



Policy responses to ultra-processed foods in global context

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Recent publications – a shameless plug

UPFs and health outcomes



Review

Ultra-Processed Foods and Health Outcomes: A Narrative Review

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Abstract: The nutrition literature and authoritative reports increasingly recognise the concept of ultra-processed foods (UPF), as a descriptor of unhealthy diets. UPFs are now prevalent in diets worldwide. This review aims to identify and appraise the studies on healthy participants that investigated associations between levels of UPF consumption and health outcomes. This involved a systematic search for extant literature; integration and interpretation of findings from diverse study types, populations, health outcomes and dietary assessments; and quality appraisal. Of 43 studies reviewed, 37 found dietary UPF exposure associated with at least one adverse health outcome. Among adults, these included overweight, obesity and cardio-metabolic risks; cancer, type-2 diabetes and cardiovascular diseases; irritable bowel syndrome, depression and frailty conditions; and all-cause mortality. Among children and adolescents, these included cardio-metabolic risks and asthma. No study reported an association between UPF and beneficial health outcomes. Most findings were derived from observational studies and evidence of plausible biological mechanisms to increase confidence in the veracity of these observed associations is steadily evolving. There is now a considerable body of evidence supporting the use of UPFs as a scientific concept to assess the 'healthiness' of foods within the context of dietary patterns and to help inform the development of dietary guidelines and nutrition policy actions.

Keywords: ultra-processed food; health outcomes; dietary patterns; NOVA; food processing; obesity

UPFs and the nutrition transition

Ultra-processed foods and the nutrition transition: global, regional and national trends, food systems transformations and political economy drivers

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Key words: ultra-processed foods, beverages, palm oil, nutrition transition, food systems, political economy

Running title: Ultra-processed foods and the nutrition transition

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Abstract

Understanding changes in global ultra-processed food (UPF) consumption and associated drivers is essential, given mounting evidence linking these foods with adverse health outcomes. In this synthesis review we take two steps. First, we quantify per capita volumes and trends in UPF sales, and ingredients (sweeteners, fats, sodium, cosmetic additives) supplied by these foods, in countries classified by income and region. Second, we review the literature on food systems and political economy factors that may explain the observed changes. We find evidence for a substantial expansion in the types and quantities of UPFs sold worldwide, representing a transition towards a more processed global diet, but with variations between regions and countries. As countries grow richer, more UPFs and a wider variety of UPFs are sold. Sales volumes are highest in Australasia, North America, Europe and Latin America, but are growing most rapidly in Asia, the Middle East and Africa. These developments are closely linked with the industrialisation of food systems, technological change and globalisation, including growth in the market and political activities of transnational food corporations, and inadequate governance and policy responses. The scale of dietary change underway, especially in highly-populated middle-income countries, raises serious concerns for global health.



What's the policy problem?

UPFs are harmful

- To health & equity
- To the environment
- To the rights of children
- To food culture

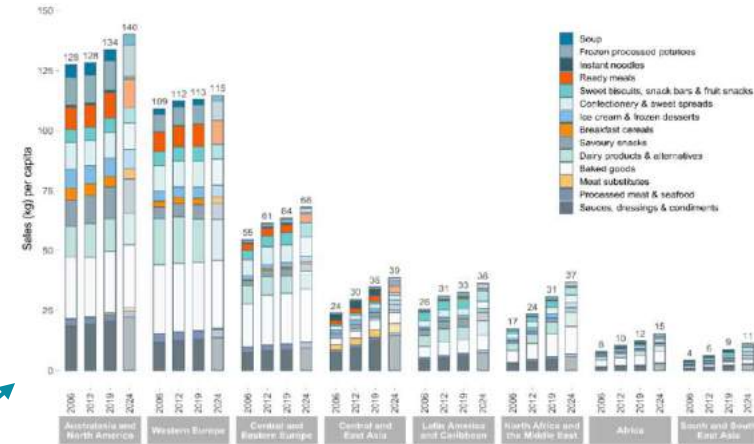
Contribute to unhealthy & unsustainable diets

Yet UPF sales are rising nearly everywhere

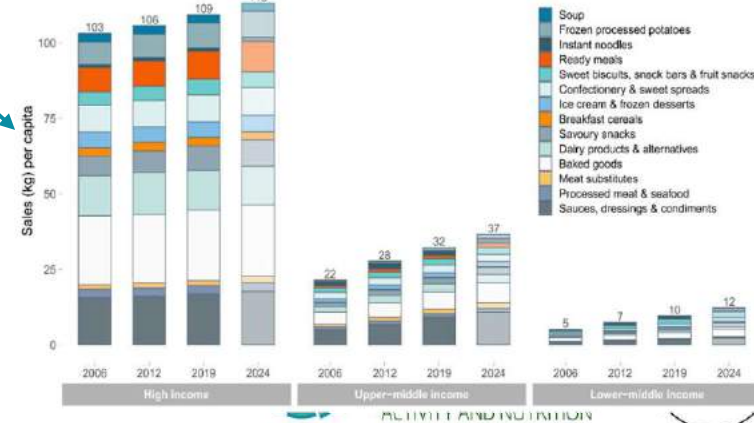
What are the broad policy objectives?

