

**PAHO/WHO TECHNICAL ADVISORY GROUP
ON REDUCING DIETARY SALT/SODIUM TO PREVENT
CARDIOVASCULAR DISEASE POPULATION-WIDE**

Final Report for the Period 2012-15
February 2016



Acknowledgements

Technical Advisory Group

Norm Campbell | Co-chair of TAG, University of Calgary, Canada
Ricardo Correa-Rotter | Co-chair of TAG, National Institute of Medical Sciences and Nutrition (INNSZ), Mexico
Sonia Angell | New York City Department of Health and Mental Hygiene, United States
Lawrence J. Appel | Johns Hopkins University, United States
Adriana Blanco-Metzler | Institute for Research and Education in Nutrition and Health (INCIENSA), Costa Rica
Beatriz Champagne | InterAmerican Heart Foundation, United States
Omar Dary | US Agency for International Development (USAID), United States
Daniel Ferrante | Ministry of Health, Argentina
Trevor Hassell | Healthy Caribbean Coalition, Barbados
Mary L'Abbé | University of Toronto, Canada
Hubert Linders | Consumers International Regional Office for Latin America and the Caribbean, Chile
Eduardo Augusto Fernandes Nilson | Ministry of Health, Brazil
Ricardo Uauy | University of Chile Institute on Nutrition and Food Technology (INTA), Chile

Secretariat

Branka Legetic | WHO/PAHO, Washington DC
Barbara Legowski | ESC Consulting, Ottawa, Canada
Norm Campbell | University of Calgary, Canada

Abbreviations

ABIA	Associação Brasileira das Indústrias da Alimentação
AHA	American Heart Association
ALASS	Acción Latino-Americana de Sal y Salud
BRIC	Brazil, Russia, India, China
CDC	Centers for Disease Control and Prevention (US)
DALYs	disability-adjusted life years
FAO	Food and Agriculture Organization (UN)
FCTC	Framework Convention on Tobacco Control
FIC Argentina	Fundación InterAmericana del Corazón Argentina
ICCIDD	International Council for Control of Iodine Deficiency Disorders
IDRC	International Development Research Centre (Canada)
IFBA	International Food and Beverage Alliance
INCAP	Instituto de Nutrición de Centroamérica y Panamá
KAB	knowledge, attitudes and behaviour
LMIC	low- and middle-income countries
MOH	ministry of health
NCDs	noncommunicable diseases
NGOs	non-governmental organizations
PAFNCD	Pan American Forum for Action on NCDs
SME	small and medium enterprises
TAG	Technical Advisory Group
TGI	The George Institute for Global Health (Australia)
WASH	World Action on Salt and Health

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Executive summary

for the Final Report marking the completion of Phase 2 (2012-2015) of the WHO/PAHO initiative on *Cardiovascular Disease Prevention through Population-wide Dietary Salt Reduction.*

In 2009 WHO/PAHO launched the regional initiative to reduce the overconsumption of salt/sodium in the Americas. An Expert Group guided its first phase and a Technical Advisory Group (TAG) the second. Both groups comprised researchers, civil society and public health authorities, from the Region and further abroad, who supported five areas of work: advocacy, communication and social marketing; surveillance; engagement of the private sector; synchronization of salt/sodium reduction and salt fortification programs; and scientific research. Their emphasis was developing resources and tools to activate civil society and to support public health authorities to establish or continue with national strategies.

At the completion of the second phase, 20 countries in the Region were active in addressing dietary salt/sodium reduction compared to three in 2009. Twelve of the 20 are at national-scale – Argentina, Barbados, Brazil, Canada, Chile, Columbia, Costa Rica, Ecuador, Mexico, Paraguay, Uruguay and the National Salt Reduction Initiative (NSRI) in the US, an entity outside the national government. Eight among the 12 have targets and timelines for sodium in specified food categories: Brazil, Canada, Mexico and the NSRI have exclusively voluntary targets; Argentina, Chile and Ecuador have both voluntary and regulated components to their approaches; and Paraguay has regulated the salt content of bread.

Over the course of the initiative, progress was made in all the areas of work. Specific to Phase 2, regarding advocacy and communication, cross-country networking grew through e.g. Acción Latino-Americana de Sal y Salud (ALASS) and the Healthy Caribbean Coalition. The InterAmerican Heart Foundation in Argentina (FIC Argentina), supported by the American Heart Association, prepared an inventory of civil society organizations in the Region working or planning to work on reducing salt/sodium. The PAHO secretariat working with TAG adapted and disseminated the World Salt Awareness messaging to the Region. With social marketing, five pilots were launched in the Caribbean, supported by PAHO, the American Heart Association, the WHO Collaborating Centre for Social Marketing for Social Change at the University of South Florida and the Healthy Caribbean Coalition. Columbia reported a new guide for consumers “Salt and Food”, and the United States CDC awarded support for sodium reduction to a number of states and municipalities.

With private sector engagement, Mexico with the Mexican PAHO office hosted a meeting and workshop in December 2013 on setting targets and timelines for reducing salt/sodium in processed packaged foods. Thirteen countries from the Region participated. The meeting resulted in a synthesis of the experiences, lessons learned and advice in a *Guide for Setting Targets and Timelines to Reduce the Salt Content of Food*.

The SaltSmart Consortium continued with its strategic plan, prioritizing two of its objectives for Phase 2: social marketing and harmonization of salt/sodium reduction targets. In 2014 in Brasilia, it agreed to the TAG proposal for an inaugural set of voluntary regional maximum targets (upper limits) for salt/sodium content for 11 common food categories, selected by TAG from existing national targets. Members also accepted a set of principles to guide maintaining the targets. In 2015, the Consortium met in the Caribbean with a focus on social marketing. Members learned of the country-based pilots underway and presented updates on their respective social marketing initiatives. Also at country level, public authorities engagement with the private sector, to set targets and timelines for reduced salt/sodium in key food categories, grew in the period; Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, the United States and Uruguay reported advances.

Countries are also increasingly recognizing that the discretionary use of salt/sodium, added at the table and in cooking, is in some cases, the leading if not among the primary sources of salt/sodium in the diet. This includes not only the use of table salt but also implicates a sub-category of processed packaged foods e.g. condiments, sauces, soup mixes and cubes, while used in relatively small amounts at any one time, can contribute very high levels of salt/sodium to the diet because they are so frequently consumed.

In 2014, there were two sub-regional meetings, one for Central America and one for the Andean region, on “Elimination of iodine deficiency: joint public health effort to secure optimum intake of iodine and salt”. The first meeting, in Guatemala City, organized by ICCIDD, UNICEF and PAHO, coordinated with INCAP, involved 10 country representatives. At the second meeting in Quito, participants included ICCIDD, experts in salt/sodium reduction and salt fortification, nutrition policy coordinators from seven countries plus the main producers of salt in two of the countries. The meeting reaffirmed the need for coordination between the two programs. A key message to emerge was that national surveillance to determine salt/sodium intake should include the simultaneous measurement of iodine intake, with 24-hour urine collection remaining the most accurate method. Leading in this regard is Brazil where 24-hour urine samples will be used to validate a sub-sample of spot-urine samples for both sodium and iodine as part of the National Health Study. Also in Costa Rica, stakeholders agreed to prepare a project proposal for the combined surveillance of iodine, sodium, calcium and magnesium.

With surveillance, several countries reported a variety of activities. Barbados and Brazil conducted sodium intake studies using 24-hour urine samples. Several countries were involved in collecting food label data in support of product comparison and monitoring, to inform consumers and to influence food manufacturers to supply their best-in-class and best-in-world products worldwide. Data were collected for the global George Institute project; to determine baseline salt/sodium content in products in the 11 food categories for which the SaltSmart Consortium had accepted harmonized regional targets; and for 80 brands of processed soups using food labels and fast food restaurant web sites. Canadian researchers collected the sodium levels in processed packaged foods and restaurant food to compare to voluntary targets, finding mixed progress. And researchers in Canada and Argentina each studied the sodium levels reported on nutrition labels, in Canada’s case to check for label accuracy, and in Argentina, to compare to the sodium concentrations allowed by national law.

The PAHO secretariat, TAG members and researchers in numerous countries were active in conducting and disseminating research. Topics ranged from the effectiveness of removing saltshakers in restaurants in two Mexican states; studies on the main sources of salt/sodium in diets; and the salt/sodium content of specific foods.

