

Seminário comemorativo dos 5 anos do Guia Alimentar para a População Brasileira
Coordenação-Geral de Alimentação e Nutrição (CGAN) do Ministério da Saúde
Brasília, 13 de fevereiro de 2020

Alimentos ultraprocessados, qualidade da dieta e saúde no mundo: o relatório da FAO de 2019

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Quatro componentes da alimentação influenciam a saúde:

1) Nutrientes

2) Alimentos

(mais que nutrientes!)

*3) Combinações
de alimentos*

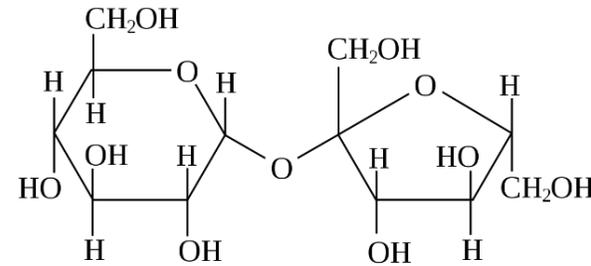
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4) Modos de comer

(quando, onde, como?)

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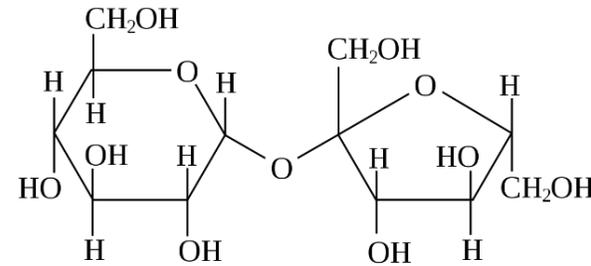
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Carboidratos, proteínas, ácidos graxos, manganês, vitamina B6, selenium ... em um total de 67 nutrientes.

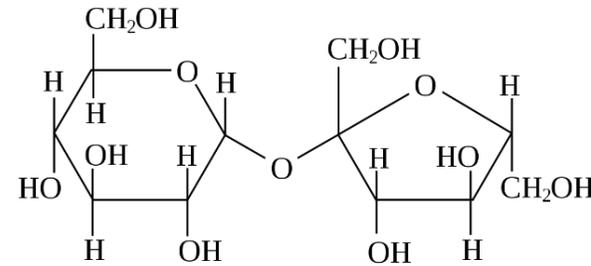
Alicina, aliina, vinilditina, alixina, alilcisteína, tiossulfina, frutanas, tiocinato de alilo, ajoenes, luteolina ...em um total de mais de dois mil outros compostos químicos bioativos, vários deles cardioprotetores.



Ingredientes: sal, condimento preparado de alho (**contém alho**), gordura vegetal, cúrcuma, realçadores de sabor glutamato monossódico, inosinato dissódico e guanilato dissódico e aromatizante.

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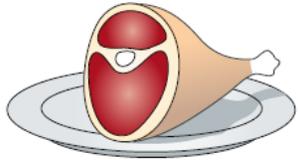
The unmapped chemical complexity of our diet

Albert-László Barabási ^{1,2,3*}, Giulia Menichetti ¹ and Joseph Loscalzo²

Our understanding of how diet affects health is limited to 150 key nutritional components that are tracked and catalogued by the United States Department of Agriculture and other national databases. Although this knowledge has been transformative for health sciences, helping unvell the role of calories, sugar, fat, vitamins and other nutritional factors in the emergence of common diseases, these nutritional components represent only a small fraction of the more than 26,000 distinct, definable biochemicals present in our food—many of which have documented effects on health but remain unquantified in any systematic fashion across different individual foods. Using new advances such as machine learning, a high-resolution library of these biochemicals could enable the systematic study of the full biochemical spectrum of our diets, opening new avenues for understanding the composition of what we eat, and how it affects health and disease.

The maxim of Jean Anthelme Brillat-Savarin, “*Dites-moi ce que vous mangez et je vais vous dire ce que vous êtes*”—‘you are what you eat’—remains as pertinent today, in the era of modern medicine, as it did in 1826. Indeed, the exceptional role

chemical, exercised through smell, taste and appearance. These chemical defences require an extensive secondary metabolism that produces a wide range of flavonoids, terpenoids and alkaloids. Polyphenols—a highly studied group of chemicals believed to be



Red Meat: 78 nutrients in USDA

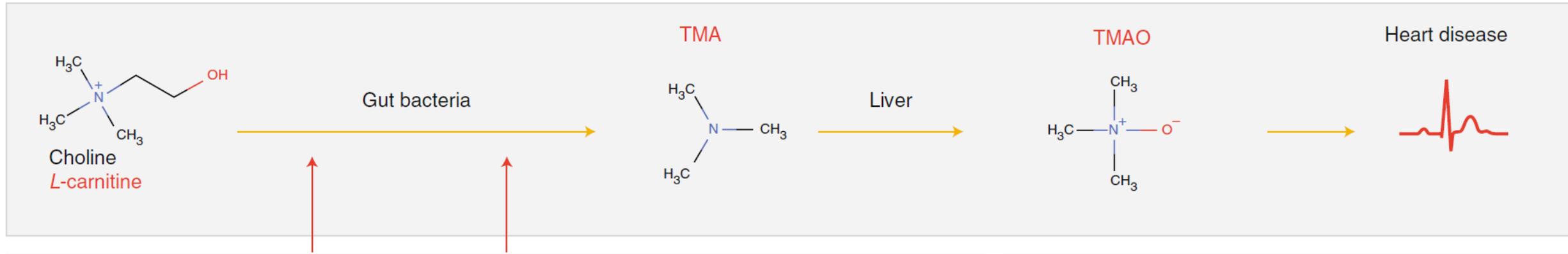
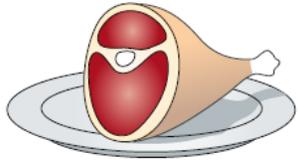


