Updated PAHO Regional Sodium Reduction Targets

PAHO
Pan American Health Organization
World Health Organization
REGIONAL OFFICE FOR THE Americas

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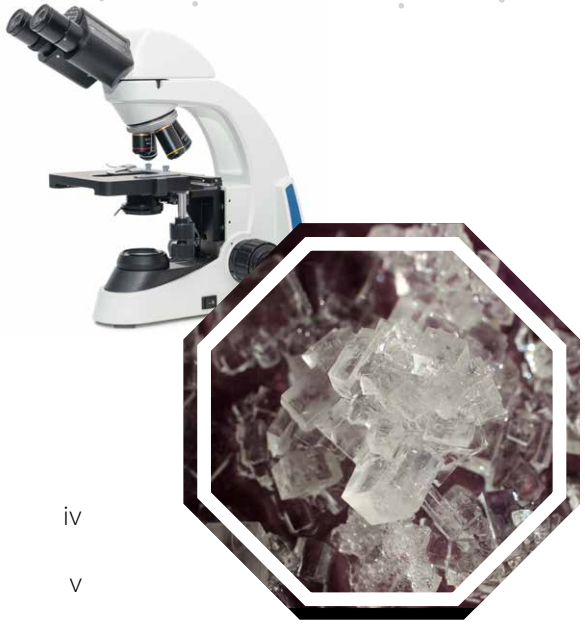

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Abbreviations and acronyms

CVD	cardiovascular disease
FOPL	front-of-package labeling
LAC	Latin America and the Caribbean
NCD	noncommunicable disease
PAHO	Pan American Health Organization
TAG	Technical Advisory Group
WHO	World Health Organization

Introduction

In 2009, the Pan American Health Organization (PAHO) launched the initiative Cardiovascular Disease Prevention through Population-wide Dietary Salt Reduction to support Member States in efforts to reduce the consumption of salt/sodium and with the broader goal of meeting the World Health Organization (WHO) 2025 global target for noncommunicable diseases (NCDs) of a 30% relative reduction in mean population intake of salt/sodium. WHO recommends an intake of less than 5 g of salt (< 2 g of sodium) per adult per day and set a target for countries to reduce dietary salt intake by 30% by 2025 (*1*).

This initiative was accompanied by a technical expert group that was brought together to translate evidence into policy and action. This expert group comprised researchers, public authorities, and civil society representatives from within the Region and beyond (*2, 3*). Their support to the initiative involved three phases.

The first phase, which lasted from 2009 to 2011, focused on policy development. The technical expert group prepared a policy statement intended to mobilize policy makers and decision makers in government, leaders in nongovernmental organizations (representing consumers, and health, scientific, and health care professionals), civil society, the food industry (including food processors, distributors, importers, and exporters), and in PAHO offices to take action to reduce population salt/sodium intake (*4–10*).

In the second phase, a technical advisory group (TAG) was established to guide the PAHO initiative from 2012 to 2015. The TAG focused its efforts on policy awareness and policy support. The TAG prepared guidelines and position papers and produced a series of technical reports and protocols to assist Member States in taking action (*10, 11, 12*). These materials were based on experiences from within the Region and elsewhere and served to inform and provide scientific evidence for salt/sodium reduction (*13, 14*) and prepared the first set of PAHO regional targets for sodium reduction (*15*). The first set of targets for selected categories and subcategories was developed in 2015 (*15*). The initiative finalized its third phase (2016–2018), with a focus on policy implementation and monitoring.

As part of Phase 3 of the initiative of the TAG, a meeting took place 25–26 October 2017 at PAHO Headquarters to: 1) review current policies, initiatives, resources, and advocacy efforts for salt reduction, globally and regionally, and identify actions for further progress; 2) discuss engagement with food industry, positions on product reformulation, and the revision of voluntary or recommended targets; 3) update progress on consumer awareness projects and identify opportunities in the Region; 4) discuss and update the trajectory and function of the Salt Smart Consortium; and 5) discuss and review objectives of the 2016–2019 operational plan. During this meeting, reducing salt/sodium in the food supply across the life course was identified as a key area of work as part of the Operational Plan for Phase 3. This would be achieved through expanding and updating the 2015 PAHO regional sodium targets (*15*) to lower the current target values and increase the number of food categories with targets, where warranted.

The time is now appropriate for updating these targets for several reasons:

1. It is consistent with the stated goal in the Salt Smart Consortium Consensus Statement (14) to update the PAHO targets in a phase-wise approach, and also is one of the TAG recommendations during Phase 3 of the initiative of the TAG (2016–2018).

2. Food supply monitoring data (*16*) show that a large proportion of food products across a wide range of food categories meet the 2015 PAHO targets, yet sodium intakes remain high across the Region.

3. More countries have established sodium targets for foods and for a broader range of food categories and subcategories, permitting the update of targets and expansion to a broader number of food categories and subcategories (*17*).

4. National-level monitoring of data on the sodium content of foods has been conducted in many countries since 2015, which can be used to establish new targets (*18–28*). At the time of the 2015 PAHO target-setting process, targets were developed based on existing targets from only four countries of the Americas: Argentina, Brazil, Canada and Chile, with a review of targets from the United Kingdom of Great Britain and Northern Ireland, and with very few national-level sodium content data available.

