
Systematic review of nutrient profile models for front-of-pack nutrition labelling

In the format provided by the
authors and unedited

SUPPLEMENTARY INFORMATION

S1: Excluded studies and models during the full text screening and data extraction stages with reason(s)

At the time of the screening and data extraction, this is the justification and rational for excluding the publications and NPMs listed below.

Table 1. Inclusion and exclusion criteria for NPMs and publications

	Inclusion criteria for NPMs	Exclusion criteria for NPMs
A	NPMs allowing for the classification/categorisation or ranking/scoring of individual foods	NPMs NOT allowing for the classification/categorisation or ranking/scoring of individual foods
B	NPMs comprising separate sets of criteria for multiple nutrients and/or food components, or NPMs integrating data from more than one nutrient and food component to obtain a single overall score or categorisation	Any NPMs with a focus solely on food components and not on nutrients
C	NPMs developed or endorsed ^a by governmental or inter-governmental organisations	NPMs not developed or endorsed by governmental or inter-governmental organisations (e.g., developed by retailers/manufactures/commercial companies)
D	Algorithm of the NPMs publicly available in the peer-reviewed or grey literature	Details of the NPMs and/or algorithm not publicly available
E	NPMs with details available in English, Spanish or Portuguese	NPMs with details NOT available in either English, Spanish or Portuguese
I	NPM for FOPNL with sufficiently interpretive system	NPM for FOPNL but not with a sufficiently interpretive system or for other purposes (e.g., marketing, baby foods)
	Inclusion criteria for publications	Exclusion criteria for publications
C	Publication mentions a potential NPM developed or endorsed ^a by governmental or inter-governmental organisations	Publication only mentions a NPM not developed or endorsed ^a by governmental or inter-governmental organisations (e.g., developed by retailers/manufactures/commercial companies)
E	Publications with details available in English, Spanish or Portuguese	Publications NOT available in either English, Spanish or Portuguese
F	Publications published since 2016	Publications published before 2016
G	Publication mentions a NPM according to the inclusion criteria above	Publication doesn't mention a NPM
H	Publication publicly available	Publication not publicly available
I	Publication mentions at least one potential NPM for FOPNL with sufficiently interpretive system	Publication only mentions a NPM for other purposes (i.e., baby foods)

- a. This review follows the definition used by Labonté et al. 2018, where “endorsed” refers to the models used by governmental or inter-governmental organisations or that are referenced in publications of these organisations

Table 2. Excluded **publications**, after full text review, with reason(s)

Publication	Title		Reason(s) for exclusion
Raine et al (2017)	Policy recommendations for front-of-package, shelf, and menu labelling in Canada: Moving towards consensus	G	Doesn't mention a specific NPM
Dall'Asta et al (2020)	Evaluation of nutritional quality of biscuits and sweet snacks sold on the Italian market: the Food Labelling of Italian Products (FLIP) study.	G	Doesn't mention a specific NPM
Angelino et al (2020)	Nutritional Quality of Plant-Based Drinks Sold in Italy: The Food Labelling of Italian Products (FLIP) Study	G	Doesn't mention a specific NPM
Bialkova et al (2020)	From desktop to supermarket shelf: Eye-tracking exploration on consumer attention and choice	G	Doesn't mention a specific NPM
Baker et al (2021)	Assessing the potential of perennial cereals in processing food products	G	Doesn't mention a specific NPM
Rimbawan 2020	Consumers and Food Manufacturers Preferences for Front-of-Pack Nutrition Labelling in Indonesia	G	Doesn't mention a specific NPM
Mulligan et al (2018)	Assessment of the Canadian Children's Food and Beverage Advertising Initiative's Uniform Nutrition Criteria for Restricting Children's Food and Beverage Marketing in Canada	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Mukaneeva et al (2022)	Research on the labeling and promotion of finished food products for children under 3 years of age in the Russian Federation	E	Publication not in English, Spanish or Portuguese (Russian)
Gamboa-Gamboa et al (2019)	Nutritional Content According to the Presence of Front of Package Marketing Strategies: The Case of Ultra-Processed Snack Food Products Purchased in Costa Rica	G	Doesn't mention a specific NPM
McCann, Russell and Woods (2022)	The Nutritional Profile and On-Pack Marketing of Toddler-Specific Food Products Launched in Australia between 1996 and 2020	I	NPM for other purposes (baby foods)
Huang Ze Ying (2022)	Progress in Front of Package Labeling of Fresh Pork in China	E	Publication not in English, Spanish or Portuguese (Chinese)
de Boer (2021)	Fifteen Years of Regulating Nutrition and Health Claims in Europe: The Past, the Present and the Future	G	Doesn't mention a specific NPM
Colombo and Mazal (2020)	Investigation of the nutritional composition of different types of salmon available to Canadian consumers	G	Doesn't mention a specific NPM
Flores and Cooper (2021)	A Network-based Analysis of Ingredients Lists in Nutrient Profile Systems	G	Doesn't mention a specific NPM

Publication	Title		Reason(s) for exclusion
Yokoyama et al (2021)	A study on the characteristics of nutrient profile models in other countries for the development of a Japanese nutrient profile model.	E	Publication not in English, Spanish or Portuguese (Japanese)
Haurogné 2023	All Nutri-Score classes can fit in nutritionally adequate diets	E	Publication not in English, Spanish or Portuguese (French)
Verrill et al (2017)	Vitamin-Fortified Snack Food May Lead Consumers to Make Poor Dietary Decisions	G	Doesn't mention a specific NPM
Bray et al (2019)	Food information presentation: consumer preferences when eating out	G	Doesn't mention a specific NPM
Finkelstein et al (2018)	Identifying the effect of shelf nutrition labels on consumer purchases: results of a natural experiment and consumer survey	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Taillie 2017	No Fat, No Sugar, No Salt . . . No Problem? Prevalence of "Low-Content" Nutrient Claims and Their Associations with the Nutritional Profile of Food and Beverage Purchases in the United States.	G	Doesn't mention a specific NPM
Braesco et al (2022)	A Slight Adjustment of the Nutri-Score Nutrient Profiling System Could Help to Better Reflect the European Dietary Guidelines Regarding Nuts	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Kontsevaya et al (2023)	Missing data and other challenges in assessing inappropriate marketing of baby foods in the Russian Federation: a cross-sectional study	I	NPM for other purposes (baby foods)
Ning et al (2017)	Dietary sodium reduction in New Zealand: influence of the Tick label	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Avery et al (2022)	Does industry self-regulation work to protect consumers? An evaluation of the children's food and beverage advertising initiative	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Pace et al (2020)	High levels of sugar and salt in commercial baby foods in Malta: Results from a pilot study using the world health organization draft nutrient profile model	I	NPM for other purposes (baby foods)
Vercammen et al (2019)	Calorie and Nutrient Profile of Combination Meals at U.S. Fast Food and Fast Casual Restaurants	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Dötsch-Klerk et al (2022)	Improving the Nutrient Quality of Foods and Beverages Using Product Specific Standards for Nutrients to Limit Will Substantially Reduce Mean Population Intakes of Energy, Sodium, Saturated Fat and Sugars towards WHO Guidelines	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Bassetti et al (2022)	Nutrient profiles of commercially produced complementary foods available in Cambodia, Indonesia and the Philippines	I	NPM for other purposes (baby foods)

Publication	Title	Reason(s) for exclusion
Garcia, Menon and Parrett (2022)	Extensive use of on-pack promotional claims on commercial baby foods in the UK	I NPM for other purposes (baby foods)
Tharrey et al (2017)	Comparison of recipes classification between 3 French nutrient profiling systems: SAIN, LIM, SENS and 5-C.	H Publication not available
Mulligan et al (2021)	Comparing how Canadian packaged food products align with the 2007 and 2019 versions of Canada's Food Guide	H Publication not available
Arakawa et al (2022)	Nutrient Profiling for Salt Content on Simplified Front-of-package Labels for Japanese Patients with Hypertension	H Publication not available
Stuthridge et al (2022)	"It's All Just Marketing", a Qualitative Analysis of Consumer Perceptions and Understandings of Nutrition Content and Health Claims in New Zealand	G Doesn't mention a specific NPM
Ishimi et al (2022)	Basic research on a nutrient profile model for Japan: draft development and validation.	E Publication not in English, Spanish or Portuguese (Japanese)
Britos (2017)	Nutrition profiles: Definitions and status of the topic in Argentina.	H Publication not available
Andrews et al (2021)	What consumers actually know: The role of objective nutrition knowledge in processing stop sign and traffic light front-of-pack nutrition labels	G Doesn't mention a specific NPM
World Health Organization Regional Office for the Western Pacific (2015)	Consultation on Overweight, Obesity, Diabetes and Law in the Western Pacific Region, Manila, Philippines, 9–11 April 2014 : meeting report	F Published before 2016
Emonts M, Banfi P, Bode L, Milieu (2016) Directorate-General for Internal Policies of the Union (European Parliament)	Eat for health : workshop : Brussels, 13 October 2015.	G Doesn't mention a specific NPM
World Health Organization Regional Office for the Eastern Mediterranean (2015)	Summary report on the technical consultation on reducing sugar intake in the Eastern Mediterranean Region, Amman, Jordan 26–27 July 2015	F Published before 2016
World Health Organization (2014)	GLOBAL STATUS REPORT on noncommunicable diseases 2014	F Published before 2016
Vandevijvere S, Dominick C, Devi A, Swinburn B (2015) for the International Network for Food and Obesity/non-communicable diseases Research, Monitoring and Action Support	The healthy food environment policy index: findings of an expert panel in New Zealand	F Published before 2016
Barquera, Simón ; Corvalán, Camila ; Reyes, Marcela ; Tolentino, Lizbeth (2018).	Implementation of INFORMAS in Latin America : measuring and benchmarking food environments and policies to effectively reduce obesity and non-communicable diseases.	G Doesn't mention a specific NPM

Publication	Title		Reason(s) for exclusion
Finkelstein (2019)	USING EXPERIMENTAL RESEARCH TO IMPROVE DIET QUALITY	C	NPM not developed or endorsed by governmental or inter-governmental organisations
World Health Organization Regional Office for Europe (2019)	Improving the nutritional quality of commercial foods for infants and young children in the WHO European Region	I	NPM for other purposes (baby foods)
World Health Organization Regional Office for Europe (2019)	Strengthening the capacity to tackle noncommunicable diseases (NCDs): meeting of collaborating centres of the WHO European Region on NCDs, with a focus on risk factors and surveillance: Moscow, Russian Federation, 5–6 December 2018	G	Doesn't mention a specific NPM
World Health Organization Regional Office for Europe (2022)	Effective regulatory frameworks for ending inappropriate marketing of breast-milk substitutes and foods for infants and young children in the WHO European Region	I	NPM for other purposes (baby foods)
World Health Organization Regional Office for South-East Asia (2022)	Expert Group Consultation on supporting the Infant and Young Child Nutrition through Improving Feeding Practices and the Food Environment, WHO South-East Asia Region	I	NPM for other purposes (baby foods)
ASEAN, UNICEF and Alive & Thrive (2022)	Guidelines and Minimum Standards for the Protection, Promotion and Support of Breastfeeding and Complementary Feeding	I	NPM for other purposes (baby foods)
World Health Organization (2022)	Universal salt iodization and sodium intake reduction: compatible, cost-effective strategies of great public health benefit	G	Doesn't mention a specific NPM
World Health Organization (2011)	Nutrient profiling: report of a WHO/IASO technical meeting	F	Published before 2016
Jewell, Rayner, Breda, Nishida, Galea & World Health Organization (2015)	Addressing the challenge of food marketing to children: the WHO Regional Office for Europe nutrient profile model as a common tool	F	Published before 2016
Naciones Unidas Comisión Económica para América Latina y el Caribe (2016)	Plan para la seguridad alimentaria, nutrición y erradicación del hambre de la CELAC 2025: una propuesta para seguimiento y análisis	G	Doesn't mention a specific NPM
Ministerio de la Salud Argentina (2016)	Guía De Recomendaciones Para Panaderos	G	Doesn't mention a specific NPM
Ministerio de Salud y Protección Social Colombia (2016)	Ingesta de Energía y Nutrientes (RIEN)	G	Doesn't mention a specific NPM
Ministerio de la Salud Argentina (2018)	Guías alimentarias para la población Argentina	G	Doesn't mention a specific NPM
Villaroel, Curcio, Gutiérrez and FAO (2017)	Proceso de implementación del Plan SAN CELAC en la República Bolivariana de Venezuela	G	Doesn't mention a specific NPM
Allen, De Benoist, Dary, Hurrell, Richard and Organización Mundial de la Salud (2017)	Guías para la fortificación de alimentos con micronutrientes	G	Doesn't mention a specific NPM
	Diálogo Social: Uruguay hacia los Objetivos De Desarrollo Sostenible	G	Doesn't mention a specific NPM
Comité Regional para a África 72 (2022)	Sumário Executivo: América Latina e o Caribe Panorama da Segurança Alimentar e Nutricional 2016	G	Doesn't mention a specific NPM
Graziano da Silva et al (2021)	Relatório anual da Directora Regional sobre as actividades da OMS na Região Africana 2021-2022	G	Doesn't mention a specific NPM
Bassetti et al (2023)	Benchmarking the nutrient composition and labelling practices of dry or instant cereals for older infants and young children across seven Southeast Asian countries.	I	NPM for other purposes (baby foods)

Publication	Title		Reason(s) for exclusion
Zhang et al. (2023)	Nutritional Assessment of Plant-Based Meat Products Available on Hong Kong Market: A Cross-Sectional Survey.	G	Doesn't mention a specific NPM
Richter et al. (2023)	Toddler Milk Perceptions and Responses to Front-of-Package Claims and Product Warnings: A Qualitative Study of Caregivers of Toddlers.	G	Doesn't mention a specific NPM
Khosravi et al. (2023)	Nutrient Profiles of Commercially Produced Complementary Foods Available in Burkina Faso, Cameroon, Ghana, Nigeria and Senegal.	I	NPM for other purposes (baby foods)
Zhang et al. (2023)	[Development and validation of the nutrient-rich food index for China].	E	Publication not in English, Spanish or Portuguese (Chinese)
Bassetti et al (2023)	Benchmarking the nutrient composition and labelling practices of commercially produced ready-to-eat purees and meals for older infants and young children across seven southeast Asian countries.	I	NPM for other purposes (baby foods)
Tada et al. (2023)	Feasibility study of the draft Japanese Nutrient Profile model to support healthy eating behaviors: a cross-sectional study focusing on the motivation of behavioral change.	E	Publication not in English, Spanish or Portuguese (Japanese)
Sharib et al. (2024)	Disclosure of mandatory and voluntary nutrition labelling information across major online food retailers in the USA.	G	Doesn't mention a specific NPM
Jacobs et al. (2024)	Canadian Dietary Intakes Assessed by Nutrient Profiling Models and Association with Mortality and Cardiovascular Disease.	H	Publication not available
Bathrellou et al. (2024)	Nutritional value of cereal-based gluten-free products and comparison to that of gluten containing counterparts in the Greek market.	G	Doesn't mention a specific NPM
Coyle et al. (2024)	An Evaluation of the Nutritional and Promotional Profile of Commercial Foods for Infants and Toddlers in the United States.	I	NPM for other purposes (baby foods)
Dunford et al. (2024)	Commercially-produced infant and toddler foods-How healthy are they? An evaluation of products sold in Australian supermarkets.	I	NPM for other purposes (baby foods)
Scully et al. (2024)	Compliance of Australian commercial foods for young children (<36 months) with an international nutrient and promotion profile model.	I	NPM for other purposes (baby foods)
Sun et al. (2024)	Research progress and current applications of nutrient profiling systems domestically and internationally.	E	Publication not in English, Spanish or Portuguese (Chinese)
Wagner et al. (2024)	Front-of-package nutrition labeling should recognize the full nutrient profile of foods.	H	Publication not available
Bucchini et al. (2024)	Navigating the complex regulatory framework of sports foods ahead of the European Elections.	G	Doesn't mention a specific NPM
Leszczynska et al. (2025)	Nutritional content and promotional practices of foods for infants and young children on the spanish market: a cross-sectional product evaluation.	I	NPM for other purposes (baby foods)
Shyam et al. (2025)	Assessment of Commercial Baby Food Quality and Promotion in Malaysia for Policy Development.	I	NPM for other purposes (baby foods)
Mora-Plazas et al. (2022)	Retraction: Impact of nutrient warning labels on choice of ultra-processed food and drinks high in sugar, sodium, and saturated fat in Colombia: A randomized controlled trial	H	Publication not available (retraction)

Publication	Title		Reason(s) for exclusion
Alhumaidan et al. (2024)	Computational model for policy simulation and prediction of the regulatory impact of front-of-package food labels	G	Doesn't mention a specific NPM
Lwin et al. (2023)	Evaluation of Nutritive Value of Commercially Packaged Snacks Available in Thai Supermarkets	H	Publication not available
Gul et al. (2023)	Nutrient Profile of Commercially Packaged Food Products in Turkiye	G	Doesn't mention a specific NPM
World Health Organization Regional Office for Europe (2024)	Investigation of inappropriate promotion of commercially available complementary foods for infants and young children aged 6–36 months in the Russian Federation.	I	NPM for other purposes (baby foods)
FSAI (2023)	The Food Reformulation Task Force Progress Report 2022	I	NPM for other purposes (baby foods)
World Health Organization Regional Office for South-East Asia (2023)	Nutrient and promotion profile model. Ending the inappropriate promotion of food products for older infants and young children	I	NPM for other purposes (baby foods)
World Health Organization Regional Office for South-East Asia (2025)	Regional consultation on SEHEARTS Monitoring Framework and measuring progress on milestones	G	Doesn't mention a specific NPM
World Health Organization Regional Office for Europe (2023)	Commercial foods for infants and young children in Türkiye	I	NPM for other purposes (baby foods)
World Health Organization Regional Office for Europe (2024)	Child and adolescent health in Europe: report on progress to 2021	I	NPM for other purposes (baby foods)
World Health Organization Regional Office for South-East Asia (2023)	WHO Regional Committee for South-East Asia: report of the Seventy-sixth Session New Delhi, India, 30 October-2 November 2023	G	Doesn't mention a specific NPM
Directiva Del Parlamento Europeo Y Del Consejo	DIRECTIVA DEL PARLAMENTO EUROPEO Y DEL CONSEJO por la que se modifican las Directivas 2001/110/CE del Consejo, relativa a la miel, 2001/112/CE, relativa a los zumos de frutas y otros productos similares destinados a la alimentación humana, 2001/113/CE, relativa a las confituras, jaleas y «marmalades» de frutas, así como a la crema de castañas edulcorada, destinadas a la alimentación humana, y 2001/114/CE, relativa a determinados tipos de leche conservada parcial o totalmente deshidratada destinados a la alimentación humana	G	Doesn't mention a specific NPM

Table 3. Included publications, after full text review, with list of NPMs identified in the publication

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Garcia et al (2020)	Sugar Content and Nutritional Quality of Child Orientated Ready to Eat Cereals and Yoghurts in the UK and Latin America; Does Food Policy Matter?	UK Ofcom
Baldrige et al (2019)	The Healthfulness of the US Packaged Food and Beverage Supply: A Cross-Sectional Study	Health Star Rating
Richonnet et al (2021)	Nutritional Quality and Degree of Processing of Children's Foods Assessment on the French Market	Nutri-Score WHO-Euro NPM
Bucher et al (2017)	What Is Nutritious Snack Food? A Comparison of Expert and Layperson Assessments	UK Ofcom Health Star Rating
Hernandez et al (2018)	Characterization of the Types of Sweeteners Consumed in Honduras.	PAHO
Cameron et al (2022)	Change in the Healthiness of Foods Sold in an Australian Supermarket Chain Following Implementation of a Shelf Tag Intervention Based on the Health Star Rating System	Health Star Rating
Storcksdieck Genannt Bonsmann et al (2019)	The ineligibility of food products from across the EU for marketing to children according to two EU-level nutrient profile models	EU Pledge WHO-Euro NPM
Jansen et al (2016)	The use of food composition data in the Choices International Programme	Choices
Hagmann et al (2020)	Nutri-score, multiple traffic light and incomplete nutrition labelling on food packages: Effects on consumers' accuracy in identifying healthier snack options	UK TFL Nutri-Score UK Ofcom
Egnell et al (2019)	Front-of-Pack Labeling and the Nutritional Quality of Students' Food Purchases: A 3-Arm Randomized Controlled Trial	Nutri-Score Reference Intakes Nutri-Score
Koen et al (2018)	The development of a single health-endorsement logo for South Africa	South Africa NPM
Khandpur et al (2019)	Choosing a front-of-package warning label for Brazil: A randomized, controlled comparison of three different label designs	PAHO
Carrad et al (2016)	A nutrient profiling assessment of packaged foods using two star-based front-of-pack labels	Health Star Rating IOM three-star system
Watson et al (2021)	Defining unhealthy food for regulating marketing to children—What are Australia's options?	WHO-WPR NPM WHO-Euro NPM COAG Health Star Rating Health Star Rating2
Almughthim et al (2023)	Nutritional quality of prepackaged foods carrying health or nutritional claims in KSA	UK Ofcom
Li et al (2022)	Nutritional Quality of Pre-Packaged Foods in China under Various Nutrient Profile Models	WHO-WPR NPM PAHO Chilean WL
Ares et al (2020)	Food industry arguments against front-of-package nutrition labels in Uruguay	PAHO

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Delgado Zegarra et al (2021)	Nutrient profile of food products exempted from the application of front-of-package warnings during the first stage of the Healthy Eating Law in Peru: case study	PAHO
Richonnet et al (2021)	Nutritional Quality and Degree of Processing of Children's Foods Assessment on the French Market	Nutri-Score WHO-Euro NPM
Wellard et al (2016)	Investigating nutrient profiling and Health Star Ratings on core dairy products in Australia	Health Star Rating NPSC
Yip et al (2021)	Breakfast on the go: Evaluating the nutritional content of supermarket products	UK TFL
James et al (2017)	Are food and drink retailers within NHS venues adhering to NICE Quality standard 94 guidance on childhood obesity? A cross-sectional study of two large secondary care NHS hospitals in England	UK Ofcom
Bernstein et al (2018)	A free sugars daily value (DV) identifies more "less healthy" prepackaged foods and beverages than a total sugars DV	NPSC
Ares et al (2018)	Comparative performance of three interpretative front-of-pack nutrition labelling schemes: Insights for policy making	Nutri-Score Health Star Rating Chilean WL
Lawrence et al (2019)	Positioning food standards programmes to protect public health: current performance, future opportunities and necessary reforms	NPSC
Morrison et al (2019)	Nutritional quality and reformulation of a selection of children's packaged foods available in Australian supermarkets: Has the Health Star Rating had an impact?	NPSC
Borges et al (2022)	Comparing Latin American nutrient profile models using data from packaged foods with child-directed marketing within the Brazilian food supply	ANVISA WL PAHO Chilean WL Mexican WL Uruguay WL Peru WL
Jones et al (2018)	Uptake of Australia's Health Star Rating System	Health Star Rating
Hafner et al (2021)	Evaluation of the Ability of Nutri-Score to Discriminate the Nutritional Quality of Prepacked Foods Using a Sale-Weighting Approach	Nutri-Score Slovenia NPM - WHO-EURO adaptation
Van der Bend 2022	The Nutri-Score algorithm: Evaluation of its validation process	Nutri-Score
Saavedra-Garcia et al (2023)	Reformulation of Top-Selling Processed and Ultra-Processed Foods and Beverages in the Peruvian Food Supply after Front-of-Package Warning Label Policy	Peru WL
Rodríguez et al (2017)	Evaluación de los anuncios de alimentos procesados y ultraprocesados en la televisión en España aplicando el modelo de Semáforo Nutricional de Reino Unido	UK TFL
Tomaz et al (2022)	From the most to the least flexible nutritional profile: Classification of foods marketed in Brazil according to the Brazilian and Mexican models	ANVISA WL Mexican WL
Andreeva et al (2019)	Association of the Dietary Index Underpinning the Nutri-Score Label with Oral Health: Preliminary Evidence from a Large, Population-Based Sample.	Nutri-Score
Wellard et al (2017)	Health and nutrition content claims on Australian fast-food websites	NPSC
Soo et al (2016)	Nutritional quality and child-oriented marketing of breakfast cereals in Guatemala	UK Ofcom

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Silva et al (2022)	Coexistence of high content of critical nutrients and claims in food products targeted at Brazilian children.	PAHO
De Las Heras-Delgado et al (2021)	Assessment of price and nutritional quality of gluten-free products versus their analogues with gluten through the algorithm of the nutri-score front-of-package labeling system	Nutri-Score
Gillon-Keren et al (2020)	Development of Criteria for a Positive Front-of-Package Food Labeling: The Israeli Case	Israel Red WL Israel Green Label
Aguenauou et al (2021)	Comparison of appropriateness of Nutri-Score and other front-of-pack nutrition labels across a group of Moroccan consumers: awareness, understanding and food choices	Health Star Rating Nutri-Score Reference Intakes UK TFL Chilean WL
Maillot et al (2018)	The simplified nutrient profiling system (SENS) adequately ranks foods in relation to the overall nutritional quality of diets: a validation study	SENS
Allemandi et al (2020)	Nutritional quality, child-oriented marketing and health/nutrition claims on sweet biscuit, breakfast cereal and dairy-based dessert packs in Argentina	PAHO WHO-Euro NPM
Deschasaux et (2020)	Association between nutritional profiles of foods underlying Nutri-Score front-of-pack labels and mortality: EPIC cohort study in 10 European countries	Nutri-Score
Bayram et al (2022)	The multiple 'traffic light' labels: are they a promising alternative for packaged foods and beverages sold in Turkey	UK TFL
Ahmed et al (2022)	Development of the Food Label Information Program: A Comprehensive Canadian Branded Food Composition Database	NPSC UK Ofcom UK TFL HCST
Mulligan et al (2020)	Evaluating the Canadian Packaged Food Supply Using Health Canada's Proposed Nutrient Criteria for Restricting Food and Beverage Marketing to Children	Canada NP (Health Canada - marketing)
Kaur et al (2019)	Regulating health and nutrition claims in the UK using a nutrient profile model: an explorative modelled health impact assessment	NPSC EC proposed NPM
Pointke et al (2022)	Plant-Based Alternative Products: Are They Healthy Alternatives? Micro- and Macronutrients and Nutritional Scoring	Nutri-Score
Wadhwa et al (2021)	A Cross-Sectional Audit of Nutrition and Health Claims on Dairy Yoghurts in Supermarkets of the Illawarra Region of New South Wales, Australia	NPSC Health Star Rating
Saavedra-Garcia et al (2022)	Reformulation of Top-Selling Processed and Ultra-Processed Foods and Beverages in the Peruvian Food Supply after Front-of-Package Warning Label Policy	Peru WL
Mertens et al (2023)	Mapping the nutritional value of diets across Europe according to the Nutri-Score front-of-pack label	Nutri-Score
Ducrot et al (2016)	Impact of Different Front-of-Pack Nutrition Labels on Consumer Purchasing Intentions - A Randomized Controlled Trial	UK Ofcom UK TFL Nutri-Score Tick label Keyhole
Galan et al (2017)	Front-of-pack nutrition label NutriScore: An useful public health tool for Spanish consumers	Nutri-Score

