

# Inaugural Maximum Values for Sodium in Processed Food Products in the Americas

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Reducing dietary salt/sodium is one of the most cost-effective interventions to improve population health. There are five initiatives in the Americas that independently developed targets for reformulating foods to reduce salt/sodium content. Applying selection criteria, recommended by the Pan American Health Organization (PAHO)/World Health Organization (WHO) Technical Advisory Group on Dietary Salt/Sodium Reduction, a consortium of governments, civil society, and food companies (the Salt Smart Consortium) agreed to an inaugural set of regional max-

imum targets (upper limits) for salt/sodium levels for 11 food categories, to be achieved by December 2016. Ultimately, to substantively reduce dietary salt across whole populations, targets will be needed for the majority of processed and pre-prepared foods. Cardiovascular and hypertension organizations are encouraged to utilize the regional targets in advocacy and in monitoring and evaluation of progress by the food industry. *J Clin Hypertens (Greenwich)*. 2015;17:611–613. © 2015 Wiley Periodicals, Inc.

Salt consumption above 5 g/day\* is estimated to cause 1.65 million deaths around the world annually.<sup>1</sup> In different regions of the Americas, high dietary salt ranges from the 9th to the 15th leading risk for premature death.<sup>2</sup> Reducing dietary salt is a strong recommendation of the United Nations and the World Health Organization (WHO) and is considered to be highly cost-effective and in some cases cost saving.<sup>3,4</sup>

Since 2009, the Pan American Health Organization (PAHO) has supported a group of scientific experts, a Technical Advisory Group (TAG), to mobilize policies and interventions to limit dietary salt/sodium intake in the region.<sup>5</sup> While a number of countries in the Americas had targets and timelines for reformulation of food products or were in the initial stages of setting them, and TAG compiled their experiences and lessons learned into guidance on how to establish national initiatives that engage food companies to reformulate,<sup>6</sup> many countries were not pursuing policies for food formulations with less salt/sodium despite the potential benefits to population health. These countries lack the resources, technical capacities, and baseline information on salt/sodium content of foods required for a national

initiative; food companies in these countries have not had clear direction on what are feasible reductions in salt/sodium in their products that could be monitored and evaluated; and civil society, where active in diet-related health issues, lacks benchmarks against which national initiatives, once in place, can be gauged.

Using the Pan American Forum for Action on Noncommunicable Diseases (PAFNCD), the platform established by PAHO/WHO to convene the diversity of stakeholders that constitute an “all-of-society approach” to prevent and fight noncommunicable diseases, PAHO/WHO led the formation of the Salt Smart Consortium, bringing together governments, civil society, and food companies, as an arm of PAFNCDs to stimulate collaborative action to reduce dietary salt/sodium in the Americas.<sup>7</sup> The Salt Smart Consortium in its Strategic Plan prioritized leveraging the existing salt/sodium reduction initiatives in the region to establish harmonized targets for a set of common key food categories.<sup>7</sup> This article provides the inaugural targets (maximum values [upper limits]) and timelines for salt/sodium reductions for specific food categories agreed to by the multi-stakeholder consortium members, and describes the process by which the targets were derived.

## METHODS

The TAG compiled the food reformulation schedules in effect as of October 2014 for the five most advanced initiatives in the region—Argentina, Brazil, Canada, Chile, and the National Salt Reduction Initiative in the United States (NSRI; an entity separate from the federal government). There are similarities among them: Each identifies specific food categories to which schedules for lower salt/sodium content targets apply that the food industry is either mandated to adopt or does so

\*While sodium is the technically and scientifically correct term for the nutrient of public health concern, both of the terms salt and sodium are used in this document depending on context. Whether a country refers to salt or sodium in its discourse on the nutrient is a matter of national discretion. Equivalencies: 5 g of salt (NaCl)=2000 mg sodium (Na)=87 mmol of sodium=87 mEq sodium.

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**Manuscript received:** February 26, 2015; **accepted:** March 8, 2015  
**DOI:** 10.1111/jch.12553

voluntarily. All initiatives involve public health authorities and the food industry negotiating the targets, informed by data on the main sources of salt/sodium in the national diet, and include independent assessments of the impacts on food technology processes, and, in some cases, with input from consumers on taste. The existing targets are the evidence that reducing salt/sodium in the food supply is feasible for the food industry and acceptable to consumers.

All initiatives followed the United Kingdom model in identifying the main sources of salt/sodium in the diet for which targets are derived. They differ in the extent to which the foods responsible for salt/sodium intake are addressed: some reformulation schedules are comprehensive, with targets assigned to all food categories that contribute salt/sodium to the diet (Canada, Chile, and the NSRI); the others began with the top food categories and are gradually adding products.

From all of the food categories included in the five initiatives, where two or more countries had identified targets for the same category, TAG selected it for the harmonization exercise. As a result, 12 food categories were considered: bread; soups; mayonnaise; biscuits and cookies; cakes; meats; breakfast cereals; cheese, processed cheese products, and cheese spreads; butter/dairy spreads and margarine; snacks; pasta; and condiments.

As for target types, Argentina, Brazil, Canada, and Chile all have maximum values (upper limits), with Canada also having sales-weighted average targets (the NSRI utilizes only sales-weighted averages for targets). Acknowledging that maximum values are the most straightforward concept for governments, consumers, and the food industry to apply, one of the principles that TAG submitted to the Consortium, and which it accepted, was that target harmonization be based on existing maximum values (hence, the NSRI targets were not used).

