

Punta Cana, Dominican Republic May 14-17, 2019













# HE RTS IN THE AMERICAS Regional Workshop

# Population Approaches for Hypertension Prevention & Control

### Sonia Angell, MD MPH

TEPHINET, PAHO Public Health Consultant

USA















# Lifestyle is Key to CVD Prevention <u>&</u> Control



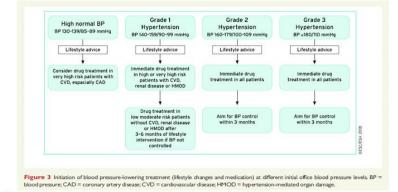
#### Modules



Healthy-lifestyle counselling Evidence-based treatment protocols Access to essential medicines and technology Risk based charts (available soon) Team-based care Systems for monitoring Implementation manual (available soon)

Source: WHO http://www.who.int/cardiovascular\_diseases/hearts/en/

### ECS/ESH Hypertension Guidelines 2018: Hypertension Classification and Treatment



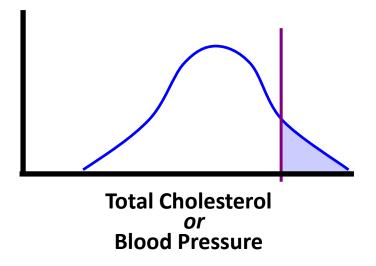
Slide Source: DiPette D, Hearts in the Americas Iniatiive Technical Visit, Chile 2018







# **High Risk Approaches**



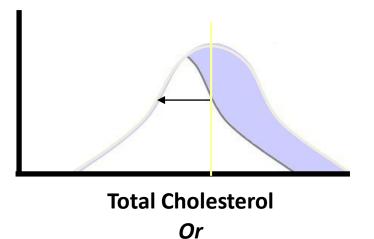
Based upon: Rose International Journal of Epidemiology, Volume 30, Issue 3, 1 June 2001, Pages 427–432







# **Population Approach**



**Blood Pressure** 

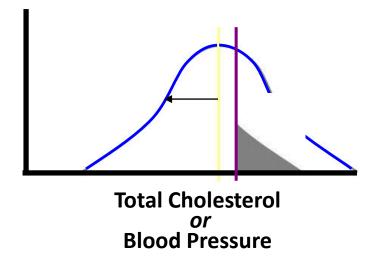
Source: Rose International Journal of Epidemiology, Volume 30, Issue 3, 1 June 2001, Pages 427–432







# **Combining Approaches**



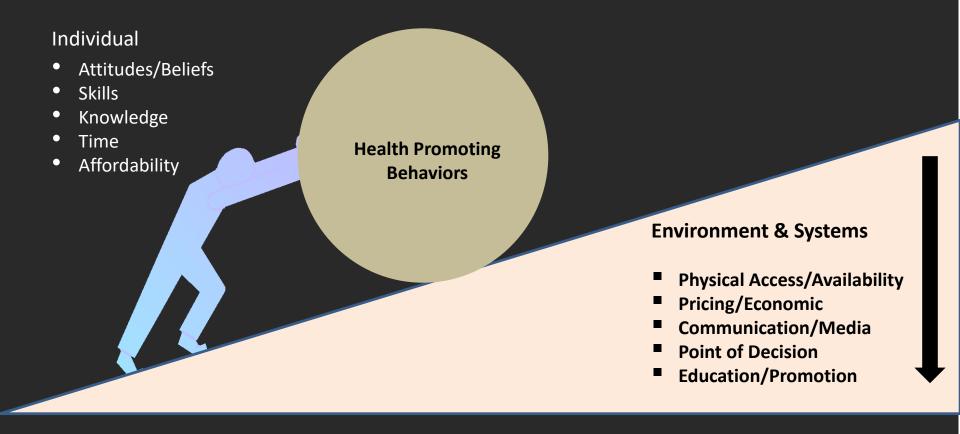
Source: Rose International Journal of Epidemiology, Volume 30, Issue 3, 1 June 2001, Pages 427–432







### Make the Healthy Choice the Easy Choice









### "BEST BUYS" INTERVENTIONS FOR NCD PREVENTION AND CONTROL

### TOBACCO

- 1. Increase tobacco taxes and prices
- 2. Smoke-free policies
- 3. Graphic health warnings / plain packaging
- 4. Advertising, promotion & sponsorship bans
- 5. Mass media campaigns

