

# IUNS 21<sup>st</sup> ICN International Congress of Nutrition “From Sciences to Nutrition Security”



Sociedad Argentina de Nutrición



IUNS

INTERNATIONAL UNION OF  
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## Conflict of Interest Disclosure

I have no conflict of interest to report in relation to  
this presentation

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# Progress on Sodium Reduction in the Americas

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Nutritional Sciences  
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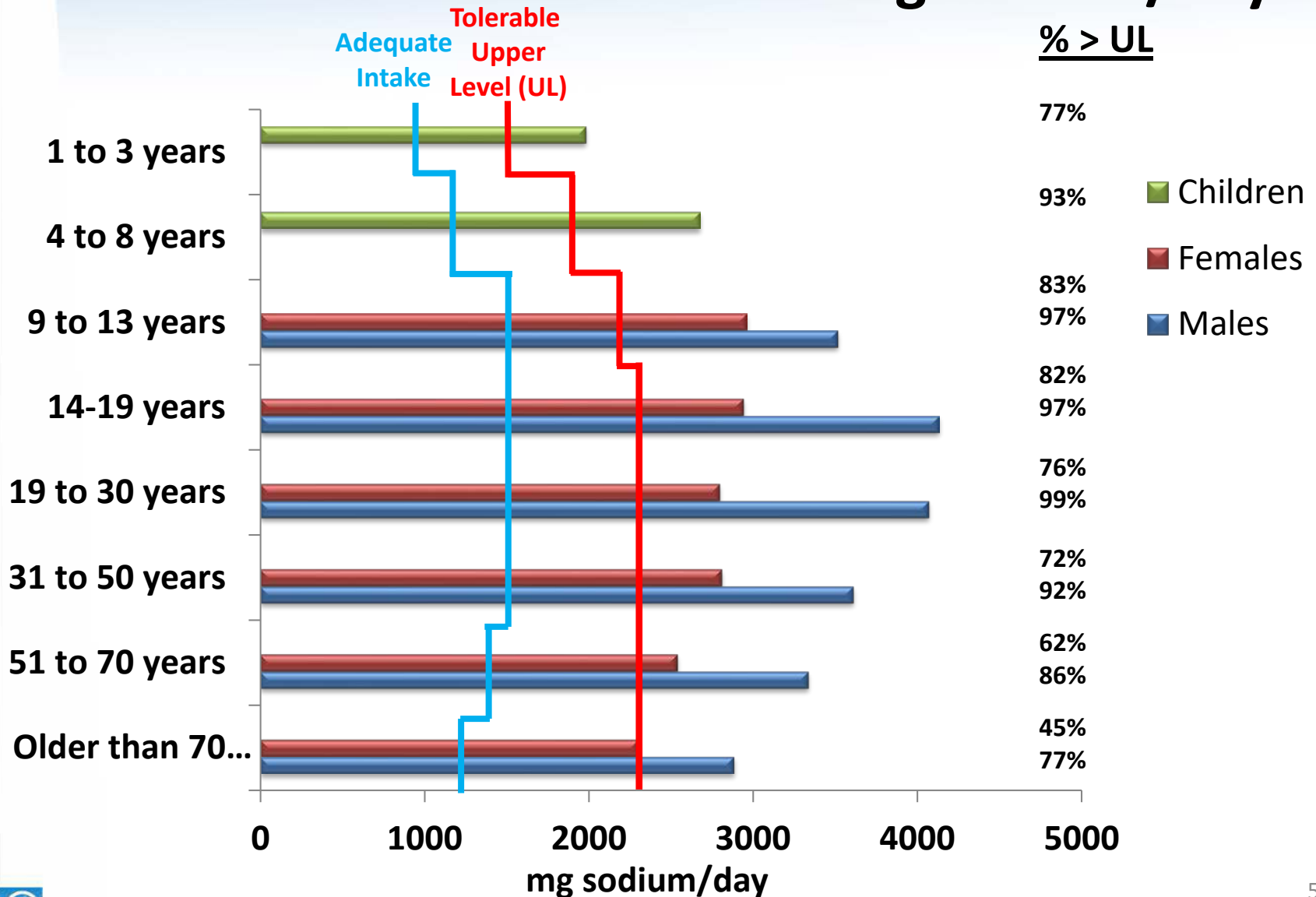


WHO Collaborating Centre on  
Nutrition Policy for  
Chronic Disease Prevention

# Outline

- **Canada**
  - Sodium Reduction Strategy (2010)
  - Setting Targets and Timelines (Health Canada, 2012)
  - Interim Results:
    - Sodium levels in foods (2010 vs 2013)
  
- **Latin America**
  - Sodium Technical Advisory Group
  - Harmonized Regional Targets (Published Jan 2015)
  - Results of PAHO Multi-Country Study (Baseline Data collected in 2015)