Fig. 1 | Untracked biochemicals and their health implications. Animal products contain *L*-carnitine, choline and choline-contributing compounds²¹. These molecules are metabolized by gut bacteria into trimethylamine (TMA), which is converted in the liver to trimethylamine-*N*-oxide¹⁷ (TMAO), a compound linked to coronary events¹⁶. Garlic, extra-virgin olive oil and red wine, staple ingredients of the Mediterranean diet, reduce the production of TMAO through allicin and 3,3-dimethylbutan-1-ol (DMB), compounds that block TMA production by gut bacteria. Of the six biochemical compounds involved in this pathway, only one, choline, is tracked in food by the USDA. The other compounds are part of the nutritional 'dark matter' (in red).



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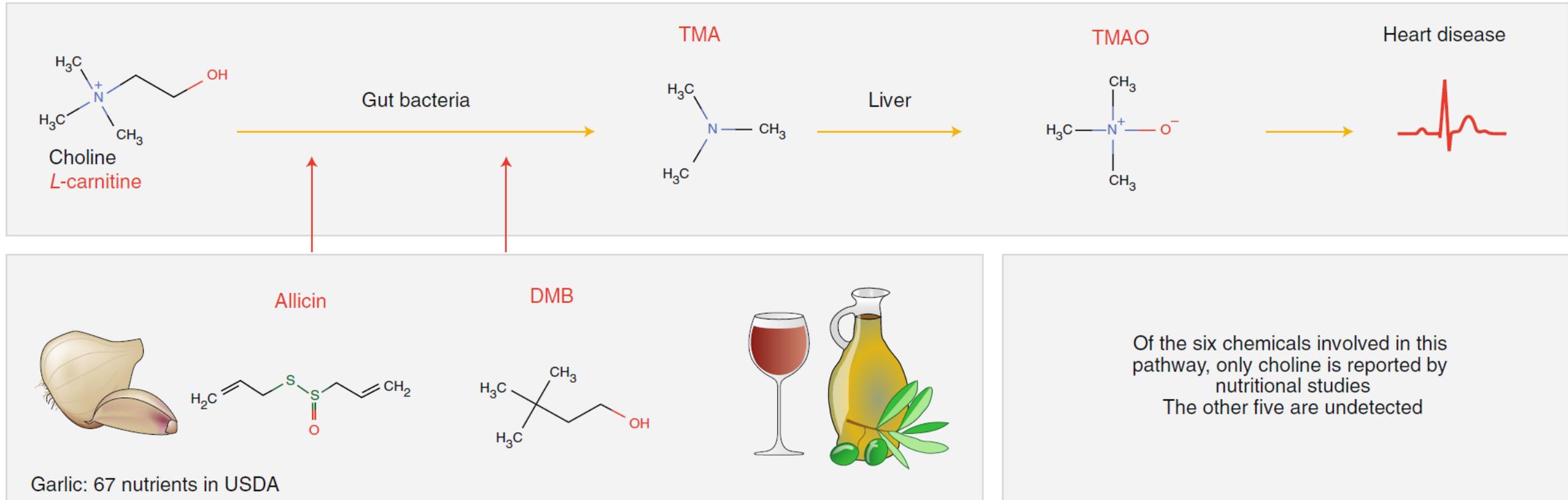
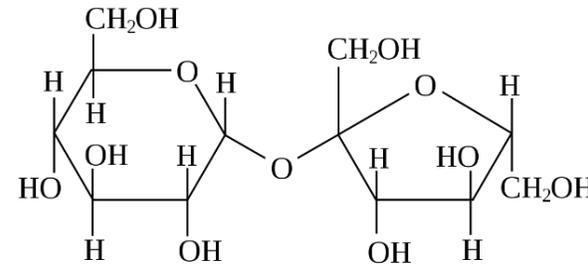


