



# The Challenge of Reducing Dietary Salt / Sodium Intake in Latin American Countries

## Policy Brief

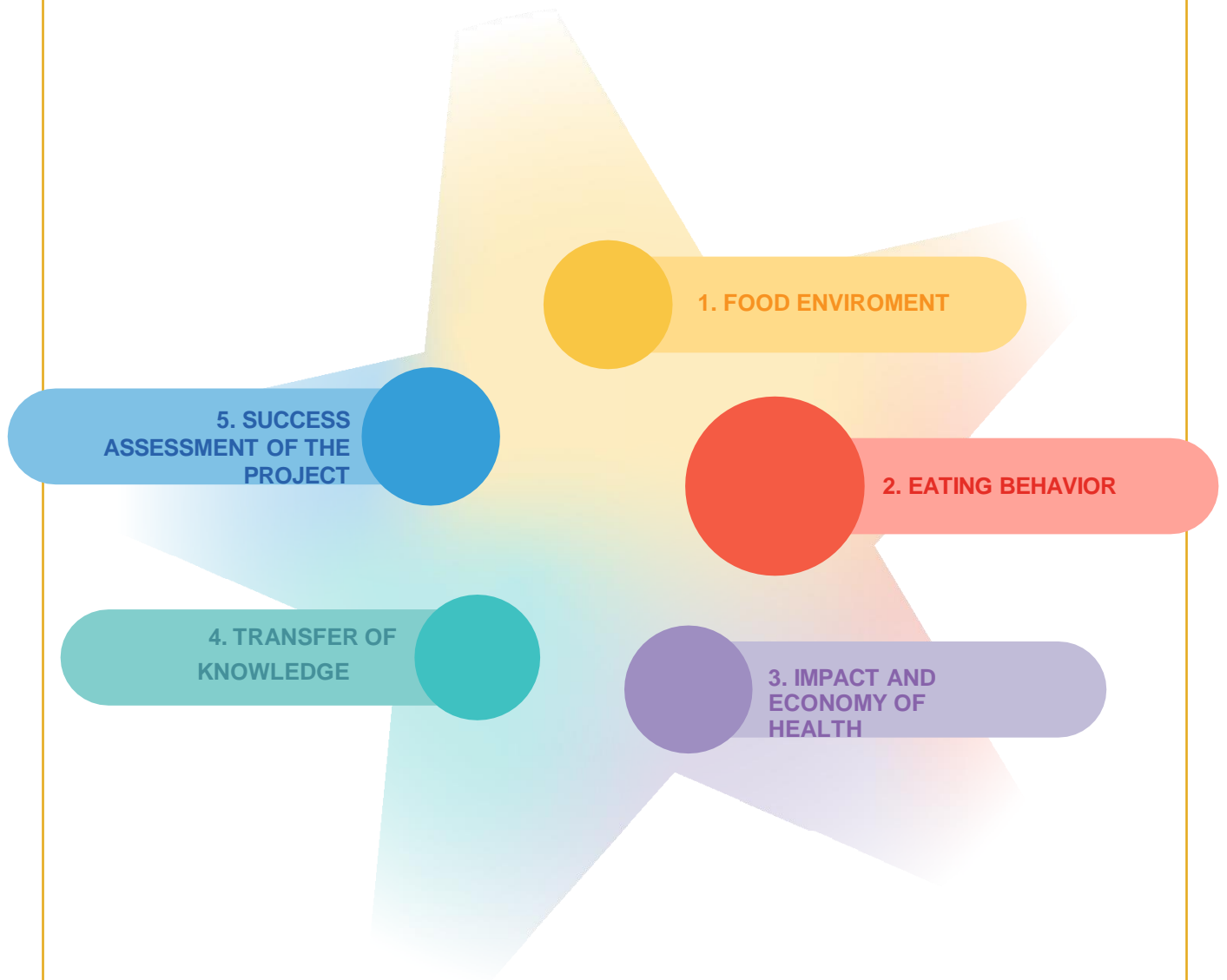


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Project - IDRC 108167 "Scaling Up and Evaluating Salt Reduction Policies and Programs in Latin American Countries. 2016-2019"

# Components of the IDRC 108167 Project



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## I Introduction

# The challenge of reducing salt / sodium intake in the diet of Latin American countries



## I Introduction

High levels of dietary salt/sodium intake increases blood pressure and risk of hypertension. Hypertension is a global burden and is the main risk factor for cardiovascular diseases, which includes heart attacks and strokes[1]. It has been estimated that 9.4 million deaths each year have been caused by hypertension; which represents more than half of the 17 million annual deaths attributed to cardiovascular diseases (CVD)[1,2,3]. The most recent study on the Global Burden of Disease reported high sodium intake as the main risk factor for dietary mortality, which represent 3.20 million deaths worldwide in 2017[3,4]. Several studies have demonstrated that low levels of dietary salt intake decreases both blood pressure and the risk of Non-Communicable Diseases (NCDs)[1,2]. Recent data suggests that global sodium intake exceeds recommendations[2]. The World Health Organization (WHO) recommends a sodium intake of less than 2000 mg/day, equivalent to 5 g of salt/day in adults, which is equivalent to less than 1 teaspoon of salt per day. It is recommended that children consume even lower sodium levels, in accordance with their energy needs[1,2].

