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Parallel session 1.3 'The commercial determinants of non-communicable diseases'
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The role of the transnational ultra-processed food industry in the pandemic of obesity and its associated diseases: problems and solutions

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Why regulatory policies to counteract strategies used by TN ultra-processed food industries to increase the sales of their products inexist in most countries or are restricted to a few products in others?

The TN UPF industry narrative 'food is not tobacco'

'We all need food'

 'Consumed in moderation and combined with other foods, any food (even those processed) can make part of a healthy diet'

'There are no unhealthy foods, only unhealthy diets'

An alternative narrative

(Nutrition and health. The issue is not food, nor nutrients, so much as processing. Public Health Nutr. 2009 May;12(5):729-31)

'We all need food'

 'Any food can make part of a healthy diet except ultra-processed foods, which are unhealthy by design and are formulated and marketed to be overconsumed and to displace healthier foods'

• 'As tobacco, ultra-processed foods should be strongly regulated'

Ultra-processed foods as defined by NOVA food classification system*

'Ultra-processed foods are technological formulations of raw and chemically modified food substances added of flavors, colors, emulsifiers and other cosmetic additives.'

Processes and ingredients of UPF allow the industry to obtain durable, ready-to-consume, hyper-palatable, and highly profitable products liable to replace all other NOVA food groups'

* Monteiro CA et al. Ultra-processed foods: what are they and how to identify them? Public Health Nutrition 2019 (in press)

Ultra-processed foods are formulated to be over-consumed and to replace real food

































Marketing of ultra-processed foods typically reinforces overeating ...



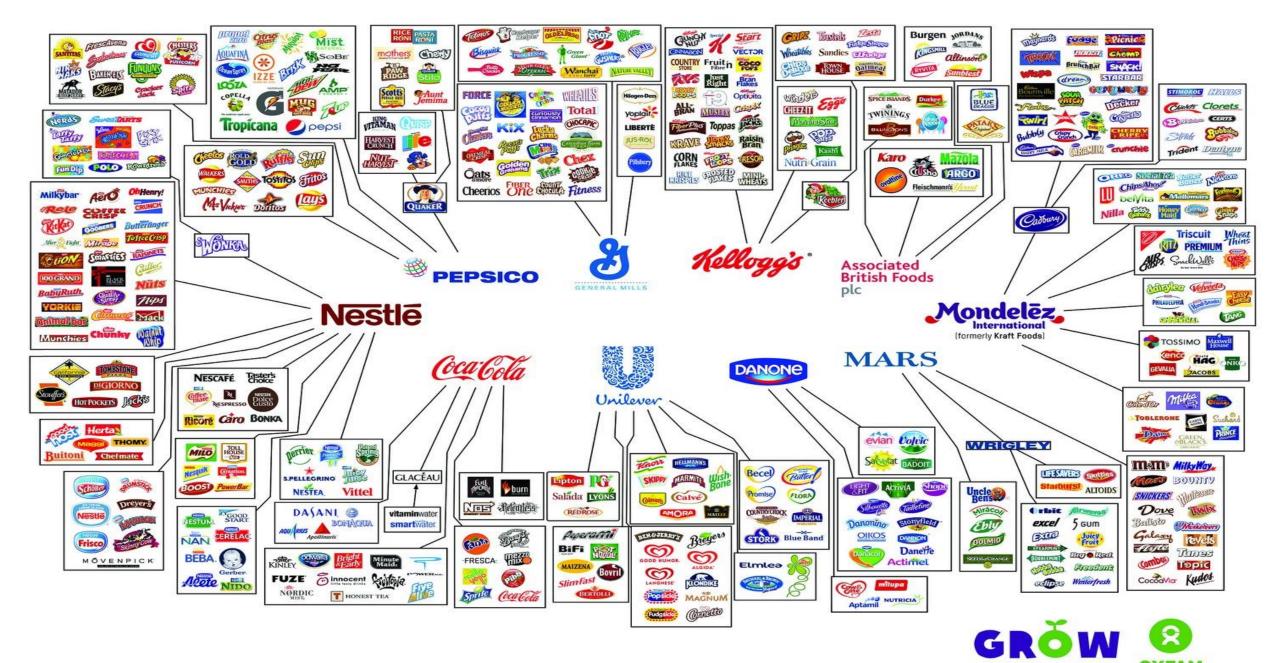
It is one after the other!

