



# Organización Panamericana de la Salud



*Oficina Regional de la*  
Organización Mundial de la Salud

<http://www.paho.org>

## PAHO/WHO: advocating for NCD prevention and control



Miguel Malo, PAHO/WHO Perú  
march, 2015

- NCDs and social determinants
- Who resolutions/United Nations Declaration
- Challenges

**NCDs account for 63% of all deaths:** primarily cardiovascular diseases, cancers, chronic respiratory diseases and diabetes, are responsible for 63% of all deaths worldwide

**80% of NCDs deaths occur in low and middle-income countries.**

**More than 9 million of all deaths attributed to NCDs occur before the age of 60.**

- **NCDs are largely preventable.**

- Noncommunicable diseases are preventable through effective interventions that tackle shared risk factors, namely: tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol

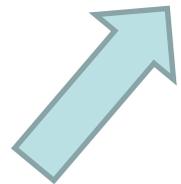
- **Eliminating major risks could prevent most NCDs.**

- If the major risk factors for noncommunicable diseases were eliminated, at around three-quarters of heart disease, stroke and type 2 diabetes would be prevented; and 40% of cancer would be prevented.

**•NCDs are not only a health problem but a development challenge as well.**

•Noncommunicable diseases force many people into, or entrench them in poverty due to catastrophic expenditures for treatment. They also have a large impact on undercutting productivity.

NCDs mortality  
and morbidity



Individual  
Life styles

Barriers to  
health care

**High sugar,  
saturated fats  
and salt  
consumption**

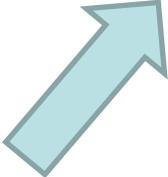
**Smoking**

**Physical  
inactivity**

**Harmful use  
of alcohol**



NCDs mortality  
and morbidity



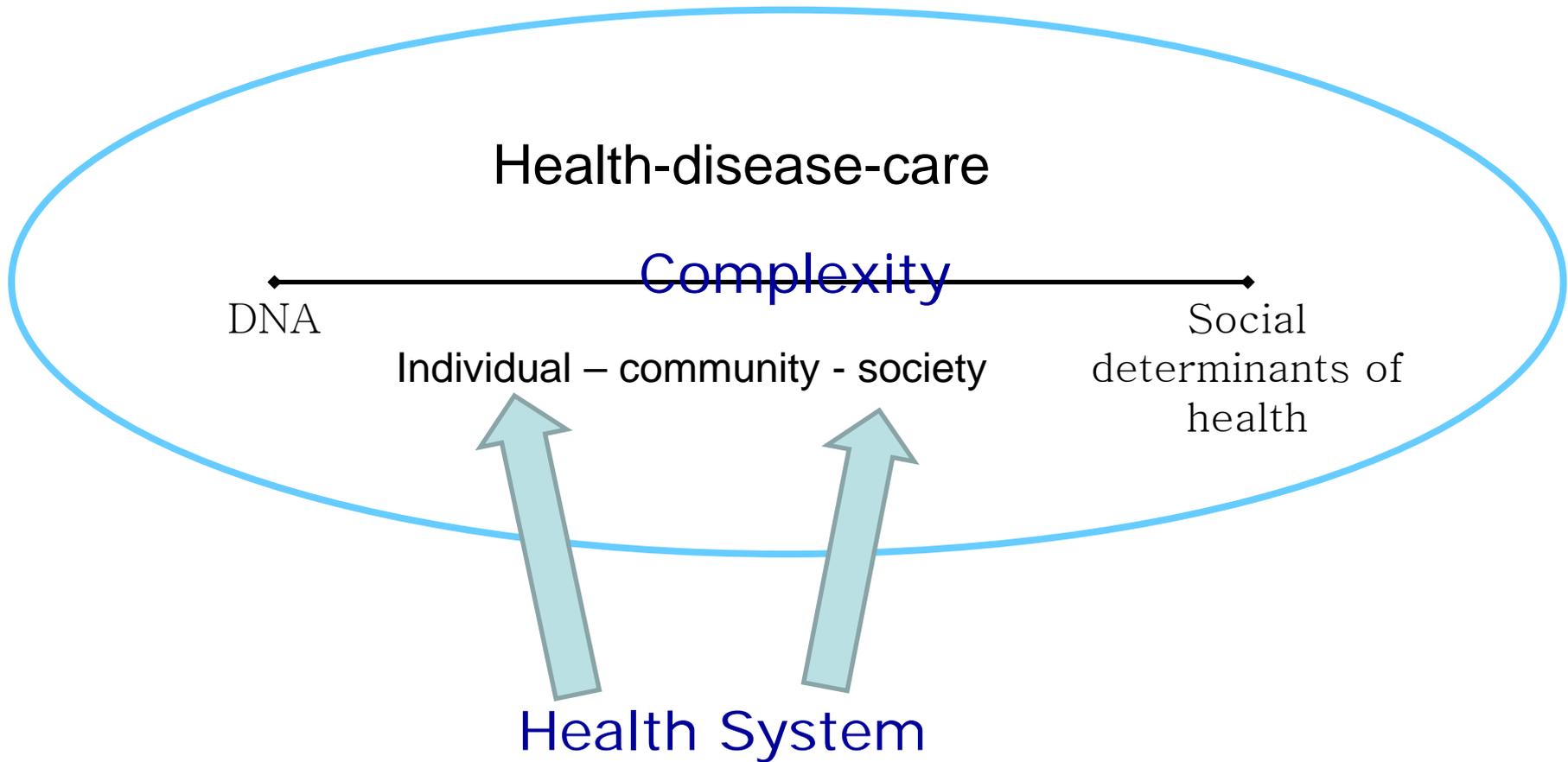
Eat healthy, don't  
smoke, be active,  
relax and please  
take your medication!