#### **CANCER / CVD / DIABETES**

- Drug therapy and counselling for high-risk persons
- 15. HPV vaccination for girls
- 16. Cervical cancer screening

### ALCOHOL

- 6. Increase taxes
- 7. Restrictions on advertising
- 8. Regulations on availability and physical access

### DIET & PHYSICAL INACTIVITY

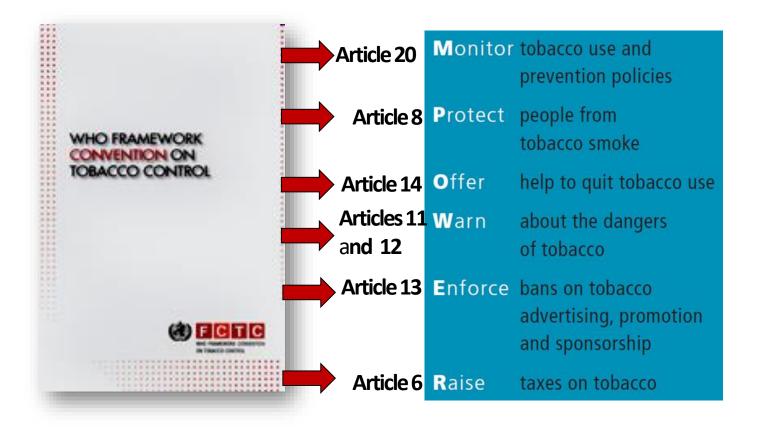
- 9. Reduce salt content through reformulation of food products
- 10. Providing supportive environments
- 11. Behavioural change communication and mass media campaigns
- 12. Front-of-pack labelling
- 13. Awareness campaign for physical activity







### Taking on Tobacco: MPOWER





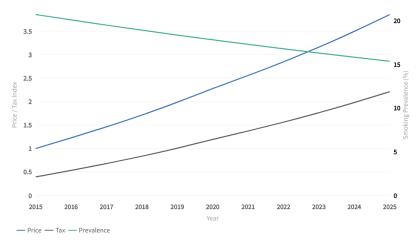




### Increasing Price: Price Elasticity of Demand

#### Meeting the WHO 30% Prevalence Reduction Target Globally Through Tobacco Tax Increases

Tobacco tax increases that result in higher tobacco product prices are among the most effective tobacco control measures available



Making cigarettes four times more costly in all countries globally by 2025 would reduce the world's tobacco use prevalence from the current 21% to 15% in 2025. Such a drop in prevalence would be sufficient to reach the World Health Organization target of reducing tobacco use prevalence 30% by 2025. This scenario is attainable, but would require a 7-fold excise tax increase.

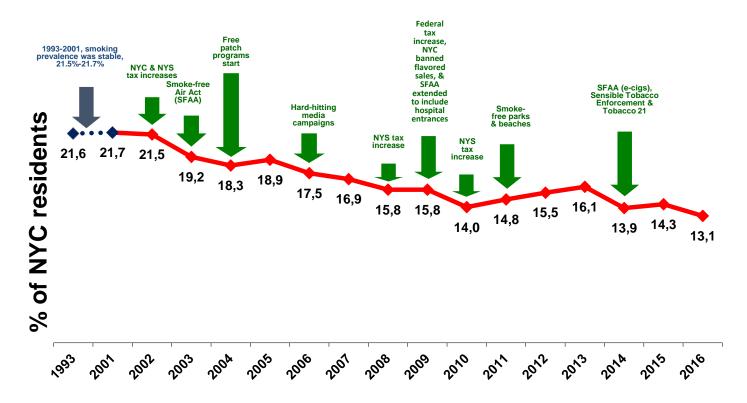








## **Adult Smoking in NYC**





Source: NYC Community Health Survey





# **Improving Nutrition**



Adapted from Chapter 1.3 Managing Value Chains for Improved Nutrition by Shauna Downs and Jess Fanzo, p. 49, YEAR