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Alarcon-Calderon et al (2020)	Lack of nutrient declarations and low nutritional quality of pre-packaged foods sold in Guatemalan supermarkets	PAHO
		WHO-Euro NPM
Machado et al (2022)	Evaluating intake levels of nutrients linked to non-communicable diseases in Australia using the novel combination of food processing and nutrient profiling metrics of the PAHO Nutrient Profile Model	PAHO
Cabrera et al (2017)	Nutrition warnings as front-of-pack labels: influence of design features on healthfulness perception and attentional capture	PAHO
Paper et al (2023)	Cross-sectional comparisons of dietary indexes underlying nutrition labels: nutri-score, Canadian 'high in' labels and Diabetes Canada Clinical Practices (DCCP)	Nutri-Score
		Canada FOP
		DCCP
Turck et al (2022)	Scientific Opinion on the scientific advice related to nutrient profiling for the development of harmonised mandatory front-of-pack nutrition labelling and the setting of nutrient profiles for restricting nutrition and health claims on foods	Health Star Rating
		Nutri-Score
Lawrence et al (2018)	Do Nutrient-Based Front-of-Pack Labelling Schemes Support or Undermine Food-Based Dietary Guideline Recommendations? Lessons from the Australian Health Star Rating System	Health Star Rating
Nieto et al (2017)	Characterization of Breakfast Cereals Available in the Mexican Market: Sodium and Sugar Content	UK Ofcom
Alessandrini et al (2021)	Nutritional Quality of Plant-Based Meat Products Available in the UK: A Cross-Sectional Survey	UK Ofcom
		UK TFL
Katsouri et al (2021)	Dietary Intake Assessment of Pre-Packed Graviera Cheese in Greece and Nutritional Characterization Using the Nutri-Score Front of Pack Label Scheme	Nutri-Score
Fialon et al (2020)	Effectiveness of Different Front-of-Pack Nutrition Labels among Italian Consumers: Results from an Online Randomized Controlled Trial	Health Star Rating
		UK TFL
		Nutri-Score
		Chilean WL
Dickie et al (2023)	A novel food processing-based nutrition classification scheme for guiding policy actions applied to the Australian food supply	Reference Intakes
		Health Star Rating
Pombo-Rodrigues et al (2020)	Nutrition Profile of Products with Cartoon Animations on the Packaging: A UK Cross-Sectional Survey of Foods and Drinks	PAHO
		UK Ofcom
Jones et al (2018)	Defining 'Unhealthy': A Systematic Analysis of Alignment between the Australian Dietary Guidelines and the Health Star Rating System	UK TFL
		Health Star Rating
Cruz-Casarrubias (2021)	Estimated effects of the implementation of the Mexican warning labels regulation on the use of health and nutrition claims on packaged foods	Mexican WL
Dunford and Neal (2017)	FoodSwitch and use of crowdsourcing to inform nutrient databases	NPSC
		Health Star Rating
		UK TFL
Ogundijo et al (2021)	An assessment of nutrition information on front of pack labels and healthiness of foods in the United Kingdom retail market	UK TFL
Katsouri et al (2020)		WHO-Euro NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
	Nutritional Characteristics of Prepacked Feta PDO Cheese Products in Greece: Assessment of Dietary Intakes and Nutritional Profiles	Keyhole UK Ofcom NPSC Choices
NiMhurchu et al (2018)	Do nutrition labels influence healthier food choices? Analysis of label viewing behaviour and subsequent food purchases in a labelling intervention trial	UK TFL Health Star Rating NPSC
Nobrega et al (2020)	Are nutritional warnings more efficient than claims in shaping consumers' healthfulness perception?	PAHO
Dunford et al (2019)	How Does the Healthfulness of the US Food Supply Compare to International Guidelines for Marketing to Children and Adolescents?	WHO-Euro NPM Chilean WL
Dickie et al (2022)	Nutrition Classification Schemes for Informing Nutrition Policy in Australia: Nutrient-Based, Food-Based, or Dietary-Based?	Chilean WL Health Star Rating Nutri-Score WHO-Euro NPM PAHO
Silva et al (2021)	A comparison of four different nutritional profile models in their scoring of critical nutrient levels in food products targeted at Brazilian children.	PAHO ABIA ANVISA WL Uruguay WL Chilean WL
Adriouch et al (2016)	Prospective association between a dietary quality index based on a nutrient profiling system and cardiovascular disease risk	Nutri-Score
Ghodsian and Madden (2018)	Evaluating the ≤10:1 wholegrain criterion in identifying nutrient quality and health implications of UK breads and breakfast cereals	UK TFL
Garcia (2019)	Confused health and nutrition claims in food marketing to children could adversely affect food choice and increase risk of obesity	UK Ofcom
Gomez-Donoso et al (2021)	Association between the nutrient profile system underpinning the Nutri-Score front-of-pack nutrition label and mortality in the SUN project: A prospective cohort study	Nutri-Score
Talati et al (2018)	A randomized trial assessing the effects of health claims on choice of foods in the presence of front-of-pack labels	UK TFL Health Star Rating NPSC
Szabo de Edelenyi et al (2019)	Ability of the Nutri-Score front-of-pack nutrition label to discriminate the nutritional quality of foods in the German food market and consistency with nutritional recommendations	Nutri-Score
Roodenburg (2017)	Nutrient profiling for front of pack labelling: how to align logical consumer choice with improvement of products?	Choices
Rodrigues et al (2017)	Nutritional quality of packaged foods targeted at children in Brazil: which ones should be eligible to bear nutrient claims?	UK Ofcom
Perry et al (2018)	Health claims and product endorsements on child-oriented beverages in Guatemala	UK Ofcom

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Talati et al (2017)	The relative ability of different front-of-pack labels to assist consumers discriminate between healthy, moderately healthy, and unhealthy foods	Health Star Rating
Parra-Murillo et al (2021)	Claims on Ready-to-Eat Cereals: Are Those With Claims Healthier?	Chilean WL
Krušič et al (2022)	Use of Branded Food Composition Databases for the Exploitation of Food Fortification Practices: A Case Study on Vitamin D in the Slovenian Food Supply	WHO-Euro NPM Nutri-Score
Breen et al (2020)	Prevalence of Product Claims and Marketing Buzzwords Found on Health Food Snack Products Does Not Relate to Nutrient Profile	Health Star Rating
Bullon-Vela et al (2022)	Mortality prediction of the nutrient profile of the Chilean front-of-pack warning labels: Results from the Seguimiento Universidad de Navarra prospective cohort study	Chilean WL Nutri-Score
Gaines et al (2021)	Deconstructing the Supermarket: Systematic Ingredient Disaggregation and the Association between Ingredient Usage and Product Health Indicators for 24,229 Australian Foods and Beverages	Health Star Rating
Bonaccio et al (2022)	Joint association of food nutritional profile by Nutri-Score front-of-pack label and ultra-processed food intake with mortality: Moli-sani prospective cohort study	Nutri-Score
Pandav et al (2021)	The WHO South-East Asia Region Nutrient Profile Model Is Quite Appropriate for India: An Exploration of 31,516 Food Products.	SEARO Chilean WL
Duran et al (2021)	Role of different nutrient profiling models in identifying targeted foods for front-of-package food labelling in Brazil	PAHO ANVISA WL Chilean WL
Deschasaux et al (2017)	Are self-reported unhealthy food choices associated with an increased risk of breast cancer? Prospective cohort study using the British Food Standards Agency nutrient profiling system	Nutri-Score
Dickie et al (2020)	Evaluating Nutrient-Based Indices against Food- and Diet-Based Indices to Assess the Health Potential of Foods: How Does the Australian Health Star Rating System Perform after Five Years?	Health Star Rating
Hernandez Santana et (2020)	Evaluation of the Nutritional Quality of Processed Foods in Honduras: Comparison of Three Nutrient Profiles.	PAHO Chilean WL CATRP-NWFL
Jones et al (2017)	An Evaluation of the Healthiness of the Indian Packaged Food and Beverage Supply	Health Star Rating WHO-Euro NPM
Rito et al (2019)	Improving breakfast patterns of portuguese children—an evaluation of ready-to-eat cereals according to the European nutrient profile model	WHO-Euro NPM
Cooper, Pelly and Lowe (2017)	Assessment of the construct validity of the Australian Health Star Rating: a nutrient profiling diagnostic accuracy study	Health Star Rating
Maganja et al (2019)	Consumer choice and the role of front-of-pack labelling: the Health Star Rating system	Health Star Rating
Mais et al (2022)	Brazil's nutrition labeling regulation: Challenges ahead on the path to guaranteeing consumer's right to adequate information	ANVISA WL
Hermosilla Soria, Sanchez Bernal and Burgos (2020)	Contenido de grasas, sodio, azúcares y edulcorantes declarados en etiquetado nutricional de golosinas, snacks salados y en bebidas dulces no alcohólicas seleccionadas	PAHO
Van Dam and Vandevijvere (2022)	Benchmarking the nutrition-related commitments and practices of major French food companies	Nutri-Score WHO-Euro NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Millar et al (2022)	Associations between the Nutrient Profiling System Underlying the Nutri-Score Nutrition Label and Biomarkers of Chronic Low-Grade Inflammation: A Cross-Sectional Analysis of a Middle- to Older-Aged Population	Nutri-Score
Ni Mhurchu 2017	Effects of interpretive nutrition labels on consumer food purchases: the Starlight randomized controlled trial	UK TFL Health Star Rating
Adriouch et al (2017)	Association between a dietary quality index based on the food standard agency nutrient profiling system and cardiovascular disease risk among French adults	FSA-NPS DI
Peters et al (2017)	Incorporating Added Sugar Improves the Performance of the Health Star Rating Front-of-Pack Labelling System in Australia	Health Star Rating
Wanselius et al (2022)	Consumption of foods with the Keyhole front-of-pack nutrition label: potential impact on energy and nutrient intakes of Swedish adolescents	Keyhole
Jauregui et al (2020)	Impact of front-of-pack nutrition labels on consumer purchasing intentions: a randomized experiment in low- and middle-income Mexican adults	Mexican GDA Ecuador TFL Chilean WL NPSC
Frank et al (2021)	A Fit-for-Purpose Nutrient Profiling Model to Underpin Food and Nutrition Policies in South Africa	South African NPM
Hafner and Pravst (2023)	Comparison of Nutri-Score and Health Star Rating Nutrient Profiling Models Using Large Branded Foods Composition Database and Sales Data	Health Star Rating Nutri-Score
Franco-Arellano et al (2018)	Examining the Nutritional Quality of Canadian Packaged Foods and Beverages with and without Nutrition Claims	NPSC
Mozaffarian et al (2021)	Food Compass is a nutrient profiling system using expanded characteristics for assessing healthfulness of foods	Food Compass Health Star Rating Nutri-Score
Lavrisa et al (2020)	Nutritional Composition of Gluten-Free Labelled Foods in the Slovenian Food Supply	NPSC
Kaur et al (2016)	How many foods in the UK carry health and nutrition claims, and are they healthier than those that do not?	NPSC
Chepulis et al (2017)	The nutritional quality of New Zealand breakfast cereals: an update	NPSC
Egnell et al (2022)	Impact of the Nutri-Score front-of-pack nutrition label on purchasing intentions of individuals with chronic diseases: results of a randomised trial	Nutri-Score Reference Intakes
Dunford et al (2017)	Color-Coded Front-of-Pack Nutrition Labels—An Option for US Packaged Foods?	UK TFL
Jansen, van Kleef and Van Loo (2021)	The use of food swaps to encourage healthier online food choices: a randomized controlled trial	Nutri-Score
Ricardo et al (2022)	Adherence to voluntary sodium reduction agreements in Brazil	PAHO
Piaggio and Solans (2017)	Ultra-processed fun: food products targeted at children in supermarkets in Argentina. Approach to marketing strategies and nutritional composition	PAHO
Lockyer et al (2020)	Proceedings of a roundtable event ‘Is communicating the concept of nutrient density important?’	NRF(s) SAIN,LIM UK Ofcom Health Star Rating Nutri-Score Choices

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Keyhole
		Heart Symbol
		UK TFL
Lawrence et al (2020)	Interpretive nutrient profiling algorithms are a limited tool for assessing the healthiness of countries' packaged food and beverage supplies, and the conclusions are not substantiated by the data	Health Star Rating
Elliott (2018)	The Nutritional Quality of Gluten-Free Products for Childre	PAHO
Julia et al (2022)	Are foods 'healthy' or 'healthier'? Front-of-pack labelling and the concept of healthiness applied to foods	Peru WL
		Keyhole
		Chilean WL
		Nutri-Score
Kaur et al (2016)	The nutritional quality of foods carrying health-related claims in Germany, The Netherlands, Spain, Slovenia and the United Kingdom	NPSC
Montero-Salazar et al (2022)	Food consumption based on the nutrient profile system underlying the Nutri-Score and renal function in older adults	Nutri-Score
Niven et al (2019)	Effects of health star labelling on the healthiness of adults' fast food meal selections: an experimental study	Health Star Rating
Petimar et al (2023)	Nutritional Composition and Purchasing Patterns of Supermarket Prepared Foods Over Time	Chilean WL
Dunford et al (2019)	A comparison of the healthiness of packaged foods and beverages from 12 countries using the Health Star Rating nutrient profiling system, 2013-2018.	Health Star Rating
Cutroneo et al (2022)	Nutritional Quality of Meat Analogues: Results From the Food Labelling of Italian Products (FLIP) Project	Nutri-Score
Burse, Wiles and Biggs (2021)	The nutrient quality and labelling of ready-to-eat snack foods with health and/or nutrition claims	R429
Pereira et al (2021)	Evaluating nutrition quality of packaged foods carrying claims and marketing techniques in Brazil using four nutrient profile models.	NPSC
		UK Ofcom
		PAHO
		Nutrition Score from Unilever Food & Health Rese (Unilever)
Tharrey et al (2017)	From the SAIN,LIM system to the SENS algorithm: a review of a French approach of nutrient profiling	SAIN,LIM
		SENS
Deschasaux et al (2018)	Nutritional quality of food as represented by the FSAm-NPS nutrient profiling system underlying the Nutri-Score label and cancer risk in Europe: Results from the EPIC prospective cohort study	Nutri-Score
Konings et al (2022)	Comparison between the Choices Five-Level Criteria and Nutri-Score: Alignment with the Dutch Food-Based Dietary Guidelines	Choices
		Nutri-Score
Egnell et al (2019)	Consumers' Responses to Front-of-Pack Nutrition Labelling: Results from a Sample from The Netherlands	Health Star Rating
		UK TFL
		Reference Intakes
		Chilean WL
Christoforou, Norsen and L'Abbe (2021)	Examining the Prevalence, Nutritional Quality and Marketing of Foods with Voluntary Nutrient Additions in the Canadian Food Supply	NPSC
Neal et al (2017)		Health Star Rating

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
	Effects of Different Types of Front-of-Pack Labelling Information on the Healthiness of Food Purchases—A Randomised Controlled Trial	UK TFL
		‘Daily Intake Guide’ (DIG)
Vergeer et al (2020)	A comparison of the nutritional quality of products offered by the top packaged food and beverage companies in Canada	Health Star Rating Canada FOP
Duran et al (2019)	Conflicting Messages on Food and Beverage Packages: Front-of-Package Nutritional Labeling, Health and Nutrition Claims in Brazil	PAHO
Drewnowski, Smith and Fulgoni (2021)	The New Hybrid Nutrient Density Score NRFh 4:3:3 Tested in Relation to Affordable Nutrient Density and Healthy Eating Index 2015: Analyses of NHANES Data 2013–16	NRF(s)
van der Bend and Lissner (2019)	Differences and Similarities between Front-of-Pack Nutrition Labels in Europe: A Comparison of Functional and Visual Aspects	Keyhole
		Choices
		Nutri-Score
		UK TFL
		Israel Red WL
Russel et al (2021)	Does the Australian Health Star Rating System Encourage Added Sugar Reformulation? Trends in Sweetener Use in Australia	Health Star Rating
van den Assum et al (2020)	Periodic Revisions of the International Choices Criteria: Process and Results	Choices
Vergeer et al (2020)	Methodology for the Determination of Fruit, Vegetable, Nut and Legume Points for Food Supplies without Quantitative Ingredient Declarations and Its Application to a Large Canadian Packaged Food and Beverage Database	UK Ofcom
		NPSC
		Health Star Rating
		Nutri-Score
Pan et al (2020)	Seventeen-Year Associations between Diet Quality Defined by the Health Star Rating and Mortality in Australians: The Australian Diabetes, Obesity and Lifestyle Study (AusDiab)	Health Star Rating/Health Star Rating-DI
Drewnowski, Gonzalez and Rehm (2022)	Balanced Hybrid Nutrient Density Score Compared to Nutri-Score and Health Star Rating Using Receiver Operating Characteristic Curve Analyses	bHNDS
		Health Star Rating
		Nutri-Score
Dunford et al (2018)	Evaluation of Alignment between the Health Claims Nutrient Profiling Scoring Criterion (NPSC) and the Health Star Rating (HSR) Nutrient Profiling Models	Health Star Rating
		NPSC
Beacom et al (2022)	Investigating the healthiness of food products on promotion: market brands and own brands	UK TFL
An et al (2021)	Impact of Sugar-Sweetened Beverage Warning Labels on Consumer Behaviors: A Systematic Review and Meta-Analysis	Chilean WL
Andrianasolo et al (2019)	Association between an individual dietary index based on the British Food Standard Agency Nutrient Profiling System and asthma symptoms	Nutri-Score
Corvalan et al (2013)	Structural responses to the obesity and non-communicable diseases epidemic: the Chilean Law of Food Labeling and Advertising	Chilean WL
de Abreu et al (2019)	Nutrient profiling and food prices: what is the cost of choosing healthier products?	Health Star Rating
Darmon et al (2018)	The SENS algorithm—a new nutrient profiling system for food labelling in Europe	SENS
		SAIN, LIM
Gassler, Faesel and Moeser (2022)	Toward a differentiated understanding of the effect of nutri-score nutrition labeling on healthier food choices.	Nutri-Score

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Thomas, Seenivasan and Wang (2021)	A nudge toward healthier food choices: the influence of health star ratings on consumers' choices of packaged foods	Health Star Rating
		NuVal
		Guiding Stars
Wolfson 2020	Trends in the Nutrition Profile of Menu Items at Large Burger Chain Restaurants	UK Ofcom
Pongutta et al (2018)	Declaration of nutrition information on and nutritional quality of Thai ready-to-eat packaged food products	Thai Healthier Choice Logo
Bayram and Ozturkcan (2021)	Nutrition Quality of the Turkey Packaged Foods and Beverages: A Comparison of Two Nutrient Profile Models	Health Star Rating
		PAHO
Ni Mhurchu et al (2016)	Nutrient profile of 23 596 packaged supermarket foods and non-alcoholic beverages in Australia and New Zealand	NPSC
Ramirez, Osorio and Pinilla (2021)	Evaluación de etiquetas de alimentos dirigidos a población vegetariana en Colombia	UK Ofcom
Karageuzian et al (2021)	Marketing of commercial foods for infant and young children in Uruguay: sugary products, health cues on packages and fun social products on Facebook	PAHO
		Uruguay WL
Bryngelsson et al (2022)	Nutritional assessment of plant-based meat analogues on the Swedish market	Keyhole
		Nutri-Score
Bernstein et al (2017)	Healthfulness and nutritional composition of Canadian prepackaged foods with and without sugar claims	NPSC
Soo et al (2018)	Changes in the nutritional quality of fast-food items marketed at restaurants, 2010 v. 2013	Ofcom
Egnell et al (2020)	Compared to other front-of-pack nutrition labels, the Nutri-Score emerged as the most efficient to inform Swiss consumers on the nutritional quality of food products	Health Star Rating
		UK TFL
		Nutri-Score
		Reference Intakes
		Chilean WL
Yin et al (2022)	Key Stakeholder Perspectives on Introducing a Front-of-Pack Labelling Scheme on Packaged Foods in China: A Qualitative Study	"Healthier Choice"
		"Smart Choice"
Tognon et al (2021)	Development of the Choices 5-Level Criteria to Support Multiple Food System Actions	Choices
Crosbie et al (2023)	A policy study on front-of-pack nutrition labeling in the Americas: emerging developments and outcomes	PAHO
		Argentina WL
		Chilean WL
		Ecuador TFL
		Mexican WL
		Peru WL
		Uruguay WL
		Venezuela WL
		Colombia WL
Contreras-Manzano et al (2018)	Comparative Analysis of the Classification of Food Products in the Mexican Market According to Seven Different Nutrient Profiling Systems	Bolivia TFL
		Canada FOP
		PAHO
		NPSC

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		MCNE
		Health Star Rating
		MNS - Mexican Nutritional Seal
		Chilean WL
		Ecuador TFL
Rincon-Gallardo Patino et al (2016)	Nutritional quality of foods and non-alcoholic beverages advertised on Mexican television according to three nutrient profile models	MNS - Mexican Nutritional Seal
Poon et al (2018)	Comparison of nutrient profiling models for assessing the nutritional quality of foods: a validation study	WHO-EURO NPM
		UK Ofcom
		NPSC
		Nutri-Score
		HCST
Mackerras (2020)	Diet Quality Indexes and Health	WHO-EURO NPM
		PAHO
		UK Ofcom
		UK Ofcom
		UK Ofcom
Dubois et al (2021)	Effects of front-of-pack labels on the nutritional quality of supermarket food purchases: evidence from a large-scale randomized controlled trial	UK Ofcom
Chimedtseren et al (2020)	Prevalence and Credibility of Nutrition and Health Claims: Policy Implications from a Case Study of Mongolian Food Labels	SENS
		Nutri-Repère
		Nutri-Score
		WHO-WPR NPM
		WHO-WPR NPM
Van Dam et al (2022)	Benchmarking the nutrition-related commitments and practices of major Belgian food companies	Nutri-Score
Donini et al (2022)	Efficacy of front-of-pack nutrition labels in improving health status	WHO-EURO NPM
		UK Ofcom
		Danish NPM
		Norway
		WHO-EURO NPM
Hess and Slavin (2017)	Healthy Snacks: Using Nutrient Profiling to Evaluate the Nutrient-Density of Common Snacks in the United States	NRF(s)
Contreras-Manzano et al (2022)	Evaluation of the Mexican warning label nutrient profile on food products marketed in Mexico in 2016 and 2017: A cross-sectional analysis	NRF(s)
		PAHO
		Mexican WL
		Chilean WL
		Ecuador TFL
		Peru WL
		Uruguay WL
		ANVISA WL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Pivk Kupirovic et al (2019)	Nutrient Profiling Is Needed to Improve the Nutritional Quality of the Foods Labelled with Health-Related Claims	NPSC
		WHO-EURO NPM
Drewnowski and Richonnet (2020)	Dairy and Fruit Listed as Main Ingredients Improve NRF8.3 Nutrient Density Scores of Children's Snacks	NRF(s)
Singh et al (2021)	Categorizing Foods by Relative Healthfulness: A Scoping Review of Front of Pack Labelling	Choices
		Israel Green Label
		Israel Red WL
		Croatia Healthy Living Guarantee Mark
		Heart Symbol
		Keyhole
		Slovenian Protective Food Symbol
		UK TFL
		Chilean WL
		Nutri-Score
		Health Star Rating
		South Africa TFL
		South Africa GDA
Muzzioli et al (2023)	How Much Do Front-Of-Pack Labels Correlate with Food Environmental Impacts?	Nutri-Score
		Health Star Rating
		HCST
		NutriInform Battery
		Israel Green Label
Cooper et al (2020)	Australian Consumers Are Willing to Pay for the Health Star Rating Front-of-Pack Nutrition Label	Israel Red WL
Muzzioli et al (2022)	Are Front-of-Pack Labels a Health Policy Tool?	Health Star Rating
		UK Ofcom
Labonte et al (2017)	Comparison of global nutrient profiling systems for restricting the commercial marketing of foods and beverages of low nutritional quality to children in Canada	WHO-EURO NPM
		NPSC
		WHO-EURO NPM
		PAHO
Egnell et al (2021)	Randomised controlled trial in an experimental online supermarket testing the effects of front-of-pack nutrition labelling on food purchasing intentions in a low-income population	Modified-PAHO
		Nutri-Score
Wellard-Cole et al (2020)	Changes in nutrition content and health claims post-implementation of regulation in Australia	Reference Intakes
Pravst and Kusar (2019)	Labeling of nonalcoholic beverages (Chapter 9)	NPSC
		Health Star Rating
		NPSC
		Thai Healthier Choice Logo

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Vermote et al (2020)	Nutritional Content, Labelling and Marketing of Breakfast Cereals on the Belgian Market and Their Reformulation in Anticipation of the Implementation of the Nutri-Score Front-Of-Pack Labelling System	WHO-EURO NPM Nutri-Score
Lorenzoni et al (2021)	What Is the Nutritional Composition of Ultra-Processed Food Marketed in Italy?	Nutri-Score UK TFL NutriInform Battery
Khoury et al (2022)	Associations Between the Modified Food Standard Agency Nutrient Profiling System Dietary Index and Cardiovascular Risk Factors in an Elderly Population	Nutri-Score
Bielefeld, Hughes and Grafenauer (2021)	Categorizing Foods by Relative Healthfulness: A Scoping Review of Front of Pack Labelling	NPSC
Dickie, Woods and Lawrence (2018)	Analysing the use of the Australian Health Star Rating system by level of food processing	Health Star Rating
Elliott (2019)	Tracking Kids' Food: Comparing the Nutritional Value and Marketing Appeals of Child-Targeted Supermarket Products Over Time	WHO-EURO NPM CSPI criteria
Delgado Zegarra and Silva Gomes (2021)	Perfil de nutrientes de productos alimentarios eximidos de la aplicación de advertencias en el frente del envase durante la primera etapa de la Ley de alimentación saludable en Perú: estudio de caso	Peru WL PAHO
Colchero, Paraje and Popkin (2021)	The impacts on food purchases and tax revenues of a tax based on Chile's nutrient profiling model	Chilean WL
Dickinson, Watson and Prichard (2018)	Are Clean Eating Blogs a Source of Healthy Recipes? A Comparative Study of the Nutrient Composition of Foods with and without Clean Eating Claims	UK TFL
Siegrist, Hartmann and Lazzarini (2019)	Healthy choice label does not substantially improve consumers' ability to select healthier cereals: results of an online experiment	UK Ofcom
Al-Ani et al (2016)	Nutrition and health claims on healthy and less-healthy packaged food products in New Zealand	NPSC
Ahn and Lee (2022)	Effect of NUTRI-SCORE labeling on sales of food items in stores at sports and non-sports facilities	Nutri-Score
Ares et al (2018)	Nutritional warnings and product substitution or abandonment: Policy implications derived from a repeated purchase simulation	PAHO
Kim et al (2019)	A comparison of the Health Star Rating and nutrient profiles of branded and generic food products in Sydney supermarkets, Australia	Health Star Rating
Hu, Ahmed and L'Abbe (2023)	Natural language processing and machine learning approaches for food categorization and nutrition quality prediction compared with traditional methods	NPSC
Gassler, Faesel and Moeser (2023)	Toward a differentiated understanding of the effect of Nutri-Score nutrition labeling on healthier food choices	Nutri-Score
Pivk Kupirovic et al (2020)	Facilitating Consumers Choice of Healthier Foods: A Comparison of Different Front-of-Package Labelling Schemes Using Slovenian Food Supply Database	Nutri-Score Health Star Rating UK TFL Slovenian Protective Food Symbol Choices Heart Symbol Keyhole UK Ofcom WHO-EURO NPM NPSC

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Mora-Plazas et al (2019)	Nutrition Quality of Packaged Foods in Bogotá, Colombia: A Comparison of Two Nutrient Profile Models	PAHO
		Chilean WL
Ho et al (2020)	Menu labeling, calories, and nutrient density: Evidence from chain restaurants	RRR
		NRF(s)
Potvin Kent, Cameron and Philippe (2017)	The healthfulness and prominence of sugar in child-targeted breakfast cereals in Canada	UK Ofcom
Sagaceta-Mejia et al (2022)	Understanding of front of package nutrition labels: Guideline daily amount and warning labels in Mexicans with non-communicable diseases	Mexican GDA
		Mexican WL
		Chilean WL
Vergeer et al (2022)	The relationship between voluntary product (re) formulation commitments and changes in the nutritional quality of products offered by the top packaged food and beverage companies in Canada from 2013 to 2017	Health Star Rating
Hernández et al (2018)	Contenido de azúcar, grasa y sodio en alimentos comercializados en Honduras, según el etiquetado nutricional: prueba para la regulación de alimentos procesados y ultraprocesados	PAHO
Shahid, Neal and Jones (2020)	Uptake of Australia's Health Star Rating System 2014-2019	Health Star Rating
Julia et al (2016)	Impact of the front-of-pack 5-colour nutrition label (5-CNL) on the nutritional quality of purchases: an experimental study	UK Ofcom
Galan, Barbio and Salas Salvado (2019)	[Nutri-Score: front-of-pack nutrition label useful for public health in Spain which is supported by as strong scientific background].	Nutri-Score
Grummon et al (2023)	Consumer Reactions to Positive and Negative Front-of-Package Food Labels	UK Ofcom
Cooper et al (2016)	Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature	Choices
		Keyhole
		AFSSA system
		EU system
		Food Profiler
		SAIN/LIM system
		Point of purchase nutrition label
		Ratio between the Nutrient Density Score and LIM
		UK TFL
		Guiding Stars
		USA FDA Health Claims scheme
		UK Ofcom
		A Little A Lot (UK Ministry of Agriculture)
		USA FDA Health Claims scheme
		Netherlands Tripartite Classification model
		USA GRFMC CSPI scheme