5. Broader policy initiatives have been developed. PAHO released a PAHO Nutrient Profile Model (*29*) for use in several policy applications with a limit set for sodium based on WHO guidelines. Additionally, some countries in the Americas have introduced or proposed front-of-package labeling regulations, including thresholds for the sodium content in foods (*17*).

Simultaneously with the update of these regional targets, WHO has prepared global benchmarks for sodium levels in foods across different food categories. These WHO global benchmarks build on country and regional work and experiences of setting targets for sodium levels in different food categories, as part of national and regional efforts to reduce population salt intake, reduce the burden of diet- and nutrition-related NCDs and achieve the global NCD target for a 30% relative reduction in mean population intake of salt, with the aim of achieving a target of less than 5 g of salt (< 2 g of sodium, for example) per day by 2025. The global benchmarks also call for accelerated action from Member States in scaling up their efforts to reduce their populations' sodium intake. These WHO global benchmarks are complementary to existing and ongoing national and regional efforts and initiatives and are intended to serve as a global reference for maximum sodium content of specific food categories.

A. Harmonization of PAHO Regional Targets and Timelines

Harmonizing salt/sodium reduction targets will benefit both national strategies to improve the quality of the food supply and food industry processes: countries without targets can take advantage of the targets and timelines already in place and the lessons learned from others; consumers across the Region will be in a better position to achieve the recommended intake and the associated health gains; and food companies can migrate to harmonized formulations for same-products supplied to markets in the Americas.

The setting of regional targets does not preclude countries from establishing more stringent national targets for priority food categories. Harmonized regional targets are to support expansion and consistency of salt/sodium reduction efforts across a larger number of countries in the Region.

B. Principles for Agreeing on, Maintaining, and Monitoring Regional Targets for Food Products

The following set of principles are used to develop, maintain, and monitor regional targets:

- Regional targets are agreed upon, based on existing national data and targets in the Americas.
- Regional targets are voluntary and recommended as a starting point for product reformulations.
- Governments may set or regulate different targets and are encouraged to develop more stringent targets appropriate to their national situations.
- Regional targets will be revised, as progress with reformulations in key food categories shifts salt/sodium levels downwards.
- Monitoring and evaluation of compliance with regional targets will be transparent and safeguarded from conflicts of interest.

C. Updating the Regional Sodium Targets

To revise the 2015 PAHO Regional Targets for Salt Reduction in the Americas, PAHO collaborated with the WHO Collaborating Centre on Nutrition Policy for Chronic Disease Prevention at the University of Toronto (Canada) and Ontario Tech University (Canada) (Appendix). The following workplan was established and executed between July 2020 and January 2021:

1. Collect and compile current Member State salt/sodium national targets levels in food products set by governments in the Region.
2. Evaluate the available data on the salt/sodium content in Member State food products and compare with the regional goals for sodium reduction, to assist TAG in assessing progress against current voluntary targets.
3. Draft new and/or revised regional targets based on TAG recommendations.

This publication presents the set of new and revised PAHO Regional Sodium Reduction Targets 2021–2025 adopted by the TAG (Table 1). It also provides an overview of the methodological approaches taken to expand the number of food categories and to generate the revised targets.

1. Methods

With the extensive amount of data available, the new target-setting approach followed an iterative and integrated process informed by national-level data and progress relative to existing targets and policy goals and based on previous policy guidance including the 2015 PAHO Regional Targets for Salt Reduction in the Americas, national-level targets, WHO proposed reduction objectives, front-of-package labeling (FOPL) thresholds, and PAHO Nutrient Profile Model objectives.

The methodological approaches taken to expand the number of food categories and to derive new and revised sodium targets were informed by the TAG Target-setting Subgroup (Appendix) at virtual meetings on 22 September 2020 and 30 October 2020 and then adopted by the full TAG following extensive discussion and review at a meeting of the TAG held on 4–5 February 2021. The following methods were applied based on consensus recommendations of the Target-setting Subgroup and full TAG review.

1.1 Evaluation and Expansion of Food Categories and Creation of Definitions

Three primary criteria were used in considering the expansion of food categories and subcategories: 1) a food category/subcategory is documented as a significant source of dietary sodium in several of the countries within the Region, or 2) stakeholders or the TAG Target-setting Subgroup requested the inclusion of a food category of national relevance to dietary sodium intakes, based on consultation, or 3) more than two countries had national-level targets for a given food category. Additionally, some new categories/subcategories were created by splitting the broad food categories that were part of the 2015 PAHO regional sodium targets. Here, broad food categories were split into multiple subcategories to increase specificity, where sufficient data were available to support the development of sodium targets for more refined subcategories.

To support Member States in applying the targets and in conducting food supply monitoring, definitions and sample food items were created to accompany the description of each food subcategory. A document containing these definitions was circulated to members of the TAG Target-setting Subgroup for review and feedback. This process ensured that the examples of foods used in defining a food category reflected the diverse intakes across the Region.

1.2 Overview of Methods to Develop the Updated PAHO Regional Sodium Reduction Targets 2022–2025

To align with global initiatives, the TAG Target-setting Subgroup recommended that the updated sodium targets be generated to reflect annual milestones for 2022 and 2025. These values would replace the Regional Target and Lower Target that were established as part of the 2015 PAHO regional sodium targets.

The updated targets are designed as "maximum" thresholds, whereby food products are required to have their sodium levels below target levels.