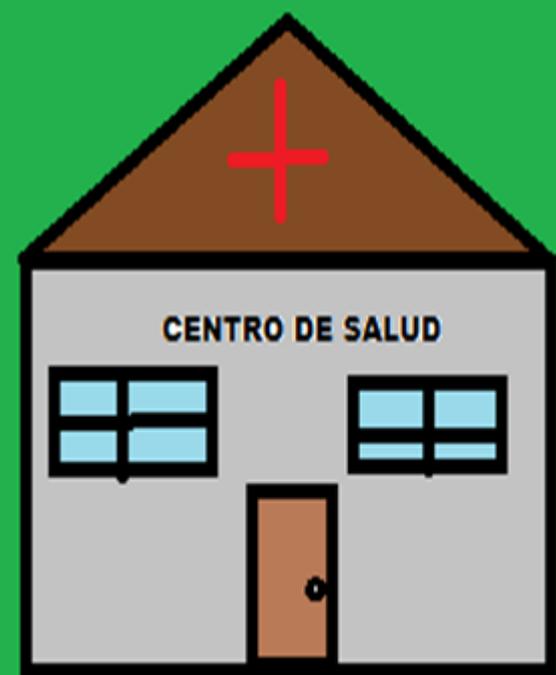
DNA



Social  
determinants of  
health









Physical and social  
context in which we live

CENTRO DE SALUD

**Social  
Determinants  
of health**



**It is not only an individual option, it is a socially, economically and culturally shaped choice**

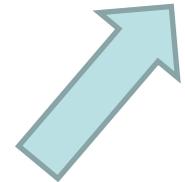
**Individual Life styles**

**Barriers to health care**

**High sugar,  
saturated fats  
and salt  
consumption**  
**Smoking**  
**Physical  
inactivity**  
**Harm alcohol  
consumption**  
**Behaviors  
related to care**