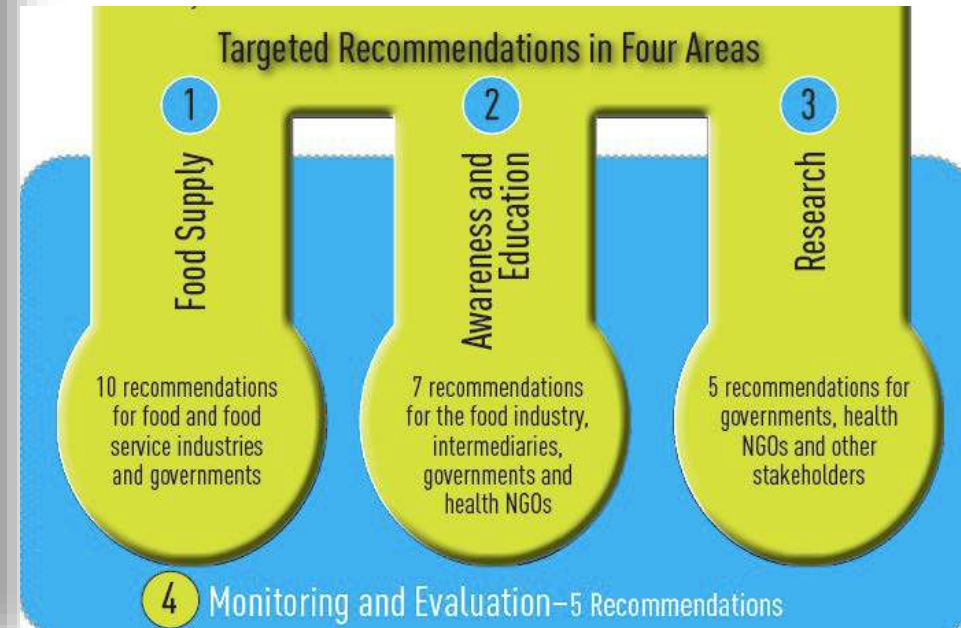
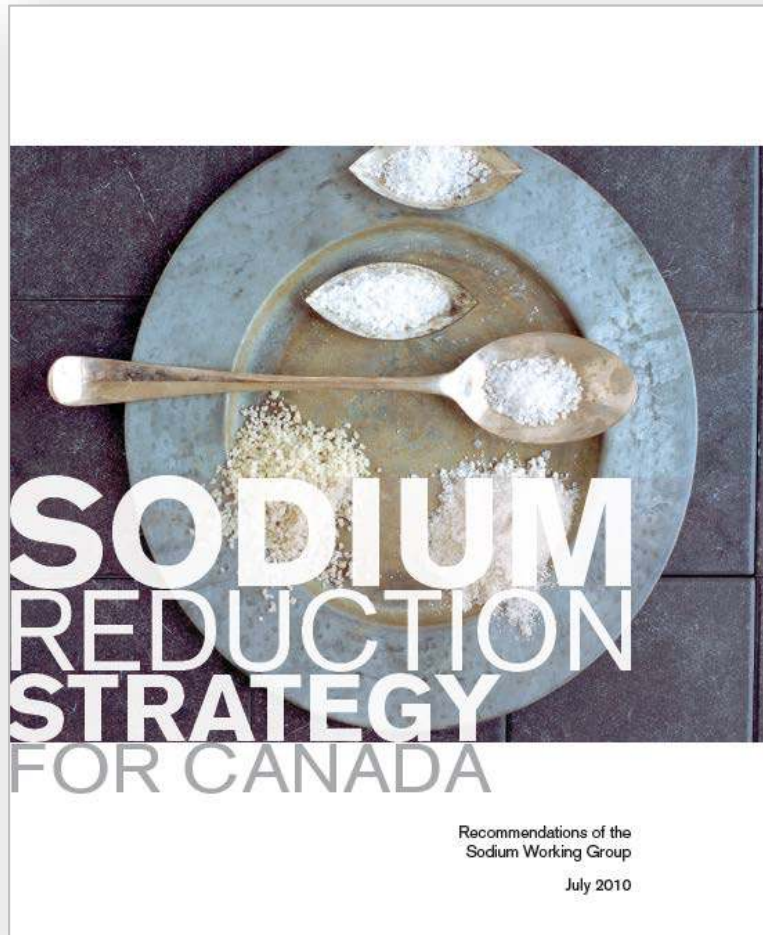
# Canadians consume ~ 3400 mg sodium/day