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		NPSC
		Brazilian model for marketing
		Danish NPM
		Disney model
		PepsiCo model
		US (Interagency) model
		EU Pledge
		NRF(s)
		NSW (Australia) School Canteens criteria
		Uncle Toby's nutrition criteria
		Coronary Prevention Group (fat criteria only)
		Sainsbury's
		Calorie For Nutrient
		Nutritious Food Index
		Ratio of Recommended to Restricted Foods
		Naturally Nutrient Rich score
		Nutrient Density Score
		Modified Calories-for-Nutrients Score
		Nutrient Adequacy Score
		UK FSA WXYfm model
		US National Heart, Lung and Blood Institute "Go", "Slow" and "Whoa" food classes
		Modified Heart Foundation tick
		Modified FSANZ model
		LIM
		Nestle nutritional profiling system
		Kraft Sensible Solutions
		Cereal Partners Worldwide Nutrition Foundation Criteria
		Kelloggs global nutrient criteria
		Fonterra Good Choice guidelines
		Overall Nutritional Quality Index (ONQI)

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Food Quality Score 1, 2 and 3
		Nutrimap
		Dutch Vovo tripartite system
		Smart Choices
		UK FSA model SSCg3d
		Ratio of Recommended to Restricted Nutrients
		Australian Heart Foundation Tick
		American Heart Association heart-check mark
		Ratio of Recommended to Restricted food components
		FDA model
		FSANZ low salt guidance
Blitstein, Guthrie and Rains (2020)	Low-Income Parents' Use of Front-of-Package Nutrition Labels in a Virtual Supermarket	Guiding Stars
		IOM three-star system
Santos et al (2021)	Nutrient profile models a useful tool to facilitate healthier food choices: A comprehensive review	Overall Nutritional Quality Index (ONQI)
		NRF(s)
		Limited Nnutrient Score (LIM)
		SENS
		Nutri-Score
		Choices
		Keyhole
		Health Star Rating
		NPSC
		Chilean WL
		UK TFL
		UK Ofcom
		WHO-Euro NPM
		EU Pledge
		MNS - Mexican Nutritional Seal
Labonte et al (2018)	Nutrient Profile Models with Applications in Government-Led Nutrition Policies Aimed at Health Promotion and Noncommunicable Disease Prevention: A Systematic Review	NHSC
		HCST
		SAIN, LIM
		Choices
		Health Star Rating

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
El-Abbadi 2020	Nutrient Profiling Systems, Front of Pack Labeling, and Consumer Behavior.	Chilean WL
		Ecuador TFL
		Heart Symbol
		Nutri-Score
		Syngapore Healthier Choice Symbol
		Keyhole
		Weqaya logo
		UK TFL
		US Fruits & veggies - More matters
		US Smart Meal Seal nutrition criteria
		Keyhole
		Chilean WL
		UK TFL
		Choices
Dongo (2022)	Front-of-Pack Nutrition Labelling - Legitimacy of Using the Nutri-Score System in EU Member States	Nutri-Score
		Guiding Stars
Newman 2017	Marketers' use of alternative front-of-package nutrition symbols: An examination of effects on product evaluations	IOM three-star system
		NuVal
Melo, Zhen and Colson (2019)	Does point-of-sale nutrition information improve the nutritional quality of food choices?.	NuVal
The Food Foundation (2016)	Force-Fed	UK Ofcom
UK Government (2016)	5 A Day: external reference group review	UK Ofcom
		UK TFL
Bunn S, Barn G (2016)	Sugar and Public Health	UK Ofcom
Schoj V, Gutkowski P, Ponce M, Tiscornia V, Castronuovo L, Allemandi L (2016)	Food advertising to children in Argentinean television : a quantitative and qualitative analysis; final technical report	UK Ofcom
		UK TFL
		WHO-EURO NPM
		PAHO
UK Government (2016)	Childhood obesity: government response	UK Ofcom
World Health Organization (2016)	Fiscal policies for diet and prevention of noncommunicable diseases: technical meeting report, 5-6 May 2015, Geneva, Switzerland	WHO-EURO NPM
		PAHO

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Ecuador TFL
UNSCN (2016)	UNSCN Discussion Paper - Impact Assessment of Policies to support Healthy Food Environments and Healthy Diets	Samoa NPM
Wollgast J, Caldeira S, Bock AK, Maragkoudakis P, Ulberth F, Mylona K (2016) - Institute for Reference Materials and Measurements (Joint Research Centre)	Delivering on EU food safety and nutrition in 2050 : future challenges and policy preparedness.	WHO-EURO NPM
World Health Organization Executive Board 138 (2016)	Maternal, infant and young child nutrition: report by the Secretariat	WHO-EURO NPM PAHO WHO EMRO WHO WPR
World Health Organization (2016)	Enfoques poblacionales de la prevención de la obesidad infantil	Keyhole
Grattan Institute (2018)	Why Australia should have a tax on sugar sweetened beverages	Health Star Rating NPSC
Martyn T, Rogers S (2016) FAO	Food Matters	SAIN,LIM
World Health Organization World Health Assembly 69 (2016)	Maternal, infant and young child nutrition: report by the Secretariat	WHO-EURO NPM PAHO WHO EMRO WHO WPR
Health Canada (2017)	Consultation report : restricting marketing of unhealthy food and beverages to children in Canada.	WHO-EURO NPM
World Health Organization Regional Office for South-East Asia (2017)	WHO nutrient profile model for South-East Asia Region	WHO SEARO
UK Government (2016)	Childhood obesity: a plan for action	UK Ofcom
World Health Organization Regional Office for the Western Pacific (2017)	Technical Workshop on Taxing Sugar-sweetened Beverages, Manila, Philippines, 21-22 September 2016 : meeting report	WHO WPR
World Health Organization 70th World Health Assembly (2017)	Report of the Commission on Ending Childhood Obesity: implementation plan - Report by the Secretariat	PAHO WHO-EURO NPM WHO WPR
FAO (2017)	Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security. September 2017	PAHO
Scottish Government (2017)	A healthier future - action and ambitions on diet, activity, and healthy weight: consultation	UK TFL UK Ofcom
World Health Organization Regional Office for the Western Pacific	Protecting children from the harmful impact of food marketing - Draft	WHO WPR
World Health Organization Executive Board 140 (2017)	Executive Board 140th session, Geneva, 23-31 January 2017: resolutions and decisions, annexes	WHO nutrient profile model(s) for regulating marketing food and non-alcoholic beverages to children

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Al-Jawaldeh A, McColl K, Alwan A (2017) - World Health Organization, Regional Office for the Eastern Mediterranean	Proposed policy priorities for preventing obesity and diabetes in the Eastern Mediterranean Region	WHO EMRO
	House of Commons Official Report Parliamentary Debates - Tuesday 16 January 2018	UK Ofcom
The Food Foundation (2018)	Food Foundation response to Health Select Committee Inquiry on Childhood Obesity	UK Ofcom
House of Commons Health Committee (2018)	Childhood obesity: Time for action. Eighth Report of Session 2017–19	UK Ofcom
Public Health England (2018)	UK Nutrient Profiling Model 2018 review	UK Ofcom
European Observatory on Health Systems and Policies (2018)	The role of public health organizations in addressing public health problems in Europe: the case of obesity, alcohol and antimicrobial resistance	UK Ofcom
World Health Organization Regional Office for the Western Pacific (2016)	Technical Meeting on the Regional Adaptation of the WHO Nutrient Profile Model to the Western Pacific Region, Manila, Philippines, 19-21 October 2015 : meeting report	WHO WPR
World Health Organization Regional Office for South-East Asia (2018)	Regional workshop on Nutrition labelling to promote healthy diets	WHO SEARO
		Thai Healthier Symbol Logo
		Keyhole
		UK TFL
		Sri Lanka TFL
MA Boer, A Blokstra, F Vennemann, J Driesenaar, J Hansen, N Pushkarev (2019)	Supporting the mid-term evaluation of the EU action plan on childhood obesity : the childhood obesity study.	Chilean WL
		Keyhole
		Finnish Heart Symbol
		Choices
		Nutri-Score
		Slovenian Protective Food Symbol
		UK TFL
		WHO-EURO NPM
		EU Pledge
World Health Organization (2018)	Global nutrition policy review 2016-2017: country progress in creating enabling policy environments for promoting healthy diets and nutrition.	Swiss Pledge
		WHO EMRO
		WHO SEARO
		WHO WPR
		WHO-EURO NPM
World Health Organization, Country Office for Sri Lanka (2017)	Technical report on: Taxation for Sugar Sweetened Beverages in Sri Lanka	PAHO
European Union (2018)	Reviews of Scientific Evidence and Policies on Nutrition and Physical Activity - Objective Area A2: Effectiveness and Efficiency of Policies and Interventions on Diet and Physical Activity.	Sri Lanka NPM
		Nestle Nutrition Profiling System
		Keyhole

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
UK Department of Health and Social Care (2018)	Restricting checkout, end-of-aisle, and store entrance sales of food and drinks high in fat, salt, and sugar (HFSS) - Impact Assessment.	UK Ofcom
World Health Organization Regional Office for Western Pacific	Western Pacific Regional Action Agenda on Strengthening Legal Frameworks for Health in the Sustainable Development Goals	WHO WPR
Finkelstein	Using Experimental Research to Improve Diet Quality	NuVal
World Health Organization Regional Office for South-East Asia (2017)	A practice guide to effective population-based food policy actions to promote healthy diets	WHO-SEARO Keyhole Chilean WL UK TFL GDA
Chantal, Hercberg & World Health Organization (2017)	Development of a new front-of-pack nutrition label in France: the five-colour Nutri-Score	Nutri-Score
McColl, Lobstein, Brinsden & World Health Organization (2017)	Nutrient profiling could be used to transform food systems and support health-promoting food policies	WHO-EURO WHO WPR PAHO
Edelenyi et al (2019)	Ability of the front-of-pack nutrition label Nutri-Score to discriminate nutritional quality of food products in 7 European countries (Spain, Switzerland, Belgium, Italy, UK, Netherlands and Sweden) and consistency with nutritional recommendations	Nutri-Score
World Health Organization Western Pacific Region (2019)	Member States Consultation on the Draft Regional Action Framework on Protecting Children from the Harmful Impact of Food Marketing 2020-2030	Chilean WL
Kelly and Jewell (2018)	Health Evidence Network synthesis report 61 - What is the evidence on the policy specifications, development processes and effectiveness of existing front-of-pack food labelling policies in the WHO European Region?	Choices Israel Green Label Healthy Living Guarantee Mark Finnish Heart Symbol Keyhole Protective Food logo Nutri-Score Israel WL UK TFL
Belot M, James J, Spiteri J (2019).	Facilitating Healthy Dietary Habits: An Experiment with a Low Income Population	UK Ofcom
The Food Foundation (2019)	Submission to the Health and Social Care Committee's Inquiry on Childhood Obesity October 2019	UK Ofcom
Giner and Brooks (2019)	Policies for encouraging healthier food choices	Keyhole Health Star Rating
WHO Regional Office for the Eastern Mediterranean (2017)	Strategy on nutrition for the Eastern Mediterranean Region	WHO EMRO
Grammatikaki et al (2019)	Marketing of food, non-alcoholic, and alcoholic beverages. A toolkit to support the development and update of codes of conduct	WHO-EURO NPM Norwegian NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Danish NPM
		Portuguese NPM
		EU Pledge
		Nutri-Score
		Keyhole
		Irish NPM
Popkin (2020)	Ultra-processed foods' impacts on health	Chilean WL
		PAHO
UK Parliament Select Committee Publications (2020)	Consensus Action on Salt, Sugar and Health – Written evidence (FPO0053)	UK Ofcom
Access to Nutrition Initiative (2019)	U.K. Product Profile 2019	WHO-EURO NPM
		Health Star Rating
		UK Ofcom
World Health Organization Country Office for Sri Lanka (2019)	WHO Sri Lanka Biennium Report 2018-2019	Sri Lanka NPM
		Sri Lanka TFL
		Sri Lanka TFL on SSB
World Health Organization Regional Office for Africa (2019)	Regional Committee for Africa 69th Session.	WHO AFRO NPM
Nordic Council of Ministers (2020)	Food composition data and labelling - A challenging dialogue	Keyhole
		Finnish Heart Symbol
		Nutri-Score
		UK Ofcom
FAO, PAHO, WFP and UNICEF (2019)	Regional Overview of Food Security and Nutrition in Latin America and the Caribbean 2019	PAHO
		Ecuador TFL
		Chilean WL
		Peru WL
		Argentina WL
		Uruguay WL
World Health Organization Regional Office for the Western Pacific (2020)	Better laws for better health : Western Pacific regional action agenda on strengthening legal frameworks for health in the Sustainable Development Goals	WHO WPR
FAO, IFAD, UNICEF, WFP and WHO (2020)	Regional Overview of Food Security and Nutrition in the Near East and North Africa 2019 – Rethinking food systems for healthy diets and improved nutrition	WHO EMRO
European Commission (2020)	Study supporting the evaluation of: a) Regulation (EC) No 1924/2006 on nutrition and health claims made on food with regard to nutrient profiles and health claims made on plants and their preparations, and of b) the general regulatory framework for their use in foods	NPSC
		Keyhole
		UK TFL
		WHO-EURO
		Norwegian model

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Danish model Choices Finnish Heart Symbol SENS Nutri-Repère EU Pledge UK Ofcom USA ("disqualifying levels") Ireland Code Nestlé Nutritional Profiling System, NNPS
Storcksdieck genannt Bonsmann et al (2020)	Front-of-pack nutrition labelling schemes: a comprehensive review	Choices Finnish Heart Symbol Keyhole Nutri-Score Slovenian Protective Food Symbol UK TFL Daily Intake Guide Health Star Rating References Intakes Facts-Up-Front
European Commission (2020)	Report from the Commission to the European Parliament and the Council regarding the use of additional forms of expression and presentation of the nutrition declaration	Keyhole References Intakes NutriInform Battery UK TFL Choices Finnish Heart Symbol Slovenian Protective Food Symbol Healthy Living Guarantee Mark Nutri-Score South Korea TFL Ecuador TFL Health Star Rating Chilean WL Health Check Program Canada
L'Abbe, Arellano and Schermel (2020)	Scaling-up and evaluating salt reduction policies and programs in Latin American countries - final technical report	PAHO

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Chilean WL
Blanco-Metzler (2020)	Escalando y evaluando las políticas y programas de reducción de sal en América Latina : informe técnico final	UK TFL
		Peru WL
FAO (2020)	Proceedings of the FAO International Symposium on The Future of Food: 10–11 June 2019	Thai Healthier Symbol Logo
		PAHO
		Chilean WL
		Ecuador TFL
Bortoletto Martins and Amaral Mais (2020)	Front-of-package labelling (FOP): a collaborative regional study with countries members of the Common Southern Market (MERCOSUR)	Chilean WL
		Israel WL
		Peru WL
		Uruguay WL
		Mexico WL
		PAHO
World Health Organization Country Office for Sri Lanka. (2020)	A review of food procurement and provision in hospitals and schools in Sri Lanka	Sri Lanka NPM
		WHO-SEARO
		Sri Lanka TFL
Balogun (2023)	Obesity policy in England	UK Ofcom
World Health Organization Regional Office for Europe (2020)	Manual to develop and implement front-of-pack nutrition labelling: guidance for countries on the selection and testing of evidence-informed front-of-pack nutrition labelling systems in the WHO European Region	Keyhole
		Choices
		UK TFL
		Health Star Rating
		Chilean WL
		Nutri-Score
WHO (2021)	Action framework for developing and implementing public food procurement and service policies for a healthy diet	PAHO
		WHO-AFRO NPM
		WHO-EMRO
		WHO-EURO
		WHO-SEARO
		WHO-WPR
World Health Organization Regional Office for Europe (2018)	Sixty-eighth Regional Committee for Europe: Rome, 17–20 September 2018: end-of-biennium performance assessment: regional plan for implementation of the programme budget 2016–2017	WHO-EURO
World Health Organization Regional Office for Europe (2019)	Sixty-ninth Regional Committee for Europe: Copenhagen, 16–19 September 2019: Beyond 2020: status of WHO European regional action plans within the scope of the Sustainable Development Goals and WHO's Thirteenth General Programme of Work, 2019–2023	WHO-EURO
World Health Organization Regional Office for Europe (2020)	Accelerating salt reduction in Europe: a country support package to reduce population salt intake in the WHO European region	WHO-EURO
		Nutri-Score

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
European Commission, Directorate-General for Health and Food Safety (2021)	Study on the exposure of children to linear, non-linear and online marketing of foods high in fat, salt or sugar – Final report	WHO-EURO NPM
		EU Nutrition Criteria White Paper/EU Pledge
		UK Ofcom
		Denmark model
		Norway model
		PAHO
		Nutri-Score
		Health Star Rating
		SAIN, LIN
		Modified Australian TFL
		NPSC
		Children's Food and Beverages Advertising initiative (CFBAI) model
		Health Canada Surveillance Tool (HCST)
		Ministry of Health Food and Beverage Classification System (FBCS)
FAO, IFAD, UNICEF, WFP and WHO (2021)	2021 State of Food Security and Nutrition in the World – Report	Nutrient rich foods model (NRF) (USA)
		WHO-EURO
		Chilean WL
		Turkish NPM
		South Korea TFL
		Republic of Korea menu labelling
World Health Organization Regional Office for Europe (2021)	4th Meeting of the WHO European action network on reducing marketing pressure on children, Bern, Switzerland	Mexico WL
		WHO-EURO
		Portuguese NPM
		UK Ofcom
		Slovenian NPM
Fundación InterAmericana del Corazón Argentina (2021)	Informe de resultados : evaluación de efectividad de diferentes sistemas de etiquetado frontal de alimentos en niños/as en Argentina	Israel WL
		Uruguay WL
World Health Organization (2021)	Implementing nutrition labelling policies: a review of contextual factors	UK TFL
		Health Star Rating
		Nutri-Score
		UK TFL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Chilean WL
		Israel Green Label
		Israel WL
		Health Canada claims?
		NPSC
		Keyhole
		Ecuador TFL
		Sri Lanka TFL on SSB
		Canada's Food Labelling Modernization initiative??
		Mexico WL
		Venezuela WL
		Iran FOPL
World Health Organization Regional Office for Europe (2018)	Better food and nutrition in Europe: a progress report monitoring policy implementation in the WHO European Region	Keyhole
		Finnish Heart Symbol
		Nutri-Score
		UK TFL
		WHO-EURO
		EU Pledge
		Slovenian NPM
		UK Ofcom
World Health Organization Regional Office for Europe (2017)	12th Meeting of the WHO European Action Network on Reducing Marketing Pressure on Children: Dublin, Ireland, 10–11 May 2017: meeting report	Choices
		WHO-EURO
		Slovenian NPM
		UK Ofcom
		Irish NPM
		EU Pledge
		Chilean WL
		Keyhole
Köhler et al. (2017)	Reducing the consumption of sugar-sweetened beverages and their negative health impact in Estonia: EVIPNet evidence brief for policy, number 1	WHO-EURO
		Choices
		Keyhole
		Guiding Stars
World Health Organization Regional Office for Europe (2019)	Better nutrition in Kazakhstan: a key to achieving the Sustainable Development Goals	UK TFL
		WHO-EURO

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
World Health Organization Regional Office for Europe (2019)	National multisectoral multidisciplinary workshop for development of detailed implementation of the draft Action Plan for Noncommunicable Diseases (NCDs) in North Macedonia until 2025: Skopje, North Macedonia, 30–31 October 2018.	Nutri-Score WHO-EURO
Farrington et al (2019)	Prevention and control of noncommunicable diseases in Kazakhstan: the case for investment	WHO-EURO
World Health Organization Regional Office for Europe (2019)	Ending inappropriate promotion of commercially available complementary foods for infants and young children between 6 and 36 months in Europe: a discussion paper outlining the first steps in developing a nutrient profile model to drive changes to product composition and labelling and promotion practices in the WHO European Region	WHO-EURO
World Health Organization Regional Office for Europe and MCColl (2016)	Meeting of the WHO Action Network on Salt Reduction in the Population in the European Region (ESAN)20-21 April 2016 Lisbon, Portugal: meeting report	NPSC UK TFL Finnish Heart Symbol
UNICEF	Policy brief: Front-of-pack nutrition labelling of foods and beverages	Nutri-Score Health Star Rating Chilean WL Mexico WL Uruguay WL GDA PAHO Ecuador TFL UK TFL
UNICEF (2022)	Effective regulatory approaches to protect, support and promote better diets and create healthy food environments for children	Chilean WL Nutri-Score GDA Uruguay WL ANVISA WL Health Star Rating
	Update of the Nutri-Score algorithm -Yearly report from the Scientific Committee of the Nutri-Score 2021	Nutri-Score UK Ofcom Health Star Rating
	Nutri-score Frequently Asked Questions	Nutri-Score
World Health Organization Regional Office for Europe (2022)	WHO European Regional Obesity Report 2022	Portuguese NPM WHO-EURO Nutri-Score UK calorie labelling (menus restaurants, takeaways)
World Health Organization (2022)	Nudges to promote healthy eating in schools: policy brief	WHO-AFRO NPM PAHO WHO-EMRO NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
World Health Organization (2022)	Nutrition labelling: policy brief	WHO-EURO
		WHO SEARO
		WHO WPR NPM
		Nutri-Score
		Health Star Rating
		UK TFL
		Chilean WL
		Finnish Heart Symbol
		Keyhole
		Ecuador TFL
OECD (2022)		Mexico WL
		Venezuela WL
		Nutri-Score
		The Danish Whole Grain Partnership
		UK Ofcom
		NutrInform
		Health Star Rating
		UK TFL
World Health Organization (2022)	Reformulation of food and beverage products for healthier diets: policy brief	Keyhole
		WHO-AFRO NPM
		PAHO
		WHO-EMRO NPM
		WHO-EURO
		WHO SEARO
FAO (2022)	Assessment of retail food environments and green spaces for healthy cities	WHO WPR NPM
		SAIN-LIM
		WHO Regional NPMs
		WHO-AFRO NPM
World Health Organization Regional Office for Europe (2020)	Improving dietary intake and achieving food product improvement: a workshop of “first mover” countries to exchange experience and identify wider policy implications for the WHO European Region	Nutri-Score
		UK TFL
		Israel Green Label
		Israel WL
		Keyhole
		UK Ofcom
		WHO-EURO NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
World Health Organization Regional Office for Europe (2020)	Improving dietary intake and achieving food product improvement: policy opportunities and challenges for the WHO European Region in reducing salt and sugar in the diet: featuring case studies from United Kingdom, Israel, Spain, Portugal, Netherlands	Israel Green Label
		Israel WL
		Finnish Heart Symbol
		Chilean WL
European Health and Digital Executive Agency (European Commission) , ICF S.A (2022)	SC 2097106, Mapping of pricing policies and fiscal measures applied to food, non-alcoholic and alcoholic beverages	Chilean WL
		Hungarian NPM
Alluhidan et al (2022)	Overweight and Obesity in Saudi Arabia: Consequences and Solutions. International Development in Focus	UK Ofcom
		WHO-EMRO NPM
		Saudi Arabia TFL
		Saudi National Nutrition Committee NPM
		Chilean WL
		Mexico WL
		NPSC
Nohlen, Bakogiann et al. (2022)	Front-of-pack nutrition labelling schemes: an update of the evidence	RI
		NutrInform
		UK TFL
		Nutri-Score
		Keyhole
		Choices
		Finnish Heart Symbol
		Slovenian Protective Food Symbol
		Healthy Living Guarantee Mark
		Health Star Rating
		Chilean WL
		Peru WL
		Uruguay WL
		SENS
		Nutri-Repere
		Nestlé Know Your Serving
		GDA
		Teaspoon Nutritional Illustration
		Guiding Stars
		physical activity equivalent (PACE)
		Malasya FOP energy icon

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		coloured Health Star Rating
		Singapore Healthier Choice
		Nutri-Couleurs
		Whole Grain label
		PAHO
		Ecuador TFL
		Mexican Nutritional Seal
		UK Ofcom
		NPSC
		WHO-EURO NPM
		NOVA
		Mexican Committee of Nutrition Experts NPM
	Update of the Nutri-Score algorithm	Nutri-Score
	Update report from the Scientific Committee of the Nutri-Score 2022	
World Health Organization Regional Office for South-East Asia (2022)	Monitoring progress and acceleration plan for NCDs, including oral health and integrated eye care, in the WHO South-East Asia Region.	WHO SEARO NPM
World Health Organization Regional Office for South-East Asia (2022)	Mid-term review of the Strategic Action Plan to reduce the double burden of malnutrition in the WHO South-East Asia Region 2016–2025, 2022	WHO SEARO NPM
		Sri Lanka NPM
		Indian FOPL (FSSAI)
		Indonesia FOP
		Sri Lanka FOP
		WHO-EURO NPM
		Hungarian NPM
		Austrian NPM
		Estonian NPM
		Portuguese NPM
		Slovenian NPM
		WHO WPR NPM
		WHO SEARO NPM
		PAHO
		Chilean WL
		Nutri-Score
		UK Ofcom
		Finnish Heart Symbol

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Keyhole
		UK TFL
		Choices
		Healthy Living Guarantee Mark
World Health Organization Regional Office for South-East Asia (2022)	Implementation roadmap for accelerating the prevention and control of noncommunicable diseases in South-East Asia 2022–2030	WHO SEARO NPM
Robertson, Andersson and Lunn (2022)	Assessing the Impact of Nutri-Score Labelling and Product Availability on Consumer Choice	Nutri-Score
		UK Ofcom
		Chilean WL
		Health Star Rating
Asia Development Bank (2022)	Battling Climate Change and Transforming Agri-Food Systems: Asia-Pacific Rural Development and Food Security Forum 2022 Highlights and Takeaways	Thai Healthier Symbol Logo
World Health Organization (2023)	Countdown to 2023: WHO report on global trans fat elimination 2022	Mexican WL
		Chilean WL
		Peru WL
		Uruguay WL
		Venezuela WL
		PAHO
UNICEF (2023)	Key Barriers to Food Marketing Regulation	WHO Regional NPMs
Theodoros Zagorakis (PPE)		Nutri-Score
FAO, IFAD, United Nations, UNDP, UNICEF, WFP, WHO Regional Office for Europe and WMO (2023)	Regional Overview of Food Security and Nutrition in Europe and Central Asia 2022. Repurposing policies and incentives to make healthy diets more affordable and agrifood systems more environmentally sustainable	Nutri-Score
		Keyhole
		Healthy Living Guarantee Mark
		UK TFL
World Health Organization (2023)	WHO global report on sodium intake reduction	PAHO
		Nutri-Score
		Chilean WL
		Sri Lanka TFL
		Health Star Rating
		Hungarian tax NPM
		Panama NPM??
		Venezuela WL
		ANVISA WL
		Brunei Darussalam HE
		Healthy Living Guarantee Mark
		Choices