The Canadian research agency, IDRC, granted 1.2 million CAN for a three year period for the project – *Scaling-up and evaluating salt/ sodium reduction policies and programs in Latin American countries*. Researchers in four countries are involved: in INCIENSA Costa Rica; Universidad Peruana Gaetano Heredia (Peru); FIC Argentina and the University I-Salud (Argentina); the School of Public Health at the University of Sao Paolo and the MOH Brazil; and the MOH and National Institute of Food and Nutrition in Paraguay.

Collaborators in the project are: the WHO CC on Nutrition Policy related to NCDs at the University of Toronto [Canada], Faculty of Health Sciences; University of Ontario Institute of Technology [Canada]; the University of California, San Francisco; WHO CC on Social Marketing for Social Change at the University of South Florida; InterAmerican Heart Foundation; Consumers International; Dietitians of Canada; and PAHO.

The project objectives are: to assess the salt/sodium content of packaged, artisanal and fast foods; conduct formative research on consumer KAB and develop social marketing strategies; conduct health economic impact analyses of population-wide salt/sodium reduction; and develop knowledge translation strategies.

Going forward there are lessons learned, transferrable experiences and progress in the Region and elsewhere that are generating momentum and creating new opportunities, some of which are specific to the existing areas of work. In other cases, the developments are such that the TAG perceives different approaches that still build on what has been achieved but take a new perspective to best support active countries to take bolder steps forward and inactive countries to launch national action.

While 20 countries in the Region are active, 16 are not. Increasingly, inexpensive poor quality processed foods are penetrating the markets of LMIC in the Region, exacerbating health equity and food justice issues. TAG is calling for retaining the integrity of work to specifically reduce dietary salt/sodium while at the same time positioning salt/sodium reduction within broader contexts, linking to other initiatives addressing diet-related risk factors to NCDs, to chronic conditions and diseases that are affected by diet, and to determinants of healthful diet. The TAG considers salt/sodium reduction as one stream among several that are related to diet that share an ultimate goal – a healthful and secure food supply accessible on an equitable basis, to promote and protect health across whole populations.

Taking into consideration the full span of the initiative to date and the TAG's new perspective, the TAG prepared a set of recommendations that 1) build on achievements; 2) emphasize dissemination of experiences, findings and tools; and 3) leverage on the momentum and new opportunities emerging in the Region and elsewhere. The recommendations are directed to the range of stakeholders: Member States; manufacturers of packaged and processed foods, restaurants, caterers, food service operators; civil society; to the next PAHO secretariat; the group of advisors expected for the next phase; and PAHO.

I Description of the Report

This report marks the completion of the work of the Technical Advisory Group (TAG) that led Phase 2 of the WHO/PAHO initiative for *Cardiovascular Disease Prevention through Population-wide Dietary Salt Reduction* (2012-2015). It begins with the TAG's recommendations directed to Member States, the private sector, civil society, a PAHO secretariat and a new group of advisors anticipated for the next phase. The report then summarizes the achievements and advances made during Phase 2 and the progress made by specific countries as reported by them to the PAHO secretariat. It concludes with the TAG's analysis of momentum and opportunities that add impetus to going forward.

II Recommendations Going Forward

Countries in the American Region can aim for the WHO NCD Action Plan target of 30% relative reduction in dietary salt/sodium intake by 2025, the PAHO target of 5g salt (2000mg sodium)/person/day by 2020 or a national target.¹ The messages below are directed to stakeholders at national and international levels to guide going forward, calling on them to take substantive and concerted action such that countries have the best chance possible to achieve their selected target. Underpinning the recommendations is 1) building on achievements; 2) emphasizing dissemination of experiences, findings and tools; and 3) leveraging on momentum and new opportunities emerging in the Region and elsewhere.

To Member States

Use partners to raise the profile of the benefits of salt/sodium reduction and healthful diet

NGOs, associations of health professionals and civil society remain at the core of building consumer health literacy and demand for low/no salt/sodium products, and they can play an important role in social marketing. Their involvement is also important in countries with targets and timelines, as monitors of whether industry adopts and adheres to targets and timelines for reduced salt/sodium content of foods in local markets.

Public health authorities should supply information and educational materials to raise public awareness and where necessary mobilize resources for e.g. consumer organizations and patient groups focussed on diet and health, and societies of health professionals. The latter are especially important allies, particularly in cases where civil society is weak, as they are recognized civic leaders.

Countries that intend to use 24-hour urine sampling to measure salt/sodium intake should plan to assess the samples for both sodium and iodine concentration.

The word salt is used to refer to sodium and the term “reducing dietary salt intake” implies the reduction of total sodium intake from all dietary sources including, for example, salt added during food manufacturing and processing, sodium additives such as monosodium glutamate and other sodium-based preservatives or taste enhancers, as well as salt added at the table and in cooking. Where salt substitutes are advocated (partially replacing sodium with potassium and other components) sodium reduction may be achieved without salt reduction thereby requiring a distinction between the two terms.

Set and regularly update targets and timelines

With reformulation targets for processed packaged foods being a cornerstone of national initiatives, in absence of national capacity to set them, countries should adopt the regional targets agreed to by the SaltSmart Consortium. Otherwise, countries should use the *Guide for Setting Targets and Timelines for Salt/sodium Reductions in Foods* to set a schedule of progressively lower targets.²

Nationally derived targets, because they are based on data specific to the main sources of salt/sodium in the national diet, may have a larger impact on dietary salt/sodium intake in the country than the harmonized regional targets.

Countries should consider transitioning from voluntary targets to a regulatory approach.

Address the discretionary use of salt/sodium

In a number of countries in the Region, discretionary use, of not only of table salt but also the sub-category of processed packaged food products added during cooking and at the table, is among the main sources if not the primary source of salt/sodium in the diet.

Establish national multi-stakeholder platforms

Countries should establish national platforms similar in composition to the regional SaltSmart Consortium but more locally oriented, namely, convene national, regional and municipal public health authorities, national food industries and/or their associations, NGOs, civil society, patient groups, scientific societies and health professionals, academia and school authorities. Together the participants should agree upon and act on a set of activities that constitute a coordinated strategy, with each sector committing to a role appropriate to its mandate, guided by clear conflict of interest policies.

Bring together the stakeholders in salt/sodium reduction and salt iodization programs

With the steps taken in the Andean and Central American sub-regions towards coordinating salt/sodium reduction and salt iodization programs, countries should initiate dialogues and fora to bring together and coordinate the national stakeholders in both programs, to, at a minimum, raise awareness for the issue and reassure the stakeholders of the feasibility of coordinated action.

Countries should consider co-surveillance of sodium and iodine as a first step in coordinating the two programs.

Countries can combine the education and messaging on salt/sodium reduction and salt fortification/iodization to reassure the public that intake of the nutrients can be harmonized.

Set food procurement criteria/standards for public institutions

Given that many countries in the Region offer school lunch programs, public health authorities working with schools have the opportunity to set obligatory food procurement standards (possibly with targets and timelines) that limit the salt/sodium content along with limits for other nutrients and meal profiles. Similar standards can be developed for food services in other public institutions e.g. hospitals, child-care centres, government agencies.

Utilize sub-regional or bi-lateral economic platforms

Countries should consider formal or informal common markets as mechanisms for developing unified positions on issues that have cross-border implications e.g. limiting the marketing to children and nutrition labelling standards. They can also use the platforms to speak as one voice to transnational food companies for them to supply their best quality products to their common market.

Ensure Health-in-All-Policies specific to healthful diet

Countries should take the broader perspective of Health-in-All-Policies, focussing specifically on non-health sectors that can affect both the demand and supply of healthful food products e.g. taxation or agricultural policies.

Countries receiving development assistance through UN framework agreements should, with the support of PAHO country offices, ensure that development initiatives explicitly promote and protect health and in particular, recognize the actions in sectors other than health can exacerbate or reduce exposure to diet-related risk factors for NCDs.

Publish updates on national activities on salt/sodium intake reduction (e.g. new legislation, new voluntary agreements, etc.) and results achieved through the PAHO website and the ALASS map

To manufacturers of packaged and processed foods, restaurants, caterers, food service operators

Supply best quality products to the Americas

All companies should aim to reformulate their products to reach the lowest salt/sodium content achievable in a food category. Global brand products, both processed foods and restaurant meals, with the highest quality nutritional profiles, should be supplied worldwide.

Adopt the regional targets in the absence of national targets

Transnational and national food companies, in the absence of country-specific reformulation targets, should adopt the regional targets. **If regional targets have already been met, the lower target in the range for each food category should be adopted.** Reductions in salt/sodium should not result in higher levels of sugars and/or fats.