**NCDs mortality  
and morbidity**



Context in which we live

Individual Life styles

Barriers to health care

**Global economy**

**Globalization**

**Urbanization**

**Priorities for development**

**Environment that promotes a non healthy life style**

**Conditions that create barriers for health care accesibility**

**High sugar, saturated fats and salt consumption**

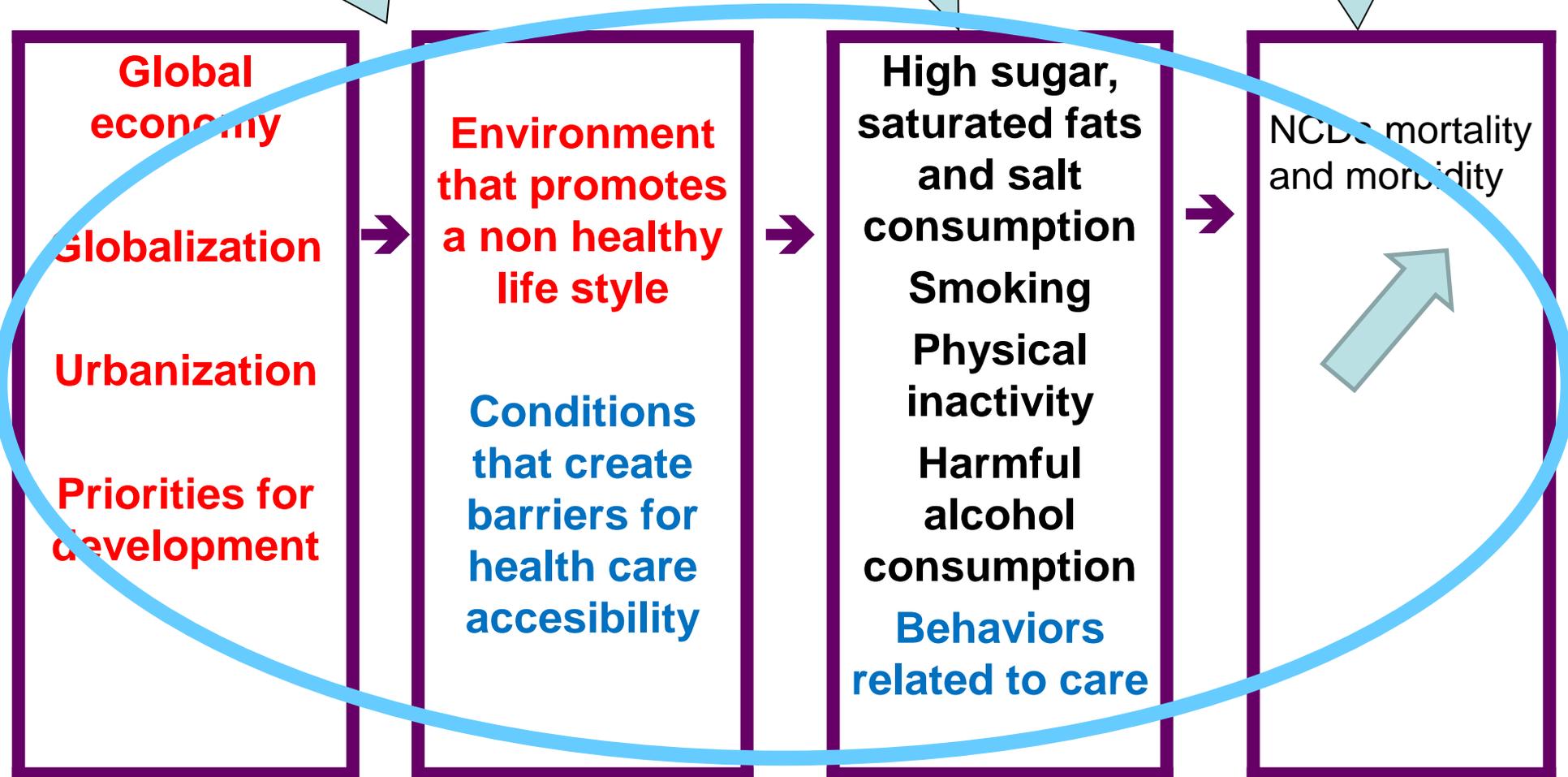
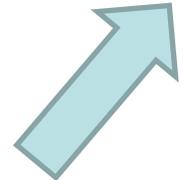
**Smoking**