### **Decreasing Sodium to Reduce Blood Pressure**

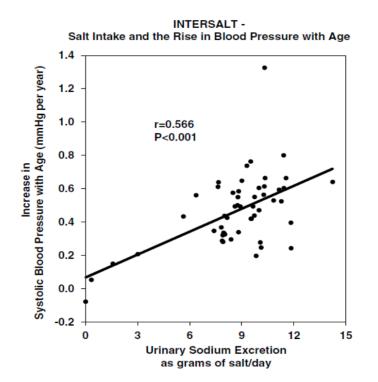








# **Sodium Intake and Health**



Primarily linked with CVD

- Sodium consumption increases BP
- BP increases CVD risk
- Age, sex and baseline BP specific effects

Also associated with: left ventricular hypertrophy, kidney disease, renal stones, osteoporosis, gastric cancer

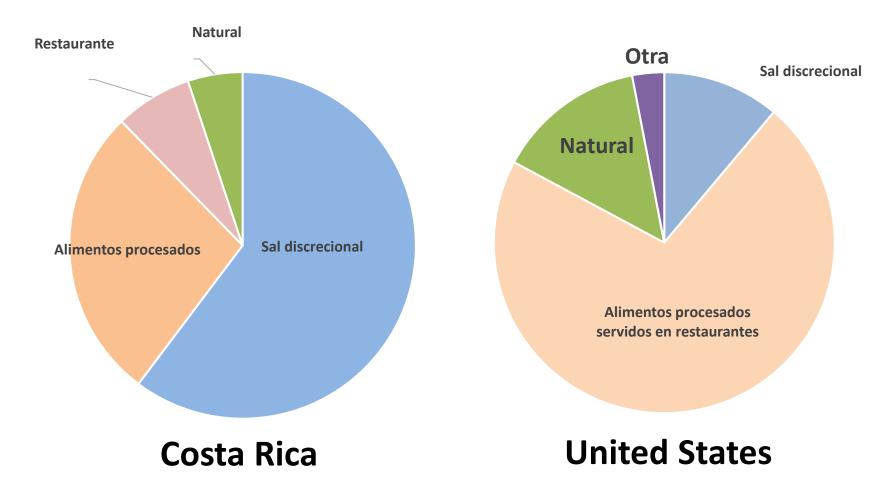


Slide Adapted from WHO SHAKE presentation, 2018





### **Relative Contribution of Sodium Varies**



Harnack et al. Sources of Sodium in US Adults from 3 Geographic Regions. Circulation. 2017 Blanco-Metzler et al. Baseline and Estimated Trends of Sodium Availability.... Nutrients. 2017.













#### NATIONAL SALT REDUCTION INITIATIVE PACKAGED FOOD CATEGORIES AND TARGETS

MAIN PACKAGED FOOD CATEGORY	PACKAGED Food Category	PACKAGED FOOD CATEGORY DESCRIPTION	BASELINE 2009 SALES- WEIGHTED MEAN	Targets apply to a company's sales-weighted mean sodium	
				2012 TARGET	2014 TARGET
1. Bakery Products	1.1 Breads and rolls	Savory yeast-leavened breads and rolls e.g., bagels, English muffins, croissants, flatbreads, pre-packaged sliced bread, soft bread slicks, and soft pretals. Excludes dough and frozen or refrigerated bakery products.	485 mg/100g	440 mg/100g	360 mg/100g
	1.2 Sweet breads and rolls	Sweet yeast-leavened breads and rolls e.g., Danish, sweet rolls, and yeast-leavened doughnuts.	295 mg/100g	270 mg/100g	220 mg/100g
	1.3 Tortillas and wraps	Refrigerated and shelf stable tortillas and wraps, savory chemically-leavened breads e.g., biscuits, corn bread, and hush puppies. Excludes wonton skins and frozen bakery products.	717 mg/100g	650 mg/100g	540 mg/100g
	1.4 Cakes, snack cakes, muffins, and toaster pastries	Medium and light weight cake, snack cakes, muffins, toaster pastries, cake doughnuts, coffee cake, crumb cake, scones, brownies, and sweet quick-type breads. Excludes heavy weight cake e.g., cheesecake.	359 mg/100g	310 mg/100g	250 mg/100g
	1.5 Cookies	Filled and unfilled cookies, sandwich cookies, and tea biscuits. Excludes cookie dough and frozen or refrigerated cookies.	367 mg/100g	310 mg/100g	260 mg/100g
	1.6 Crackers	Filled and unfilled crackers and puffed cereal-grain cakes e.g., butter crackers, cheese crackers, sandwich crackers, soda crackers, cheese and cracker snack packs, graham crackers, and rice cakes. Excludes animal crackers (see 1.5), bagei chips, crisp breads, hard breadsticks, and melba toast.	918 mg/100g	780 mg/100g	640 mg/100g
	1.7 French toast, pancakes, and waffles	Frozen French toast, pancakes, and waffles e.g., French toast sticks, and plain and flavored pancakes and waffles. Excludes refrigerated and shelf stable French toast, pancakes, waffles, and dry batter mixes. Excludes mixed dishes containing French toast, pancakes, and waffles (see 10.1-10.3).	569 mg/100g	510 mg/100g	430 mg/100g
2. Cereal and Other Grain	2.1 Instant hot	Flavored and unflavored instant oatmeal, farina	562 mg/100g	480 mg/100g	390 mg/100g