Report on progress relative to regional targets

Food sector representatives participating in the SaltSmart Consortium should agree to an independent agent and a mechanism by which they report annually to the agent the salt/sodium content of products to allow comparison to the regional targets. They can also consider showcasing progress through ALASS.

Transfer successful reformulation technology to SME

Consistent with the SaltSmart Consortium Strategic Plan (2013-2108), private sector participants in the Consortium should follow through on their stated intention to transfer food formulation technology, proven successful in reducing the use of salt/sodium, to SME. For example, bread producers in a number of countries have demonstrated successful reformulations. The Consortium should agree to compile examples of reductions in food categories that align with those to which regional targets apply, describing the functions of salt/sodium per category, and how to reformulate lower salt/sodium products within the category while accounting for

sodium functionality. It would be standardized information for countries that intend to engage with local food manufacturers to set national targets and timelines.

Define global commitments for the benefit of the Region

IFBA members need to define for the Region the substantive and measureable actions that demonstrate their stated “enhanced commitments to health and wellness”.³ They can for example support at arms-length the social marketing pilots being developed for the English Caribbean, agree to supply their most healthful low salt/sodium global-brand products to the Region and supply nutritional composition to central databases.

National and transnational food and beverage companies, including those participating in the Consumer Goods Forum, should adopt fully the PAHO recommendations on the marketing of foods and non-alcoholic beverages to children, to be effective in all the countries in the Region.⁴

Inform consumers

Processed food manufacturers and restaurants should adopt interpretive labelling (e.g. traffic lights, front-of-pack labels) and provide nutrient facts information in a manner demonstrated to be effective in helping consumers to readily understand and thereby make an informed choice as to whether a product or meal is healthful or not.

Be consistent and transparent

The participation of private sector representatives in the SaltSmart Consortium requires that industry actions be consistent with stated agreements and commitments made as a Consortium, from research to formulation to communication to the public, whether undertaken directly by a company or by industry associations. **Industry should act with full disclosure, in a transparent manner, dedicated to reducing the overconsumption of salt/sodium by making substantive product reformulations** that enable countries to reach the PAHO target of 5g salt (2000mg sodium)/person/day by 2020 or their national targets.

Food companies should endorse the 2009 Policy Statement that launched the regional salt/sodium reduction initiative and the 2011 WEF Declaration of Rio de Janeiro on healthful food formulations. There are explicit commitments in the documents regarding supplying best quality products to all markets, clear and consistent food labelling, contributing to consumer KAB research and public information campaigns.^{5, 6}

Supply food composition data

The food industry should supply food composition data to centralized databases e.g. LATINFOODS or others. The databases are sub-regional and national, and can represent specific supply markets. Up-to-date and centralized food composition data can inform multiple countries and serve consumer protection and international trade.

Conduct research on iodized salt in formulations

Consistent with the SaltSmart Consortium Strategic Plan (2013-2108), and with the momentum growing to synchronize salt/sodium reduction and salt fortification with iodine, the food industries represented at the Consortium can proceed with their stated objective to conduct research on iodized salt in formulations.

To civil society

Raise awareness, build capacity, conduct campaigns and advocate

Strong well-positioned civil society organizations are important allies in changing the social norms on salt/sodium consumption. Through e.g. social marketing or dissemination of information, they can show the risks of high salt/sodium diets, assist in changing consumer behavior and create demand for low/no salt/sodium products.

Create and connect to networks at local, national and international levels to advocate dietary salt/sodium reduction

Networks of (consumer) organizations can compare products between countries and look at differences in salt/sodium levels and use name and shame (or fame) campaigns to pressure industry to make changes (or praise them for good practices).

Be "watch dogs"

Civil society can mobilize and exert social pressure on (or demand) governments to adopt salt/sodium reduction measures in countries without targets and timelines and to address gaps in the measures taken. Furthermore, they can act as independent monitors to confirm whether governments enforce the measures they have instituted.

Civil society can make public both positive progress with food product reformulations and identify non-performers among food manufacturers, restaurants, caterers, and food service operators.

Continue with knowledge, attitudes and behaviour studies as a component of consumer research

Civil society organizations should continue to promote and conduct KAB studies. In the countries where there is already baseline information, the instrument should be redesigned to facilitate monitoring change in consumer KAB.

At the same time, the organizations need to take into account the capacities needed to conduct KAB surveys, to process the data and draw conclusions worthwhile publishing and disseminating.

To a Secretariat at PAHO

Establish and support a new group of technical advisors

Countries have indicated that an expert technical advisory group guiding the regional initiative, with sub-groups per area of work, has been helpful in both Phases 1 and 2. It is recommended that PAHO establish a new group of advisors to lead a subsequent phase of work.

Tailor the technical advisors to respond to the needs of countries

The nature and extent of technical assistance that Member States in the Region need to move forward, determined through a survey, can guide the selection of a new group of advisors and a pool of additional technical experts. Not yet active countries need to develop responses to high dietary salt/sodium and those already active need to reach full capacity with the elements that

make up comprehensive national responses. The technical advisory support must be feasible and appropriate to the country situations.

Extend the reach of advocacy, communication and social marketing

Raising awareness remains key to securing political attention to the risks of high salt/sodium diets and to maintaining the commitments made to reduce intake. **The social and traditional media campaigns, involving the PAHO communications office, and its support to networks such as ALASS, the InterAmerican Heart Foundation and the Healthy Caribbean Coalition, have been both intensive and extensive and should continue to be so.**

Mobilizing the public is an ongoing endeavour. The **knowledge, attitudes and behaviours survey instrument, already designed and applied in Phase 2, can be adjusted to include indicators of change among consumers. It is to be a tool to support civil society to survey and re-survey the public.**

Social marketing, as an instrument to change behaviour, can benefit both public health authorities and the private sector. People can be motivated to use less salt/sodium at home and as consumers to demand low/no salt/sodium products. The social marketing pilots in four English-speaking Caribbean countries, involving the University of South Florida, the Healthy Caribbean Coalition and members of the Salt Smart Consortium, are potentially transferrable to other English-speaking markets, and possibly, with appropriate translation and cultural adjustments, to Latin American markets. As such, resources need to be mobilized **through mechanisms protected from conflicts of interest, to disseminate the social marketing products and techniques shown to be successful in pilots. A possible mechanism for dissemination is workshops at sub-regional levels involving social marketing experts and where appropriate, the country-based people involved in the pilots.**

Utilize fully the SaltSmart Consortium

All the participants in the Consortium can take lead roles in promoting health and wellness, at both national and international levels, and within each of their respective networks and alliances, can develop key influencers and champions for dietary salt/sodium reduction. The Consortium platform has been a positive mechanism for bringing forward this leadership potential and has successfully elicited members' agreement to move forward on strategic objectives. As such, **the entities represented at the Consortium can demonstrate their commitment to reduce salt/sodium intake by their endorsing the 2009 Policy Statement that launched the regional salt/sodium reduction initiative and the 2011 WEF Declaration of Rio de Janeiro on healthful food formulations.**^{7,8}

Consortium membership can be expanded to include food importers and distributors as well as the restaurant chains in the Region that are the top sources of food consumed outside the home.

The Consortium can continue to follow its strategic plan that extends to 2018, specifically the objectives to transfer technology to SME; contribute to social marketing that is focused on the discretionary use of salt/sodium; and support research on the use of iodized salt in food processing.

Emphasize implementation

Concept notes can be developed for pilots on e.g. coordinating salt/sodium reduction and salt fortification/iodization programs, and developing and adapting social marketing programs specific to sub-regional markets.

Support can be given to the uptake of the existing regional targets and to establishing the means by which new targets derived in countries can be monitored. The goal is for the food categories with regional targets to account for the most common sources of salt/sodium in diets and for the target values to become progressively lower for them to have a greater impact on salt/sodium in the food supply, and ultimately, on population level intake.

The discretionary use of salt must be addressed, referring to both table salt and high-sodium processed food products added at the table or during cooking that are specific to national food cultures or to a region or sub-population within a country. This **in parallel to encouraging countries to set national targets and timelines or adopt the regional targets for reduced salt/sodium in the processed packaged foods that are major sources of salt/sodium in national diets.**

Countries can be supported to work on regulatory approaches to promote and protect health, specifically the mandatory labelling of the nutrient content of packaged foods that includes salt/sodium using CODEX standards as reference. The daily allowances for nutrients can also be standardized to facilitate common labelling.