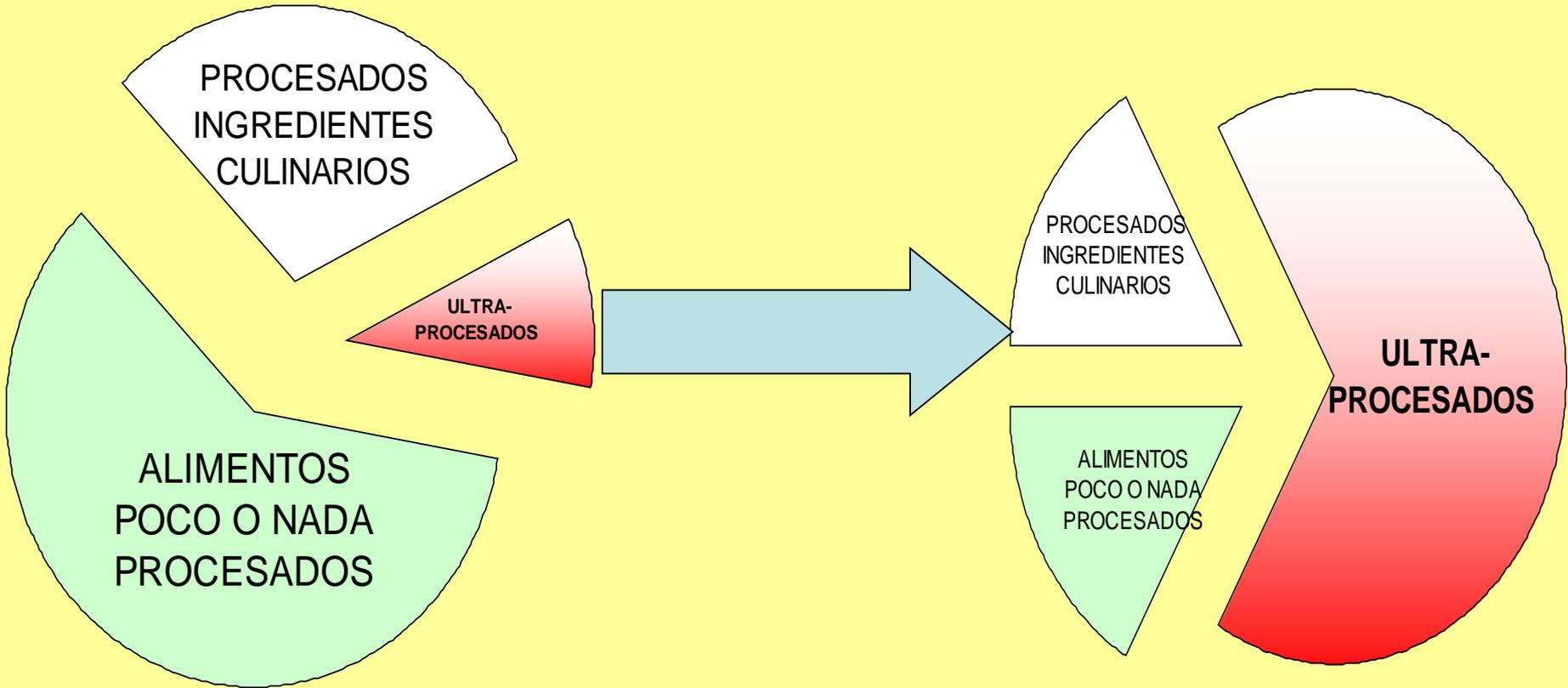
**Physical inactivity**

**Harmful alcohol consumption**

**Behaviors related to care**

**NCDE mortality and morbidity**





PROCESADOS  
INGREDIENTES  
CULINARIOS

ULTRA-  
PROCESADOS

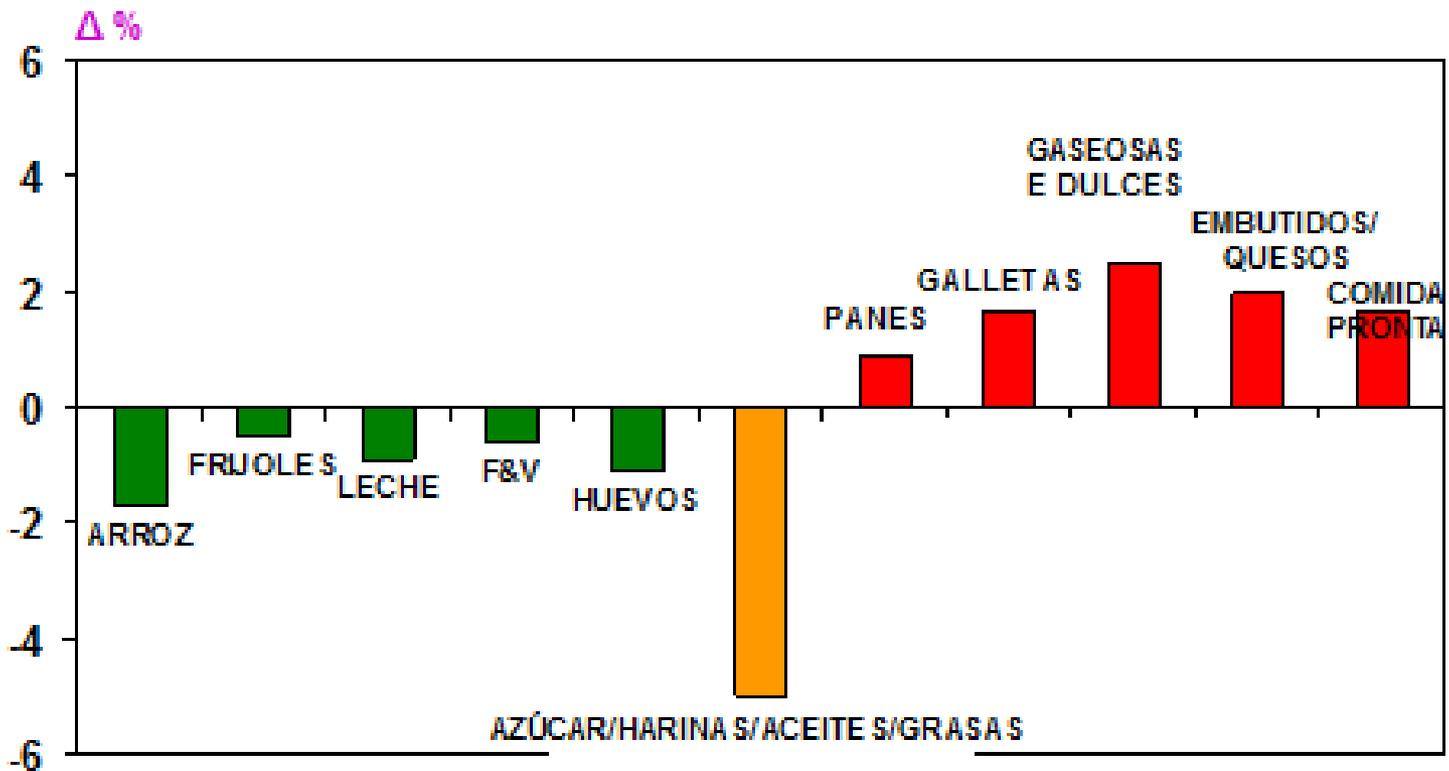
ALIMENTOS  
POCO O NADA  
PROCESADOS

PROCESADOS  
INGREDIENTES  
CULINARIOS

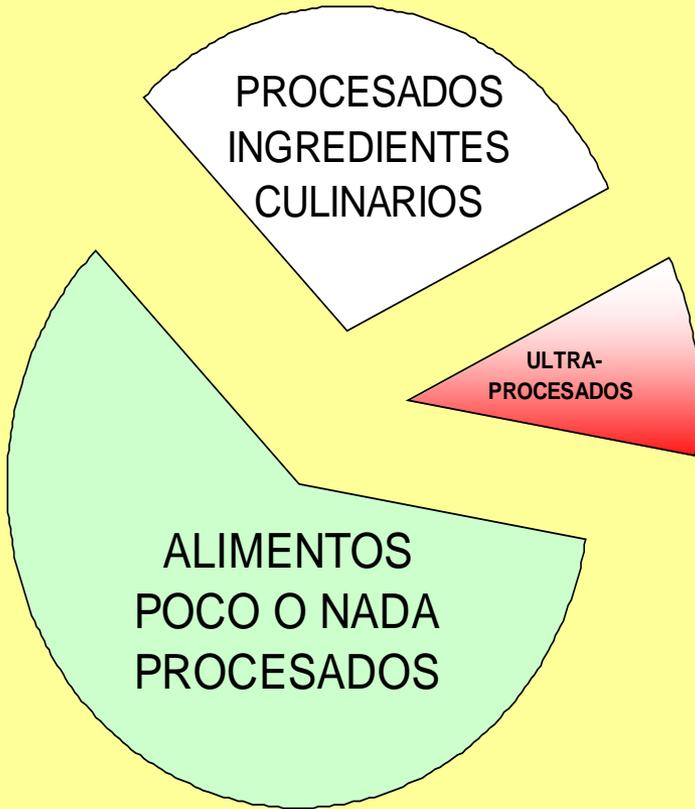
ALIMENTOS  
POCO O NADA  
PROCESADOS

ULTRA-  
PROCESADOS

# Changes on the total calories coming from food groups in Brazil, between 1987 y 2003, Brazil



C.A. Monteiro et al, Reunion CARMEN, Lima, 2009



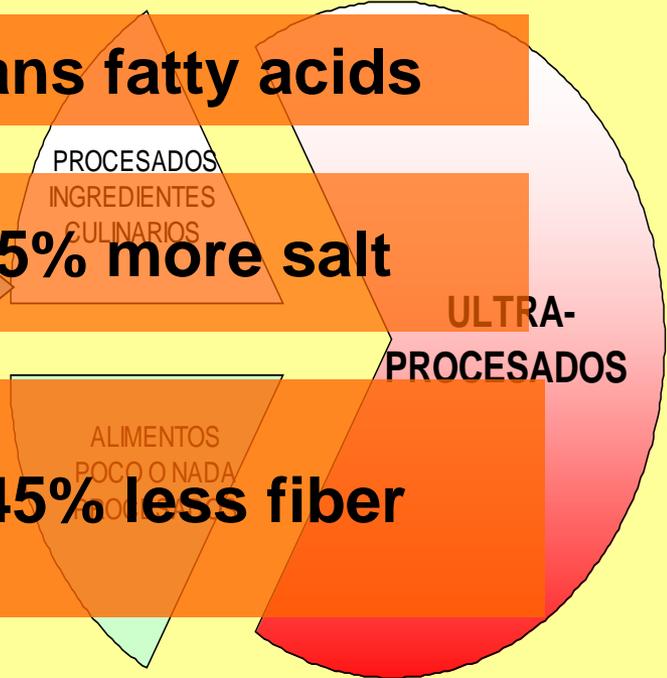
**UPF 30% free sugar**

**UPF 30% saturated fat**

**UPF trans fatty acids**

**UPF 15% more salt**

**UPF 45% less fiber**



# Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-Analysis

Lenny R. Vartanian, PhD, Marlene B. Schwartz, PhD, and Kelly D. Brownell, PhD

In a meta-analysis of 88 studies, we examined the association between soft drink consumption and nutrition and health outcomes. We found clear associations of soft drink intake with increased energy intake and body weight. Soft drink intake also was associated with lower intakes of milk, calcium, and other nutrients and with an increased risk of several medical problems (e.g., diabetes).