The name says it all: 'Non-stop is simply irresistible'.

... and the displacement of healthy foods!

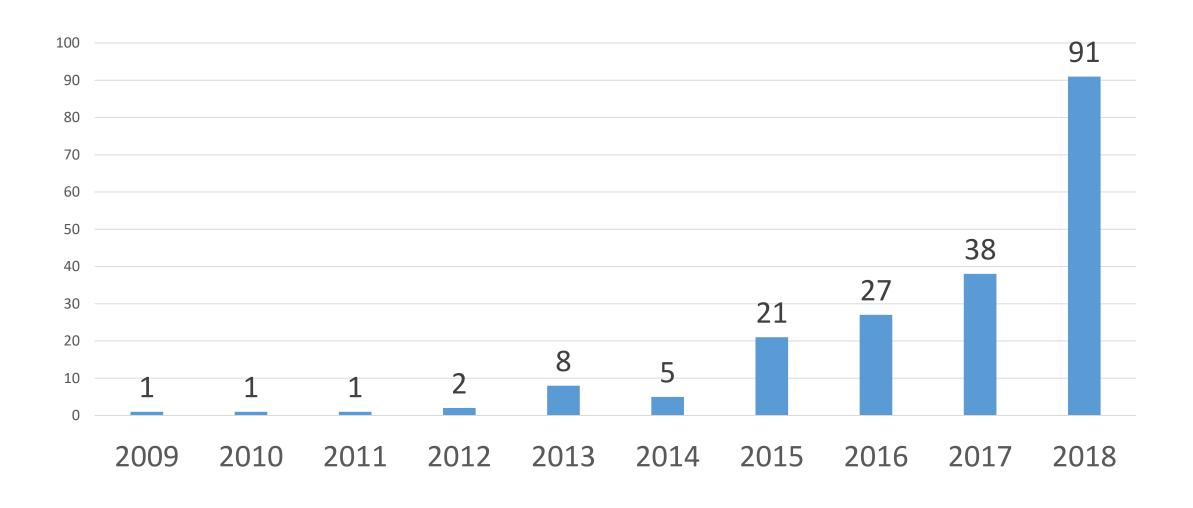


`Nestlé Canada is thrilled to introduce **Peelin' Pops, a unique new frozen treat that looks like a banana and tastes like one too!** With something so fun and tasty, kids and adults alike will be entertained each and every time, **keeping them coming back for more**.`



Global sales from these companies: US\$1,1 bi /day (2013)

Articles in PubMed with the term 'ultra-processed'



UPF

All other foods







Studies in Brasil, Chile, Colombia, Argentine, Mexico, US, Canada, UK, France, Australia, Japan, Taiwan ... show that UPF had:

- higher energy density
- higher content of free sugars and unhealthy fats
- lower content of protein and fibre
- lower content of vitamins and minerals

Source: Monteiro et al Pub Health Nutr 2017

Ultra-processed foods and chronic diseases: non-nutrient mechanisms

- ➤ Effects on microbiome (Zinocker and Lindseth 2018)
- ➤ Absence of bioactive compounds (Martinez-Steele 2017)
- ➤ High glycemic index and low satiety (Fardet 2016)
- ➤ Hyper-palatability (Kessler 2009; Brownell 2012; Moss 2013; Ifland 2018)
- ➤ Mindless eating (Cohen & Farley 2008)

Cross-sectional and longitudinal studies show that ultra-processed food consumption is associated with obesity, hypertension, dyslipidaemias, metabolic syndrome, heart attacks, stroke, breast cancer and total cancer