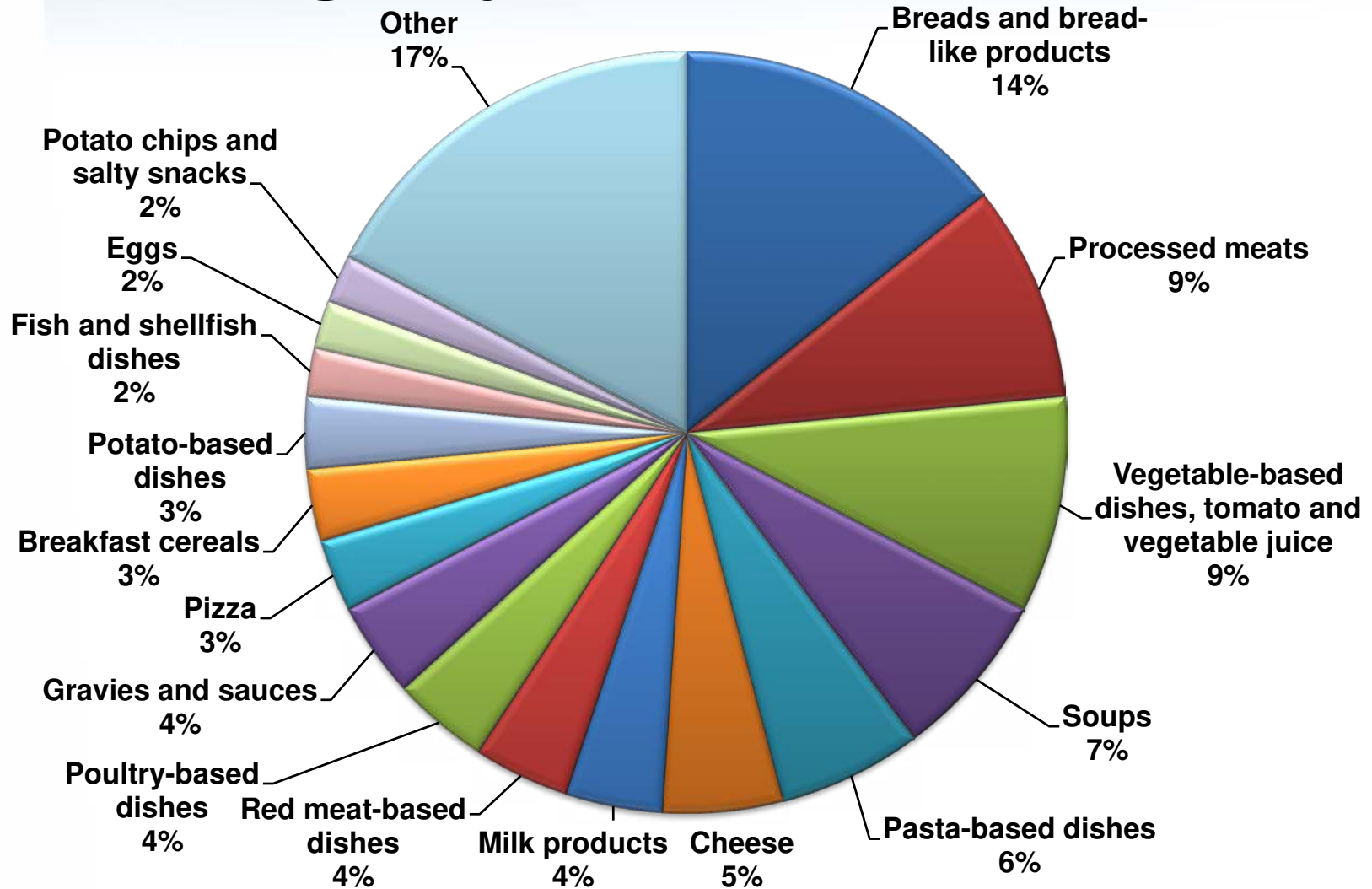
# Canada's Sodium Reduction Strategy

Developed by a Multi-stakeholder  
working group

Published July 2010



# Food group contributors to intake

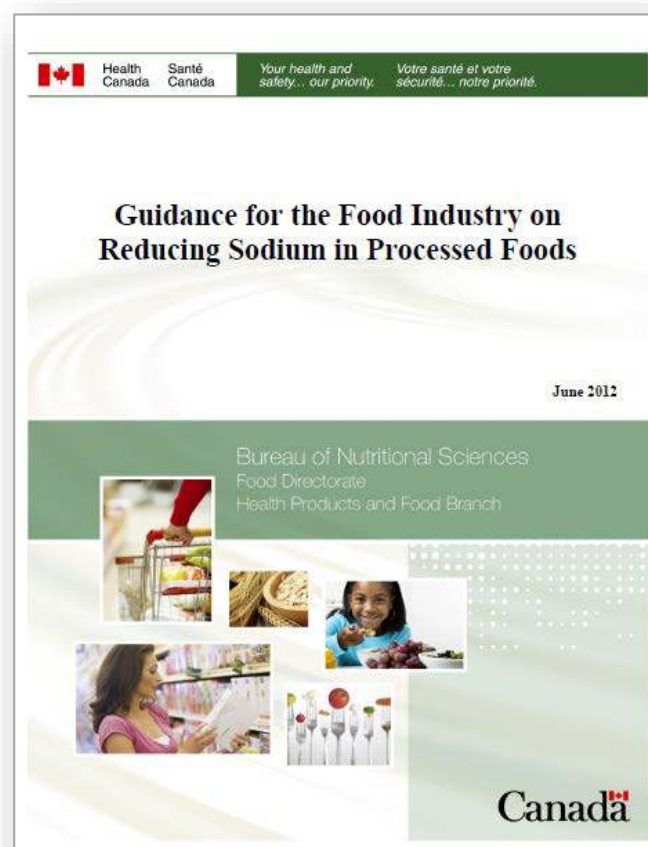


# Health Canada’s Sodium Reduction Benchmark Targets – Packaged Foods only

- Finalized June 2012
- Benchmark “targets” set to achieve ~25% reduction in food categories by 2016

Encourages voluntary incremental reductions in sodium:

- **Phase 1** (2012)
- **Phase 2** (2014)
- **Phase 3** (2016 Goal benchmark target; sales weighted)
- **Maximum levels** (all foods should have sodium levels < maximum)





# UofT Study Objectives

1. Assess changes in the distribution of sodium levels within food categories from 2010 to 2013 (mg/100g, % change).
2. Determine the changes in the proportion of foods meeting Health Canada’s sodium reduction benchmark targets from 2010 to 2013.

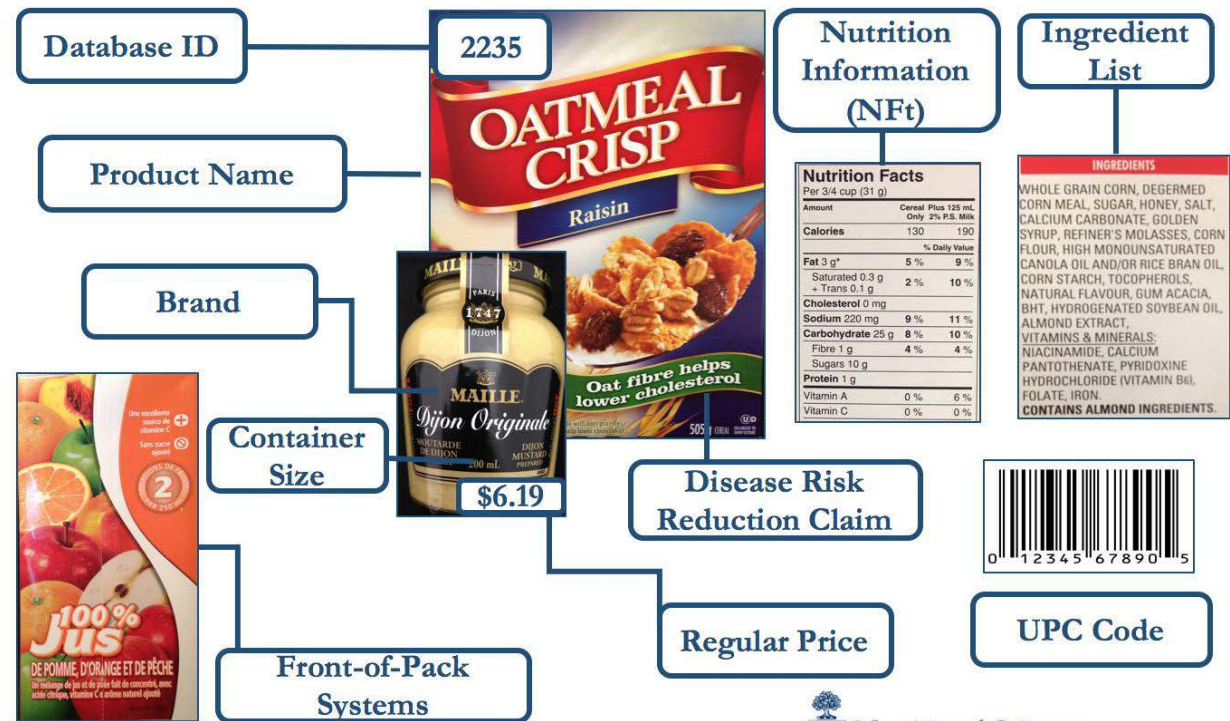
**Results Published:** Arcand et al., *Appl. Physiol. Nutr. Metab.*  
*41: 684–690 (2016)*