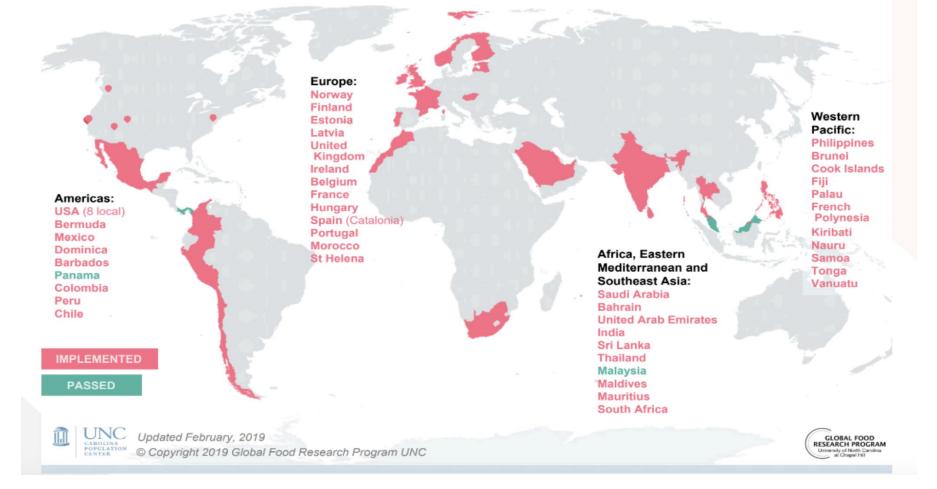
Source: http://www.nyc.gov/html/doh/downloads/pdf/cardio/packaged-food-targets.pdf







### Sugary drink taxes around the world



http://www.healthyfoodamerica.org/map







### **Front of Package Labeling in Chile**









## **NYC Food Standards**

### New York City Food Standards **MEALS/SNACKS PURCHASED AND SERVED**

This document outlines standards for food purchased and meals and snacks served, with the goal of improving the health of all New Yorkers served by City agencies and their contractors. The New York City Food Standards ("Standards") aim to reduce the prevalence of chronic disease, such as obesity, diabetes and cardiovascular disease, by increasing access to healthy foods and improving dietary intake.

Agencies and their contractors are required to follow the standards described in each of the four sections:

#### Section I. Standards for Purchased Food

Addresses food items purchased and provides specific standards by food category.

Section II. Standards for Meals and Snacks Served

Addresses the overall nutrient requirements for meals and provides standards for snacks and special occasions.

#### Section III. Agency and Population-Specific Standards and Exceptions

Addresses standards for specific populations (e.g., children) and agencies. The additions and exceptions in this section supersede the first two sections. For example, children under 2 years may be served whole milk, instead of 1% or non-fat milk as required in Section I.

#### Section IV. Sustainability Recommendations

Addresses recommendations to support a healthy and ecologically sustainable food system.

Source: Lederer, Ashley, et al. American journal of preventive medicine 46.4 (2014): 423-428. https://www1.nyc.gov/site/foodpolicy/initiatives/procurement.page

### **Your meals** are healthier than ever







# Thank you!

### Sonia Y. Angell, MD, MPH TEPHINET Consultant



This publication was supported by a grant from the Centers for Disease Control and Prevention (CDC) through TEPHINET, a program of the Task Force for Global Health, Inc. Its contents are solely the responsibility of the authors and do not necessarily represent the views of The Task Force for Global Health, Inc., TEPHINET, or the CDC.