OPEN & ACCESS Freely available online

PLOS ONE

Ultra-Processed Food Products and Obesity in Brazilian Households (2008-2009)

Daniela Silva Canella^{1,2}*, Renata Bertazzi Levy^{2,3}, Ana Paula Bortoletto Martins^{1,2}, Rafael Moreira Claro^{2,4}, Jean-Claude Moubarac², Larissa Galastri Baraldi^{1,2}, Geoffrey Cannon², Carlos

1 Departamento de Nutrição, Faculdade de Saúde Pública, Universidade de São Paulo, São Paulo, Brazil, 2 Núcleo de Pesquisas Epidemiológicas em Nutrição e Saúde, Faculdade de Saúde Pública, Universidade de São Paulo, São Paulo, Brazil, 3 Departamento de Medicina Preventiva, Faculdade de Medicina, Universidade de São Paulo, São Paulo, Brazil, 4 Departamento de Nutrição, Escola de Enfermagem, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Background: Production and consumption of industrially processed food and drink products have risen in parallel with the global increase in overweight and obesty and related chronic non-communicable diseases. The objective of this study was to analyze the relationship between household availability of processed and ultra-processed products and the prevalence of excess weight (overweight plus obesity) and obesity in Brazil.

5.5970 Brazilian households. The units of study were household aggregates (strata), geographically and socioeconomically homogeneous. Multiple linear regression models were used to assess the relationship between the availability of processed and ultra-processed products and the average of Body Mass Index (BMI) and the percentage of individuals with excess weight and obesity in the strata, controlling for potential confounders (socio-demographic characteristics, percentage of expenditure on eating out of home, and dietary energy other than that provided by processed and ultra-processed products). Predictive values for prevalence of excess weight and obesity were estimated according to quartiles of the usehold availability of dietary energy from processed and ultra-processed products.





adolescents and adults

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ARTICLE INFO

Available online 29 luly 2015

Consumption of ultra-processed foods and obesity in Brazilian

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tamento de Nutricão. Faculdade de Saúde Pública, Universidade de São Paulo, Av. Dr. Amalda, 715, 2º floor, São Paulo 01246-907. Brazil Opportunitation or materity or, customate or state in product, universitude of site of product pr

ABSTRACT

Ana Paula Bortoletto Martins b, Daniela Silva Canella b, Jean-Claude Moubarac b, Renata Bertazzi Levy b, C,

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AJCN. First published ahead of print October 12, 2016 as doi: 10.3945/ajcn.116.135004.

Ultraprocessed food consumption and risk of overweight and obesity:

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Research Center Network in Physiopathology of Obesity and Nutrition, Carlos III Health Institute, Madrid, Spain; and 9Department of Nutrition, Harvard

the University of Navarra Follow-Up (SUN) cohort study^{1,2}

Miguel Angel Martinez-Gonzalez, 3,7-9 Aline Cristine Souza Lopes,4 and Maira Bes-Rastrollo 3,7,8,

Raquel de Deus Mendonça, 3,4,6 Adriano Marçal Pimenta, 3,5 Alfredo Gea, 3,7,8 Carmen de la Fuente-Arrillaga, 3,7,8

Geoffrey Cannon b, Ashkan Afshin d, Fumiaki Imamura e.3, Dariush Mozaffarian d.4, Carlos Augusto Monteiro a.b

foods and obesity indicators among Brazilian adults and adolescents.