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Keyhole
		Ecuador TFL
		Indonesia FOP
		Iran TFL
		Israel WL
		NutriInform Battery
		Malaysia Healthier Choice Logo
		Mexico WL
		Mongolia TFL
		Peru WL
		Choices
		South Korea TFL
		Russian Federation TFL
		Saudi Arabia TFL
		Singapore Healthier Choice
		Slovenian Protective Food Symbol
		Thai Healthier Symbol Logo
		United Arab Emirates TFL
		UK TFL
		Uruguay WL
Amaral et al (2019)	Composição e rotulagem nutricional de alimentos : aplicação da metodologia informas	Choices
		ANVISA WL
		PAHO
		NPSC
Organização Mundial da Saúde Escritório Regional para a África (2019)	Plano estratégico para reduzir o duplo fardo da malnutrição na Região africana – 2019-2025: relatório do Secretariado	WHO-AFRO NPM
Secretaria de Gobierno de Salud, Ministerio de Salud y Desarrollo Social Argentina (2018)	Etiquetado Nutricional Frontal de Alimentos	Ecuador TFL
		Chilean WL
		WL Canada
		ANVISA WL
		Health Star Rating
		Keyhole
		Nutri-Score
OECD (2021)	Estudos da OCDE sobre os Sistemas de Saúde: Brasil 2021	Choices
		ANVISA WL
Graziano da Silva et al (2021)	Sistemas alimentarios en América Latina y el Caribe	Chilean WL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		ANVISA WL
Serviço Nacional de Saúde, Ministério da Saúde Portugal (2019)	Relatório Anual do Acesso 2019	Portuguese NPM
Organización de las Naciones Unidas para la Alimentación y la Agricultura (2017)	Plan para la Seguridad Alimentaria, Nutrición y Erradicación del Hambre de la CELAC 2025 Capítulo Chile	Chilean WL
Subsecretaría De Salud Pública División De Políticas Públicas Saludables Y Promoción Departamento De Nutrición Y Alimentos, Ministerio de Salud	Consolidado de respuestas a observaciones recibidas durante consulta pública nacional e internacional sobre la propuesta de modificación de las: "Normas Técnicas sobre Directrices Nutricionales que indica, para la Declaración de Propiedades Saludables de los Alimentos"	Chilean WL PAHO
Presidencia Uruguay	ODS Informe Voluntario Nacional Uruguay	Uruguay WL
United Nations System Standing Committee on Nutrition (2017)	UNSCN Discussion Paper - Schools as a System to Improve Nutrition	Philippines NPM
Organización Mundial de la Salud (2017)	Informe de la Comisión para acabar con la obesidad infantil: plan de aplicación: informe de la Secretaría	PAHO WHO-EURO NPM WHO WPR NPM
Organización Mundial de la Salud (2017)	70.ª Asamblea Mundial de la Salud: Ginebra, 22-31 mayo de 2017, resoluciones y decisiones, anexos	"WHO model(s)"
Madriz et al (2020)	El desafío de reducir el consumo de sal/sodio en la dieta de la población latinoamericana - Policy Brief	UK TFL
International Food Policy Research Institute (2020)	Reflexiones sobre las políticas alimentario-nutricionales de la Argentina, antes y durante la pandemia del COVID-19	Argentina WL
International Food Policy Research Institute (2020)	Reflexiones para un futuro programa de protección social en Venezuela	Venezuela WL
Coalición Nacional para Prevenir la Obesidad en Niños, Niñas y Adolescentes	Pronunciamento de la coalición nacional para prevenir la obesidad infantil en niños, niñas y adolescentes sobre etiquetado frontal de advertencias	PAHO Argentina WL Nutri-Score
FIC Argentina (2020)	Etiquetado frontal de advertencias : guía para identificar y responder a los argumentos de la industria alimenticia y sus aliados	Argentina WL PAHO Nutri-Score
FIC Argentina (2021)	Políticas para promover un etiquetado frontal en alimentos y bebidas : recomendaciones para Argentina	Nutri-Score PAHO
	Informe de resultados : evaluación de efectividad de diferentes sistemas de etiquetado frontal de alimentos en niños/as en Argentina	Uruguay WL UK TFL
Ministerio de Salud y Protección Social Colombia, Subdirección de Salud Nutricional, Alimentos y Bebidas (2022)	Análisis de Impacto Normativo Ex post sobre etiquetado frontal de advertencia en alimentos envasados	Colombia WL
Bortoletto et al (2022)	Posibles acciones para avanzar en los resultados esperados planeados : aportes del comité coordinador de Colansa y de miembros participantes en la reunión del 26 de abril de 2022	PAHO Ecuador TFL
Paraje (2022)	An agenda for action - transitioning to a healthy sustainable food system in Latin America	Chilean WL índice NFR

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Gazarova et al. (2023)	Nutritional value of gluten-free products using the front-of-pack labeling nutri-score.	Nutri-Score UK NPM
Barrett et al. (2023)	Comparing product healthiness according to the Health Star Rating and the NOVA classification system and implications for food labelling systems: An analysis of 25 486 products in Australia.	HSR WHO-EURO NPM Food Compass Nutri-Score
Andrade et al. (2023)	Whole grain products in Brazil: the need for regulation to ensure nutritional benefits and prevent the misuse of marketing strategies.	PAHO
Ovrebo et al. (2023)	How does the updated Nutri-Score discriminate and classify the nutritional quality of foods in a Norwegian setting?	Nutri-Score NutriInform Keyhole
Martin et al. (2023)	Systematic Review of Nutrient Profile Models Developed for Nutrition-Related Policies and Regulations Aimed at Noncommunicable Disease Prevention -An Update.	Brazil WL Brunei Healthier Choice Logo Canada WL Croatia Healthy Living Mark India NPM Iran TFL Israel Green label Israel WL Saudi Arabia TFL Malaysia Healthier Choice Logo Mexico WL Peru WL Sri Lanka TFL Thailand Healthier Choice Logo Tunisia Health Logo Uruguay WL Zambia Good Food Logo Canada NPM marketing restrictions China (Taiwan) NPM marketing WHO-EMRO NPM WHO-SEARO NPM Samoa NPM Sri Lanka NPM Tunisia NPM claims

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Wallis et al. (2023)	Product promotions in online supermarkets: prevalence of 'High Fat Sugar Salt' (HFSS) products and labelling characteristics.	Slovenia TFL - consumer education
		UK NPM
		UK TFL
Browne et al. (2023)	Nutrition quality and food and packaging waste associated with the school food system: A pilot, citizen science study in an Irish secondary school.	WHO-EURO NPM
Velazquez et al. (2023)	Children's reaction to sugar reduced dairy desserts in the context of the implementation of nutritional warning labels: An exploratory study.	Uruguay WL
deLasHeras-Delgado et al. (2023)	Are plant-based alternatives healthier? A two-dimensional evaluation from nutritional and processing standpoints.	Nutri-Score (1st edition)
Srour et al. (2023)	Effect of a new graphically modified Nutri-Score on the objective understanding of foods' nutrient profile and ultraprocessing: a randomised controlled trial.	Nutri-Score
Dickie et al. (2023)	A novel food processing-based nutrition classification scheme for guiding policy actions applied to the Australian food supply.	HSR
		PAHO
		WHO-EURO NPM
		Model 1
		Model 2
Rodriguez-Martin et al. (2023)	Characterizing Meat- and Milk/Dairy-like Vegetarian Foods and Their Counterparts Based on Nutrient Profiling and Food Labels.	Nutri-Score
Ropero et al. (2023)	Nutritional Description of Organic and Conventional Food Products in Spain: The BADALI Project.	PAHO
Bassetti et al. (2023)	Prevalence of Front-of-Pack Warning Signs among Commercial Complementary Foods in Seven High and Upper Middle-Income Countries.	UK TFL
		UAE TFL
		Chile WL
		Brazil WL
		Mexico WL
		WHO NPPM
Brunacci et al. (2023)	The big squeeze: a product content and labelling analysis of ready-to-use complementary infant food pouches in Australia.	HSR
		UK NPM
Chan et al. (2023)	Validation of the Thumbs food classification system as a tool to accurately identify the healthiness of foods.	Thumbs system
		HSR
		Northern Territory School Canteens Guidelines (NTSCG)
Bertorello et al. (2023)	Effects of nutritional profile system and front labeling in food selection during purchases: a systematic review.	UK TFL
		Ecuador TFL
		Chile WL
		Nutri-Score
		HSR
		Choices

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Keyhole
		Peru WL
		Mexico WL
		Uruguay WL
		Argentina WL
		Bolivia TFL
Jahn et al. (2023)	Truthful yet misleading: consumer response to 'low fat' food with high sugar content.	GDA
Mertens and Penalvo (2023)	Mapping the nutritional value of diets across Europe according to the nutri-score front-of-pack label.	Nutri-Score
Santos et al. (2023)	Nutritional quality of foods consumed by the Portuguese population according to the Nutri-Score and consistency with nutritional recommendations.	Nutri-Score
		Portuguese NPM
		Keyhole
		Choices
		RI
		NutrInform
		UK TFL
		Nutri-Score
Deschasaux-Tanguy et al (2024)	Nutritional quality of diet characterized by the Nutri-Score profiling system and cardiovascular disease risk: a prospective study in 7 European countries.	
Lim et al. (2024)	Market survey of food product indicators and their credibility as a healthy food product in Klang Valley, Malaysia.	Malaysia Healthier Choice Logo
		WHO-WPRO NPM
		GDA %
		Australian Daily Intake Guide
		Facts-up-Front
		NutrInform
		Malaysia Energy Icon
		HSR
		Nutri-Grade
		UK TFL
		Chile WL
		Uruguay WL
		Peru WL
		Mexico WL
		Canada WL
		Brazil WL
		Israel WL
		Thailand Healthier Choice Logo
		Brunei Healthier Choice Logo

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		China Healthier Choice Logo
		Indonesia Healthier Choice Logo
		Singapore Healthier Choice Logo
		Choices
		Keyhole
		Sugar Wise
		American Heart Association
Dunford et al. (2024)	Defining "High-In" Saturated Fat, Sugar, and Sodium to Help Inform Front-of-Pack Labeling Efforts for Packaged Foods and Beverages in the United States.	Canada WL
		PAHO
		Chile WL
		FDA FOPNL "high-in"
		Mexico WL
		Brazil WL
Beltrá, Borrás and Ropero (2024)	Are Foods with Protein Claims Healthy? A Study of the Spanish Market.	PAHO
Ziraldo et al. (2024)	Investigating reformulation in the Canadian food supply between 2017 and 2020 and its impact on food prices.	FSANZ NPSC
Khoury et al. (2024)	Ability of a dietary index based on the updated algorithm underpinning the Nutri-Score to discriminate food consumption and nutrient intake in a French population of children and adolescents.	Nutri-Score 2023
Polezi et al. (2024)	The more fun, the more dangerous: The nutritional quality of foods with child-directed marketing.	Brazil WL
		Nutri-Score
		PAHO
Shobana et al. (2024)	Assessment of front and back of pack nutrition labels of selected convenience food products and snacks available in the Indian market.	Food Safety and Standards Authority of India (FSSAI) advertising and claims regulations
		UK TFL
		Nutri-Score
		WHO-EURO NPM
Lee et al. (2024)	Development and validity testing of the Canadian Food Scoring System (CFSS), a nutrient profile model based on the recommendations of Canada's Food Guide 2019.	Canadian Food Scoring System (CFSS)
Thompson et al. (2024)	Consumer perceptions of nutrient content claims in Australia: A qualitative study.	FSANZ NPSC
Sarda et al. (2024)	Consistency of the Initial and Updated Version of the Nutri-Score with Food-Based Dietary Guidelines: A French Perspective.	Nutri-Score
Millar et al. (2024)	The Nutri-Score nutrition label: Associations between the underlying nutritional profile of foods and lipoprotein particle subclass profiles in adults.	Nutri-Score
Byron et al. (2024)	Aligning front-of-pack labelling with dietary guidelines: including whole grains in the health star rating.	Health Star Rating
		Health Star Rating to include whole-grains

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Sarda et al. (2024)	How far can reformulation participate in improving the nutritional quality of diets at population level? A modelling study using real food market data in France.	Nutri-Score
Muzzioli et al. (2024)	Food Compass and the challenge of sustainability on the route towards healthful diets.	Food Compass
Ding et al. (2024)	Evaluation of the Nutritional Quality of Chinese Processed Meat Products: Comparison of Two Nutrient Profile Models.	Chile WL Chinese Healthier Choice Logo
Yang et al. (2024)	Front-of-Package-Label-Style Health Logos on Menus-Do Canadian Consumers Really Care about Menu Health Logos?.	Canada WL
Merz et al. (2024)	Nutri-Score 2023 update.	Nutri-Score
Sarda et al. (2024)	Complementarity between the updated version of the front-of-pack nutrition label Nutri-Score and the food-processing NOVA classification.	Nutri-Score
Dicken et al. (2024)	Nutrients or processing? An analysis of food and drink items from the UK National Diet and Nutrition Survey based on nutrient content, the NOVA classification and front of package traffic light labelling.	TFL Nutri-Score
Montericcio et al. (2024)	Dietary indices underpinning front-of-pack nutrition labels and health outcomes: a systematic review and meta-analysis of prospective cohort studies.	Nutri-Score / FSAm-NPS DI Chile WL HSR /Health Star Rating DI
Ciobotaru et al. (2024)	Healthiness of Meat-Based Products in Comparison to Their Plant-Based Alternatives in the UK Market: A Packaging Evaluation.	UK NPM UK TFL
Bhatnagar et al. (2024)	Nutrient profiling assessment of packaged snack foods with nutrition-related claims available on the Indian market.	WHO-SEARO NPM
Paulsen et al. (2024)	Responses to the updated Nutri-Score algorithms in Norway: A qualitative study among food system actors in the NewTools-project.	Nutri-Score
Lee et al. (2024)	Examining the diet quality of Canadian adults and the alignment of Canadian front-of-pack labelling regulations with other front-of-pack labelling systems and dietary guidelines.	Canada WL DCCP Guidelines Nutri-Score
Manzur (2024)	Comparison of added sugar in dairy products: PAHO algorithm vs. manufacturer's declaration.	PAHO
Pinedo et al. (2024)	Comparative study of the nutritional quality of ultra-processed foods according to two nutrient profile models.	PAHO Peru Manual de Advertencias Publicitarias
Hafner et al. (2024)	A systematic assessment of the revised nutri-score algorithm: potentials for the implementation of front-of-package nutrition labeling across Europe.	Nutri-Score WHO-EURO NPM/ Slovenia NPM
Hau et al. (2024)	Learning about good nutrition with the 5-color front-of-package label "Nutri-Score": an experimental study.	Nutri-Score
Franchi et al. (2025)	Updated nutrient profiling system underlying nutri-score (Uns-Nps) and colorectal cancer risk.	Nutri-Score Nutrinform Battery
Gonzalez et al. (2025)	Indonesian Adolescents' Perceptions of Front-of-Package Labels on Packaged Food and Drinks.	PAHO UK TFL Healthier Choice Indonesia
Paulsen et al. (2025)	Evaluation of Nutri-Score and NewTools-score in a Norwegian setting using a reference standard based on nutrition experts' ranking of foods' healthiness.	Nutri-Score NewTools-score
Amberntsson et al. (2025)	Improvements to the Nutri-Score to address challenges identified in a Nordic setting.	Nutri-Score

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Tassy et al. (2025)	Nutrient Profiling Models in Low- and Middle-Income Countries Considering Local Nutritional Challenges: A Systematic Review.	NewTools-score
		Keyhole
		Zambia Good Food Logo
		South Africa WL
		Iran TFL
		Keyhole - North Macedonia
		Indonesia Healthier Choice Logo
		Thai Healthier Choice Logo
		Malaysia Healthier Choice Logo
		Sri Lanka TFL
		Bolivia TFL
		Ecuador TFL
		Colombia WL
		Peru WL
		Brazil WL
deLasHeras-Delgado et al. (2025)	The Nutritional Profile of Spanish Beverages: A Comparative Evaluation of the Original and Updated Nutri-Score Algorithm.	Mexico WL
		Argentina WL
Onifade et al. (2025)	Nutritional quality and on-package marketing of pre-packaged foods and non-alcoholic beverages for sale in Senegalese supermarkets.	Ethiopia Fiscal policy
		South Africa NPM claoms
Soares et al. (2025)	Efficacy of Brazilian and Mexican front-of-package nutrition labeling systems on simulated online purchase of non-alcoholic beverages by adolescents: A randomized controlled study.	Colombia Fiscal policy
		Nutri-Score
Salgado et al. (2025)	Product reformulation in non-alcoholic beverages and foods after the implementation of front-of-pack warning labels in Mexico.	WHO-Africa NPM
		Nutri-Score
Chan et al. (2025)	The Nutrient Profiling of Swedish Food Products-A Study of the Alignment of the Multi-Level Criteria for the Choices and Nutri-Score Systems with the Nordic Keyhole Logo.	Mexico WL
		Brazil WL
Vergeer et al. (2025)	The healthfulness of major food brands according to Health Canada's nutrient profile model for proposed restrictions on food marketing to children.	Mexico WL
		Keyhole
		Nutri-Score
Barrett et al. (2025)	Modifying the Health Star Rating nutrient profiling algorithm to account for ultra-processing.	Choices
Braesco et al. (2025)	Improved Recognition of the Nutrition and Health Benefits of Nuts and Seeds Within the Health Star Rating System.	Health Canada NPM for marketing
Hurst et al. (2025)		HSR
		HSR
		UK NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
	Prevalence of High Fat Sugar Salt Products, Labeling Characteristics, and Categories of Foods Sold within In-Store Restricted Areas: A Survey in 3 UK Supermarkets after the 2022 Implementation of the Food (Promotion and Placement) Regulations.	UK TFL
Hasni et al. (2025)	Health star rating labels: a systematic review and future research agenda.	HSR
Haslam 2024	Diet quality, front-of-pack labeling, and lipoprotein particle profiles	Nutri-Score
SterupMoore et al. (2024)	Nutritional scores of milk and plant-based alternatives and their difference in contribution to human nutrition	UK TFL
		Nutrinform Battery
		Nutri-Score
		HSR
Mediratta et al. (2023)	Understanding of nutrition information on food labels among higher income adults in India	India FSSAI logo
		% GDA
Fu et al. (2024)	Nutrient Density, Added Sugar, and Fiber Content of Commercially Available Fruit Snacks in the United States from 2017 to 2022	Nutrient Rich Food (NRF)
Mamani-Urrutia et al. (2025)	Evaluating nutrient profiles of packaged foods in Peru pre- and post-introduction of front-of-pack warning labels, 2018-2021	Peru WL
Lima et al. (2023)	Front-of-package label in Brazil: Comparison of guideline daily amounts, traffic-light and warning systems	Brazil WL
		Facts up Front
		% GDA
		UK TFL
		HSR
		Nutri-Score
		Keyhole
		Choices
		Chile WL
		Ecuador TFL
		Peru WL
		Bolivia TFL
		Uruguay WL
		Venezuela WL
Liechti et al. (2025)	Does label information reflect product properties? A Swiss case study of plant-based milk alternatives	Colombia WL
		Mexico WL
		Nutri-Score
Mora-Plazas et al. (2024)	Impact of nutrient warning labels on Colombian consumers selection and identification of food and drinks high in sugar, sodium, and saturated fat: A randomized controlled trial	% GDA
		Colombia WL
		Nutri-Score
Redruello-Requejo et al. (2025)	An updated picture of the food supply in Spain using the branded food composition database TABULA™	% GDA
		WHO-EURO NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Chouraqui et al. (2023)	Nutri-Score: Its Benefits and Limitations in Children's Feeding	Nutri-Score
Noraidi 2023	Food Labelling Practices of Local Products in Brunei Darussalam	Healthier Choice Brunei
Giner, Rodriguez and Elasri (2023)	Developing Food Labels for Improved Health Outcomes	Keyhole
		Heart symbol (Finland)
		Healthy living (Croatia)
		Healthy symbol
		Chile WL
		Peru WL
		Mexico WL
		Colombia WL
		Brazil WL
		Argentina WL
		Canada WL
		Israel WL
		Israel Green logo
		Korea TFL for children food
		UK TFL
		NutriInform Battery
Pan-American Health Organization (2025)	Dietary sodium in Caribbean populations	HSR
		Nutri-Score
		PAHO NPM
World Health Organization Regional Office for Europe (2023)	Report of the first meeting of the WHO Sugar and Calorie Reduction Network. London, United Kingdom,19–20 October 2022	Chile WL
		Nutri-Score
		WHO-EURO NPM
		Portuguese NPM
		UK TFL
		Keyhole
		Israel WL
The Rt Hon the Lord Blencathra (2024)	The Rt Hon the Lord Blencathra PC (FDO0118)	Israel Green logo
		Nutri-Score
		UK TFL
UNICEF (2023)	Guidance Framework to Support Healthier Food Retail Environments for Children	Chile WL
		HSR
		WHO NPPM
		WHO-EURO NPM
		PAHO NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
The George Institute (2023)	Supporting evidence-informed policy work on added sugars labelling	Uruguay WL
		Mexico WL
		PAHO NPM
		HSR
Pan-American Health Organization (2024)	WHO/PAHO Technical Advisory Group on Cardiovascular Disease Prevention Through Dietary Salt/Sodium Reduction: Final Report Phase 3	PAHO NPM
		Chile WL
		Ecuador TFL
		Mexico WL
		Peru WL
		Uruguay WL
		Argentina WL
		Brazil WL
		Canada WL
		World Health Organization Regional Office for South-East Asia (2023)
UK TFL		
Nutri-Score		
Chile WL		
Thai Healthier Choice Logo		
Malaysia Healthier Choice Logo		
Sri Lanka TFL		
Indian Nutrition Rating		
WHO-SEARO NPM		
Department of Health and Social Care (2024)	Department of Health and Social Care (FDO0052)	UK NPM
		HSR
		Nutri-Score
		UK TFL
	Food, Diet and Obesity Committee. Corrected oral evidence: Food, diet and obesity. 25 March 2024	Nutri-Score
		UK NPM
Food and Agriculture Organization, Pan-American Health Organization, United Nations Children's Fund (2023)	Front-of-pack nutrition labelling in Latin America and the Caribbean	Mexico WL
		Venezuela WL
		Colombia WL
		Brazil WL
		Uruguay WL
		Argentina WL
		Chile WL
		Bolivia TFL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Van Tulleken (2024)	Dr Chris van Tulleken (FDO0145)	Peru WL
		Ecuador TFL
		UK TFL
		UK NPM
		Canada WL
		Venezuela WL
		Colombia WL
		Ecuador TFL
		Bolivia TFL
		Brazil WL
		Uruguay WL
		Argentina WL
		Chile WL
		Peru WL
Food and Agriculture Organization (2023)	Türkiye food literacy strategy and action plan, 2022–2028	Mexico WL
		PAHO NPM
World Health Organization Regional Office for the Eastern Mediterranean (2023)	Summary report on the Regional expert meeting on policy action for healthy diets, with a focus on the Gulf Cooperation Council countries, Dubai, United Arab Emirates, 27 February to 1 March 2023	Saudi Arabia TFL
		WHO-EMRO NPM
		Nutri-Score
		Qatar TFL
		UAE TFL
		Keyhole
		Weqaya
		Chile WL
ASEAN and UNICEF (2024)	ASEAN Minimum Standards and Guidelines on Actions to Protect Children from the Harmful Impact of Marketing of Food and Non-alcoholic Beverages	WHO-SEARO NPM
		WHO-WPRO NPM
		Malaysia NPM for marketing
		Chile WL
WHO Regional Office for Europe (2023)	Fifteenth meeting of the WHO Action Network on Salt Reduction in the Population in the WHO European Region: Bern, Switzerland 29–30 June 2023: meeting report	UK TFL
		Nutri-Score
		Keyhole
		Israel WL
		Chile WL
		WHO-EURO NPM
		WHO NPPM
Food and Drink Federation (2024)	Food and Drink Federation - Written Evidence (FDO0121)	UK NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Nutri-Score
		HSR
		UK TFL
		Chile WL
Waitrose (2024)	Waitrose – Written Evidence (FDO0137)	UK TFL
Obesity Health Alliance (2024)	Obesity Health Alliance – Written Evidence (FDO0058)	UK NPM
		UK TFL
		WHO NPPM
		PAHO NPM
Nomad Foods (2024)	Nomad Foods – Written Evidence (FDO0112)	RI
		Nutri-Score
		UK TFL
		UK NPM
World Health Organization and United Nations Children's Fund (2023)	Taking action to protect children from the harmful impact of food marketing: a child rights-based approach	WHO-EURO NPM
		WHO-EMRO NPM
		WHO-AFRO NPM
		WHO-SEARO NPM
		WHO-WPRO NPM
		PAHO NPM
Pan-American Health Organization (2023)	Front-of-package warning labels save lives and resources: results from a modeling study in Barbados	Caribbean Community (CARICOM)
		PAHO NPM
Brice et al. (2023)	Are policies in Vietnam conducive of healthy food environments? Insights from a multi-sectoral policy landscape analysis	HSR
		Nutri-Score
		Chile WL
		FSANZ health claims
Kellanova (2024)	Kellanova – Written Evidence (FDO0124)	UK NPM
		UK TFL
World Health Organization (2024)	Tackling NCDs: best buys and other recommended interventions for the prevention and control of noncommunicable diseases	WHO-EURO NPM
		WHO-EMRO NPM
		WHO-AFRO NPM
		WHO-SEARO NPM
		WHO-WPRO NPM
		PAHO NPM
	Food, Diet and Obesity Committee. Corrected oral evidence: Food, diet and obesity.Thursday 8 February 2024	UK NPM
		UK TFL
Tenhunen (2023)	Health claims made on foods: Findings on the implementation and application of Regulation (EC) No 1924/2006	WHO-EURO NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
		Nutri-Score
WHO Regional Office for Africa (2023)	Progress report on the implementation of the strategic plan to reduce the double burden of malnutrition in the African Region (2019–2025): information document	WHO-AFRO NPM
Consensus action on salt, sugar and health (2024)	Consensus action on salt, sugar and health (CASSH) - Written Evidence (FDO0102)	WHO NPPM
		UK TFL
	Food, Diet and Obesity Committee. Corrected oral evidence: Food, diet and obesity. Thursday 21 March 2024. 10 am	UK TFL
		Nutri-Score
		UK NPM
	Cancer Research UK – Written Evidence (FDO0029)	UK TFL
		UK NPM
The Committee of Advertising Practice Ltd. (CAP) (2016)	CAP Consultation: food and soft drink advertising to children - Regulatory statement	UK NPM
	Dr Charlotte Mills And Prof Gunter Kuhnle, Department of Food and Nutritional Sciences at University Of Reading - Written Evidence (Fdo0033)	Nutri-Score
		UK TFL
		UK NPM
WHO Regional Office for Europe (2023)	WHO European Office for Prevention and Control of Noncommunicable Diseases, Moscow, Russian Federation: 2014–2023 report	WHO-EURO NPM
The Food Foundation (2024)	Food Foundation – Written Evidence (FDO0091)	PAHO NPM
		Mexico WL
		Argentina WL
		Colombia WL
		UK TFL
		UK NPM
The Food Foundation (2024)	Ultra-processed foods: a new frontier for investors in food businesses?	UK TFL
		UK NPM
		Nutri-Score
		HSR
		Mexico WL
		Argentina WL
European Commission: European Health and Digital Executive Agency (2024)	Study on the effectiveness of health information on alcoholic beverages - Publications Office of the EU	NutrInform Battery
		RI
		UK TFL
		Keyhole
		Nutri-Score
		Peru WL
		Chile WL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
The Food Foundation (2025)	The Broken Plate 2025	Uruguay WL
		Mexico WL
		Argentina WL
		Caribbean Community (CARICOM)
		UK NPM
	Food, Diet and Obesity Committee. Corrected oral evidence: Food, diet and obesity. Thursday 21 March 2024. 11.15 am	WHO NPPM
		UK TFL
		UK NPM
British Nutrition Foundation (2024)	British Nutrition Foundation – Written Evidence (FDO0081)	Chile WL
		UK NPM
POST (2024)	Food, diet, nutrition and cancer	UK TFL
		UK NPM
European Commission: Directorate-General for Taxation and Customs Union, ECORYS, WIFO and Erasmus University Rotterdam (2025)	Health taxes from an EU perspective – Final report	UK TFL
		Best-ReMaP EU coordinated NPM
		Keyhole
		NutrInform Battery
World Health Organization Regional Office for Africa (2024)	Shaping a healthier future: Universal Health Coverage/Healthier Populations Cluster: results report for the end of the biennium 2022–2023	Nutri-Score
		WHO-AFRO NPM
		Kenya FOPNL
		Uganda FOPNL
The Food Foundation (2023)	The Broken Plate 2023	Tanzania FOPNL
		UK NPM
		UK TFL
World Health Organization Regional Office for the Eastern Mediterranean (2023)	Assessing national capacity for the prevention and control of noncommunicable diseases: report of the 2019 country capacity survey in the Eastern Mediterranean Region	Bahrain FOPL
		Kuwait FOPL
		Oman FOPL
		Saudi Arabia TFL
		UAE TFL
	Update of the Nutri-Score algorithm for beverages V2 - 2023	Iran FOPL
		Nutri-Score 2023
World Health Organization Regional Office for South-East Asia (2024)	Creating and supporting healthier populations and tackling noncommunicable diseases and mental health in the WHO South-East Asia Region. Biennium Report 2022–2023 – Department of Healthier Populations and Noncommunicable Diseases (HPN)	FSSAI draft regulations on front of pack nutritional labelling for foods high in fat, sugar and salt
World Health Organization Regional Office for Europe (2016)	Ninth Meeting of the WHO European Childhood Obesity Surveillance Initiative (COSI): St Petersburg, Russian Federation, 13–14 June 2016: meeting report	WHO-EURO NPM
		Turkey NPM
	Steering R & D and S & T Innovations to New Heights: The Mission Continues	Philippines NPM