# Methodology – UofT Food Label Information Program (FLIP) database

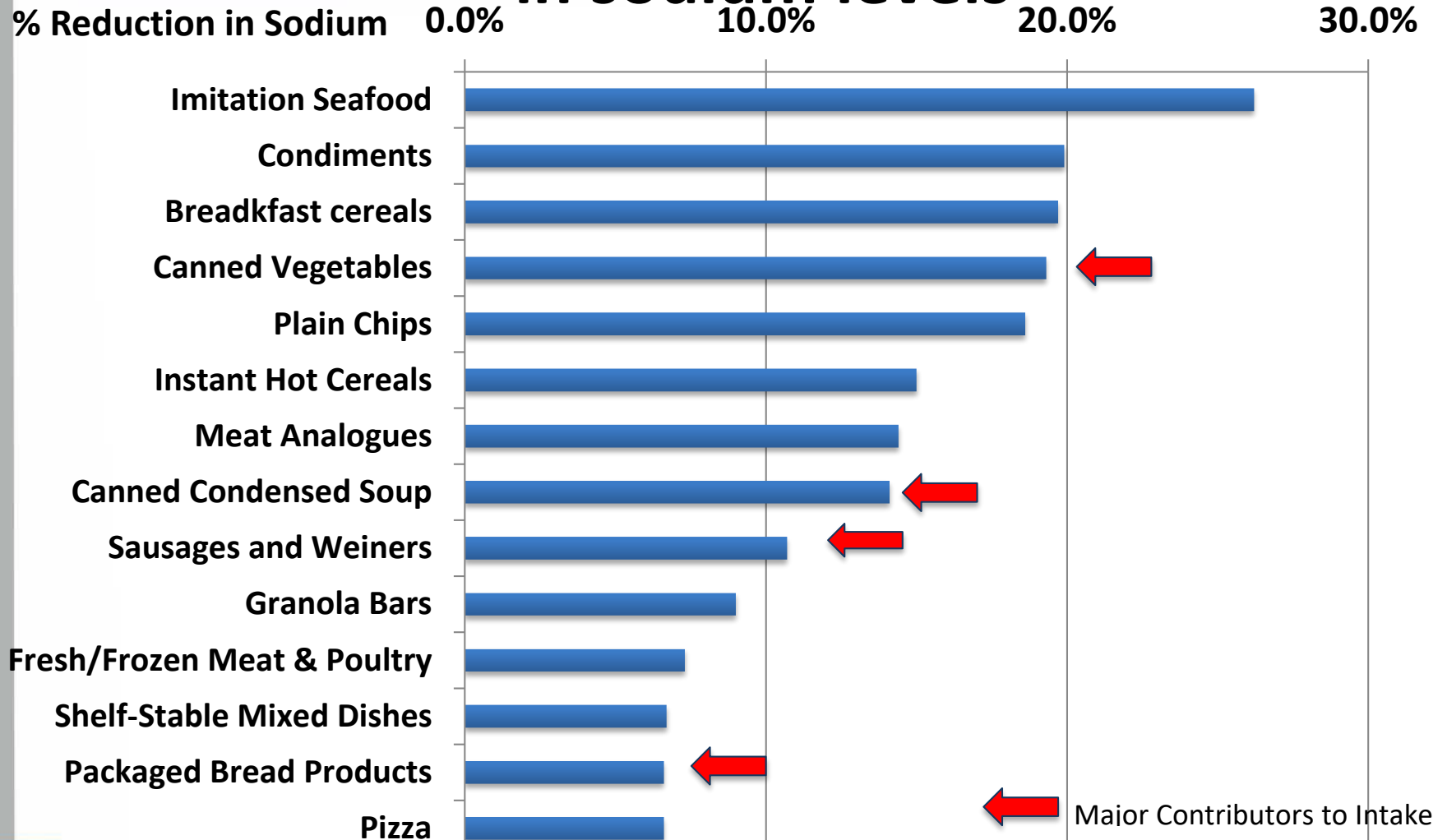
Brand name national and private label packaged foods sold in Canada in 2010, 2013 and 2017 (collected)

Collected from the top top-selling 4 grocery chains (> 75% retail market share):

- 2010: n=10,487 unique foods
- 2013: n=15,401 unique foods
- 2016/7: n>16,000 unique foods (collection completed)