Following a stage-based approach, the 2022 and 2025 targets were established to reflect an approximate 15% and 30% reduction in the baseline sodium content of food products, respectively, with considerations for feasibility (described below). A 30% reduction in the sodium content of food products corresponds to WHO global NCD targets, which include a 30% relative reduction in mean population intake of salt/sodium. A 2022 goal was generated to encourage incremental reductions in the sodium content of food products. This is a strategy known to enhance consumer acceptance of lower sodium products while allowing time for research and development related to food product reformulation.

A detailed technical report of data used in the development of the updated targets including comparison with WHO global benchmarks and other national targets is available from: ***www.paho.org/en/documents/detailed-technical-report-data-used-development-updated-targets***.

1.2.1 Methodological Details for Determining mg/100 g Sodium Targets and mg/kcal Equivalents

The sodium content of foods is most commonly presented as mg of sodium per 100 g of food (mg/100 g), as this is the unit of measure for the majority of studies that have monitored the sodium content of the food supply. The mg/100 g approach forms the basis of most sodium targets worldwide, and was the approach taken with the 2015 PAHO regional sodium targets. To set new and revised sodium targets based on mg/100 g, all available data on the distribution of sodium content (mg/100 g) of packaged foods sold within countries across the Region were included. For some food categories, data from up to 16 countries were utilized. Within some food categories (Table 1), foods were created as recipes to reflect the nutritional composition of the product "as consumed." This step was necessary for some food categories to ensure like-foods sold in different forms could be compared within the same food category (i.e., a soup fully prepared could be compared with a soup sold as a condensed product, by adding the appropriate amount of water) and then presented in a standardized format "as consumed" (mg/100 g). Data utilized were published and unpublished, and were primarily based on baseline data collected between 2013 and 2015.

Sodium concentrations measured per 100 g of products are useful to monitor the variation of these concentrations in products within and between categories but not in relation to recommended intake levels. A product that has met its category target may still be excessive in sodium. For this reason, the targets are also expressed in mg/kcal, so countries can easily identify products that even after meeting their category's sodium concentration targets would still be excessive in sodium, and hence would need to be regulated by other policies, including those featured in the WHO SHAKE Technical Package for Salt Reduction (front-of-package labeling and marketing restrictions, among others). Further details on data sources and methods are available from: ***www.paho.org/en/documents/detailed-technical-report-data-used-development-updated-targets***.

2. PAHO Regional Sodium Reduction Targets 2022–2025

The number of food categories in the updated PAHO Regional Sodium Reduction Targets has been expanded from 18 food categories in 2015 to 75 subcategories, which fall under 16 food category headings (Table 1).

Several of the 2015 PAHO food categories were split, yielding more detailed food groupings. For example, the 2015 PAHO Regional Targets for Salt Reduction in the Americas include one category for all bread products. However, the updated targets include four unique subcategories for bread products: 1) pantry and hearth bread, rolls, and buns; 2) tortillas (wheat), wraps, naan, and roti; 3) bread with additions; and 4) other bread products.

Table 1 presents the Updated PAHO Regional Sodium Reduction Targets 2022–2025. In those food categories and subcategories where the global benchmarks are more stringent, Member States may consider adopting the WHO benchmark.

Table 1. ***Updated PAHO Regional Sodium Reduction Targets 2022–2025***

	Category	Description	mg sodium/100 g		mg sodium/kcal	
			2022 Target	2025 Target	2022	2025
1. Bread, bread products and crisp breads						
1a	Pantry and hearth bread, rolls and buns	Includes whole grain, whole wheat, wholemeal, white bread, and buns.	*340*	280	*1.2*	1.0
1b	Tortillas (wheat), wraps, naan, roti	Includes plain or flavored flatbread, pita, roti, wheat-based tortillas, wraps or naan. Excludes tortillas made with corn (3a) and bread with additions (1c).	*550*	450	*1.8*	1.7
1c	Bread with additions	Includes breads with additions that contain sodium, e.g., olives, onion, pieces of ham, raisins, tomatoes, butter/garlic, cheese, and pandebono.	*420*	350	*1.5*	1.2
1d	Other bread products	Includes bread products not captured in 1a-c, e.g., English muffins, bagels, dry bread, croutons, croissants, and pizza crusts.	*400*	350	*1.3*	1.1
2. Cakes, biscuits, pastries and sweet breads						
2a	Savory biscuits and crackers	Plain or flavored crackers, sandwich crackers, puffed cakes, and graham crackers, e.g., cheese crackers, soda crackers, and rice cakes. Excludes dry bread (1d).	*640*	580	*1.5*	1.3
2b	Cookies and sweet biscuits	Includes filled/coated and unfilled/uncoated sweet cookies and biscuits. Excludes graham crackers (2a) and crackers/savory biscuits (2a).	*225*	200	*0.5*	0.4

Table 1 (continued)