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Department of Science and Technology: Food and Nutrition Research Institute	Joint Committee on Health debate - Wednesday, 14 Feb 2024	WHO-WPRO NPM
		WHO-SEARO NPM
		Choices
House of Lords Library (2023)	Obesity policy in England	Best-ReMaP EU coordinated NPM
		WHO-EURO NPM
		UK TFL
Danzer and Zeidler (2024)	Present Bias in Choices over Food and Money	UK NPM
European Commission: European Research Executive Agency and Agra CEAS Consulting (2023)	The food and beverage market entry handbook – Saudi Arabia	Saudi Arabia TFL
		Saudi Arabia NPM
World Health Organization (2023)	WHO country stories: delivering for all.	Argentina WL
		PAHO NPM
Kenya National Tresury (2024)	Health Sector Report	Kenya NPM / FOPNL
Sri Lanka Directorate of Policy Analysis and Development - Ministry of Health (2022)	Review Of The National Health Policy	Sri Lanka TFL
		Sri Lanka TFL for SSB
World Health Organization Regional Office for South-East Asia (2023)	The Work of WHO in the South-East Asia Region, Report of the Regional Director, 1 January-31 December 2022	WHO-SEARO NPM
		Indian FOPNL
FAO, IFAD, UNICEF, WFP and WHO (2023)	The state of food security and nutrition in the world. 2023, urbanization, agrifood systems, transformation and healthy diets across the rural - urban continuum	Ghana NPM/FOPNL
FAO, IFAD, UNICEF, United Nations, UNDP, WFP, WHO and WMO (2023)	Europe and Central Asia – Regional Overview of Food Security and Nutrition 2022	Keyhole
		Healthy Living Mark
		UK TFL
		Nutri-Score
FAO, IFAD, UNICEF, WFP and WHO (2024)	The State of Food Security and Nutrition in the World 2024 – Financing to end hunger, food insecurity and malnutrition in all its forms.	WHO-EURO NPM
		Chlile WL
Ministerio de la Salud Argentina	Reporte de Gestión SIFeGA 2022	Argentina WL
Ministerio de la Salud Argentina	Aplicación De La Ley N ° 27642 Y El Decreto 151 / 22	Argentina WL
		PAHO NPM
FAO, PAHO & UNICEF (2023)	Front-of-pack nutrition labelling in Latin America and the Caribbean – Guidance note	Mexico WL
		Venezuela WL
		Brazil WL
		Colombia WL
		Uruguay WL
		Argentina WL
		Ecuador TFL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
PAHO (2023)	Marco de acción para formular y aplicar políticas de compras y servicios de alimentos en el sector público para promover una alimentación saludable	Bolivia TFL
		Chile WL
		Peru WL
		PAHO NPM
		PAHO NPM
		WHO-Africa NPM
		WHO-WPRO NPM
		WHO-EURO NPM
		WHO-SEARO NPM
		WHO-EMRO NPM
PAHO (2023)	Análisis de criterios de clasificación de productos alimentarios para la aplicación del etiquetado frontal de advertencia en Paraguay	Chile WL
		Uruguay WL
		Paraguay WL
PAHO (2024)	Estrategia de cooperación de país entre OPS/OMS y el Uruguay, 2023 - 2027	PAHO NPM
PAHO (2024)	Políticas saludables de compra y abastecimiento de alimentos para la Región de las Américas	Uruguay WL
Argentina Productiva 2030 (2023)	Misión 6. Adaptar la producción de alimentos a los desafíos del siglo XXI. Plan para el Desarrollo Productivo, Industrial y Tecnológico - Ministerio de Economía de la Nación.	PAHO NPM
		Argentina WL
		PAHO NPM
		Chile WL
		Mexico WL
		Peru WL
Gabinete de Ministros Argentina	Informe 136	Uruguay WL
FAO (2025)	El estado mundial de la agricultura y la alimentación 2024: Transformación de los sistemas agroalimentarios orientada hacia el valor.	Argentina WL
		Argentina WL
		Brazil WL
		Ecuador TFL
		Israel FOPNL
		Mexico WL
		Peru WL
		Iran FOPNL
		Singapur FOPNL
		Sri Lanka FOPNL
		Thailand FOPNL
		Uruguay WL
		Bolivia TFL
		Canada FOPNL

Author (year)	Title	Possible NPMs or FOPNL system mentioned in the publication
Programa Nacional para a Promoção da Alimentação Saudável (2023) Pena Junior and Francozo (2023) Organização Mundial da Saúde Escritório Regional para a África (2025)	Boletín Oficial Del País Vasco - jueves 29 de febrero de 2024	Venezuela WL
		Chile WL
		PAHO NPM
	Programa Nacional Para A Promoção Da Alimentação Saudável	WHO-EURO NPM
		Portuguese NPM
	O futuro da agricultura brasileira: 10 visões.	ANVISA FOPNL
		Kenya FOPNL
		Uganda FOPNL
	Uma década de transformação 2015-2024: melhoria da saúde das populações Africanas	Tanzania FOPNL

Table 4. Excluded **NPMs** with reason(s)

Potential NPM	Reference	Reason for exclusion	
"Daily intake Guide"	Neal B, Crino M, Dunford E, et al. Effects of Different Types of Front-of-Pack Labelling Information on the Healthiness of Food Purchases-A Randomised Controlled Trial. <i>Nutrients</i> . 2017;9(12):1284. Published 2017 Nov 24. doi:10.3390/nu9121284	C	NPM not developed or endorsed by governmental or inter-governmental organisations
A Little A Lot (UK Ministry of Agriculture)	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Garsetti, M., de Vries, J., Smith, M. et al. Nutrient profiling schemes: overview and comparative analysis. <i>Eur J Nutr</i> 46 (Suppl 2), 15–28 (2007). https://doi.org/10.1007/s00394-007-2002-7 Rayner M, Scarborough P, Williams C. The origin of Guideline Daily Amounts and the Food Standards Agency's guidance on what counts as 'a lot' and 'a little'. <i>Public Health Nutr</i> . 2004 Jun;7(4):549-56. doi: 10.1079/PHN2003552. Erratum in: <i>Public Health Nutr</i> . 2004 Aug;7(5):693. PMID: 15153261.	I	NPM for other purposes
ABIA model	Silva, A.R.C.S., Braga, L.V.M. and Anastácio, L.R. (2021), A comparison of four different Nutritional Profile models in their scoring of critical nutrient levels in food products targeted at Brazilian children. <i>Nutr Bull</i> , 46: 128-138. https://doi.org/10.1111/nbu.12490	C	NPM not developed or endorsed by governmental or inter-governmental organisations
American Heart Association heart-check mark	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Scarborough P, Boxer A, Rayner M, Stockley L. Testing nutrient profile models using data from a survey of nutrition professionals. <i>Public Health Nutrition</i> . 2007;10(4):337-345. doi:10.1017/S1368980007666671 American Heart Association (AHA). The power of the heart: American Heart Association food certification program annual report 04–05 [online]. Texas: AHA, 2005	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Australian Heart Foundation Tick	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Scarborough P, Boxer A, Rayner M, Stockley L. Testing nutrient profile models using data from a survey of nutrition professionals. <i>Public Health Nutrition</i> . 2007;10(4):337-345. doi:10.1017/S1368980007666671 National Heart Foundation of Australia (AHF). Tick Program. Guidelines for Tick approval [online]. Melbourne: AHF, 2005.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Austrian NPM	Use of nutrient profile models for nutrition and health policies: meeting report on the use of nutrient profile models in the WHO European Region, September 2021. Copenhagen: WHO Regional Office for Europe; 2022	I	NPM for other purposes
Bahrain FOPL	Mentioned in report: Assessing national capacity for the prevention and control of noncommunicable diseases. Report of the 2019 country capacity survey in the Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2023	D	Details of the NPMs and/or algorithm not publicly available

Potential NPM	Reference	Reason for exclusion	
Best-ReMaP EU coordinated NPM	European Commission: Directorate-General for Taxation and Customs Union, ECORYS, WIFO and Erasmus University Rotterdam, <i>Health taxes from an EU perspective – Final report</i> , Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2778/9947154 Best-ReMaP. D6.1 EU coordinated approach using the WHO nutrient profile model for the identification of foods not permitted for marketing to children; 2021. Available from: https://bestremap.eu/wp-content/uploads/2022/08/D6.1-An-EU-harmonised-approach-using-the-WHO-nutrient-profile-model-for-the-identification-of-foods-not-permitted-for-marketing-to-children.pdf	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Balanced hybrid nutrient density score (bHNDS)	Drewnowski A, Gonzalez TD and Rehm CD (2022) Balanced Hybrid Nutrient Density Score Compared to Nutri-Score and Health Star Rating Using Receiver Operating Characteristic Curve Analyses. <i>Front. Nutr.</i> 9:867096. doi: 10.3389/fnut.2022.867096	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Brazilian model for marketing	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Scarborough, P., Payne, C., Agu, C. <i>et al.</i> How important is the choice of the nutrient profile model used to regulate broadcast advertising of foods to children? A comparison using a targeted data set. <i>Eur J Clin Nutr</i> 67 , 815–820 (2013). https://doi.org/10.1038/ejcn.2013.112 Board of the National Health Surveillance Agency Brazil (2010) Brazilian regulations on the marketing of food to children. Federal Official Gazette No 122 2010, Brasilia.	I	NPM for other purposes
Calorie For Nutrient	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Azaïs-Braesco V, Goffi C, Labouze E. Nutrient profiling: comparison and critical analysis of existing systems. <i>Public Health Nutrition</i> . 2006;9(5):613-622. doi:10.1079/PHN2006966	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Canada NP (Health Canada - marketing)	Mulligan C, Christoforou AK, Vergeer L, Bernstein JT, L'Abbé MR. Evaluating the Canadian Packaged Food Supply Using Health Canada's Proposed Nutrient Criteria for Restricting Food and Beverage Marketing to Children. <i>International Journal of Environmental Research and Public Health</i> . 2020; 17(4):1250. https://doi.org/10.3390/ijerph17041250 Health Canada. Guide to the Application of the Child Health Protection Act (Bill S-228)-Draft for comments, Version 1.0; Health Canada: Ottawa, ON, Canada, 12 December 2018.	I	NPM for other purposes
Canada's Food Labelling Modernization Initiative	Implementing nutrition labelling policies: a review of contextual factors. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO. Food labelling modernization initiative phase III: engagement on key proposals to modernize the food labelling system [website]. Ottawa: Canadian Food Inspection Agency; 2018 (https://inspection.canada.ca/food-label-requirements/labelling/labelling-modernization-initiative/phase-iii/eng/1513957863218/1513957863658).	A	Not a NPM (allowing for the classification/categorisation or ranking/scoring of individual foods)

Potential NPM	Reference		Reason for exclusion
Cereal Partners Worldwide Nutrition Foundation Criteria	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
CFBAI (USA - Industry Pledge)	Hebden, L., King, L., Kelly, B., Chapman, K., Innes-Hughes, C. and GUNATILLAKA, N. (2010), Regulating the types of foods and beverages marketed to Australian children: How useful are food industry commitments?. <i>Nutrition & Dietetics</i> , 67: 258-266. https://doi.org/10.1111/j.1747-0080.2010.01473.x	C	NPM not developed or endorsed by governmental or inter-governmental organisations
China "Healthier Choice"	European Commission: Directorate-General for Health and Food Safety, University of Helsinki, Kantar Public and ECORYS, <i>Study on the exposure of children to linear, non-linear and online marketing of foods high in fat, salt or sugar – Final report</i> , Publications Office, 2021. Available from: https://data.europa.eu/doi/10.2875/928620	C	NPM not developed or endorsed by governmental or inter-governmental organisations
China "Smart Choice"	van den Assum, S.; Schilpzand, R.; Lissner, L.; Don, R.; Nair, K.M.; Nnam, N.; Uauy, R.; Yang, Y.; Pekcan, A.G.; Roodenburg, A.J. Periodic revisions of the international choices criteria: Process and results. <i>Nutrients</i> 2020, 12, 2774. China's Healthier Choice. Available online: https://chinafoodlaw.blog/2020/04/30/chinas-healthier-choice/	C	NPM not developed or endorsed by governmental or inter-governmental organisations
China (Taiwan) NPM marketing	China's Healthier Choice. Available online: https://chinafoodlaw.blog/2020/04/30/chinas-healthier-choice/	I	NPM for other purposes
COAG	Taiwan Food and Drug Administration, Measures for the Administration of Food Advertising and Promotions Not Suitable for Children's Long term Consumption, 2016 [Internet]. Available from: https://www.fda.gov.tw/tc/lawContent.aspx?cid=62&pn=19&id=2909 . (Accessed 7 July 2021).	I	NPM for other purposes
Colombia Fiscal policy	Watson, WL, Khor, PY, Hughes, C. Defining unhealthy food for regulating marketing to children—What are Australia's options? <i>Nutrition & Dietetics</i> . 2021; 78: 406– 414. https://doi.org/10.1111/1747-0080.12658 COAG Health Council. National interim guide to reduce children's exposure to unhealthy food and drink promotion; 2018. Available from: COAG Health Council - National interim guide to reduce children's exposure to unhealthy food	I	NPM for other purposes
Coronary Prevention Group	Global Food Research Program, UNC Chapel Hill, Fiscal policies: Taxes on unhealthy foods, Internet, 2023. Available from, https://www.globalfoodresearchprogram.org/wp-content/uploads/2023/02/GFRP-UNC_Tax_maps_foods_2023_02.pdf	C	NPM not developed or endorsed by governmental or inter-governmental organisations
US Centre for Science in the Public Interest (CSPI) criteria	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Elliott C. Tracking Kids' Food: Comparing the Nutritional Value and Marketing Appeals of Child-Targeted Supermarket Products Over Time. <i>Nutrients</i> . 2019;11(8):1850. Published 2019 Aug 9. doi:10.3390/nu11081850 Center for Science in the Public Interest. Guidelines for Responsible Food Marketing to Children. Available from: https://cspinet.org/sites/default/files/attachment/marketingguidelines.pdf	C	NPM not developed or endorsed by governmental or inter-governmental organisations

Potential NPM	Reference		Reason for exclusion
Danish NPM	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	I	NPM for other purposes
	Scarborough, P., Payne, C., Agu, C. <i>et al</i> . How important is the choice of the nutrient profile model used to regulate broadcast advertising of foods to children? A comparison using a targeted data set. <i>Eur J Clin Nutr</i> 67 , 815–820 (2013). https://doi.org/10.1038/ejcn.2013.112		
	Forum of Responsible Food Marketing Communication. <i>Code of responsible food marketing communication to children</i> . FRFMC: Copenhagen, 2010, Internet: http://kodeksforfoedevareklamer.di.dk/SiteCollectionDocuments/Code%20with%20guide%20english%20aug%202010.pdf		
Diabetes Canada Clinical Practices (DCCP) Guidelines	Paper L, Ahmed M, Lee JJ, et al. Cross-sectional comparisons of dietary indexes underlying nutrition labels: nutri-score, Canadian 'high in' labels and Diabetes Canada Clinical Practices (DCCP). <i>Eur J Nutr</i> . 2023;62(1):261-274. doi:10.1007/s00394-022-02978-w	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Disney model	Mavra Ahmed, Jennifer Lee, Madyson Weippert, et al (2021) TECHNICAL DOCUMENT - Diabetes Canada		
	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Scarborough, P., Payne, C., Agu, C. <i>et al</i> . How important is the choice of the nutrient profile model used to regulate broadcast advertising of foods to children? A comparison using a targeted data set. <i>Eur J Clin Nutr</i> 67 , 815–820 (2013). https://doi.org/10.1038/ejcn.2013.112		
	Walt Disney Company. Disney Nutrition Guideline Criteria. Internet: http://thewaltdisneycompany.com/sites/default/files/MOHL_Nutrition_Criteria_2012.pdf accessed 11th February 2012).		
Dutch tripartite system	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Netherlands Nutrition Center. Criteria for the nutritional evaluation of foods. The Netherlands tripartite classification model for foods [online], 2005. Available from: http://www.voedingscentrum.nl		
EC proposed model (health claims)	Kaur, A., Scarborough, P. & Rayner, M. Regulating health and nutrition claims in the UK using a nutrient profile model: an explorative modelled health impact assessment. <i>Int J Behav Nutr Phys Act</i> 16, 18 (2019). https://doi.org/10.1186/s12966-019-0778-5	I	NPM for other purposes
Estonian NPM	Use of nutrient profile models for nutrition and health policies: meeting report on the use of nutrient profile models in the WHO European Region, September 2021. Copenhagen: WHO Regional Office for Europe; 2022	I	NPM for other purposes
Ethiopia Fiscal policy	World Health Organization, Policy - Excise Tax Proclamation No. 1186/2020, Internet, 2021. Available from: https://extranet.who.int/nutrition/gina/en/node/40429 .	I	NPM for other purposes
EU pledge (Industry Pledge)	Storcksdieck genannt Bonsmann S, Robinson M, Wollgast J, Caldeira S (2019) The ineligibility of food products from across the EU for marketing to children according to two EU-level nutrient profile models. <i>PLOS ONE</i> 14(10): e0213512. https://doi.org/10.1371/journal.pone.0213512	C	NPM not developed or endorsed by governmental or inter-governmental organisations

Potential NPM	Reference		Reason for exclusion
	Pledge EU. EU Pledge Nutrition Criteria White Paper. 2015.		
Swiss Pledge	Mentioned in report 57: European Commission: Directorate-General for Health and Food Safety, Netherlands Institute for Health Services Research (NIVEL), National Institute for Public Health and the Environment (RIVM) and European Public Health Alliance (EPHA), <i>Supporting the mid-term evaluation of the EU action plan on childhood obesity – The childhood obesity study</i> , Publications Office, 2018, https://data.europa.eu/doi/10.2875/722984	I	NPM for other purposes
Facts-Up-Front	Facts up Front - Consumer Brands Association	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Fonterra Good Choice guidelines	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Hebden, L., King, L., Kelly, B., Chapman, K., Innes-Hughes, C. and GUNATILLAKA, N. (2010), Regulating the types of foods and beverages marketed to Australian children: How useful are food industry commitments?. <i>Nutrition & Dietetics</i> , 67: 258-266. https://doi.org/10.1111/j.1747-0080.2010.01473.x	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Food Compass	Mozaffarian, D., El-Abbadi, N.H., O'Hearn, M. et al. Food Compass is a nutrient profiling system using expanded characteristics for assessing healthfulness of foods. <i>Nat Food</i> 2, 809–818 (2021). https://doi.org/10.1038/s43016-021-00381-y	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Food Profiler	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Clerfeuille, E., Vieux, F., Lluch, A. <i>et al.</i> Assessing the construct validity of five nutrient profiling systems using diet modeling with linear programming. <i>Eur J Clin Nutr</i> 67 , 1003–1005 (2013). https://doi.org/10.1038/ejcn.2013.95	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Food Quality Score 1, 2 and 3	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Eileen Kennedy, Patrick Racsa, Gerard Dallal, Alice H Lichtenstein, Jeanne Goldberg, Paul Jacques, Raymond Hyatt, Alternative approaches to the calculation of nutrient density, <i>Nutrition Reviews</i> , Volume 66, Issue 12, 1 December 2008, Pages 703–709, https://doi.org/10.1111/j.1753-4887.2008.00124.x	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Food Safety and Standards Authority of India (FSSAI) advertising and claims regulations	FSSAI. Food Safety and Standards (Advertising and Claims) Regulations, 2018. 2018. Available: https://fssai.gov.in/upload/uploadfiles/files/Compendium_Advertising_Claims_Regulations_04_03_2021.pdf	I	NPM for other purposes

Potential NPM	Reference		Reason for exclusion
FSANZ low salt guidance	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	I	NPM for other purposes
	Ireland DM, Clifton PM, Keogh JB. Achieving the salt intake target of 6 g/day in the current food supply in free-living adults using two dietary education strategies. <i>J Am Diet Assoc</i> . 2010;110(5):763-767. doi:10.1016/j.jada.2010.02.006		
Guiding Stars	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Fischer LM, Sutherland LA, Kaley LA, et al. Development and Implementation of the Guiding Stars Nutrition Guidance Program. <i>American Journal of Health Promotion</i> . 2011;26(2):e55-e63. doi:10.4278/ajhp.100709-QUAL-238		
HCST	Poon T, Labonté M-È, Mulligan C, Ahmed M, Dickinson KM, L'Abbé MR. Comparison of nutrient profiling models for assessing the nutritional quality of foods: a validation study. <i>British Journal of Nutrition</i> . 2018;120(5):567-582. doi:10.1017/S0007114518001575	I	NPM for other purposes
	Health Canada The Development and Use of a Surveillance Tool: The Classification of Foods in the Canadian Nutrient File According to Eating Well with Canada's Food Guide, 2014. Available online: http://publications.gc.ca/collections/collection_2014/sc-hc/H164-158-2-2014-eng.pdf		
Ministry of Health Food and Beverage Classification System (FBCS)	Mentioned in report: European Commission: Directorate-General for Health and Food Safety, University of Helsinki, Kantar Public and ECORYS, <i>Study on the exposure of children to linear, non-linear and online marketing of foods high in fat, salt or sugar – Final report</i> , Publications Office, 2021. Available from: https://data.europa.eu/doi/10.2875/928620	D	Details of the NPMs and/or algorithm not publicly available
Health Canada claims	Health Canada's action plan in response to stakeholder feedback from consultations on modernizing Canada's framework for health claims on food. Ottawa: Health Canada; 2009.	I	NPM for other purposes
Health Check Program Canada	European Commission. Report from the commission to the European Parliament and the Council regarding the use of additional forms of expression and presentation of the nutrition declaration (2020)	C	NPM not developed or endorsed by governmental or inter-governmental organisations (currently)
	Dummer J. Sodium reduction in Canadian food products with the health check program. <i>Can J Diet Pract Res</i> . 2012;73(1):e227-e232. doi:10.3148/73.1.2012.e227		
HSR + whole grains	Byron C, Kisoock KR, Barrett EM, Beck EJ. Aligning front-of-pack labelling with dietary guidelines: including whole grains in the health star rating. <i>Eur J Nutr</i> . 2024;63(6):2025-2033. doi:10.1007/s00394-024-03404-z	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Hungarian NPM	Martos E, Bakacs M, Tamas J, Kaposvari C, Nagy B, Nagy ES et al. Assessment of the impact of a public health product tax. Budapest: National Institute of Pharmacy and Nutrition; 2015 (https://www.euro.who.int/__data/assets/pdf_file/0008/332882/assessment-impact-PH-tax-report.pdf).	I	NPM for other purposes
Indonesia Healthier Choice Logo	Republic of Indonesia, Peraturan badan pengawas obat dan makanan nomor 26 tahun 2021 tentang informasi nilai gizi pada label pangan olahan [Regulation of the Food and Drug Supervisory Agency Number 26 of 2021 concerning nutritional information on processed food labels], Internet, 2021. Available from: https://peraturan.bpk.go.id/Details/223934/peraturan-bpom-no-26-tahun-2021	E	NPM with details NOT available in either English, Spanish or Portuguese

Potential NPM	Reference		Reason for exclusion
IOM three-star system	Carrad AM, Louie JC, Yeatman HR, Dunford EK, Neal BC, Flood VM. A nutrient profiling assessment of packaged foods using two star-based front-of-pack labels. Public Health Nutr. 2016;19(12):2165-2174. doi:10.1017/S1368980015002748	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Irish NPM	12th Meeting of the WHO European Action Network on Reducing Marketing Pressure on Children Meeting Report. Dublin, Ireland 10-11 May 2017. World Health Organization; 2017	I	NPM for other purposes
Kellogg's Global Nutrient Criteria	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Hebden, L., King, L., Kelly, B., Chapman, K., Innes-Hughes, C. and GUNATILLAKA, N. (2010), Regulating the types of foods and beverages marketed to Australian children: How useful are food industry commitments?. <i>Nutrition & Dietetics</i> , 67: 258-266. https://doi.org/10.1111/j.1747-0080.2010.01473.x	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Kraft Sensible Solutions	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Hebden, L., King, L., Kelly, B., Chapman, K., Innes-Hughes, C. and GUNATILLAKA, N. (2010), Regulating the types of foods and beverages marketed to Australian children: How useful are food industry commitments?. <i>Nutrition & Dietetics</i> , 67: 258-266. https://doi.org/10.1111/j.1747-0080.2010.01473.x	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Kuwait FOPL	Mentioned in repor: Assessing national capacity for the prevention and control of noncommunicable diseases. Report of the 2019 country capacity survey in the Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2023	D	Details of the NPMs and/or algorithm not publicly available
Malasya FOP energy icon	Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report "Front-of-pack nutrition labelling schemes: a comprehensive review", published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125. Sulong, F., Salleh, R., & Ali, Z. M. (2019). Consumer awareness and understanding of front-of-pack (FOP) energy icon labelling in Negeri Sembilan, Malaysia. Peer-Reviewed Journal of the Nutrition Society of Malaysia, 25(2), 287. https://doi.org/10.31246/mjn-2018-0127	I	NPM for FOPNL but not with a sufficiently interpretive system (%GDA)
Malaysia NPM for marketing	ASEAN and UNICEF. 2024. Minimum standards and guidelines on actions to protect children from the harmful impact of marketing of food and non-alcoholic beverages in the ASEAN region. Jakarta; UNICEF	I	NPM for other purposes
Mexican Committee of Nutrition Experts (MCNE) NPM	Contreras-Manzano A, Jáuregui A, Velasco-Bernal A, et al. Comparative Analysis of the Classification of Food Products in the Mexican Market According to Seven Different Nutrient Profiling Systems. <i>Nutrients</i> . 2018;10(6):737. Published 2018 Jun 7. doi:10.3390/nu10060737 Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report "Front-of-pack nutrition labelling schemes: a comprehensive review", published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125.	C	NPM not developed or endorsed by governmental or inter-governmental organisations