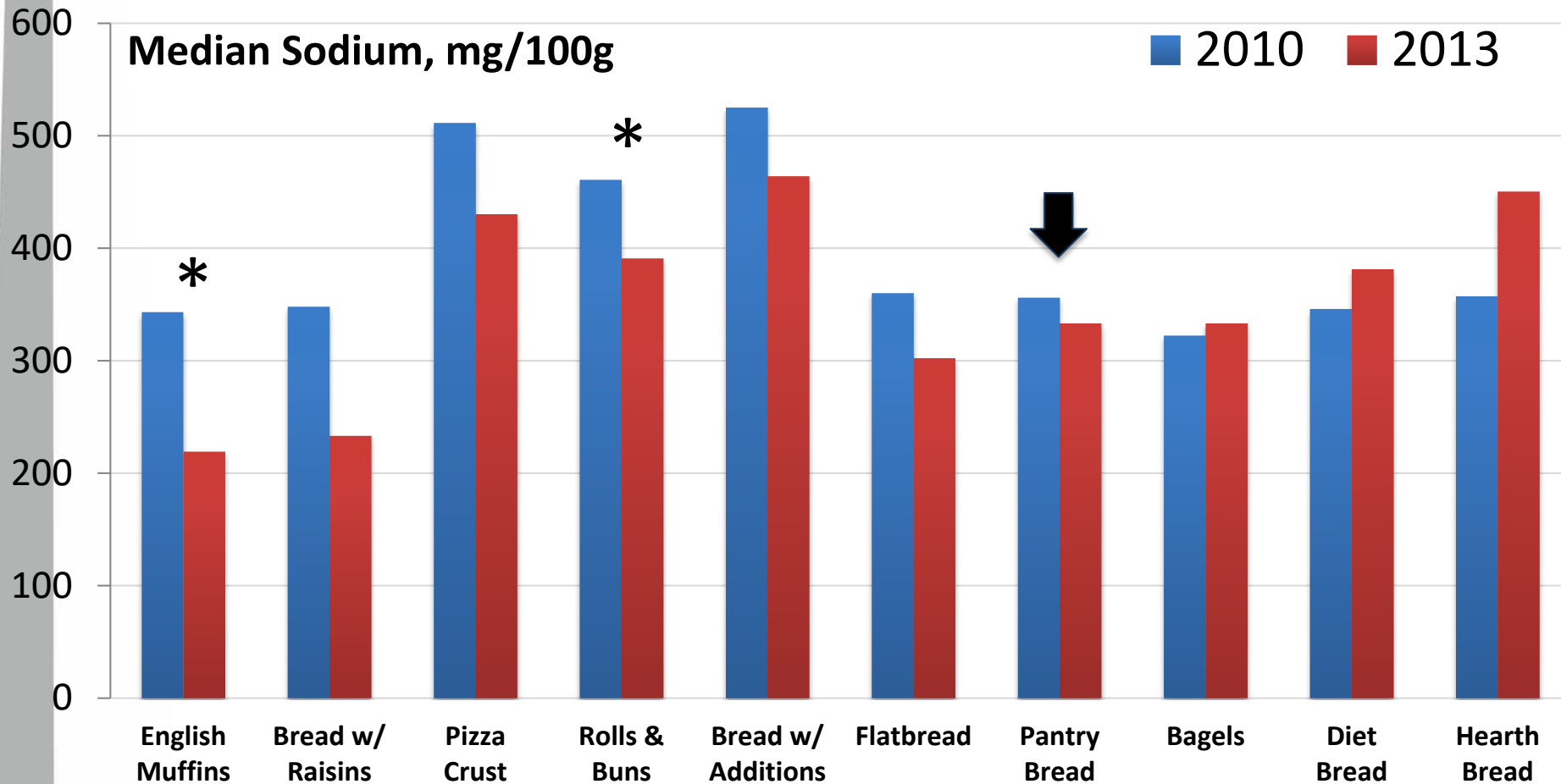


# Sub-categories with the greatest reductions in sodium levels



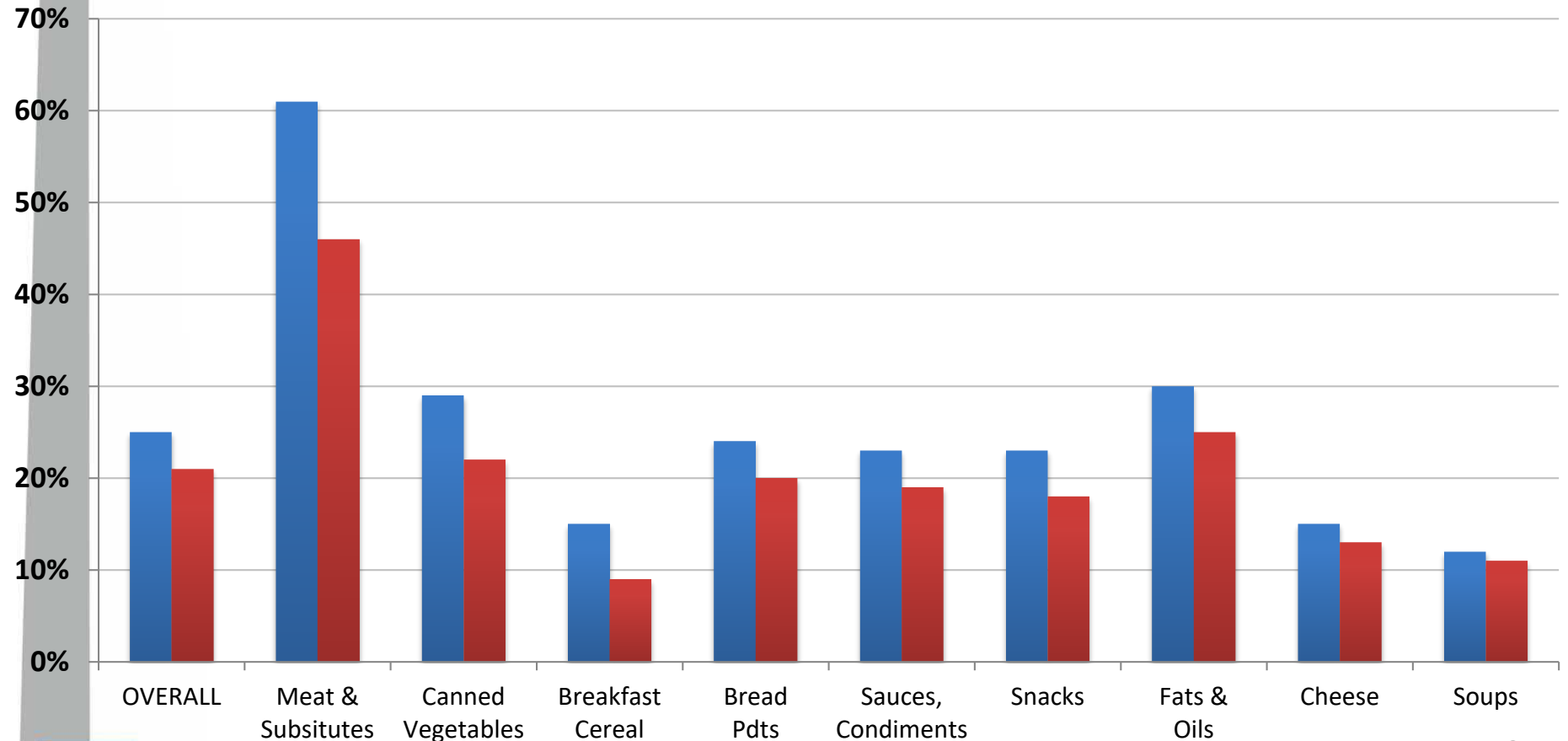
Source: Arcand et al, *Appl. Physiol. Nutr. Metab.* 41: 684–690 (2016)