### High blood pressure and salt intake:

- A high dietary salt/sodium intake is associated with an increased blood pressure, even in healthy people.
- It is estimated that at least 20% of adults in the Americas suffer from hypertension<sup>[5,6]</sup>
- High blood pressure is the main risk factor for heart disease in the region, as well as in the world.

However, the per capita consumption doubles or triples the amount in different Latin American countries, such as Argentina (11.2 g), Brazil (11.8 g), Costa Rica (11.5 g), Paraguay (13.7 g) and Peru (9.7 g). Main salt sources in the Latin American region are: discretionary salt, that is common salt added during the preparation of food at home and at the table, processed foods and prepared foods<sup>[7]</sup> (Annex 2, Table 1).

*Interventions to reduce salt/sodium in the diet are considered "Best-buys" by the WHO, since they are the most cost-effective measures that countries could take to improve the NCDs situation in the population<sup>[8]</sup>.*

Research evidence demonstrates that reducing salt/sodium intake is one of the most cost-effective public health interventions to reduce the global burden of NCD proposed by the WHO<sup>[8]</sup>.

- The main reduction measures in the salt / sodium intake would lead to one more year of healthy life at a cost lower than the average annual income or the gross domestic product per person<sup>[9]</sup>
- It is estimated that 2.5 million deaths could be prevented each year (1.65 million per CVD), if salt consumption worldwide were reduced to the level recommended by the WHO <sup>[3,9]</sup>
- By reducing the salt intake in a ten-year-period, it is possible to prevent the loss of 5.8 million DALYs/year at a low cost<sup>[10]</sup>

In 2009, the Pan American Health Organization/World Health Organization (PAHO/WHO) issued a policy statement for the prevention of CVD through sodium reduction. The goal was to gradually decreasing sodium intake consumption levels to less than 2000 mg of sodium/person/day in the Americas' by 2020. In November 2014, the Declaration of the SaltSmart Consortium was formed, which resulted in the development and agreement of regional sodium reduction targets for key categories of processed foods[8]. The implementation of this public health initiative is a challenge in the region because of the limited national data and scientific capacity for conducting monitoring and evaluation. As a result, knowledge and research dissemination to decision makers and other stakeholders is limited. To address this problem, a multinational, interdisciplinary team formed a consortium of institutions with five Latin American countries which includes the following institutions by country:

**Argentina** - the InterAmerican Heart Foundation (FIC, by its acronym in Spanish) in Argentina (\*) and the University of Jujuy.

**Brazil** – the Brazilian Ministry of Health, the University of Sao Paulo and the Brazilian Institute of Consumer Protection (IDEC, by its acronym in Spanish)

**Costa Rica** - the Costa Rican Institute of Research and Teaching in Health and Nutrition (INCIENSA, by its acronym in Spanish), as the Regional Coordinator of the Project, the Ministry of Health and the Research Foundation of the University of Costa Rica (Fundación UCR, by its name in Spanish).

**Peru** –Cayetano Heredia Peruvian University.

**Paraguay** - the Paraguayan Ministry of Public Health and Social Welfare.

The project was led by researchers from the Costa Rican Institute for Research and Education in Nutrition and Health (INCIENSA, by its acronym in Spanish). It also has an international team of advisors from North American universities such as the University of Toronto, University of Ontario Institute of Technology (Ontario Tech University), and Laval University in Canada. As well as, the University of South Florida in the United States of America, an international civil society foundation (Inter-American Heart Foundation) and a multilateral organization (PAHO / WHO).

To address this problem, the consortium carried out the “**Scaling Up and Evaluating Salt Reduction Policies and Programs in Latin American Countries**” project (IDRC #108167), with funds from the International Center for Research Development (IDRC) in Canada.

The primary objective of the project was to “Promote innovative policies on sodium reduction in Latin American food systems, through gradual strengthening and evaluation of existing salt reduction policies and programs, and supporting new programs by a consortium of institutions from Argentina, Brazil, Costa Rica, Paraguay and Peru” [7].





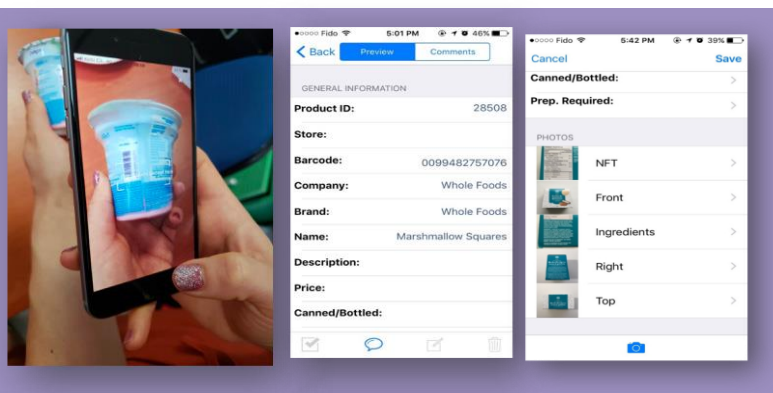
## **II Main Regional Results of the Project**

## II Main Regional Results of the Project

### Evaluation of the sodium content in processed foods of five countries and comparison against the thresholds established in the regional and national goals, and between countries (Objective 1A).