Objectives. The aim of this study was to evaluate the relationship between the consumption of ultra-process.



doi:10.1017/S0007114518001046

Ultra-processed food consumption and excess weight among US adults

Filippa Juul¹, Euridice Martinez-Steele^{2,3}, Niyati Parekh^{1,4}, Carlos A. Monteiro^{2,3} and Virginia W. Chang^{1,4}e College of Global Public Health, New York University, New York, NY 10012, USA School of Public Health, University of São Paulo, São Paulo, 03178-200, Brazil

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Submitted 17 November 2017 - Final revision received 17 March 2018 - Accepted 24 March 2018)

Ultra-processed foods provide 58% of energy intake and 89% of added sugars in the American diet. Nevertheless, the association between ultra rocessed foods and excess weight has not been investigated in a US sample. The present investigation therefore aims to examine the association tween ultra-processed foods and excess weight in a nationally representative sample of US adults. We performed a cross-sectional analysis of nthropometric and dietary data from 15 977 adults (20-64 years) participating in the National Health and Nutrition Examination Survey 2005-2014. Dietary data were collected by 24-h recall. Height, weight and waist circumference (WC) were measured. Foods were classified as ultrarocessed/non-ultra-processed according to the NOVA classification. Multivariable linear and logistic regression was used to evaluate the ociation between ultra-processed food consumption (% energy) and BMI, WC and odds of BMI≥25kg/m², BMI≥30 kg/m² and abdominal

Canadian Journal of Public Health

Consumption of ultra-processed foods and obesity in Canada.

Manuscript Number:	CJPH-D-18-00094R1
Full Title:	Consumption of ultra-processed foods and obesity in Canada.
Article Type:	Original Article
Section/Category:	Quantitative Research
Funding Information:	
Abstract:	OBJECTIVES: To assess the association between consumption of ultra-processed toods and obesity in the Canadian population. METHODS: Cross-sectional study including 19,863 seldits upon 119 years or more in the 1802 Consistent Community including 19,903 and the upon 19,904 of 19,904 personal record from the was estimated using daily relative energy intake of data; processed food finding was estimated using daily relative energy intake of data; processed food for data energy intake) from data obtained by 24-hour food recalls. Obesity was assessed using body mass index (RMI 30 kg/m²), Univariate and multivariate linear regression were performed to describe ultra-processed food consumption according to socioeconomic and demographic validates, and multivariate logistic regression was observed and considerable of the control
	RESULTS: Utilize processed foods make up almost half (46%) of the daily calories consumed by Canadian adults. Consumption of these foods is higher amongst men, younger adults, with fewer years of formal education, smokers, physically inactive, an Canadian-born individuals. Utilize processed food consumption is positively associated with obesity. After adjusting for confounding factors, individuals in the highest quintle of utilize-processed food consumption were 25% more likely of having obesity compare.









Nutrition, Metabolism & Cardiovascular Diseases

journal homepage: www.elsevier.com/locate/nmcd





Consumption of ultra-processed food products and its effects on children's lipid profiles: A longitudinal study

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Received 2 April 2014; received in revised form 10 August 2014; accepted 11 August 2014 Available online 20 August 2014

KEYWORDS

Food processing and ultra-processed Risk factors: Child nutrition:

Abstract Background and Aims: Cardiovascular disease development is related to known risk factors (such as diet and blood lipids) that begin in childhood. Among dietary factors, the consumption of ultra-processing products has received attention. This study investigated whether children's consumption of processed and ultra-processing products at preschool age predicted an increase in lipid concentrations from preschool to school age.

Methods and Results: Cohort study conducted with 345 children of low socioeconomic status



Background: Ultraprocessed food consumption has increased in and 15% of men were obese (1), the past decade. Evidence suggests a positive association between and obesity. However, few prospective studies to our knowledge have investigated this potential relation in adults.

