Submission to WHO on the Establishment of a Guideline Development Group on "Ultra-Processed Foods (UPFs)"

Comments and contribution from Aman Wirakartakusumah)*

We appreciate the opportunity to provide input to the World Health Organization (WHO) on the establishment of a Guideline Development Group (GDG) to consider the role of so-called "ultra-processed foods (UPFs)" in diet and health.

IUFoST, as the global scientific body representing food science and technology, has recently developed a framework on food classification systems that aims to support evidence-based, inclusive, and science-driven policy agendas. This framework proposes a multi-attribute, formulation- and processing-based classification model that explicitly integrates food safety, nutrition, sustainability, affordability, and palatability, and is intended as a constructive alternative to reductionist approaches that treat "processing" as inherently negative.

IUFoST Framework for UPF

Building on this framework and the additional considerations outlined below, we respectfully submit the following points for WHO's consideration when establishing the GDG on UPF.

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1. The Guideline Development Group should adopt a multi-attribute, function-oriented classification approach

IUFoST strongly supports moving from a one-dimensional focus on "degree of processing" towards an integrated assessment of foods based on:

1. **Degree of formulation/fabrication** (what is in the product and how ingredients are combined);
2. **Degree and type of processing** (what technologies are used, at what intensity, and for what purpose); and
3. **Resulting function in healthy diets** (contribution to nutrition security and risk reduction for non-communicable diseases, NCDs).

Within this architecture, classification should not be an end in itself, but a means to assess how a food contributes – positively or negatively – to:

- **Food security** (availability, stability, and resilience of supply);
- **Food safety** (microbiological, chemical, and physical safety, shelf life, and waste reduction);
- **Nutrition security** (adequacy and balance of macro- and micronutrients; contribution to preventing undernutrition and micronutrient deficiencies); and
- **Healthy diets and NCD risk** (overall diet quality, energy balance, metabolic health, and long-term disease risk).

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This implies the use of **both quantitative and qualitative metrics** and a **multi-criteria scoring system** rather than a binary or categorical "UPF vs non-UPF" label. Such an approach is more compatible with WHO's mandate to support safe, nutritious, and sustainable diets across very diverse food systems.

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2. The classification solution must integrate palatability, culture, convenience, affordability, and sustainability

For any future WHO guidance to be realistic, equitable, and implementable, the GDG should explicitly integrate additional determinants of food choice and diet quality, including:

- **Palatability, pleasure, and cultural meaning of food**
  Eating is not merely a biochemical act; it is also social, cultural, and emotional. Frameworks that ignore *eating pleasure, cultural identity, and "happiness while eating"* risk recommending diets that are not acceptable or sustainable in real life. Palatability and cultural fit should therefore be treated as legitimate attributes in the classification system and in subsequent guidance.

- **Ease and convenience of use**
  Time constraints, urbanization, women's labour participation, and caregiving burdens make convenience a critical dimension, especially in low- and middle-income countries (LMICs). Processing can reduce preparation time, enable safe storage, and support school feeding and workplace meals. Guidance should distinguish between **convenience that facilitates healthy eating** and **convenience associated with over-consumption of energy-dense, nutrient-poor options**.

- **Local affordability and accessibility**
  Foods recommended as "healthy" must be **affordable and physically accessible** to the majority of the population. The GDG should explicitly consider **price, purchasing power, and market structure** when assessing the desirability of food groups and formulations. A classification that excludes affordable fortified staples or safe, shelf-stable foods risks worsening malnutrition among vulnerable groups.

- **Environmental and resource sustainability**
  Classification should also be sensitive to **biodiversity, resource use, and planetary boundaries**. The same product category may have different environmental footprints depending on region and supply chain. Future guidance should therefore avoid universal judgments that do not account for local agro-ecological conditions and sustainability trade-offs.

By embedding these variables into the classification model, WHO can promote dietary patterns that are not only nutritionally sound and safe, but also culturally meaningful, feasible, and sustainable in diverse settings.

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3. Global diversity of diets and planetary contexts must be central – not peripheral

Dietary intake patterns across the world are shaped by **regional, ethnic, cultural, and religious traditions**, local **biodiversity**, **climate and geography**, and **socio-economic**

structures. A guideline development process that implicitly assumes a "default" diet model from high-income countries will not meet the needs of most of the world's population.

We therefore recommend that the GDG:

- Ensure that the **reference diet models** and scenarios used in evidence reviews and modelling **include LMIC settings** and a wide range of traditional dietary patterns, not only those prevalent in high-income countries.
- Recognize that **planetary boundaries and environmental constraints differ across regions**, leading to different optimal combinations of fresh, minimally processed, and processed foods.
- Avoid language and constructs that may **stigmatize culturally important foods** or traditional processing techniques (fermentation, drying, smoking, etc.), which often have significant safety and nutritional benefits when properly applied.