The laboratory of Dr. Mary L'Abbé at the University of Toronto developed the Food Label Information Program (FLIP), which was adapted to the Latin American context to create the Food Label Information Program for Latin American Countries (FLIP-LAC).

**Figure 1. FLIP-LAC (Food Label Information Program for Latin American Countries).**

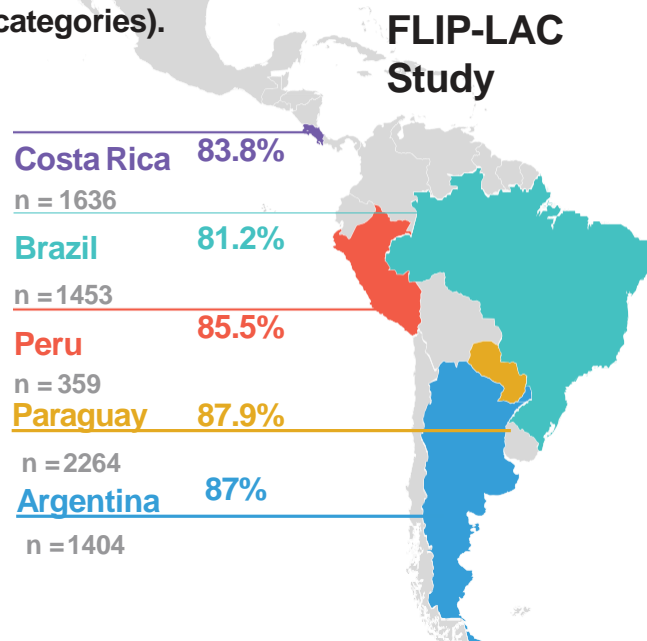


Using the FLIP-LAC software, data packaged foods was collected from 3 supermarket chains of different socio-economic levels. Data was collected on foods in the 12 categories with a regional sodium reduction target (i.e. bread, soups, mayonnaise, crackers and cookies, cakes, processed meats, breakfast cereals, cheese [with no harmonized regional goals], butter/dairy spreads, snacks and pasta). Using FLIP-LAC, pictures of the packages and nutritional information were captured. Subsequently, this information was recorded in the FLIP-LAC website which included the: brand, company name, product name, food category, portion size [in grams (g) and/or milliliters(ml)] and data from the nutritional information table: energy

(in kcal and/or kJ), carbohydrates, total fat, total protein and fiber (in g), sodium (in mg). The product information was standardized to “as consumed” for foods that required the addition of ingredients prior to consumption. A large proportion of products were found to meet the the regional sodium reduction targets. Paraguay had the largest percentage of these products (87.9%), followed by Argentina (87%), Peru (85.5%), Costa Rica (83.9%) and Brazil (81.2%). This demonstrates that the sodium content in many food products in the Latin American markets already meet the regional targets. Since so many countries have high sodium consumption, more stringent sodium reduction targets must be established to promote the reduction of sodium intake levels.

*A vast majority of pre-packaged food already meets the regional sodium reduction targets. Since the average population consumption for the countries in the region is still high, the adoption of more stringent sodium reduction targets for packaged foods should be considered.*

**Figure 2. Percentage of packaged food products that meet the regional sodium reduction targets, by country (average of 12 categories).**



High sodium content variability was found in products pertaining to a same category, which confirms that sodium reduction in products with higher content is feasible. Also, these results show that even when some products are compliant with the regional targets, others are not. Therefore, this demonstrates that additional reformulation efforts are required for products that continue to contain high amounts of sodium. The categories with greater variability in their sodium content by country were: Wet and Dry Soups in Costa Rica, Condiments in Peru, Condiments for main dishes in Paraguay, and “Pasta and noodles as consumed in Argentina and Meats in Brazil (Annex, Table 2).

*There is high variability of the sodium content in the products of a same category, revealing that its reduction is feasible.*

The food categories with the highest sodium content were “Broth cubes and powders” (Argentina, Costa Rica and Paraguay), “Condiments” (Brazil and Peru), “Meats” (Brazil), “Mayonnaise” (Peru), (Annex, Table 2). The food categories with the highest percentage of products meeting the regional sodium reduction targets were “Flavored cookies”, “Bread”, “Condiments” and “meats and breaded poultry”, which varied by country (Annex, Table 2).

Food categories with the lowest percentage of products meeting the regional sodium targets varied greatly between countries. These were “Dry cured meats” in Brazil, “Meat and breaded poultry” in Costa Rica, “Pasta and noodles (as consumed)” in Paraguay, “Noodles in broth” in Argentina, and “Meats and sausages cooked, raw and processed” in Peru.



Figure 3. Condiments, meat and meat products, mayonnaise and cheese and cheese products were the food categories with the highest sodium content.



### Identification of sodium content in fast, artisanal and street foods and comparison of the results between countries (Objective 1B of the study).