Potential NPM	Reference	Reason for exclusion	
Mexican GDA	Sagaceta-Mejía J, Tolentino-Mayo L, Cruz-Casarrubias C, Nieto C, Barquera S. Understanding of front of package nutrition labels: Guideline daily amount and warning labels in Mexicans with non-communicable diseases. <i>PLoS One</i> . 2022;17(6):e0269892. Published 2022 Jun 24. doi:10.1371/journal.pone.0269892	C	NPM not developed or endorsed by governmental or inter-governmental organisations (currently)
Mexican Nutritional Seal (MNS)	Contreras-Manzano A, Jáuregui A, Velasco-Bernal A, et al. Comparative Analysis of the Classification of Food Products in the Mexican Market According to Seven Different Nutrient Profiling Systems. <i>Nutrients</i>. 2018;10(6):737. Published 2018 Jun 7. doi:10.3390/nu10060737 Diario Oficial de la Federación. Secretaria de Salud. Mexico. ACUERDO por el que se Emiten los Lineamientos a que se Refiere el Artículo 25 del Reglamento de Control Sanitario de Productos y Servicios que Deberán Observar los Productores de Alimentos y Bebidas no Alcohólicas Preenvasadas para Efectos de la Información que Deberán Ostentar en el área Frontal de Exhibición, así como los Criterios y las Características Para la Obtención y uso del Distintivo Nutrimental a que se Refiere el Artículo 25 Bis del Reglamento de Control Sanitario de Productos y Servicios. 2014; (In Spanish). Available from: http://www.dof.gob.mx/nota_detalle.php?codigo=5340693&fecha=15/04/2014 Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report "Front-of-pack nutrition labelling schemes: a comprehensive review", published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Model 1	Dickie S, Woods J, Machado P and Lawrence M (2023) A novel food processing-based nutrition classification scheme for guiding policy actions applied to the Australian food supply. <i>Front. Nutr.</i> 10:1071356. doi: 10.3389/fnut.2023.1071356	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Model 2	Dickie S, Woods J, Machado P and Lawrence M (2023) A novel food processing-based nutrition classification scheme for guiding policy actions applied to the Australian food supply. <i>Front. Nutr.</i> 10:1071356. doi: 10.3389/fnut.2023.1071357	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Modified Australian TFL	Sacks G, Tikellis K, Millar L, Swinburn B. Impact of 'traffic-light' nutrition information on online food purchases in Australia. <i>Aust N Z J Public Health</i> . 2011 Apr;35(2):122-6. doi: 10.1111/j.1753-6405.2011.00684.x. Epub 2011 Mar 7. PMID: 21463406.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Modified Calories-for-Nutrients Score	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i>. 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Drewnowski A. Concept of a nutritious food: toward a nutrient density score. <i>Am J Clin Nutr</i>. 2005;82(4):721-732. doi:10.1093/ajcn/82.4.721	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Modified FSANZ model	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i>. 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Eyles H, Gorton D, Ni Mhurchu C. Classification of 'healthier' and 'less healthy' supermarket foods by two Australasian nutrient profiling models. <i>N Z Med J</i>. 2010;123(1322):8-20. Published 2010 Sep 10.	C	NPM not developed or endorsed by governmental or inter-governmental organisations

Potential NPM	Reference	Reason for exclusion	
Modified Heart Foundation tick	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Eyles H, Gorton D, Ni Mhurchu C. Classification of 'healthier' and 'less healthy' supermarket foods by two Australasian nutrient profiling models. <i>N Z Med J</i> . 2010;123(1322):8-20. Published 2010 Sep 10.		
Modified-PAHO	Labonté MÈ, Poon T, Mulligan C, Bernstein JT, Franco-Arellano B, L'Abbé MR. Comparison of global nutrient profiling systems for restricting the commercial marketing of foods and beverages of low nutritional quality to children in Canada. <i>Am J Clin Nutr</i> . 2017;106(6):1471-1481. doi:10.3945/ajcn.117.161356	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Mongolia TFL	Mentioned in Table A2.4 of report: WHO global report on sodium intake reduction. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO	D	Details of the NPMs and/or algorithm not publicly available
Naturally Nutrient Rich score (NNR)	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Drewnowski, A. Concept of a nutritious food: toward a nutrient density score. <i>American Journal of Clinical Nutrition</i> 2005; 82(4): 721–32.		
Nestle Know Your Serving	Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report “Front-of-pack nutrition labelling schemes: a comprehensive review”, published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Mabotja, F. S., Metcalfe, D. J. A., & Adebo, O. A. (2021). South African consumers' interpretation of nutritional labelling systems of food products. <i>Transactions of the Royal Society of South Africa</i> , 76(1), 41–51. https://doi.org/10.1080/0035919X.2020.1834466		
Nestle Nutrition Profiling System	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Hebden, L., King, L., Kelly, B., Chapman, K., Innes-Hughes, C. and GUNATILLAKA, N. (2010), Regulating the types of foods and beverages marketed to Australian children: How useful are food industry commitments?. <i>Nutrition & Dietetics</i> , 67: 258-266. https://doi.org/10.1111/j.1747-0080.2010.01473.x		
NewTools-score	Amberntsson A, Paulsen MM, Bianchi MA, et al. Improvements to the Nutri-Score to address challenges identified in a Nordic setting. <i>Food Nutr Res</i> . 2025;69:10.29219/fnr.v69.10914. Published 2025 Jan 29. doi:10.29219/fnr.v69.10914	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Nigeria Heart Check	From Google searches: https://www.nigerianheart.org/awareness/	D	Details of the NPMs and/or algorithm not publicly available

Potential NPM	Reference	Reason for exclusion	
Northern Territory School Canteens Guidelines (NTSCG)	Chan J, McMahon E, Wycherley T, Howes K, Bidstrup G, Brimblecombe J. Validation of the Thumbs food classification system as a tool to accurately identify the healthiness of foods. <i>Br J Nutr.</i> 2023;129(11):2001-2010. doi:10.1017/S0007114522002756	I	NPM for other purposes
Norwegian model	Norwegian Directorate of Health (2013). Appendix 1 to Draft Regulations. Foods and beverages that are considered unhealthy under these Regulations. http://www.eftasurv.int/media/notification-of-dtr/Appendix-to-Regulations.-Unhealthy-foods---9005.pdf .	I	NPM for other purposes
Food Standards Australia New Zealand - Nutrient Profiling Scoring Criterion (FSANZ-NPSC)	Australian Government (2017) Australia and New Zealand Food Standards Code – Schedule 5 – Nutrient Profiling Scoring Method. Canberra: Australian Government; available at https://www.legislation.gov.au/Details/F2017C00719	I	NPM for other purposes
NRF	Drewnowski A, Smith J, Fulgoni VL III. The New Hybrid Nutrient Density Score NRFh 4:3:3 Tested in Relation to Affordable Nutrient Density and Healthy Eating Index 2015: Analyses of NHANES Data 2013–16. <i>Nutrients.</i> 2021; 13(5):1734. https://doi.org/10.3390/nu13051	C	NPM not developed or endorsed by governmental or inter-governmental organisations
NSW (Australia) School Canteens criteria	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite.</i> 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Walker KZ, Woods JL, Rickard CA, Wong CK. Product variety in Australian snacks and drinks: how can the consumer make a healthy choice? <i>Public Health Nutrition.</i> 2008;11(10):1046-1053. doi:10.1017/S1368980007001462	I	NPM for other purposes
Nutri-Couleurs	Dubois, P., Albuquerque, P., Allais, O. et al. Effects of front-of-pack labels on the nutritional quality of supermarket food purchases: evidence from a large-scale randomized controlled trial. <i>J. of the Acad. Mark. Sci.</i> 49, 119–138 (2021). https://doi.org/10.1007/s11747-020-00723-5	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Nutri-Repère	Dubois, P., Albuquerque, P., Allais, O. et al. Effects of front-of-pack labels on the nutritional quality of supermarket food purchases: evidence from a large-scale randomized controlled trial. <i>J. of the Acad. Mark. Sci.</i> 49, 119–138 (2021). https://doi.org/10.1007/s11747-020-00723-5	C	NPM not developed or endorsed by governmental or inter-governmental organisations

Potential NPM	Reference	Reason for exclusion	
Nutrient Adequacy Score	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Drewnowski, A., Mailliot, M. & Darmon, N. Testing nutrient profile models in relation to energy density and energy cost. <i>Eur J Clin Nutr</i> 63 , 674–683 (2009). https://doi.org/10.1038/ejcn.2008.16		
Nutrient Density Score	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Drewnowski, A., Mailliot, M. & Darmon, N. Testing nutrient profile models in relation to energy density and energy cost. <i>Eur J Clin Nutr</i> 63 , 674–683 (2009). https://doi.org/10.1038/ejcn.2008.16		
Nutrimap ®	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Labouze E, Goffi C, Moulay L, Azaïs-Braesco V. A multipurpose tool to evaluate the nutritional quality of individual foods: Nutrimap®. <i>Public Health Nutrition</i> . 2007;10(7):690-700. doi:10.1017/S1368980007382505		
Nutrition Score from Unilever Food & Health Rese (Unilever)	Pereira, R.C., Souza Carneiro, J. & de Angelis Pereira, M.C. Evaluating nutrition quality of packaged foods carrying claims and marketing techniques in Brazil using four nutrient profile models. <i>J Food Sci Technol</i> 59, 1520–1528 (2022). https://doi.org/10.1007/s13197-021-05162-w	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Nijman CA, Zijp IM, Sierksma A, et al. A method to improve the nutritional quality of foods and beverages based on dietary recommendations. <i>Eur J Clin Nutr</i> . 2007;61(4):461-471. doi:10.1038/sj.ejcn.1602548		
Nutritious Food Index	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Gazibarich, B., & Ricci, P. F. (1998). Towards better food choices: the nutritious food index.		
NuVal	Finkelstein EA, Li W, Melo G, Strombotne K, Zhen C. Identifying the effect of shelf nutrition labels on consumer purchases: results of a natural experiment and consumer survey. <i>Am J Clin Nutr</i> . 2018;107(4):647-651. doi:10.1093/ajcn/nqy014	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Oman FOPL	Mentioned in report: Assessing national capacity for the prevention and control of noncommunicable diseases. Report of the 2019 country capacity survey in the Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2023	D	Details of the NPMs and/or algorithm not publicly available
Overall Nutritional Quality Index (ONQI)	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Katz DL, Njike VY, Rhee LQ, Reingold A, Ayoob KT. Performance characteristics of NuVal and the Overall Nutritional Quality Index (ONQI). <i>Am J Clin Nutr</i> . 2010;91(4):1102S-1108S. doi:10.3945/ajcn.2010.28450E		
PACE	Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report “Front-of-pack nutrition labelling schemes: a comprehensive review”, published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125.	A	Not a NPM (allowing for the classification/categorisation or ranking/scoring of individual foods)

Potential NPM	Reference		Reason for exclusion
	Hartley IE, Keast RS, Liem DG. Physical activity-equivalent label reduces consumption of discretionary snack foods. <i>Public Health Nutrition</i> . 2018;21(8):1435-1443. doi:10.1017/S1368980018000228		
Panama NPM	Mentioned in report: WHO global report on sodium intake reduction. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO	I	NPM for other purposes
PepsiCo model	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Scarborough, P., Payne, C., Agu, C. <i>et al.</i> How important is the choice of the nutrient profile model used to regulate broadcast advertising of foods to children? A comparison using a targeted data set. <i>Eur J Clin Nutr</i> 67 , 815–820 (2013). https://doi.org/10.1038/ejcn.2013.112		
Philippines NPM	Mentioned in report: Department of Science and Technology: Food and Nutrition Research Institute. Steering R&D and S&T Innovations to New Heights: The Mission Continues	D	Details of the NPMs and/or algorithm not publicly available
Philippines NPM	Mentioned in report: Las escuelas como Sistema para mejorar la nutrición. Una nueva declaración en favor de las intervenciones alimentarias y nutricionales en las escuelas. United Nations System Standing Committee on Nutrition; 2017.	I	NPM for other purposes
Philippines energy GDA	Pettigrew S, Coyle D, McKenzie B, Vu D, Lim SC, Berasi K, Poowanasatien A, Suya I, Kowal P. A review of front-of-pack nutrition labelling in Southeast Asia: Industry interference, lessons learned, and future directions. <i>Lancet Reg Health Southeast Asia</i> . 2022 Jun 13;3:100017. doi: 10.1016/j.lansea.2022.05.006. PMID: 37384259; PMCID: PMC10305914.	I	NPM for FOPNL but not with a sufficiently interpretive system (%GDA)
Point of purchase nutrition label	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Hoefkens C, Lachat C, Kolsteren P, Van Camp J, Verbeke W. Posting point-of-purchase nutrition information in university canteens does not influence meal choice and nutrient intake. <i>Am J Clin Nutr</i> . 2011;94(2):562-570. doi:10.3945/ajcn.111.013417	A	NPM NOT allowing for the classification/categorisation or ranking/scoring of individual foods
Portuguese NPM	Use of nutrient profile models for nutrition and health policies: meeting report on the use of nutrient profile models in the WHO European Region, September 2021. Copenhagen: WHO Regional Office for Europe; 2022	I	NPM for other purposes
Ratio between the Nutrient Density Score and LIM	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Maillot M, Ferguson EL, Drewnowski A, Darmon N. Nutrient profiling can help identify foods of good nutritional quality for their price: a validation study with linear programming. <i>J Nutr</i> . 2008;138(6):1107-1113. doi:10.1093/jn/138.6.1107	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Reference Intakes	Food and Drink Federation. Reference intakes (previously guideline daily amounts), 2017. Available: http://www.foodlabel.org.uk/label/reference-intakes.aspx	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Republic of Korea menu labelling	Mentioned in report: The State of Food Security and Nutrition in the World. Transforming Food Systems for Food Security, Improved Nutrition and Affordable Healthy Diets for All. Rome: Food and Agriculture Organization of the United Nations, 2021.	I	NPM for other purposes

Potential NPM	Reference		Reason for exclusion
Ratio of Recommended to Restricted Nutrients (RRR)	Ho DE, Mbonu O, McDonough A, Pottash R (2020) Menu labeling, calories, and nutrient density: Evidence from chain restaurants. <i>PLoS ONE</i> 15(5): e0232656. https://doi.org/10.1371/journal.pone.0232656	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Russian Federation TFL	Scheidt DM, Daniel E. Composite index for aggregating nutrient density using food labels: Ratio of recommended to restricted food components. <i>J Nutr Educ Behav.</i> 2004; 36(1):35–9. https://doi.org/10.1016/s1499-4046(06)60126-7 PMID: 14756980	E	NPM with details NOT available in either English, Spanish or Portuguese
Sainsbury's	Mentioned in report: WHO global report on sodium intake reduction. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite.</i> 2016;100:26-40. doi:10.1016/j.appet.2016.02.001		
	Arambepola C, Scarborough P, Boxer A, Rayner M. Defining 'low in fat' and 'high in fat' when applied to a food. <i>Public Health Nutrition.</i> 2009;12(3):341-350. doi:10.1017/S136898000800205X		
SAIN,LIM	Tharrey M, Maillot M, Azais-Braesco V, Darmon N. From the SAIN,LIM system to the SENS algorithm: a review of a French approach of nutrient profiling. <i>Proceedings of the Nutrition Society.</i> Cambridge University Press; 2017;76(3):237–46.	I	NPM for other purposes
SENS	Tharrey M, Maillot M, Azais-Braesco V, Darmon N. From the SAIN,LIM system to the SENS algorithm: a review of a French approach of nutrient profiling. <i>Proceedings of the Nutrition Society.</i> Cambridge University Press; 2017;76(3):237–46.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
	Darmon, N., Sondey, J., Azais-Braesco, V. <i>et al.</i> The SENS algorithm—a new nutrient profiling system for food labelling in Europe. <i>Eur J Clin Nutr</i> 72 , 236–248 (2018). https://doi.org/10.1038/s41430-017-0017-6		
Slovenia NPM - WHO-EURO adaption	Hafner E, Pravst I. Evaluation of the Ability of Nutri-Score to Discriminate the Nutritional Quality of Prepacked Foods Using a Sale-Weighting Approach. <i>Foods.</i> 2021; 10(8):1689. https://doi.org/10.3390/foods10081689	I	NPM for other purposes
Slovenia TFL - consumer education	Consumers' Association of Slovenia (ZPS), Mobile application Do you know what you are eating?! a quick and simple assistant in choosing foods with a more favorable nutritional composition, April 3, 2019. [Internet]. Available from: https://veskajjes.si/mediji/90-za-medije/mobilna-aplikacija-ves-kaj-jes-hiter-in-preprost-pomocnik-pri-izbirzivil-z-ugodnejso-hranilno-sestavo .	I	NPM for other purposes
Slovenian Protective Food symbol	Pivk Kupirovič U, Hristov H, Hribar M, Lavriša Ž, Pravst I. Facilitating Consumers Choice of Healthier Foods: A Comparison of Different Front-of-Package Labelling Schemes Using Slovenian Food Supply Database. <i>Foods.</i> 2020; 9(4):399. https://doi.org/10.3390/foods9040399	C	NPM not developed or endorsed by governmental or inter-governmental organisations
South Africa GDA	Singh S, Naicker A, Memela SN. Categorizing Foods by Relative Healthfulness: A Scoping Review of Front of Pack Labelling. <i>International Journal of Environmental Research and Public Health.</i> 2021; 18(22):11980. https://doi.org/10.3390/ijerph182211980	I	NPM for FOPNL but not with a sufficiently interpretive system (%GDA)
South Africa TFL	Department of Health. Regulations relating to the Labelling and Advertising of Foods: Amendment. No. R. 429.	C	NPM not developed or endorsed by governmental or inter-governmental organisations (currently)

Potential NPM	Reference		Reason for exclusion
South Africa NPM	Minister of Health. Food stuffs, cosmetics and disinfectants act, 1972 (Act No. 54 of 1972): Regulations relating to the labelling and advertising of foodstuffs Internet. Government Gazette of the Republic of South Africa, 2023. Available from: https://www.health.gov.za/wp-content/uploads/2023/05/R3337-Draft-Labelling-Regulations-21-April-2023-sc.pdf .	I	NPM for other purposes
South Africa HE	Koen N, Wentzel-Viljoen E, Blaauw R. The development of a single health-endorsement logo for South Africa. <i>Public Health Nutr.</i> 2018;21(8):1444-1454. doi:10.1017/S1368980018000034	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Sri Lanka NPM	Sri Lanka Nutrition Division Ministry of Health Nutrition and Indigenous Medicine in collaboration with World Health Organization, Nutrient Profile Model for Sri Lanka - To Implement Recommendations on the Marketing of Food and Non-Alcoholic Beverages to Children, 2018 [Internet]. Available from: https://nutrition.health.gov.lk/english/resource/publications/	I	NPM for other purposes
Sugar Wise	Lim YS, Aim N, Shahar S. Market survey of food product indicators and their credibility as a healthy food product in Klang Valley, Malaysia. <i>BMJ Open.</i> 2024;14(10):e081226. Published 2024 Oct 2. doi:10.1136/bmjopen-2023-081226	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Teaspoon Nutrition Illustration	Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report "Front-of-pack nutrition labelling schemes: a comprehensive review", published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125. Mabotja, F. S., Metcalfe, D. J. A., & Adebo, O. A. (2021). South African consumers' interpretation of nutritional labelling systems of food products. <i>Transactions of the Royal Society of South Africa</i> , 76(1), 41–51. https://doi.org/10.1080/0035919X.2020.1834466	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Thailand %GDA	Mabotja, F. S., Metcalfe, D. J. A., & Adebo, O. A. (2021). South African consumers' interpretation of nutritional labelling systems of food products. <i>Transactions of the Royal Society of South Africa</i> , 76(1), 41–51. https://doi.org/10.1080/0035919X.2020.1834466	I	NPM for FOPNL but not with a sufficiently interpretive system (%GDA)
Thumbs system	Henryks J, Brimblecombe J & Bidstrup G (2017) Supporting healthier food choices in remote Indigenous communities:developing a food choice app. <i>J Food Prod Mark</i> 23, 609–620. Paper 993	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Tick label	Ning SX, Mainvil LA, Thomson RK, McLean RM. Dietary sodium reduction in New Zealand: Influence of the 'Tick' label. <i>Asia Pacific journal of clinical nutrition.</i> 2017 Jan;26(6):1133-8.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Tunisia Health Logo	Ministere de la Sante de la Republique Tunesienne, Strategie de Prevention de l'Obesite, Decembre 2016 [Internet]. Available from: https://extranet.who.int/ncdccs/Data/TUN_B23_STRATEGIE%20NATIONAL%20de%20lutte%20contre%20l'ob%C3%A9sit%C3%A9.pdf	E	NPM with details NOT available in either English, Spanish or Portuguese
Tunisia NPM claims	USDA Foreign Agricultural Service, Tunisia's Order on Food Labeling and Presentation of Prepackaged Foods, March 15, 2019 [Internet]. Available from: https://www.fas.usda.gov/data/tunisia-order-food-labeling-and-presentation-prepackaged-foods .	I	NPM for other purposes

Potential NPM	Reference	Reason for exclusion	
Turkish NPM	Mentioned in report: The State of Food Security and Nutrition in the World. Transforming Food Systems for Food Security, Improved Nutrition and Affordable Healthy Diets for All. Rome: Food and Agriculture Organization of the United Nations, 2021.	I	NPM for other purposes
UK calorie labelling (menus restaurants, takeaways)	Mentioned in report: World Health Organization. Regional Office for Europe. (2022). WHO European Regional Obesity Report 2022. World Health Organization. Regional Office for Europe. https://apps.who.int/iris/handle/10665/353747 Calorie labelling on menus to be introduced in cafes, restaurants and takeaways [news item]. London: Department of Health and Social Care; 2021 (https://www.gov.uk/government/news/calorie-labelling-on-menus-to-be-introduced-in)	I	NPM for other purposes
UK FSA model SSCg3d	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Scarborough P, Boxer A, Rayner M, Stockley L. Testing nutrient profile models using data from a survey of nutrition professionals. <i>Public Health Nutrition</i> . 2007;10(4):337-345. doi:10.1017/S1368980007666671	I	NPM for other purposes
UK Ofcom NPM	Department of Health. Nutrient Profiling Technical Guidance, 2011. Available from: https://assets.publishing.service.gov.uk/media/695e87982a4a53b73d513855/NutrientProfilingModel_2004_2005_TechnicalGuidance.pdf	I	NPM for other purposes
Uncle Toby's nutrition criteria	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001 Tapsell, L.C., Williams, P., Droulez, V., Gillen, L.J., & Murray, S. (2006). A nutritious snacks initiative for Uncle Tobys.	C	NPM not developed or endorsed by governmental or inter-governmental organisations
US Fruits & veggies - More matters	Labonté MÈ, Poon T, Gladanac B, et al. Nutrient Profile Models with Applications in Government-Led Nutrition Policies Aimed at Health Promotion and Noncommunicable Disease Prevention: A Systematic Review. <i>Adv Nutr</i> . 2018;9(6):741-788. doi:10.1093/advances/nmy045	A,B	Not a NPM (allowing for the classification/categorisation or ranking/scoring of individual foods NOR comprising separate sets of criteria for multiple nutrients and/or food components)
US Smart Meal Seal nutrition criteria	Labonté MÈ, Poon T, Gladanac B, et al. Nutrient Profile Models with Applications in Government-Led Nutrition Policies Aimed at Health Promotion and Noncommunicable Disease Prevention: A Systematic Review. <i>Adv Nutr</i> . 2018;9(6):741-788. doi:10.1093/advances/nmy045	A,B	Not a NPM (allowing for the classification/categorisation or ranking/scoring of individual foods NOR comprising separate sets of criteria for multiple nutrients and/or food components)
US Interagency Working Group (IWG) model	European Commission: Directorate-General for Health and Food Safety, University of Helsinki, Kantar Public and ECORYS, <i>Study on the exposure of children to linear, non-linear and online marketing of foods high in fat, salt or sugar – Final report</i> , Publications Office, 2021. Available from: https://data.europa.eu/doi/10.2875/928620	I	NPM for other purposes
US National Heart, Lung and Blood Institute "Go",	Cooper SL, Pelly FE, Lowe JB. Construct and criterion-related validation of nutrient profiling models: A systematic review of the literature. <i>Appetite</i> . 2016;100:26-40. doi:10.1016/j.appet.2016.02.001	A,B	Not a NPM (allowing for the classification/categorisation or ranking/scoring of individual foods NOR comprising separate sets of criteria for multiple nutrients and/or food components)

Potential NPM	Reference		Reason for exclusion
"Slow" and "Whoa" food classes	Drewnowski A, Fulgoni V 3rd. Comparing the nutrient rich foods index with "Go," "Slow," and "Whoa," foods. / <i>Am Diet Assoc.</i> 2011;111(2):280-284. doi:10.1016/j.jada.2010.10.045		
USA ("disqualifying levels")	European Commission: Directorate-General for Health and Food Safety, Agra CEAS Consulting, Civic Consulting and Arcadia International, Study supporting the evaluation of a) Regulation (EC) No 1924/2006 on nutrition and health claims made on food with regard to nutrient profiles and health claims made on plants and their preparations, and of b) the general regulatory framework for their use in foods – Final report – Executive summary and abstract, Publications Office, 2020. Available from: https://data.europa.eu/doi/10.2875/943156	I	NPM for other purposes
USA FDA Health Claims scheme	Food and Drug Administration (FDA) (2010) Code of Federal Regulations, Title 21, Food and drugs (vol 2). Chapter I—Food and Drug Administration, Department of Health and Human Services. Part 101—Food Labeling—Subpart A: General Provisions, Sec. 101.14. Health claims: General requirements. US Government Printing Office: revised as of 1 April 2010.	I	NPM for other purposes
WHO SEARO NPM	WHO Nutrient Profile Model for South-East Asia Region. To implement the set of recommendations on the marketing of foods and non-alcoholic beverages to children. New Delhi: World Health Organization, Regional Office for South-East Asia; 2017. Licence: CC BY-NC-SA 3.0 IGO.	I	NPM for other purposes
WHO-AFRO NPM	Nutrient Profile Model for the WHO African Region: a tool for implementing WHO recommendations on the marketing of foods and non-alcoholic beverages to children. Brazzaville: WHO Regional Office for Africa; 2018. Licence: CC BY-NC-SA 3.0 IGO	I	NPM for other purposes
WHO-EMRO NPM	Nutrient profile model for the marketing of food and non-alcoholic beverages to children in the WHO Eastern Mediterranean Region. Cairo: WHO Regional Office for the Eastern Mediterranean; 2017. Licence: CC BY-NC-SA 3.0 IG	I	NPM for other purposes
WHO-EURO NPM	WHO Regional Office for Europe nutrient profile model: second edition. Copenhagen: WHO Regional Office for Europe; 2023. Licence: CC BY-NC-SA 3.0 IGO WHO Regional Office for Europe Nutrient Profile Model. Copenhagen: World Health Organization Regional Office for Europe; 2015.	I	NPM for other purposes
WHO-WPR NPM	WHO Nutrient Profile Model for the Western Pacific Region A tool to protect children from food marketing. Manila: World Health Organization Regional Office for the Western Pacific; 2016. ISBN 978 92 9061 785 3	I	NPM for other purposes
Danish Whole Grain logo	Nohlen, H.U.*, Bakogianni, I.*, Grammatikaki, E., Ciriolo, E., Pantazi, M., Dias, J., Salesse, F., Moz Christofolletti, M.A., Wollgast, J., Bruns, H., Dessart, F., Marandola, G., van Bavel, R. Front-of-pack nutrition labelling schemes: an update of the evidence. Addendum to the JRC Science for Policy report "Front-of-pack nutrition labelling schemes: a comprehensive review", published in 2020. Publications Office of the European Union, Luxembourg, 2022, doi:10.2760/932354, JRC130125. Danish Whole Grain Logo—User Manual. Available online: https://www.fuldkorn.dk/wp-content/uploads/The-Whole-Grain-Manual_2024.pdf	B	NPM with a focus solely on food components and not on nutrients
Ghana NPM/FOPNL	Mentioned in report: The state of food security and nutrition in the world. 2023, urbanization, agrifood systems, transformation and healthy diets across the rural - urban continuum HD4HL Project' Healthier Diets for Healthy Lives Project. Identifying potentially relevant nutrient profiling models (NPMs) for consideration by the HD4HL Nutrient Profiling sub-committee (2022)	D	Details of the NPMs and/or algorithm not publicly available

Potential NPM	Reference	Reason for exclusion	
Qatar TFL	Mentioned in Report: Summary report on the regional expert meeting on policy action for healthy diets, with a focus on the Gulf Cooperation Council countries; 2023.	D	Details of the NPMs and/or algorithm not publicly available
Saudi Arabia National Nutrition Committee NPM	Mentioned in Paper 77: A draft regulation on Requirements of Food Products with High Nutritional Value was also notified to the WTO in 2021. This effectively set out the requirements for a nutrient profile model for Saudi Arabia	I	NPM for other purposes
FOPWL Caribbean/ CARICOM	From Google searches: https://www.paho.org/en/front-package-warning-labeling-fopwl-caribbean Initially, there were suggested warning labels, but the latest version (2024) of CARICOM draft standards do not specify any NPM for FOPNL: https://drive.google.com/file/d/1GkM-oSc-_F6fX08kA8EpYjael6kOjStC/view	C	NPM not developed or endorsed by governmental or inter-governmental organisations
Tanzania FOPNL	Mentioned in report: Shaping a healthier future: Universal Health Coverage/Healthier Populations Cluster: results report for the end of the biennium 2022–2023. Brazzaville: WHO African Region, 2024. Licence: CC BY-NC-SA 3.0 IGO. And report: Organização Mundial da Saúde. Escritório Regional para a África. (2025). Uma década de transformação 2015-2024: melhoria da saúde das populações Africanas. Organização Mundial da Saúde. Escritório Regional para a África. https://iris.who.int/handle/10665/380653 . License: CC BY-NC-SA 3.0 IGO	D	Details of the NPMs and/or algorithm not publicly available
Uganda FOPNL	Mentioned in report: Shaping a healthier future: Universal Health Coverage/Healthier Populations Cluster: results report for the end of the biennium 2022–2023. Brazzaville: WHO African Region, 2024. Licence: CC BY-NC-SA 3.0 IGO. And report: Organização Mundial da Saúde. Escritório Regional para a África. (2025). Uma década de transformação 2015-2024: melhoria da saúde das populações Africanas. Organização Mundial da Saúde. Escritório Regional para a África. https://iris.who.int/handle/10665/380653 . License: CC BY-NC-SA 3.0 IGO	D	Details of the NPMs and/or algorithm not publicly available
Nutri-Mark	https://qcc.gov.ae/Nutri-Mark/Official-Documents-and-Tools - as of 3rd of March 2026, authors couldn't access the documents provided in the QCE website)	D	Details of the NPMs and/or algorithm not publicly available
Zambia Good Food Logo	https://www.gflzambia.com/ - as of 3rd of March 2026, authors couldn't access the website and the specific NPM	D	Details of the NPMs and/or algorithm not publicly available

S2: Supplementary characterisation and results of the NPMs for FOPNL

Table 5. Scope (which products (food groups and categories) the NPM is applying to, as well as what are the exemptions to the NPM) and categories of the included NPMs for FOPNL.