1. Halt (the rise)
2. Reduce (consumption)
3. Minimise (harm)

Ultra-processed food sales by region



Ultra-processed food sales by country income



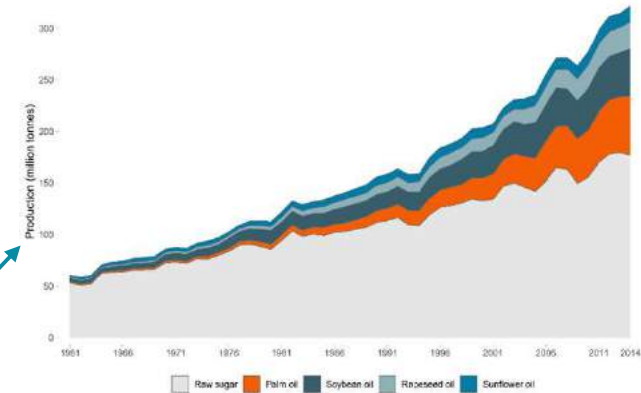
What explains rising UPF consumption?

Choice and lack of personal responsibility → rising consumption results from a decline in personal responsibility

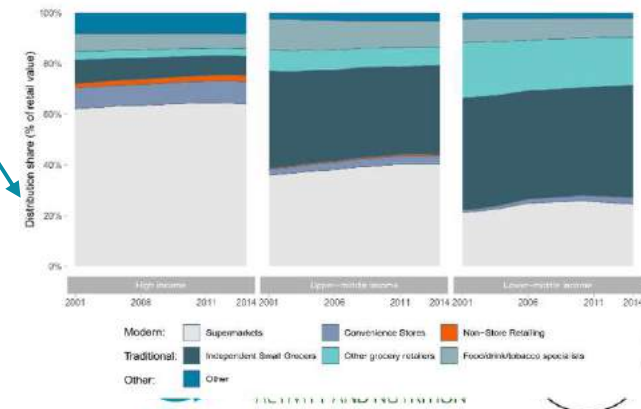
Food systems transformations →

- *Demand* – rising incomes, urbanization etc
- *Production* – cheap & readily available production inputs
- *Manufacturing* – global expansion (Coca-colonization)
- *Technologies* – processing, manufacturing and food science
- *Retail* – supermarketization; fast food (McDonalidization)
- *Marketing* – mass media, digital, packaging, pricing
- *Globalization* – trade & investment liberalization
- *Political economy* – market and political power of Big Food

World production of sugar & vegetable oils

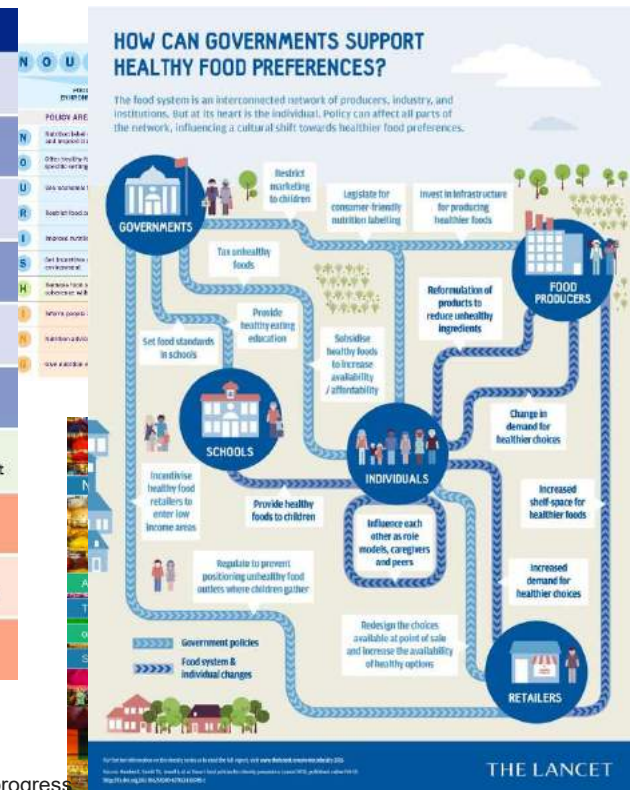


Retail distribution of packaged foods



What principles and frameworks for guiding action?