The definition of the sodium content in artisanal, street and fast foods was established in all five countries from the research consortium. Every country selected 20 prepared foods from three categories (artisanal, street and fast foods) based on the countries' market availability, consumption habits and traditions. Expert consultations, consumer surveys and scientific literature reviews were undertaken. The sampled food information was recorded in a form of the Latin American Food Composition Network (LATINFOODS). Photographs of the food products were taken. Subsequently, the sample portion size was weighed and prepared according to the product instructions (e.g., lyophilization, cooked, crushed, liquefied) for analysis of the sodium content. After the preparation, an analytical sample was obtained where moisture, ash and sodium content were analyzed. The nutrient profile system criteria for the Traffic Light System (United Kingdom)[12] was used to classify the sodium content levels as low, moderate or high. Overall, the highly novel data that was produced supports the need of sodium reduction and reformulation in the gastronomic sector as part of the salt reduction policies (Annex, Table 3).

### Identification of the determinants and barriers affecting the change in dietary sodium intake of the consumers, to develop a social marketing plan and to implement a salt reduction strategy at the population level (Objective 2)

Social marketing applies commercial marketing principles to persuade a particular target audience to have a more desirable behavior, in this case to reduce the salt/sodium intake. The process is focused on the consumer, the audience is segmented, and it applies the exchange theory and the elements of the "marketing mix" (e.g., the 4 P: product, price, place and promotion). It is a process that should generate value, be sustainable over time and involve not only the target audience, but also other key stakeholders that create a favorable environment for the desired change. The strategies in social marketing, education and communication related to healthy eating can change social standards related to salt in food, increase the demand of healthier products with less salt and, in the long term, improve the individual and population health. These strategies should be based on research, social marketing principles and the use of innovative platforms to convey messages<sup>[13]</sup>.

*Social marketing helps to go beyond public awareness to design comprehensive programs that can really change behaviors.*

#### Salt Reduction in Latin America – A Regional Social Marketing & Communication Plan



Spanish



English



Figure 4. Examples of street, fast and artisanal food

## Street Food

Vegetable pie,  
Argentina



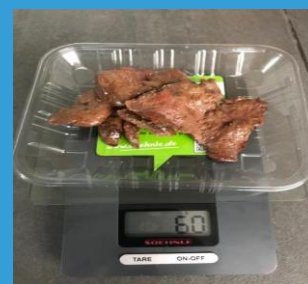
BBQ



Tapioca,  
Brazil



Anticuchos  
(Cut Stew Meat), Peru



Patty, Costa Rica



## Fast Food

Beef Tacos, Costa Rica



Corn starch  
alfajores,



Hamburger



Chicken croquette,  
Brazil



Wrap,



Peruvian Humitas (sweet tamales)



Salamicolonial,  
Brazil



Mbeyu (Paraguayan  
starch cake), Paraguay



Tortilla with cheese,  
Costa Rica



Chicken Soup, Peru



## Artisanal Food



The “Salt Reduction in Latin America – A Regional Social Marketing & Communication Plan” is the result of the joint work from the countries in the study. It was developed with support from the WHO Collaborating Center on Social Marketing and Social Change for Non-Communicable Diseases at the University of South Florida. This plan represents an innovative strategy in salt reduction efforts. The strategy was aimed at a thoughtfully selected target audience in each country to promote a healthy choice at the individual level; thus, bridging the gap between what consumers know and what they actually do (behaviour), while highlighting the value of reducing salt use (and sodium consumption) in the population. Female caregivers of school-aged children (mothers) were selected as the primary audience and school-aged children and partners/spouses (fathers) were selected as secondary audience. These target audiences were considered to be groups more receptive to health behaviour change, which was considered the most strategic audience on which to have a positive impact and to achieve the proposed goals of the plan. These goals were:

- To decrease demand for high salt and sodium ingredients used in household food preparation and consumption.
- To increase demand for more natural, less processed ingredients (low sodium/less salt) used in household food preparation.

The objective was to generate a regional social marketing and communication plan able to achieve the desired behavior of the target audience: the reduction of salt used in the preparation and consumption of food at home. The LAC will need to adapt the regional plan to the national context. The proposal should consider the benefits of reducing salt perceived by the audience and the aspects valued by this group in order to succeed.

Based on these guidelines and the results of the formative research of the countries and creative reports, the following creative concepts were developed: Tradition, Taste, Love and Secret source (see information in **Figure 5** and **Annex, Table 4**).

**Quantification of the health and economic benefits of salt reduction initiatives to inform planners of salt reduction and healthy eating policies and to develop capacities in Latin America (Objective 3)**

**Economic and social costs of NCDs are very important for the countries. However, they are often unknown or underestimated in Latin American countries.**

Different models have been developed for health economics studies. The PRIME (Preventable Risk Integrated Model) model of the University of Oxford estimates the impact that population-level health have on NCD morbidity and mortality.[14] Additionally, the IMPACT Food Policy Model of the University of Liverpool estimates the costs attributable to CVD diseases. Brazil and Costa Rica carried out studies with the PRIME model. Whereas, the IMPACT model only has data available from Brazil.