Model name	Scope	Number of categories	Categories
ANVISA WL	Applies to all foods and beverages. Excludes unprocessed and minimally processed foods, selected processed foods (fresh fruits and vegetables, yogurt and other fermented milk beverages without added sugars, processed cheeses) with a low content of added sugars, sodium and saturated fat; breastmilk substitutes; nutrition supplements; and alcoholic beverages.	2	Solid and liquid foods
Argentina WL	Applies to products with critical nutrients (sugars, fat and sodium) and/or sweeteners and caffeine added by the producer. Excludes all foods "in natura" or culinary ingredients that don't include processes of adding the critical nutrients, sweeteners and/or caffeine.	2	Solid and liquid
CATRP-NWFL	Applies to pre-packaged food products and beverages sold in Central American countries, for the population above 3 years of age.	2	Solid and liquid
Chilean WL	Applies to foods in which critical nutrients (sugars, saturated fat and sodium) have been added as part of their processing.	2	Solid and liquid
Colombia WL	Applies to all edible or drinkable products classified according to the level of processing with an excessive amount of critical nutrients established by the Ministry of Health and Social Protection.	2	Solid and liquid
Canada FOP	Applies to pre-packaged foods	2	Solid and liquid
Israel Red Label	Applies to packaged foods.	2	Solid and liquid
Kenya NPM	Applies to to pre-packaged foods and beverages	11	Confectionaries; bakery products; cereals and cereal products; ready to eat snacks; beverages; composite foods; butter, fat spreads and oil emulsions; processed meat, fish, and poultry products; fruits and vegetables; sauces, dips, other seasonings, soups and dressings; dairy products, dairy analogues and ices.
Mexican WL	Applies to pre-packaged foods that contain excess calories and ingredients of concern.	2	Solid and liquid
PAHO	Applies to processed and ultra-processed foods and beverages.	2	Solid and liquid
Paraguay WL	Applies to processed and packaged foods.	2	Solid and liquid
Peru WL	Applies to processed foods high in sugar, sodium, saturated fat, and containing trans-fat.	2	Solid and liquid
South Africa WL (R3337)	Applies to pre-packaged foodstuff and beverages.	2	Solid and liquid
Uruguay WL	Applies to packaged foods with added sugar, fat, or sodium, when the content of sugars, total fat, saturated fats and/or sodium exceeds the thresholds established in the decree. Excludes foods for medicinal uses, foods for partial meal replacement, dietary supplements, sport supplements and tabletop sweeteners.	2	Solid and liquid
Venezuela WL	Applies to pre-packaged foods which during the manufacturing process sugars, sodium, saturated fats, and trans-fat were added. Excludes unprocessed or minimally processed foods, fats and oils, tabletop sweeteners, foods in bulk or culinary industry ingredients.	2	Solid and liquid
Bolivia TFL	Applies to processed foods and non-alcoholic beverages.	2	Solid and liquid
Ecuador TFL	Applies to pre-packaged processed foods.	2	Solid and liquid
Iran TFL	Applies to all imported and domestic foods, except for products that are not chemically processed or formulated, such as vegetables, spices, vinegar, lemon juice, tea, infusions, coffee, honey, dates, flour and barberry.	2	Solid and liquid
NutrInform Battery	Applies to packaged products. It excluded foodstuffs packaged in packages whose largest surface area is less than 25 cm ² , products covered by Regulation (EU) No 1151/2012 (PDO, Protected Designation of Origin; PGI, Protected Geographical Indication, and TSG, Traditional Speciality Guaranteed).		
FDA Nutrition Box	Applies to most foods that must bear a Nutrition Facts label.		
Saudi Arabia TFL	Applies to all national and imported packaged foods and beverages.	2	Solid and liquid
South Korea TFL	For certain children's foods like snacks		
Sri Lanka TFL on SSB	Applies to sweetened beverages.	1	
Sri Lanka TFL	Applies to pre-packaged solid and semi-solid processed foods based on the content of sugar, salt and fats.		

Model name	Scope	Number of categories	Categories
UAE TFL	All prepackaged products Canned, solid and liquid foods, but excludes certain products, such as unprocessed products that are composed of a single ingredient or category of ingredient, namely fresh foods (fruits, vegetables, meat and fish), herbs, as well as processed products are composed of a single ingredient or category of ingredient	2	Solid and liquid
UK TFL	Applies to food products with a mandatory nutritional declaration in accordance with regulation no. 1169/2011.	2	Solid and liquid
Health Star Rating	Applies to packaged products, with some exemptions as certain special purpose foods (e.g., infant formula, supplements) and alcoholic beverages.	6	Non- dairy beverages, jellies and water-based ice confections; milk and dairy beverages (and alternatives); foods; dairy foods (and alternatives); oils and spreads; cheese
Indian HSR	Applies to processed and packaged food products, except those defined in the Food Safety and Standards Authority of India 44272/2022 (Schedule-IV), such as plain milk, fresh and frozen fruits and vegetables, fresh eggs, honey, refined and raw sugars, among others.	2	Solid and liquid
Nutri-Score	Applies to food products with a mandatory nutritional declaration in accordance with regulation no. 1169/2011, known as the FIC regulation (Food Information to Consumers).	5	General foods; cheeses; red meat; animal and vegetable fats, nuts and seeds; beverages
Singapore Nutri-Grade	Applies to beverages in pre-packaged form and non-customisable beverages from automated beverage dispensers.		
Brunei Healthier Choice Logo	Applies to packaged food products	13	Beverages; cereals; dairy products; egg products; fats and oils; fruit and vegetables; legumes, nuts and seeds (including soy and other plant-based products); meat and poultry; seafood; sauces, spreads, and condiments; snacks; convenience meals and desserts).
Choices	Applies to all products, except for those containing >0.5% alcohol, food supplements, products for use under medical supervision, and foods for children under one year old can be categorized within one of the described product groups. Products are categorised defined basic and non-basic food groups.	12 (and 33 sub-groups)	Basic food groups: fruits and vegetables (fresh fruit and vegetables, processed vegetables, processed fruit, processed beans and legumes), water (plain water, tea and coffee), nuts and seeds ((un)processed nuts and seeds), sources of complex carbohydrates (plain tubers used as staple, processed tubers used as staple, plain noodles and pasta, flavoured noodles and pasta, grains, bread, breakfast cereals), meat, fish, poultry and eggs (unprocessed meat, poultry and eggs, processed meat and meat products, fresh, frozen or processed seafood, insects), dairy (milk (-products), cheese (-products)), oils, fats and fat-containing spreads (oils, fats, spreads), meals (main meals, sandwiches and rolls, soups) Non-basic food groups: sauces (meal sauces, emulsified sauces, dark sauces, other sauces (water-based)), snacks (savory snacks, sweet snacks), liquids (fruit and vegetable juices, non-dairy milk substitutes, beverages), other (all other products)
Heart Symbol	Applies to the categories defined	9	Milk and dairy products, oils and fats, fish, meat, meat products, bread and cereal products, convenience foods, spices and seasoning sauces, vegetables, fruits and berries.
Healthy Living Guarantee Mark	Applies to certain categories of packaged foodstuffs.	9	Milk and dairy products; oils and fats; fruits, vegetables and their processed products; drinks and beverages, including water and tea; cereals and their processed products; confectionery and snack products; meat, fish and their processed products; convenience and semi-convenience meals; other (includes tofu, seitan, tempeh and similar).
Israel Green Label	Applies to foods in their natural form or with added spices or herbs or those that underwent minimal processing, with no food additives	13	Dairy products; Soy products; Vegetable oils; Seeds, Nuts, Almonds; Grains and pseudo-grains; Legumes; Tahini from whole sesame; Eggs; Fish; Poultry; Fruits; Vegetables; Tea
Keyhole	May be used for the labelling and presentation of foods if, after placement in the appropriate food group, they fulfil all the conditions for the relevant food group specified in Annex 2 of the Keyhole legislation (which specifies the categories and subcategories).	11 (32 subcategories)	11 main categories: vegetables, fruits, berries and nuts; flour, grains and rice; porridge, bread and pasta; milk, fermented products, plant-based alternatives; cheese and corresponding plant-based products; fats and oils; fish and shellfish and derivative products; meat, cold cuts, sausages; plant-based products; ready meals; dressings and sauces.
Malaysia Healthier Choice Logo	Applies to packaged food products	11	Cereals; fruit and vegetables; fish and fish products; meat and poultry; legumes, nuts and seeds; dairy and dairy products; beverages; soup, sauces and recipe mixes; fats and oil; convenience food and edible ice group).

Model name	Scope	Number of categories	Categories
Singapore Healthier Choice Symbol	Applies to packaged food products	14	Beverages, cereals, dairy products, eggs and egg products, fats and oils, fruit and vegetables, legumes, nuts and seeds, meat and poultry, seafood, sauces, soups and recipe mixes, snacks, convenience meals, desserts and miscellaneous).
Thai Healthier Choice Logo	Food products in compliance with the Ministry of Public Health's Notification No.373 (2016)	9	ready-to-eat meals, beverages, seasoning sauce, dairy products, instant food, snacks, ice cream, fats and oils, bread
Weqaya	Applies to packaged food suitable for any individual of ages three years and above and that is not intended as diet, therapeutic or allergy - free food. Weqaya Logo cannot be used for food that is deep-fried or food that contain artificial sweeteners, artificial flavors or artificial colors.	17	Milk, or other fermented dairy products intended for drinking; Yogurt, laban or other fermented dairy product; Cheeses (other than fresh cheeses); Fresh cheese and labnah; Flour; Bread; Pasta/noodles (dry weight); Rice (dry weight); Breakfast cereals; Popcorn /crackers/crisp bread/biscuits; Meat or poultry; Fish; Vegetables, root vegetables, and legumes; the products can be fresh, processed or frozen; Vegetable Juice; Fruits fresh, dried or frozen; Nuts and peanuts; Smoothies.
Healthy Symbol USA	Applies to packaged foods.	12	Grain products; dairy products; vegetable products; fruit products; protein foods (game meats; seafood; eggs; beans, peas and lentils; nuts, seeds and soy products); oils (100% oil; oil-based spreads; oil-based dressing)
Samoa NPM	Applies to the food and beverages that fall into the defined categories.	7	Confectionary, cakes, sweet biscuits, savoury snacks, edible ices, sauces and spices; beverages; breakfast cereals, mixed prepared convenience foods, breads, pasta, rice, grains; processed meats (including canned), meat, poultry, fish, eggs, other milk products, cheese; fats and oils; table salt; processed fruit and vegetables, fruit and vegetables (fresh and frozen), root crops, coconut products.

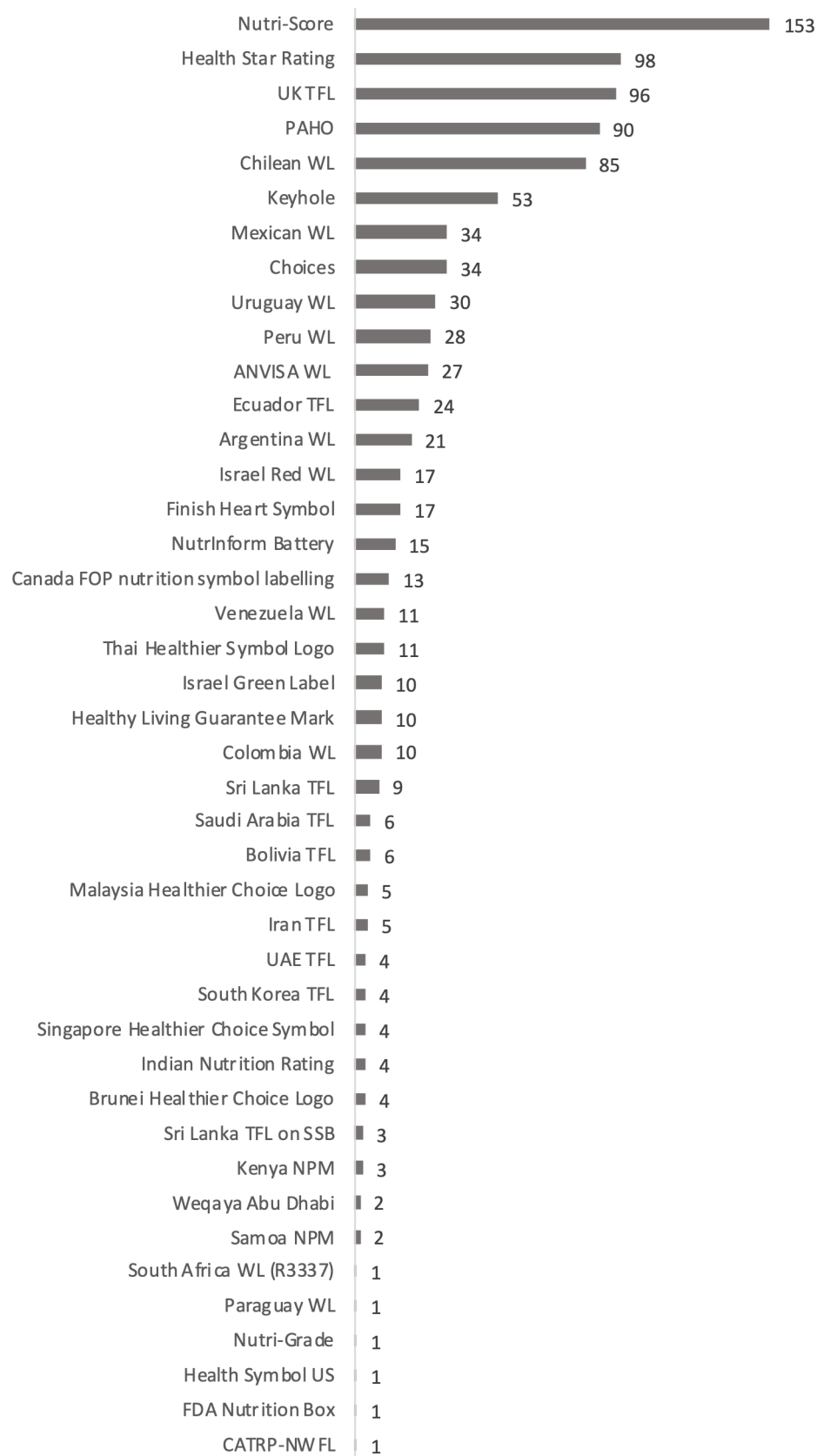


Figure 1. Prevalence of NPMs in the included literature (N=954)

Tables 6 and 7 present the comparison of the NPMs thresholds.

Table 6 presents all the NPMs underpinning traffic-light labels, per country or organisation. The thresholds are divided by the different tiers (colours) of the nutrients' content – low (green), medium (yellow) and high (red). This FOPNL is colour coded to demonstrate if the product has high, medium or low content of the different nutrients and if, therefore, its consumption should be limited or not.

Table 7 presents the comparison of the thresholds of the NPMs underpinning warning labels, per country.

Table 6. Comparison of the thresholds for NPMs underpinning traffic-light labelling systems.

Country	Total fat		Saturated fat		Sugars		Salt		Energy		Trans fat	
	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid
	Low											
UK	≤ 3.0g/100g	≤ 1.5g/100ml	≤ 1.5g/100g	≤ 0.75g/100ml	≤ 5.0g/100g	≤ 2.5g/100ml	≤ 0.3g/100g	≤ 0.3g/100ml				
Ecuador	≤ 3.0g/100g	≤ 1.5g/100ml			≤ 5.0g/100g	≤ 2.5g/100ml	≤ 120mg/100g	≤ 120mg/100ml	*sodium			
Bolivia			≤ 1.5g/100g	≤ 0.75g/100ml	≤ 5.0g/100g	≤ 2.5g/100ml	≤ 120mg/100g	≤ 120mg/100ml	*added sugars	*sodium		
Sri Lanka Foods ^a	< 3.0g/100g				< 5.0g/100g		< 0.25g/100g					
Sri Lanka SSB						< 2.0 g/100ml						
Iran	≤ 3.0g/100g	≤ 1.5g/100ml			≤ 5.0g/100g	≤ 2.5g/100ml	≤ 0.3g/100g	≤ 0.3g/100ml			≤ 0.5g/100g	≤ 0.5g/100ml
Saudi Arabia	≤ 3.0g/100g	≤ 1.5g/100ml	≤ 1.5g/100g	≤ 0.75g/100ml	≤ 5.0g/100g	≤ 2.5g/100ml	≤ 0.3g/100g	≤ 0.3g/100ml				
UAE	≤ 3.0g/100g	NF	≤ 1.5g/100g	NF	≤ 5.0g/100g	NF	≤ 0.3g/100g	NF				
South Korea	< 3.0g/ serving		< 1.5g/ serving		< 3g/ serving		< 120 mg/ serving		*sodium			
	Medium											
UK	> 3.0 – ≤ 17.5g/ 100g	> 1.5 – ≤ 8.75g/ 100ml	> 1.5 – ≤ 5.0g/100g	> 0.75 – ≤ 2.5g/100ml	> 5.0 – ≤ 22.5g/ 100g	> 2.5 – ≤ 11.25g/ 100ml	> 0.3 – ≤ 1.5g/100g	> 0.3 – ≤ 0.75g/100ml				
Ecuador	> 3.0 – < 20g/100g	> 1.5 – < 10g/100ml			> 5.0 – <15g/100g	> 2.5 – < 7.5g/100ml	> 120mg – <600mg/100g	> 120mg – <600mg/100ml	*sodium			
Bolivia			> 1.5 – < 10g/100g	> 0.75 – < 5g/100ml	> 5.0 – <15g/100g	> 2.5 – < 7.5g/100ml	> 120mg – <600mg/100g	> 120mg – <600mg/100ml	*added sugars	*sodium		
Sri Lanka Foods ^a	≥ 3.0 – ≤ 17.5g/100g				≥ 5.0 – ≤ 22g/100g		≥ 0.25 – ≤ 1.25g/100g					
Sri Lanka SSB						> 2.0 – < 11g/100ml						
Iran	> 3.0 – ≤ 17.5g/ 100g	> 1.5 – ≤ 8.75g/ 100ml			> 5.0 – ≤ 22.5g/100g	> 2.5 – ≤ 11.25g/ 100ml	> 0.3 – ≤ 1.5g/100g	> 0.3 – ≤ 0.75g/100ml			> 0.5 – ≤ 2g/100g	> 0.5 – ≤ 2g/100ml
Saudi Arabia	> 3.0 – ≤ 17.5g/ 100g	> 1.5 – ≤ 8.75g/ 100ml	> 1.5 – ≤ 5.0g/100g	> 0.75 – ≤ 2.5g/100ml	> 5.0 – ≤ 22.5g/100g	> 2.5 – ≤ 11.25g/ 100ml	> 0.3 – ≤ 1.5g/100g	> 0.3 – ≤ 0.75g/100ml				

Country	Total fat		Saturated fat		Sugars		Salt		Energy		Trans fat	
	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid
	Medium											
UAE	3.1 – 17.5g/100g	NF	1.6 –5g/100g	NF	5.1 –22.5 g/100g	NF	0.31 – 1.5 g/100g	NF				
	*sodium											
South Korea	≥ 3.0 - ≤ 9 g/serving	/	≥ 1.5 – ≤ 4g/serving	/	≥ 3 – ≤ 17g/serving		≥ 120 – ≤ 300mg/ serving					
	High											
UK	> 17.5g/ 100g	> 8.75g/ 100ml	> 5.0g/100g	> 2.5g/100ml	> 22.5g/ 100g	> 11.25g/ 100ml	> 1.5g/ 100g	> 0.75g/ 100ml				
Ecuador	≥ 20g/100g	≥ 10g/100ml			≥ 15g/100g	≥ 7.5g/100ml	≥ 600mg/100g	≥ 600mg/100ml				
Bolivia			≥ 10g/100g	≥ 5.0g/100g	≥ 15g/100g	≥ 7.5g/100ml	≥ 600mg/100g	≥ 600mg/100ml				
Sri Lanka Foods ^a	> 17.5g/ 100g				> 22g/100g		> 1.25g/100g					
Sri Lanka SSB						≥ 11g/100ml						
Iran	> 17.5g/ 100g	> 8.75g/ 100ml			> 22.5g/100g	> 11.25g/ 100ml	> 1.5g/100g	> 0.75g/100ml			> 2g/100g	> 2g/100ml
Saudi Arabia	> 17.5g/ 100g	> 8.75g /100ml	> 5.0g/100g	> 2.5g/100ml	> 22.5g/100g	> 11.25g/ 100ml	> 1.5g/100g	> 0.75g/100ml				
UAE	> 17.5g/ 100g	NF	> 5.0g/100g	NF	> 22.5g/100g	NF	> 1.5g/100g	NF				
	*sodium											
South Korea	> 9 g/ serving		> 4g/serving		> 17g/serving		>300 mg/ serving					

Key: SSB – sugar-sweetened beverages, NF – not found (in English)

a. Solid or semi-solid foods

Note: FDA thresholds are not provided here considering that the proposal was for the level of thresholds to be based on percent Daily Value (%DV). “Low” would correspond to ≤ 5% DV, “Medium” to 6%-19% DV and “High” to ≥ 20% DV.

Table 7. Comparison of the thresholds for NPMs underpinning warning labels

Country/ Organisation		Energy		Sodium		Total sugars		Added or Free Sugars		Total fat		Saturated fat		Other sweetener s	Trans fat
		Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid		
PAHO				≥ 1 mg of sodium per 1 kcal				≥ 10% of total energy from free sugars		≥ 30% of total energy from total fat		≥ 10% of total energy from saturated fat		Any amount of other sweeteners	≥ 1% of total energy from trans fat
Chile	Phase 1 (2016)	> 350 kcal /100g	> 100 kcal /100ml	> 800 mg /100g	> 100 mg /100ml	> 22.5 g /100g	> 6 g /100ml					> 6 g /100g	> 3 g /100ml		
	Phase 2 (2018)	> 300 kcal /100g	> 80 kcal /100ml	> 500 mg /100g	> 100 mg /100ml	> 15 g /100g	> 5 g /100ml					> 5 g /100g	> 3 g /100ml		
	Phase 3 (2019)	> 275 kcal /100g	> 70 kcal /100ml	> 400 mg /100g	> 100 mg /100ml	> 10 g /100g	> 5 g /100ml					> 4 g /100g	> 3 g /100ml		
Brazil	Instrução Normativa nº 75/2020			≥ 600 mg /100g	≥ 300 mg /100ml			≥ 15 g /100g from added sugars	≥ 7.5 mg /100ml from added sugars			≥ 6 g /100g	≥ 3 mg /100ml		
Argentina	Phase 1 (2022)	≥ 300 kcal /100g	≥ 50 kcal /100ml	≥ 5mg /1kcal or ≥ 600mg /100g	≥ 40mg /100ml			≥ 20% of total energy from added sugars		≥ 35% of total energy from total fat		≥ 12% of total energy from saturated fat			
	Phase 2 (2023)	≥ 275 kcal /100g	≥ 25 kcal /100ml	≥ 1mg /1kcal or ≥ 300mg /100g	≥ 40mg /100ml			≥ 10% of total energy from added sugars		≥ 30% of total energy from total fat		≥ 10% of total energy from saturated fat			
Peru	D.S.N° 007-2015-SA Phase 1 (2019)			≥ 800 mg /100g	≥ 100 mg /100ml	≥ 22.5 g /100g	≥ 6 g /100ml					≥ 6 g /100g	≥ 3 g /100ml		
	D.S.N° 007-2015-SA Phase 2 (2021)			≥ 400 mg /100g	≥ 100 mg /100ml	≥ 10 g /100g	≥ 5 g /100ml					≥ 4 g /100g	≥ 3 g /100ml		

Country/ Organisation		Energy		Sodium		Total sugars		Added or Free Sugars		Total fat		Saturated fat		Other sweetener s	Trans fat
		Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid		
	Resolucion Ministerial 526-2022			≥ 100mg / 100 kcal		≥ 10 kcal / 100 kcal						≥ 10 kcal / 100 kcal			
Mexico	Phase 1 (2020-2023)	≥ 275 total kcal /100g	≥ 70 total kcal or ≥ 10 kcal from free sugars	≥ 350mg /100g	≥ 45mg /100 ml ^a			≥ 10% of total kcal from free sugars ^b				≥ 10% of total kcal from saturated fat			≥ 1% of total kcal from trans fat
	Phase 2 (2023-2025)	≥ 275 total kcal /100g	≥ 70 total kcal or ≥ 8 kcal from free sugars	≥ 1mg/1kcal or ≥ 300mg /100g	≥ 45mg /100 ml ^a			≥ 10% of total kcal from free sugars				≥ 10% of total kcal from saturated fat			≥ 1% of total kcal from trans fat
	Phase 3 (01/10/2025)	Thresholds are the same as in Phase 2. However, in the event of any addition of critical nutrients to the prepackaged product, all the critical nutrients present will be evaluated.													
Uruguay	approved 2018, implemented 2020 - Decree 034/021			> 500 mg /100g	> 200 mg /100ml			> 13 g /100g	> 3g /100ml ^c	> 13 g /100g	> 4 g /100ml	> 6 g /100g	> 3 g /100ml		
Venezuela	2020			≥ 600 mg /100g	≥ 300 mg /100ml										
	2021							≥ 11 g /100g from added sugars	≥ 5.5 g /100ml from added sugars						≥ 5 g /100g
Colombia	Resolución 810 de 2021 (Chapter VI - article 32)			≥ 400 mg /100g	≥ 150 mg /100ml			≥ 10 g /100g from added sugars	≥ 5 g /100ml from added sugars			≥ 4 g /100g	≥ 3.5 g /100ml		

Country/ Organisation		Energy		Sodium		Total sugars		Added or Free Sugars		Total fat		Saturated fat		Other sweetener s	Trans fat
		Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid	Solid	Liquid		
	Resolución 254 de 2023 (in place)			≥ 1 mg per 1 kcal or 300 mg/ 100 g ^d	≥ 1 mg per 1 kcal or 40 mg / 100 ml			≥ 10% of total energy from free sugars				≥ 10% of total energy from saturated fat		Any amount of other sweeteners ^e	≥ 1% of total energy from trans fat
CATRP- NWFL	2017			≥ 1 mg of sodium per 1 kcal		≥ 20% of total energy from total sugars				≥ 30% of total energy from total fat		≥ 10% of total energy from saturated fat		Any amount of other sweeteners ^e	
Israel	Phase 1 (January 2020)			> 500 mg /100g	> 400 mg /100ml	> 13.5 g /100g	> 5 g /100ml					> 5 g /100g	> 3 g /100ml		
	Phase 2 (January 2021)			> 400 mg /100g	> 300 mg /100ml	> 10 g /100g	> 5 g /100ml					> 4 g /100g	> 3 g /100ml		
Canada	2022			≥ 15% DV* = 345 mg ≥ 10% DV** = 230 mg ≥ 30% DV*** = 690 mg (or 360 mg)		≥ 15% DV* = 15 g ≥ 10% DV** = 10 g ≥ 30% DV*** = 30 g (or 15 g)						≥ 15% DV* = 3 g ≥ 10% DV** = 2 g ≥ 30% DV*** = 6 g (or 3 g)			
South Africa	R3337 (2023)			≥ 400 mg /100g	≥ 100 mg /100ml	≥ 10 g /100g	≥ 5 g /100ml					≥ 4 g /100g	≥ 3 g /100ml	Any added artificial sweetener ^e	
Paraguay	Ley n° 7092 (2023)			600 mg /100g	200 mg /100ml	15g /100g	7.5 g /100ml					6 g /100g	3 mg /100ml		

Key: a. For non-caloric beverages

b. beverages containing <10 kcal from free sugars are exempted from presenting this warning

c. or > 5g/100 ml for products without non-nutritive sweeteners or >7g/100 g for products without non-nutritive sweeteners and energy from sugars < 80% of total calories

d. this is the limit for packaged raw meat with added salt/sodium

e. warning featuring "CONTAINS SWEETENERS"

*Prepackaged foods with a reference amount >30 g or 30 mL that are not main dishes

** Prepackaged foods with a reference amount ≤ 30 g or 30 mL

*** Prepackaged main dishes with a reference amount ≥ 200 g or 170 g for foods intended solely for children 1 to 4 years of age

Note: Kenya NPM thresholds are not provided in this table as these vary between the 11 food categories (not as the other NPMs for warning labels which only have thresholds for solids and liquids).