Resources can be mobilized for more countries to contribute to the database that holds the nutrient contents of food products, built thus far by a number of countries in the LATINFOODS network and the Caribbean. Food companies can be encouraged to contribute to the database.

Support research and disseminate best practices within and outside the Region

The economic analyses that demonstrate the benefits to countries of reduced salt/sodium intake in whole populations can be scaled up.

Partners can be sought with whom to co-host a regional Salt Summit. Among its objectives would be featuring the best practices and successes achieved in all areas of work by countries, the private sector and civil society in the Region, plus achievements from further abroad. The Summit could be an opportunity to create a regional network of experts and organizations with mandates relevant to reducing salt/sodium intake.

Innovative interventions can be collected and studied as to their effectiveness and feasibility to transfer and/or scale-up, especially those in low-resource environments.

There can be research on e.g. the SaltSmart Consortium as a multi-sector platform intending collaborative action towards a common public health goal – reduced salt/sodium intake; and on e.g. the shift in Argentina from a voluntary to a regulatory approach to reduce the salt/sodium in the food supply.

A communications strategy can be developed that includes innovative contemporary techniques and media to disseminate case studies and best practices.

Research can be supported on the science of sodium and the quality standards to be expected of any research undertaken need to be disseminated and promoted. Similarly the requirements for making transparent any conflicts of interest with research can be established.

Lead the coordination of dietary salt/sodium reduction with other diet-related issues relevant to preventing NCDs

Alliances with entities, initiatives and donor organizations that have interests closely related to diet-related health conditions and NCDs are a means to extend the reach of messaging on salt/sodium reduction, broaden the base of support and possibly pool resources, both within

PAHO and with agencies operating in the Region. Joining forces and relating interests can increase the potential to penetrate political agendas and to have greater influence on the private sector regarding reformulations. Possibilities include alliances with movements to e.g. reduce sugars and eliminate trans fats; develop nutrient reference values for NCD reduction; develop interpretive product labelling programs and standards; restrict advertising and marketing of foods and non-alcoholic beverages to children (addressing childhood obesity); institute fiscal measures to incentivize healthful food consumption; and linking more closely with initiatives such as hypertension prevention and control.

Advocate Health-in-All-Policies specific to healthful diet

Member States can be supported, both centrally and through the PAHO country offices, to adopt the wider perspective of Health-in-All-Policies with the specific focus on the non-health determinants of healthful diet. In cases where countries are involved with UN framework agreements for development, UN country teams can be assisted to identify the non-health sectors, factors and conditions that can protect and promote healthful diet for whole populations, with particular attention to those most vulnerable.

To a new group of advisors

Develop an action plan for the period 2016-2018

Based on the status and needs of countries determined by survey, the group should develop an action plan with areas of work that correspond to country contexts and needs, taking into consideration the areas of work that guided the previous two phases.

Identify a pool of technical experts to assist countries

With PAHO assistance, a new advisory group should identify a pool of technical experts who with the advisory group can assist countries according to their specific needs and contexts.

Continue to disseminate/publish the national and regional targets, and food industry and government commitments to adopt the targets to enable independent (civil society) monitoring

Continue to support Member States to collect nutrient facts data to monitor progress with uptake of the regional targets

Review, adjust and add regional targets on a biennial basis

There is now baseline data for the salt/sodium content of products in the key food categories that the regional targets address, collected by a number of countries in the LATINFOODS network and the Caribbean. A new advisory group can consider whether these new data can be the basis for another principle on which to adjust the regional targets. Otherwise, a new advisory group needs to monitor the targets and timelines that countries in the Region are setting and use these to continually review progress relative to the regional targets and set progressively lower regional targets. The group should also be prepared to add, where appropriate, new food categories with targets.

Support countries to address, in parallel, reducing the salt/sodium content of processed foods and the discretionary use of salt/sodium

A number of countries have reported that substantive proportions of salt/sodium in the diet are due to discretionary use, referring to not only salt added at the table or during cooking but also high-sodium prepared foods that are specific to national food cultures or to a region or sub-

population within a country. Countries will need to develop methods to address discretionary use specific to their food cultures.

Review scientific evidence, participate in and/or initiate research, and collect and disseminate learnings on how to effectively reduce dietary salt/sodium

A new advisory group should seek out best practices from within the region and elsewhere and participate in transferring them to the international community. Very important is dissemination of innovative and effective interventions proven feasible in low resource environments e.g. the availability to countries of regional harmonized targets for key common food categories.

Provide guidance on how countries can shift from voluntary to regulatory approaches to reduce the salt/sodium in the food supply.

Assist with and/or support the scale-up of countries conducting economic analyses to demonstrate the benefits of reducing salt/sodium intake across whole populations.

Assist and support sub-regional initiatives and platforms where multiple countries can take joint actions of mutual and reinforcing benefit

A number of interventions that reduce dietary salt/sodium, generally improve the quality of the food supply, and promote and protect health can be reinforced on a multilateral basis through sub-regional initiatives and common market platforms. The new advisory group should encourage such coordinated actions. Examples are restricting the marketing of food and non-alcoholic beverages to children, adopting standardized nutrient facts labelling and interpretive labels, adopting the regional targets for key common food products. The multilateral platforms also offer the opportunity for countries to disseminate lessons learned and achievements.

Contribute to setting research standards

The TAG in Phase 2 became part of an international consortium recommending research standards and conducting regular systematic reviews of literature relevant to salt/sodium intake. This work will continue and should involve members of a new advisory group established to lead a next phase.

Take the broader perspective on diet-related risk factors and NCDs, and on determinants of diet

A new advisory group for salt/sodium reduction has the opportunity to link to other diet-related risk factors for NCDs and contribute to building a critical mass of stakeholders determined to improve the overall nutritional quality of the food supply and equitable access to it. Within countries and the Region, group members can see themselves as ambassadors for not only dietary salt/sodium reduction but also for the promotion of healthful diet and its social, economic and environmental determinants.

III Phase 2 Achievements

By area of work

The efforts of the Expert Group and the TAG over the course of Phases 1 and 2 of the initiative have been oriented to five areas of work: advocacy, communication and social marketing; engagement of food industries; synchronizing salt/sodium reduction with salt fortification programs; surveillance; and research and dissemination of scientific evidence. Below are brief summaries of Phase 2 achievements in each area of work. Interspersed throughout are examples of country-specific advances as reported to the PAHO secretariat over the Phase 2 period.

Advocacy, communication and social marketing

- The PAHO Secretariat working with the TAG communications sub-group continued to capitalize on World Salt Awareness Weeks to launch intensive and extensive social and traditional media campaigns. It proved effective in directing the conversations on salt/sodium on Twitter and Facebook, to the extent that the Region became a leading “influencer” for messages. The Ministries of Health of Paraguay and Ecuador used the PAHO tweets and the UN re-tweeted them. Webinars were particularly successful; assisted by networks such as ALASS and the Healthy Caribbean Coalition, some involved over 200 participants.
- Salt Awareness week is celebrated at country level as well, in Costa Rica and Jamaica, joined with national projects calling for change in lifestyle by lowering their salt intake, by cooking with natural herbs and spices, cutting back on commercial sauces and powdered seasonings, eating fewer processed foods, making sure to read nutrition labels carefully, and asking for less salt when eating out
- Consumers International (CI) for Latin America continues to support ALASS. It has translated and disseminated WASH materials and those of the AHA throughout the network and disseminates and tracks country initiatives. The ALASS website has received several thousand visits e.g. the Salt Smart Guide for Action in Spanish has been downloaded close to 6500 times. So far, governments in Brazil, Chile, Costa Rica and Uruguay have provided profiles for country-specific pages and civil society has done so for Argentina.⁹ CI is calling for a global convention on healthy diet, modelled after the FCTC.
- Secretariat continues to disseminate news from the Region through regular monthly updates that now reach the “salt reduction community” in the Americas, as well as worldwide.