The following results were obtained:

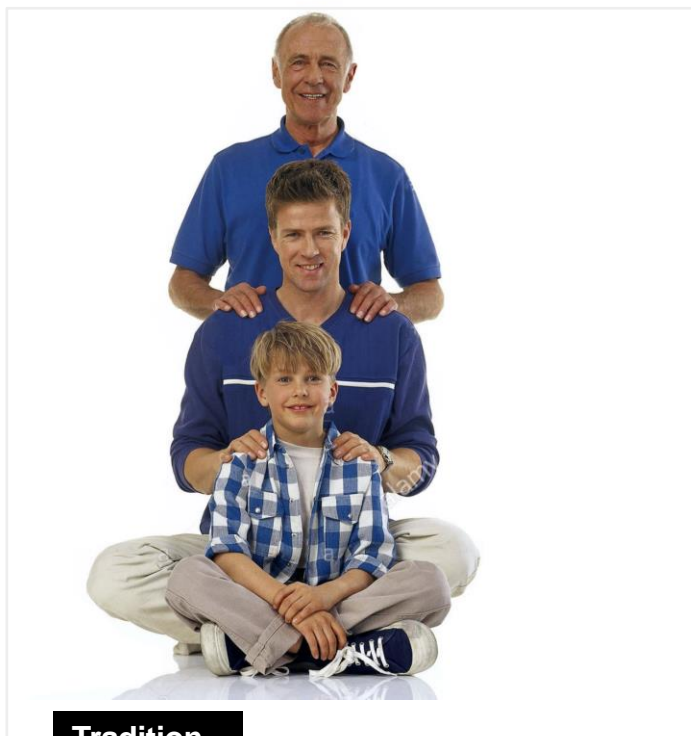
Brazil: Based on 2017 data, estimates suggest that 67,597 CVD annual deaths could be prevented by reducing sodium consumption to 2000 mg/person/day. By adding an economic analysis to the PRIME model, these deaths would mean 815,493 Years of Life Lost and the economic losses of these early deaths would represent \$1.4 billion United States Dollar (USD). Costs for the Brazilian health system attributable to excess sodium consumption were estimated at \$342 million USD/year, considering hospitalizations, consultations and hypertension medication use.

Costa Rica: When the proposed scenarios, a salt consumption decrease by 15% from the total intake and a reduction to 5 grams of salt/person/day, 4% and 15% of deaths due to CVD are prevented, respectively, which is equivalent to 222 and 760 deaths per year. These estimates are based on the Costa Rican CVD mortality data from 2013 and uses the most recent estimates of sodium consumption in the population, which is also from 2013 [15].

*More than 30% of CVD deaths in Brazil and 15% in Costa Rica can be prevented by reducing excessive salt intake to the levels recommended by PAHO / WHO.*

Latin American and Caribbean countries can apply different models to carry out studies in health economics that show the effectiveness of sodium reduction policies at a relatively low cost.

**Figure 5. Creative Concepts: Tradition, Taste, Love and Secret Source**



**Tradition**



**Secret Source**



**Taste**



**Love**



### III Priority actions to address salt and sodium reduction

### III Priority actions to address salt and sodium reduction

**Public policies and strategies should promote the creation of a food environment that allows the population to consume healthy and nutritious foods, with a low sodium content.**

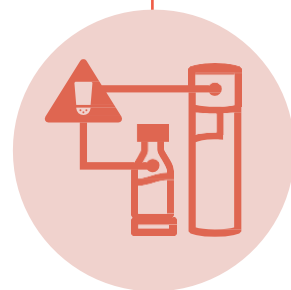
It requires commitment and synergy at all levels of society, including the government, private sector, food industry, food services, restaurants and cafeterias, academia and civil society. These actions are directed to enable the countries of the region to fulfill the commitments assumed with the “Sustainable Development Goals towards 2030”, to reduce one third of premature mortality from NCDs and fighting malnutrition in all its forms.

The results of this research point to the need for several priority measures that are recommended by World Health Organization as part of the “SHAKE Guide - less salt more health” from WHO [12], a technical guide to reduce salt consumption. The following priority measures are recommended: Adoption of more stringent regional and national targets for sodium reduction in packaged and prepared foods. The inclusion of new food categories and subcategories that represent an important part of the population’s diet (e.g., “Cheese” has no regional target) should be considered.



Mandatory and universal nutritional labeling of packaged foods should be implemented. This includes the declaration of the content of sodium/salt and other nutrients of public health interest that are related to non-communicable diseases. This will provide nutritional information for consumers to be able to choose the healthiest choice.

Adoption of a front of package labeling system for packaged foods containing excess of nutrients of public health concern (sodium, sugars and fats) should be considered. This system provides accurate, simple and clear information in a transparent way to interpret the nutritional composition of a food to the consumer. Thus, it is expected to promote better decisions related to healthy eating and preventing malnutrition in all its forms, including obesity and other NCDs.



Launching localized education, communication and social marketing campaigns for each country, which contributes to the acquisition of knowledge, practices and attitudes that promote the value of a healthy diet that is low in sodium.