T.H. Chan School of Public Health, Boston, MA

were obese, and in the Eastern Mediterranean ~25% of women

Changes in the food system continuously promote obesity ultraprocessed food consumption and the incidence of overweight There is now a greater availability of ready-to-eat or -heat foods known as ultraprocessed foods, which are products that have little, if any, whole foods and are manufactured with substances

ORIGINAL ARTICLE

American Journal of Hypertension 30(4) April 2017

Ultra-Processed Food Consumption and the Incidence of Hypertension in a Mediterranean Cohort: The Seguimiento Universidad de Navarra Project

Raquel de Deus Mendonça 1-3, Aline Cristine Souza Lopes 2, Adriano Marçal Pimenta 1,4, Alfredo Gea 1,5,6, Miguel Angel Martinez-Gonzalez^{1,5-7}, and Maira Bes-Rastrollo^{1,5,6}

Some available evidence suggests that high consumption of Iltra-processed foods (UPFs) is associated with a higher risk of obesity. Collectively, this association and the nutritional characteristics of UPFs suggest that UPFs might also be associated with hypertension.

METHODS

We prospectively evaluated the relationship between UPF consumption and the risk of hypertension in a prospective Spanish cohort, the eguimiento Universidad de Navarra project. We included 14,790 Spanish adult university graduates who were initially free of hypertension at base line who were followed for a mean of 9.1 years (SD, 3.9 years; total person-

hazards models were used to estimate adjusted hazard ratios (HRs) and 95% confidence intervals (CIs) for hypertension incidence.

During follow-up, 1.702 incident cases of hypertension were identified Participants in the highest tertile of UPF consumption had a higher risk of developing hypertension (adjusted HR, 1.21; 95% Cl, 1.06, 1.37; P for trend = 0.004) than those in the lowest tertile after adjusting for potential confounders.

CONCLUSIONS

In this large prospective cohort of Spanish middle-aged adult university graduates, a positive association between UPF consumption and tension risk was observed. Additional longitudinal studies are needed to confirm our results

BMJ 2018;360:k322 | doi: 10.1136/bmj.k322

OPEN ACCESS Consumption of ultra-processed foods and cancer risk: results from NutriNet-Santé prospective cohort

> Thibault Fiolet, 1 Bernard Srour, 1 Laury Sellem, 1 Emmanuelle Kesse-Guyot, 1 Benjamin Allès, 1 Caroline Méjean, Mélanie Deschasaux, Philippine Fassier, Paule Latino-Martel, Marie Beslay, Serge Hercberg, A Céline Lavalette, Carlos A Monteiro, Chantal Julia, A Mathilde Touvier

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SETTING AND PARTICIPANTS

ABSTRACT

OBJECTIVE

Population based cohort study.

To assess the prospective associations between

consumption of ultra-processed food and risk of

statistically significant after adjustment for several markers of the nutritional quality of the diet (lipid. sodium, and carbohydrate intakes and/or a Western pattern derived by principal component analysis).

CONCLUSIONS

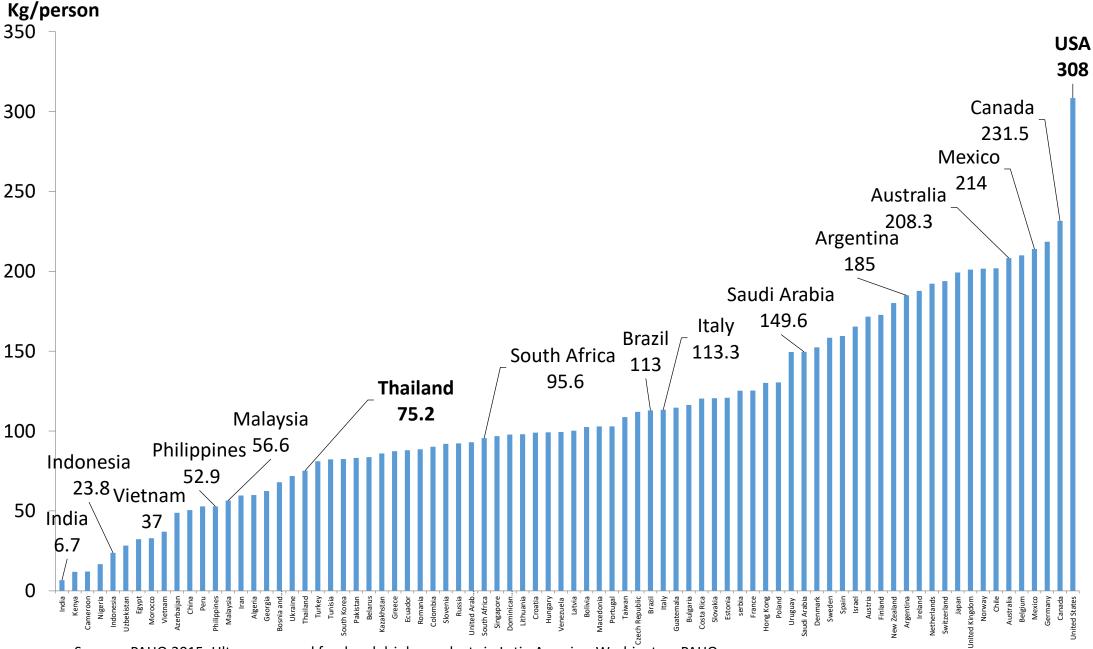
In this large prospective study, a 10% increase in the proportion of ultra-processed foods in the diet was associated with a significant increase of greater than 10% in risks of overall and breast cancer, Further



