Policy responses to ultra-processed foods in global context

Dr Phillip Baker
Institute for Physical Activity and Nutrition Deakin University, Melbourne
Email: phil.baker@deakin.edu.au
@PhilBakerNZ
Recent publications – a shameless plug

UPFs and health outcomes

Ultra-Processed Foods and Health Outcomes: A Narrative Review

Lennie Elizabeth Quintana-Mladenov1,5, Marta Zmirou5, Philipp Baker1 and Mark Lawrence5

1 School of Health and Nutritional Sciences, Deakin University, Geelong, VIC, Australia
2 Institute for Physical Activity and Nutrition, Deakin University, Geelong, VIC, Australia
3 Faculty of Health Sciences, University of Western Sydney, Campbelltown, NSW, Australia
4 Correspondence: lquintana@deakin.edu.au

Abstract: The nutrition literature and authoritative reports increasingly recognize upregulated and health outcomes. This is a systematic review of the recent literature, interpretation and meta-regression on the health of dietary food types, populations, and dietary outcomes and dietary assessments. Including 48 studies, known dietary approaches associated with at least one adverse health outcome. Among adults, these included overweight, obesity, cardiovascular disease, cancer, type-2 diabetes and cardiovascular disease in vulnerable subgroups, depression and anxiety conditions, and alcohol misuse. Among children and adolescents, these included high dietary risks and obesity. No study reported an association between UPF and health benefits. Many findings were derived from observational studies and evidence of plausible biological mechanisms to increase cardiovascular mortality of these adverse associations is steadily evolving. There is now a considerable body of evidence supporting the role of UPF as a scientific concept to assess the healthfulness of foods within the context of dietary patterns and to help interpret the development of dietary guidelines and nutrition policy actions.

Keywords: ultra-processed foods; 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

Phillip Baker1, Quintina Mladenov1,5, Brandi Harvey, Kristen Terriss1,5, Jennifer Berchich1,5, Nicole McKellar1, Chris Powell2,3, Oliver Boyd, Chris Deily, Gregory Sokol6, Andrew Wrobley7, Sharon Noon1,5

1 Institute for Physical Activity and Nutrition, Deakin University, Geelong, Australia
2 School of Health and Environmental Sciences, Deakin University, Geelong, Australia
3 Faculty of Health Sciences, University of Western Sydney, Campbelltown, NSW, Australia
4 School of Public Health, University of Sydney, Sydney, NSW, Australia
5 Faculty of Health Sciences, University of Western Sydney, Campbelltown, NSW, Australia
6 Institute of Nutrition and Food Security, Australian National University, Canberra, ACT, Australia
7 School of Agriculture and Food Sciences, University of Queensland, St Lucia, Brisbane, Australia

Key words: ultra-processed foods; beverages; snacking; nutrition transition; food systems; political economy.

Running title: Ultra-processed foods and the nutrition transition

Conflicts of interest: The authors declare no conflicts of interest.

Abstract:

Understanding changes in global ultra-processed foods (UPF) consumption and associated drivers is essential given increasing evidence linking these foods with adverse health outcomes. In this systematic review, we take this step forward, using a narrative synthesis to examine the role of UPF exposure and upregulated and health outcomes. This is a qualitative analysis of the literature, using meta-regression to interpret the role of UPF exposure and associated adverse health outcomes. We focus on five indigenous populations and their exposure to UPF, the most widespread in the world. We use a range of methods, including narrative synthesis, meta-regression, and evidence-based policy recommendations, to assess the role of UPF exposure and adverse health outcomes. This study highlights the need for further research to understand the role of UPF exposure in the adverse health outcomes observed in global populations. The results provide evidence for the need for further research to understand the role of UPF exposure and adverse health outcomes. This study highlights the need for further research to understand the role of UPF exposure in the adverse health outcomes observed in global populations. The results provide evidence for the need for further research to understand the role of UPF exposure in the adverse health outcomes observed in global populations.
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)
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 (McDonaldization)
- **Marketing** – mass media, digital, packaging, pricing
- **Globalization** – trade & investment liberalization
- **Political economy** – market and political power of Big Food
What principles and frameworks for guiding action?

<table>
<thead>
<tr>
<th>Domain</th>
<th>Policy area</th>
<th>Examples of potential policy actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food environment</td>
<td>Nutrition label standards and regulations on the use of claims and implied claims on foods</td>
<td>eg., nutrient label on food packages: clearly visible &quot;intermediate&quot; and &quot;alone&quot; labels; menu, shelf labels; rules on ornament and health claims</td>
</tr>
<tr>
<td></td>
<td>Offer healthy foods and meet standards in public institutions and other specific settings</td>
<td>eg., fruit and vegetable programmes, standards in education, work, health facilities, award schemes, choice architecture</td>
</tr>
<tr>
<td></td>
<td>Use economic tools to address food affordability and purchase incentives</td>
<td>eg., targeted rebates; price promotions at points of sale; unit pricing; health-related food taxes</td>
</tr>
<tr>
<td></td>
<td>Restrain food advertising and other forms of commercial promotion</td>
<td>eg., restrict advertising to children that promotes unhealthy diets in all forms of media, sales promotions, packaging, sponsored activities</td>
</tr>
<tr>
<td></td>
<td>Improve the nutritional quality of the whole food supply</td>
<td>eg., food nutrient density of processed foods; portion sizes limits</td>
</tr>
<tr>
<td></td>
<td>Set incentives and rules to create a healthy retail and food service environment</td>
<td>eg., incentives for shops to locate in underserved areas; planning restrictions on food outlets; in-store promotions</td>
</tr>
<tr>
<td>Food system</td>
<td>Harness the food supply chain and act across sectors to ensure coherence with health</td>
<td>eg., supply chain incentives for products; public procurement through &quot;health&quot; criteria, health in all policies; governance structures for multi-sectoral engagement</td>
</tr>
<tr>
<td>Behaviour change</td>
<td>Inform people about food and nutrition through public awareness</td>
<td>eg., education about food-based dietary guidelines; mass media, social marketing, community and public information campaigns</td>
</tr>
<tr>
<td>Communication</td>
<td>Nutrition advice and counselling in health-care settings</td>
<td>eg., nutrition advice for at-risk individuals; telephone advice and support; clinical guidelines for health professionals; effective interventions; for nutrition counselling</td>
</tr>
<tr>
<td></td>
<td>Give nutrition education and skills</td>
<td>eg., nutrition, cooking; food production skills; education seminars; workplace health and safety; health literacy programmes</td>
</tr>
</tbody>
</table>


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 \(\Rightarrow\) nutrient-centric
- High sugar, salt and fat
- Discretionary, non-core \(\Rightarrow\) choice / consumer-centric
- Highly-processed
  - Ultra-processed \(\Rightarrow\) 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
Policy action – what’s holding us back?

Power of the UPF industry

- The food industry *Playbook*: lobby, frame the debate, fund research studies, partner with scientists, promote self-regulation, create front groups

Reductionism

- Nutrient-profiling models; exclusion of food processing from dietary guidelines and policy action
- Enables ‘nutrients-to-limit’ reformulation, fortification and functionalisation of UPFs
- But – a reformulated ultra-processed food, is (almost always) still an ultra-processed food
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
Thank you

phil.baker@deakin.edu.au