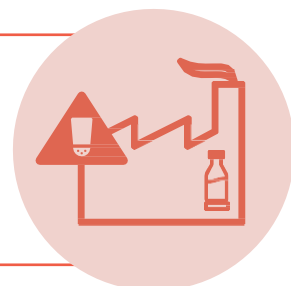
A sodium monitoring and surveillance program for the food supply within countries should be established, with integration and collaboration across countries in the region. Included in this monitoring program would be the sodium content declared on the nutrition label and sodium content obtained from direct chemical analysis. For the latter, an accredited laboratory in sodium analytical methodology is recommended.

Regular monitoring of the dietary intakes, knowledge, practices and attitudes related to sodium/salt in the population is recommended.



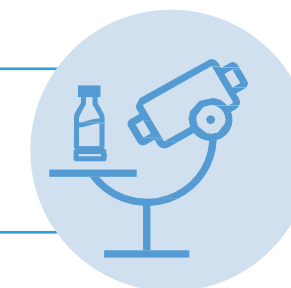
Promotion of sodium reduction measures in the gastronomic sector (restaurants, cafes and other food services) are encouraged. To offer consumers healthier choices when eating outside of the home, such measures may include innovative menus, recipe reformulation and development, and the elimination of salt shakers from the table.

To promote the reformulation of packaged and processed food at the industrial level, it is recommended that partnerships and incentives be generated with the food industry sector. This will encourage research, innovation, development and formulation of foods with low sodium content and other critical nutrients.



Acquiring further knowledge about the health and economic costs associated to excessive salt consumption in the population is recommended. Understanding the costs attributable to diseases caused by dietary factors, such as sodium in each country, will allow policymakers to prioritize, monitor and evaluate the most cost-effective public health nutrition policies.

Investment in research and knowledge translation of research evidence to support effective policy-making in accordance with the needs of the country is recommended.







## **IV Annexes**

Table 1. Comparison of salt intake from all sources, dietary sources and prevalence of Hypertension (HT) and Cardiovascular Diseases (CVD) in the countries of study \*

Country	Estimated salt intake (g/p/d)	Main dietary sources of sodium and contribution (%)	Prevalence	
			HT (%)	CVD (%)
Argentina	11.2	Processed food: 65-70	34	35
Brazil	11.8	Cooking salt and condiments: 74	21	31
		Processed food: 19		
Costa Rica	11.5	Cooking salt: 60	36	30
		Processed food: 25		
		Prepared food: 7		
Paraguay	13.7	Unavailable	46	Unavailable
Peru	11	Unavailable	10	16

\*Source: Blanco-Metzler A. Project - IDRC # 108167 Scaling Up and Evaluating Salt Reduction Policies and Programs in Latin American Countries. 2016 <sup>[16]</sup>

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#### Reference – Peru

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Table 2. Compliance and variability of regional goals for sodium reduction in participant countries

Compliance of the regional goals in the 5 countries of study	Paraguay reached the highest compliance with 87.9%, followed by Argentina 87%, Peru 85.5%, Costa Rica 83.8% and Brazil 81.2%.
Categories with higher variability of intra-category sodium content(mg/100 g)	<p><b>Argentina:</b> Pasta and noodles as consumed (CV: 114.8%, range: 0-1075 mg / 100 g), butter and margarine (CV: 88.1%, range: 0-920 mg / 100 g) and breakfast cereals (CV: 69.3%, range: 0- 810mg / 100 g).</p> <p><b>Brazil:</b> Meats (CV: 104%, range: 146.0-598.1 mg / 100 g), breakfast cereals(CV: 106%, range: 0- 761.9 mg / 100 g) and butter (CV: 97%, range: 0-1500 mg / 100 g).</p> <p><b>Costa Rica:</b> Wet and dry soups (CV: 277.92%, range: 625 ± 1735 mg / 100 g), pasta and noodles, dry, uncooked (CV: 341.01%, range: 78 ± 266 mg / 100 g) and mayonnaise (CV: 118.61%, range: 1064 ± 1262mg / 100 g).</p> <p><b>Paraguay:</b> Condiments and side dishes (CV: 321.62%, range: 606 ± 1949 mg / 100 g),pasta and noodles, dry, uncooked (CV: 297.14% (140 ± 416 mg / 100 g) and meat and fish seasonings(CV: 185.83% (3310 ± 6151 mg / 100 g).</p> <p><b>Peru:</b> Condiments (CV: 4242 ± 7714.3mg / 100 g), soups (CV: 503.5 mg ± 511.7 mg / 100 g).</p>
Categories with the highest sodium content (average ± DE, mg/100 g)	<p><b>Argentina:</b> Bouillon cubes and powders (20309 ± 7964 mg / 100 g), meat and fish seasonings(14095 ± 4446 mg / 100 g), pasta and noodles, dry, uncooked (1453 ± 777 mg / 100 g).</p> <p><b>Brazil:</b> Condiments (16,555.0 ± 7504.3 mg / 100 g), meats (1241.3 ± 1294.3 mg / 100 g) and soups(2921.3 ± 2860.2 mg / 100 g).</p> <p><b>Costa Rica:</b> Bouillon cubes and powders (18646 ± 7013 mg / 100 g), condiments for accompaniments and main dishes (16269 ± 9755 mg / 100 g) and meat and fish seasonings (8577 ± 279 mg / 100g).</p> <p><b>Paraguay:</b> Bouillon cubes and powders (17201 ± 3491 mg / 100 g), meat and fish seasonings (3310mg ± 6151 mg / 100 g) and cured meats and preserved (1045 ± 555 mg / 100 g).</p> <p><b>Peru:</b> Condiments (4242 mg ± 7714.3 mg / 100 g), mayonnaise (666.4 ± 335.5 mg / 100 g), butter (538.7mg ± 384.2mg / 100g).</p>
Categories with the highest percentage (%) of compliance with regional goal	<p><b>Argentina:</b> Flavored cookies (100%), mayonnaise (100%) and breaded meat and poultry (100%).</p> <p><b>Brazil:</b> Bread and chicken (100%), cookies (99.3%), breakfast cereals (98.1%).</p> <p><b>Costa Rica:</b> Condiments for side dishes and main dishes (100%), pasta and noodles like raw and dry pasta and noodles (99.4%) are consumed (100%).</p> <p><b>Paraguay:</b> Condiments for side dishes and main dishes (100%), mayonnaise (100%) and broth noodles (100%).</p> <p><b>Peru:</b> meats and breaded poultry (100%), flavored cookies and crackers (100%) and cakes (100%).</p>