	Category	Description	mg sodium/100 g 2022 Target	mg sodium/100 g 2025 Target	mg sodium/kcal 2022	mg sodium/kcal 2025
2c	**Pastries, squares, and quick/sweet breads**	Filled/unfilled pastries, Danish, sweet buns, tea biscuits/scones, muffins, squares, brownies, and quick/sweet breads.	*260*	215	*0.7*	0.6
2d	**Cakes**	Cakes, cheesecakes, and snack cakes. Includes prepared products and dry cake mixes (as consumed).	*300*	240	*0.7*	0.6
	3. Corn derivatives					
3a	**Tortillas (corn)**	Tortillas made from nixtamalized corn flour or cornmeal. Excludes tortillas made with wheat (1b).	*35*	30	*0.9*	0.7
3b	**Biscuits (bizcochos)**	Flavored and unflavored salty biscuits and crackers made of corn flour, salt, and cheese. Excludes extruded corn products.	*825*	800	*1.6*	1.5
3c	**Tostadas**	Chips or crisp-type products, made from corn tortillas, flavored and unflavored, that have been either oil fried, air fried, oven fried or baked.	*720*	600	*2.6*	2.1
3d	**Arepas**	Plain or savory flat (usually round), unleavened patty of soaked, ground kernels of corn, corn meal or corn flour that can be grilled, baked, fried, boiled, or steamed. It may be savory.	*50*	40	*0.5*	0.4
	4. Breakfast cereal					
4a	**Ready to eat and hot instant breakfast cereals**	Granola, muesli, shredded, flaked, puffed, extruded, and high-fiber compact cereals. Includes plain and flavored hot instant cereals (dry mix, as sold), e.g., oatmeal. Excludes plain oatmeal and other traditional cereals cooked from scratch.	*260*	220	*0.6*	0.5
	5. Savory snacks					
5a	**Nuts, seeds, and kernels, seasoned and candied**	Seasoned, salted, and candied nuts, seeds, and kernels, e.g., salted sunflower seeds, barbecued peanuts, beer nuts, and trail mixes. Excludes unsalted products.	*265*	220	*0.9*	0.8
5b	**Chips, popcorn, and/or extruded snacks**	Potato, corn, tortilla, rice, and vegetable chips; extruded and puffed corn snacks; microwave and stovetop ready popcorn, and seasoned or candied ready-to-eat popcorn. Excludes unseasoned, dry popcorn kernels.	*530*	470	*1.4*	1.2

Table 1 (continued)

	Category	Description	mg sodium/100 g 2022 Target	mg sodium/100 g 2025 Target	mg sodium/kcal 2022	mg sodium/kcal 2025
5c	Pretzels and snack mixes	Hard pretzels, candied pretzels, sesame sticks, and assorted salty snack mixes. Excludes trail mix (5a).	*800*	670	*1.8*	1.7
5d	Other savory snacks	Includes savory snacks not captured in 5a-c., e.g., plantain/yucca chips, kale chips, and chips made with tropical root products.	*525*	430	*0.9*	0.8
	6. Cheese					
6a	Fresh cheese (i.e., fresh mozzarella and others)	Includes fresh mozzarella, turrialba, and palmito (Costa Rica) and quesillo, queso de hebra, queso oaxaca (a Mexican cheese), and cheese curds.	*480*	400	*1.1*	0.9
6b	Soft cheese (i.e., unripened goat cheese and cream cheese)	Plain and flavored (sweet or savory) cream cheese, cream cheese spreads, cream cheese-style products, and soft unripened goat cheese. Excludes processed cheese (6e) and cream cheese-based dips (16h).	*420*	380	*0.7*	0.6
6c	Semi-hard cheese (mozzarella, cheddar and others)	Includes semi-hard cheese such as mozzarella (including pasta filata), cheddar (mild, medium, and old), swiss, monterey jack, brick, colby, gouda, brie, camembert, manchego, string cheese, and shredded mixed cheese. Excludes fresh mozzarella and cheese curds (6a).	*650*	590	*1.7*	1.5
6d	Hard cheese, grated and ungrated	Shelf-stable and refrigerated hard cheese (moisture content < 35%), e.g., parmesan, manchego, pecorino, asiago, and romano.	*1,300*	1,200	*2.0*	1.6
6e	Processed cheese	Processed cheese products made from an emulsified blend of natural cheese. Includes processed cheese spreads, blocks, and slices with or without added ingredients. Excludes string cheese (6c) and cream cheese spreads (6b).	*1,000*	900	*5.4*	4.5
	7. Processed vegetables, beans, and legumes					
7a	Tomato paste with additions	Tomato paste with added ingredients, e.g., tomato paste with herbs or garlic. Excludes plain tomato paste with no added salt.	*400*	320	*3.3*	2.7
7b	Canned vegetables	Canned vegetables and legumes, e.g., potatoes, tomatoes, corn, peas, green beans, mushrooms, mixed vegetables, and beets (plain and pickled). Excludes kidney beans, chickpeas, and lentils (7c).	*150*	100	*4.0*	3.3

Table 1 (continued)