Domain		Policy area	Examples of potential policy actions
Food environment	N	Nutrition label standards and regulations on the use of claims and implied claims on foods	eg. nutrient lists on food packages; clearly visible "interpretive" and calorie labels; menu, shelf labels; rules on nutrient and health claims
	O	Offer healthy foods and set standards in public institutions and other specific settings	eg. fruit and vegetable programmes; standards in education, work, health facilities; award schemes; choice architecture
	U	Use economic tools to address food affordability and purchase incentives	eg. targeted subsidies; price promotions at point of sale; unit pricing; health-related food taxes
	R	Restrict food advertising and other forms of commercial promotion	eg. restrict advertising to children that promotes unhealthy diets in all forms of media; sales promotions; packaging; sponsorship
	I	Improve the nutritional quality of the whole food supply	eg. reformulation to reduce salt and fats; elimination of trans fats; reduce energy density of processed foods; portion size limits
	S	Set incentives and rules to create a healthy retail and food service environment	eg. incentives for shops to locate in underserved areas; planning restrictions on food outlets; in-store promotions
Food system	H	Harness the food supply chain and actions across sectors to ensure coherence with health	eg. supply-chain incentives for production; public procurement through "short" chains; health-in-all policies; governance structures for multi-sectoral engagement
Behaviour-change communication	I	Inform people about food and nutrition through public awareness	eg. education about food-based dietary guidelines, mass media, social marketing; community and public information campaigns
	N	Nutrition advice and counselling in health-care settings	eg. nutrition advice for at-risk individuals; telephone advice and support; clinical guidelines for health professionals on effective interventions for nutrition
	G	Give nutrition education and skills	eg. nutrition, cooking/food production skills on education curricula; workplace health schemes; health literacy programmes



Hawkes, C., Jewell, J., & Allen, K. (2013). A food policy package for healthy diets and the prevention of obesity and diet-related non-communicable diseases: the NOURISHING framework. *Obesity reviews*, 14, 159-168.

Roberto, C. A., Swinburn, B., Hawkes, C., Huang, T. T., Costa, S. A., Ashe, M., ... & Brownell, K. D. (2015). Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking. *The Lancet*, 385(9985), 2400-2409.

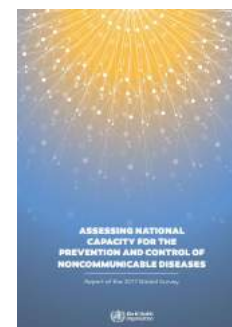
Policy action – how are we tracking so far, in global context?

Government actions targeting lifestyle-behavioural change

- Education and counselling (75%)
- Media campaigns (61%)

Actions targeting food supplies and food environments

- School food standards (43%)
- Taxes on sugar-sweetened beverages (38%) and unhealthy foods (6%)
- Elimination of industrially produced trans-fats (37%)
- Restrictions on marketing foods and beverages to children (35%)
- Front-of-pack labelling schemes (25%; with about half being mandatory)
- Portion-size controls (16%)



Other cross-cutting proposals

Using the right descriptors in FBDGs

- Energy-dense, nutrient poor
 - High sugar, salt and fat
 - Discretionary, non-core
 - Highly-processed
 - Ultra-processed
- } *nutrient-centric*
- } *choice / consumer-centric*
- } *processing / producer-centric*

Only Brazil, Peru, Uruguay, Ecuador use UPF concept in dietary guidelines

Other actions

- Adopt 'food-based profiling' into dietary guidelines and policy
- Whole-food reformulation – reducing the degree of processing
- Promote hand-prepared and home-prepared foods; address the culinary skills transition
- Protect traditional food cultures – e.g. Japan, South Korea

Accelerating action – what’s our public health playbook?

Bottom-up civil society mobilization

- Broad-based coalitions
- Strategic advocacy during key policy windows
- Strategic development and deployment of evidence
- Leadership

Top-down political commitment, sustained over time Resources & capacity

- To design, implement and monitor policy actions
- Financial support for ‘social lobbying’
- Capacity to defend against ongoing industry opposition

The collage displays several key research articles and commentaries. At the top left is the JHPM logo and the title 'The Untapped Power of Soda Taxes: Incentivizing Consumers, Generating Revenue, and Altering Corporate Behavior'. To its right is an editorial from Research Square titled 'The Political Economy of Sugar-Sweetened Beverages Taxation in Latin America: Lessons from Mexico, Chile and Colombia'. Below these are two more articles: 'Prevention of childhood obesity and food policies in Latin America: from research to practice' and 'Understanding policy change for obesity prevention: learning from sugar-sweetened beverages taxes in Mexico and Chile'. At the bottom left is a commentary titled 'Accelerating the Worldwide Adoption of Sugar-Sweetened Beverage Taxes: Strengthening Commitment and Capacity'. The collage also includes logos for JHPM, Research Square, and the Institute for Physical Activity and Nutrition.

Thank you

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