Table 2.  
(Continuation)

Categories with lower percentage (%) from compliance with regional goal	<p><b>Argentina:</b> Noodles in broth (44.4%), bouillon cubes and powders (50%) and cakes (66.6%).</p> <p><b>Brazil:</b> Cured meats (72.1%), cakes (71.6%) and raw cured meats (74.8%).</p> <p><b>Costa Rica:</b> meat and breaded poultry (50.0%), bouillon cubes and powders (52.9%) and broth noodles (53.8%).</p> <p><b>Paraguay:</b> Pasta and noodles, as consumed (59.5%), cubes and broth powders (66.7%) and appetizers (72.6%).</p> <p><b>Peru:</b> Cooked, Raw and Processed Meats and Sausages (0.0%), bouillon cubes and powders (0.0%) and wet and dry soups (37.8%).</p>
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Table 3. Classification of artisanal, street and fast foods according to sodium content and country, 2018-2019.

Country	Total # of samples	Artisanal food (%)				Street Food (%)				Fast Food (%)			
		L	M	H (*)	Min — Max	L	M	H (*)	Min — Max	L	M	H (*)	Min — Max
Argentina	189	0	71	29	193 — 1159	14	43	43	93 — 778	0	57	43	505 — 738
Brazil	540	0	17	83	534 — 1729	0	33	67	278 — 794	0	50	50	336 — 1252
Costa Rica	720	29	71	0	58 — 412	14	86	0	96 — 405	33	67	0	84 — 286
Paraguay	167	0	43	57	455 — 812	0	13	87	520 — 1055	0	20	80	506 — 1008
Peru	540	0	86	14	211 — 635	0	71	29	230 — 827	0	100	0	362 — 569

(\*) L, M and H; corresponds to low (<120 mg/100g), medium (>120≤600 mg/100g) and high sodium (> 600mg/100g) in accordance with the Traffic Light criteria <sup>[12]</sup>

Table 4. A Regional Social Marketing & Communication Plan in Latin American Countries

Target Audience	
Primary Audience	Female caregivers of school aged children (mothers).
Secondary Audience	Children segmented into 2 age groups: age 4-7 years old and age 8- 11 years old. Partner/spouse (fathers).
Audience Analysis	
Benefits: Reduction in salt intake	<p>A way to care and nurture one's family.</p> <p>A way to be creative and innovative.</p> <p>A way to stay in good shape.</p>
Barriers: Adoption of the desired behavior	<p>Consumption of processed foods.</p> <p>Habit of adding salt to prepared foods.</p> <p>Perceived time constraints.</p> <p>Resistance to change/emotional attachment to traditional cooking.</p> <p>Association between salt and good taste.</p> <p>Low-salt/sodium foods are associated with illness.</p> <p>Fear that family members, especially children, will reject new foods.</p>
Communication goals	
	To decrease demand for salt and high sodium ingredients used in household food preparation and consumption. To increase demand for more natural, less processed ingredients (low sodium/less salt) used in household food preparation.
Creative Development	
Creative Concepts	Tradition, taste, love, secret source.

Source: Regional Social Marketing & Communication Plan. Project - IDRC 108167 Scaling Up and Evaluating Salt Reduction Policies and Programs in Latin American Countries. 2016-2020 <sup>[24]</sup>