	Category	Description	mg sodium/100 g		mg sodium/kcal	
			2022 Target	2025 Target	2022	2025
7c	Canned beans, chickpeas and lentils	Boiled, whole, canned kidney beans, chickpeas, and lentils. Excludes dry beans and lentils that are cooked or uncooked.	*220*	190	*2.5*	2.2
7d	Baked and refried beans (mashed)	Shelf-stable baked beans and refried beans (mashed beans). Products may include meat.	*280*	250	*2.6*	2.4
7e	Frozen potatoes and similar products	Frozen plain and seasoned French fries, sweet potato fries, hash browns, potato patties, green plantain, and tropical tubers such as cassava (yuca).	*170*	140	*N/A*	N/A
7f	Dry mashed or scalloped potatoes (as consumed)	Dehydrated scalloped or mashed potatoes, as consumed.	*290*	270	*N/A*	N/A
7g	Pickled vegetables	Shelf-stable sour pickled vegetables, e.g., cucumbers, onions, peppers, sauerkraut, and other vegetables. Also includes shelf-stable sweet pickled vegetables, e.g., cucumbers, onions, and relish.	*680*	560	*30.1*	24.8
7h	Sundried tomatoes	Sundried tomatoes.	*900*	790	*7.8*	6.4
7i	Olives	Shelf-stable stuffed olives, unstuffed olives, and tapenade.	*1,300*	1,100	*9.9*	8.1
7j	Vegetable juice	Vegetable juice and vegetable juice cocktail, e.g., tomato juice, carrot juice, and tomato and clam juice. Excludes vegetable and fruit juice blends.	*175*	160	*4.5*	3.7
	8. Processed meat and poultry					
8a	Packaged deli meats – fully cooked	Cooked deli meat, e.g., smoked meat, pastrami, mortadella, bologna, corned beef, ham, sliced chicken and turkey, luncheon meat loaf, roast beef, cooked pepperoni, and cooked back bacon.	*900*	800	*6.6*	5.7
8b	Packaged dry-cured deli meats – dry cured, fermented, no thermal process	Dry cured, fermented deli meats that have not been thermally processed, e.g., salami and dried pepperoni. Excludes prosciutto (8g).	*1,350*	1,200	*3.6*	3.5
8c	Sausages – uncooked	Uncooked breakfast and dinner sausages, e.g., pork, chicken, and turkey. Excludes hot dogs and wieners (8d).	*600*	500	*2.5*	2.4
8d	Sausages - cooked	Cooked breakfast and dinner sausages, e.g., pork, chicken, and turkey. Includes salchichon, wieners (hot dogs), and smoked or unsmoked sausages with or without cheese.	*840*	770	*3.0*	2.7

Table 1 (continued)

	Category	Description	mg sodium/100 g 2022 Target	mg sodium/100 g 2025 Target	mg sodium/kcal 2022	mg sodium/kcal 2025
8e	**Uncooked bacon – belly**	Uncooked belly bacon. Excludes back bacon, bacon substitutes, and precooked shelf-stable bacon.	*700*	590	*1.4*	1.2
8f	**Burgers, meatballs, meatloaf and breaded meat and poultry**	Meat and poultry burgers, meatballs, and meatloaf, and breaded meat products, e.g., products with cheese, breaded and unbreaded burgers, strips, nuggets/fingers, chicken burgers, chicken balls, schnitzel, and cutlets.	*540*	500	*2.0*	1.7
8g	**Ham, canned meat and poultry, and uncooked, pickled, cured and smoked meats that are not deli meats**	Picnic and roast ham, cottage rolls, prosciutto, back bacon, peameal bacon, and turkey-bacon strips. Also includes uncooked pickled, corned, and cured or smoked meats. Includes canned meat and poultry. Excludes canned fish (9a), uncooked belly bacon (8e), and deli meats (8a and 8b).	*915*	790	*4.1*	3.4
8h	**Patés and meat spreads**	Patés and spreads, e.g., creton and liverwurst. Excludes fish patés and spreads.	*720*	600	*2.4*	2.1
	9. Processed fish and seafood					
9a	**Canned fish**	Canned fish or shellfish packed in water, oil or sauce, e.g., salmon, tuna, sardines, mackerel, shrimp, crab, clams, smoked oysters, anchovies, and fish salad.	*320*	280	*2.2*	1.9
9b	**Frozen plain fish and seafood with added sodium phosphate**	Frozen plain fish and seafood with added sodium phosphate.	*350*	300	*3.1*	2.5
9c	**Fish and seafood cakes, fingers or burgers, seasoned, and breaded or battered or with sauces**	Fish and seafood cakes and burgers, seasoned, with sauce or seasoning, breaded or battered, and stuffed fish.	*310*	280	*1.7*	1.5
9d	**Smoked, salted, pickled and kippered fish**	Smoked fish, e.g., smoked salmon, smoked rainbow trout, pickled fish, salted fish, and kippered fish, e.g., kippered herring, dried and salted cod.	*540*	440	*2.6*	2.1
	10. Soy products and meat alternatives					
10a	**Seasoned tofu and tempeh**	Savory, marinated, and seasoned tofu and tempeh. Excludes plain tofu, tofu-based desserts, and plain tempeh.	*350*	320	*2.0*	1.7
10b	**Meat analogues and other meat alternatives**	Frozen and refrigerated meat analogues, e.g., veggie patties, burgers, veggie dogs, meatballs, and deli-style slices.	*410*	370	*2.5*	2.2

Table 1 (continued)