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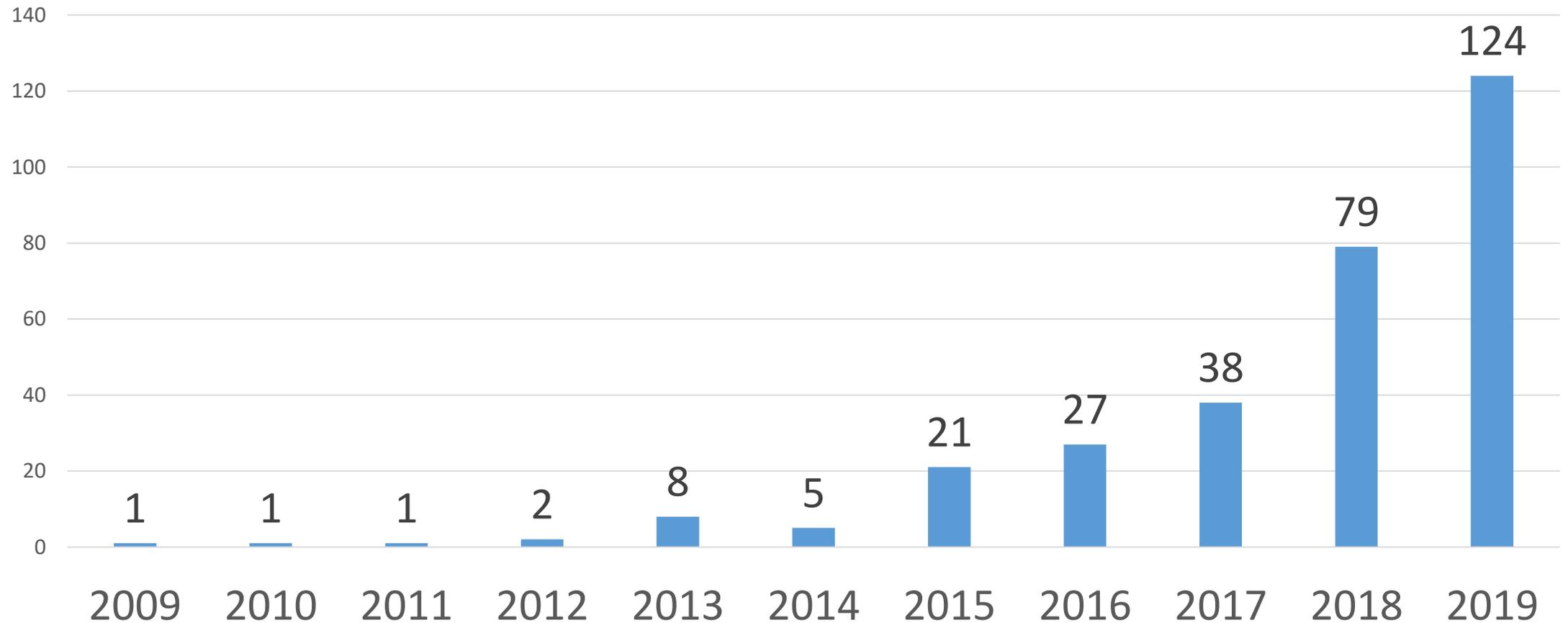


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312 artigos no PubMed com o termo ‘ultra-processed’





Food and Agriculture
Organization of the
United Nations

Ultra-processed foods, diet quality, and health using the NOVA classification system

Prepared by

Carlos Augusto Monteiro
Geoffrey Cannon
Mark Lawrence
Maria Laura da Costa Louzada
and
Priscila Pereira Machado

Food and Agriculture Organization of the United Nations

Rome, 2019

Consumo de alimentos ultraprocessados e doenças crônicas

Mecanismos



X



Aumento no consumo de alimentos ultraprocessados leva a aumento na densidade energética da dieta e no teor de açúcar e gorduras não saudáveis e a menor teor de fibra e proteína

Estudos nacionais no Brasil, Chile, Colômbia, Argentina, México, USA, Canadá, Inglaterra, França, Bélgica, Austrália, Taiwan ...

