products (8%) was eligible for marketing to children (**Figure 6.5**), increasing slightly to 10% when results were weighted by sales. Japan had the highest proportion of products eligible for marketing to children (17%), although Hong Kong had the highest after sales-weighting was applied (20%). Not surprisingly, 'Bottled Water – Pure' had the highest proportion of products eligible under the WHO criteria, with most other categories ineligible.

More specific results broken down by company and country for Coca-Cola can be seen in Appendix B.

COMPANY 7: CONAGRA

Products included

There were 2,262 identified products manufactured by ConAgra in five countries. There was sufficient nutrient information for 1,891 products to generate a Health Star Rating and for 2,021 to generate results for the WHO analysis. There were 241 products (11%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 7.1** shows the breakdown of products in each category by country.

Table 7.1 Number of ConAgra products by country in each Euromonitor subset

	Hong Kong	India	Mexico	New Zealand	USA	Total
Breakfast Cereal	0	0	12	0	0	12
Edible Oils	0	14	8	0	0	22
Other Hot Drinks	2	0	0	0	0	2
Processed Fruit and Vegetables	0	0	0	0	257	257
Processed Meat and Seafood	0	0	0	0	209	209
Ready Meals	0	0	0	0	968	968
Sauces, Dressings and Condiments	0	0	33	0	179	212
Savoury Snacks	0	64	55	17	431	567
Sweet Spreads	0	13	0	0	0	13
Total	2	91	108	17	2,044	2,262
% sales*	92%	100%	100%	100%	80%	81%

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR and PAHO models were used in the WHO analysis

The five countries used in this analysis represented 97% of ConAgra's global food and beverage sales in 2019. Of these five countries, the US represented the highest revenue (>\$10 billion) and Hong Kong the lowest revenue (<\$10 million). Within each country, the included categories represented between 80% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the nine product categories included in analysis, 'Ready Meals' represented the largest number of products and the highest sales value.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of ConAgra products and sales-weighted mean nutrient profile of ConAgra products



Figure 7.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for ConAgra products

Figure 7.2 Mean Health Star Rating by category for ConAgra products



ConAgra had a relatively high overall mean HSR of 3.1, which remained the same when results were weighted by sales (**Figure 7.1**). Out of the five countries included in ConAgra's analysis, India had the highest mean HSR before and after results were weighted by sales (3.5 and 3.9). Mexico's mean HSR increased from 3.1 to 3.7 when results were weighted by sales. Hong Kong had the lowest mean HSR both before and after sales-weighting of results (0.5), due to only selling products in the 'Other Hot Drinks' category. When ConAgra's results were examined by category (**Figure 7.2**), the highest mean HSR was seen in the 'Edible Oils' category (4.3), with 'Other Hot Drinks' having the lowest mean HSR (0.5).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of ConAgra products considered "healthy" and sales-weighted proportion of ConAgra products considered "healthy"



Figure 7.3 Proportion of products considered "healthy" using the Health Star Rating by country for ConAgra

Figure 7.4 Proportion of products considered "healthy" using the Health Star Rating by category for ConAgra



Overall, ConAgra had a high proportion of sales with an HSR of 3.5 or greater (57%), however this decreased to 47% when results were weighted by sales (**Figure 7.3**) illustrating that products of lower nutritional quality account contributed more to 2019 sales than those of higher nutritional quality. ConAgra India had both the highest mean HSR of all countries and the highest proportion of products receiving an HSR of 3.5 or more (62%). Mexico and the US showed dramatically different results before and after sales-weighting of results, with the USA showing a decrease in the proportion of healthy products when sales-weighting was applied and Mexico showing an increase. The same categories that received the highest overall mean HSR also had the highest proportion of products receiving \geq 3.5 HSR (**Figure 7.4**).
<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of ConAgra products meeting WHO criteria

Figure 7.5 Proportions of ConAgra products meeting WHO criteria for marketing to children – by Country



Figure 7.6 Proportions of ConAgra products meeting WHO criteria for marketing to children – *by Category*



Overall a very low proportion of ConAgra products (2%) was eligible for marketing to children using the WHO criteria (**Figure 7.5**), increasing slightly to 5% after sales-weighting. India had the highest proportion of products eligible for marketing to children (16%) before sales-weighting was undertaken, increasing dramatically to 83% after sales-weighting. Despite India's dramatic increase, most sales globally derived from the US and so the overall change in the proportion of products eligible for marketing did not change substantially. 64% of 'Edible Oils' were eligible for marketing to children, followed by 9% of 'Processed Fruit and Vegetables' and 3% of 'Sauces, Dressings and Condiments', with no 'Breakfast Cereals', 'Ready Meals', 'Other Hot Drinks', 'Processed Meat and Seafood' or 'Sweet Spreads' eligible.

More specific results broken down by company and country for ConAgra can be seen in Appendix B.

COMPANY 8: DANONE

Products included

There were 1,642 identified products manufactured by Danone in 10 countries. There was sufficient nutrient information for 1,626 products to generate a Health Star Rating and for 1,642 to generate results for the WHO analysis. There were zero products with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 8.1** shows the breakdown of products in each category by country.

	Bottled Water - Other	Bottled Water - Pure	Dairy	Juice	RTD Coffee	Total	% sales*
Australia	0	1	48	0	0	49	100%
Brazil	0	1	150	0	0	151	100%
China	13	1	20	0	0	34	100%
France	46	6	260	0	0	312	99%
Hong Kong	0	2	0	0	0	2	98%
Mexico	36	2	185	0	0	223	100%
Russia	0	1	167	0	0	168	100%
South Africa	0	0	76	0	0	76	99%
UK	19	9	152	3	0	183	100%
USA	0	2	419	0	23	444	100%
Total	114	25	1,477	3	23	1,642	100%

Table 8.1 Number of Danone products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, EURO, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 58% of Danone's global food and beverage sales in 2019. Of these 10 countries, the USA represented the highest revenue (>\$5 billion) and Hong Kong the lowest revenue with <\$100 million. Within each country, the included categories represented between 98-100% of sales, however it is unknown whether we have captured every product for sale in every country. The 'Dairy' category represented the vast majority of sales within this analysis, with >\$10 billion.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Danone products and sales-weighted mean nutrient profile of Danone products



Figure 8.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Danone products

Figure 8.2 Mean Health Star Rating by category for Danone products



Danone had a relatively high overall mean HSR of 3.4 which increased slightly to 3.5 when results were weighted by sales (**Figure 8.1**). Out of the 10 countries included in Danone's analysis, Hong Kong had the highest mean HSR both before and after results were weighted by sales (5.0), followed by the UK with an HSR of 3.8, with China having the lowest HSR of 2.7. Hong Kong's high HSR result is because the products evaluated were plain bottled water products which automatically receive an HSR of 5.0. In fact, Danone's relatively high overall result is likely due in large part to nine out of the 10 countries selling plain bottled water products.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Danone products considered "healthy" and sales-weighted proportion of Danone products considered "healthy"





Figure 8.4 Proportion of products considered "healthy" using the Health Star Rating by category for Danone



Overall Danone had 61% of their products receiving an HSR of 3.5 or greater, both before and after salesweighting was applied (**Figure 8.3**). Once again, driven by sales of plain bottled water products, Hong Kong had 100% of products receiving an HSR of 3.5 or more, with the UK, USA and Brazil also having more than 70% of products considered 'healthy'. China had the lowest proportion of healthy products (18%). Danone had a higher proportion of healthy products in each category compared to the average for all companies combined (**Figure 8.4**).

<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of Danone products meeting WHO criteria

Figure 8.5 Proportions of Danone products meeting WHO criteria for marketing to children – by Country



Figure 8.6 Proportions of Danone products meeting WHO criteria for marketing to children – by Category



Only 18% of Danone products were eligible for marketing to children (**Figure 8.5**), increasing to 25% when results were weighted by sales. Hong Kong once again with its product list comprising solely of plain bottled water products ranked first out of the 10 countries, with 100% of its portfolio eligible for marketing to children. Australia was the only country to have a lower proportion of products eligible for marketing to children compared to the average for all companies combined. 'RTD Coffee' was the only category where a higher proportion of Danone products were eligible for marketing to children companies combined (Figure 8.6).

More specific results broken down by company and country for Danone can be seen in Appendix B.

COMPANY 9: FERRERO

Products included

There were 1,475 identified products manufactured by Ferrero in 10 countries. There was sufficient nutrient information for 1,232 products to generate a Health Star Rating and for 1,324 to generate results for the WHO analysis. There were 151 products (10%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 9.1** shows the breakdown of products in each category by country.

	Baked Goods	Confecti onery	Dairy	RTD Tea	Sweet Biscuits, Snack Bars and Fruit Snacks	Sweet Spreads	Total	% sales*
Australia	0	58	0	0	0	2	60	100%
China	0	26	0	0	0	0	26	83%
Germany	0	226	6	0	3	1	236	100%
Hong Kong	0	27	0	0	0	1	28	87%
India	0	45	0	0	0	2	47	100%
Italy	19	139	0	28	0	1	187	85%
Mexico	0	54	0	0	0	2	56	100%
NZ	0	27	0	0	0	1	28	100%
UK	42	394	0	0	0	2	438	96%
USA	0	348	0	0	14	7	369	100%
Total	61	1,344	6	28	17	19	1,475	95%

Table 9.1 Number of Ferrero products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, EURO, SEAR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 59% of Ferrero's global food and beverage sales in 2019. Of these 10 countries, the USA represented the highest revenue (>\$3 billion) and New Zealand the lowest revenue with <\$40 million. Within each country, the included categories represented 95% of product sales, however it is unknown whether we have captured every product for sale in every country. 'Confectionery' represented by far the largest number of products and the highest sales value, with >\$7 billion across the 10 countries.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Ferrero products and sales-weighted mean nutrient profile of Ferrero products



Figure 9.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Ferrero products



Figure 9.2 Mean Health Star Rating by category for Ferrero products

Ferrero had a very low overall mean HSR of 0.9 which increased slightly to 1.0 when results were weighted by sales (**Figure 9.1**). New Zealand had the highest mean HSR (1.9) and China the lowest (0.5). In all countries and all categories, Ferrero scored lower than the mean HSR for all companies combined. 'RTD Tea' had the highest mean HSR (1.5) and 'Dairy' the lowest (0.7). The 'Dairy' category consisted solely of chocolate-based snacks, resulting in its low mean HSR for Ferrero.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Ferrero products considered "healthy" and sales-weighted proportion of Ferrero products considered "healthy"





Figure 9.4 Proportion of products considered "healthy" using the Health Star Rating by category for Ferrero



A very low proportion of Ferrero products (2%) were considered "healthy", decreasing to 1% when salesweighting was applied. All countries and categories were below the average for all companies (**Figure 9.3 and 9.4**). <u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of Ferrero products meeting WHO criteria

Zero Ferrero products across all 10 countries were eligible for marketing to children under the WHO criteria.

More specific results broken down by company and country for Ferrero can be seen in Appendix B.

COMPANY 10: FRIESLANDCAMPINA

Products included

There were 494 identified products manufactured by FrieslandCampina in 10 countries. There was sufficient nutrient information for 494 products to generate a Health Star Rating and for 494 to generate results for the WHO analysis. **Table 10.1** shows the breakdown of products in each category by country.

	Dairy	Other Hot Drinks	Processed Meat and Seafood	Total	% sales*
Germany	105	0	0	105	100%
Hong Kong	16	0	0	16	100%
Indonesia	32	0	0	32	87%
Netherlands	162	0	10	172	100%
Nigeria	14	1	0	15	100%
Philippines	14	0	0	14	100%
Russia	63	0	0	63	100%
Thailand	31	0	0	31	100%
UK	11	0	0	11	100%
Vietnam	35	0	0	35	100%
Total	483	1	10	494	100%

Table 10.1 Number of FrieslandCampina products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO EURO, WPR, SEAR, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 70% of FrieslandCampina's global food and beverage sales in 2019. Within each country, the included categories represented 100% of product sales (with the exception of Indonesia which had only 87%), however it is unknown whether we have captured every product for sale in every country. 'Dairy' by far represented FrieslandCampinia's largest category, with the majority of products and sales (>\$4 billion).

<u>ANALYSIS 1 and 2:</u> Country rankings based upon mean nutrient profile of FrieslandCampina products and sales-weighted mean nutrient profile of FrieslandCampina products



Figure 10.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for FrieslandCampina products

Figure 10.2 Mean Health Star Rating and sales-weighted mean Health Star Rating by category for FrieslandCampina products



FrieslandCampina had a relatively high overall mean HSR of 3.4 which decreased slightly to 3.3 when results were weighted by sales (**Figure 10.1**). Out of the 10 countries included in FrieslandCampina's analysis, the UK had a higher mean HSR both before and after results were weighted by sales (4.2), followed by the Netherlands with an HSR of 4.0. Although FrieslandCampina sells predominantly 'Dairy' products, the 'Processed Meat and Seafood' category had the highest mean HSR (3.8; **Figure 10.2**).

<u>ANALYSIS 3 and 4:</u> Country rankings based upon proportion of FrieslandCampina products considered "healthy" and sales-weighted proportion of products considered "healthy"





Figure 10.4 Proportion of products considered "healthy" using the Health Star Rating by category for FrieslandCampina



Overall, FrieslandCampina had a relatively high proportion of products across the 10 countries with an HSR of 3.5 or greater (56%), which increased slightly to 59% when results were weighted by sales (**Figure 10.3**). 100% of UK products received an HSR of \geq 3.5 followed by Nigeria with 93%. FrieslandCampina had slightly more healthy 'Dairy' products (56%) than the average for all companies (52%) and had a very high proportion (90%) of 'Processed Meat and Seafood' products receiving \geq 3.5 HSR (**Figure 10.4**).

<u>ANALYSIS 5 and 6:</u> Country rankings based upon proportion of FrieslandCampina products meeting WHO criteria

Figure 10.5 Proportions of FrieslandCampina products meeting WHO criteria for marketing to children – by Country



Figure 10.6 Proportions of FrieslandCampina products meeting WHO criteria for marketing to children – by Category



Results for FrieslandCampina did not look as favourable when using the WHO criteria compared to the HSR criteria, with only 32% of products eligible for marketing to children, decreasing further to 25% once sales weighting was applied. Nigeria had the largest proportion of products eligible (67%) with Indonesia and the Philippines having 0% (**Figure 10.5**). Category results look similar to the HSR results, with 'Processed Meat and Seafood' having the highest proportion eligible for marketing to children under the WHO criteria, and a higher proportion of 'Dairy' products than the average for all companies combined (**Figure 10.6**).

More specific results broken down by company and country for FrieslandCampina can be seen in <u>Appendix B</u>.

COMPANY 11: GENERAL MILLS

Products included

There were 2,642 identified products manufactured by General Mills in 10 countries. There was sufficient nutrient information for 2,578 products to generate a Health Star Rating and for 2,586 to generate results for the WHO analysis. There were 56 products (2%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 11.1** shows the breakdown of products in each category by country.

Table 11.1 Number of General Mills products by country in each Euromonitor subset

	AU	СА	CN	НК	IN	MX	NZ	ZA	UK	US	Total
Baked Goods	62	67	0	0	44	51	0	0	0	0	224
Breakfast Cereal	68	55	14	6	0	22	9	2	13	181	370
Dairy	0	188	0	5	0	0	26	0	111	348	678
Ice Cream and Frozen Desserts	0	0	37	60	0	20	0	0	37	0	154
Ready Meals	37	67	105	24	0	0	15	5	34	143	430
Rice, Pasta and Noodles	21	0	0	0	0	0	1	0	0	0	22
Sauces, Dressings and Condiments	22	0	0	0	0	0	10	0	0	0	32
Soup	0	0	0	0	0	0	0	0	0	100	100
Sweet Biscuits, Snack Bars and Fruit Snacks	0	106	0	8	0	28	0	15	44	428	629
Sweet Spreads	0	0	0	0	3	0	0	0	0	0	3
Total	210	483	156	103	47	121	61	22	239	1,200	2,642
% sales*	98%	96%	100%	99%	100%	100%	88%	100%	92%	85%	87%

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR, APR and PAHO models were used for the WHO analysis.

The 10 countries used in this analysis represented 76% of General Mills' global food and beverage sales in 2019. Of these 10 countries, the USA by far represented the highest revenue (>\$8 billion) and India the lowest revenue with <\$6 million. Within each country, the included categories represented between 85% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 10 product categories that are covered in this analysis, 'Breakfast Cereals' represented the highest sales value, and 'Dairy' the largest number of products.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of General Mills products and sales-weighted mean nutrient profile of General Mills products



Figure 11.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for General Mills products

Figure 11.2 Mean Health Star Rating by category for General Mills products



General Mills had an overall mean HSR of 2.8 which remained the same when results were weighted by sales (**Figure 11.1**). Out of the 10 countries included in General Mills' analysis, New Zealand had the highest mean HSR both before and after results were weighted by sales (3.8), followed by Australia and the UK. India, Hong Kong and Mexico had the lowest mean HSRs overall, however Mexico's mean HSR improved when sales-weighting was applied. When results were examined by category (**Figure 11.2**), the highest

mean HSR was seen in the 'Rice, Pasta and Noodles' category (3.7), followed by 'Dairy', 'Sauces, Dressings and Condiments' and 'Soup'. 'Sweet Spreads' had the lowest mean HSR of all General Mills product categories (1.5). Important to note when interpreting General Mills' analysis is that the highest and lowest ranked categories represented the lowest dollar amount in sales across the 10 countries. 'Breakfast Cereals' overall represented >\$2 billion compared with <\$80 million for 'Rice, Pasta and Noodles'.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of General Mills products considered "healthy" and sales-weighted proportion of General Mills products considered "healthy"

Figure 11.3 Proportion of products considered "healthy" using the Health Star Rating by country for General Mills



Overall, General Mills had 36% of products across all 10 countries with an HSR of 3.5 or more, which decreased to 29% when results were weighted by sales (**Figure 11.3**) illustrating that products of lower nutritional quality contributed slightly more to annual 2019 sales than products of higher nutritional quality. New Zealand had both the highest mean HSR of all countries as well as the highest proportion of products receiving an HSR of 3.5 or more (85%) and remained ranked first after results were weighted by sales. China and India had the lowest proportion of products receiving \geq 3.5 HSR. New Zealand's high ranking is likely fuelled by the product types available. For example, **Figure 11.4** shows that the 'Rice, Pasta and Noodles' had the highest proportion of products receiving \geq 3.5 HSR, with New Zealand one of only two countries with products in this category.

Figure 11.4 Proportion of products considered "healthy" using the Health Star Rating by category for General Mills



<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of General Mills products meeting WHO criteria

Figure 11.5 Proportions of General Mills products meeting WHO criteria for marketing to children – by Country



Figure 11.6 Proportions of General Mills products meeting WHO criteria for marketing to children – by Category



Overall a very low proportion of General Mills products (12%) were eligible for marketing to children (**Figure 11.5**), decreasing to 6% when results were weighted by sales. New Zealand once again had the highest proportion of products eligible for marketing to children (45%) with India and South Africa both selling zero products that were eligible for marketing to children. Once again, these results were driven by the fact that General Mills sold 'Rice, Pasta and Noodles' products in New Zealand, with 95% of 'Rice, Pasta and Noodles' eligible for marketing to children.

More specific results broken down by company and country for General Mills can be seen in Appendix B.

COMPANY 12: GRUPO BIMBO

Products included

There were 992 identified products manufactured by Grupo Bimbo in six countries. There was sufficient nutrient information for 991 products to generate a Health Star Rating and for 992 to generate results for the WHO analysis. **Table 12.1** shows the breakdown of products in each category by country.

	Baked Goods	Confectionery	Savoury Snacks	Sweet Biscuits, Snack Bars and Fruit Snacks	Total	% sales*
Brazil	87	0	0	0	87	100%
Canada	114	0	0	0	114	100%
China	91	0	0	0	91	100%
Mexico	104	62	74	109	349	100%
UK	16	0	0	0	16	100%
USA	298	0	37	0	335	100%
Total	710	62	111	109	992	100%

Table 12.1 Number of Grupo Bimbo products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, EURO and PAHO models were used for the WHO analysis

The four countries used in this analysis represented 85% of Grupo Bimbo's global food and beverage sales in 2019. The USA and Mexico represented Grupo Bimbo's main markets, with >\$5 billion each with remaining countries representing <\$1 billion each. Within each country, the included categories represented 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the four product categories included in analysis, 'Baked Goods' represented the largest number of products and the highest sales value (>\$10 billion).

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Grupo Bimbo products and sales-weighted mean nutrient profile of Grupo Bimbo products







Figure 12.2 Mean Health Star Rating by category for Grupo Bimbo products

Grupo Bimbo had an overall mean HSR of 2.6 which increased slightly to 2.7 when results were weighted by sales (Figure 12.1). Out of the six countries included in Grupo Bimbo's analysis, the UK had the highest mean HSR both before and after results were weighted by sales (3.8), followed by Brazil with an HSR of 3.4. Mexico had the lowest mean HSR overall (2.0). 'Baked Goods' were available in every country included in analysis, with this category also having the highest mean HSR of all categories included (3.0 – Figure 12.2). 'Confectionery', not surprisingly, had the lowest mean HSR of all categories examined, perhaps explaining Mexico's relatively low overall mean HSR as Mexico was the only country to have 'Confectionery' items included in analysis. Importantly, the highest-ranked category (Baked Goods) represented more sales than the remaining categories combined, which helps explain Grupo Bimbo's mean overall HSR increasing when results were weighted by sales.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Grupo Bimbo products considered "healthy" and sales-weighted proportion of Grupo Bimbo products considered "healthy"



Figure 12.3 Proportion of products considered "healthy" using the Health Star Rating by country for Grupo Bimbo

Figure 12.4 Proportion of products considered "healthy" using the Health Star Rating by category for Grupo Bimbo



Overall, Grupo Bimbo had 41% of products across all six countries with an HSR of 3.5 or greater, which increased to 45% when results were weighted by sales (**Figure 12.3**) illustrating that products of higher nutritional quality contributed more to annual 2019 sales than products of lower nutritional quality. The UK had both the highest mean HSR of all countries as well as the highest proportion of products receiving an HSR of 3.5 or more (88%). Mexico had the lowest proportion of products receiving an HSR of \geq 3.5 (20%) although this changed to China once sales-weighting was applied, as Mexico's mean HSR of \geq 3.5, likely driven by Grupo Bimbo's plain bread-based products within this category. Zero 'Confectionery' products received an HSR of \geq 3.5 (**Figure 12.4**).

<u>ANALYSIS 5 and 6:</u> Country and company rankings based upon proportion of Grupo Bimbo products meeting WHO criteria





Figure 12.6 Proportions of Grupo Bimbo products meeting WHO criteria for marketing to children – by Category



Overall a very low proportion (5%) of Grupo Bimbo products were eligible for marketing to children under the WHO criteria (**Figure 12.5**), decreasing slightly to 3% when results were weighted by sales. The UK had the highest proportion of products eligible for marketing to children (75%) followed by China (23%) with all countries in the Americas the lowest. These results, however, should be interpreted with caution. The WHO criteria for the Americas region is stricter than for other regions in the world, which is a large part of the reason that the UK and China performed better using this part of the analysis. At a category level, 'Baked Goods' was the category with the largest proportion of products eligible for marketing to children (6%; **Figure 12.6**).