# Important Variations in minor subcategories: Packaged Bread Products

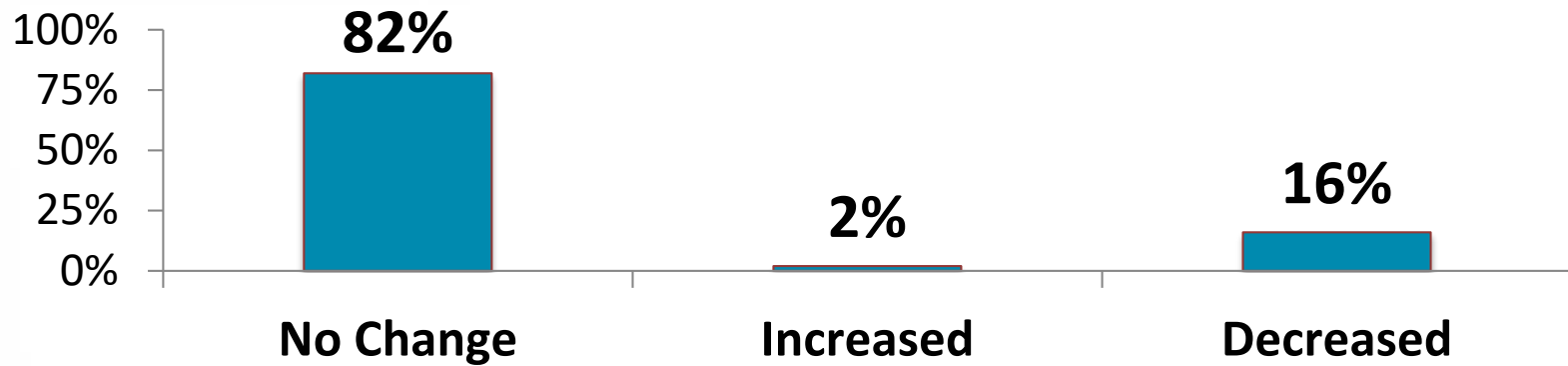


# Fewer foods exceeded Health Canada's Maximum Levels in 2013

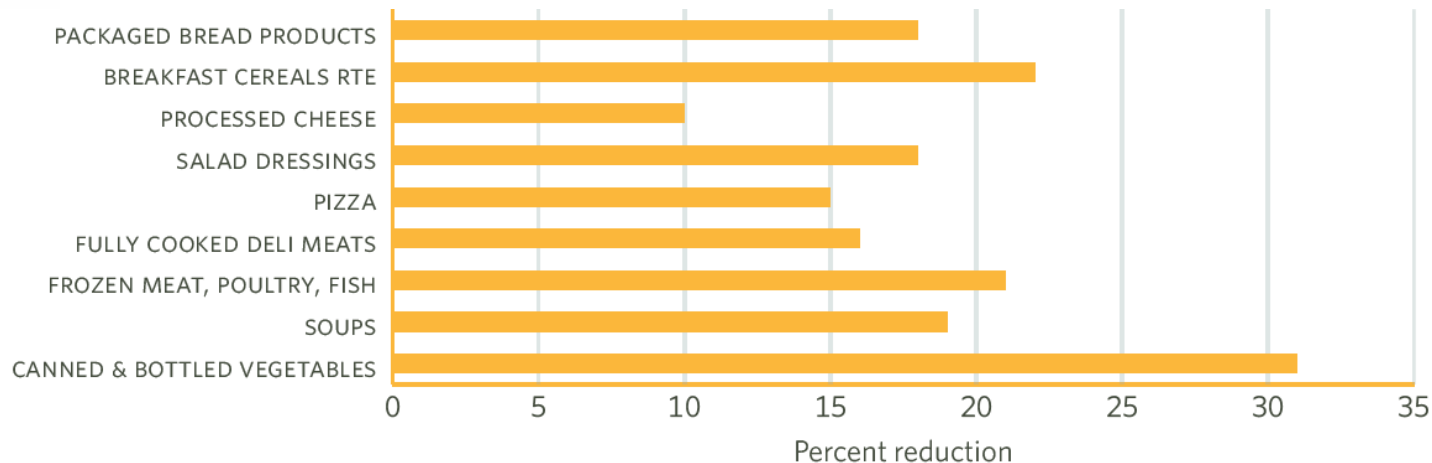
■ 2010 ■ 2013



# However, 82% of food categories had no significant change in sodium content



## Matched-Pair reformulated foods: 9% of the foods (n=542)



Source: Arcand et al, *Appl. Physiol. Nutr. Metab.* 41: 684–690 (2016)

# Conclusions – Interim Results



Sodium reduction has occurred in Canada

- Changes are not occurring at the same rate or to the same extent in all food categories
- There is evidence that reformulation is occurring in the highest sodium foods

Data collection in 2017 has been completed to determine if sodium levels foods in Canadian have met the 2016 goals.

# PAHO Salt Overview

- Technical Advisory Group (TAG):

- *Researchers, civil society, health authorities*
- *From the Region and abroad*

- 5 areas of work:

1. Social marketing;
2. **Surveillance;**
3. Engagement of the private sector  
(Salt Smart Consortium);
4. Synchronization of salt/sodium reduction and salt fortification programs;
5. Scientific research and study quality/methodology



□ Emphasis on developing resources and tools to support public health authorities to establish or continue with national strategies.