An inclusive approach of this kind will better align WHO's guidance with the realities of diverse populations and support more equitable health outcomes.

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4. Causal inference for NCDs must go beyond simple statistical correlations

Observational studies have reported associations between high intakes of certain categories labelled as "ultra-processed" and increased risk of NCDs. While these findings are important, **association is not necessarily causation**, especially when underlying classification systems were not designed with mechanistic or functional criteria in mind.

For a robust and scientifically defensible guideline, the GDG should:

- Distinguish clearly between **statistical correlation** and **causal inference**, explicitly addressing potential confounders such as overall diet quality, socio-economic status, smoking, physical activity, and health-seeking behaviour.
- Assess whether the **adverse effects are attributable to:**
    - Excessive intake of energy, sugars, saturated fats, sodium, or low fibre (i.e., **nutrient composition**);
    - Portion size, frequency of consumption, or eating context;
    - Specific additives or process-induced contaminants; or
    - The **processing level itself**, independent of the above.
- Consider **triangulation of evidence** across:
    - Mechanistic and toxicological data;
    - Controlled feeding trials and intervention studies;
    - Longitudinal observational studies; and
    - Comparative case studies of foods with similar formulation but different processing, and vice versa.

It is essential that **processed foods as a broad category are not assumed to be causal for NCDs** in the absence of strong mechanistic and clinical evidence. Failure to make this distinction could lead to unintended harms, including discouraging beneficial processing technologies (e.g., pasteurization, fortification, cold chains) that are vital for food safety and nutrition security.

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5. Composition of the Guideline Development Group: diversity of disciplines, regions, and perspectives

Given the multi-dimensional nature of food systems and dietary patterns, the GDG must be **intentionally multidisciplinary and globally representative**. We recommend including expertise across, at minimum, the following domains:

- **Nutrition and public health** (including NCDs, obesity, undernutrition, and micronutrient deficiencies);
- **Food science and technology** (formulation, processing, preservation, safety, and innovation);
- **Epidemiology and biostatistics** (causal inference, study design, evidence grading);
- **Toxicology and food safety risk assessment**;
- **Behavioural and social sciences** (food choice, culture, psychology of eating, consumer behaviour);
- **Economics and trade** (food affordability, market structures, trade implications);
- **Sustainability and environmental sciences** (life-cycle assessment, biodiversity, climate impacts);
- **Implementation science and health systems** (policy feasibility, monitoring and evaluation);
- **Representation from low- and middle-income countries**, including practitioners experienced in school feeding, safety nets, and local food systems.

In addition, WHO may wish to consider **structured stakeholder engagement** with civil society, consumer groups, farmers, and food industry representatives, in ways that preserve the integrity and independence of the GDG while ensuring that guidelines are grounded in practical realities.

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6. Alignment with existing normative bodies, especially Codex Alimentarius

We echo the IUFoST recommendation that discussions on food classification and processing be closely aligned with – and, where appropriate, channelled through – the **Codex Alimentarius Commission**, particularly committees such as CCNFSDU and CCFL.

Key reasons include:

- Codex provides a **neutral, science-based platform** that already integrates trade, health, and agriculture perspectives;

- Many countries align their **regulations and labelling** with Codex standards, so coherence will facilitate implementation;
- Existing work on **nutrient profiling, front-of-pack labelling, and food safety** can be leveraged rather than duplicated.

A WHO GDG that is conceptually and procedurally aligned with Codex will be better positioned to produce guidance that is **globally coherent, implementable, and supportive of innovation** in both high- and low-resource settings.

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7. Offer of collaboration

IUFoST and its global network of food science and technology experts stand ready to:

- Contribute to the GDG through **technical expertise** in formulation, processing, safety, and sustainability;
- Share **case studies and data** illustrating how multi-attribute models (such as the IUFoST Formulation and Processing Classification model) can be operationalized to evaluate real foods and dietary patterns;
- Participate in **joint workshops and consultations** with WHO, FAO, Codex, and other relevant bodies to develop harmonized, evidence-based approaches.

Concluding remarks

We fully support WHO's objective to reduce the global burden of NCDs and malnutrition. We believe this goal is best served not by judging "processing" in the abstract, but by **evaluating actual foods and dietary patterns through a multi-dimensional, evidence-based lens** that recognizes:

- The essential role of responsible food processing in food safety, nutrition security, and sustainability;
- The diversity of cultures, diets, and planetary contexts across regions; and
- The importance of robust causal reasoning in linking foods and processing to health outcomes.

We hope these considerations will be helpful in shaping the mandate, composition, and methodological approach of the Guideline Development Group and remain available for further dialogue and collaboration.

Aman Wirakartakusumah, Jakarta, Indonesia November 28, 2025