The TAG then proposed, and the Consortium accepted, that where there are at least two maximum targets for a food category, the highest value would become the “regional target.” Where a national initiative exists and the regional target for a food category was already met, reformulations for the category should aim for the lower target, although some lower targets may only apply to specific subcategories of products.

The Consortium set the first deadline for achieving the regional targets as 2016, providing a 2-year window for adjustments in food processing, recognizing that the food industry can reformulate products incrementally. As more countries set and reach progressively lower targets, a downward trend in maximum values is expected. The Consortium acknowledges that maintaining regional targets will therefore require ongoing monitoring and a process to reset values. It anticipates reassessing the regional target values at 2-year intervals, eg, in 2016, 2018, and 2020.

The full agreement reached by the Consortium regarding harmonization and the definitions for terminology are given in a consensus statement.<sup>8</sup>

## RESULTS

The regional and lower targets for salt/sodium content for 11 of the 12 food categories are presented in the Table. A regional target could not be assigned for cheeses because of the wide variation in product types and targets. The targets for this food category are nevertheless available as some of the specific products are very common, eg, mozzarella.<sup>8</sup>

**TABLE.** Regional Targets for Sodium (Salt) Content for Specific Food Categories in the Americas to Be Met by the End of 2016<sup>a</sup>

Food Category <sup>b</sup>	Sodium Content (mg) per 100 g of Food	
	Regional Target	Lower Target
Bread	600	400
Soups		
Soups (as consumed)	360	306
Noodles in broth (as consumed)	430	360
Mayonnaise	1050	670
Biscuits and cookies		
Cookies and sweet biscuits	485	265
Savory biscuits and crackers	1340	700
Cakes	400	205
Meats		
Cooked, uncooked and processed meats and sausages	1210	690
Dry cured meats and meats conserved at room temperatures	1900	1350
Breaded meat and poultry	735	470
Breakfast cereals	630	500
Butter/dairy spreads	800	500
Snacks	900	530
Pasta		
Shelf-stable pasta and noodles (dry, uncooked)	1921	1333
Shelf-stable pasta and noodles (as consumed)	640	440
Condiments		
Rice and side/main dish condiments	33,100	9,100
Meat and fish condiments	23,000	21,775
Bouillon cubes and powders	20,500	18,000

<sup>a</sup>The regional target for a food category is the highest value in the range of existing maximum values. If a maximum target has already been met, it is recommended that reformulations aim for the lower target in the range, recognizing that some lower targets may only apply to specific subcategories of products within the key food category. See the Consensus Statement<sup>8</sup> for the complete lists of country-based targets. <sup>b</sup>Food categories correspond to the Harmonized Commodity Description and Coding System (HS) of the World Customs Organization. See World Customs Organization HS Nomenclature 2012 Edition at [http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs\\_nomenclature\\_2012/hs\\_nomenclature\\_table\\_2012.aspx](http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_nomenclature_2012/hs_nomenclature_table_2012.aspx).

## DISCUSSION

The development of regional maximum values for salt/sodium content of common food groups in the Americas is an important step in equitably lowering dietary salt throughout the Americas.<sup>6</sup> It supports countries and their peoples where there is currently a lack of targets. It provides guidance to food processing companies as to the minimum expectations for reducing the salt/sodium content of foods that are much higher than other similar foods in the region. It also provides more stringent lower limits that could be adopted by countries or companies to further benefit their people or customers, respectively. The use of maximum values also allows easy monitoring of foods and companies by civil society organizations.<sup>6</sup> Cardiovascular and hypertension organizations are especially encouraged to use the maximum values and lower limits in advocacy and in monitoring and evaluation.<sup>9</sup> Importantly, these targets for the Americas are not intended to supplant more stringent targets that are already developed in countries, nor should they discourage countries from developing more stringent targets where national data support their feasibility. It is recommended that in countries where targets cannot currently be derived from national data, the regional and lower targets be used as the starting points for reformulation schedules.

Going forward, as more countries set reformulation schedules and food companies implement them, targets are expected to shift downward and more rigorous regional targets can be developed. More comprehensive data on the salt/sodium content of foods could also allow the development of targets that are averages rather than maximum values, which would be more effective in reducing salt/sodium across the food supply and not to be limited to foods with the highest salt/sodium content.<sup>6</sup> The process could in the future advocate percent reductions in the salt/sodium content of food categories or average salt/sodium content for food categories.

Setting of voluntary maximum values for reducing salt/sodium additives in processed foods is only one component of an effective program to reduce dietary salt/sodium. Comprehensive reductions in salt/sodium in processed and pre-prepared foods is required, hence more comprehensive targets are needed. But despite the comprehensiveness of targets, without close government oversight, experience has shown that voluntary targets are not sufficient incentive for the food industry to reformulate; hence, close monitoring and

potentially regulatory targets may be required. In any case, monitoring of adherence to targets needs to be transparent and independently verified.<sup>10</sup> At the same time, public education and social marketing are needed to build the demand for low and salt/sodium-free foods.

## CONCLUSIONS

Reducing dietary salt/sodium is recognized as one of the most cost-effective public health interventions to curb premature deaths and disability. Setting salt/sodium reduction targets with timelines is critical to incentivize the food industry to use less salt/sodium in food processing. The setting of regional targets for the Americas is an important first step toward reducing dietary salt/sodium in countries that have not yet implemented reformulation initiatives. There is a strong role for the cardiovascular and especially the hypertension community in advocacy and in monitoring and evaluation, along with consumer organizations.

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