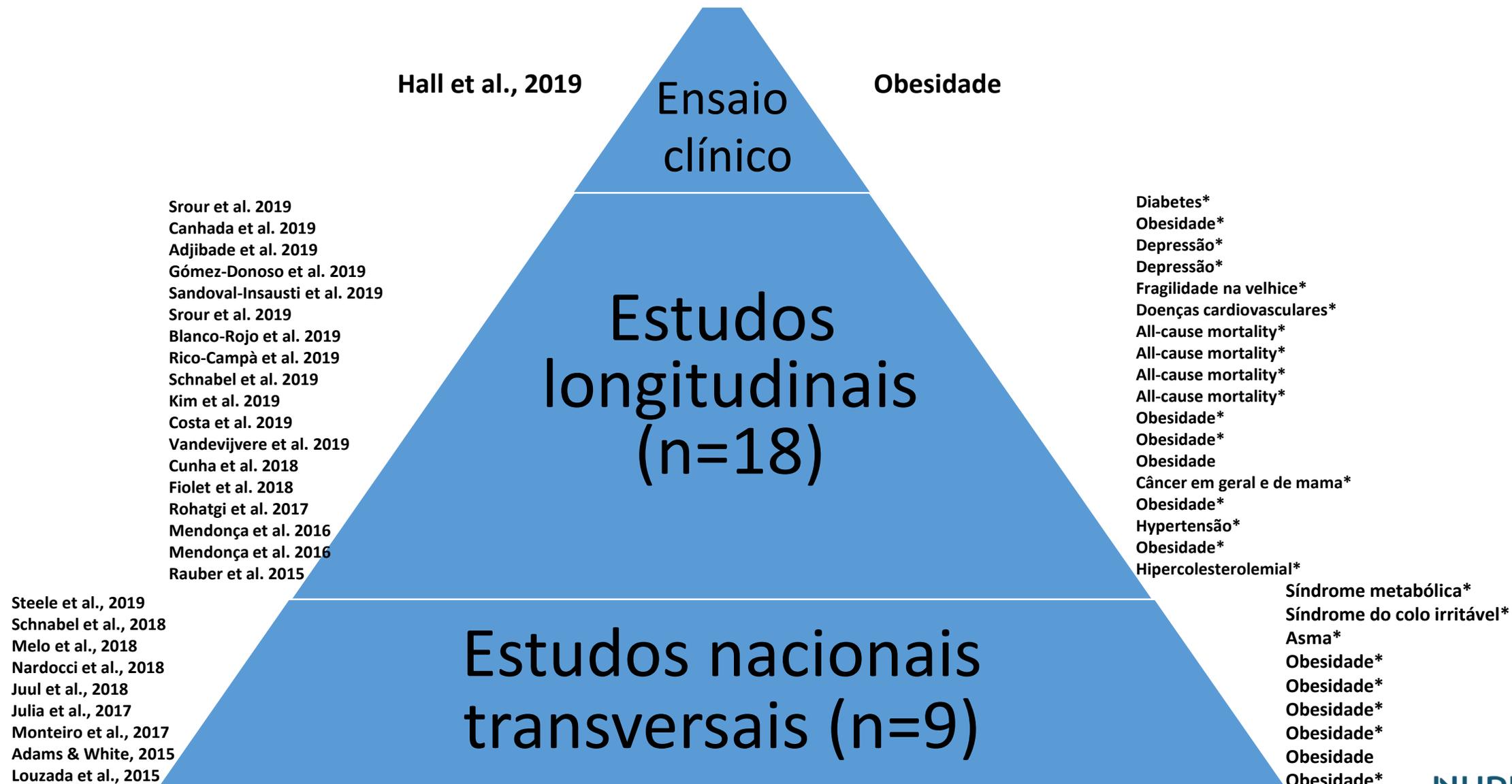
Consumo de alimentos ultraprocessados e doenças crônicas

Mecanismos não relacionados a nutrientes específicos

- Contribui para baixa saciedade da dieta (Fardet 2016)
- Estimula o consumo compulsivo (Kessler 2009; Brownell 2012; Moss 2013; Ifland 2018)
- Induz o comer sem atenção (Cohen & Farley 2008)
- Reduz o tempo de mastigação (Hall et al 2019)
- Determina microbiota pró-inflamatória (Zinocker & Lindseth 2018)
- Diminui o teor da dieta em compostos bioativos protetores (Martines-Steele et al. 2017)
- Aumenta o teor da dieta em compostos bioativos disruptores (Buckley et al 2019)

Consumo de alimentos ultraprocessados e doenças crônicas (2015-2019)

Fonte: Monteiro, CA e al. 2019. *Ultra-processed foods, diet quality, and health using the NOVA classification system*. Rome, FAO.



* Associação significativa do tipo dose-resposta

Cell

Metabolism

Volume 30
Number 1

July 2, 2019

www.cell.com



Ultra-Processed Foods and Obesity



Ultra-processed Menu

Day 2

Breakfast

Croissant (Chef Pierre)

Margarine (Glenview Farms)

Turkey sausage (Ember Farms)

Blueberry yogurt (Yoplait) with NutriSource fiber



Non ultra-processed Menu

Day 2

Breakfast

Scrambled egg (made from fresh eggs)

Hash brown potatoes (potato, garlic, paprika (Simply Organic), ground turmeric (McCormick), cream (Stoneyfield) and onions)

Salt and Pepper (Monarch)



Ultra-processed Menu

Day 4

Lunch

Hot dog (Patuxent Farms) on bun (Hilltop Hearth) with ketchup (Heinz) and yellow mustard (Monarch)
Baked potato chips (Lay's)
Cranberry juice (Sun Cup) with NutriSource fiber
Blueberry yogurt (Yoplait) with NutriSource fiber