More specific results broken down by company and country for Grupo Bimbo can be seen in Appendix B.

COMPANY 13: KELLOGG

Products included

There were 1,350 identified products manufactured by Kellogg in nine countries. There was sufficient nutrient information for 1,347 products to generate a Health Star Rating and for 1,349 to generate results for the WHO analysis. There was 1 product (<1%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 13.1** shows the breakdown of products in each category by country.

	Baked Goods	Breakfast Cereal	Processed Meat and Seafood	Savoury Snacks	Sweet Biscuits, Snack Bars and Fruit Snacks	Total	% sales*
Australia	0	51	0	3	39	93	100%
Canada	16	51	0	30	56	153	100%
Hong Kong	0	30	0	6	0	36	100%
India	0	25	0	0	0	25	100%
Mexico	0	42	0	7	45	94	100%
New Zealand	0	51	0	3	39	93	100%
South Africa	0	14	0	15	8	37	100%
UK	0	98	0	43	55	196	100%
USA	57	172	60	184	150	623	99%
Total	73	534	60	291	392	1,350	100%

Table 13.1 Number of Kellogg products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country

The nine countries used in this analysis represented 72% of Kellogg global food and beverage sales in 2019. Of these nine countries, the US represented by far the highest revenue with >\$9 billion and Hong Kong the lowest revenue with just over \$20 million. Within each country, the included categories represented between 99% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the five product categories included in analysis, 'Breakfast Cereals' represented the largest number of products and the highest sales value (>\$4 billion across the included countries).

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Kellogg products and sales-weighted mean nutrient profile of Kellogg products



Figure 13.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Kellogg products

Figure 13.2 Mean Health Star Rating by category for Kellogg products



Kellogg had an overall mean HSR of 2.6 which remained the same when results were weighted by sales (**Figure 13.1**). Out of the nine countries included in the Kellogg analysis, Australia and New Zealand had the highest mean HSR both before and after results were weighted by sales (3.0 and 3.1 respectively), although Canada and South Africa also increased to 3.1 after sales-weighting was applied. Hong Kong was the only country that had a decrease in mean HSR once sales-weighting was applied (2.8 to 2.7). The USA had the lowest mean HSR of 2.4 following sales-weighting. When the Kellogg results were examined by category (**Figure 13.2**), the highest mean HSR was seen in the 'Processed Meat and Seafood' category (3.9), followed by 'Breakfast Cereals' (3.2), with 'Savoury Snacks' having the lowest mean HSR of all Kellogg product categories (1.7). 'Breakfast Cereals' represents Kellogg's largest category (>\$4 billion), with the highest-ranked category (Processed Meat and Seafood) representing the lowest sales (<\$400 million).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Kellogg products considered "healthy" and sales-weighted proportion of Kellogg products considered "healthy"





Figure 13.4 Proportion of products considered "healthy" using the Health Star Rating by category for Kellogg



Overall, Kellogg had a lower than average proportion of sales in all nine countries with an HSR of 3.5 or greater (29%), which decreased slightly to 26% when results were weighted by sales (**Figure 13.3**). Kellogg Australia and New Zealand had the highest proportion of products receiving an HSR of 3.5 or more both before and after sales-weighting of results, with Hong Kong and the USA the lowest proportion. Interestingly, the 'Processed Meat and Seafood' is the category with the highest proportion of products with an HSR \geq 3.5, but it is the smallest category by sales. The majority of sales in the USA did not derive from this category and were of lower nutritional value. Just under half of all Kellogg 'Breakfast Cereals' across all countries would be considered "healthy" using this metric of an HSR \geq 3.5 (**Figure 13.4**).

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Kellogg products meeting WHO criteria



Figure 13.5 Proportions of Kellogg products meeting WHO criteria for marketing to children – by Country

Figure 13.6 Proportions of Kellogg products meeting WHO criteria for marketing to children – by Category



Overall a very low proportion of Kellogg products (4%) were eligible for marketing to children under the WHO criteria (**Figure 13.5**), decreasing further to 2% when results were weighted by sales. New Zealand and Australia had the highest proportion of products eligible for marketing to children before and after sales weighting, with Canada, Mexico and South Africa having 0% of products eligible for marketing to children. The 'Breakfast Cereals' category was the only category with products eligible for marketing (**Figure 13.6**).

More specific results broken down by company and country for Kellogg can be seen in Appendix B.

COMPANY 14: KEURIG

Products included

There were 501 identified products manufactured by Keurig in three countries. There was sufficient nutrient information for 473 products to generate a Health Star Rating and for 499 to generate results for the WHO analysis. There were 2 products (<1%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 14.1** shows the breakdown of products in each category by country.

Table 14.1 Number of Keurig products by country in each Euromonitor subset

	Hong Kong	Mexico	USA	Total
Bottled Water - Other	0	0	5	5
Bottled Water - Pure	0	6	0	6
Carbonates	0	52	202	254
Juice	5	0	130	135
Processed Fruit and Vegetables	0	0	34	34
RTD Tea	2	8	57	67
Total	7	66	428	501
% sales*	100%	100%	99%	99%

* Note that this value indicates % sales from included categories for each country. The WHO WPR and PAHO models were used in the WHO analysis.

The three countries used in analysis represented 95% of Keurig global food and beverage sales in 2019. Of these three countries, the USA is the dominant market, with the covered product categories representing more than 89% of global sales (>\$10 billion). Hong Kong represented the lowest revenue market, with <\$22 million. Within each country, the included categories represented between 99% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the six product categories included in analysis, 'Carbonates' represented the highest sales value (>\$8 billion) and 'Bottled Water – Other' the lowest (<\$10 million).

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Keurig products and sales-weighted mean nutrient profile of Keurig products

Figure 14.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Keurig products





Figure 14.2 Mean Health Star Rating by category for Keurig products

Keurig had an overall mean HSR of 1.8 which decreased to 1.5 when results were weighted by sales (**Figure 14.1**). Out of the three countries included in the Keurig analysis, Mexico had the highest mean HSR both before and after results were weighted by sales (1.9 and 2.3 respectively), with Hong Kong having the lowest HSR of 1.1. When results were examined by category (**Figure 14.2**), the highest mean HSR was seen in the 'Bottled Water – Pure' category (5.0), followed by 'Processed Fruit and Vegetables' (3.3), with 'Carbonates' (the highest selling category) having the lowest mean HSR of all Keurig product categories (1.3). Interestingly, the three highest-ranked categories combined represented <\$2 billion in sales in 2019, whereas the lowest ranked three categories represented >\$10 billion.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Keurig products considered "healthy" and sales-weighted proportion of Keurig products considered "healthy"





Figure 14.4 Proportion of products considered "healthy" using the Health Star Rating by category for Keurig



Overall, Keurig had only 12% all products across the nine countries with an HSR of 3.5 or greater, which decreased to 5% when results were weighted by sales (Figure 14.3) illustrating that products of lower nutritional quality contributed more to annual 2019 sales than products of higher nutritional quality. The USA had the highest proportion of products considered healthy before sales weighting was applied, with Mexico taking the lead with sales-weighting. Just as with the mean HSR results, the driving force behind the low proportions of products considered "healthy" using the HSR was the fact that the three lowest ranked categories drive the majority of sales for Keurig (Figure 14.4).

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Keurig products meeting WHO criteria

Figure 14.5 Proportions of Keurig products meeting WHO criteria for marketing to children – by Country



Figure 14.6 Proportions of Keurig products meeting WHO criteria for marketing to children – by Category



Overall only 13% of Keurig products were eligible for marketing to children under the WHO criteria (**Figure 14.5**), decreasing to 7% when results were weighted by sales, again indicating that products of lower nutritional quality contributed more to annual 2019 sales than products of higher nutritional quality. The USA had the highest proportion of products eligible for marketing to children (14%) before sales-weighting, after which Mexico had the highest proportion (19%). Hong Kong had zero products eligible. Results by category using the WHO model were different to the HSR-based results, with the 'Bottled Water – Other' category having 100% of products eligible for marketing to children (**Figure 14.6**).

More specific results broken down by company and country for Keurig can be seen in Appendix B.

COMPANY 15: KRAFT HEINZ

Products included

There were 3,923 identified products manufactured by Kraft Heinz in nine countries. There was sufficient nutrient information for 3,820 products to generate a Health Star Rating and for 3,897 to generate results for the WHO analysis. There were 26 products (1%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 15.1** shows the breakdown of products in each category by country.

	AU	CA	CN	НК	IN	MX	NZ	UK	US	Total
Baked Goods	0	0	0	0	0	24	0	0	0	24
Concentrates	0	53	0	0	0	9	0	0	0	62
Dairy	0	207	0	4	0	29	0	0	387	627
Juice	56	0	0	0	0	0	0	0	0	56
Processed Fruit and Vegetables	77	0	0	2	6	0	221	24	0	330
Processed Meat and Seafood	16	0	0	0	0	0	0	0	163	179
Ready Meals	0	72	0	0	0	8	52	50	599	781
Sauces, Dressings and Condiments	148	275	37	40	0	81	214	87	494	1,376
Savoury Snacks	0	0	0	28	0	0	0	0	220	248
Soup	45	0	0	5	0	0	59	77	0	186
Sweet Spreads	0	17	0	0	0	0	37	0	0	54
Total	342	624	37	79	6	151	583	238	1,863	3,923
% sales*	89%	97%	100%	98%	100%	94%	94%	100%	89%	90%

Table 15.1 Number of Kraft Heinz products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR, EURO and PAHO models were used in the WHO analysis.

The nine countries used in analysis represented 81% of Kraft Heinz global food and beverage sales in 2019. Of these nine countries, the USA is the dominant market, with the covered product categories representing more than 60% of global sales. India represented the lowest revenue market, with <\$1 million. Within each country, the included categories represented between 89% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 11 product categories included in analysis, 'Dairy' represented the highest sales value with >\$7 billion and 'Sauces, Dressings and Condiments' the largest number of products.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Kraft Heinz products and sales-weighted mean nutrient profile of Kraft Heinz products



Figure 15.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Kraft Heinz products

Figure 15.2 Mean Health Star Rating by category for Kraft Heinz products



Kraft Heinz had an overall mean HSR of 2.7 which stayed the same when results were weighted by sales (**Figure 15.1**). Out of the nine countries included in the Kraft Heinz analysis, India had the highest mean HSR both before and after results were weighted by sales (4.2), followed by New Zealand (3.4), with China having the lowest HSR by far of 1.1. When results were examined by category (**Figure 15.2**), the highest

mean HSR was seen in the 'Processed Fruit and Vegetables' category (4.2), followed by 'Soup' (3.6), with 'Concentrates' having the lowest mean HSR of all Kraft Heinz product categories (1.1). Kraft Heinz sells products in a wide variety of product categories, and so country rankings were heavily affected by which product categories were sold. For example, India ranked first due to the fact that this country only sold products from its highest ranked category; 'Processed Fruit and Vegetables'. Conversely, Kraft Heinz in China sold only products in the low-ranked 'Sauces, Dressings and Condiments' category. Interestingly, the two highest-ranked categories combined represented <\$800 million in sales in 2019, whereas the lowest ranked two categories represented >\$4 billion.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Kraft Heinz products considered "healthy" and sales-weighted proportion of Kraft Heinz products considered "healthy"

Figure 15.3 Proportion of products considered "healthy" using the Health Star Rating by country for Kraft Heinz



Figure 15.4 Proportion of products considered "healthy" using the Health Star Rating by category for Kraft Heinz



Overall, Kraft Heinz had 41% of all products across the nine countries with an HSR of 3.5 or greater, which decreased to 36% when results were weighted by sales (**Figure 15.3**) illustrating that products of lower nutritional quality contributed more to annual 2019 sales than products of higher nutritional quality. Just as with the overall country rankings, India ranked highest in terms of the proportion of products receiving an HSR of 3.5 or more and China ranked the lowest. However, this is due to products in India only deriving from 'Processed Fruit and Vegetables', the highest ranked category (**Figure 15.4**).

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Kraft Heinz products meeting WHO criteria

Figure 15.5 Proportions of Kraft Heinz products meeting WHO criteria for marketing to children – by Country



Figure 15.6 Proportions of Kraft Heinz products meeting WHO criteria for marketing to children – by Category



Overall only 11% of Kraft Heinz products were eligible for marketing to children under the WHO criteria (**Figure 15.5**), decreasing to just 3% when results were weighted by sales, again indicating that products of lower nutritional quality contributed more to annual 2019 sales than products of higher nutritional quality. The UK had the highest proportion of products eligible for marketing to children (45%) followed by New Zealand with 30%, with Canada and India both selling zero products that were eligible for marketing to children. The majority of countries saw a decrease in the proportion of products eligible for marketing to children when sales-weighting was applied. Results by category using the WHO criteria were very different to the HSR-based results, with the 'Soup' category having the highest proportion of products eligible for marketing to children to children (94%) (**Figure 15.6**).

More specific results broken down by company and country for Kraft Heinz can be seen in Appendix B.

COMPANY 16: LACTALIS

Products included

There were 1,625 identified products manufactured by Lactalis in 10 countries. There was sufficient nutrient information for 1,468 products to generate a Health Star Rating and for 1,533 to generate results for the WHO analysis. There were 92 products (6%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 16.1** shows the breakdown of products in each category by country.

	Dairy	Juice	RTD Coffee	Sauces, Dressings and Condiments	Total	% sales*
Australia	301	0	10	0	311	100%
Brazil	197	0	0	6	203	100%
Canada	226	1	0	0	227	100%
China	29	0	0	0	29	100%
France	352	0	0	0	352	100%
India	33	0	0	0	33	100%
Mexico	30	0	0	0	30	100%
South Africa	110	14	0	0	124	100%
UK	138	0	0	0	138	100%
USA	178	0	0	0	178	100%
Total	1,594	15	10	6	1,625	100%

Table 16.1 Number of Lactalis products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, EURO, SEAR, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 59% of Lactalis global food and beverage sales in 2019. Of the 10 included countries, France represented the highest revenue, with >\$3.5 billion, and China the lowest revenue with <\$100 million. Within each country, the included categories represented 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the four product categories included in analysis, 'Dairy' represented the largest number of products and the highest sales value.
<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Lactalis products and sales-weighted mean nutrient profile of Lactalis products



Figure 16.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Lactalis products





Lactalis had an overall mean HSR of 3.1 which decreased slightly to 3.0 when results were weighted by sales (**Figure 16.1**). Out of the 10 countries included in Lactalis' analysis, India had the highest mean HSR both before and after results were weighted by sales (3.5), followed by Mexico with an HSR of 3.4, with France (the largest market) having the lowest mean HSR of 2.8. When Lactalis results were examined by category (**Figure 16.2**), the highest mean HSR was seen in the 'Juice' (4.3) category, followed by 'RTD Coffee' (4.1), with 'Sauces, Dressings and Condiments' having the lowest mean HSR of all Lactalis product categories (2.6). It's important to note, however, that even the lowest scoring category scored relatively highly when compared to other categories and countries overall in this analysis. Lactalis' decrease in mean HSR when sales were taken into account is explained in part by the fact that the 'Dairy' category ranked quite low, yet represented the bulk of Lactalis sales in 2019 across the 10 countries examined, with >\$12 billion compared to 'Juice' and 'RTD Coffee' combined representing <\$130 million.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Lactalis products considered "healthy" and sales-weighted proportion of Lactalis products considered "healthy"





Figure 16.4 Proportion of products considered "healthy" using the Health Star Rating by category for Lactalis



Overall, Lactalis had just over half of products in all 10 countries with an HSR of 3.5 or greater (51%), which decreased slightly to 50% when results were weighted by sales (**Figure 16.3**). Mexico had the highest proportion of products receiving an HSR of 3.5 or more (74%), with South Africa having the lowest proportion (38%). Rankings did not change when sales-weighting of results was applied. 'RTD Coffee' and 'Juice' had the largest proportion of products with an HSR of \geq 3.5 (**Figure 16.4**).

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Lactalis products meeting WHO criteria

Figure 16.5 Proportions of Lactalis products meeting WHO criteria for marketing to children – by Country



Figure 16.6 Proportions of Lactalis products meeting WHO criteria for marketing to children – by Category



Results using the WHO criteria told a very different story to the HSR results with ~50% of products considered "healthy" using the HSR, and a comparatively low proportion of Lactalis products (15%) eligible for marketing to children (**Figure 16.5**). Despite Mexico being ranked first under the proportion of healthy products with the HSR, it was ranked last using the WHO criteria in part due to the strictness of the PAHO criteria. In this case, India had the highest proportion of products eligible for marketing to children (36%) followed by Australia with 22%. Also a very different category-based result under the WHO criteria (**Figure 16.6**), with 'Dairy' being the only category with any products eligible for marketing to children (16%), compared with 'Dairy' ranking lower out of the categories using the HSR metric.

More specific results broken down by company and country for Lactalis can be seen in Appendix B.

COMPANY 17: MARS

Products included

There were 3,688 identified products manufactured by Mars in 10 countries. There was sufficient nutrient information for 3,124 products to generate a Health Star Rating and for 3,382 to generate results for the WHO analysis. There were 306 products (8%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 17.1** shows the breakdown of products in each category by country.

	AU	CN	НК	IN	MX	NZ	RU	ZA	UK	US	Total
Confectionery	254	174	96	95	191	145	58	45	393	1,016	2,467
Dairy	0	0	0	0	0	0	0	0	15	0	15
Ice Cream and Frozen Desserts	14	0	0	0	0	0	1	0	36	46	97
Ready Meals	0	0	0	0	0	0	0	9	0	26	35
Rice, Pasta and Noodles	50	0	0	0	0	36	0	0	120	83	289
Sauces, Dressings and Condiments	348	0	5	0	0	82	11	83	191	0	720
Savoury Snacks	0	0	0	0	0	0	0	0	0	19	19
Soup	0	0	0	0	0	0	0	46	0	0	46
Total	666	174	101	95	191	263	70	183	755	1,190	3,688
% sales	100%	100%	98%	100%	100%	100%	100%	100%	99%	100%	100%

Table 17.1 Number of Mars products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR, EURO, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 67% of Mars global food and beverage sales in 2019. Of these 10 countries, the USA represented the highest revenue, with >\$9 billion, and India the lowest revenue with <\$80 million. Within each country, the included categories represented between 98% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the eight categories, 'Confectionery' represented the highest sales value (>\$16 billion).

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Mars products and sales-weighted mean nutrient profile of Mars products



Figure 17.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Mars products



Figure 17.2 Mean Health Star Rating by category for Mars products

Mars had a lower than average overall mean HSR of 1.8 which decreased to 1.3 when results were weighted by sales (Figure 17.1) illustrating its products with lower HSRs accounted for a larger proportion of sales than those with higher HSRs. This was not surprising considering 'Confectionery' items made up the majority of products examined in each country in this analysis. Out of the 10 countries, Russia had the highest mean HSR before results were weighted by sales (3.0), with Mexico having the lowest HSR of 1.1. However, sales-weighting changed results substantially, with Russia dropping from first to last place, and the UK dropping from second to sixth place. No country had an increase in mean HSR when sales-weighting was applied. When results were examined by category (Figure 17.2), the highest mean HSR was seen in the 'Rice, Pasta and Noodles' category (3.5), followed by 'Ready Meals' (3.4), with 'Savoury Snacks' the lowest mean HSR of all Mars product categories (0.7). The decrease in mean HSR when sales-weighting was applied is explained in part by the fact that the 'Confectionery' category alone across the nine countries represented >\$16 billion of sales in 2019, with the remaining categories combined representing <\$2 billion.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Mars products considered "healthy" and sales-weighted proportion of Mars products considered "healthy"





Figure 17.4 Proportion of products considered "healthy" using the Health Star Rating by category for Mars



Overall, Mars had a low proportion of products in all four countries with an HSR of 3.5 or greater (26%), which decreased substantially to 14% when results were weighted by sales (**Figure 17.3**). The UK had the largest proportion of products receiving an HSR of 3.5 or more (42%). However, when results were weighted by sales, the UK dropped from first to fifth position. Russia ranked last after sales-weighting was applied, with zero healthy products. The UK's large drop in rankings is explained by the huge difference in sales that Mars 'Confectionery' products contribute in the UK (>\$2 billion) versus other categories such as 'Rice, Pasta and Noodles' (<\$250 million).

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Mars products meeting WHO criteria

Figure 17.5 Proportions of Mars products meeting WHO criteria for marketing to children – by Country



Figure 17.6 Proportions of Mars products meeting WHO criteria for marketing to children – by Category



Overall a very low proportion of Mars products (7%) were eligible for marketing to children under the WHO criteria (**Figure 17.5**), dropping substantially to only 2% when results were weighted by sales. The UK had the highest proportion of products eligible for marketing to children before sales-weighting was applied (29%), dropping to second place behind New Zealand after sales-weighting. China, Hong Kong, India, Mexico and Russia all sold zero products that were eligible for marketing to children. Confectionery dominating the product portfolios of all countries explains these results, with all products in the 'Confectionery' category ineligible for marketing to children using the WHO criteria (**Figure 17.6**).

More specific results broken down by company and country for Mars can be seen in Appendix B.

COMPANY 18: MEIJI

Products included

There were 785 identified products manufactured by Meiji in three countries. There was sufficient nutrient information for 744 products to generate a Health Star Rating and for 782 to generate results for the WHO analysis. There were three products (<1%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 18.1** shows the breakdown of products in each category by country.

	Ob trans			
Table 18.1 Number of Meiji products by co	untry in e	ach Euromonito	or subset	

	China	Hong Kong	Japan	Total
Confectionery	18	17	332	367
Dairy	0	12	178	190
Ice Cream and Frozen Desserts	35	0	67	102
Ready Meals	0	0	19	19
Sweet Biscuits, Snack Bars and Fruit Snacks	0	1	106	107
Total	53	30	702	785
% sales*	100%	96%	98%	98%

* Note that this value indicates % sales from included categories for each country. The WHO WPR model was used for the WHO analysis.

The three countries used in this analysis represented 92% of Meiji global food and beverage sales in 2019. Of these three countries, Japan represented the highest revenue market and Hong Kong the lowest. Within each country, the included categories represented between 96% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the five product categories included in analysis, 'Confectionery' represented the largest number of products and the highest sales value.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Meiji products and sales-weighted mean nutrient profile of Meiji products

Figure 18.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Meiji products





Figure 18.2 Mean Health Star Rating by category for Meiji products

Meiji had a low overall mean HSR of 1.6 which increased substantially to 2.6 when results were weighted by sales (**Figure 18.1**) illustrating that its products with higher HSRs accounted for a larger proportion of sales than those with lower HSRs. Out of the three countries included in Meiji's analysis, Japan had the highest mean HSR both before and after results were weighted by sales (1.6 and 2.6), with China the lowest HSR of 1.6. These results were mainly driven by the types of products available in each country, with 'Dairy' being the category with the highest mean HSR, and Japan selling most of these products (**Figure 18.2**).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Meiji products considered "healthy" and sales-weighted proportion of Meiji products considered "healthy"

Figure 18.3 Proportion of products considered "healthy" using the Health Star Rating by country for Meiji



Figure 18.4 Proportion of products considered "healthy" using the Health Star Rating by category for Meiji



Overall, an extremely low proportion of Meiji products in all three countries had an HSR of 3.5 or greater (12%), although this more than doubled to 28% after results were weighted by sales (**Figure 18.3**). With the 'Dairy' category having the largest proportion of products considered healthy using this metric (**Figure 18.4**), and Japan's sales dominated by the 'Dairy' category, it is no surprise that the proportion of healthy products increased following sales-weighting.