United States

In 2013, CDC awarded funds to support two state coordinated programs and five large municipalities to reduce sodium intake in the population, through the Sodium Reduction in Communities Program (SRCP). This program was expanded in 2014 and three additional grantees were awarded funds: two state coordinated programs and one large municipality. SRCP aims to increase access to and accessibility of lower sodium food options, reduce sodium intake, and continue to build practice-based evidence around effective population-based strategies to reduce sodium consumption at the community level.¹⁰

In June 2015, the US Department of Agriculture launched "What's Shaking? Creative Ways to Boost Flavour with Less Sodium." It is a national collaborative initiative aimed at school meals. The initiative's website includes resources to increase awareness of the need for dietary salt/sodium reduction and to ensure school meals meet current salt/sodium standards. Resources are aimed at school nutrition professionals, school administrators, teachers and school staff.¹¹

- The Healthy Caribbean Coalition, initiated in Barbados, continues to promote population level salt/sodium reduction programmes within the context of improving nutrition across the Caribbean.
- PAHO, the American Heart Association, the WHO Collaborating Centre for Social Marketing for Social Change at the University of South Florida and the Healthy Caribbean Coalition are piloting a social marketing project in four countries in the English-speaking Caribbean: **Antigua, Barbados, Jamaica, and St. Vincent and The Grenadines.** The Ministries of Health and civil society entities in these countries are forming the leading teams under the umbrella of the Healthy Caribbean Coalition
- The InterAmerican Heart Foundation (IAHF) has affiliates in Argentina, Jamaica and Mexico. FIC Argentina, supported by the American Heart Association, prepared an inventory of the civil society organizations working or planning to work on reducing dietary salt/sodium to address cardiovascular disease in Latin America and the Caribbean.¹² The Healthy Latin American Coalition, a IAHF initiative, is working on conflict of interest guidelines regarding the involvement of private sector entities in matters of public health.
- PAHO hosted a side event at the UN General Assembly meeting on NCDs in 2014, showcasing the regional advances as “A population-based approach to hypertension prevention: Salt Smart Americas”, involving Argentina, Barbados, Brazil and Canada, publically confirming commitments and intending to stimulate expansion of the initiative. Close to 100 representatives of governments, NGOs and the private sector participated, including the WHO Director General.
- Twenty-five colleagues from Central America, Panama and Colombia participated in a seminar on promoting dietary salt/sodium reduction in Central America.¹³

Colombia

A new guide on “Salt and Food” gives advice to the general public on how to select and prepare food products and includes recommendations specifically to mothers with small children. Consumers are encouraged to read the labels on industrially manufactured food products to determine and compare the sodium per serving, where, based on the nutrition labelling requirements in Resolution 333 adopted in 2011. The aim is to nurture healthful habits with regards to salt/sodium consumption from an early age.^{14 15}

Taking advantage of World Salt Awareness Week, the national salt reduction team at the MOH launched a communication and advocacy campaign directed to other government departments (education, agriculture, welfare) as well as the private sector, universities, civil society and professional health organizations.¹⁶

- New communication materials was added to the PAHO and ALASS web sites (http://www.paho.org/hq/index.php?option=com_content&view=article&id=2015&Itemid=4024&lang=en and <http://www.alass.net/index.php/8-sobre-alass/1-bienvenido-a-a-la-accion-latino-americana-de-sal-y-salud>)
- In May 2105, PAHO and Health Canada co-hosted a session on Salt Smart Americas: Making Partnerships Work at the Canadian Public Health Association conference in Vancouver.
- There were a variety of dissemination activities within the America’s and elsewhere, many involving TAG members, to support countries and other regions developing salt/sodium reduction programs. Among them, the Americas salt/sodium reduction initiative was featured at

the symposium entitled "Global Health Aspects of Salt/sodium Reduction in Latin America", held at the 16th International Public Health Research Congress led by Mexico's Institute of Public Health.¹⁷

- NGOs and Canadian academics have collaborated to design and release a sodium calculator 'Big Life Salt Calculator' to help consumers manage their sodium intakes. To date, it has been used not only by Canadians but also by nearly half a million consumers worldwide.^{18,19}

Engaging the private sector

- In December 2013, Mexico with the Mexican PAHO office hosted a technical meeting and workshop on setting targets and timelines for dietary salt/sodium reduction, led by PAHO and TAG. Thirteen countries participated, including those more advanced and those intending to take action: Argentina, Barbados, Brazil, Canada, Chile, Costa Rica, the Dominican Republic, Ecuador, Mexico, Paraguay, Peru, Trinidad & Tobago and Uruguay. They discussed "what works" and "what is not working" regarding national initiatives, engaging with stakeholders and negotiating with food industries on setting salt/sodium reduction targets. The meeting resulted in a *Guide for Setting Targets and Timelines to Reduce the Salt Content of Food*.²⁰
- PAHO formalized the SaltSmart Consortium under PAFNCD, comprising representatives of multinational food industries, civil society organizations, national public health authorities, academia and a PAHO secretariat. In its first meeting, the Consortium approved an Action Plan for 2012 to 2018.^{21,22}
- For Phase 2, the Consortium prioritized two of its strategic objectives: social marketing and harmonization of salt/sodium reduction targets. In Washington DC in 2013, Consortium members participated in an exercise to draft a creative brief that could serve an advertising agency in designing social marketing messages aimed at building consumer demand for low/no salt/sodium foods. In 2014, the TAG sub-group on industry engagement launched a project on target harmonization and prepared a proposal for consideration by the SaltSmart Consortium.
- In Brasilia, the Consortium accepted the TAG proposal and agreed to an inaugural set of voluntary regional maximum targets (upper limits) for salt/sodium content for 11 common food categories, selected from existing regionally-based targets. Targets are to be achieved by December 2016. The Consortium also accepted a set of principles to guide its members in their working together to agree on: how to monitor regional targets; the key food categories to have targets; and how to support country capacity building to adopt and monitor the targets.²³

Barbados

Purity Bakeries approached the Healthy Caribbean Coalition with a request for assistance to outline how they can help in the fight against NCDs. In collaboration with the Trinidad-based Caribbean Industrial Research Institute Laboratory, a full nutritional facts assessment on all "Wonder" branded products was conducted. The tests confirmed that salt and sugar content has been reduced while there has been an intended increase in fibre. This step opens the opportunity for discussions with other food manufacturers.

Brazil

From 2011 to 2012, the food industry eliminated 1.295 tons of salt from buns, loaf bread, noodles and instant pasta. Among the companies that belong to the Brazilian Association of Food Industries (ABIA), thanks to an agreement between ABIA and the MOH, the targets for reduced salt/sodium were reached for 94.4% of instant pasta products, for 97.7% of loaf breads and for 100% of buns. Along with reducing the upper limits of sodium in these food categories, this represents a decrease of over 10% in the average sodium content in two of the most popular bread types in Brazil, and a 15% decrease in the average sodium in noodles and

instant pastas. Important also was that industries that did not belong to ABIA have also shown reductions in the average sodium contents of these same food categories, evidence that the voluntary agreement induced reformulation of most products in the market, regardless of whether the food companies were part of the agreement.

In June 2015, Brazil released the results of the second round of sodium reductions for cakes and cake mixes, cookies and biscuits, mayonnaise, corn snacks and potato chips. In the two year period since setting the targets, between 95% and 100% of the products in each food category reached the targets and average sodium reductions ranged from 5% to 21%. It is estimated that achieving the targets between 2011 and 2014 has resulted in 7.6 thousand tons less sodium in processed foods. Further agreements on targets are expected to eliminate 28 thousand tons of sodium by 2020, estimated to reduce deaths due to stroke and heart attack by 15% and 10% respectively. The Minister of Health has stressed the importance of reformulating processed foods and also of reducing the discretionary use of salt/sodium.

As of June 2015, under Brazil's leadership, the ministers of health from the MERCOSUR common market countries approved a proposal for a common salt/sodium reduction initiative. They accepted that MERCOSUR countries should focus on at least the 11 food groups with regional targets, recognizing that each country is at liberty to add other food groups based on national dietary patterns.

Argentina

By the end of 2014, through laboratory monitoring conducted by the National Food Laboratory Network (RENALOA), 90% of the products considered in MOH/industry agreements were found to be within targets, with reductions ranging from 5 to 25%. An overall evaluation, including changes in food consumption and salt use (from the National Risk Factor Survey 2009-2013; National Expenditures Survey 2004-2014; 24-hour urine sodium measurements in one province 2011-2013; table salt consumption and sales from the Ministry of Agriculture 2011-2015), has estimated that salt/sodium consumption per capita fell from 11.3 g per day in 2011, before the salt/sodium reduction initiative, to 9.3 g per capita by 2015.