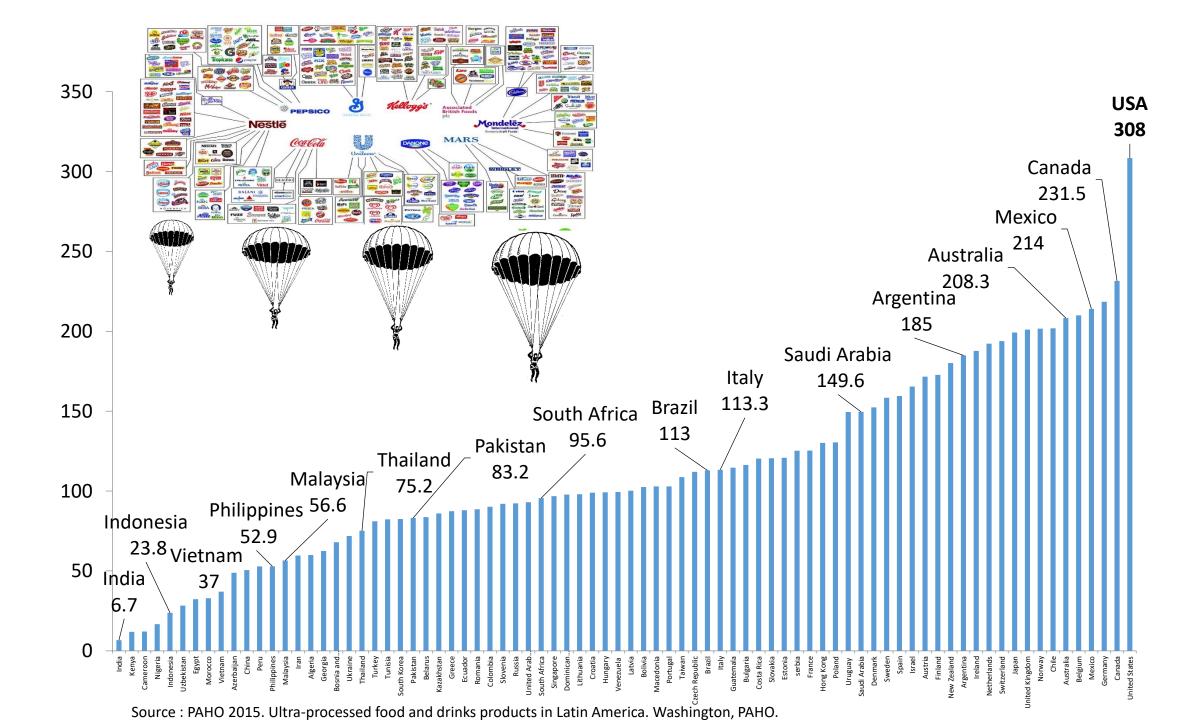




Annual retail sales of ultra-processed food and drink products in 80 countries (2013)



Source: PAHO 2015. Ultra-processed food and drinks products in Latin America. Washington, PAHO.