Study design significantly influenced results: larger effect sizes were observed in studies with stronger methods (longitudinal and experimental vs cross-sectional studies). Several other factors also moderated effect sizes (e.g., gender, age, beverage type). Finally, studies funded by the food industry reported significantly smaller effects than did non-industry-funded studies. Recommendations to reduce population soft drink consumption are strongly supported by the available science. (*Am J Public Health*. 2007;97:667–675. doi:10.2105/AJPH.2005.083782)

Soft drink consumption has become a highly visible and controversial public health and public policy issue. Soft drinks are viewed by many as a major contributor to obesity and related health problems and have consequently been targeted as a means to help curtail the rising prevalence of obesity, particu-

they displace other foods and beverages and, hence, nutrients; whether they contribute to diseases such as obesity and diabetes; and whether soft drink marketing practices represent commercial exploitation of children.<sup>3–5</sup>

The industry trade association in the United States (the American Beverage Associ-

## METHODS

We focused on research investigating the effects of sugar-sweetened beverages; diet and artificially sweetened beverages are noted only in certain cases for comparison purposes. We conducted a computer search through MEDLINE and PsycINFO using the key terms “soft drink,” “soda,” and “sweetened beverage.” We identified articles that assessed the association of soft drink consumption with 4 primary outcomes (energy intake, body weight, milk intake, and calcium intake) and 2 secondary outcomes (nutrition and health). We identified additional articles by searching each article’s reference section and the Web of Science database. Finally, we contacted the authors of each included article with a request for unpublished or in-press work, and we asked each author to forward our request

# Reducing Consumption of Sugar-Sweetened Beverages Is Associated With Reduced Blood Pressure

## A Prospective Study Among United States Adults

Liwei Chen, MD, PhD; Benjamin Caballero, MD, PhD; Diane C. Mitchell, MS, RD;  
Catherine Loria, PhD; Pao-Hwa Lin, PhD; Catherine M. Champagne, PhD, RD;  
Patricia J. Elmer, PhD; Jamy D. Ard, MD; Bryan C. Batch, MD;  
Cheryl A.M. Anderson, PhD, MPH, MS; Lawrence J. Appel, MD, MPH

**Background**—Increased consumption of sugar-sweetened beverages (SSBs) has been associated with an elevated risk of obesity, metabolic syndrome, and type II diabetes mellitus. However, the effects of SSB consumption on blood pressure (BP) are uncertain. The objective of this study was to determine the relationship between changes in SSB consumption and changes in BP among adults.

**Methods and Results**—This was a prospective analysis of 810 adults who participated in the PREMIER Study (an 18-month behavioral intervention trial). BP and dietary intake (by two 24-hour recalls) were measured at baseline and at 6 and 18 months. Mixed-effects models were applied to estimate the changes in BP in responding to changes in SSB consumption. At baseline, mean SSB intake was  $0.9 \pm 1.0$  servings per day ( $10.5 \pm 11.9$  fl oz/d), and mean systolic BP/diastolic BP was  $134.9 \pm 9.6/84.8 \pm 4.2$  mm Hg. After potential confounders were controlled for, a reduction in SSB of 1 serving per day was associated with a 1.8-mm Hg (95% confidence interval, 1.2 to 2.4) reduction in systolic BP and 1.1-mm Hg (95% confidence interval, 0.7 to 1.4) reduction in diastolic BP over 18 months. After additional adjustment for weight change over the same period, a reduction in SSB intake was still significantly associated with reductions in systolic and diastolic BPs ( $P < 0.05$ ). Reduced intake of sugars was also significantly associated with reduced BP. No association was found for diet beverage consumption or caffeine intake and BP. These findings suggest that sugars may be the nutrients that contribute to the observed association between SSB and BP.

**Conclusions**—Reduced consumption of SSB and sugars was significantly associated with reduced BP. Reducing SSB and sugar consumption may be an important dietary strategy to lower BP.