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Meiji products meeting WHO criteria

Figure 18.5 Proportion of Meiji products meeting WHO criteria for marketing to children – by Country



Figure 18.6 Proportion of Meiji products meeting WHO criteria for marketing to children – by Category



The proportion of Meiji products eligible to be marketed to children was low (3%) increasing slightly to 8% when results were weighted by sales (**Figure 18.5**). With Japan's sales dominated by 'Dairy', and 'Dairy' being one of the only categories to have product eligible to be marketed to children (**Figure 18.6**), it is no surprise that the proportion of eligible products increased following sales-weighting. The overall results heavily mimicked the results from Japan.

More specific results broken down by company and country for Meiji can be seen in Appendix B.

COMPANY 19: MONDELEZ

Products included

There were 3,925 identified products manufactured by Mondelez in 10 countries. There was sufficient nutrient information for 3,540 products to generate a Health Star Rating and for 3,658 to generate results for the WHO analysis. There were 267 products (7%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 19.1** shows the breakdown of products in each category by country.

	AU	BR	CN	НК	IN	MX	NZ	ZA	UK	US	Total
Baked Goods	0	2	0	0	0	0	0	0	3	0	5
Concentrates	0	48	12	0	11	44	0	0	0	0	115
Confectionery	530	254	69	49	153	58	268	128	611	278	2,398
Dairy	5	0	0	0	0	15	0	0	48	4	72
Other Hot Drinks	9	0	0	2	16	0	5	0	21	0	53
Savoury Snacks	10	33	28	27	0	9	7	6	0	199	319
Sweet Biscuits, Snack Bars and Fruit Snacks	69	56	139	38	22	46	31	11	201	350	963
Total	623	393	248	116	202	172	311	145	884	831	3,925
% sales*	99%	97%	100%	100%	99%	100%	100%	100%	94%	100%	98%

Table 19.1 Number of Mondelez products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR, AFR, EURO and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 52% of Mondelez global food and beverage sales in 2019. Of these 10 countries, the USA represented the highest revenue, with >\$8 billion, and Hong Kong the lowest revenue with <\$100 million. Within each country, the included categories represented between 94% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the seven product categories included in analysis, 'Confectionery' had the highest sales value by far (>\$10 billion) followed by 'Sweet Biscuits, Snack Bars and Fruit Snacks' (>\$6 billion).

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Mondelez products and sales-weighted mean nutrient profile of Mondelez products



Figure 19.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Mondelez products



Figure 19.2 Mean Health Star Rating by category for Mondelez products

Mondelez had a low overall mean HSR of 1.3 which increased slightly to 1.5 when results were weighted by sales (**Figure 19.1**). Out of the 10 countries included in analysis, the USA had the highest mean HSR both before and after results were weighted by sales (2.0), with India having the lowest HSR of 0.6. When Mondelez results were examined by category (**Figure 19.2**), the highest mean HSR was seen in the 'Dairy' category (2.4), followed by 'Savoury Snacks' (2.2), with 'Concentrates' and 'Other Hot Drinks' having the lowest mean HSRs. Note that all analyses were done using data per 100g/mL, which is an important consideration for the lower-ranked Mondelez categories (e.g. 'Concentrates'), with these products generally consumed in small amounts and so likely contribute less to daily nutrient intake compared to other food categories. These product categories also represented a substantially lower proportion of product sales for Mondelez (<\$300 million for 'Other Hot Drinks' for example) compared to categories such as 'Confectionery' which represented more than \$10 billion across the 10 countries examined.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Mondelez products considered "healthy" and sales-weighted proportion of Mondelez products considered "healthy"

Figure 19.3 Proportion of products considered "healthy" using the Health Star Rating by country for Mondelez





Figure 19.4 Proportion of products considered "healthy" using the Health Star Rating by category for Mondelez

Overall, Mondelez had a very low proportion of sales in all four countries with an HSR of 3.5 or greater (6%), which increased slightly to 9% when results were weighted by sales (**Figure 19.3**). South Africa and USA had the highest proportion of products receiving an HSR of 3.5 or more (16%). However, when results were weighted by sales, Mexico ranked highest in terms of the country with the highest proportion of products considered 'healthy', with 26%. No products in Hong Kong or India received an HSR of 3.5 or above. The 'Dairy' category had the highest proportion of products with an HSR≥3.5 (23%), followed by 'Savoury Snacks' with 18% (**Figure 19.4**). 'Baked Goods' and 'Concentrates' ranked lowest out of the categories included.

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Mondelez products meeting WHO criteria



Figure 19.5 Proportions of Mondelez products meeting WHO criteria for marketing to children – *by Country*



Figure 19.6 Proportions of Mondelez products meeting WHO criteria for marketing to children – *by Category*

Overall a very low proportion of Mondelez products (1%) were eligible for marketing to children under the WHO criteria (**Figure 19.5**). The UK had the highest proportion of products eligible for marketing to children (4%) followed by the USA with 2%, with most of the remaining countries selling zero products that were eligible for marketing to children. These results were driven by the fact that 'Confectionery' dominates most country portfolios, with 'Confectionery' products ineligible for marketing using this metric (**Figure 19.6**).

More specific results broken down by company and country for Mondelez can be seen in Appendix B.

COMPANY 20: NESTLÉ

Products included

There were 2,950 identified products manufactured by Nestlé in 10 countries. There was sufficient nutrient information for 2,760 products to generate a Health Star Rating and for 2,794 to generate results for the WHO analysis. There were 155 products (5%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 20.1** shows the breakdown of products in each category by country.

	AU	BR	CN	FR	НК	IN	MX	ZA	UK	US	Total
Bottled Water - Other	0	0	0	0	0	0	0	0	0	283	283
Bottled Water - Pure	0	0	0	11	0	0	4	0	10	38	63
Breakfast Cereal	35	0	0	0	0	0	0	3	33	0	71
Carbonates	0	0	0	0	0	0	0	0	19	0	19
Concentrates	0	0	0	0	0	0	4	0	0	0	4
Confectionery	88	213	30	385	26	51	10	38	147	0	988
Dairy	0	165	25	0	38	25	58	13	56	130	510
Other Hot Drinks	36	13	0	18	1	0	9	32	0	22	131
Processed Meat and Seafood	0	0	0	24	0	0	0	0	0	0	24
RTD Coffee	0	0	10	0	11	0	0	0	0	0	21
RTD Tea	0	0	0	0	3	0	0	0	0	0	3
Ready Meals	27	0	0	129	0	0	0	0	0	461	617
Rice, Pasta and Noodles	0	0	0	0	0	35	0	11	0	0	46
Sauces, Dressings and Condiments	0	0	9	0	0	16	0	0	0	0	25
Soup	0	22	0	0	0	0	0	0	0	0	22
Sweet Biscuits, Snack Bars and Fruit Snacks	27	85	11	0	0	0	0	0	0	0	123
Total	213	498	85	567	79	127	85	97	265	934	2,950
% sales*	82%	94%	78%	92%	89%	99%	95%	97%	84%	99%	93%

Table 20.1 Number of Nestlé products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WPR, EURO, SEAR, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 52% of Nestlé global food and beverage sales in 2019. Of these 10 countries, the USA represented the highest revenue by far, with >\$11 billion, and Hong Kong the lowest revenue with <\$350 million. Within each country, the included categories represented between 78% and 99% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 16 product categories included in analysis, 'Dairy' represented the highest sales value with >\$7 billion in the current analysis.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Nestlé products and sales-weighted mean nutrient profile of Nestlé products



Figure 20.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Nestlé products





Nestlé had a relatively low overall mean HSR of 2.0 which increased substantially to 2.7 when results were weighted by sales (**Figure 20.1**) illustrating that its products with higher HSRs accounted for a larger proportion of sales than those with lower HSRs. The USA had the highest mean HSR (2.7), however, once sales-weighting was applied, France led with a mean HSR of 3.8. China had the lowest mean HSR both before and after sales-weighting was applied. When results were examined by category (**Figure 20.2**), the highest mean HSR was seen in the 'Bottled Water – Pure' category (5.0), followed by 'Processed Meat and Seafood' (4.1), with 'Confectionery' having the lowest mean HSR of all Nestlé categories.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Nestlé products considered "healthy" and sales-weighted proportion of Nestlé products considered "healthy"



Figure 20.3 Proportion of products considered "healthy" using the Health Star Rating by country for Nestlé





Overall, Nestlé had 29% of sales with an HSR of 3.5 or greater, increasing substantially to 43% after salesweighting (**Figure 20.3**) again showing that healthier products contributed more to 2019 sales than less healthy products. The USA, South Africa, Mexico and France all had >1/3 of products considered healthy. China had the lowest proportion of products receiving an HSR \geq 3.5. Similar trends were observed in the category analysis as were observed in the overall mean HSR analysis, with 'Bottled Water – Pure' and 'Processed Meat and Seafood' having the highest proportion of products with \geq 3.5 HSR (**Figure 20.4**).

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Nestlé products meeting WHO criteria





Figure 20.6 Proportions of Nestlé products meeting WHO criteria for marketing to children – by Category



Overall a low proportion of Nestlé products (11%) were eligible for marketing to children under the WHO criteria (**Figure 20.5**), increasing substantially to 21% when results were weighted by sales. The USA had the highest proportion of products eligible for marketing to children (20%) increasing to 36% when results were weighted by sales. South Africa had zero products eligible. The USA's high result can be explained by the fact that Nestlé's product range in the USA was made up of predominantly 'Ready Meals' which ranked highly in the category analysis (**Figure 20.6**). More specific results broken down by company and country for Nestlé can be seen in <u>Appendix B</u>.

COMPANY 21: PEPSICO

Products included

There were 2,881 identified products manufactured by PepsiCo in 10 countries. There was sufficient nutrient information for 2,779 products to generate a Health Star Rating and for 2,877 to generate results for the WHO analysis. There were 4 products (<1%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 21.1** shows the breakdown of products in each category by country.

	AU	CN	НК	IN	MX	NZ	RU	ZA	UK	US	Total
Bottled Water - Other	0	0	0	0	11	0	0	0	0	0	11
Bottled Water - Pure	0	0	0	5	0	0	0	0	0	4	9
Breakfast Cereal	0	27	39	11	0	0	0	0	67	0	144
Carbonates	10	29	7	22	22	22	22	8	16	118	276
Concentrates	0	0	0	0	0	1	0	0	0	0	1
Dairy	0	0	0	0	0	0	256	0	0	0	256
Energy Drinks	0	0	0	0	0	0	13	0	0	0	13
Juice	0	6	12	36	0	0	148	0	64	181	447
Sauces, Dressings and Condiments	5	0	0	0	0	0	0	0	4	0	9
Savoury Snacks	147	95	39	79	178	124	106	80	198	436	1,482
Sports Drinks	19	4	4	0	15	10	0	0	0	85	137
Sweet Biscuits, Snack Bars and Fruit Snacks	0	0	0	0	73	23	0	0	0	0	96
Total	181	161	101	153	299	180	545	88	349	824	2,881
% sales*	98%	99%	99%	97%	93%	100%	96%	100%	99%	89%	92%

Table 21.1 Number of PepsiCo products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, SEAR, EURO, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 68% of PepsiCo global food and beverage sales in 2019. Of these 10 countries, the USA represented the highest revenue by far, with >\$44 billion, and Hong Kong the lowest revenue with <\$100 million. Within each country, the included categories represented between 89% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 12 product categories included in analysis, 'Savoury Snacks' represented the largest number of products and the highest sales value by far (>\$28 billion).

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of PepsiCo products and sales-weighted mean nutrient profile of PepsiCo products



Figure 21.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for PepsiCo products



Figure 21.2 Mean Health Star Rating by category for PepsiCo products

PepsiCo had an overall mean HSR of 2.5 which decreased slightly to 2.3 when results were weighted by sales (**Figure 21.1**). Out of the 10 countries included in PepsiCo's analysis, the UK had the highest mean HSR (3.5), followed by Hong Kong (3.2), with South Africa and India the lowest mean HSR of 1.9. When results were examined by category (**Figure 21.2**), the highest mean HSR was seen in the 'Bottled Water – Pure' category (5.0), with 'Energy Drinks' the lowest (1.1). The decrease in mean HSR after sales-weighting is explained in part due to the three highest ranked categories representing <\$2 billion and the bottom-ranked three countries representing >\$17 billion.

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of PepsiCo products considered "healthy" and sales-weighted proportion of PepsiCo products considered "healthy"





Figure 21.4 Proportion of products considered "healthy" using the Health Star Rating by category for PepsiCo



Overall, PepsiCo had just under a third of products across all nine countries with an HSR of 3.5 or greater (30%), however that proportion dropped substantially to 18% when results were weighted by sales (**Figure 21.3**) again illustrating that products of lower nutritional quality contributed more to annual 2019 sales than products of higher nutritional quality. Similar results to the overall mean HSR were seen with the proportion of products receiving an HSR of \geq 3.5 in that prior to sales-weighting being applied, the UK ranked first with 69% of products considered "healthy". Once sales-weighting was applied, this dropped to 50% of products. Only 5% of products from South Africa received an HSR of 3.5 or above.

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of PepsiCo products meeting WHO criteria

Figure 21.5 Proportions of PepsiCo products meeting WHO criteria for marketing to children – *by Country*



Figure 21.6 Proportions of PepsiCo products meeting WHO criteria for marketing to children – *by Category*



Overall a very low proportion of PepsiCo products (7%) was eligible for marketing to children (**Figure 21.5**). India had the highest proportion of products eligible for marketing to children after sales-weighting was applied (16%), with New Zealand and South Africa selling zero products that were eligible for marketing to children. These results paint a different picture to when using the HSR as a marker for healthiness, mainly because the WHO criteria exclude whole categories whereas the HSR is based on nutrient cut-offs. 'Bottled Water - Pure' and 'Bottled Water – Other' were the only categories to have a high proportion of products eligible for marketing to children (**Figure 21.6**; 100%).

More specific results broken down by company and country for PepsiCo can be seen in Appendix B.

COMPANY 22: SUNTORY

Products included

There were 926 identified products manufactured by Suntory in nine countries. There was sufficient nutrient information for 851 products to generate a Health Star Rating and for 874 to generate results for the WHO analysis. There were 52 products (6%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 22.1** shows the breakdown of products in each category by country.

	AU	CN	FR	DE	НК	JP	NZ	ZA	UK	Total
Baked Goods	5	0	0	0	0	0	0	0	0	5
Bottled Water - Other	13	0	0	0	0	0	23	0	0	36
Bottled Water - Pure	0	0	0	0	0	4	3	0	0	7
Carbonates	0	0	48	34	5	45	5	0	25	162
Concentrates	0	0	5	0	0	0	0	0	19	24
Dairy	12	0	0	0	0	0	0	0	0	12
Energy Drinks	29	0	0	0	7	0	32	10	46	124
Juice	0	1	42	0	9	29	178	0	61	320
RTD Coffee	0	7	0	0	5	105	0	0	0	117
RTD Tea	0	4	10	0	0	66	0	0	0	80
Sports Drinks	8	0	0	0	3	0	0	0	28	39
Total	67	12	105	34	29	249	241	10	179	926
% sales*	93%	100%	100%	100%	95%	88%	71%	100%	100%	90%

Table 22.1 Number of Suntory products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. The WHO WPR, EURO, AFR and PAHO models were used in the WH analysis.

The nine countries used in this analysis represented 91% of Suntory global food and beverage sales in 2019. Of these nine countries, Japan represented the highest revenue, with >\$9 billion, and South Africa the lowest revenue with <\$25 million. Within each country, the included categories represented between 71% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 11 product categories included in analysis, 'RTD Tea' represented the highest sales value.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Suntory products and sales-weighted mean nutrient profile of Suntory products



Figure 22.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Suntory products





Suntory had an overall mean HSR of 2.4 which increased slightly to 2.6 when results were weighted by sales (**Figure 22.1**). Out of the nine countries included in Suntory's analysis, New Zealand had the highest mean HSR both before and after results were weighted by sales (3.8 and 2.9 respectively), with Hong Kong and Germany the lowest mean HSR of 1.3. When results were examined by category (**Figure 22.2**), the highest mean HSR was seen in the 'Bottled Water – Pure' category (5.0) followed by the 'Juice' category (3.5), with 'Baked Goods' having the lowest mean HSR (0.5).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Suntory products considered "healthy" and sales-weighted proportion of Suntory products considered "healthy"





Figure 22.4 Proportion of products considered "healthy" using the Health Star Rating by category for Suntory



Overall, just under a third (28%) of Suntory products had an HSR of 3.5 or greater, which decreased to 27% when results were weighted by sales (**Figure 22.3**). Before sales-weighting was applied, New Zealand had the largest proportion of products with an HSR of \geq 3.5 (68%). However, once sales-weighting was applied, Japan had the largest proportion of products considered healthy (33%). 'Bottled Water – Pure' and 'Juice' were at the top of the category rankings, with five categories having zero products considered healthy.

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Suntory products meeting WHO criteria

Figure 22.5 Proportions of Suntory products meeting WHO criteria for marketing to children – by Country



Figure 22.6 Proportions of Suntory products meeting WHO criteria for marketing to children – by Category



Overall a very low proportion of Suntory products (3%) were eligible for marketing to children (**Figure 22.5**), increasing to 11% when results were weighted by sales. New Zealand and Japan were the only countries with a substantial proportion of products eligible for marketing to children, (12% and 14%, respectively following sales-weighting). These results were driven purely by the 'Bottled Water - Pure' category as this was the category with the highest proportion of products eligible for marketing to children.

More specific results broken down by company and country for Suntory can be seen in Appendix B.

COMPANY 23: TINGYI

Products included

There were 355 identified products manufactured by Tingyi in one country. There was sufficient nutrient information for 355 products to generate a Health Star Rating and for 355 to generate results for the WHO analysis. There were zero products with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 23.1** shows the breakdown of products in each category by country.

Table 23.1 Number of Tingyi products by country in each Euromonitor subset

	Bottled Water - Pure	Dairy	Juice	Теа	Rice, Pasta and Noodles	Total	% sales*
China	5	71	54	37	188	355	98%
Total	5	71	54	37	188	355	98%

* Note that this value indicates % sales from included categories for each country

The one country (China) used in this analysis represented 98% of Tingyi global food and beverage sales in 2019. The included categories represented 98% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the five product categories included in analysis, 'Rice, Pasta and Noodles' represented the highest sales value, with >\$4 billion.

<u>ANALYSIS 1 and 2:</u> Category rankings based upon mean nutrient profile of Tingyi products and sales-weighted mean nutrient profile of Tingyi products



Figure 23.1 Mean Health Star Rating by country for Tingyi products



Figure 23.2 Mean Health Star Rating by category for Tingyi products

Tingyi had an overall mean HSR of 1.7 which decreased to 1.4 when results were weighted by sales (**Figure 23.1**) illustrating that its products with lower HSRs accounted for a relatively larger proportion of sales than those with higher HSRs. China was the only country included in Tingyi's analysis. When examining results by category, 'Bottled Water - Pure' had the highest mean HSR of 5.0, followed by 'Juice' with 3.6 and 'Dairy' with 2.7 (**Figure 23.2**). The decrease in Tingyi's overall mean HSR when sales-weighting was applied is explained in part by the fact that the top three ranked categories represented less than half the 2019 sales than the lowest ranked category alone represented.

<u>ANALYSIS 3 and 4:</u> Category rankings based upon proportion of Tingyi products considered "healthy" and sales-weighted proportion of Tingyi products considered "healthy"

Figure 23.3 Proportion of products considered "healthy" using the Health Star Rating by country for Tingyi



Figure 23.4 Proportion of products considered "healthy" using the Health Star Rating by category for Tingyi



One fifth of Tingyi products were considered "healthy" with an HSR of \geq 3.5 (**Figure 23.3**), however this proportion dropped to 14% when sales-weighting was applied. Once again, 'Bottled Water - Pure' and 'Juice' products had the highest proportion of products with an HSR of \geq 3.5 (**Figure 23.4**).

<u>ANALYSIS 5 and 6:</u> Category rankings based upon proportion of Tingyi products meeting WHO criteria





Figure 23.6 Proportions of Tingyi products meeting WHO criteria for marketing to children – by Category



The opposite trend was seen when assessing products using the WHO criteria versus the HSR in that the proportion of products eligible for marketing to children actually increased following sales weighting of results from 3-5% (**Figure 23.5**). 100% of 'Bottled Water - Pure' products were eligible for marketing to children followed by 6% of 'Dairy' products. Zero 'Juice', 'Rice, Pasta and Noodles' and 'RTD Tea' products were eligible for marketing to children under the WHO criteria.

More specific results broken down by company and country for Tingyi can be seen in Appendix B.

COMPANY 24: UNILEVER

Products included

There were 3,930 identified products manufactured by Unilever in 10 countries. There was sufficient nutrient information for 3,616 products to generate a Health Star Rating and for 3,625 to generate results for the WHO analysis. There were 305 products (8%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 24.1** shows the breakdown of products in each category by country.

	AU	BR	CN	FR	DE	IN	МХ	ZA	UK	US	Total
Baked Goods	0	0	0	67	21	0	0	0	0	0	88
Breakfast Cereal	0	12	0	0	0	0	16	0	0	0	28
Ice Cream and Frozen Desserts	126	112	132	289	290	127	95	61	213	370	1,815
Other Hot Drinks	4	0	36	0	0	10	0	0	0	0	50
Processed Meat and Seafood	0	0	0	0	0	0	0	8	0	0	8
RTD Tea	0	0	0	0	0	0	0	0	0	26	26
Ready Meals	40	0	0	0	103	0	18	7	0	71	239
Rice, Pasta and Noodles	0	0	0	0	0	0	0	0	40	0	40
Sauces, Dressings and Condiments	42	59	66	153	309	20	77	136	153	129	1,144
Soup	75	17	7	136	79	28	40	58	30	10	480
Sweet Spreads	0	3	0	0	0	8	0	0	1	0	12
Total	287	203	241	645	802	193	246	270	437	606	3,930
% sales	99%	100%	100%	99%	96%	100%	100%	99%	99%	100%	99%

Table 24.1 Number of Unilever products by country in each Euromonitor subset

* Note that this value indicates % sales from included categories for each country. WHO WPR, EURO, SEAR, AFR and PAHO models were used in the WHO analysis.

The 10 countries used in this analysis represented 51% of Unilever global food and beverage sales in 2019. Of the 10 countries included, the USA represented the highest revenue, with >\$6 billion, and South Africa the lowest revenue with <\$400 million. Within each country, the included categories represented between 96% and 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the 11 product categories included in analysis, 'Ice Cream and Frozen Desserts' represented the highest sales value and the largest number of products.