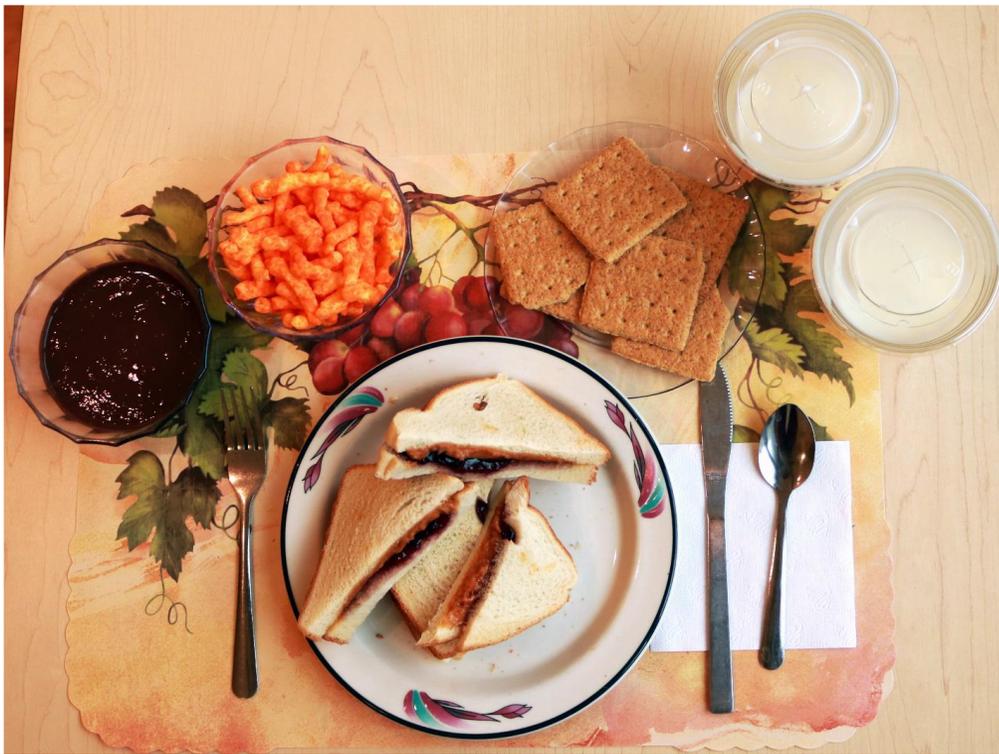


Non ultra-processed Menu

Day 4

Lunch

Baked cod filet (Harbor Banks) with fresh squeezed lemon juice
Baked russet potato with olive oil
Steamed broccoli with olive oil and garlic
Side salad (green leaf lettuce, tomatoes, cucumber and carrots)
Vinaigrette (balsamic vinegar (Nature's Promise) and olive oil)
Salt and Pepper (Monarch)



Ultra-processed Menu

Day 7

Dinner

Peanut butter (Monarch) and jelly (Monarch) sandwich on white bread (Ottenberg)
2% milk (Cloverland) with NutriSource fiber
Baked Cheetos (Frito-Lay)
Graham crackers (Nabisco)
Chocolate pudding (Snack Pack) with NutriSource fiber



Non ultra-processed Menu

Day 7

Dinner

Penne pasta (Barilla) primavera (olive oil, garlic, pinto beans (cooked from dried), spinach, basil, tomatoes)
Side salad (green leaf lettuce, baby carrots, broccoli)
Vinaigrette (red wine vinegar (Giant) and olive oil)
Salt and Pepper (Monarch)
Grapes



Ultra-processed Menu

Daily Snacks

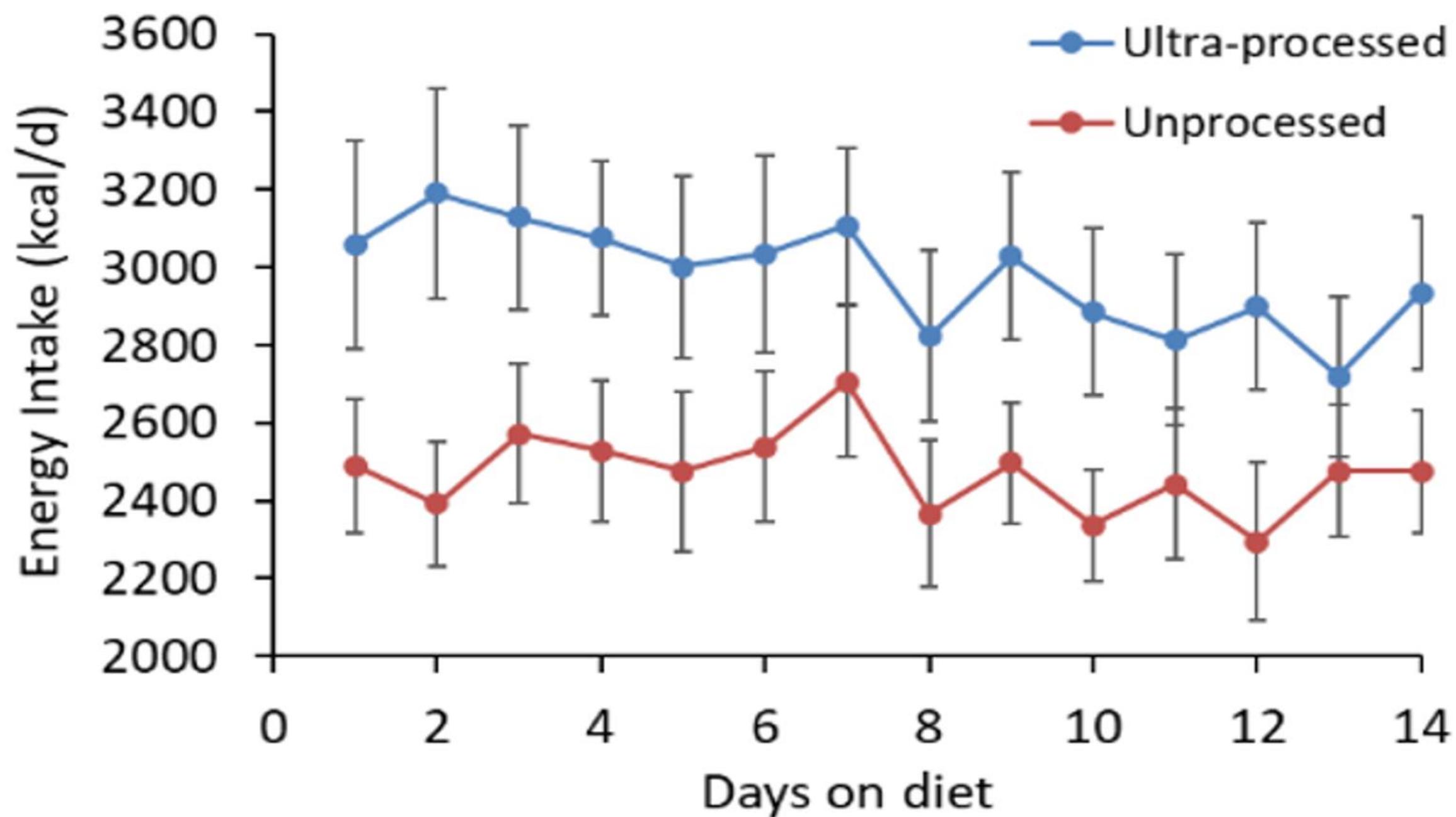
Baked Potato Chips (Lay's), Dry Roasted Peanuts (Planters), Cheese & Peanut Butter Sandwich Crackers (Keebler), Goldfish Crackers (Pepperidge Farm), Applesauce (Lucky Leaf).