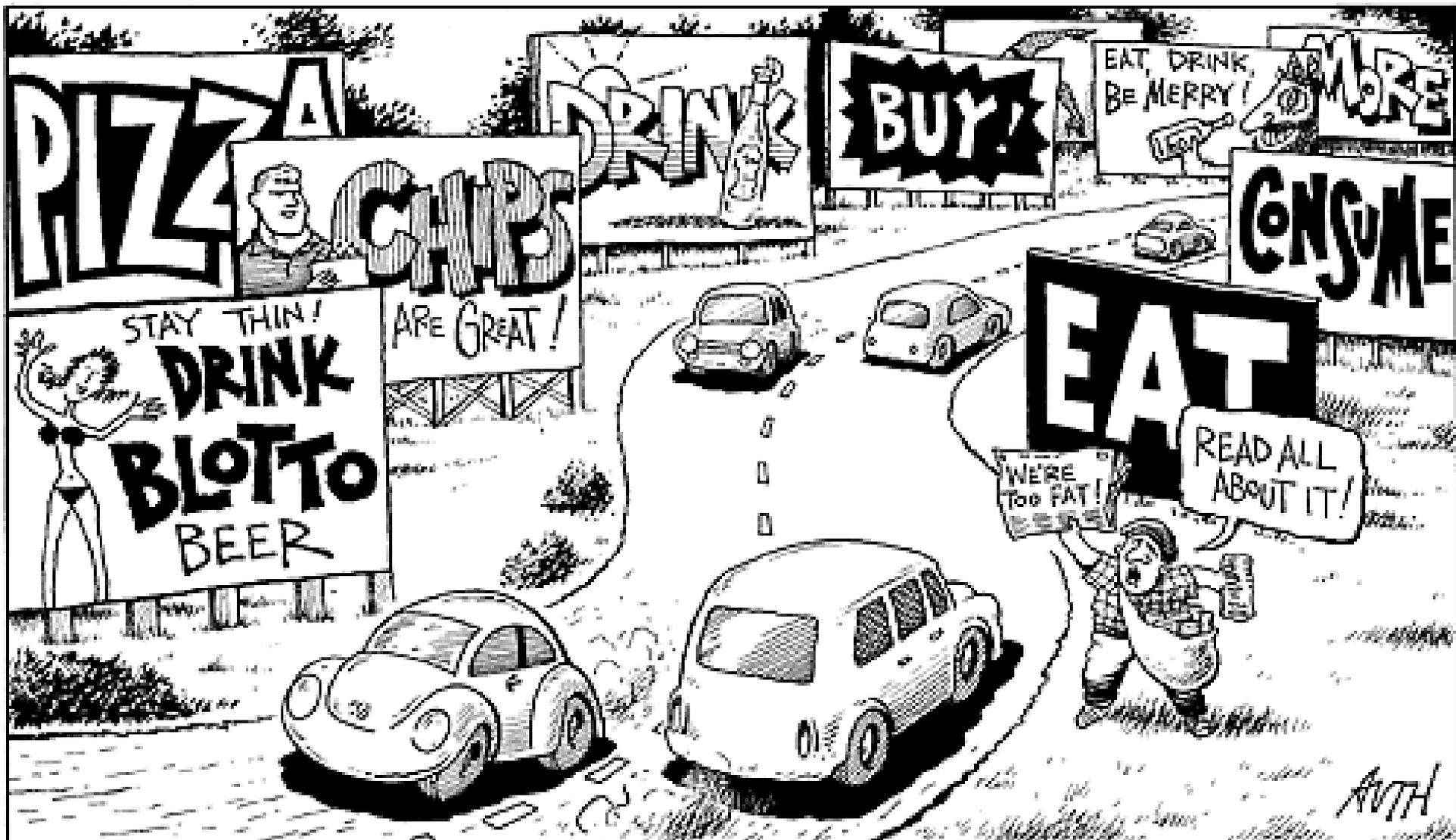
**Clinical Trial Registration**—URL: <http://clinicaltrials.gov>. Unique identifier: NCT00000616.

(*Circulation*. 2010;121:2398-2406.)

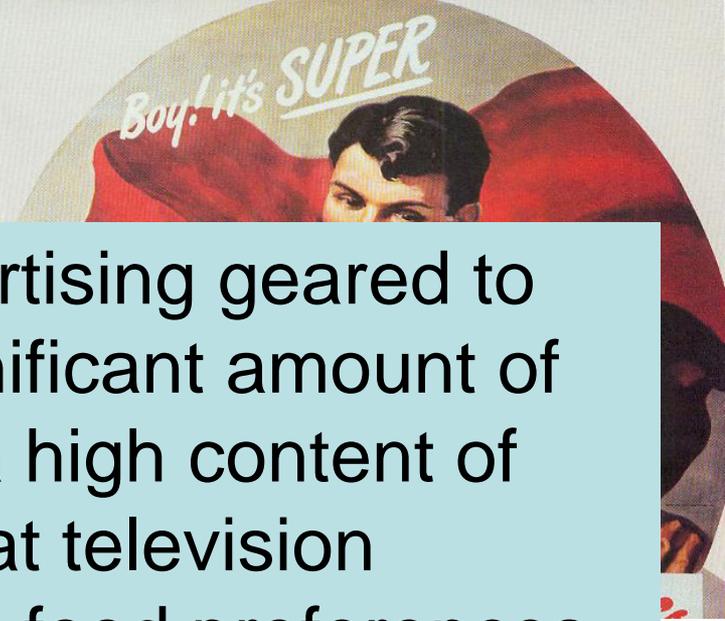
**10 percent rise in food prices would,**

- ***increase probability of frequent F&V consumption by 3%,***
- ***reduce BMI by 0.4% and***
- ***lower probability of being overweight by 5.9%***

Powell, et al., *Advances in Health Economics and Health Services Research*, 2007



\$11 BILLION IS SPENT YEARLY ADVERTISING CONVENIENCE FOODS,  
SNACKS AND ALCOHOLIC BEVERAGES.