<u>ANALYSIS 1 and 2:</u> Country and category rankings based upon mean nutrient profile of Unilever products and sales-weighted mean nutrient profile of Unilever products



Figure 24.1 Mean Health Star Rating and sales-weighted mean Health Star Rating by country for Unilever products



Figure 24.2 Mean Health Star Rating by category for Unilever products

Unilever had an overall mean HSR of 2.2 which remained the same when results were weighted by sales (**Figure 24.1**). Out of the 10 countries included in Unilever's analysis, South Africa had the highest mean HSR both before and after results were weighted by sales (2.5), followed by Mexico (2.4 and 2.3 respectively), with China the lowest mean HSR (1.9 and 2.0). South Africa's high ranking can be explained in part by the types of products evaluated, as seen in **Figure 24.2**. South Africa had a larger number of products in product categories such as 'Soup' and 'Processed Meat and Seafood' compared to other countries, and these categories ranked well in terms of overall mean HSR. 'Other Hot Drinks' had the lowest mean HSR of all product categories (1.6).

<u>ANALYSIS 3 and 4:</u> Country and category rankings based upon proportion of Unilever products considered "healthy" and sales-weighted proportion of Unilever products considered "healthy"





Figure 24.4 Proportion of products considered "healthy" using the Health Star Rating by category for Unilever



Overall, Unilever had a relatively low proportion of products across all nine countries with an HSR of 3.5 or greater (18%), which decreased slightly to 17% when results were weighted by sales (**Figure 24.3**). Similar country rankings were observed to the overall mean HSR analysis, with South Africa and Mexico ranked first and second respectively. When examining results by category (**Figure 24.4**), 'Breakfast Cereal' and 'Processed Meat and Seafood' both had 100% of products receiving an HSR of \geq 3.5, followed by 'Ready Meals' with 61%. Zero products in the 'Other Hot Drinks' and 'RTD Tea' categories received an HSR of 3.5 or greater.

<u>ANALYSIS 5 and 6:</u> Country and category rankings based upon proportion of Unilever products meeting WHO criteria

Figure 24.5 Proportions of Unilever products meeting WHO criteria for marketing to children – *by Country*



Figure 24.6 Proportions of Unilever products meeting WHO criteria for marketing to children – *by Category*



Overall a relatively low proportion of Unilever products (13%) were eligible for marketing to children (**Figure 24.5**), decreasing substantially to 6% when results were weighted by sales. South Africa ranked highest in terms of the proportion of products eligible for marketing to children before and after sales-weighting (24% and 33%, respectively), with the USA and China selling zero products that were eligible for marketing to children. These results are explained in part by looking at **Figure 24.6**, with countries selling products in categories such as 'Ready Meals', 'Soup' and 'Rice, Pasta and Noodles' generally ranked higher than other countries.

More specific results broken down by company and country for Unilever can be seen in Appendix B.

COMPANY 25: YILI

Products included

There were 189 identified products manufactured by Yili in one country. There was sufficient nutrient information for 188 products to generate a Health Star Rating and for 188 to generate results for the WHO analysis. There was one product (<1%) with insufficient nutrient information to calculate either an HSR or a WHO result. **Table 25.1** shows the breakdown of products in each category by country.

Table 25.1 Number of Yili products	by country in each Euromonitor subset
------------------------------------	---------------------------------------

	Dairy	Ice Cream and Frozen Desserts	Total	% sales*
China	162	27	189	100%
Total	162	27	189	100%

* Note that this value indicates % sales from included categories for each country. The WHO WPR model was used in the WHO analysis.

The one country (China) used in this analysis represented 100% of Yili global food and beverage sales in 2019. The included categories represented 100% of product sales, however it is unknown whether we have captured every product for sale in every country. Of the two product categories included in analysis, 'Dairy' represented the highest sales value, with >\$15 billion.

<u>ANALYSIS 1 and 2:</u> Category rankings based upon mean nutrient profile of Yili products and sales-weighted mean nutrient profile of Yili products



Figure 25.1 Mean Health Star Rating by country for Yili products

Yili had an overall mean HSR of 3.0 which increased slightly to 3.1 when results were weighted by sales (**Figure 25.1**). China was the only country included in Yili's analysis. When examining results by category, 'Dairy' had the highest mean HSR of 3.1, and 'Ice Cream and Frozen Desserts' the lowest (2.1; **Figure 25.2**).


Figure 25.2 Mean Health Star Rating by category for Yili products

<u>ANALYSIS 3 and 4:</u> Category rankings based upon proportion of Yili products considered "healthy" and sales-weighted proportion of Yili products considered "healthy"

Figure 25.3 Proportion of products considered "healthy" using the Health Star Rating by country for Yili



Figure 25.4 Proportion of products considered "healthy" using the Health Star Rating by category for Yili



Just under a third (29%) of Yili products were considered "healthy" with an HSR of \geq 3.5 (**Figure 25.3**), increasing slightly to 31% when sales-weighting was applied. Once again, 'Dairy' products had the highest proportion of products with an HSR of \geq 3.5 (**Figure 25.4**), with zero 'Ice Cream and Frozen Desserts' products.

<u>ANALYSIS 5 and 6:</u> Category rankings based upon proportion of Yili products meeting WHO criteria

Figure 25.5 Proportions of Yili products meeting WHO criteria for marketing to children – by Country



Figure 25.6 Proportions of Yili products meeting WHO criteria for marketing to children – by Category



Only 7% of Yili products were eligible for marketing to children under the WHO criteria (**Figure 25.5**), increasing very slightly to 8% following sales-weighting of results. 9% of 'Dairy' products and zero 'Ice Cream and Frozen Desserts' products were eligible for marketing to children under the WHO criteria.

More specific results broken down by company and country for Yili can be seen in Appendix B.

Section 2: Changes in the nutritional profile of packaged food and beverage products from 18 global companies between 2018 and 2021

OVERALL GOAL AND SPECIFIC OBJECTIVES

The overall goal of this work was to provide stakeholders, including companies, government, nutrition experts and others with a fuller understanding of changes that have occurred in the nutritional quality of packaged food and non-alcoholic beverage products (hereafter "foods and beverages") sold by 18 of the largest global manufacturers between 2018 and 2021.⁸ The specific objective was to answer the following question:

1. How has the average sales-weighted nutritional quality of each company's product portfolio changed between 2018 and 2021 and how do companies compare? The metric used was the sales-weighted mean Health Star Rating of the product portfolio.

⁸ Note that nutritional quality for the purposes of this report does not include assessment of whether products have been fortified with micronutrients.

METHODOLOGY

Selection of companies

The products of 18 manufacturers for which data were available in both the 2018 Global Product Profile and the 2021 Global Product Profile were included in this report. Two additional companies (FrieslandCampina and Meiji) were not included as <5% of global sales were represented in 2018. The included companies, in alphabetical order, are:

1.	Arla	10.	Kraft Heinz
2.	Campbell	11.	Lactalis
3.	Coca-Cola	12.	Mars
4.	ConAgra	13.	Mondelez
5.	Danone	14.	Nestlé
6.	Ferrero	15.	PepsiCo
7.	General Mills	16.	Suntory
8.	Grupo Bimbo	17.	Tingyi
9.	Kellogg	18.	Unilever

Product identification

In 2018, The George Institute's FoodSwitch database was used to compile product lists for manufacturers. Product lists along with nutrition information were supplied to each manufacturer, and manufacturers were requested to check the information and update it where necessary. Fifteen of the included companies accepted the offer to either supply their full product list or to review the data provided by The George Institute.

In 2021, two data sources were used to create a product list for each manufacturer (detailed information is provided in the main 2021 Global Product Profile report):

- Products from the previous 2018 Global Index were used as a starting point
- Products from Innova Market Insight's database with data entered or updated from November 2018 onwards

The FoodSwitch and Innova market Insight databases were merged, and where the same product was available in both databases, the most recent entry was used in the 2021 analysis. In August 2021, companies were provided with their data for review (product list and nutrient content) and offered an opportunity to make corrections or additions to information about their product range. Eighteen companies did so and any corrected or new information was updated in the project database.

The data were analysed using STATA statistical software version 16.

RESULTS

Table 1 shows the overall results for this change analysis for the 18 companies included. The following sections examine these results in detail.

Table 2 Sales-weighted mean Health Star Rating by company in 2018 versus 2021 – overall product portfolio

	Countries included in analysis	No. of prod selected	of products among lected countries Aggregated country and category sales-weighted mean HSR		Difference between 2018 and 2021	% sales fro countries in sal	% sales from included countries in global retail sales*	
		<u>2018</u>	<u>2021</u>	<u>2018</u>	<u>2021</u>		<u>2018</u>	<u>2021</u>
Nestlé	AU, CN, HK, IN, MX, ZA, UK, US	1860	1756	1.9	2.7	+0.8	50%	38%
Ferrero	AU, CN, HK, IN, MX, NZ, UK, US	260	846	0.7	1.2	+0.5	22%	33%
Danone	AU, CN, HK, MX, ZA, UK, US	759	1004	3.1	3.5	+0.4	28%	36%
Mars	AU, CN, HK, IN, MX, NZ, ZA, UK, US	1526	3117	1.0	1.3	+0.3	61%	60%
Mondelez	AU, CN, IN, MX, NZ, ZA, UK, US	2048	3129	1.3	1.6	+0.3	42%	44%
Arla	AU, HK, UK, US	108	228	3.0	3.2	+0.2	10%	18%
ConAgra	IN, MX, NZ, US	1028	1889	2.9	3.1	+0.2	94%	97%
General Mills	AU, CN, IN, MX, NZ, ZA, UK, US	1542	2095	2.6	2.7	+0.1	73%	70%
Unilever	AU, CN, IN, MX, ZA, UK, US	1416	2069	2.1	2.2	+0.1	39%	36%
Campbell	MX, US	977	1014	3.0	2.9	-0.1	76%	83%
Kraft Heinz	AU, CN, HK, IN, MX, NZ, UK, US	2142	3209	2.8	2.7	-0.1	82%	75%
Lactalis	AU, MX, ZA, UK, US	509	696	3.3	3.2	-0.1	15%	17%
Suntory	AU, CN, HK, NZ, ZA, UK	503	503	1.8	1.7	-0.1	15%	12%
Tingyi	CN	137	335	1.6	1.4	-0.2	98%	98%
Coca-Cola	AU, CN, HK, IN, MX, NZ, ZA, UK, US	1186	1233	1.8	1.8	0	47%	47%
Grupo Bimbo	CN, MX, UK, US	477	790	2.7	2.7	0	72%	74%
Kellogg	AU, HK, IN, MX, NZ, ZA, UK, US	1310	1194	2.5	2.5	0	72%	68%
PepsiCo	AU, CN, HK, IN, MX, NZ, ZA, UK, US	1813	2255	2.3	2.3	0	62%	62%

Note: * ATNI estimates derived from Euromonitor International.

1. COMPANIES WITH AN INCREASE IN MEAN HSR BETWEEN 2018-2021

Overall, nine companies had an increase in mean HSR between 2018 and 2021 (limited to those countries included in both the 2018 and 2021 Product Profile); Nestlé, Ferrero, Danone, Mars, Mondelez, Arla, ConAgra, General Mills and Unilever. This section examines results in further detail for these nine companies, in order of the magnitude of change in sales-weighted mean HSR.

1.1 NESTLÉ

The largest increase in mean HSR between the 2018 and 2021 Product Profile was for <u>Nestlé</u> (mean HSR=1.9 to 2.7). However, our analysis below is based only on the eight countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=1.9 to 2.7; **Table 1A**) Nestlé was found to have improved its average HSR by 0.8 stars using the sales-weighted portfolio-level results.

Country	No of products 2018	No of products 2021	Category sales-weighted HSR 2018*	Category sales-weighted HSR 2021*	Difference
Australia	221	213	2.2	1.6	-0.6
China	25	84	0.5	1.6	+1.1
Hong Kong	82	79	2.8	2.5	-0.3
India	33	127	2.1	2.1	0.0
Mexico	98	85	1.7	2.4	+0.7
South Africa	70	97	1.0	2.0	+1.0
UK	260	263	1.3	1.8	+0.5
USA	1071	808	2.5	3.5	+1.0
Total	1860	1756	1.9	2.7	+0.8

Table 1A: Nestlé overall change analysis results

* Results also weighted by country sales

Brazil and France were included in the 2021 Product Profile but not 2018. New Zealand was included in the 2018 Product Profile but not 2021. **Figures 1.1A and C** show the differences in the proportion of category sales both for all countries included in the 2021 Product Profile, and for only those countries which appeared in both the 2018 and 2021 Product Profiles.

Comparing **Figures 1.1B and C**, the large increase observed in mean HSR between 2018 and 2021 is likely attributed to some key changes in category sales (**Table 1B**). For example, the proportion of sales deriving from the 'Dairy' category in these eight countries increased from 19% to 24%, with a subsequent decrease in 'Confectionery' sales from 21% to 15%.

Of the eight countries with data available in both 2018 and 2021 for Nestlé (**Table 1A**), the mean HSR increased the most for the USA because the company divested its 'Confectionery' and 'Ice Cream' businesses. The USA also represented the largest market among the countries included in analysis and so these divestments had a profound effect on overall changes as a result. In China, the company also derived more sales from 'Dairy' in 2021 compared to 2018 and more products were found to meet the healthy threshold (HSR ≥3.5).



The three countries with the largest changes in sales-weighted mean HSR were South Africa, China and the USA. However, in 2021 South Africa represented <1% of overall sales and so the changes within this country did not have as substantial an effect on the overall mean HSR for Nestlé compared to China (8% of overall sales) and the USA (19% of overall sales). The mean HSR for 'Dairy' products in both China and the USA, and 'Ready Meals' products in the USA, increased between 2018 and 2021, and these (along with the increase in % sales deriving from these categories) were the main drivers of both country-level changes and overall changes for Nestlé between 2018 and 2021.

	Australia	China	Hong Kong	India	Mexico	South Africa	UK	USA
2018	Breakfast Cereals	Confectionery	Confectionery	Confectionery	Bottled Water	Confectionery	Bottled Water	Bottled Water
	Confectionery	Dairy	Dairy	Dairy	Breakfast Cereals	Dairy	Breakfast Cereals	Confectionery
	Dairy	RTD Coffee	Ice Cream	Ready Meals	Confectionery	Other Hot Drinks	Confectionery	Dairy
	Other Hot Drinks	Sauces	RTD Coffee	Rice, Pasta and Noodles	Dairy	Rice, Pasta and Noodles	Dairy	Ice Cream
	Rice, Pasta and Noodles	Sweet biscuits	RTD Tea	Sauces	Ice cream	Sauces	Other Hot Drinks	Ready Meals
2021	Breakfast Cereals Confectionery Other Hot Drinks Ready Meals Sweet Biscuits	Confectionery Dairy RTD Coffee Sauces Sweet biscuits	Confectionery Dairy Other Hot Drinks RTD Coffee RTD Tea	Confectionery Dairy Rice, Pasta and Noodles Sauces	Bottled Water Concentrates Confectionery Dairy Other Hot Drinks	Breakfast Cereals Confectionery Dairy Other Hot Drinks Rice, Pasta and Noodles	Bottled Water Breakfast Cereals Carbonates Confectionery Dairy	Bottled Water Dairy Other Hot Drinks Ready Meals
	Decrease in mean HSR	Increase in mean HSR	Decrease in mean HSR	No change in mean HSR	Increase in mean HSR	Increase in mean HSR	Increase in mean HSR	Increase in mean HSR
	(2.2 to 1.6)	(0.5 to 1.6)	(2.8 to 2.5)	(2.1)	(1.7 to 2.4)	(1.0 to 2.0)	(1.3 to 1.8)	(2.5 to 3.5)

Table 1B: Categories for each country for Nestlé in 2018 and 2021.

1.2 FERRERO

Ferrero showed an increase in mean HSR between 2018 and 2021, both overall (mean HSR=0.7 to 1.0) and when examining the same countries included in both Product Profiles (mean HSR=0.7 to 1.2; **Table 1C**). Ferrero was found to attain on average 0.5 stars improvement in its sales-weighted portfolio-level results in the countries included in both Product Profile reports. However, despite this improvement, Ferrero still had one of the lowest mean sales-weighted HSRs out of all companies in both 2018 and 2021 (**Table 1**).

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	18	50	0.8	0.9	+0.1
China	8	26	0.5	0.5	0.0
Hong Kong	22	25	0.9	0.8	-0.1
India	16	45	0.5	0.6	+0.1
Mexico	9	46	0.5	0.8	+0.3
New Zealand	4	18	0.9	1.6	+0.7
UK	141	375	0.6	0.7	+0.1
USA	42	261	0.9	1.5	+0.6
Total	260	846	0.7	1.2	+0.5

Table 1C: Ferrero overall change analysis results

* Results also weighted by country sales

Germany and Italy were included in the 2021 Product Profile but not 2018. South Africa was included in the 2018 Product Profile but not 2021. **Figures 1.2A and C** show differences in the proportion of category sales both for all countries included in the 2021 Product Profile, and for only those countries which appeared in both the 2018 and 2021 Product Profiles.

Comparing **Figures 1.2B and C**, the large increase observed in mean HSR between 2018 and 2021 (0.5 stars) is likely attributed to a few key changes. For example, the proportion of sales deriving from the 'Confectionery' category decreased from 85% to 78%, with a subsequent introduction of the 'Sweet Biscuits, Snack Bars and Fruit Snacks' category (**Figure 1.2B and C**). Despite 'Sweet Biscuits, Snack Bars and Fruit Snacks' not necessarily being classified as a "healthy" category, in the 2021 Product Profile Product Profile report this category was healthier overall than the 'Confectionery' category (1.9 versus 1.1 stars). Another change between 2018 and 2021 was in the number of products included in analysis. It is beyond the scope of this report to comment on why this was the case (as Ferrero provided and/or reviewed nutrient data for both Product Profiles), however this may have contributed to the overall improvement due to the presence of additional (healthier) products in 2021 versus 2018. For example, the addition of the 'Sweet Biscuits, Fruit Snacks and Fruit Bars' category led to the inclusion of fruit-based snacks for Ferrero (e.g. *Stretch Island Fruit Co* Fruit leathers), which contributed to the improvement in mean HSR.



Out of the eight countries with data available in both 2018 and 2021 for Ferrero (**Table 1D**), the USA represented the largest market out of the countries included in analysis (20%), and so improvements in the mean HSR for the USA drove overall improvements for Ferrero. The two countries with the largest changes in sales-weighted mean HSR were New Zealand and the USA. However, in 2021 New Zealand represented <1% of global sales and so the changes within this country did not have as substantial an effect on the overall mean HSR for Ferrero compared to the USA (20% of global sales).

Table 1D: Categories for each countr	v for Ferrero in 2018 and 2021.

	Australia	China	Hong Kong	India	Mexico	New Zealand	UK	USA
2018	Confectionery Spreads*	Confectionery	Confectionery Spreads*	Confectionery Spreads*	Confectionery Spreads*	Confectionery Spreads*	Baked Goods Confectionery Spreads*	Confectionery Spreads*
2021	Confectionery Sweet Spreads	Confectionery	Confectionery Sweet Spreads	Confectionery Sweet Spreads	Confectionery Sweet Spreads	Confectionery Sweet Spreads	Baked Goods Confectionery Sweet Spreads	Confectionery Sweet Spreads Sweet Biscuits
	Increase in mean HSR (0.8 to 0.9)	No change in mean HSR (0.5)	Decrease in mean HSR (0.9 to 0.8)	Increase in mean HSR (0.5 to 0.6)	Increase in mean HSR (0.5 to 0.8)	Increase in mean HSR (0.9 to 1.6)	Increase in mean HSR (0.6 to 0.7)	Increase in mean HSR (0.9 to 1.5)

Bold indicates category is present in both years * The EMI definition for 'Spreads' in 2018 was changed to 'Sweet Spreads' in 2021, with all savoury spreads being incorporated into 'Sauces, Dressings and Condiments'

1.3 DANONE

<u>Danone</u> showed an increase in mean HSR between 2018 and 2021, both overall (mean HSR=3.1 to 3.5) and when examining the same countries included in both Product Profile reports (mean HSR=3.1 to 3.5; **Table 1E**). Danone was found to attain on average 0.4 stars improvement in its sales-weighted portfolio-level results in the countries included in both Product Profile reports.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	47	49	2.3	3.4	+1.1
China	27	34	2.4	2.7	+0.3
Hong Kong	3	2	5.0	5.0	0.0
Mexico	113	222	2.3	3.0	+0.7
South Africa	65	76	3.1	3.3	+0.2
UK	113	177	3.3	4.0	+0.7
USA	391	444	3.8	3.7	-0.1
Total	759	1004	3.1	3.5	+0.4

Table 1E: Danone overall change analysis results

* Results also weighted by country sales

Brazil, France and Russia were included in the 2021 Product Profile but not 2018. Together these countries account for ~39% of Danone's global sales. **Figures 1.3A and C** show the differences in the proportion of category sales both for all countries included in the 2021 Product Profile, and for only those countries which appeared in both the 2018 and 2021 Product Profiles.

Comparing **Figures 1.3B and C**, the 0.4 increase observed in mean HSR between 2018 and 2021 may be attributed to changes in category sales between 2018 and 2021 (**Table 1F**). Changes to the healthiness and proportion of sales from the 'Dairy' category across most countries and overall appear to have driven Danone's improvement in mean HSR (**Figures 1.3B and C**) along with a decrease in 'Bottled Water' sales. Despite plain bottled water automatically receiving an HSR of 5.0, Danone sells a large proportion of flavoured water products (18% compared to 11% for pure water) which do not score as highly under the HSR algorithm. Out of the seven countries with data available in both 2018 and 2021 for Danone (**Table 1E**), Australia showed the greatest improvement in mean HSR due to increases in the mean HSR of 'Dairy' products. However, Australia represents <1% of Danone's global sales, and instead the main drivers of Danone's improvements at a country level appear to be a combination of improvements in China, Mexico and the UK (together representing ~15% of overall sales and ~40% of sales when limiting countries to only those included in the 2018 and 2021 Product Profiles).



The 3 countries with the largest change in sales-weighted mean HSR were Australia, Mexico and the UK. However in 2021 Australia represented <1% of overall sales and so the changes within this country did not have as substantial an effect on the overall mean HSR for Danone compared to Mexico (5% of overall sales) and the UK (4% of overall sales).

Table 1F: Categories for each country for Danone in 2018 and 2021.

	Australia	China	Hong Kong	Mexico	South Africa	UK	USA
2018	Bottled Water* Dairy	Bottled Water* Dairy	Bottled Water*	Bottled Water* Dairy	Bottled Water Dairy	Bottled Water* Dairy Juice	Bottled Water* Dairy Ice Cream
2021	Bottled Water - Pure Dairy	Bottled Water – Other Bottled Water - Pure Dairy	Bottled Water - Pure	Bottled Water – Other Bottled Water - Pure Dairy	Dairy	Bottled Water – Other Bottled Water - Pure Dairy Juice	Bottled Water - Pure Dairy RTD Coffee
	Increase in mean HSR (2.3 to 3.4)	Increase in mean HSR (2.4 to 2.7)	No change in mean HSR (5.0)	Increase in mean HSR (2.3 to 3.0)	Increase in mean HSR (3.1 to 3.3)	Increase in mean HSR (3.3 to 4.0)	Decrease in mean HSR (3.8 to 3.7)

Bold indicates category is present in both years

* The 2018 EMI category 'Bottled Water' was split into two categories in 2021 ('Bottled Water – Pure' and 'Bottled Water – Other')

1.4 MARS

Mars showed an increase in mean HSR between 2018 and 2021, both overall (mean HSR=1.0 to 1.3) and when examining the same countries included in both Product Profile reports (mean HSR=1.0 to 1.3; **Table 1G**). Mars was found to attain on average 0.3 stars improvement in its sales-weighted portfolio-level results in the countries included in both Product Profile reports. However, it is important to note that despite this improvement, Mars still had the second lowest sales-weighted mean HSRs of all companies in the 2021 Product Profile. Despite improvements, less than 1/3 of Mars products in both 2018 and 2021 were considered "healthy".