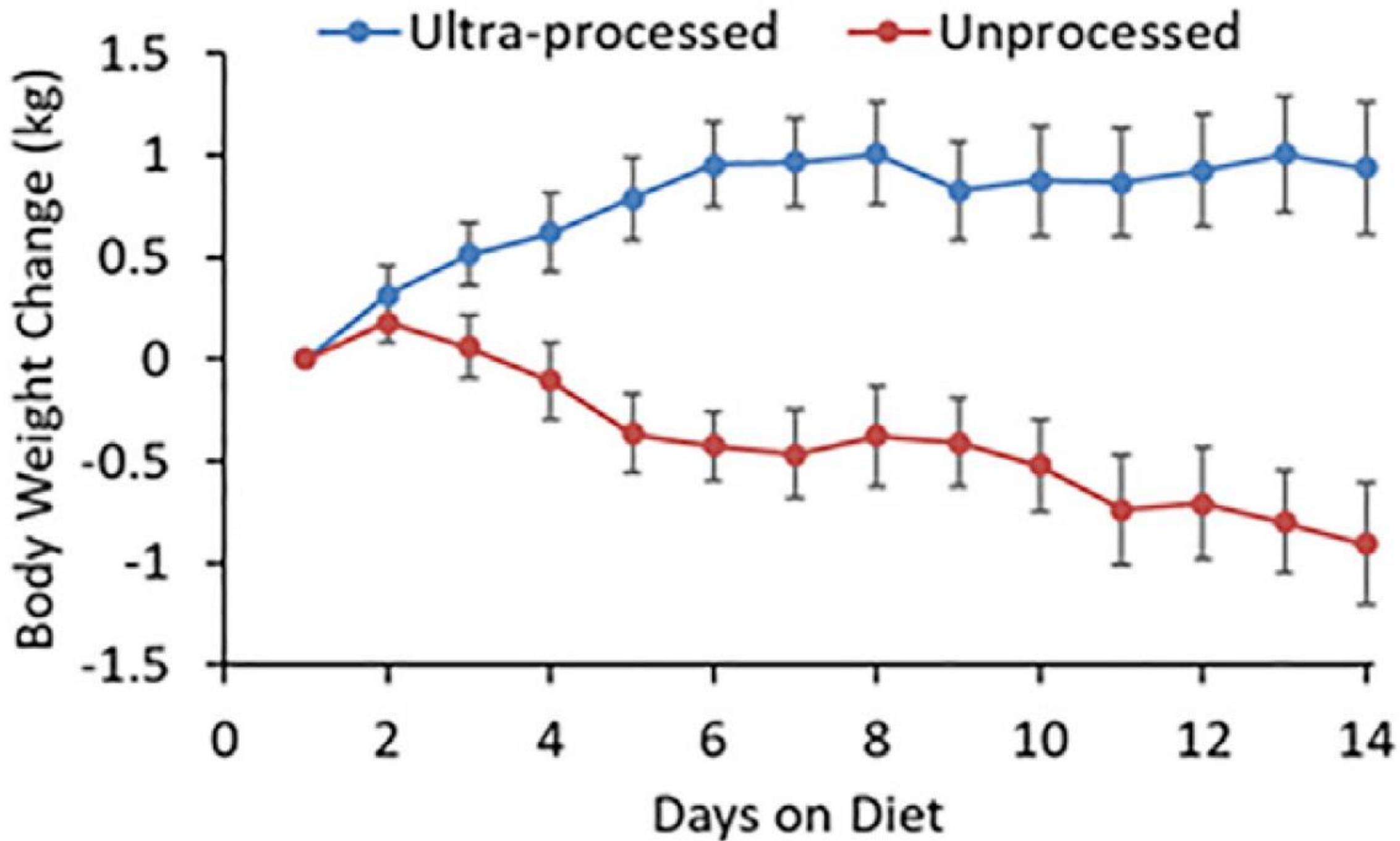


Non ultra-processed Menu

Daily Snacks

Fresh oranges and apples, raisins (Monarch), raw almonds (Giant), chopped walnuts (Diamond)