Chile

As of April 2015, the bread industry reached a voluntary agreement to reduce salt/sodium in bread to 400mg/100g by 2017.²⁴ Chile's law requiring warning labels on food packages will come into effect in 2018. It mandates graphic norms for warnings on all products that have higher than set thresholds for fat, sugar or salt; and graphic norms for the healthy living messages aiming to motivate and educate consumers.²⁵ PAHO and FAO have supported the regulation.²⁶

Colombia

Technical discussions with the food industry have begun regarding targets and deadlines for reducing the sodium in a first set of foods prioritized by their sodium content. New food categories will be selected in a second phase.²⁷

Costa Rica

Early in 2015 the Costa Rican MOH with INCIENSA and the national Chamber of Food Industries signed an agreement establishing an alliance to promote healthy lifestyle in particular related to salt/sodium consumption. The two parties hosted their first activity – a workshop featuring “Regional experiences in salt reduction of processed food”. The objective was to sensitize and generate discussion among industry representatives about actions to reduce the salt/sodium content in processed food. The workshop marks the start of a process of negotiations between the health sector and the private sector.

In May 2015, Costa Rica's national team on salt/sodium reduction, with political support, held a workshop on targets with six sectors of the food industry. Three sets of regional targets were

accepted: for seasonings, cookies and biscuits and some breads.

United States

Responding to congressional language encouraging CDC to work with food manufacturers and chain restaurants to reduce sodium levels in their products, the agency is meeting with and garnering feedback from the food industry to enhance and facilitate collaboration on sodium reduction. Its work supports the national initiative – Million Hearts® – whose goal is to reduce 1 million heart attacks and strokes by 2017 through strategies including a 20% reduction in average sodium intake.²⁸

In September 2015, the New York City Board of Health approved an amendment to the Health Code that requires chain food service establishments (those with 15 or more locations nationwide) to post a warning label on menu items that contain 2,300 mg or more of sodium – the recommended daily limit for sodium intake. NYC is the first jurisdiction in the United States to pass this regulation. The warning labels will enable consumers to easily identify items containing very high levels of sodium and will educate them about the risks of consuming too much. The regulation is an important step in providing more transparency on what people order in chain restaurants, empowers consumers to make informed decisions, and may encourage restaurants to reformulate high sodium items. The rule is scheduled to go into effect on December 1st, 2015. The Department will be evaluating.²⁹

Uruguay

The national initiative “Less salt more health” received new impetus from the Ministry of Public Health for the Montevideo Government, the Association of Bread Makers and the Honorary Commission for Cardiovascular Health, with the introduction of a monitoring process for the salt/sodium content in bread in Montevideo.

Synchronizing salt/sodium reduction and salt fortification programs

- In 2014, there were two sub-regional meetings, one for Central America and one for the Andean region, on “Elimination of iodine deficiency: joint public health effort to secure optimum intake of iodine and salt”. The first, in Guatemala City, organized by ICCIDD, UNICEF and PAHO, coordinated with INCAP, involved 10 country representatives (Guatemala, Costa Rica, El Salvador, Honduras, Nicaragua, Panama, Belize, Dominican Republic, Cuba and Haiti). All countries, except Nicaragua and Haiti, have already taken some steps to coordinate the two programs; missing are concrete activities and support for implementation. USAID, Mexico and INCAP presented the results from different research studies that confirmed the need for joint monitoring of salt and iodine in the general population and PAHO presented a concept proposal for a project that could be implemented at a national level. The delegations from Costa Rica and the Dominican Republic expressed interest in further steps, including seeking financial support from their UNICEF country offices.
- At the second meeting in Quito, participants included ICCIDD, experts in salt/sodium reduction and salt fortification, and nutrition policy coordinators from Bolivia, Colombia, Ecuador, Guyana, Peru, Venezuela and Mexico, plus the main producers of salt from Mexico and Peru. The meeting concluded with a clear statement on the need for coordination between the two programs. Colombia and Peru expressed interest in preparing a project proposal on sodium and iodine co-surveillance.

Brazil

The fieldwork for the Brazilian National Health Study was completed in 2015. It included 80,000 households throughout Brazil and a sub-sample of 18,000 individuals who provided spot-urine samples. These will be validated against 24-hour urine samples collected in one Brazilian state. The samples will be analyzed for both sodium and iodine intake.

Costa Rica

In August 2015, a workshop was held on salt fortification and salt reduction, an extension of the earlier sub-regional meetings organized by ICCIDD and PAHO. The workshop resulted in an agreement to prepare a project proposal for the combined surveillance of iodine, sodium, calcium and magnesium in Costa Rica, to be coordinated by the MOH surveillance team with participation of both technical groups.

Surveillance

- New findings of the likely utility of spot urine sampling at population levels to assess average sodium intake, validated against a sub-set of 24-hour urine samples, gives countries hope for a possible cost-effective alternative to national-scale 24-hour urine sampling.^{30,31,32}
- Brazil conducted spot urine sampling with 18,000 individuals to estimate salt/sodium intake. Informing the validation of the spot sample data is a study in the state of Vitória that determined salt intake based on 24-hour urine collection, correlated with blood pressure. Among 272 adults of both genders, mean salt intake was 10.4 ± 4.1 g/day, and 94% of the participants (98% of men and 90% of women) ingested more than the recommended level of 5 g salt/day. There was a positive association between salt and body mass index (BMI) categories, as well as with salt and blood pressure, independent of age and BMI.³³
- Barbados has been able to determine national salt/sodium intake through 24-hour urine sampling, to be 6.75 g/per person/per day. The study included 24 h in-depth dietary recalls to determine main sources of salt in the diet.³⁴
- TAG disseminated an invitation to countries in the Region to join a project led by TGI to track and makes transparent the composition of processed foods around the world. Twelve countries responded (Argentina, Barbados, Brazil, Canada, Chile, Costa Rica, Cuba, Ecuador, Guatemala, Mexico, Panama, Peru). The primary outcome measures to be assessed will be energy content, saturated fat, total sugar, sodium, and serving size.^{35,36}
- PAHO is supporting 14 countries in South America and Caribbean to collect data on the salt/sodium content of products in the 12 food groups to which the regional targets apply. This will deliver baselines for the products against which progress with the uptake of regional values will be assessed. A statistician will compile and analyze the data. Participating are Argentina, Brazil, Chile, Costa Rica, Cuba, Ecuador, Guatemala, Panama, Paraguay, Peru, Mexico, Barbados, Jamaica and Trinidad & Tobago.
- Twelve research teams across nine countries in Latin America collected data on the sodium content declared in processed soups, using food labels and web sites of fast food restaurants. They examined a total of 812 soups with 80 different brands (47.6% belonging to three trademarks). Average sodium content was 328mg per 100g (ranging from 100 to 880mg/100g) or 788mg per ready-to-eat portion (ranging from 30 to 2100mg per portion).

Canada

A study in 2014 of sodium levels in Canadian packaged foods and of the proportion of foods meeting the voluntary targets found mixed progress. Overall, 51.4% of foods met one of the sodium benchmark levels: 11.5% met Phase 1, 11.1% met Phase 2, and 28.7% met 2016 goal (Phase 3) benchmarks. Food groups with the greatest proportion meeting goal benchmarks were dairy (52.0%) and breakfast cereals (42.2%). Overall, 48.6% of foods did not meet any benchmark level and 25% of all products exceeded maximum levels. Meats (61.2%) and canned vegetables and legumes (29.6%) had the most products exceeding maximum levels. Food categories highest in sodium (mg/serving) were dry, condensed and ready-to-serve soups; oriental noodles; broth; and frozen appetizers/side dishes.³⁷

With restaurant foods, between 2010 and 2013, progress was similarly inconsistent. Sodium

levels (mg/serving) decreased in 30.1% of foods, increased in 16.3% and were unchanged in 53.6%. The average change in foods with a decrease in sodium was –220mg/serving (a decline of 19%), whereas the average change in foods with an increase in sodium was 251mg/serving (a 44% increase). Overall, there was a small, yet significant, decrease in sodium per serving (–25mg); however, the percentage of foods exceeding the daily sodium adequate intake (1500 mg) and tolerable upper intake level (2300 mg) remained unchanged.³⁸

Reporting on the accuracy of sodium values on nutrition labels in Canada, researchers found that 49 (18.4%) underreport sodium levels.³⁹ Researchers also have examined Canadian consumer attitudes towards sodium: 67.0% were concerned about dietary sodium and 59.3% were currently taking action to limit sodium intake; they have also examined which among a number of strategies for reducing sodium intakes were the most difficult or easiest for consumers to follow.^{40,41}

Dominican Republic

The Cardiology Society of the Dominican Republic, together with MOH and with support of the PAHO TAG, is preparing a research protocol to determine a baseline for salt intake and identify the main sources of salt in the country. The study was triggered by findings from the iodine deficiency prevention program that people have very high salt intake and that there are important sources apart from table salt e.g. processed food and in particular very popular soup cubes.