"All the News That's Fit to Print"

The New York Times

Late Edition

Today, patchy morning fog, variably cloudy, humid, high 80. Tonight, partly cloudy, humid, low 66. Tomorrow, variably cloudy, humid, high 75. Details in SportsSunday, Page 8.

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NEWS ANALYSIS

World's Eyes On President As U.N. Meets

Challenge for Trump: Sell 'America First'

By PETER BAKER

WASHINGTON — Every year, the president heads to New York to welcome world leaders to the United Nations General Assembly. He gives a speech and meets with an endless string of foreign potentates to discuss a dizzying array of complicated, often intractable issues.

The days are "kind of like speed dating from hell," as one analyst put it, and the evenings are "the world's most tedious cocktail party." In other words, not exactly President Trump's favored format.

But when Mr. Trump attends the first United Nations session of his presidency this coming week, all eyes will be on him as counterparts from around the globe crane their necks and slide through the crowd to snatch a handshake — and, in the process, try to figure out this most unusual of American leaders.

"The world is still trying to take the measure of this president," said Jon B. Alterman, a senior vice president at the Center for Strategic and International Studies in Washington and author of the speed-dating analogy. "For a number of leaders, this is going to be their first chance to see him, to judge him, to try to get on his good side."

In some places, there has been an instinct to dismiss Mr. Trump as a bombastic, Twitter-obsessed



WILLIAM DANIELS FOR THE NEW YORK TO

Celene da Silva, left, and her daughter Sabrina delivering Nestlé products like Kit-Kats and pudding in Fortaleza, Brazil.

How Big Business Got Brazil Hooked on Junk Food

By ANDREW JACOBS and MATT RICHTEL

FORTALEZA, Brazil — Children's squeals rang through the muggy morning air as a woman pushed a gleaming white cart along pitted, trash-strewn streets. She was making deliveries to some of the poorest households in this seaside city,

As she dropped off variety packs of Chandelle pudding, Kit-Kats and Mucilon infant cereal, there was something striking about her customers: Many were visi-

PLANET FAT

Nestlé Goes Door to Door

she had high blood pressure, a condition she acknowledges is probably tied to her weakness for fried chicken and the Coca-Cola she drinks with every meal, breakfast included.

Nestle's direct-sales army in Brazil is part of a broader transformation of the food system that is delivering Western-

U.S. DIGGING IN FOR LONG HAUL IN AFGHANISTAN

A REMAKING OF KABUL

Green Zone Expansion Underscores Threat to Western Allies

By ROD NORDLAND

KABUL, Afghanistan — Soon, American Embassy employees in Kabul will no longer need to take a Chinook helicopter ride to cross the street to a military base less than 100 yards outside the present Green Zone security district.

Instead, the boundaries of the Green Zone will be redrawn to include that base, known as the Kabul City Compound, formerly the headquarters for American Special Operations forces in the capital. The zone is separated from the rest of the city by a network of police, military and private security checkpoints.

The expansion is part of a huge public works project that over the next two years will reshape the center of this city of five million to bring nearly all Western embasies, major government ministries, and NATO and American military headquarters within the protected area.

After 16 years of American presence in Kabul, it is a stark acknowledgment that even the city's central districts have become too difficult to defend from Taliban bombings.

But the capital project is also clearly taking place to protect another long-term American investment: Along with an increase in troops to a reported 15 000 from



Actions and policies that are not working:

Misleading nutritional labelling Cosmetic product reformulation Marketing self-regulation









The real best buys:

Taxation, warning labels and strong marketing restrictions on ALL UPF
Dietary guidelines based on real food and real meals
Consistent food procurement policies
A global framework convention on food systems to limit the influence of TN UPF industry