	Category	Description	mg sodium/100 g 2022 Target	mg sodium/100 g 2025 Target	mg sodium/kcal 2022	mg sodium/kcal 2025
	11. Soups					
11a	**Wet and dry soups (as consumed)**	Canned condensed, ready-to-serve, or dry cream and broth-based soups; broth, stock, and consommé. As consumed. Excludes bouillon (16a).	*260*	230	*9.2*	7.7
11b	**Noodles in broth (as consumed)**	Includes fresh and instant noodles with soup, broth, or seasoning, e.g., instant oriental noodle soups. Excludes shelf-stable pasta with sauce or seasonings (12c).	*330*	275	*5.2*	4.9
	12. Ready-made foods, convenience foods, and mixed dishes					
12a	**Canned chili**	Shelf-stable vegetarian and meat chili.	*260*	250	*2.5*	2.4
12b	**Canned stew and meatballs**	Shelf-stable stew, meatballs, and curries.	*470*	440	*3.2*	2.7
12c	**Pasta, noodles, rice or grains with sauce or seasonings (as consumed)**	As consumed. Shelf-stable pasta (dry mix, as consumed), ready-to-eat noodles, and rice or grain mixes with sauce or seasonings, e.g., macaroni with cheese sauce, noodles in tomato sauce, and teriyaki noodles. Excludes refrigerated or frozen pasta dishes (12h), noodles in broth (11b), plain dry or cooked pasta without additions (13a), and frozen pasta dishes (12h).	*330*	300	*1.9*	1.7
12d	**Pasta, noodles, rice or grains with sauce or seasonings (dry mix, as sold)**	Dry mixes, as sold. Shelf-stable pasta, noodles, and rice or grain mixes with sauce or seasonings, e.g., macaroni with cheese sauce, noodles in tomato sauce, and teriyaki noodles. Excludes noodles in broth (11b) and plain dry or cooked pasta without additions (13a).	*870*	800	*2.6*	2.5
12e	**Stuffing mixes (as consumed)**	Shelf-stable stuffing mixes, as consumed. Excludes refrigerated stuffing.	*470*	430	*N/A*	N/A
12f	**Pizza and pizza snacks**	Frozen and refrigerated pizza, pizza snacks, and calzones.	*500*	470	*1.9*	1.8
12g	**Sandwiches**	Fresh or frozen sandwiches with or without meat. Includes sandwich wraps and burritos.	*500*	470	*1.9*	1.8
12h	**Refrigerated or frozen appetizers, sides and entrees**	Refrigerated or frozen entrées, meal sides, meal centers, frozen pasta mains/sides, and appetizers. Includes empanadas. Excludes pizza and pizza snacks (12f) and sandwiches (12g).	*575*	480	*1.7*	1.5

Table 1 (continued)

Category		Description	mg sodium/100 g 2022 Target	mg sodium/100 g 2025 Target	mg sodium/kcal 2022	mg sodium/kcal 2025
13. Fresh or dried plain pasta and noodles						
13a	**Plain pasta and noodles (as consumed or dry, uncooked)**	Plain dry or uncooked pasta, as consumed. Excludes pasta with sauce or seasonings (12c) and noodles in broth (11b).	*0*	0	*0.0*	0.0
14. Granola and energy bars, and nut butters/spreads						
14a	**Granola, cereal and energy bars**	Granola bars (plain and coated), energy bars, sweet and salty bars, fruit filled bars, and muffin-type bars. Excludes sweet and salty bars (see 1n), and infant and toddler snack bars.	*170*	150	*0.5*	0.4
14b	**Nut butters and nut spreads**	Nut butters and nut spreads, e.g., peanut, almond, cashew, soy, and hazelnut cocoa spread. Excludes unsalted nut butters and tahini.	*330*	300	*0.3*	0.2
15. Fats and oils						
15a	**Salted butter, margarine, and butter blends**	Plain and flavored butter, margarine, and butter blends. Excludes unsalted butter and margarine.	*510*	460	*0.8*	0.7
15b	**Mayonnaise**	Plain and flavored mayonnaise and mayonnaise-type spreads and dressings. Includes low fat and fat-free versions, and oil-based sandwich spreads.	*670*	600	*2.3*	1.9
15c	**Salad dressing & vinaigrette**	Refrigerated and shelf-stable oil and vinegar-based dressings, and creamy dressings. Includes dry mix salad dressing, as consumed. Includes low fat and fat-free versions.	*800*	730	*2.3*	1.9
16. Sauces, dips, gravy and condiments						
16a	**Bouillon cubes and powders (as sold)**	Bouillon cubes and powders, as sold.	*18,000*	16,000	*68.0*	56.0
16b	**Pasta sauce**	Shelf stable, refrigerated, frozen, and dry mix pasta sauces including those that are tomato, cream or cheese-based (e.g., alfredo sauce). As consumed. Includes pizza sauce.	*330*	300	*4.5*	4.0
16c	**Pesto**	Shelf stable and refrigerated pesto e.g., basil or sun-dried tomato pesto.	*800*	640	*1.9*	1.5
16d	**Tomato sauce**	Shelf stable plain or flavored tomato sauce. Excludes tomato-based pasta sauces (16b) and tomato paste (7a).	*300*	240	*5.7*	4.7

Table 1 (continued)