Ecuador

The Ecuadorian University San Carlos, with the National Institute of Public Health and MOH, supported by PAHO, is planning a national study to determine sodium, potassium and iodine concentration using 24-hour urine samples.

FIC Argentina

Researchers collected nutrient data on 1320 packaged foods in 14 food groups in a leading supermarket chain located in Buenos Aires. It is the first analysis of labels on processed foods and provides a baseline of sodium concentrations for the food groups for comparison to the standards for sodium concentration set in Argentina's national law.

- In 2015, Argentina, Brazil, Canada, Chile, Columbia, Costa Rica, Ecuador, Guatemala, Mexico, Peru, the United States and Venezuela contributed to an international children's meals survey carried out by World Action on Salt and Health (WASH). A total of 37 countries around the world collected data on the salt/sodium content of 387 popular kid's meal combinations offered by popular fast food chains.⁴²

Research and knowledge dissemination

- With IDRC support, TAG members along with national and international colleagues prepared articles for a 2012 special issue of the PAHO Journal of Public Health, examining cardiovascular disease prevention through salt/sodium reduction.⁴³
- TAG members have supported a weekly science update on salt/sodium and health and of implementation programs to reduce dietary salt/sodium.⁴⁴
- TAG members have joined a call to improve the quality of research on dietary salt/sodium.⁴⁵ They are involved in an international consortium to establish recommended standards for research on dietary salt/sodium and to conduct regular systematic reviews.

- PAHO produced a summary document – Salt Smart Americas: A Guide for Country-level Action. It highlights the recommendations, protocols and guidelines developed to date under the PAHO regional initiative.⁴⁶
- At a meeting on Population Approaches to Reducing High Blood Pressure, convened by the Bloomberg Philanthropies, the Americas initiative was presented to blood pressure experts, leading NGOs, WHO Collaborating Centres, countries and WHO HQ. The objectives were to: review which population-wide approaches are proven to work to reduce high blood pressure in LMIC; determine which LMIC with the highest absolute burden of hypertension are ready to address hypertension through policy change; and determine which interventions may work best in particular settings.

Columbia

Researchers at the University of Antioquia published two articles about the content of salt in selected products in Colombia and about TV food advertising directed at children (that included some sodium analysis).

Mexico

Governments of the City of Mexico and Chiapas State, in collaboration with researchers from the WHO Collaborating Centre for Social Marketing for Social Change at the University of South Florida, and supported by PAHO TAG experts from Mexico, initiated a project to evaluate the initiative of “salt shakers removal” in DF and the State of Chiapas.

Peru

Researchers working on salt/sodium substitutes at the Centre of Excellence on NCDs at the Peruvian University of Cayetano Heredia published two articles: “Launching a salt substitute to reduce blood pressure at the population level: a cluster randomized stepped wedge trial in Peru”; and “Generating information: what is the average consumption of salt and what are the sources?”.⁴⁷ Also published is research on the success with reduced salt in bread.^{48,49}

United States

The Dietary Guidelines Advisory Committee (DGAC) submitted the Scientific Report of the 2015 Dietary Guidelines Advisory Committee of the US Departments of Health and Human Services and Agriculture. The report provides a foundation for federal nutrition policy and outlines healthy eating patterns for Americans, including crosscutting topics of public health importance such as salt/sodium intake. The DGAC and its Sodium Working Group conducted a focused review of dietary salt/sodium and its relationship with blood pressure as well as its relationship with cardiovascular disease.

IV Momentum and opportunities

Going forward there are lessons learned, transferrable experiences and progress in the Region and elsewhere that are generating momentum and creating new opportunities, some of which are specific to the existing areas of work. In other cases, the developments are such that the TAG perceives different areas of work, shown below, to build on what has been achieved, to best help active countries to take bolder steps forward and inactive countries to launch national action.

The TAG is also presenting a new perspective in its analysis below. While 20 countries in the Region are active, 16 are not. Increasingly, inexpensive poor quality processed foods are penetrating the markets of LMIC, exacerbating health equity and food justice issues. TAG is calling for retaining the integrity of work to specifically reduce dietary salt/sodium while at the same time positioning salt/sodium reduction within broader contexts, linking to other initiatives addressing diet-related risk factors to NCDs, to chronic conditions and diseases that are affected by diet, and to determinants of healthful diet. The TAG considers salt/sodium reduction as one stream among several that are related to diet that share an ultimate goal – a healthful and secure food supply accessible on an equitable basis, to promote and protect health across whole populations.

Building on existing momentum	New opportunities
Surveillance and research	
<p>The call to reduce dietary salt/sodium consumption at the population level remains steadfast. Countries can aim for the PAHO target of 5g salt (2000mg sodium)/person/day by 2020, the WHO NCD Action Plan target of 30% relative reduction in dietary salt/sodium intake by 2025, or a national target. Regardless of which goal a country chooses, it is important for it to establish a baseline intake of salt/sodium and to learn the main sources of salt/sodium in the diet. Once the values are known, the country needs to maintain monitoring.</p> <p>The PAHO tools for determining salt/sodium intake and main sources of dietary salt/sodium have been tested. In both large and small countries in the Region, there is experience with 24-hour urine collection, with food recall surveys and with alternative methods to determine both e.g. household budget surveys. There have also been two experiences with simultaneous assessment of sodium and iodine intake using 24-hour urine samples.</p>	<p>Whereas 24-hour urine collection remains the gold standard method to determine salt/sodium intake, recent studies have indicated that spot urine testing has likely utility in assessing average sodium intake at population levels when combined with a sub-set of 24-hour urine collection data.</p> <p>With reductions in the salt/sodium content of food products beginning to take hold, countries need to assess sodium and iodine intake simultaneously to initiate the coordination of salt/sodium reduction and salt fortification programs. Iodine deficiency prevention programmes need to be secure for the most vulnerable populations (pregnant women and school-age children). At the same time, the daily intake of iodine in general populations needs to be assessed in case it exceeds recommended levels, and sources of iodine need to be determined, whether from iodized table salt or iodized salt used in processed foods.</p> <p>Being able to use spot urine testing for sodium, coupled with sub-sets of populations collecting 24-hour urine samples, lends itself to co-surveillance for iodine intake, reinforcing the opportunity for coordinating the programs.</p>

Building on existing momentum	New opportunities
<p>With minimal resources, 10 LATINFOODS countries have been able to collect the nutrient content information for 12 categories of packaged foods from package labels and food company web sites. The experiences thus far have been positive and with minimal training and expenditure, transferrable to other countries in the Region.</p>	<p>The collection of nutrient label data may become a lever for opening the discussion on food companies supplying food composition data to national or sub-regional databases. With various diet-related initiatives requiring nutrient content information, countries may be persuaded to make the supply of food composition data mandatory.</p>
<p>IDRC has accepted the concept note responding to its call for proposals regarding NCDs. If successful, the project would involve scaling up Costa Rica's experience (also supported by IDRC) with building a food product database to support a consumer food selection application. Argentina, Brazil, Paraguay and Peru would join Costa Rica in the project.</p>	<p>The recently designated WHO Collaborating Centre on Nutrition Policy at the University of Toronto is a new partner active in the Region. It has developed methods to survey the food supply that have delivered data to support tools that the Canadian consumer can use to make more healthful food product choices. With adjustments, the methods and tools may be applicable in other countries in the Region.</p>
<p>The international consortium setting recommendations for research standards is addressing the dissenting research that the private sector is known to support. The divergence of opinions that dissenting research is generating can have a disproportionate influence in resource-poor countries. The consortium will deliver what is acceptable research and is calling for it to be positioned within systematic reviews to identify outliers. Researchers across the Region can participate in disseminating the research standards and in particular, can inform scientific journals of the new requirements. Researchers are also encouraged to translate accurate scientific research into actions that political decision makers can understand and adopt.</p>	<p>With the private sector involved in the SaltSmart Consortium having stated its support for PAHO's target of 5g salt/person/day by 2020, and with reformulations underway, the argument can be made that the private sector should be a partner in the surveillance of salt/sodium intake. With data indicating that processed foods or high-sodium prepared products used on a discretionary basis account for substantial proportions of the salt/sodium in diets, understanding the actual impact of the reformulated versions of the products on salt/sodium intake can be considered a joint responsibility of health authorities and the industries that produce the products.</p>