Vendas de ultraprocessados no varejo em 80 países em 2013

Kg/pessoa/ano

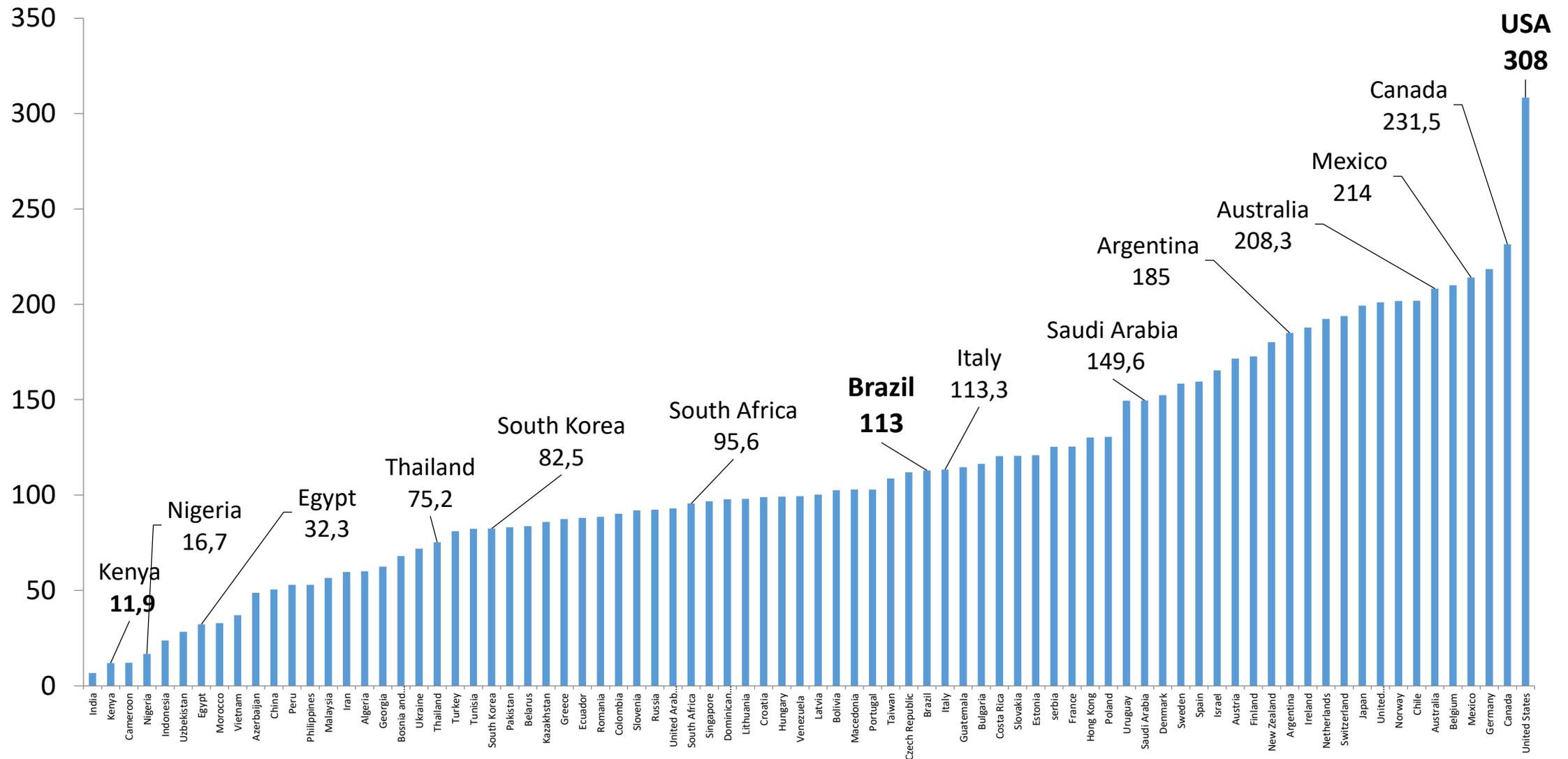
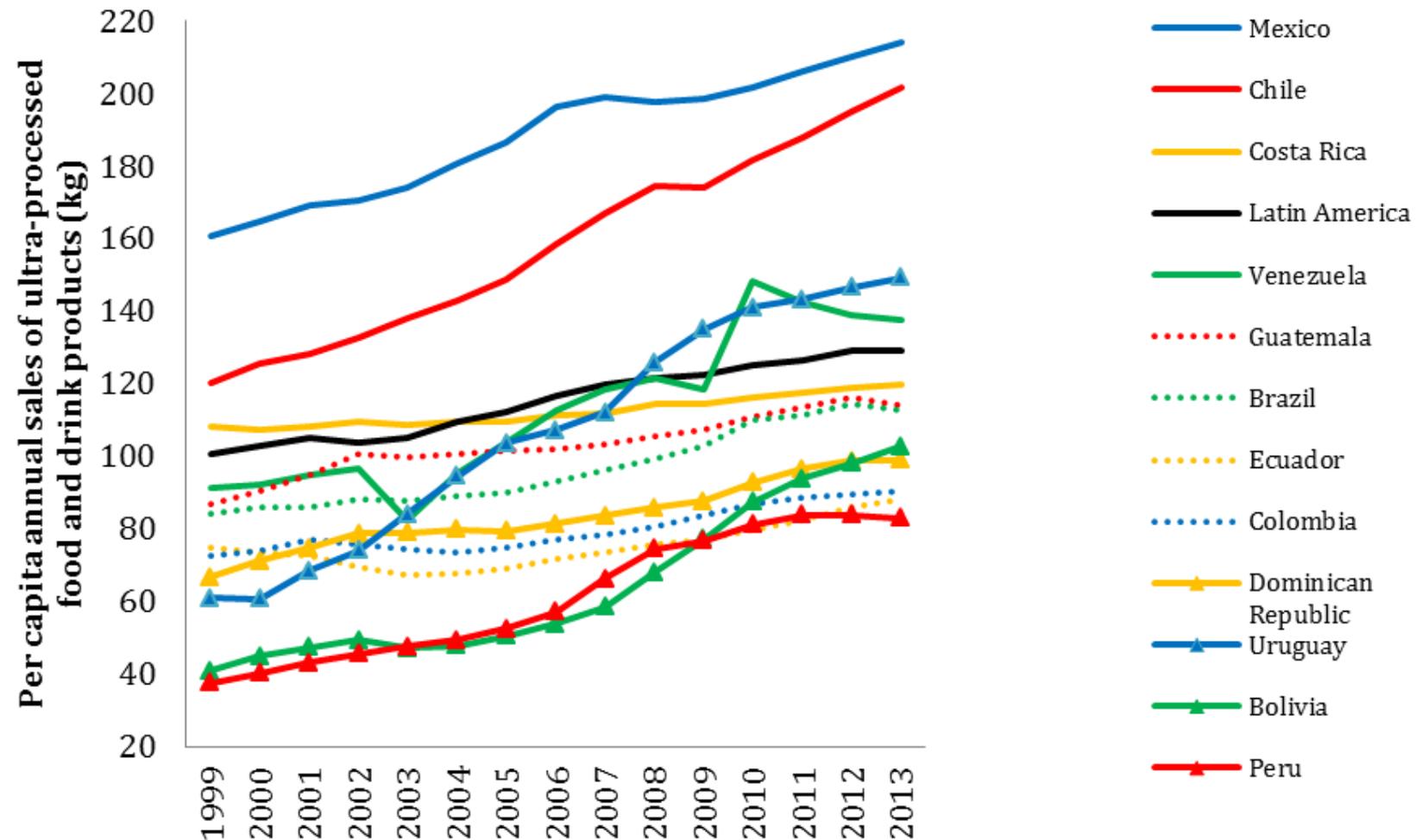