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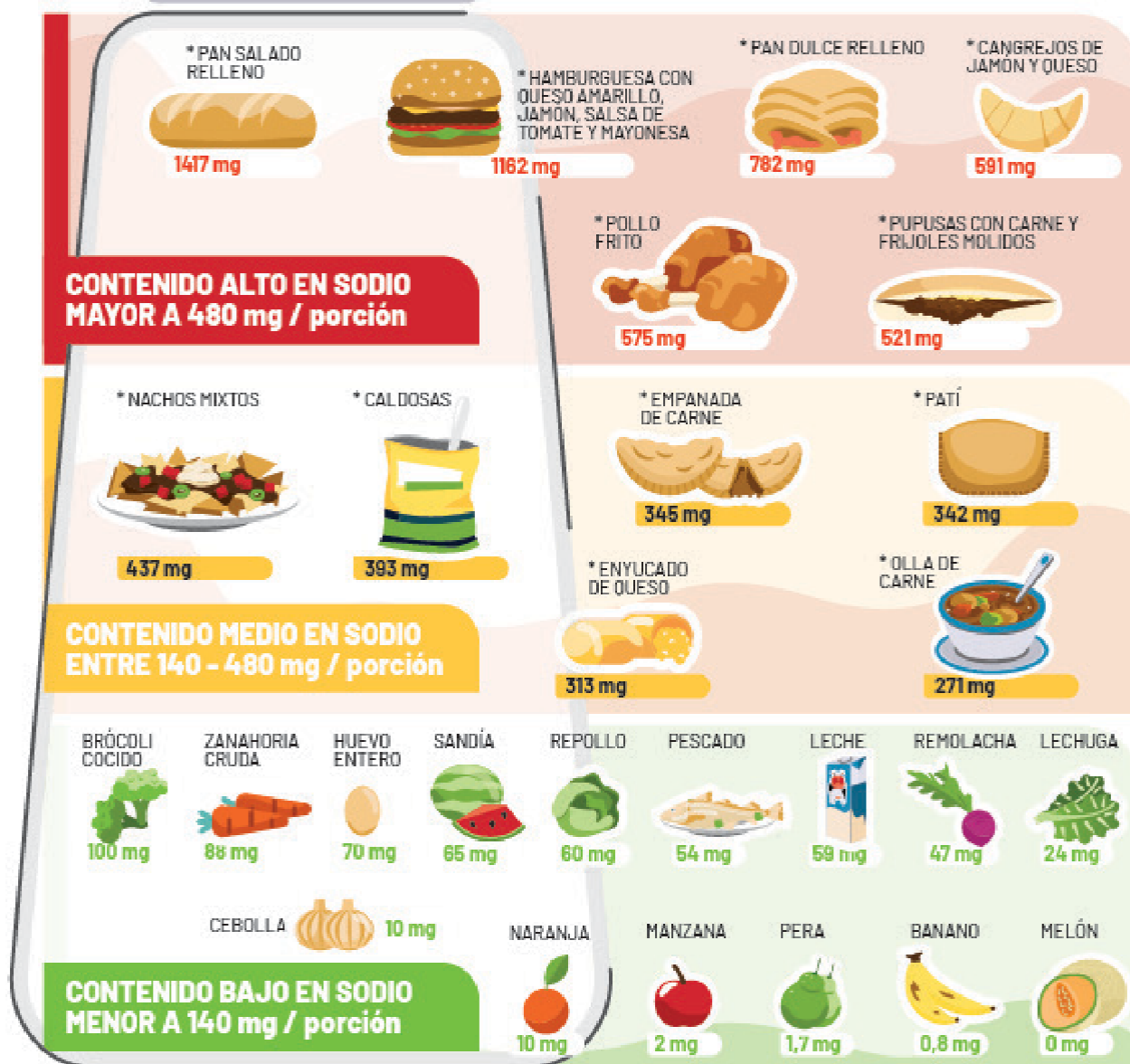
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# ¿CUÁNTO SODIO TIENEN LOS ALIMENTOS QUE CONSUMIMOS?



Conozca el contenido de sodio en los alimentos y prefiera aquellos con menos sodio.



Fuente:

\*Proyecto IDRC 108167: "Escalando y evaluando políticas y programas de reducción de sal/sodio en países de América Latina".

+Clasificación del perfil nutricional según parámetros de Food and Drug Administration (FDA) (Alto: Mayor a 480 mg/porción, Medio: entre 140-480 mg/porción y Bajo: Menor a 140 mg/porción).

+Tabla de Composición de Alimentos para Centroamérica del Instituto de Nutrición de Centroamérica y Panamá (INCAP).

The open educational resource: "Salero: sodium content in the food we consume" was elaborated based on the results of the Costa Rican research on the determination of sodium content in artisanal, street and fast food foods (Objective 1b Project - IDRC 108167).





# The Challenge of Reducing Dietary Salt / Sodium Intake in Latin American Countries

## Policy Brief

The Costa Rican Institute for Research and Teaching in Nutrition and Health (INCIENSA, by its acronym in Spanish) led the multicenter project IDRC 108167 "Scaling up and evaluating salt reduction policies and programs in Latin American countries", with funds from the International Center for Research Development (IDRC) during the period 2016 to 2020.

As part of the knowledge translation plan of the regional project (Objective 4), the document "Policy Brief: The challenge of reducing the consumption of salt / sodium in the diet of the Latin American population" was prepared.

This Policy Brief is a summary of the scientific evidence generated by the five participating countries (Argentina, Brazil, Costa Rica, Paraguay and Peru) with the technical assistance of international experts in the multi-center project. Based on the regional conclusions and recommendations, the main priority actions were identified to address the prevention of hypertension and cardiovascular diseases by reducing excessive salt / sodium consumption, and provide updated information to guide decision making in health policies and related sectors.



Canada