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales-weighted HSR 2021*	Difference
Australia	361	581	1.9	1.8	-0.1
China	86	114	0.8	1.2	+0.4
Hong Kong	81	98	2.2	1.9	-0.3
India	13	80	2.0	1.7	-0.3
Mexico	22	180	1.2	1.1	-0.1
New Zealand	175	218	2.2	2.2	0.0
South Africa	109	141	2.0	1.8	-0.2
UK	324	618	1.3	1.4	+0.1
USA	355	1087	0.8	1.3	+0.5
Total	1526	3117	1.0	1.3	+0.3

Table 1G: Mars overall change analysis results

* Results also weighted by country sales

Russia was included in the 2021 Product Profile but not 2018. **Figures 1.4A and C** show the differences in proportion of category sales for all countries included in the 2021 Product Profile, and for only those countries included in both the 2018 and 2021 Product Profiles.

Comparing **Figures 1.4B and C**, the increase observed in mean HSR between 2018 and 2021 cannot be attributed to differences in category-level sales (**Table 1H**). It is unclear exactly what drove the overall increase in mean HSR for Mars, however it is likely due to an increase in mean HSR of 'Confectionery' products in the USA (the largest market of the nine countries included in analysis) and to a smaller extent, 'Confectionery' products in China. In 2018, Mars did not engage in the Product Profile data review process and thus data used in analysis derived from third party databases. However, in 2021, Mars reviewed product data. This may have influenced the changes observed, simply as by being involved in the data preparation, information may have been provided in 2021 that was not available nor included in 2018. It is possible that there were also product-level improvements between 2018 and 2021, however it is unlikely that product-level changes in nutrient content of confectionery products were large enough to drive the 0.3 mean HSR increase overall for Mars.



The three countries with the largest proportion of sales (China, the UK and USA – 54% of Mars sales combined in the 2021 Product Profile report) were the only countries to show an increase in mean HSR between 2018 and 2021. In particular, the relatively large increase seen in China (0.8 to 1.2) and the USA (0.8 to 1.3) likely drove the majority of the change.

	Australia	China	Hong Kong	India	Mexico	New Zealand	South Africa	UK	USA
2018	Confectionery Ice Cream Rice and Pasta Sauces Spreads	Confectionery	Confectionery Sauces	Confectionery	Confectionery	Confectionery Rice and Pasta Sauces	Confectionery Ready Meals Sauces Soup	Confectionery Ice Cream Rice and Pasta Sauces Sweet Biscuits	Confectionery Ice Cream Rice and Pasta Savoury Snacks
2021	Confectionery Ice Cream Rice and Pasta Sauces	Confectionery	Confectionery Sauces	Confectionery	Confectionery	Confectionery Rice and Pasta Sauces	Confectionery Ready Meals Sauces Soup	Confectionery Dairy Ice Cream Rice and Pasta Sauces	Confectionery Ice Cream Ready Meals Rice and Pasta Savoury Snacks
	Decrease in mean	Increase in mean	Decrease in mean	Decrease in mean	Decrease in mean	No change in	Decrease in mean	Increase in mean	Increase in mean
	HSR	HSR (0.8 to 1.2)	HSR	HSR	HSR	mean HSR	HSR	HSR	HSR
	(1.9 to 1.8)		(2.2 to 1.9)	(2.0 to 1.7)	(1.2 to 1.1)	(2.2)	(2.0 to 1.8)	(1.3 to 1.4)	(0.8 to 1.3)

Table 1H: Categories for each country for Mars in 2018 and 2021.

1.5 MONDELEZ

Mondelez showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=1.3 to 1.5). However, our analysis below is based only on the eight countries that were assessed in both 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=1.3 to 1.6; **Table 1I**) Mondelez was found to have improved its average HSR by 0.3 stars using the sales-weighted portfolio-level results.

Country	No of products 2018	No of products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	393	602	1.0	1.0	0.0
China	182	240	1.2	1.7	+0.5
India	71	200	0.7	0.6	-0.1
Mexico	103	161	1.4	1.6	+0.2
New Zealand	247	295	1.1	1.0	-0.1
South Africa	93	130	1.4	1.3	-0.1
UK	578	724	1.1	1.0	-0.1
USA	381	777	1.5	2.0	+0.5
Total	2048	3129	1.3	1.6	+0.3

Table 1I: Mondelez overall change analysis results

* Results also weighted by country sales

Brazil and Hong Kong were included in the 2021 Product Profile but not 2018. Brazil represented ~15% of overall sales for Mondelez in 2021. **Figures 1.5A and C** show the differences in the proportion of category sales both for all countries included in the 2021 Product Profile, and for only those countries which appeared in both the 2018 and 2021 Product Profiles.

Comparing **Figures 1.5B and C**, the reason for the 0.3 increase observed in mean HSR between 2018 and 2021 is difficult to pinpoint. It appears that 'Confectionery' had a higher overall mean HSR in 2021 compared to 2018. On exploration at the product level, there does not appear to be a clear reason for this, other than the product mix included in each year. Sugar-free gums and mint products score higher than chocolate confectionery under the HSR algorithm, and the presence of more sugar-free gum products may have increased Mondelez USA's mean HSR for 'Confectionery' in 2021. The USA also represents the largest market among the countries included in analysis (>40%) and so any changes to US data lend weight to the overall mean increase in HSR. China's increase in mean HSR between 2018 and 2021 may have also had a small effect on the overall increase, with China representing ~7% of overall sales. China's increase was driven by an increase in mean HSR of 'Sweet Biscuits, Snack Bars and Fruit Snacks'. The sole reason for this change was that in 2018, Mondelez did not provide total sugar or saturated fat values for their products, yet in 2021 a large proportion of products did have this information provided.



	Australia	China	India	Mexico	New Zealand	South Africa	UK	USA
2018	Confectionery Other Hot Drinks Sweet Biscuits	Concentrates Confectionery Savoury Snacks Sweet Biscuits	Concentrates Confectionery Other Hot Drinks Sweet Biscuits	Concentrates Confectionery Dairy Savoury Snacks Sweet Biscuits	Confectionery Other Hot Drinks Savoury Snacks Sweet Biscuits	Confectionery Dairy Other Hot Drinks Savoury Snacks Sweet Biscuits	Baked Goods Confectionery Other Hot Drinks Savoury Snacks Sweet Biscuits	Confectionery Dairy Savoury Snacks Sweet Biscuits
2021	Confectionery Dairy Other Hot Drinks Savoury Snacks Sweet Biscuits	Concentrates Confectionery Savoury Snacks Sweet Biscuits	Concentrates Confectionery Other Hot Drinks Sweet Biscuits	Concentrates Confectionery Dairy Savoury Snacks Sweet Biscuits	Confectionery Other Hot Drinks Savoury Snacks Sweet Biscuits	Confectionery Savoury Snacks Sweet Biscuits	Baked Goods Confectionery Dairy Other Hot Drinks Sweet Biscuits	Confectionery Dairy Savoury Snacks Sweet Biscuits
	No change in mean HSR (1.0)	Increase in mean HSR (1.2 to 1.7)	Decrease in mean HSR (0.7 to 0.6)	Increase in mean HSR (1.4 to 1.6)	Decrease in mean HSR (1.1 to 1.0)	Decrease in mean HSR (1.4 to 1.3)	Decrease in mean HSR (1.1 to 1.0)	Increase in mean HSR (1.5 to 2.0)

Table 1J: Categories for each country for Mondelez in 2018 and 2021.

1.6 ARLA

Arla showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=3.0 to 3.3). However, our analysis below is based only on the four countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=3.0 to 3.2; **Table 1K**) Arla was found to have improved its mean HSR by 0.2 stars using the sales-weighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	9	17	1.2	1.0	-0.2
Hong Kong	8	12	1.1	1.0	-0.1
UK	73	140	3.2	3.4	+0.2
USA	18	59	1.9	2.5	+0.6
Total	108	228	3.0	3.2	+0.2

Table 1K: Arla overall change analysis results

* Results also weighted by country sales

In the 2018 Product Profile, only a small proportion (10%) of country sales were included (Australia, Hong Kong, the UK and the USA), and most of Arla's major markets were not included. In 2021, this increased greatly to 81% with the addition of Canada, Denmark, Finland, Germany, Russia and Sweden. **Figures 1.6A and C** show the differences in the proportion of category sales both for all countries included in the 2021 Product Profile, and for only those countries which appeared in both the 2018 and 2021 Product Profiles. Arla's portfolio is dominated by 'Dairy' products in each country in which it operates.

Comparing **Figures 1.6B and C**, the increase observed in mean HSR between 2018 and 2021 cannot be attributed to differences in category-level sales as only one category (Dairy) was included in both the 2018 and 2021 Product Profiles for Arla. The change appears to be driven solely by an increase in the mean HSR for UK 'Dairy' products, moving from a mean of 3.2 to 3.4 between 2018 and 2021. On deeper exploration at the product level, it appears that a larger number of yoghurt products were included in 2021 versus 2018, likely responsible for the slightly higher mean HSR for Arla UK 'Dairy' in 2021.



1.7 CONAGRA

<u>ConAgra</u> showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.9 to 3.1). When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=2.9 to 3.1; **Table 1L**) ConAgra was found to have improved its average HSR by 0.2 stars using the sales-weighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
India	30	90	3.5	3.9	+0.4
Mexico	43	106	3.6	3.7	+0.1
New Zealand	6	15	2.3	2.4	+0.1
USA	949	1678	2.9	3.1	+0.2
Total	1028	1889	2.9	3.1	+0.2

Table 1L: ConAgra overall change analysis results

* Results also weighted by country sales

Hong Kong was included in the 2021 Product Profile but not 2018, however Hong Kong represents an extremely small market for ConAgra (<1%) and so its inclusion did not change any overall results for ConAgra (**Figures 1.7A and C**).

Comparing **Figures 1.7B and C**, the increase observed in mean HSR between 2018 and 2021 is difficult to attribute to specific category-level changes (**Table 1M**), although it appears the replacement of the 'Dairy' category (HSR=2.1) for the USA with 'Sauces, Dressings and Condiments' (HSR=2.5) in 2021 was partly responsible for the change. Alongside this an increase in the proportion of sales from 'Processed Fruit and Vegetables' (**Figures 1.7B and C**) contributed to the overall increase in mean HSR. A change in the mean HSR for 'Savoury Snacks' in the USA between 2018 (HSR=2.1) and 2021 (HSR=2.4) also contributed in part to the overall change. Of the four countries for which data were available in both 2018 and 2021 for ConAgra (**Table 1L**), the mean HSR increased the most for India, however the USA completely dominated ConAgra's portfolio in both years, with >90% of all sales and was therefore the only country with a substantial effect on the overall mean HSR.

Table 1M: Cates	ories for each	country for	ConAgra in	2018 and 2021.
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	India	Mexico	New Zealand	USA
2018	Edible Oils Savoury Snacks Spreads	Breakfast Cereals Edible Oils Sauces Savoury Snacks	Savoury Snacks	Dairy Processed Fruit/Veg Processed Meat/Seafood Ready Meals Savoury Snacks
2021	Edible Oils Savoury Snacks Sweet Spreads	Breakfast Cereals Edible Oils Sauces Savoury Snacks	Savoury Snacks	Processed Fruit/Veg Processed Meat/Seafood Ready Meals Sauces Savoury Snacks
	Increase in mean HSR (3.5 to 3.9)	Increase in mean HSR (3.6 to 3.7)	Increase in mean HSR (2.3 to 2.4)	Increase in mean HSR (2.9 to 3.1)



1.8 GENERAL MILLS

<u>General Mills</u> showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.6 to 2.8). However, our analysis below is based only on the nine countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=2.6 to 2.7; **Table 1N**) General Mills was found to have improved its average HSR by 0.1 stars using the sales-weighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	84	203	3.5	3.5	0.0
China	73	156	2.5	2.7	+0.2
Hong Kong	45	85	2.0	2.3	+0.3
India	21	46	2.0	1.7	-0.3
Mexico	86	119	2.3	2.4	+0.1
New Zealand	42	53	2.7	3.8	+1.1
South Africa	12	21	2.7	3.4	+0.7
UK	193	232	2.9	2.9	0.0
USA	986	1180	2.6	2.7	+0.1
Total	1542	2095	2.6	2.7	+0.1

Table 1N: General Mills overall change analysis results

* Results also weighted by country sales

Canada was included in the 2021 Product Profile but not 2018. **Figures 1.8A and C** show the differences in the proportion of category sales both for all 10 countries included in the 2021 Product Profile, and for only those nine countries which appeared in both the 2018 and 2021 Product Profiles. Comparing **Figures 1.8B and C**, the 0.1 stars increase observed in mean HSR between 2018 and 2021 is likely attributed to a few category changes. Overall for all countries, the proportion of sales deriving from the 'Dairy' category decreased from 24% to 17%, with a subsequent increase in 'Ready Meals' (12% to 21%) (**Figure 1.8B and C**). In addition, the 'Baked Goods' category overall decreased from 8% to 0%, being replaced by the 'Soup' category which went from 0% in 2018 to 7% in 2021.

Of the nine countries with data available in both 2018 and 2021 for General Mills (**Table 1N**), the USA represented the largest market (>50% overall, with the next largest market the UK with 5%), and so the mean HSR for the USA mirrored the overall mean HSR in both years. However, the UK also appeared to have driven some of the overall change, with the 'Breakfast Cereals' category replacing sales for the 'Baked Goods' category in 2021, and as a result, the mean sales-weighted HSR for the UK improved and its weight contributed 0.2 HSR to the overall mean for 2021 (compared to 0.1 in 2018). The overall mean HSR for the UK did not change, however its contribution to the overall mean HSR increased.



	Australia	China	Hong Kong	India	Mexico	New Zealand	South Africa	UK	USA
2018	Baked Goods Ready Meals Rice and Pasta Sauces Sweet Biscuits	Ice Cream	Ice Cream Processed Meat/Seafood	Baked Goods	Baked Goods Dairy Ice Cream Sweet Biscuits	Baked Goods Ready Meals Sauces Sweet Biscuits	Ready Meals Sweet Biscuits	Baked Goods Dairy Ice Cream Ready Meals Sweet Biscuits	Baked Goods Breakfast Cereals Dairy Ready Meals Sweet Biscuits
2021	Baked Goods Breakfast Cereals Ready Meals Rice and Pasta Sauces	Breakfast Cereals Ice Cream Ready Meals	Breakfast Cereals Dairy Ice Cream Ready Meals Sweet Biscuits	Baked Goods Sweet Spreads	Baked Goods Breakfast Cereals Ice Cream Sweet Biscuits	Breakfast Cereals Dairy Ready Meals Rice and Pasta Sauces	Breakfast Cereals Ready Meals Sweet Biscuits	Breakfast Cereals Dairy Ice Cream Ready Meals Sweet Biscuits	Breakfast Cereals Dairy Ready Meals Soup Sweet Biscuits
	No change in mean HSR (3.5)	Increase in mean HSR (2.5 to 2.7)	Increase in mean HSR (2.0 to 2.3)	Decrease in mean HSR (2.0 to 1.7)	Increase in mean HSR (2.3 to 2.4)	Increase in mean HSR (2.7 to 3.8)	Increase in mean HSR (2.7 to 3.4)	No change in mean HSR (2.9 to 2.9)	Increase in mean HSR (2.6 to 2.7)

Table 10: Categories for each country for General Mills in 2018 and 2021.

1.9 UNILEVER

<u>Unilever</u> showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.1 to 2.2). However, our analysis below is based only on the seven countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=2.1 to 2.2; **Table 1P**) Unilever was found to have improved its average HSR by 0.1 stars using the sales-weighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	204	264	2.3	2.2	-0.1
China	99	209	1.8	2.0	+0.2
India	107	190	2.4	2.1	-0.3
Mexico	56	202	2.5	2.3	-0.2
South Africa	199	242	2.7	2.5	-0.2
UK	272	409	2.2	2.3	+0.1
USA	479	553	1.9	2.1	+0.2
Total	1416	2069	2.1	2.2	+0.1

Table 1P: Unilever overall change analysis results

* Results also weighted by country sales

Brazil, France and Germany were included in the 2021 Product Profile but not 2018. New Zealand was included in the 2018 Product Profile but not 2021. Brazil, France and Germany combined represented 15% of Unilever's overall sales in the 2021 Product Profile. The seven included countries in the change analysis represent 36% of Unilever's 2021 portfolio. Figures 1.9aA and C show the differences in the proportion of category sales both for all 10 countries included in the 2021 Product Profile, and for only those seven countries which appeared in both the 2018 and 2021 Product Profiles. Comparing Figures 1.9aB and C, the 0.1 star increase observed in mean HSR between 2018 and 2021 needs to be interpreted with caution. In 2018, sales data were derived from Euromonitor International. However, in 2021 Unilever provided company-reported sales weightings for analysis. This resulted in some fairly significant differences in the proportion of sales deriving from key categories, particularly in larger markets such as the USA. Figures 1.9aB and C show some of these overall category differences, with 'RTD Tea' representing a much larger proportion of sales in 2018 versus 2021, and 'Sauces, Dressings and Condiments' a much smaller proportion. Figures 1.9bA and B show proportions of sales using solely Euromonitor International sales data in both Product Profile years. It is unknown what effect this would have had on the mean sales-weighted HSR for Unilever, however due to the very minor change seen in HSR between Product Profile years, it is unlikely that any larger changes have been missed.





	Australia	China	India	Mexico	South Africa	UK	USA
2018	Dairy Ice Cream RTD Tea Sauces Soup	lce Cream RTD Tea Sauces Soup	Concentrates Ice Cream Sauces Soup Spreads*	Dairy Ice Cream RTD Tea Sauces Soup	Dairy Ice Cream Processed Meat/Seafood Sauces Soup	Dairy Ice Cream Rice and Pasta Sauces Spreads*	Dairy Ice Cream Ready Meals RTD Tea Sauces
2021	Ice Cream Ready Meals Sauces Soup	Ice Cream Other Hot Drinks Sauces Soup	Ice Cream Other Hot Drinks Sauces Soup Sweet Spreads	Breakfast Cereal Ice Cream Ready Meals Sauces Soup	Ice Cream Processed Meat/Seafood Sauces Soup	Ice Cream Rice and Pasta Sauces Sweet Spreads*	Ice Cream Ready Meals RTD Tea Sauces Soup
	Decrease in mean HSR (2.3 to 2.2)	Increase in mean HSR (1.8 to 2.0)	Decrease in mean HSR (2.4 to 2.1)	Decrease in mean HSR (2.5 to 2.3)	Decrease in mean HSR (2.7 to 2.5)	Increase in mean HSR (2.2 to 2.3)	Increase in mean HSR (1.9 to 2.1)

Table 1Q: Categories for each country for Unilever in 2018 and 2021.

Bold indicates category is present in both years

* The Euromonitor International subset definition for 'Spreads' in 2018 was changed to 'Sweet Spreads' in 2021, with all savoury spreads being incorporated into 'Sauces, Dressings and Condiments'

2. COMPANIES WITH A DECREASE IN MEAN HSR BETWEEN 2018-2021

There were five companies that showed a decrease mean HSR between 2018 and 2021 (Campbell, Kraft Heinz, Lactalis, Suntory and Tingyi). It is not possible to conclude form this analysis whether their overall product portfolios decreased in nutritional quality.

2.1 CAMPBELL

<u>Campbell</u> showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.9 to 3.0). However, our analysis below is based only on the two countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=3.0 to 2.9; **Table 2A**) Campbell was found to have decreased its average HSR by 0.1 stars using the salesweighted portfolio-level results.

Country	No of products 2018	No of products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Mexico	40	81	3.7	3.9	+0.2
USA	937	933	3.0	2.9	-0.1
Total	977	1014	3.0	2.9	-0.1

Table 2A: Campbell overall change analysis results

* Results also weighted by country sales

Australia, Hong Kong, India, New Zealand and the UK were included in the 2018 Product Profile but not 2021. Canada was included in the 2021 Product Profile but not 2018. **Figures 2.1A and C** show the differences in the proportion of category sales both for all countries included in the 2021 Product Profile, and for only those countries which appeared in both the 2018 and 2021 Product Profiles.

Comparing **Figures 2.1B and C**, the decrease observed in mean HSR between 2018 and 2021 is likely attributed to some key changes in category sales (**Table 2B**). For example, the proportion of sales deriving from the 'Savoury Snacks' category increased from 15% to 41%, with a subsequent decrease in the proportion of sales deriving from healthier categories such as 'Soup' and 'Juice'. This large change in the 'Savoury Snacks' category is likely a result of Campbell purchasing of *Snyder's-Lance* in 2018, increasing their savoury snacks portfolio offerings.

Of the two countries for which data were available in both 2018 and 2021 for Campbell (**Table 2A**), the mean HSR decreased in the USA and increased in Mexico. However, the USA represents the largest market for Campbell (representing >80% of sales) and so the increase in savoury snacks sales likely drove the overall decrease in mean HSR.



|--|

	Mexico	USA
		Baked Goods
	Juice	Juice
2018	Sauces	Sauces
	Soup	Savoury Snacks
		Soup
		Baked Goods
	Juice	Juice
2021	Sauces	Sauces
	Soup	Savoury Snacks
		Soup
	Decrease in mean HSR	Increase in mean HSR
	(2.3 to 2.2)	(1.8 to 2.0)

2.2 KRAFT HEINZ

<u>Kraft Heinz</u> showed a decrease in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.8 to 2.7). However, our analysis below is based only on the 8 countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=2.8 to 2.7; **Table 2C**) Kraft Heinz was found to have decreased its average HSR by 0.1 stars using the salesweighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	325	340	3.0	3.5	+0.5
China	18	37	1.1	1.1	0.0
Hong Kong	39	77	2.1	2.4	+0.3
India	3	6	2.0	4.2	+2.2
Mexico	32	122	2.3	2.3	0.0
New Zealand	709	573	3.4	3.4	0.0
UK	284	195	3.4	3.3	-0.1
USA	732	1859	2.8	2.7	-0.1
Total	2142	3209	2.8	2.7	-0.1

Table 2C: Kraft Heinz overall change analysis results

* Results also weighted by country sales

South Africa was included in the 2018 Product Profile but not 2021. Canada was included in the 2021 Product Profile but not 2018. **Figures 2.2A and C** show the differences in the proportion of category sales both for all nine countries included in the 2021 Product Profile, and for only those eight countries which appeared in both the 2018 and 2021 Product Profiles. Comparing **Figures 2.2B and C**, the 0.1 stars decrease observed in mean HSR between 2018 and 2021 was not driven greatly by changes in category sales, with relatively consistent proportions of category sales existing between 2018 and 2021.