	Category	Description	mg sodium/100 g		mg sodium/kcal	
			2022 Target	2025 Target	2022	2025
16e	**Ketchup and similar tomato-type condiments (as consumed)**	Shelf stable condiments e.g., ketchup, tomato-based chili sauce, seafood sauce, BBQ sauce, steak sauce, chutney. Excludes relish (7g), mustard (16f) and mayonnaise (15b).	*800*	780	*7.1*	6.8
16f	**Mustard**	Mustards including yellow, Dijon, honey mustard, spicy brown mustard.	*1,000*	890	*10.2*	8.6
16g	**Spicy sauce**	Red, green, ranchera sauces, pepper sauce, chilero, salsa picante, sriracha, chili picante, salsa de ají/rocoto.	*1,100*	900	*21.4*	17.7
16h	**Gravy, cooking sauces, dips, and salsa (as consumed)**	Shelf stable, refrigerated and dry mix gravy, cooking sauces, as consumed e.g., hollandaise, curry, and stir-fry sauces, and salsa. Includes vegetable, legume, and dairy-based dips (i.e., cream cheese and sour cream-based dips). As consumed. Excludes curry paste.	*350*	300	*3.5*	2.8
16i	**Sweet oriental sauces**	Sweet oriental sauces e.g. plum sauce, cherry sauce, pineapple sauce, and sweet and sour sauce. Excludes salty oriental sauces (16j).	*220*	180	*1.3*	1.1
16j	**Soya and other salty oriental sauces**	Oriental sauces, e.g., soya, teriyaki, black bean, fish, hoisin, and peanut sauce. Excludes stir-fry sauce (16h), marinades (16k), and sweet oriental sauces (16i).	*2,900*	2,400	*9.9*	8.1
16k	**Marinades (as consumed)**	Shelf-stable and dry marinade mixes. As consumed.	*1,800*	1,500	*14.2*	11.7
16l	**Dry seasoning mixes for rice and side dishes**	Dry seasoning mixes for side and main dishes, as sold, e.g., chili, stew, fajita, and salad seasoning. Includes popcorn seasoning.	*10,000*	8,000	*13.1*	10.8
16m	**Dry seasoning mixes for meat and fish**	Dry seasoning for meat, poultry, and fish, e.g., steak spice.	*10,000*	8,000	*27.9*	23.0


Sodium

3. Conclusions and recommendations

PAHO and WHO have called on countries to strive for a 30% relative reduction in mean population intake of salt/sodium by 2025. Although there have been significant advances in policies or interventions in the Region of the Americas, more accelerated action is needed to reduce cardiovascular disease and other diet-related NCDs by reducing sodium intake. Member States have demonstrated that it is feasible to reduce sodium levels in food products by setting national or regional sodium targets.

These updated sodium reduction targets are a tool for governments to boost progress towards achieving a reduction in the NCD burden. They are designed to be complementary to existing and ongoing national efforts and initiatives. It is important to mention that some categories, even after undergoing significant reductions in sodium by applying these regional targets, will still remain excessive in in terms of sodium content, and the population must be informed about that. This is why other measures are crucial in order to achieve reductions in sodium consumption at population levels. These targets are also intended to serve as a regional reference, and for the monitoring of sodium content in food products.

PAHO recommends the implementation of these regional targets, preferably through a regulatory approach instead of voluntary targets, as this will more effectively enable countries to achieve the 2025 global target on reducing the mean population intake of salt/sodium.

Furthermore, PAHO recommends the promotion and implementation of legislation and regulations to accelerate progress towards reduction of population sodium intake included in the WHO SHAKE Technical Package for Salt Reduction (*30*) and WHO "Best Buys" for the prevention and control of NCDs (*31*).

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Appendix

Members of the target-setting working groups

Core Working Group

- *Chair:* **Mary L'Abbe**, University of Toronto, Canada
- Director WHO CC on Nutrition Policy for NCD Prevention
- *Co-Chair:* **JoAnne Arcand**, Ontario Tech University, Canada
- **Lorena Allemandi**, Pan American Health Organization/ World Health Organization
- **Valentina Bolanos**, Pan American Health Organization/World Health Organization
- **Fabio Da Silva Gomes**, Pan American Health Organization/World Health Organization
- **Nadia Flexner**, University of Toronto, Canada
- **Katherine Jefferson**, Ontario Tech University, Canada
- **Leo Nederveen**, Pan American Health Organization/ World Health Organization
- **Madyson Weippert**, University of Toronto, Canada

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- **Adriana Blanco-Metzler**, INCIENSA, Costa Rica
- **Eduardo Augusto Fernandes**, Ministry of Health, Brazil
- **Diego Gaitán**, Universidad de Antioquia, Colombia
- **Trevor Hassell**, Healthy Caribbean Coalition, Barbados
- **Claudia Nieto**, National Institute of Public Health of Mexico, Mexico

Meeting of the PAHO Technical Advisory Group (TAG) on Cardiovascular Disease Prevention through Population-wide Dietary Salt Reduction, held 4–5 February 2021

- *Chair:* **Mary L'Abbe**, University of Toronto, Canada
- *Co-Chair:* **Trevor Hassell**, Healthy Caribbean Coalition, Barbados
- *Co-Chair:* **Eduardo Nilson**, Ministry of Health, Brazil
- **Adriana Blanco**, INCIENSA, Costa Rica
- **Norm Campbell**, University of Calgary, Canada
- **Omar Dary**, USAID, United States of America
- **Tamu Davidson**, Head of NCD, Caribbean Public Health Agency (CARPHA)
- **Diego Alejandro Gaitán**, Universidad de Antioquia, Colombia *(unable to attend)*
- **Qaiser Mukhtar**, United States Centers for Disease Control and Prevention, United States of America *(replacing Molly Cogswell)*
- **Claudia Nieto**, National Institute of Public Health of Mexico, Mexico
- **Lorena Saavedra**, Centre of Excellence in Chronic Diseases (CRONICAS), Peru
- **Joy St John**, Executive Director, Caribbean Public Health Agency (CARPHA)
- **Michael Zimmerman**, Iodine Global Network and ETH, Switzerland *(unable to attend)*