Building on existing momentum	New opportunities
Advocacy, communication and social marketing	
<p>The social marketing (SM) pilots in four English Caribbean countries hold potential for adaptation and transfer to other English-speaking countries in the Region. With their focus on discretionary use of salt/sodium, some aspects of the messaging, adjusted to be culturally appropriate, may be relevant in other countries that have reported substantial proportions of total salt/sodium consumption attributed to discretionary use.</p> <p>The WHO Collaborating Centre on Social Marketing at the University of South Florida, as the technical partner in the Caribbean project, is gaining experience with salt/sodium intake reduction that can be applied to other countries and sub-regions.</p> <p>The ALASS network is growing and attracting increasingly more interest on social media. The Caribbean countries beginning the SM projects can from a network similar to ALASS.</p> <p>PAHO's successes with communication and dissemination of information during Salt Awareness Weeks are a sound basis on which to expand its reach. To make next steps most effective, PAHO can evaluate the impacts of its communications to date and learn what can be improved.</p>	<p>Discretionary use refers not only to table salt as there can be several products, considered a sub-set of processed and packaged foods, that are subject to discretionary use – high-sodium prepared foods that are specific to the national food culture or to a region or sub-population within a country. Even though used in relatively small amounts at any one time, these products can contribute very high levels of salt/sodium to the diet because they are so frequently consumed. Examples are some pickled foods, salted fish, condiments, sauces (soy sauce, fish sauce, tomato sauce, specialty local sauces), marinades, curry pastes and soup mixes and cubes. SM that focuses on discretionary use can therefore have multiple target audiences, not only cooks in households but also cooks and chefs in restaurants, and street food vendors.</p> <p>As the SaltSmart Consortium agreed to SM as one of its objectives in its Strategic Plan, and with members having participated twice in conversations about creative briefs on reducing the discretionary use of salt/sodium, there may be a growing foundation for the food companies and their alliances who are members of the Consortium to provide in-kind support for SM that was requested previously but not yet acted upon.</p> <p>The growing communications and SM initiatives regarding salt/sodium reduction offer an opportunity to connect the messaging to iodine intake, stressing that iodine fortification is not threatened by reduced salt intake as long as monitoring is directed to both elements simultaneously.</p>

Building on existing momentum	New opportunities
SaltSmart Consortium	
<p>The Consortium has demonstrated its utility as a platform that convenes multiple sectors with roles to play in reducing dietary salt/sodium. It has advanced with two of its strategic objectives – harmonizing reformulation targets and SM. The food industry sector has already stated its intention to proceed with another of objectives – to prepare information on aspects of reformulation technology to transfer to SME. Outstanding is acting on its objective to support research on the use of iodized salt in formulations.</p> <p>Regional targets</p> <p>The Consortium’s agreement on regional targets for 11 food categories is its first step with target harmonization. It has agreed to review the regional targets on a biennial basis and to adjust them as needed as countries reach new lower salt/sodium levels for foods according to their reformulation schedules. Regional targets are still outstanding for a 12th category on cheeses.</p> <p>As countries add food categories to their schedules, the Consortium, according to the principles on which the regional targets are selected, can consider new targets, in particular, for other foods that are common in multiple countries in the Region. Examples would be corn-based staples such as tortillas.</p> <p>PAHO has begun monitoring the uptake of the regional targets, as it had committed to the Consortium, by supporting the 10 LATINFOODS countries to collect nutrient data for food products in the 12 food categories recognized by the Consortium. Based on the success of this experience, PAHO should engage countries in the Caribbean to determine baselines for same food categories in that sub-region.</p>	<p>Once the database of nutrient label information collected in the LATINFOODS countries is completed and comparisons made on the salt/sodium content for global brand products, the Consortium platform provides the opportunity to encourage the transnational food manufacturers to supply their best quality global-brand products throughout markets in the Americas.</p> <p>Where the database indicates that the salt/sodium content of most products in a category is already below the regional target, the Consortium has the opportunity to consider the finding as another principle for setting a regional target. It could for example assign the current lower target for a food category to be the new regional target thereby lowering the sodium content ceiling for the category.</p> <p>The Consortium is the platform on which the food industries can be engaged on issues of concern and benefit not only to dietary salt/sodium reduction but also other health protection initiatives specific to diet. Current members representing several transnational food companies can be encouraged to take action e.g. standardizing the most-effective labelling of packaged foods following CODEX recommendations, and limiting the advertising and marketing of food products and non-alcoholic beverages to children. For the latter, the PAHO action plan on childhood obesity and the nutrient profiling initiative can inform and assist with the approach.</p> <p>Other private sectors involved in the food supply and food systems can be invited to join the Consortium e.g. supermarket associations and food importers and distributors. In some cases, there may also be local associations or initiatives involving fresh food producers that can be invited.</p>
<p>The Consortium members agreed to disseminate the regional targets within their respective sectors. They need to report on their progress in this regard.</p> <p>PAHO and technical advisors can, where needed, promote adoption of the regional targets by the countries that lack the capacity to determine the main sources of salt/sodium in the national diet.</p> <p>Bread remains the most common product for which countries are assigning reformulation targets, in particular, artisanal bread. The success with bread and associations of bakers needs to be</p>	

<p>disseminated broadly among the countries that have not yet taken action.</p> <p><i>Social marketing</i></p> <p>Several of the Consortium participants, representing various sectors, have agreed to support the SM pilots underway in the Caribbean. (Refer to the report for the 4th SaltSmart Consortium meeting in Antigua.) PAHO needs to follow-up on the commitments made, and working with the University of South Florida social marketing team, assist with coordinating the Consortium members' inputs and commitments with the country teams.</p>	
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Building on existing momentum	New opportunities
Alliances, allies, multilateral action	
<p>Countries participating in the MERCOSUR common market have set a precedent by adopting the regional targets agreed to by the SaltSmart Consortium. In addition, Costa Rica and Ecuador are considering mandatory nutrition labelling that they intend to bring to the other countries in the Central American Common Market.</p> <p>Countries in other sub-regional common markets, or that otherwise as a group constitute a single market to large national or transnational food manufacturers, should be encouraged and supported to take similar action.</p>	<p>The regional initiative and national strategies, while retaining the integrity of salt/sodium reduction, can recognize and orient salt/sodium reduction within the broader context of equitable access to healthful diets. Adding to this a stronger clinical integration of salt/sodium reduction with regional and national initiatives on e.g. hypertension, diabetes and obesity, can increase the base for consumer/patient awareness and education on healthful diet. In general, a cohesion and coherence among initiatives that call for improving nutrition quality potentially broadens the base of public support for governments to require improvements in the overall quality of manufactured foods as a means to protect health.</p> <p>The nutrition label data being collected by 10 countries in the Region covers over 11,000 packaged food products and includes all nutrients reported. This is potentially baseline data relevant to other diet-related initiatives that also need to monitor the nutrient content of packaged processed foods. Natural alliances, at country and regional levels, are initiatives to e.g. eliminate TFA and reduce added sugars and saturated fats. The sharing of label data is an efficiency of benefit to all these initiatives.</p> <p>The combined voices of diet-related initiatives could call for mandatory disclosure of the nutrient content of manufactured food products and restaurant meals; they could apply collective pressure such that governments require food companies to provide food composition data to central databases; together they can add weight to the call for using the PAHO nutrient profiles as the</p>

basis for limiting the advertising and marketing of foods and non-alcoholic beverages to children.⁵⁰

If the combined constituencies take the even wider view of Health-in-All-Policies, they can bring critical mass to the pressure for the multifaceted “smart” food policies needed to promote and protect health.^{51,52}

Emphasizing the high salt/sodium content of many highly processed inexpensive foods in the context of nutrition transition in LMIC, where the supply and demand for these products is increasing, combined with increasing rates of NCDs in LMIC, opens the opportunity to profile salt/sodium reduction within nutrition and NCD prevention policies as a best buy in lower resource settings.

With large-scale rapid urbanization underway in many LMIC and growing urban poor populations, urban food systems are increasingly supplying highly processed and often high-salt/sodium packaged products of low nutritional value, raising food justice and health equity issues. Salt/sodium reduction initiatives can in this way contribute to the conversations on urban food policies.

Given that trade is a common sector targeted for development assistance, for countries in the Region that are involved with UN framework agreements for development, and that rely heavily on imported food products, governments have an enhanced opportunity and responsibility to influence the agreements such that they recognize food and diet as risk factors for NCDs. Countries should establish national nutrition policies that protect and promote public health, and taking the Health-in-All-Policies perspective, be mindful that development initiatives such as trade liberalization can undermine or support national health protection goals.

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