Of the eight countries with data available in both 2018 and 2021 for Kraft Heinz (**Table 2C**), the USA represented the largest market (>60% overall, with the next largest market the UK with 4%), and so the mean HSR for the USA mirrored the overall mean HSR in both years. Decreases in the sales-weighted mean HSRs for 'Processed Meat and Seafood' and 'Ready Meals' for Kraft Heinz USA appear to be the main drivers of the overall change.



	Australia	China	Hong Kong	India	Mexico	New Zealand	UK	USA
2018	Dairy Juice Processed Fruit/Veg Sauces Spreads*	Sauces	Dairy Processed Fruit/Veg Sauces Soup Spreads*	Processed Fruit/Veg Sauces	Baked Goods Dairy Processed Meat/Seafood Ready Meals Sauces	Processed Fruit/Veg Ready Meals Sauces Soup Spreads*	Processed Fruit/Veg Ready Meals Sauces Soup Spreads*	Dairy Processed Meat/Seafood Ready Meals Sauces Savoury Snacks
2021	Juice Processed Fruit/Veg Processed Meat/Seafood Sauces Soup	Sauces	Dairy Processed Fruit/Veg Sauces Savoury Snacks Soup	Processed Fruit/Veg	Baked Goods Concentrates Dairy Ready Meals Sauces	Processed Fruit/Veg Ready Meals Sauces Soup Sweet Spreads	Processed Fruit/Veg Ready Meals Sauces Soup	Dairy Processed Meat/Seafood Ready Meals Sauces Savoury Snacks
	Increase in mean HSR (3.0 to 3.5)	No change in mean HSR (1.1)	Increase in mean HSR (2.1 to 2.4)	Increase in mean HSR (2.0 to 4.2)	No change in mean HSR (2.3)	No change in mean HSR (3.4)	Decrease in mean HSR (3.4 to 3.3)	Decrease in mean HSR (2.8 to 2.7)

Table 2D: Categories for each country for Kraft Heinz in 2018 and 2021.

Bold indicates category is present in both years

* The EMI definition for 'Spreads' in 2018 was changed to 'Sweet Spreads' in 2021, with all savoury spreads being incorporated into 'Sauces, Dressings and Condiments'

2.3 LACTALIS

Lactalis showed a decrease in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=3.3 to 3.0). However, our analysis below is based only on the five countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=3.3 to 3.2; **Table 2E**) Lactalis was found to have decreased its average HSR by 0.1 stars using the sales-weighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	283	295	3.5	3.4	-0.1
Mexico	10	27	3.6	3.4	-0.2
South Africa	107	104	2.9	2.9	0.0
UK	76	97	3.0	3.0	0.0
USA	33	173	3.0	3.3	+0.3
Total	509	696	3.3	3.2	-0.1

Table 2E: Lactalis overall change analysis results

Hong Kong and New Zealand were included in the 2018 Product Profile for Lactalis, but not 2021. Brazil, Canada, China, France and India were included in the 2021 Product Profile but not 2018. **Figures 2.3A and C** show the differences in the proportion of category sales both for all 10 countries included in the 2021 Product Profile, and for only those 5 countries which appeared in both the 2018 and 2021 Product Profiles. Comparing **Figures 2.3B and C**, the 0.1 star decrease observed in mean HSR between 2018 and 2021 is not necessarily attributed to category-level changes. Instead, the slight decrease in mean HSR for Lactalis appears driven by changes in the proportion of sales deriving from each country. For example, in 2018 the USA represented 10% of sales within the five countries examined. However in 2021 this more than doubled to 26%. A corresponding decrease in mean HSR overall, with Australia and Mexico having the highest mean HSR of the five countries included.


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	Australia	Mexico	South Africa	UK	USA
2018	Dairy RTD Coffee	Dairy	Dairy Juice	Dairy	Dairy
2021	Dairy RTD Coffee	Dairy	Dairy Juice	Dairy	Dairy
	Decrease in mean HSR (3.5 to 3.4)	Decrease in mean HSR (3.6 to 3.4)	No change in mean HSR (2.9)	No change in mean HSR (3.0)	Increase in mean HSR (3.0 to 3.3)

Bold indicates category is present in both years

2.4 SUNTORY

<u>Suntory</u> showed an increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=1.8 to 2.6). However, our analysis below is based only on the six countries that were common to both Product Profiles in 2018 and 2021. When examining the same countries included in both the 2018 and 2021 Product Profiles (mean HSR=1.8 to 1.7; **Table 2G**) Suntory was found to have decreased its mean HSR by 0.1 stars using the salesweighted portfolio-level results.

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference		
Australia	144	63	1.7	1.2	-0.5		
China	7	10	2.1	1.6	-0.5		
Hong Kong	22	28	1.4	1.2	-0.2		
New Zealand	252	236	2.5	2.9	+0.4		
South Africa	11	10	1.2	1.5	+0.3		
UK	67	156	1.7	1.6	-0.1		
Total	503	503	1.8	1.7	-0.1		

Table 2G: Suntory overall change analysis results

* Results also weighted by country sales

France, Germany and Japan were included in the 2021 Product Profile but not 2018. Importantly, these three countries combined represented over 75% of Suntory's global sales in the 2021 Product Profile. **Figures 2.4A and C** show the differences in the proportion of category sales both for all nine countries included in the 2021 Product Profile, and for only those six countries which appeared in both the 2018 and 2021 Product Profiles. The absence of Japan in this change analysis is the key reason for the very large differences in categorylevel sales in **Figures 2.4A and C**. Comparing **Figures 2.4B and C**, the 0.1 star decrease observed in mean HSR between 2018 and 2021 is likely attributed to both country-level changes and category-level changes. Australia appears to have been responsible for the overall 0.1 star decrease due to changes in the categories included in analysis between 2018 and 2021. For example, in 2018 Australia included 'Sauces, Dressings and Condiments' and 'Concentrates' which were its second and third highest scoring categories. In 2021 these were replaced by 'Baked Goods' which was the lowest scoring category. Although the UK was Suntory's largest market out of the six included countries, there were no significant changes within the included categories to warrant a change in mean HSR overall.

A key reason for country-level changes for Suntory between 2018 and 2021 can also be attributed to changes in the way categories were defined in each year. In 2018, 'Sports and Energy Drinks' were included as a single category, yet in 2018 they were split into two separate categories. What this meant was that in 2021 some countries then had categories 'drop out' of the top five to make way for two categories ('Sports Drinks' and 'Energy Drinks') rather than one single category. See **Table 2H** for further details on this for each country.



Table 2H: Categories for each country for Suntory in 2018 and 2021.

		Australia	China	Hong Kong	New Zealand	South Africa	UK
	2018	Bottled Water* Concentrates Dairy Sauces Sports/Energy Drinks**	Juice RTD Coffee RTD Tea	Carbonates Concentrates Juice Sports/Energy Drinks**	Bottled Water* Concentrates Juice Sauces Sports/Energy Drinks**	Sports/Energy Drinks**	Carbonates Concentrates Ice Cream Juice Sports/Energy Drinks**
2	2021	Baked Goods Bottled Water - Other Dairy Energy Drinks Sports Drinks	Juice RTD Coffee RTD Tea	Carbonates Energy Drinks Juice RTD Coffee Sports Drinks	Bottled Water - Other Bottled Water - Pure Carbonates Energy Drinks Juice	Energy Drinks	Carbonates Concentrates Energy Drinks Juice Sports Drinks
		Decrease in mean HSR (1.7 to 1.2)	Decrease in mean HSR (2.1 to 1.6)	Decrease in mean HSR (1.4 to 1.2)	Increase in mean HSR (2.5 to 2.9)	Increase in mean HSR (1.2 to 1.5)	Decrease in mean HSR (1.7 to 1.6)

Bold indicates category is present in both years

* The 2018 EMI category 'Bottled Water' was split into two categories in 2021 ('Bottled Water – Pure' and 'Bottled Water – Other')

** The 2018 EMI category 'Sports and Energy Drinks' was split into two categories in 2021 ('Sports Drinks' and 'Energy Drinks')

2.5 TINGYI

Between the 2018 and 2021 Product Profiles, <u>Tingvi</u> was found to have decreased its average HSR by 0.2 stars using the sales-weighted portfolio-level results (mean HSR=1.6 to 1.4; **Table 2I**).

Country	No of products Country 2018		Category sales- weighted HSR 2018	Category sales- weighted HSR 2021	Difference	
China	137	335	1.6	1.4	-0.2	
Total	137	335	1.6	1.4	-0.2	

Table 21: Tingyi's overall change analysis results

China was the only country included in Tingyi's analysis in 2018 and 2021. Comparing Figures 2.5B and C, the decrease observed in mean HSR between 2018 and 2021 is to some degree attributed to the change in category sales of 'Bottled Water', which decreased from 2018 to 2021 from 9% to 5%. 'Bottled Water' received a mean HSR of 5.0 in both Product Profiles, and so the decrease in sales of this category contributed to the overall mean decrease in HSR between 2018 and 2021. The other contributor to the overall mean decrease in HSR for Tingyi was a decrease in the unweighted and sales-weighted mean HSR for the 'Rice, Pasta and Noodles' category, with a 0.1 HSR decrease in this category alone. On deeper examination of the data at the product level, there is no clear reason for this decrease in mean HSR, however it is likely due to the inclusion of a much larger number of products in 2021 versus 2018, and hence a larger number of products with less healthy nutrient profiles overall. It is important to note that Tingyi did not engage in the Product Profile data review process in 2018 or 2021, and no Tingyi products provided saturated fat or total sugar values. This has meant that proxy values were used in analysis, and so Tingyi's results should be interpreted with caution. We cannot say what the results would look like if product-specific saturated fat and total sugar values were used, except that there may have been a wider range of HSRs in this category. Another important factor to consider when interpreting Tingyi's results is that products in the 'Rice, Pasta and Noodles' category were evaluated using "as sold" nutrient values. No nutrient values "as prepared" were provided and hence the use of the "as sold" values would have resulted in a lower mean HSR for this category for Tingyi.



Table 2J: Categories for each country for Tingyi in 2018 and 2021.

	China
	Bottled Water*
	Dairy
2018	Juice
	RTD Tea
	Rice, Pasta and Noodles
	Bottled Water - Pure
	Dairy
2021	Juice
	RTD Tea
	Rice, Pasta and Noodles
	Decrease in mean HSR
	(1.6 to 1.4)

 $\ensuremath{\textbf{Bold}}$ indicates category is present in both years

* The 2018 EMI category 'Bottled Water' was split into two categories in 2021 ('Bottled Water – Pure' and 'Bottled Water – Other')

3. COMPANIES WITH NO CHANGE IN MEAN HSR BETWEEN 2018-2021

There were four companies that showed no change in mean HSR between 2018 and 2021 (Coca-Cola, Grupo Bimbo, Kellogg and PepsiCo). This section shows the proportion of category sales for each of these companies both overall and only including those that were assessed in both 2018 and 2021.

3.1 Coca-Cola

<u>Coca-Cola</u> showed no change in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=1.8 to 1.8). The analysis below was based only on the nine countries that were common to both Product Profiles in 2018 and 2021 and the same overall result was observed (**Table 3A**).

No. products Country 2018		No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	158	56	1.7	2.1	+0.4
China	66	68	2.1	1.8	-0.3
Hong Kong	58	48	1.8	2.3	+0.5
India	32	48	1.9	1.6	-0.3
Mexico	139	321	1.9	1.6	-0.3
New Zealand	152	81	1.9	2.0	+0.1
South Africa	82	72	1.4	1.9	+0.5
UK	148	258	2.2	2.2	0.0
USA	351	281	1.7	1.8	+0.1
Total	1186	1233	1.8	1.8	0.0

Table 3A: Coca-Cola overall change analysis results

* Results also weighted by country sales

Figures 3.1A and C show the differences in the proportion of category sales both for all 10 countries included in the 2021 Product Profile, and for only those nine countries which appeared in both the 2018 and 2021 Product Profiles. Japan was included in the 2021 Product Profile but not 2018. The proportions of sales from each category did not vary substantially between 2018 and 2021.



3.2 Grupo Bimbo

<u>Grupo Bimbo</u> showed no change in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.7 to 2.7). The analysis below was based only on the four countries that were common to both Product Profiles in 2018 and 2021 and the same overall result was observed (**Table 3B**).

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference			
China	20	91	2.1	2.5	+0.4			
Mexico	225	349	2.6	2.3	-0.3			
UK	16	16	3.5	3.8	+0.3			
USA	216	334	2.9	3.1	+0.2			
Total	477	790	2.7	2.7	0.0			

Table 3B: Grupo Bimbo overall change analysis results

* Results also weighted by country sales

Figures 3.2A and C show the differences in the proportion of category sales both for all six countries included in the 2021 Product Profile, and for only those four countries which appeared in both the 2018 and 2021 Product Profiles. Brazil and Canada were included in the 2021 Product Profile but not 2018. The proportions of sales from each category remained consistent for Grupo Bimbo between 2018 and 2021.



3.3 Kellogg

<u>Kellogg</u> showed a slight increase in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.5 to 2.6). When analysis was restricted to include only the eight countries that were common to both Product Profiles in 2018 and 2021, the result changed slightly and no changes in overall mean HSR were observed (**Table 3C**).

No. produ Country 2018		No. products 2021	Category sales- weighted HSR 2018*	Category sales- weighted HSR 2021*	Difference
Australia	108	92	3.1	3.1	0.0
Hong Kong	40	35	2.6	2.7	+0.1
India	36	25	3.0	2.6	-0.4
Mexico	64	94	2.3	2.7	+0.4
NZ	108	92	3.3	3.1	-0.2
South Africa	20	37	3.3	3.1	-0.2
UK	243	196	2.7	2.7	0.0
USA	691	623	2.5	2.5	0.0
Total 1310		1194	2.5	2.5	0.0

Table 3C: Kellogg overall change analysis results

* Results also weighted by country sales

Figures 3.3A and C show the differences in the proportion of category sales both for all nine countries included in the 2021 Product Profile, and for only those eight countries which appeared in both the 2018 and 2021 Product Profiles. Canada was included in the 2021 Product Profile but not 2018. The proportions of sales from each category remained consistent for Kellogg between 2018 and 2021.



3.4 PepsiCo

<u>PepsiCo</u> showed no change in mean HSR between the 2018 and 2021 Product Profiles (mean HSR=2.3 to 2.3). The analysis below was based only on the four countries that were common to both Product Profiles in 2018 and 2021 and the same overall result was observed (**Table 3D**).

Country	No. products 2018	No. products 2021	Category sales- weighted HSR 2018 [*]	Category sales- weighted HSR 2021*	Difference
Australia	220	181	2.3	2.4	+0.1
China	138	155	1.8	1.8	0.0
Hong Kong	79	96	3.3	2.9	-0.3
India	98	153	2.0	1.9	-0.1
Mexico	213	291	1.7	1.9	+0.2
NZ	156	176	2.0	2.1	+0.1
South Africa	68	88	1.5	1.9	+0.4
UK	222	340	2.7	3.0	+0.3
USA	619	775	2.4	2.3	-0.1
Total	1813	2255	2.3	2.3	0.0

Table 3D: PepsiCo's overall change analysis results

* Results also weighted by country sales

Figures 3.4A and C show the differences in the proportion of category sales both for all 10 countries included in the 2021 Product Profile, and for only those nine countries which appeared in both the 2018 and 2021 Product Profiles. Russia was included in the 2021 Product Profile but not 2018. The proportions of sales from each category remained consistent for PepsiCo between 2018 and 2021.



CONCLUSIONS AND INTERPRETATION

Key findings

Mean healthiness of products

- The overall mean healthiness of the 25 companies' products included in this analysis was low (2.4) and the mean healthiness of product portfolios varied substantially between the 25 companies (range from 1.0 to 3.5 sales-weighted mean HSR). Differences in mean healthiness between companies reflect primarily differences in product mix but also to a lesser extent differences in the healthiness of products within the same categories.
- 2. Companies with portfolios dominated by dairy products ranked higher when evaluating healthiness using the Health Star Rating, whereas companies selling predominantly confectionery items generally ranked lowest. For example, companies such as FrieslandCampina, Danone and Arla consistently ranked highest in terms of mean HSR whereas companies such as Ferrero and Mars ranked lowest.
- 3. Estimates of the comparative healthiness of product portfolios weighted by sales changed some rankings and generally increased the disparities between companies. Some companies derived quite different proportions of their sales from healthy versus unhealthy products. Robust sales-weighted estimates on single-product level will provide the best idea of the impact of a company's products on consumer health. The third-party derived sales data used in the current assessment does not provide sufficient granularity to do this. Obtaining these data directly from companies would be the only method to do this.
- 4. When results were weighted by sales, 10 out of the 25 companies showed an increase in mean HSR, illustrating that proportionately more sales are from healthy products (e.g. Danone, Arla, Grupo Bimbo). However, seven out of the 25 companies showed a decrease in mean Health Star Rating when results were weighted by sales, illustrating that proportionately more sales are from less healthy products (e.g. PepsiCo, Keurig, Mars). These companies with portfolios dominated by less healthy products should put more emphasis on marketing and driving sales of their healthier options.
- 5. When examining results by Euromonitor subset, categories such as 'Bottled Water Pure', 'Processed Fruit and Vegetables', 'Edible Oils' and 'Breakfast Cereals' had the highest mean Health Star Ratings. Not surprisingly, categories such as 'Confectionery', 'Concentrates' and 'Energy Drinks' which generally contained products high in sugar had the lowest mean overall Health Star Ratings.

Proportions of products defined as healthy (HSR \geq 3.5) or eligible for marketing to children

- 6. The overall proportion of companies' products defined as healthy was low (31%). The proportion of products defined as healthy varied between companies (from 1% for Ferrero to 61% for Danone).
- 7. The proportion of companies' products defined as eligible for marketing to children under the WHO criteria was very low (9%) with one company having no products eligible for marketing to children (Ferrero). This metric highlights the poor nutritional quality of most of the foods included but is less able to discriminate between the relative performances of companies than the HSR due to different models being used in each region.
- 8. The proportion of sales eligible for marketing to children under the WHO criteria was also very low, and often lower than the proportion of sales defined as 'healthy' using the HSR cut point of ≥3.5. This reflects the more stringent criteria applied for eligibility to market to children under the WHO models.
- 9. In some Euromonitor subsets there was a wide range in the proportion of products eligible by country (e.g. breakfast cereals ranging from 28-100%), which likely illustrates that the product range within each category can vary significantly between countries and perhaps the nutritional content of similar products could also vary greatly, highlighting areas in greater need of reformulation.

Changes in the healthiness of products between 2018 and 2021

- 10. Between 2018 and 2021, nine companies showed a mean increase in HSR, five companies showed a decrease, and four companies showed no change.
- 11. Nestlé showed the most positive change, with their mean HSR going from 1.9 in 2018 to 2.7 in 2021. Tingyi on the other hand showed the most negative change, decreasing its mean HSR from 1.6 to 1.4 between 2018 and 2021.

12. Nestlé's positive change was driven primarily by the divestment of its US confectionery and ice cream businesses, subsequently improving its mean HSR by removing a large proportion of unhealthy sales between 2018 and 2021. For other companies, the changes in mean HSR were driven by a mixture of changes in product category sales, changes in healthiness of product categories, as well as changes in how data were derived, with increased company engagement in 2021 leading in some cases to improvements in mean HSR.

Methodological limitations

The results of this research should be considered in relation to the following limitations:

Section 1

The limited nutrition data available. The problem was addressed by using proxy data to enable nutrient profiling unless a large proportion of data was missing. In the latter circumstance products were excluded from analysis. Of note, no alternative nutrient profiling model has been identified that would make better use of the limited data available. The most likely impact of using proxy nutrient values was underestimation of the real differences between products (because proxy values were imputed at the sub-category level), and correspondingly, therefore, underestimation of the real differences between companies.

The absence of a complete list of all marketed products. Listings of all products sold by each company in each country were sought from the companies but many did not provide them. The solution was to compile listings based upon data extracted from The George Institute's global FoodSwitch database and Innova Market Insight's database and to have each company check these data. The majority of companies (n=18) either provided nutrient data directly or checked the provided product lists prior to analysis, however this left data for seven companies unchecked. Results should be interpreted with caution as a result.

Restriction of the analysis to the top five categories from the 25 largest global food and beverage companies. The assessment of the top five categories from 25 of the largest food and beverage manufacturers was a pragmatic compromise designed to ensure feasibility and meaningful comparisons based upon the average nutritional composition of the majority of products made by each company. For the majority of companies restricting to the top five categories resulted in more than 90% of product sales within each country being included in analysis. This strategy will not have affected the primary conclusions of the project about the relative nutritional quality of the products provided by the included companies but how the included companies compare to other smaller companies, artisanal/street food providers, quick service restaurants or home-cooked meals is unknown.

Global sales coverage. There was a level of variation in the proportion of a company's global sales derived from the 25 countries included the analyses – ranging from 51% (Unilever) to 100% (China Mengniu and Yili). The lower this proportion, the less representative the results are of a company's complete global profile. However, this analysis was not designed to undertake a global comparison, but instead to use these 25 countries to highlight differences both within and between the healthiness of the product portfolios from the top 25 global food companies. We were also unable to show what percentage of the within-category sales were covered with the products included in analysis, however this was beyond the scope of our analysis and is beyond the depth of the data provided by Euromonitor.

Degree of industry participation. 18 of the 25 companies elected to engage in the research process in some way, with 12 editing/checking nutrition information to use in analysis, four providing data directly (although not complete information) and two companies did a combination of these. Although this is a high level of industry participation for the project, participation from the remaining seven companies would have enabled more complete, up-to-date data and more reliable and informative analyses with reduced reliance on imputed values.

As sold versus as prepared nutrient values. For some product categories, nutrient values can be provided for either the product "as sold" or for the product "as prepared". Example categories include 'Other Hot Drinks' and 'Rice, Pasta and Noodles'. The HSR rules state that the HSR must be based on the nutrient values displayed on-pack, however the form of food that companies choose to display nutrient information for can vary between company and even within one company across different categories. For example, nutrient values for Tingyi's 'Rice, Pasta and Noodles' products were provided "as sold", resulting in a lower mean HSR for this category (0.6). For Nestlé on the other hand, nutrient values "as prepared" were provided, resulting in a higher mean HSR (2.7). Interestingly, even for Nestlé, within just the 'Other Hot Drinks' category, for some countries data were provided "as sold" and others "as prepared".

Limitations of the nutrient profiling tools. The HSR and WHO models are all subject to ongoing evaluation and refinement. While all are based upon extensive research and validation, there is continuing discussion of how each operates for some food categories. Those fruit juices that are '100% fruit juices', for example, are able to receive high HSRs despite being high in free sugars because they receive positive points for fruit content. By contrast, some of the WHO models deems juice not eligible to be marketed to children given its role as a significant source of free sugars for children regardless of other nutritional value. In addition, the HSR model does not score 'non-nutritive' products, such as tea and instant coffee. As a result, these products have not been included in the analysis. This means that the results for companies such as Unilever and Nestlé, for example, are based on the proportion of its sales that are not generated by tea and coffee.