Observers

- **JoAnne Arcand**, Ontario Tech University, Canada
- **Roberto Bazzani**, International Development Research Center (IDRC), Canada (Day 2)
- **Laura Cobb**, Resolve to Save Lives, United States of America
- **Nadia Flexner**, University of Toronto, Canada
- **Nicole Ide**, Resolve to Save Lives, United States of America
- **Christine Johnson**, Vital Strategies, United States of America
- **Mahmooda Pasha**, University of South Florida, United States of America
- **Diana Vaca McGhie**, American Heart Association, United States of America
- **Madyson Weippert**, University of Toronto, Canada
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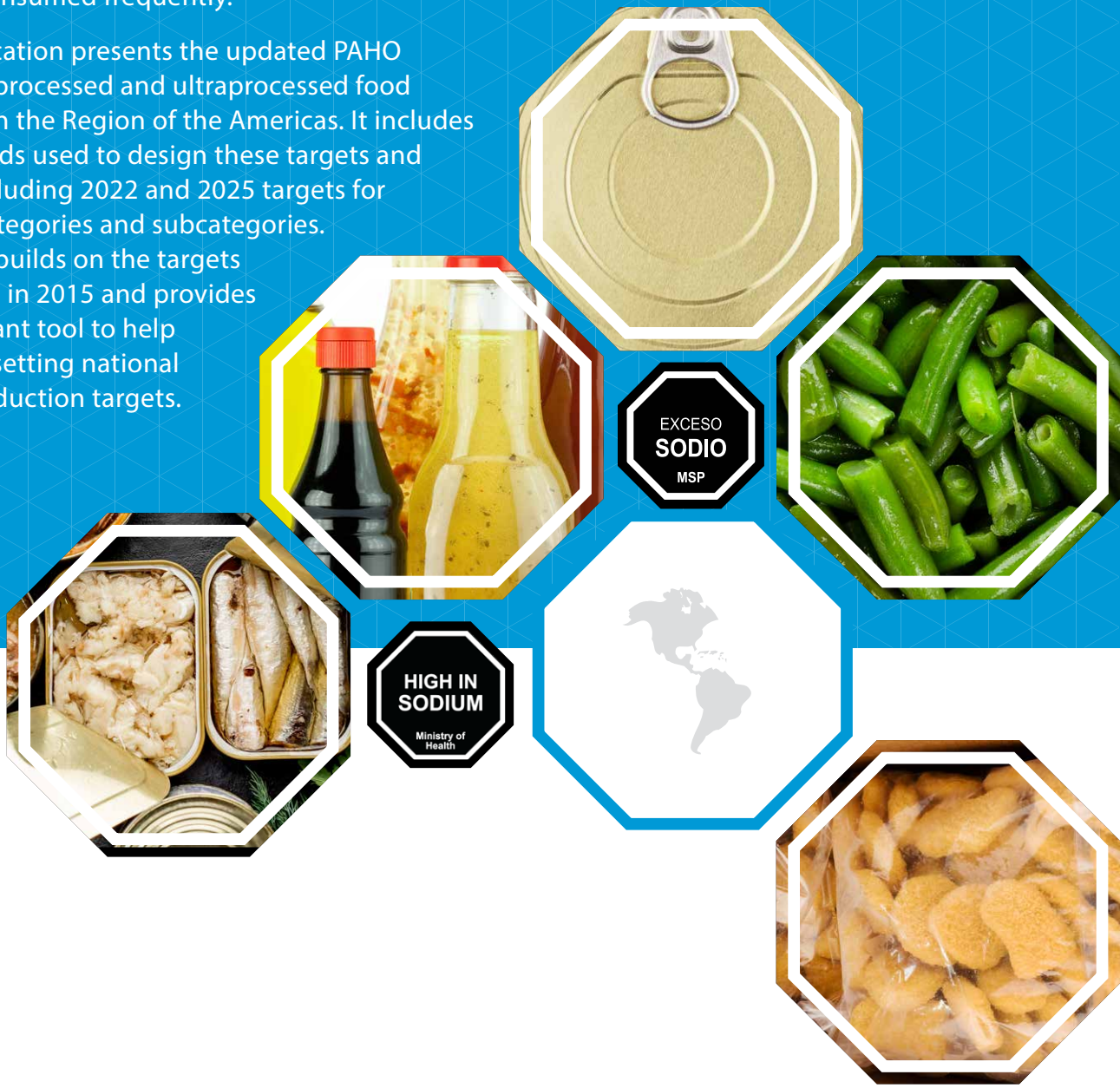
In the Region of the Americas, noncommunicable diseases are responsible for more than 80% of all deaths, with cardiovascular diseases (CVDs) being the leading cause of death in almost all countries. Over half of CVD deaths in the Region are attributable to high blood pressure.

There is clear evidence that excessive consumption of salt/sodium adversely affects blood pressure. The World Health Organization (WHO) recommends a population-based daily intake of less than 5 g of salt (< 2 g of sodium) per adult from all sources as the target for dietary salt/sodium reduction initiatives. However, salt/sodium consumption in the Region is well above the recommended level, with daily salt intake ranging from 8.5 g to 15 g per person.

In many countries, a significant proportion of sodium in the diet comes from manufactured foods such as bread, cereal and grains, processed meats and dairy product. An effective way to reduce population sodium intake is through lowering the sodium content of foods that are consumed frequently.

This publication presents the updated PAHO targets in processed and ultraprocessed food products in the Region of the Americas. It includes the methods used to design these targets and a table including 2022 and 2025 targets for all food categories and subcategories. This work builds on the targets developed in 2015 and provides an important tool to help countries setting national sodium reduction targets.



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