# Key milestones in the Region

- *By 2017, **20** countries in the Region were addressing dietary salt/sodium reduction compared to **3** in 2009.*
- ***12 of 20 at the national-level** (Argentina, Barbados, Brazil, Canada, Chile, Columbia, Costa Rica, Ecuador, Mexico, Paraguay, Unites States, and Uruguay).*
- ***10 of the 12 have targets and timelines for sodium in specified food categories:***
  - *Voluntary targets: Argentina, Brazil, Canada, Chile, Costa Rica, Cuba, Mexico, Paraguay, USA, and Uruguay*
  - *Voluntary and regulated components to their approaches: Argentina, Chile, Colombia, Ecuador, Paraguay*
  - *Regulated: Paraguay has regulated salt content of bread*

# Surveillance – Sodium Targets



Pan American  
Health  
Organization



World Health  
Organization

REGIONAL OFFICE FOR THE Americas

- **PAHO Report: *Guide for Setting Targets and Timelines to Reduce the Salt Content of Food***
- **A set of harmonized regional targets for 12 key food categories**, released in January 2015
- **2015 – Collaborative Project in 15 countries** to collect baseline sodium content for 12 key food categories with sodium targets.

**Targets:** [http://www.paho.org/hq/index.php?option=com\\_content&view=article&id=10399&Itemid=41253&lang=en](http://www.paho.org/hq/index.php?option=com_content&view=article&id=10399&Itemid=41253&lang=en)

**PAHO Salt Reduction** [http://www.paho.org/hq/index.php?option=com\\_content&view=article&id=2015&Itemid=4024&lang=en](http://www.paho.org/hq/index.php?option=com_content&view=article&id=2015&Itemid=4024&lang=en)

# Harmonized Regional Targets for 12 key food categories

	ARGENTINA <sup>4</sup>		BRAZIL <sup>5</sup>		CANADA <sup>6</sup>		CHILE <sup>7</sup>		UK <sup>8</sup>	
BREAD	breads with bran	503 (2015)	artisanal bakery (French) bread	586 (2014)	pantry bread, rolls, bagels, croissants, flatbread	520 (2016)	artisanal bakery bread	400 (2014) <sup>9</sup>	bread and rolls	450 (2017)
	breads without bran	476 (2015)	industrially produced loaf bread	522 (2014)	hearth bread	600 (2016)	private label supermarket bread	400 (2014) <sup>9</sup>	bread and rolls with additions	450 (2017)
	frozen breads	527 (2015)	industrially produced buns	430 (2014)					morning goods – yeast raised	350 (2017)
									morning goods – powder raised	500 (2017)
REGIONAL TARGET: 600 mg Na / 100g (2016); LOWER TARGET: 400 mg Na / 100g (2016)										

## PRINCIPLES

- Based on existing maximum targets approved by governments in the Americas
- Are **VOLUNTARY** starting points. Governments may set or regulate different targets, and are encouraged to develop more stringent targets appropriate to their national situation
- **REGIONAL TARGET** for a food category is the highest value in the range of existing maximum values; it is hoped that the regional target will evolve towards the lower target in the range.
- **LOWER TARGETS** are the lowest in the range of existing maximum values/upper limits per key food category set by countries in the Americas.
- **TARGETS** will be revised on a two-year cycle
- **MONITORING AND EVALUATION** will be transparent

# 12 KEY FOOD CATEGORIES:

1. **BREADS**
2. **SOUPS AND NOODLES**
  - SOUPS, WET AND DRY (AS CONSUMED);
  - NOODLES IN BROTH (AS CONSUMED)
3. **MAYONNAISE**
4. **BISCUITS AND COOKIES**
5. **CAKES**
6. **MEATS**
  - MEAT AND COOKED SAUSAGES , RAW AND PROCESSED
  - CURED MEATS DRY AND PRESERVED AT ROOM TEMPERATURE
  - BREADED MEAT AND CHICKEN
7. **BREAKFAST CEREALS**
8. **DAIRY (CHEESE AND PROCESSED CHEESE PRODUCTS)**
9. **BUTTER/DAIRY SPREADS**
10. **SNACKS**
11. **PASTA**
  - PASTA AND NOODLES LONG TERM (DRIED, RAW)
  - PASTA AND NOODLES LONG TERM (AS CONSUMED)
12. **CONDIMENTS**
  - SPICES FOR RICE AND MAIN AND COMPANIONS (no meat or fish) DISHES,
  - MEAT AND FISH CONDIMENTS;
  - CUBES AND POWDER FORM FOR BROTHES AND CONSOMMÉS

## **Data Collection Coordinated in country by the Latin Foods Network and country/ regional WHO offices**

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- **CHILE:** *Dra. Lilia Masson, OPS Chile: Roberto Del Aguilla*
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- **CUBA:** *Dr. José Luis Rodríguez, OPS Cuba: Dra Vivian Perez*
- **ECUADOR:** *Dra Johana Ortiz U, OPS Ecuador: Dr. Roberto Montoya*
- **GUATEMALA:** *Dra. Ana Victoria Román, OPS Guatemala: Olivia Brathwaite*
- **JAMAICA:** *Audrey Morris, PAHO*
- **MEXICO:** *L.N. Maricruz Morales Zárate, Instituto Nacional de Salud Pública*
- **PANAMA:** *Mgtr. Leticia de Núñez, OPS Panamá: Adelina Barantes*
- **PARAGVAY:** *Dra. Felicia Canete, OPS Paraguay: Ing Emilio Ramirez*
- **PERU:** *Dra. María Reyes García, OPS Perú: Dr Miguel Malo*
- **TRINIDAD AND TOBAGO:** *June Holdip, MS RD*
- **Analyses and data review:** *K. Benavides Aguilar, A. Blanco-Metzler INCIENSA; J. Arcand UOIT; B. Legetic, R. Grajeda, PAHO; M. L’Abbe, UofT*