Differences in rankings. The different methods of nutritional assessment of the product portfolio (mean HSR, proportion HSR≥3.5 and proportion eligible for marketing to children) consistently identified Danone, Arla and FrieslandCampina as top ranked companies and Ferrero as a bottom ranked company based upon the nutritional profiles of the overall product portfolio (<u>Appendix D</u>). For the company rankings in between there was variation in the specific rankings assigned by each assessment method. This varied again with sales-weighting. As such, the various profiling methods proved an effective way to discriminate between companies based upon the healthiness of products but did not give the same findings. This is unsurprising given the different elements that contribute to each method and the similar mean scores of several companies for some measures. This latter observation means that there is the potential for changes in the scores of just a few products to switch around the positions of companies in the rankings.

No consideration of serving size. Overweight and obesity are importantly determined by the quantity of food people choose to consume at one sitting (portion size) and the serving size recommended on packs may influence the quantity of a product eaten. This may particularly be the case for products provided in packages eaten at a single sitting (although not all such products have a serving size that corresponds to the package size). The association between serving size and portion size for products provided in packages that contain multiple servings is also not always strong. It has been argued that nutrient profiling models should include consideration of serving size but the absence of agreed national and international standards has meant that this has not proved possible to date.

Limited granularity of sales data. The Euromonitor 2019 sales data are provided by category not by individual product. This limits the capacity to obtain robust sales-weighted estimates of metrics because it is not possible to precisely match a sales figure for a category to an HSR value. Accordingly, for the overall sales-weighted results, the sales of the company within each category were matched to the mean HSR for all company products within that category. Under this strategy it is possible that erroneous results could be obtained because it is unlikely that sales volumes of every item sold by a company within a given category were the same. So, while the process should give a reasonable sales-weighted estimate of the mean healthiness of products it is imperfect. Similarly, the sales-weighted results relating to sales of healthy products and sales of products or those eligible to be marketed to children in any category is directly proportional to the total sales of that category.

Section 2

Short timeframe between Product Profiles. Given the relatively short timeframe between the 2018 and 2021 Index, any changes observed in the mean healthiness of company product profiles is more likely to

be due to divestments and acquisitions, and to changes in the categories included in analysis. Results should therefore be interpreted with caution.

Limited countries included. Due to only nine countries being included in the 2018 Product Profile analysis, we could only evaluate changes for each company in the same nine countries. A limitation of doing this is that for some companies, the major markets the company operated in were not necessarily included. The range of global sales coverage included in the change analysis ranged from 12% for Suntory in 2021 and 98% for Tingyi in 2021.

Recommendations for companies

Though obvious, it is worth stating the four key ways companies should be encouraged to improve their impact on public health:

- Product mix increase the proportion of healthier products within the portfolio. This can be achieved either through product reformulation, the introduction of healthier product lines, or through divestments and acquisitions. Nestlé demonstrated the power of this with an increase in the mean healthiness of their portfolio through the divestment of their US confectionery and ice cream businesses between 2018 and 2021.
- Marketing investment re-direct investment towards the marketing of products with healthier compositions. Companies have a particular opportunity to improve the nutrient composition of products that are important for children's diets and to positively support them.
- 3. **Product reformulation** improve the nutrition composition of existing products, particularly established, high sales volume products.
- 4. **Transparent labelling** include all Codex-recommended nutrients on product labels particularly countries like India and China where regulations don't currently require them. Consumers are increasingly seeking transparency, particularly full and clear nutrition information on products. Ensuring that labelling in all countries meets the minimum Codex-recommended nutrients would also ensure that future Product Profiles do not rely on proxy values for countries where nutrients such as total sugar or saturated fat are not mandated to be labelled.

APPENDIX A – Mandatory nutrition labelling requirements by country

Nutrient	AU	BR	CA	CN	DN	FI	FR	DE	НК	IN	ID	IT	JP	MX	NE	NZ	NG	PH	RU	ZA	SE	TH	UK	US	VT
Energy (kJ/ kcal)	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	٧	۷	٧	٧	٧	٧	٧	٧	٧	٧	٧	V	٧	٧	Х
Protein	٧	٧	٧	٧	٧	٧	٧	٧	٧	V	٧	٧	V	٧	V	٧	V	٧	V	٧	V	V	٧	٧	Х
Total fat	٧	٧	٧	٧	٧	٧	V	٧	٧	V	٧	٧	٧	٧	V	٧	V	٧	V	V	٧	V	٧	٧	Х
Saturated fat	٧	٧	٧	Х	٧	٧	V	٧	٧	Х	V	٧	Х	٧	V	٧	Х	٧	Х	V	٧	V	٧	٧	Х
Trans fat	Х	٧	٧	Х	Х	Х	Х	Х	Х	Х	٧	Х	Х	Х	Х	Х	Х	٧	Х	Х	Х	Х	Х	٧	Х
Carbohydrate	٧	V	٧	V	V	٧	V	٧	٧	V	V	V	٧	٧	V	V	V	V	V	V	٧	V	٧	٧	Х
Total sugar	٧	Х	٧	Х	٧	٧	V	٧	٧	٧	٧	٧	Х	٧	٧	٧	۷	٧	Х	V	V	V	٧	٧	Х
Added sugar	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	٧	Х
Sodium/salt	٧	٧	٧	٧	٧	٧	V	٧	٧	Х	٧	٧	V	٧	٧	٧	۷	٧	Х	V	V	V	٧	٧	Х
Fibre	Х	V	٧	Х	Х	Х	Х	Х	Х	Х	V	Х	Х	Х	X	Х	X	V	Х	V	Х	V	Х	٧	Х

Appendix A, Table 1: Mandatory nutrition labelling requirements by country

APPENDIX B – Results by category and country for each company

1. Ajinomoto

Appendix B, Table 1a: Mean HSR by category for each country for Ajinomoto

	Brazil	Japan	Thailand	USA
Concentrates	0.5			
Processed Meat and Seafood		2.2		
Ready Meals		1.9		3.1
Rice, Pasta and Noodles			0.5	
RTD Coffee		2.3	4.0	
Sauces, Dressings and Condiments	0.5	1.0		
Soup	0.7	0.9		

Appendix B, Table 1b: Proportion of products with HSR≥3.5 by category for each country for Ajinomoto

	Brazil	Japan	Thailand	USA
Concentrates	0%			
Processed Meat and Seafood		9%		
Ready Meals		5%		34%
Rice, Pasta and Noodles			0%	
RTD Coffee		0%	100%	
Sauces, Dressings and Condiments	0%	0%		
Soup	0%	0%		

Appendix B, Table 1c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Ajinomoto

	Brazil	Japan	Thailand	USA
Concentrates	0%			
Processed Meat and Seafood		45%		
Ready Meals		2%		0%
Rice, Pasta and Noodles			0%	
RTD Coffee		0%	0%	
Sauces, Dressings and Condiments	0%	0%		
Soup	0%	3%		

2. Arla

Appendix B, Table 2a: Mean HSR by category for each country for Arla

	Australia	Canada	Denmark	Finland	Germany	Hong Kong	Russia	Sweden	UK	USA
Dairy	1.0	2.4	3.5	3.3	3.0	1.0	2.9	3.4	3.4	2.4
Sauces, Dressings and Condiments			2.8					2.5		
Soup			3.0					3.1		

Appendix B, Table 2b: Proportion of products with HSR≥3.5 by category for each country for Arla

	Australia	Canada	Denmark	Finland	Germany	Hong Kong	Russia	Sweden	UK	USA
Dairy	0%	26%	67%	58%	49%	0%	71%	63%	66%	25%
Sauces, Dressings and Condiments			0%					7%		
Soup			0%					22%		

Appendix B, Table 2c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Arla

	Australia	Canada	Denmark	Finland	Germany	Hong Kong	Russia	Sweden	UK	USA
Dairy	0%	0%	41%	34%	29%	0%	43%	33%	36%	0%
Sauces, Dressings and Condiments			67%					7%		
Soup			80%					78%		

3. BRF

Appendix B, Table 3a: Mean HSR by category for each country for BRF

	Brazil
Dairy	2.7
Ice Cream and Frozen Desserts	1.8
Processed Fruit and Vegetables	5.0
Processed Meat and Seafood	1.8
Ready Meals	2.8

Appendix B, Table 3b: Proportion of products with HSR≥3.5 by category for each country for BRF

	Brazil
Dairy	44%
Ice Cream and Frozen Desserts	0%
Processed Fruit and Vegetables	100%
Processed Meat and Seafood	19%
Ready Meals	35%

Appendix B, Table 3c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for BRF

	Brazil
Dairy	18%
Ice Cream and Frozen Desserts	0%
Processed Fruit and Vegetables	0%
Processed Meat and Seafood	3%
Ready Meals	0%

4. Campbell

Appendix B,	Table 4a: Mean	n HSR by catego	ory for each c	ountry for Campbell
		, ,	/ /	/ /

	Canada	Mexico	USA
Baked Goods			3.2
Juice	4.8	4.8	2.9
Sauces, Dressings and Condiments	3.0	3.8	3.2
Savoury Snacks	2.1		2.5
Soup	3.2	3.2	3.3

Appendix B, Table 4b: Proportion of products with HSR≥3.5 by category for each country for Campbell

	Canada	Mexico	USA
Baked Goods			63%
Juice	100%	100%	30%
Sauces, Dressings and Condiments	57%	93%	54%
Savoury Snacks	0%		30%
Soup	51%	39%	63%

Appendix B, Table 4c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Campbell

	Canada	Mexico	USA
Baked Goods			1%
Juice	0%	50%	13%
Sauces, Dressings and Condiments	0%	0%	0%
Savoury Snacks	0%		3%
Soup	0%	0%	0%

5. China Mengniu

Appendix B, Table 5a: Mean HSR by category for each country for China Mengniu

	China	Hong Kong
Dairy	3.0	4.0
Ice Cream and Frozen Desserts	2.3	

Appendix B, Table 5b: Proportion of products with HSR≥3.5 by category for each country for China Mengniu

	China	Hong Kong
Dairy	27%	100%
Ice Cream and Frozen Desserts	0%	

Appendix B, Table 5c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for China Mengniu

	China	Hong Kong
Dairy	11%	25%
Ice Cream and Frozen Desserts	0%	

6. Coca-Cola

Appendix B, Table 6a: Mean HSR by category for each country for Coca-Cola

	Australia	China	Hong Kong	India	Japan	Mexico	New Zealand	South Africa	UK	USA
Asian Specialty Drinks			1.5							
Bottled Water - Other	2.0							2.0	2.1	2.1
Bottled Water - Pure	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Carbonates	1.8	1.5	1.4	1.3	1.5	1.5	1.4	1.8	1.8	1.2
Concentrates							1.5			
Dairy		3.6				3.6				
Energy Drinks								1.0		
Juice	5.0	1.3	1.4	1.3		1.8	3.0		4.4	2.5
RTD Coffee					1.3					
RTD Tea		1.7	1.9		1.8					
Sports Drinks	1.7				1.8	1.7	1.6	1.6	2.0	1.6

	Australia	China	Hong Kong	India	Japan	Mexico	New Zealand	South Africa	UK	USA
Asian Specialty Drinks			0%							
Bottled Water - Other	0%							0%	5%	9%
Bottled Water - Pure	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Carbonates	7%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Concentrates							0%			
Dairy		100%				72%				
Energy Drinks								0%		
Juice	100%	6%	0%	8%		6%	52%		84%	34%
RTD Coffee					0%					
RTD Tea		0%	0%		0%					
Sports Drinks	0%				0%	6%	0%	0%	0%	0%

Appendix B, Table 6b: Proportion of products with HSR≥3.5 by category for each country for Coca-Cola

	Australia	China	Hong Kong	India	Japan	Mexico	New Zealand	South Africa	UK	USA
Asian Specialty Drinks			0%							
Bottled Water - Other	0%							0%	26%	32%
Bottled Water - Pure	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Carbonates	0%	0%	0%	5%	33%	0%	0%	0%	2%	0%
Concentrates							0%			
Dairy		0%				1%				
Energy Drinks								0%		
Juice	100%	0%	0%	0%		6%	3%		0%	25%
RTD Coffee					0%					
RTD Tea		0%	0%		0%					
Sports Drinks	0%				0%	0%	0%	0%	0%	0%

Appendix B, Table 6c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Coca-Cola

7. ConAgra

Appendix B, Table 7a: Mean HSR by category for each country for ConAgra

	Hong Kong	India	Mexico	NZ	USA
Breakfast Cereals			3.7		
Edible Oils		4.0	4.8		
Other Hot Drinks	0.5				
Processed Fruit and Vegetables					4.0
Processed Meat and Seafood					2.5
Ready Meals					3.3
Sauces, Dressings and Condiments			3.2		2.5
Savoury Snacks		3.2	2.7	2.4	2.4
Sweet Spreads		4.2			

Appendix B, Table 7b: Proportion of products with HSR≥3.5 by category for each country for ConAgra

	Hong Kong	India	Mexico	NZ	USA
Breakfast Cereals			67%		
Edible Oils		86%	100%		
Other Hot Drinks	0%				
Processed Fruit and Vegetables					87%
Processed Meat and Seafood					40%
Ready Meals					68%
Sauces, Dressings and Condiments			61%		33%
Savoury Snacks		49%	13%	13%	32%
Sweet Spreads		100%			

Appendix B, Table 7c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for ConAgra

	Hong Kong	India	Mexico	NZ	USA
Breakfast Cereals			0%		
Edible Oils		100%	0%		
Other Hot Drinks	0%				
Processed Fruit and Vegetables					9%
Processed Meat and Seafood					0%
Ready Meals					0%
Sauces, Dressings and Condiments			0%		4%
Savoury Snacks		0%	0%	0%	1%
Sweet Spreads		0%			

8. Danone

	Australia	Brazil	China	France	Hong Kong	Mexico	Russia	South Africa	UK	USA
Bottled Water - Other			2.0	2.2		2.0			2.0	
Bottled Water - Pure	5.0	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Dairy	3.3	3.4	3.0	3.6		3.3	3.0	3.3	3.9	3.6
Juice										
RTD Coffee										3.9

Appendix B, Table 8a: Mean HSR by category for each country for Danone

Appendix B, Table 8b: Proportion of products with HSR≥3.5 by category for each country for Danone

	Australia	Brazil	China	France	Hong Kong	Mexico	Russia	South Africa	UK	USA
Bottled Water - Other			0%	7%		0%			0%	
Bottled Water - Pure	100%	100%	100%	100%	100%	100%	100%		100%	100%
Dairy	60%	72%	25%	61%		55%	39%	63%	82%	74%
Juice									0%	
RTD Coffee										96%

Appendix B, Table 8c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Danone

	Australia	Brazil	China	France	Hong Kong	Mexico	Russia	South Africa	UK	USA
Bottled Water - Other			0%	28%		0%			5%	
Bottled Water - Pure	100%	100%	100%	100%	100%	100%	100%		100%	100%
Dairy	4%	0%	80%	35%		1%	36%	20%	36%	3%
Juice									0%	
RTD Coffee										22%

9. Ferrero

Appendix B, Table 9a: Mean HSR by category for each country for Ferrero

	Australia	China	Germany	НК	India	Italy	Mexico	NZ	UK	USA
Baked Goods						1.3			1.0	
Confectionery	0.8	0.5	0.6	0.8	0.6	1.0	0.8	1.9	0.6	1.6
Dairy			0.7							
RTD Tea						1.5				
Sweet Biscuits, Snack Bars and Fruit Snacks			0.5							1.4
Sweet Spreads	1.0		1.0	0.5	1.0	1.0	1.0		1.0	0.7

Appendix B, Table 9b: Proportion of products with HSR≥3.5 by category for each country for Ferrero

	Australia	China	Germany	НК	India	Italy	Mexico	NZ	UK	USA
Baked Goods						0%			0%	
Confectionery	2%	0%	0%	0%	0%	11%	0%	28%	1%	0%
Dairy			0%							
RTD Tea						0%				
Sweet Biscuits, Snack Bars and Fruit Snacks			0%							0%
Sweet Spreads	0%		0%	0%	0%	0%	0%		0%	0%

	Australia	China	Germany	НК	India	Italy	Mexico	NZ	UK	USA
Baked Goods						0%			0%	
Confectionery	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dairy			0%							
RTD Tea						0%				
Sweet Biscuits, Snack Bars and Fruit Snacks			0%							0%
Sweet Spreads	0%		0%	0%	0%	0%	0%	0%	0%	0%

Appendix B, Table 9c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Ferrero

10. FrieslandCampina

Appendix B, Table 10a: Mean HSR by category for each country for FrieslandCampina

	Germany	НК	Indonesia	Netherlands	Nigeria	Philippines	Russia	Thailand	UK	Vietnam
Dairy	3.5	3.1	3.0	4.0	3.9	2.4	2.5	3.1	4.2	2.4
Other Hot Drinks					1.5					
Processed Meat and Seafood				3.8						

Appendix B, Table 10b: Proportion of products with HSR≥3.5 by category for each country for FrieslandCampina

	Germany	НК	Indonesia	Netherlands	Nigeria	Philippines	Russia	Thailand	UK	Vietnam
Dairy	55%	56%	72%	72%	100%	29%	13%	45%	100%	37%
Other Hot Drinks					0%					
Processed Meat and Seafood				90%						

Appendix B, Table 10c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for FrieslandCampina

	Germany	НК	Indonesia	Netherlands	Nigeria	Philippines	Russia	Thailand	UK	Vietnam
Dairy	30%	38%	0%	50%	71%	0%	22%	13%	9%	11%
Other Hot Drinks					0%					
Processed Meat and Seafood				90%						

11. General Mills

Appendix B, Table 11a: Mean HSR by category for each country for General Mills

	Australia	Canada	China	НК	India	Mexico	NZ	South Africa	UK	USA
Baked Goods	1.8	1.3			1.9	1.3				
Breakfast Cereals	4.2	2.6	3.0	3.3		3.1	4.0	3.8	3.8	2.7
Dairy		3.9		3.2			3.8		3.5	3.3
Ice Cream and Frozen Desserts			2.0	1.7		1.6			1.7	
Ready Meals	2.9	2.3	2.8	3.0			3.5	2.6	2.7	2.3
Rice, Pasta and Noodles	3.6						4.0			
Sauces, Dressings and Condiments	3.4						3.8			
Soup										3.5
Sweet Biscuits, Snack Bars and Fruit Snacks		2.5		2.6		2.5		2.4	2.5	2.3
Sweet Spreads					1.2					

	Australia	Canada	China	НК	India	Mexico	NZ	South Africa	UK	USA
Baked Goods	15%	0%			7%	4%				
Breakfast Cereals	100%	22%	29%	50%		32%	100%	100%	85%	21%
Dairy		79%		40%			77%		70%	59%
Ice Cream and Frozen Desserts			0%	0%		0%			6%	
Ready Meals	41%	7%	8%	14%			71%	25%	21%	14%
Rice, Pasta and Noodles	90%						100%			
Sauces, Dressings and Condiments	73%						100%			
Soup										88%
Sweet Biscuits, Snack Bars and Fruit Snacks		17%		14%		21%		0%	9%	18%
Sweet Spreads					0%					

Appendix B, Table 11b: Proportion of products with HSR≥3.5 by category for each country for General Mills

Appendix B, Table 11c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for General Mills

	Australia	Canada	China	НК	India	Mexico	NZ	South Africa	UK	USA
Baked Goods	4%	0%			0%	2%				
Breakfast Cereals	26%	0%	0%	17%		0%	11%	0%	8%	1%
Dairy		2%		20%			65%		33%	50%
Ice Cream and Frozen Desserts			0%	0%		0%			0%	
Ready Meals	30%	0%	7%	25%			71%	0%	0%	0%
Rice, Pasta and Noodles	95%						100%			
Sauces, Dressings and Condiments	0%						0%			
Soup										0%
Sweet Biscuits, Snack Bars and Fruit Snacks		0%		0%		0%		0%	0%	1%
Sweet Spreads					0%					

12. Grupo Bimbo

Appendix B, Table 12a: Mean HSR by category for each country for Grupo Bimbo

	Brazil	Canada	China	Mexico	UK	USA
Baked Goods	3.4	3.0	2.5	2.6	3.8	3.2
Confectionery				1.2		
Savoury Snacks				2.4		1.5
Sweet Biscuits, Snack Bars and Fruit Snacks				1.5		

Appendix B, Table 12b: Proportion of products with HSR≥3.5 by category for each country for Grupo Bimbo

	Brazil	Canada	China	Mexico	UK	USA
Baked Goods	67%	65%	24%	47%	88%	57%
Confectionery				0%		
Savoury Snacks				27%		0%
Sweet Biscuits, Snack Bars and Fruit Snacks				1%		

Appendix B, Table 12c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Grupo Bimbo

	Brazil	Canada	China	Mexico	UK	USA
Baked Goods	0%	3%	23%	4%	75%	1%
Confectionery				2%		
Savoury Snacks				5%		0%
Sweet Biscuits, Snack Bars and Fruit Snacks				0%		

13. Kellogg

Appendix B, Table 13a: Mean HSR by category for each country for Kellogg

	Australia	Canada	Hong Kong	India	Mexico	NZ	South Africa	UK	USA
Baked Goods		2.6							2.9
Breakfast Cereal	3.5	3.6	3.0	2.6	3.0	3.5	3.3	3.1	3.0
Processed Meat and Seafood									3.9
Savoury Snacks	1.2	1.9	2.3		1.9	1.2	1.2	2.1	1.7
Sweet Biscuits, Snack Bars and Fruit Snacks	2.5	2.2			2.1	2.5	2.6	2.5	2.2

Appendix B, Table 13b: Proportion of products with HSR≥3.5 by category for each country for Kellogg

	Australia	Canada	Hong Kong	India	Mexico	NZ	South Africa	UK	USA
Baked Goods		0%							35%
Breakfast Cereal	63%	67%	34%	24%	38%	63%	36%	49%	36%
Processed Meat and Seafood									88%
Savoury Snacks	0%	0%	0%		0%	0%	0%	0%	2%
Sweet Biscuits, Snack Bars and Fruit Snacks	32%	9%			11%	32%	0%	27%	14%

Appendix B, Table 13c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Kellogg

	Australia	Canada	Hong Kong	India	Mexico	NZ	South Africa	UK	USA
Baked Goods		0%							0%
Breakfast Cereal	22%	0%	10%	12%	0%	22%	0%	18%	2%
Processed Meat and Seafood									0%
Savoury Snacks	0%	0%	0%		0%	0%	0%	0%	0%
Sweet Biscuits, Snack Bars and Fruit Snacks	0%	0%			0%	0%	0%	0%	0%
14. Keurig

Appendix B, Table 14a: Mean HSR by category for each country for Keurig

	Hong Kong	Mexico	USA
Bottled Water - Other			2.0
Bottled Water - Pure		5.0	
Carbonates		1.7	1.3
Juice	1.0		2.1
Processed Fruit and Vegetables			3.3
RTD Tea	1.3	1.4	1.6

Appendix B, Table 14b: Proportion of products with HSR≥3.5 by category for each country for *Keurig*