Research shows that food advertising geared to children is extensive, and a significant amount of the marketing is for foods with a high content of fat, sugar or salt, also shows that television advertising influences children's food preferences, purchase requests and consumption patterns,



**"The set of recommendations on marketing of food and non-alcoholic beverages to children should play a significant role in helping member states promote healthier patterns of eating as part of efforts to reduce childhood obesity"**

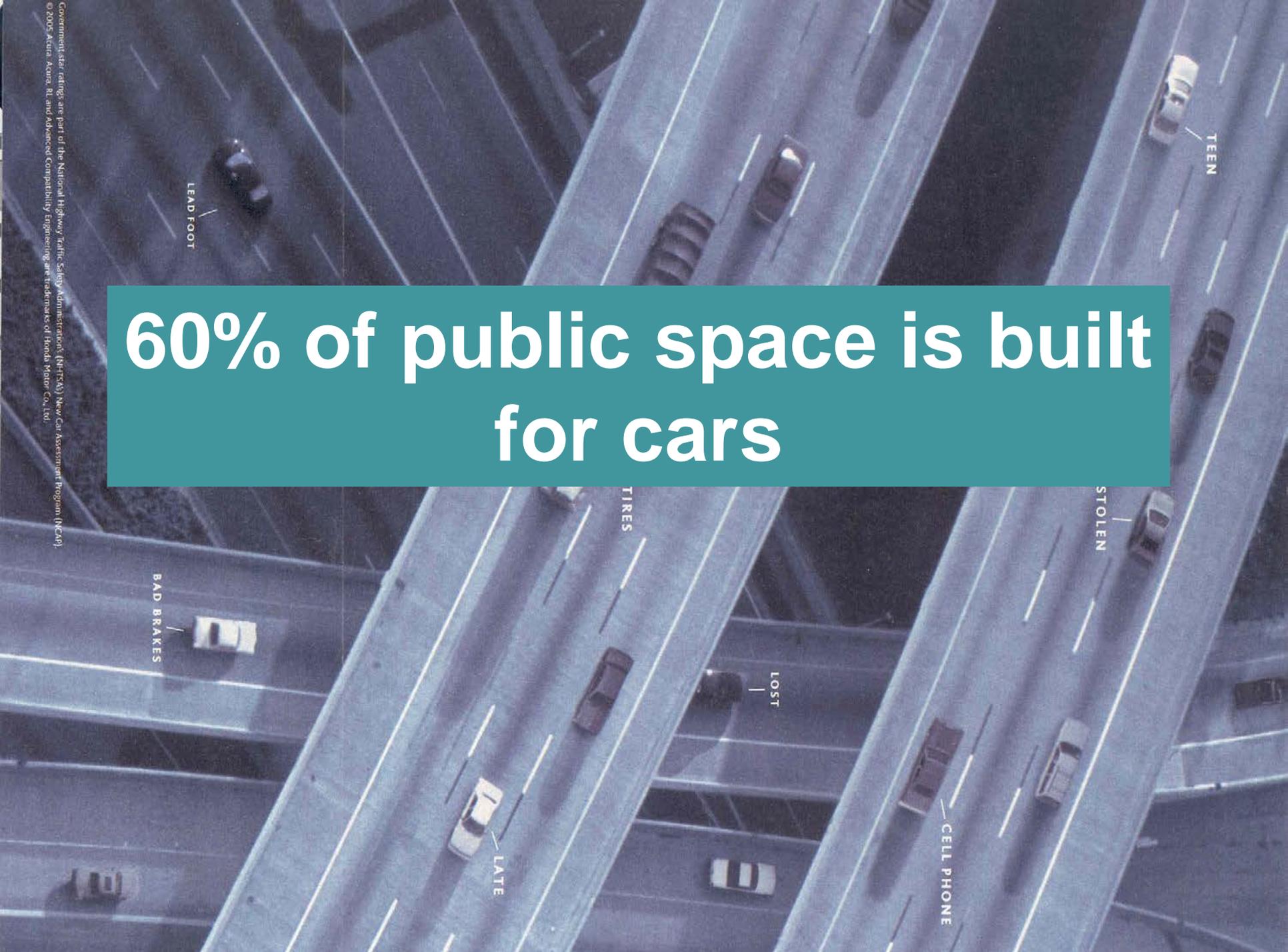
**"This is a priority for the Obama administration, in particular for the First Lady, who has raised awareness of childhood obesity and the importance of healthy eating."**

**U.S. Surgeon-General Regina Benjamin  
endorsed the plan at the WHO's WHA  
annual meeting:**







An aerial, top-down view of a multi-lane highway. Several cars are visible on the road. A central teal banner contains the text '60% of public space is built for cars'. Various labels with lines pointing to specific cars are scattered across the image: 'LEAD FOOT' points to a car in the top left; 'TEEN' points to a car in the top right; 'BAD BRAKES' points to a car in the middle left; 'LATE' points to a car in the bottom center; 'TIRES' points to a car in the middle center; 'LOST' points to a car in the middle right; 'CELL PHONE' points to a car in the bottom right; and 'STOLEN' points to a car in the top right.

# 60% of public space is built for cars