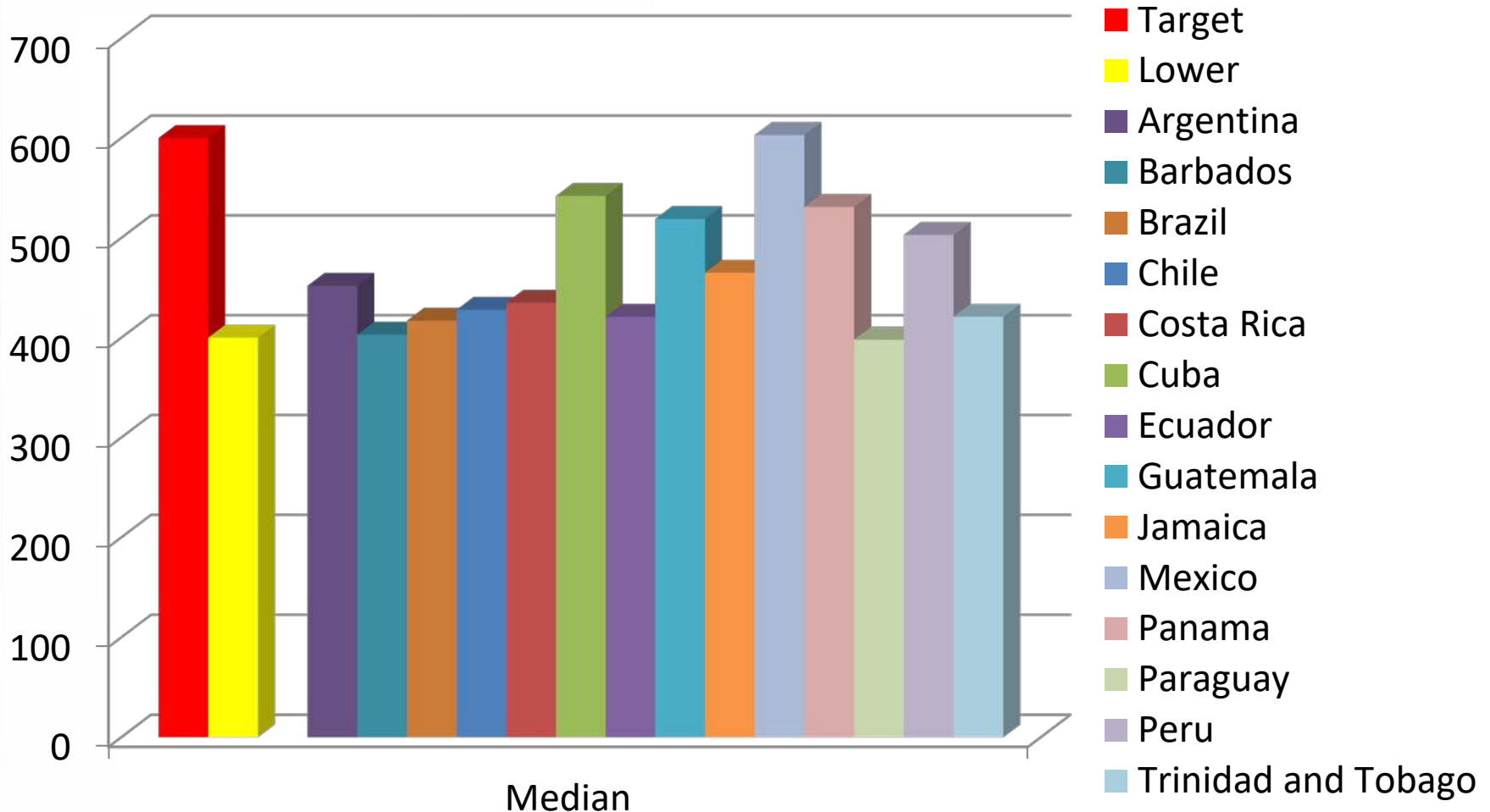
# Data Collected From Food Labels



# RESULTS - No. of Foods Collected

Country	Processed Foods (# collected)
Argentina	1275
Barbados	1353
Brazil	1382
Chile	1328
Costa Rica	1224
Cuba	241
Ecuador	1313
Guatemala	1108
Jamaica	1051
México	1424
Panamá	1509
Paraguay	981
Perú	850
Trinidad and Tobago	1318
<b>TOTAL</b>	<b>16,357</b>

# Results: Bread / Pan





# Many already meet the Lower Target!

Pan (Bread)	n	Lower Target (mg/100 g)	No. Meet Lower Target (%)	Regional Target (mg/100 g)	No. Meet Regional Target (%)	No. Exceed Regional Target (%)
Argentina	123	400	41 (33%)	600	50 (41%)	32 (26%)
Barbados	100	400	33 (33%)	600	56 (56%)	9 (9%)
Brazil	101	400	47 (46,5%)	600	46 (45,5%)	8 (8%)
Chile	106	400	48 (45,5%)	600	51 (48%)	7 (6,5%)
Costa Rica	83	400	30 (36%)	600	32 (39%)	21 (25%)
Cuba	24	400	1 (4%)	600	16 (67%)	7 (29%)
Ecuador	106	400	38 (36%)	600	59 (55,5%)	9 (8,5%)
Guatemala	68	400	28 (41%)	600	29 (43%)	8 (12%)
Jamaica	72	400	14 (19,5%)	600	52 (72%)	6 (8,5%)
México	112	400	37 (33%)	600	39 (35%)	36 (32%)
Panamá	137	400	31 (22,5%)	600	68 (50%)	38 (27,5%)
Paraguay	76	400	34 (44,5%)	600	33 (43,5%)	9 (12%)
Perú	68	400	16 (23,5%)	600	37 (54,5%)	15 (22%)
Trinidad and Tobago	95	400	36 (38%)	600	51 (53,5%)	8 (8,5%)

# Conclusions

- Data can provide the basis for monitoring progress in the years ahead; another collection planned for 2018
- Data are available for the Americas overall, and by country as well as for category/brand specific data
- Can indicate food categories in which countries are making good progress, and other areas where progress is more challenging
- Can be used to update existing regional and national targets
- Data can have a much broader application in future: (i.e. can be used to examine sugar, calories, fat levels, etc.)