	Hong Kong	Mexico	USA
Bottled Water - Other			0%
Bottled Water - Pure		100%	
Carbonates		2%	0%
Juice	0%		20%
Processed Fruit and Vegetables			68%
RTD Tea	0%	0%	0%

Appendix B, Table 14c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Keurig

	Hong Kong	Mexico	USA
Bottled Water - Other			100%
Bottled Water - Pure		100%	
Carbonates		0%	1%
Juice	0%		37%
Processed Fruit and Vegetables			9%
RTD Tea	0%	0%	2%

15. Kraft Heinz

Appendix B, Table 15a: Mean HSR by category for each country for Kraft Heinz

	Australia	Canada	China	Hong Kong	India	Mexico	New Zealand	UK	USA
Baked Goods						2.6			
Concentrates		1.1				1.2			
Dairy		2.4		2.1		2.6			2.9
Juice	3.6								
Processed Fruit and Vegetables	4.1			4.3	4.2		4.2	4.3	
Processed Meat and Seafood	3.7								2.4
Ready Meals		2.8				1.6	3.5	3.6	2.7
Sauces, Dressings and Condiments	2.5	2.2	1.1	2.4		1.9	2.5	2.2	2.0
Savoury Snacks				2.4					3.6
Soup	3.6			3.5			3.6	3.6	
Sweet Spreads		3.3					2.1		

	Australia	Canada	China	Hong Kong	India	Mexico	New Zealand	UK	USA
Baked Goods						57%			
Concentrates		0%				0%			
Dairy		20%		25%		43%			41%
Juice	66%								
Processed Fruit and Vegetables	99%			100%	100%		100%	100%	
Processed Meat and Seafood	94%								42%
Ready Meals		47%				0%	81%	97%	44%
Sauces, Dressings and Condiments	14%	19%	8%	24%		2%	20%	7%	15%
Savoury Snacks				0%					66%
Soup	89%			100%			93%	94%	
Sweet Spreads		53%					19%		

Appendix B, Table 15b: Proportion of products with HSR≥3.5 by category for each country for Kraft Heinz

Appendix B, Table 15c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Kraft Heinz

	Australia	Canada	China	Hong Kong	India	Mexico	New Zealand	UK	USA
Baked Goods						4%			
Concentrates		0%				0%			
Dairy		0%		0%		0%			1%
Juice	9%								
Processed Fruit and Vegetables	14%			0%	0%		33%	0%	
Processed Meat and Seafood	94%								0%
Ready Meals		0%				0%	75%	72%	1%
Sauces, Dressings and Condiments	1%	1%	5%	20%		0%	1%	3%	2%
Savoury Snacks				4%					8%
Soup	96%			100%			100%	87%	
Sweet Spreads		0%					0%		

16. Lactalis

Appendix B, Table 16a: Mean HSR by category for each country for Lactalis

	Australia	Brazil	Canada	China	France	India	Mexico	South Africa	UK	USA
Dairy	3.3	3.0	3.2	3.0	2.8	3.5	3.4	2.9	3.0	3.3
Juice			4.5					4.3		
RTD Coffee	4.1									
Sauces, Dressings and Condiments		2.6								

Appendix B, Table 16b: Proportion of products with HSR≥3.5 by category for each country for Lactalis

	Australia	Brazil	Canada	China	France	India	Mexico	South Africa	UK	USA
Dairy	56%	56%	50%	52%	43%	70%	74%	33%	41%	53%
Juice			100%					71%		
RTD Coffee	100%									
Sauces, Dressings and Condiments		17%								

Appendix B, Table 16c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Lactalis

	Australia	Brazil	Canada	China	France	India	Mexico	South Africa	UK	USA
Dairy	22%	15%	7%	17%	17%	36%	4%	18%	14%	10%
Juice			0%					0%		
RTD Coffee	0%									
Sauces, Dressings and Condiments		0%								

17. Mars

Appendix B, Table 17a: Mean HSR by category for each country for Mars

	Australia	China	Hong Kong	India	Mexico	NZ	Russia	South Africa	UK	USA
Confectionery	1.5	1.2	1.9	1.7	1.1	1.8	1.0	1.9	1.0	1.2
Dairy									2.8	
Ice Cream and Frozen Desserts	1.2								1.6	1.5
Ready Meals										3.4
Rice, Pasta and Noodles	3.7					3.6			3.6	3.1
Sauces, Dressings and Condiments	2.6		4.0			2.6	3.3	2.2	3.3	
Savoury Snacks										0.7
Soup								1.9		

Appendix B, Table 17b: Proportion of products with HSR≥3.5 by category for each country for Mars

	Australia	China	Hong Kong	India	Mexico	NZ	Russia	South Africa	UK	USA
Confectionery	15%	14%	30%	24%	9%	21%	0%	41%	14%	11%
Dairy									54%	
Ice Cream and Frozen Desserts	0%								0%	0%
Ready Meals										73%
Rice, Pasta and Noodles	98%					93%			96%	57%
Sauces, Dressings and Condiments	35%		100%			42%	33%	9%	53%	
Savoury Snacks										0%
Soup								13%		

	Australia	China	Hong Kong	India	Mexico	NZ	Russia	South Africa	UK	USA
Confectionery	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Dairy									0%	
Ice Cream and Frozen Desserts	0%						0%		0%	0%
Ready Meals								0%		0%
Rice, Pasta and Noodles	100%					83%			99%	21%
Sauces, Dressings and Condiments	0%		0%			0%	0%	0%	6%	
Savoury Snacks										0%
Soup								22%		

Appendix B, Table 17c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Mars

18. Meiji

Appendix B, Table 18a: Mean HSR by category for each country for Meiji

	China	Hong Kong	Japan
Confectionery	0.5	0.8	0.9
Dairy		3.1	3.2
Ice Cream and Frozen Desserts	2.1		2.2
Ready Meals			2.9
Sweet Biscuits, Snack Bars and Fruit Snacks		0.5	0.8

Appendix B, Table 18b: Proportion of products with HSR≥3.5 by category for each country for Meiji

	China	Hong Kong	Japan
Confectionery	0%	0%	1%
Dairy		13%	45%
Ice Cream and Frozen Desserts	0%		3%
Ready Meals			5%
Sweet Biscuits, Snack Bars and Fruit Snacks		0%	1%

Appendix B, Table 18c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Meiji

	China	Hong Kong	Japan
Confectionery	0%	0%	0%
Dairy		17%	11%
Ice Cream and Frozen Desserts	0%		0%
Ready Meals			26%
Sweet Biscuits, Snack Bars and Fruit Snacks		0%	0%

19. Mondelez

Appendix B, Table 19a: Mean HSR by category for each country for Mondelez

	Australia	Brazil	China	Hong Kong	India	Mexico	NZ	S. Africa	UK	USA
Baked Goods									1.2	
Concentrates		0.5	0.5		0.5	0.6				
Confectionery	0.9	0.8	1.8	0.6	0.5	2.1	1.0	1.3	0.8	2.4
Dairy	1.5					2.0			2.7	0.5
Other Hot Drinks	1.3			0.5	0.8		0.5		0.5	
Savoury Snacks	1.8	1.7	1.5	1.4		1.4	1.0	1.7		2.6
Sweet Biscuits, Snack Bars and Fruit Snacks	1.4	1.4	1.8	0.8	0.8	0.9	1.3	0.9	1.4	1.5

Appendix B, Table 19b: Proportion of products with HSR≥3.5 by category for each country for Mondelez

	Australia	Brazil	China	Hong Kong	India	Mexico	NZ	S. Africa	UK	USA
Baked Goods									0%	
Concentrates		0%	0%		0%	0%				
Confectionery	0%	2%	3%	0%	0%	40%	0%	19%	2%	23%
Dairy	20%					20%			26%	0%
Other Hot Drinks	13%			0%	0%		0%		0%	
Savoury Snacks	0%	0%	0%	0%		0%	0%	0%		29%
Sweet Biscuits, Snack Bars and Fruit Snacks	6%	2%	1%	0%	0%	0%	6%	0%	6%	4%

	Australia	Brazil	China	Hong Kong	India	Mexico	NZ	S. Africa	UK	USA
Baked Goods									0%	
Concentrates		0%	0%		0%	2%	0%			
Confectionery	0%	0%	0%	0%	0%	0%		0%	0%	0%
Dairy	20%					0%			57%	0%
Other Hot Drinks	0%			0%	0%		0%		10%	
Savoury Snacks	0%	0%	0%	0%		0%	0%	0%		7%
Sweet Biscuits, Snack Bars and Fruit Snacks	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Appendix B, Table 19c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Mondelez

20. Nestlé

Appendix B, Table 20a: Mean HSR by category for each country for Nestlé

	Australia	Brazil	China	France	Hong Kong	India	Mexico	S. Africa	UK	USA
Bottled Water - Other										2.0
Bottled Water - Pure				5.0			5.0		5.0	5.0
Breakfast Cereals	2.7							2.8	3.7	
Carbonates									1.8	
Concentrates							1.5			
Confectionery	0.7	0.7	1.0	0.7	0.7	0.7	0.9	0.5	1.0	
Dairy		2.8	2.8		3.2	2.8	2.0	1.9	3.0	1.5
Other Hot Drinks	1.7	2.0		3.9	3.0		3.9	3.1		2.6
Processed Meat and Seafood				4.1						
Ready Meals	2.6			3.2						3.3
Rice, Pasta and Noodles						2.4		3.5		
RTD Coffee			1.9		1.3					
RTD Tea					1.5					
Sauces, Dressings and Condiments			0.5			2.0				
Soup		0.8								
Sweet Biscuits, Snack Bars and Fruit Snacks	2.6	2.4	0.5							

	Australia	Brazil	China	France	Hong Kong	India	Mexico	S. Africa	UK	USA
Bottled Water - Other										0%
Bottled Water - Pure				100%			100%		100%	100%
Breakfast Cereals	26%							33%	64%	
Carbonates									0%	
Concentrates							25%			
Confectionery	1%	0%	0%	1%	0%	0%	0%	0%	5%	
Dairy		51%	44%		61%	48%	26%	15%	43%	26%
Other Hot Drinks	11%	15%		89%	0%		100%	75%		59%
Processed Meat and Seafood				96%						
Ready Meals	48%			53%						61%
Rice, Pasta and Noodles						11%		100%		
RTD Coffee			0%		0%					
RTD Tea					0%					
Sauces, Dressings and Condiments			0%			25%				
Soup		0%								
Sweet Biscuits, Snack Bars and Fruit Snacks	30%	21%	0%							

Appendix B, Table 20b: Proportion of products with HSR≥3.5 by category for each country for Nestlé

	Australia	Brazil	China	France	Hong Kong	India	Mexico	S. Africa	UK	USA
Bottled Water - Other										79%
Bottled Water - Pure				100%			100%		100%	100%
Breakfast Cereals	40%							0%	30%	
Carbonates									0%	
Concentrates							25%			
Confectionery	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Dairy		4%	12%		16%	24%	12%	0%	16%	0%
Other Hot Drinks	6%	0%		11%	0%		0%	0%		0%
Processed Meat and Seafood				8%						
Ready Meals	85%			17%						0%
Rice, Pasta and Noodles						6%		0%		
RTD Coffee			0%		0%					
RTD Tea					0%					
Sauces, Dressings and Condiments			0%			13%				
Soup		0%								
Sweet Biscuits, Snack Bars and Fruit Snacks	0%	0%	0%							

Appendix B, Table 20c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Nestlé

21. PepsiCo

Appendix B, Table 21a: Mean HSR by category for each country for PepsiCo

	Australia	China	Hong Kong	India	Mexico	NZ	Russia	S. Africa	UK	USA
Bottled Water - Other					2.0					
Bottled Water - Pure				5.0						5.0
Breakfast Cereals		3.7	3.6	3.7					4.1	
Carbonates	1.7	1.5	1.4	1.3	1.7	1.3	1.6	1.6	1.8	1.6
Concentrates						1.5				
Dairy							3.1			
Energy Drinks							1.1			
Juice		3.5	4.5	2.4			2.1		4.3	2.3
Sauces, Dressings and Condiments	3.9								3.1	
Savoury Snacks	3.0	1.9	2.9	1.4	2.3	2.1	2.9	1.9	3.1	2.7
Sports Drinks	1.7	1.5	1.5		1.5	1.5				1.6
Sweet Biscuits, Snack Bars and Fruit Snacks					1.8	3.7				

	Australia	China	Hong Kong	India	Mexico	NZ	Russia	S. Africa	UK	USA
Bottled Water - Other					0%					
Bottled Water - Pure				100%						100%
Breakfast Cereals		68%	59%	73%					100%	
Carbonates	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Concentrates						0%				
Dairy							47%			
Energy Drinks							0%			
Juice		50%	91%	36%			27%		81%	20%
Sauces, Dressings and Condiments	80%								50%	
Savoury Snacks	51%	2%	37%	6%	16%	16%	30%	5%	60%	29%
Sports Drinks	0%	0%	0%		0%	0%				0%
Sweet Biscuits, Snack Bars and Fruit Snacks					6%	70%				

Appendix B, Table 21b: Proportion of products with HSR≥3.5 by category for each country for PepsiCo

	Australia	China	Hong Kong	India	Mexico	NZ	Russia	S. Africa	UK	USA
Bottled Water - Other					100%					
Bottled Water - Pure				100%						100%
Breakfast Cereals		41%	31%	45%					31%	
Carbonates	0%	0%	0%	18%	0%	0%	18%	0%	31%	4%
Concentrates						0%				
Dairy							21%			
Energy Drinks							0%			
Juice		0%	8%	6%			0%		0%	17%
Sauces, Dressings and Condiments	0%								0%	
Savoury Snacks	0%	0%	0%	0%	0%	0%	0%	0%	1%	3%
Sports Drinks	21%	0%	0%		0%	0%				0%
Sweet Biscuits, Snack Bars and Fruit Snacks					0%	0%				

Appendix B, Table 21c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for PepsiCo

22. Suntory

Appendix B, Table 22a: Mean HSR by category for each country for Suntory

	Australia	China	France	Germany	Hong Kong	Japan	NZ	South Africa	UK
Baked Goods	0.5								
Bottled Water - Other	2.0						1.9		
Bottled Water - Pure						5.0	5.0		
Carbonates			1.7	1.3	1.3	1.3	1.9		2.0
Concentrates			0.8						1.7
Dairy	3.0								
Energy Drinks	1.0				0.9		1.0	1.5	1.3
Juice		1.5	1.7		1.0	2.4	4.6		2.0
RTD Coffee		1.2			2.5	3.0			
RTD Tea		2.0	2.0			2.1			
Sports Drinks	1.7				2.0				1.9

	Australia	China	France	Germany	Hong Kong	Japan	NZ	South Africa	UK
Baked Goods	0%								
Bottled Water - Other	0%						0%		
Bottled Water - Pure						100%	100%		
Carbonates			7%	0%	0%	0%	0%		17%
Concentrates			0%						0%
Dairy	17%								
Energy Drinks	0%				0%		0%	0%	0%
Juice		0%	6%		0%	43%	90%		12%
RTD Coffee		0%			25%	45%			
RTD Tea		0%	0%			8%			
Sports Drinks	0%				0%				0%

Appendix B, Table 22b: Proportion of products with HSR≥3.5 by category for each country for Suntory

	Australia	China	France	Germany	Hong Kong	Japan	NZ	South Africa	UK
Baked Goods	0%								
Bottled Water - Other	0%						22%		
Bottled Water - Pure						100%	100%		
Carbonates			4%	0%	0%	0%	0%		0%
Concentrates			0%						0%
Dairy	0%								
Energy Drinks	0%				0%		0%	0%	0%
Juice		0%	0%		0%	0%	7%		0%
RTD Coffee		0%			0%	0%			
RTD Tea		0%	0%			0%			
Sports Drinks	0%				0%				4%

Appendix B, Table 22c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Suntory

23. Tingyi

Appendix B, Table 23a: Mean HSR by category for each country for Tingyi

	China
Bottled Water - Pure	5.0
Dairy	2.7
Juice	3.6
Rice, Pasta and Noodles	0.6
RTD Tea	1.5

Appendix B, Table 23b: Proportion of products with HSR≥3.5 by category for each country for Tingyi

	China
Bottled Water - Pure	100%
Dairy	11%
Juice	100%
Rice, Pasta and Noodles	0%
RTD Tea	0%

Appendix B, Table 23c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Tingyi

	China
Bottled Water - Pure	100%
Dairy	6%
Juice	0%
Rice, Pasta and Noodles	0%
RTD Tea	0%

24. Unilever

Appendix B, Table 24a: Mean HSR by category for each country for Unilever

	Australia	Brazil	China	France	Germany	India	Mexico	S. Africa	UK	USA
Baked Goods				1.3	2.8					
Breakfast Cereal		3.6					4.0			
Ice Cream and Frozen Desserts	2.1	2.2	2.1	1.9	2.0	2.1	2.3	2.2	2.0	2.2
Other Hot Drinks			1.4			1.8				
Processed Meat and Seafood								4.1		
Ready Meals	3.3				3.0		3.5			3.4
Rice, Pasta and Noodles									3.2	
RTD Tea										1.8
Sauces, Dressings and Condiments	1.7	1.8	1.6	2.3	1.7	2.0	2.1	2.2	1.9	1.6
Soup	1.4	2.4	0.5	3.4	3.1	2.3	2.1	3.0	3.2	1.4
Sweet Spreads		3.0				2.1			4.0	

	Australia	Brazil	China	France	Germany	India	Mexico	S. Africa	UK	USA
Baked Goods				0%	43%					
Breakfast Cereal		100%					100%			
Ice Cream and Frozen Desserts	13%	6%	5%	1%	1%	2%	11%	0%	4%	10%
Other Hot Drinks			0%			0%				
Processed Meat and Seafood								100%		
Ready Meals	69%				38%		90%			86%
Rice, Pasta and Noodles									31%	
RTD Tea										0%
Sauces, Dressings and Condiments	19%	7%	28%	9%	7%	16%	27%	39%	12%	12%
Soup	16%	59%	0%	79%	43%	39%	43%	67%		20%
Sweet Spreads		0%				0%			100%	

Appendix B, Table 24b: Proportion of products with HSR≥3.5 by category for each country for Unilever

	Australia	Brazil	China	France	Germany	India	Mexico	S. Africa	UK	USA
Baked Goods				0%	33%					
Breakfast Cereal		11%					0%			
Ice Cream and Frozen Desserts	0%	2%	0%	0%	0%	1%	0%	0%	0%	1%
Other Hot Drinks			0%			38%				
Processed Meat and Seafood								0%		
Ready Meals	84%				74%		0%			0%
Rice, Pasta and Noodles									97%	
RTD Tea										0%
Sauces, Dressings and Condiments	3%	0%	0%	1%	2%	16%	10%	10%	0%	0%
Soup	25%	0%	0%	97%	90%	43%	3%	81%		0%
Sweet Spreads		0%				0%			0%	

Appendix B, Table 24c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Unilever

25. Yili

Appendix B, Table 25a: Mean HSR by category for each country for Yili

	China
Dairy	3.1
Ice Cream and Frozen Desserts	2.1

Appendix B, Table 25b: Proportion of products with HSR≥3.5 by category for each country for Yili

	China
Dairy	33%
Ice Cream and Frozen Desserts	0%

Appendix B, Table 25c: Proportion of products eligible for marketing to children using the WHO criteria by category for each country for Yili

	China
Dairy	9%
Ice Cream and Frozen Desserts	0%

APPENDIX C – Euromonitor subsets mapped to HSR Categories

The following table is provided to assist interpretation of results where products are categorised differently for the purpose of generating a nutrient profile outcome under the Health Star Rating to how these results are displayed in the analysis in this report.

Table 1 Euromonitor subsets mapped to Health Star Rating Cat	egories
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1. Non-dairy beverage	1D. Dairy Beverage	2. Non-dairy foods	2D. Dairy foods	3. Oils and spreads	3D. Cheese
Asian Specialty Beverages	Dairy ^a	Baked Goods	Dairy ^c	Edible Oils	Dairy ^e
Bottled water – Other	Other Hot Drinks	Breakfast Cereals			
Bottled water - Pure		Confectionery			
Carbonates		Dairy ^b			
Concentrates		Ice Cream and Frozen Desserts ^b			
Energy Drinks		Processed Fruit and Vegetables			
Juice		Processed Meat and Seafood			
Other Hot Drinks		Ready Meals			
RTD Coffee		Rice, Pasta and Noodles			
RTD Tea		Sauces, Dressings and Condiments			
Sports Drinks		Savoury Snacks			
		Soup			
		Sweet Biscuits, Snack Bars and Fruit Snacks			
		Sweet Spreads			

^a Milk-based beverages and yoghurt drinks only

^b Custards, desserts, cream cheese, ice-cream and cream are not considered as dairy foods but are classified as Category 2 foods for the purpose of HSR. For further explanation see the HSR Guide for Industry http://healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/guide-for-industry-document

^c Dairy foods other than those listed in 1D, 3 or 3D

^d Defined for the purposes of HSR as cheeses with calcium content ≥320mg/100g

APPENDIX D - Comparative rankings of companies based upon the different evaluation methods



Appendix D, Figure 1 Overall ranking of companies based upon ranking points

* Note that the WHO results and rankings are not incorporated into the overall Global Index report

The figure above demonstrates the comparative ranking of companies across the different evaluation methods used. Where a company ranked 1st (of the 25 companies) it received 25 points. Companies manufacturing predominantly dairy products such as FrieslandCampina, Arla and Danone ranked highly across all evaluation methods, and companies manufacturing predominantly confectionery such as Mars, Ajinomoto, Mondelez and Ferrero ranked lowest. The individual rankings per evaluation method are shown in **Appendix D**, **Table 1**. Note that these rankings are not the same as the rankings presented in the ATNI 2021 Global Index.

		ing of compe			n o a a o c p o i ej e	5110	
Manufacturer	Mean HSR	Sales weighted mean HSR	Proportion healthy (≥3.5 HSR)	Sales from healthy products	Meet WHO criteria	Sales from products meeting WHO criteria	
Ajinomoto	23	20	24	23	23	20	
Arla	3	2	4	2	2	1	
BRF	15	16	15	11	19	15	
Campbell	6	8	6	8	21	20	
China Mengniu	7	7	16	15	8	6	
Coca-Cola	16	19	18	21	11	8	
ConAgra	4	4	2	5	22	17	
Danone	1	1	1	1	3	2	
Ferrero	25	25	25	25	25	25	
FrieslandCampina	2	3	3	3	1	2	
General Mills	9	9	9	11	7	9	
Grupo Bimbo	11	10	7	6	15	18	
Kellogg	12	14	11	15	16	20	
Keurig	20	21	21	24	6	12	
Kraft Heinz	10	11	8	9	10	18	
Lactalis	5	6	5	4	4	5	
Mars	19	24	17	19	13	20	
Meiji	22	14	22	13	17	9	
Mondelez	24	22	23	22	24	20	
Nestlé	18	11	12	7	9	4	
PepsiCo	13	17	10	17	14	13	
Suntory	14	13	14	14	18	6	
Tingyi	21	23	19	19	20	15	
Unilever	17	18	20	18	5	13	
Yili	8	5	13	10	12	9	

Appendix D, Table 1 Ranking of companies based upon overall product portfolio