Table 8. Validation of NPMs

NPMs	Types of validation	References
Nutri-Score^a	Convergent ^b	Van der Bend (2022) Galan et al (2017) Szabo de Edelenyi et al (2019) Julia and Hercberg (2017)
	Criterion (predictive) ^c	Barrett et al (2024) Van der Bend (2022) Adriouch et al (2016) Deschasaux et al (2017) Millar et al (2022) Adriouch et al (2017) Deschasaux et al (2018) Andrianasolo et al (2019) Khoury et al (2022) Galan et al (2017) Julia and Hercberg (2017)
Health Star Rating	Convergent ^b	Jones, Rådholm and Neal (2018)
	Criterion (predictive) ^c	Pan et al (2020) Barrett et al (2024)
Choices	Convergent ^b	Tognon et al (2021)
PAHO	Convergent ^b	Ministerio de Salud Argentina (2020)
Chilean WL	Convergent ^b	Ministerio de Salud Argentina (2020)
	Criterion (predictive) ^c	Bullón-Vela et al. (2022)
Uruguay WL	Convergent ^b	Ministerio de Salud Argentina (2020)
Peru WL	Convergent ^b	Ministerio de Salud Argentina (2020)
Ecuador TFL	Convergent ^b	Ministerio de Salud Argentina (2020)
Bolivia TFL	Convergent ^b	Ministerio de Salud Argentina (2020)

- a. In the current systematic review, the updated version of Nutri-Score was included. However, considering its novelty and not yet implementation, all the validation studies were performed in the original version of the model.
- b. Convergent validity - the level of agreement (or convergence) of the classification of products using the NPM against other systems, namely food-based dietary guidelines (FBDG).
- c. Criterion validity – the most robust type of testing that relates to how consumption of foods based on NPSs is associated with objective measures of health.

Table 9. Quality assessment of the included NPMs for FOPNL

NPM	Score	NPM by order of scores	Score
ANVISA WL	15	Chilean WL	19
Argentina WL	15	Nutri-Score	18
CATRP-NWFL	14	PAHO	17
Chilean WL	19	Peru WL	16
Colombia WL	14	Uruguay WL	16
FOP nutrition symbol labelling	14	HSR	16
Israel Red WL	14	Keyhole	16
Kenya NPM	15	ANVISA WL	15
Mexican WL	14	Argentina WL	15
Paraguay WL	8	Kenya NPM	15
PAHO	17	UK TFL	15
Peru WL	16	Choices	15
South Africa WL (R3337)	5	Israel Green Label	15
Uruguay WL	16	CATRP-NWFL	14
Venezuela WL	11	Colombia WL	14
Bolivia TFL	13	FOP nutrition symbol labelling	14
Ecuador TFL	12	Israel Red WL	14
Iran TFL	8	Mexican WL	14
NutrInform Battery	9	Saudi Arabia TFL	14
FDA Nutrition Box	11	Samoa NPM	14
Republic of Korea TFL	7	Bolivia TFL	13
Saudi Arabia TFL	14	Singapore Nutri-Grade	13
Sri Lanka TFL SSB	11	Heart Symbol	13
Sri Lanka TFL	11	Ecuador TFL	12
UAE TFL	9	Healthy Living Guarantee Mar	12
UK TFL	15	Healthy Symbol USA	12
HSR	16	FDA Nutrition Box	11
Indian NR	8	Venezuela WL	11
Nutri-Score	18	Sri Lanka TFL SSB	11
Singapore Nutri-Grade	13	Sri Lanka TFL	11
Brunei Healthier Choice Logo	8	Singapore Healthier Choice Sy	10
Choices	15	NutrInform Battery	9
Heart Symbol	13	UAE TFL	9
Healthy Living Guarantee Mark	12	Malaysia Healthier Choice Log	9
Israel Green Label	15	Paraguay WL	8
Keyhole	16	Iran TFL	8
Malaysia Healthier Choice Logo	9	Indian NR	8
Singapore Healthier Choice Sym	10	Brunei Healthier Choice Logo	8
Thai Healthier Choice Logo	7	Republic of Korea TFL	7
Weqaya	7	Thai Healthier Choice Logo	7
Healthy Symbol USA	12	Weqaya	7
Samoa NPM	14	South Africa WL (R3337)	5

CRITERIA per model	Text ad ANVISA WL verbatim/justification	Argentina WL Text ad verbatim/justification	CATRP- NWFL Text ad verbatim/justification	Chilean WL Text ad verbatim/justification	Colombia WL Text ad verbatim/justification	FOP nutrition symbol labelling	Text ad verbatim/justification	Israel Red WL Text ad verbatim/justification	Kenya NPM Text ad verbatim/justification	Mexican WL Text ad verbatim/justification	Paraguay WL Text ad verbatim/justification
Algorithm available	1	1	1	1	1		1	1	1	1	1
Source	1	1	1	1	1		1	1	1	1	1
Transparency in the development process	A lot of papers and reports describing the process, both identified in the searches (academic, grey and google) and also 1 further searches	Análisis del nivel de concordancia de sistemas de perfil de nutrientes con las Guías Alimentarias para la Población Argentina. <i>El presente documento tiene como objetivo la evaluación del nivel de concordancia de ocho sistemas de perfil de nutrientes seleccionados con las Guías Alimentarias para la Población Argentina (...). En cuanto a la evaluación global de cada SPN los de mejor performance resultan ser el modelo de OPS en primer lugar, seguido de las propuestas desarrolladas 1 en Chile y Uruguay.</i>	It is clear in the model document that this was decided by the Ministries of Health, considering scientific evidence, to be 1 based on the PAHO model	Corvalán C, Reyes M, Garmendia ML, Usay R. Structural responses to the obesity and non-communicable diseases epidemic: the Chilean Law of Food Labelling and Advertising. <i>Obes Rev.</i> 2013;14 Suppl 2:79-87. doi:10.1111/obr.12099	Information spread between different documents and places: not clear the update to 0 follow PAHO NPM		It was not found a clear description of the 0 development process	Endsvelt, Ronit, Grotto, Ilanur, Sheffer, Rivka, Goldsmith, Rebecca, Golan, Maya, et al. (2017). Regulatory measures to improve nutrition policy towards a better food environment for prevention of obesity and associated morbidity in Israel. <i>Public health panorama</i> , 63 (S4), 566-574. World Health Organization, Regional 1 Office for Europe.	Ministry of Health (Kenya), State Department for Public Health and Professional standards, Division of Nutrition and Dietetics. (2025). Kenya 1 Nutrient Profile Model (1st ed.). Did not find information about this NPM being endorsed by another 0 country	MODIFICACION a la Norma Oficial Mexicana NOM-051-SCFI/SSA1-2010, Especificaciones generales de etiquetado para alimentos y bebidas no alcohólicas preenvasados-Información comercial y sanitaria, publicada el 5 de abril de 2010. - It enumerates all the organisations that were 1 involved in the update of the	In the legislation just mentions that is evidence-based and there was no conflicts of interest, but no 0 further detail
Endorsement	Not found any 0 information	0 Not found any information	0 Not found any information	Initial proposals adopted in Colombia and Peru, Israel Red Warning 2 Label, Uruguay Warning Label, Venezuela Warning Label	Not found any 0 information		Not found any 0 information	0 Not found any information	0 country	0 Not found any information	0 legislation document
Implementation	1 In Brazil, warning label	1 In Argentina, warning label	0	1 In Chile, Israel, Uruguay and Venezuela, warning label	1 In Colombia, warning 1 label		1 In Canada, FOP	1 In Israel, warning label	The NPM has been adopted, but the FOPNs, doesn't seem to be enacted yet: https://www.advocacyincubator.org/news/2025-10-08-kenya-becomes-the-first-country-in-the-east-african-community-to-adopt-a-nutrient-profile-model-paves-the-way-for-stronger-1-healthy-food-policies	1 In Mexico, warning label	1 Paraguay WL
Scope	1	1	1	1	1		1	1	1	1	
Usability in Policy Context	Categories	1	1	1	1		1	1	1	1	1
Reference amount	1	1	1	1	1		1	1	1	1	1
Components	3	3	3	3	3		3	3	3	2 evaluates free sugars	3 sodium, sugars, saturated fat
Transparency of the model features	Scope	1	1	1	1	1 distinguishes between solid (g or equivalent) and liquid (ml or 1 equivalent)	1	0	1	1	0
Categories	1	1	1	1	1		1	1	1	1	0
Components	1	1	1	1	1	when decided to follow 1 PAHO, it is justified by the scope and scientific evidence	1	1	1	1	0
Reference amount	1	1	1	1	1		1	1	1	1	0
Points or setting thresholds	1	1	1	1	1		1 DV	1 Chilean NPM	WHO recommendations and WHO- 1 AFRO NPM	1 PAHO NPM	0
Has the model been systematically validated?	face/content validity was not taken into consideration for the 0 scoring	0	0	2 convergent and criterion validity	0		0	0	0	0	0
Has the validation of the model been performed in the latest published (current) version of the model?	NA	NA	NA	Yes	NA	NA/A		N/A	N/A	N/A	N/A
TOTAL	15	15	14	19	14		14	14	15	14	8

CRITERIA per model	PAHO NPM	Text ad verbatim/justification	Peru WL	Text ad verbatim/justification	South Africa WL (R3337)	Text ad verbatim/justification	Uruguay WL	Text ad verbatim/justification	Venezuela WL	Text ad verbatim/justification	Bolivia TFL	Text ad verbatim/justification	Ecuador TFL	Text ad verbatim/justification	Iran TFL	Text ad verbatim/justification	NutrInform Battery	Text ad verbatim/justification	FDA Nutrition Box	Text ad verbatim/justification	Republic of Korea TFL	Text ad verbatim/justification
Algorithm available	1		1		1		1		1		1		1		In Al-Jawadeh et al (2020) it is mentioned energy for Iran. But it doesn't appear in any further 0 source		1	It is not clear if there was any funding, as representatives of trade associations from the agri-food industry and consumers have been 0 involve	Proposed 1 5 101.6(a)(2)(iv)	1		
Source	1		1		1		1	Ares G, Ant6nez L, Cabrera M. Thous MM. Analysis of the policy process for the implementation of nutritional warning labels in Uruguay. Public Health Nutr. 2021;24(17):5927-5940. doi:10.1017/S13689800210102469	1		1		1		1			There are some descriptions - Carruba, M.O., Carretto, A., De Lorenzis, A. et al. Front-of-pack (FOP) labelling systems to improve the quality of nutrition information to prevent obesity: NutrInform Battery vs Nutri-Score. Eat Weight Disord 27, 1575–1584 (2022). 1 https://doi.org/10.1007/s40519-021-01316-z	1		1	
Transparency in the development process		Pan American Health Organization, Pan American Health Organization Nutrient Profile Model, Washington, DC: PAHO, 1 2016		PAHO. Ley de promoci6n de la alimentaci6n saludable para ni6os, ni6as y adolescentes. Experiencia de Per6 - Exposure of methods to update the model 1 underpinning the law.		No description about 0 the process.			No description found 0 about the process		No description found about the 0 development process		No description found about the 0 process		There are some papers that refer to the TFL, but the descriptions of the development of the NPM are 0 quite vague.				1		This information was not identified in the review or 0 supplementary searches	
Endorsement		Endorsed by more than 2 national governments		0 Not found any information		0		0	0		0		0		0		0		0		0	
Implementation		Countries based their models on PAHO were counted as 1 implementation		1 Peru, WL		Draft of Regulation, published for public 0 comment		1 Uruguay, WL	1 Venezuela, WL		1 Bolivia, TFL		1 Ecuador, TFL		1 In Iran, TFL	1 even though not entirely clear if it is in use in Italy		0 Not yet implemented			1 assumed to be currently in place in South Korea World Cancer Research Fund International (2017) NOURISHING framework: Nutrition label standards and regulations on the use of claims and implied claims on food: front-of pre-packaged children's "favorite food" including cookies/candies/popsicles, breads, chocolates, dairy products, sausage (fish or meat based), some beverages, instant noodles and fast food (seaweed 1 rolls, hamburgers, sandwiches). Because the scope says "children's foods" it was assumed that it was only applied to solids (and not 0 to liquids/drinks)	
Scope	1		1		0		1		1		"alimentos y bebidas no alcoh6licas 1 procesadas"		1		0		0		1			per serving of stated size
Usability in Policy Context	Categories	1	1		1		1		1		1		1		1	Moslemi et al (2020) National food policies in the Islamic Republic of Iran aimed at control and prevention of noncommunicable diseases. EBMJ - Vol. 26 No. 12: Calculation of amounts and ensuring the culture for each food was based on the quantities per 100 g of solid foods, 100 ml of liquid 0 foods or the serving size, if the		0		1		
Reference amount	1		1		1		1		1		1		1		1		0 uses per serving		0		0	sodium considered as directly assessed from the 3 label
Components	2	evaluates free sugars	3		1		3		3		3		3		3	Form the regulation document: Que la Estrategia Mundial sobre R6gimen Alimentario, Actividad F6sica y Salud aprobado por los pa6ses miembros de la Organizaci6n Mundial de la Salud en mayo de 2004, durante la 57 ^a Asamblee Mundial, alienta a que la empresa privada "Adopte pr6cticas responsables, en particular con 1 respecto a la promoci6n y la		3		1		Edalat et al (2019). Development and implementation of nutrition labelling in Iran: A retrospective policy analysis: Low level of evidence-informed decision making for changing, finalizing and formulating 0 the guidelines
Scope	1		1		0		1		1		1 and trans fat		1		1	Not found in this regulation document		0		1		couldn't find the rationale in English for being only children foods
Categories	1		1		0		1		0		In the regulation document, it distinguishes/defines non-alcoholic 1 beverages and foods		1		1	In the regulation document, it distinguishes/defines beverages and 1 foods		0		1		0
Transparency of the model features				Chilean NPM											Moslemi et al (2020) references the 1 UK NPM		0		1		0	
Components	1		1		0		1		1		Follows the 1 recommendations of WHO		1		1	Moslemi et al (2020) references the UK NPM, but in Iran there are no thresholds for saturated fat (the rationale is not presented). And there are also some mentions about energy (Al-Jawadeh et al 0 2020) but no thresholds		1		1		0
Reference amount	1		1		0		1		0		0		0		0	In the regulation, it refers to saturated fat as the concern but the 0 NPM applies to total fat		0		1		0
Points or setting thresholds	1		1		0		1		0		Not found in the regulation document		0		0	Not found in the regulation document		1		1		0
Has the model been systematically validated?	1	convergent validity	1	convergent validity	0		1	convergent validity	0		1	convergent validity	1	convergent validity	0			0		0		0
Has the validation of the model been performed in the latest published (current) version of the model?	Yes		No		It was with the first phase of implementation of the OG NPM (not the PAHO)	N/A			N/A		Yes		Yes		N/A		N/A		N/A		N/A	
TOTAL	17		16		5		16		11		13		12		8		9		11		7	

CRITERIA per model	Choices	Text ad verbatim/justification	Heart Symbol	Text ad verbatim/justification	Healthy Living Guarantee Mark	Text ad verbatim/justification	Israel Green Label	Text ad verbatim/justification	Keyhole	Text ad verbatim/justification	Malaysia Healthier Choice Logo	Text ad verbatim/justification	Singapore Healthier Choice Symbol	Text ad verbatim/justification	Thai Healthier Choice Logo	Text ad verbatim/justification	Healthy Symbol USA	Text ad verbatim/justification	Wegaya	Text ad verbatim/justification	Samoa NPM	Text ad verbatim/justification	
Algorithm available	1		1		1		1		1		1		1		1		1		1		1		
Source	0		1	https://www.sydnermarkki.fi/en: The criteria for the symbol are based on the Finnish nutrition recommendations. The criteria are regularly updated, if needed, by the Heart Symbol expert group, which includes eight professionals in nutrition and medicine appointed by the organisations in charge, i.e. FSA, 1 and FDA.	1		1	Gillon-Karen M, Kaufman-Shriqui V, Goldsmith R, et al. Development of Criteria for a Positive Front-of-Package Food Labeling: The Israeli Case. Nutrients. 2020;12(6):1875. Published 2020 Jun 23.	1		1		1		1		1		1		1		
Transparency in the development process		Roodenburg AJ, Popkin BM, Seidell JC. Development of international criteria for a front of package food labelling system: the International Choices Programme. Eur J Clin Nutr. 2011;65(11):1199-1200. doi:10.1038/sj.ejcn.2011.101; van den Assum S, Schilpaand R, Lisner L, et al. Periodic Revisions of the International Choices Criteria: Process and Results. Nutrients. 2020;12(9):2774. Published 2020 Sep 11. doi:10.3390/nu12092774			0		1	Published 2020 Jun 23.	1		0		1		0		1		0		1		
Endorsement	2	Czech Republic, Poland	0		1		0		2		0		1	Brunei	0		0		0		0		
Implementation	1		1		1		1		1		1		1		1		The NPM has been adopted, even though FDA hasn't came up with the FOPNL symbol 1 yet		1		0		
Scope	1		1		0		1		1		1		1		1		1		1		1		
Usability in Policy Context	Categories	1	1		1		1		1		1		1		1		1		1		1		
Reference amount	1		1		1		1		1		1		1		some per serving (instant food, energy thresholds for some 0 categories)		0		it uses serving sizes in 0 smoothies for example		1		
Components	1	trans-fat content		drinks containing vegetables it 2 requires leaf vegetables	3		3		3		2	% whole grains?	2		2		1		2	% whole grain	3		
Scope	1		1		0		1		1		0		0		0		1		0		1		
Transparency of the model features	Categories	Roodenburg AJ, Popkin BM, Seidell JC. Development of international criteria for a front of package food labelling system: the International Choices Programme. Eur J Clin Nutr. 2011;65(11):1199-1200. doi:10.1038/sj.ejcn.2011.101; van den Assum S, Schilpaand R, Lisner L, et al. Periodic Revisions of the International Choices Criteria: Process and Results. Nutrients. 2020;12(9):2774. Published 2020 Sep 11. doi:10.3390/nu12092774	1		0		1	Gillon-Karen M, Kaufman-Shriqui V, Goldsmith R, et al. Development of Criteria for a Positive Front-of-Package Food Labeling: The Israeli Case. Nutrients. 2020;12(6):1875. Published 2020 Jun 23. doi:10.3390/nu12061875	1		0	Excessive dietary intake particularly fat, sodium and sugar have been shown to be associated with the development of diet-related non-communicable diseases such as obesity, cardiovascular diseases and diabetes mellitus which are increasing tremendously in 1 Malaysia. The aim of this	0		0		1		0		1		
Components	1		1		0		1		1		0		0		0		1		0		1		
Reference amount	1		1		0		1		1		0		0		0		1		0		1		
Points or setting thresholds	1			Just mentions the Finnish 0 Recommendations	0		1		Just mentions "Nordic 0 Recommendations"		0		0		0		1		0		1		
Has the model been systematically validated?		1	Convergent (Tognon et al (2021))		0		0		0		0		0		0		0		0		0		
Validation		Has the validation of the model been performed in the latest published (current) version of the model?	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		
TOTAL		N/A	15		13		12		15		16		9		10		7		12		7		14

S3: Search Strategies

Table 10. Database Ovid Medline and CAB Abstracts, 30 May 2025

Searches*	Results	Date
nutrient profile model* nutrient profil* nutrient profiling system* nutritional profil* nutrition profil* nutrient scoring* nutrition scoring* nutritional scoring* food scoring system* 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 ((nutrition or nutritional or food or nutrient*) adj label*) ("front of pack*" adj3 label *) ("front of pack*" adj3 schem*) 11 or 12 or 13 10 and 14	535	30/05/2025

* limit to yr="2016 –Current"

Table 11. Database Scopus, 30 May 2025

Searches*	Results	Date
("nutrient profile model*" OR "nutrient profil*" OR "nutrient profiling system*" OR "nutritional profil*" OR "nutrition profil*" OR "nutrient scoring*" OR "nutrition scoring*" OR "nutritional scoring*" OR "food scoring system*") AND ("nutri* label*" OR "food label*" OR "(16) label*" OR "{front of pack*} schem*")	401	30/05/2025

* Published from 2016 to Present

Table 12. Database Overton, 30 May 2025

Language	Searches	Results	Date
English	("nutrient profile model*" OR "nutrient profil*" OR "nutrient profiling system*" OR "nutritional profil*" OR "nutrition profil*" OR "food scoring system*" OR "nutri* criteria") AND ("front-of-pack*" OR "front-of-package labelling" OR "food label*" OR "nutrition label*" OR "nutritional label*")	314	30/05/2025
Spanish	("perfil nutricional" OR "perfil de nutrientes" OR "perfil* nutri*") AND ("etiquetado frontal de alimentos" OR "etiquetado nutricional frontal" OR "etiquetado nutricional" OR "información nutricional" OR "FOPL")	95	30/05/2025
Portuguese	("perfil nutricional" OR "modelo de perfil nutricional") AND ("rotulagem nutricional" OR "advertência frontal na embalagem")	29	30/05/2025
Total		438	

Table 13. Google, 17 February 2026

Language	Searches	Hits	Date	Pages searched	Results included
English	("nutrient profile model" OR "nutrient profile system" OR "nutrient profiling system" OR "nutrient profiling model" OR "nutrient scoring system" OR "nutritional profile system" OR "food scoring system") AND ("food label" OR "front of pack label")	6430	17/02/2026	5	49
Spanish	("perfil nutricional" OR "perfil de nutrientes" OR "perfil* nutri*") AND ("etiquetado frontal de alimentos" OR "etiquetado nutricional frontal" OR "etiquetado nutricional" OR "información nutricional" OR "FOPL")	142000	17/02/2026	5	49
Portuguese	("perfil nutricional" OR "modelo de perfil nutricional") AND ("rotulagem nutricional" OR "advertência frontal na embalagem")	6650	17/02/2026	5	49

S4: Quality assessment of the models

Table 14. Framework developed for the quality assessment of the NPMs

Criteria	Description	Criteria	Score
Algorithm availability	Is the NPM algorithm publicly available?	The algorithm for the model is publicly available	1
		The algorithm for the model is not publicly available	0
Source	Was the model developed by a credible source?	The model was developed by an international governmental organization (such as UN agency or the EU) Or The model was developed by a national government or a national government agency Or The model was developed by an academic institution or a non-governmental organization without commercial funding	1
		The model was developed by a commercial organization, or a non-commercial organization with commercial funding	0
Transparency in the development process (e.g., members involved)	Has the process of the development of the model been well documented?	The process of the development of the model is well documented	1
		The process of the development of the models has not been well documented/declared	0
Evidence of commercial interference (i.e., lobbying)	Has the process of the development of the model had any commercial/industry involvement?	The process of the development of the model did not include any industry interference	1
		The process of the development of the model included industry interference	0
		The process of the industry interference of the model has not been well documented/declared	0
Endorsement	Has the model been endorsed for use by credible bodies? (Select all that apply, maximum 3 points)	The model has been endorsed for use by an international governmental organization (such as a the UN or the EU)	1
		The model has been endorsed by one national government	1
		The model has been endorsed by two or more national governments	1
Implementation	Is the model used for a current application such as marketing restrictions, food taxation or food labelling?	The model is used for a current application	1
		The model is NOT used for a current application	0

Criteria		Description	Criteria	Score
Usability in Policy Context:	Scope	Is the model's scope (which foods are included and excluded from the model) clearly defined?	The model's scope is clearly defined (e.g., by Tariff Codes, Codex Codes and/or definitions, or a clear list of the foods included/excluded)	1
			The model's scope is NOT clearly defined	0
	Categories	If the model has different scoring/ thresholds for different categories, are these categories clearly defined?	The model has well defined categories (e.g. by Tariff Codes, Codex Codes or equivalent)	1
			The model does NOT have well defined categories	0
	Reference amount	Is the model's reference amount clearly defined?	The model uses a per 100g/100ml or per 100kcal reference amount	1
			The model uses other reference amounts (e.g. per serving or per pack)	0
	Components	Does the model involve components which are easy to assess?	The model solely uses compositional (and other information) that can be directly assessed from food labels , i.e. information in the nutrient declaration, the list of ingredients, etc. (e.g. content of total sugars, content of saturated fat, presence/absence of non-sugar-sweeteners)	3
			The model involves components that can be indirectly assessed applying some assumptions to the food labelling information (e.g. content of free sugars, fruit and veg (content))	2
			The model involves components that can be directly or indirectly assessed from food labels using some assumptions but requires additional information from publicly available food databases such the Composition of foods integrated dataset (CoFID) (e.g. for trans fatty acid content)	1
			Not all information about components can be found on the food label or in publicly available datasets	0
Transparency of the model features	Is the rationale for features of the model clearly explained and documented? (select all that apply, maximum 5 points)	The rational for the model's scope is clearly set out and documented	1	
		The rational for model's categories is clearly set out and documented	1	
		The rational for the model's components is clearly set out and documented	1	
		The rational for the model's reference amount is clearly set out and documented	1	
		The rational for scoring of points or setting thresholds within categories is clearly set out and documented	1	
Validation	Has the model been systematically validated?	The model has face/content validity =1 (The ability to discriminate food products based on healthfulness)	1	

Criteria	Description	Criteria	Score
	Select all that apply, maximum of 3 points)	The model has convergent validity (The level of agreement (or convergence) of the classification of products using the NPM against other systems, namely food-based dietary guidelines)	1
		The model has criterion validity (A demonstrable relationship with health and or environmental sustainability) Criterion validity (also referred to as predictive or concurrent validity) Considered the most robust type of testing and relates to how consumption of foods based on models is associated with objective measures of health	1
		No validation exercises were conducted	0
	Has the validation of the model assessed in the latest published version of the model? (I.e., Please select "No" if the validation exercise has been performed to the previous version of model or to the model in which the current model is based on)	Yes/No	