Figure 1 Trends in annual per capita sales of selected ultra-processed food and drink products¹ (kg) in 12 Latin American countries from 1999-2013



Source: PAHO 2015. Ultra-processed products in Latin America: Trends, impact on obesity, policy implications. Washington, PAHO (in press)

"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 Sports Sunday, Page 8.

VOL. CLXVI . . . No. 57,723

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NEW YORK, SUNDAY, SEPTEMBER 17, 2017

\$6.00

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



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.

Nestlé'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 embassies, 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



Ações e políticas necessárias

Guias alimentares que levem em conta o processamento de alimentos
Rotulagem frontal de alimentos industrializados com advertências do Ministério da Saúde
Impostos sobre alimentos ultraprocessados
Regulação do marketing de alimentos ultraprocessados.

Disputa de narrativas

| Narrativa da indústria de ultraprocessados | Narrativa da Saúde Pública |
|---|---|
| Alimento não é tabaco/não há alimentos não saudáveis | Alimentos ultraprocessados são não saudáveis <i>by design</i> |
| Com moderação tudo se resolve | Alimentos ultraprocessados são formulados para consumo imoderado |
| De qq forma, não há como alimentar 9 bi de pessoas sem ultraprocessados | Quem produz alimentos é a agricultura, a indústria apenas os transforma |
| Cozinhar é coisa do passado | Cozinhar nos fez humanos |
| A solução é uma nutrição personalizada | Cuidado com o 'nutricionismo' |

No buscador:
NUTRINET BRASIL



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E AJUDE A PROMOVER A SAÚDE DA
POPULAÇÃO BRASILEIRA.**

Se você tem 18 anos ou mais e mora no Brasil, basta ter acesso à internet para ser um voluntário. Entre no site nutrinetbrasil.fsp.usp.br e faça seu cadastro.

O Estudo **NutriNet Brasil** vai acompanhar 200 mil pessoas de todas as regiões do país para identificar características da alimentação brasileira que aumentam ou diminuem o risco de doenças crônicas muito frequentes entre nós, como obesidade, diabetes, doenças do coração, hipertensão e câncer.



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