Ultra-Processed Foods

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- Foods, nutrients and dietary patterns guidance
- Ultra-processed foods and NOVA and other methods
- Discussion
Foods, nutrients, and dietary pattern guidance

DRI, RDI, RDA, EAR, UL → nutrient profiling → dietary pattern profiling → UPF ultra-processed foods → NOVA
# Ultra-processed foods → NOVA and other methods

**NOVA**
- G1: Unprocessed/minimally processed foods
- G2: Processed culinary ingredients
- G3: Processed foods
- G4: Ultra-processed food and drink products

**IFIC**
- G1: Minimally processed foods
- G2: Foods processed for preservation
- G3: Mixtures of combined ingredients
- G4: Ready-to-eat processed foods
- G5: Prepared foods/meals

**IARC**
- G1: Non-processed foods
- G2.1: Moderately processed foods: No further cooking
- G2.2: Moderately processed foods: Cooked foods
- G3: Highly processed foods

**UNC**
- G1: Unprocessed/minimally processed foods
- G2.1: Basic processed foods: Ingredients
- G2.2: Basic processed foods: Preservation/precooking
- G3.1: Moderately processed: Flavor
- G3.2: Moderately processed: Grain products
- G4.1: Highly processed: Ingredients
- G4.2: Highly processed: Stand-alone

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Martinez-Perez et al., 2021, inconsistent relationship of cardiovascular health and UPF consumption with various methods

https://doi.org/10.3390/nu13072471

Adam Drewnowski, Situation assessment – why it’s important to drive health sustainable diets & the current nutrition landscape, Sponsored Satellite, Clif Bar, October 2022

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Making Healthy, Sustainable Diets Accessible and Achievable: A New Framework for Assessing the Nutrition, Environmental, and Equity Impacts of Packaged Foods

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# Sustainable, Nutritious Packaged Foods: Guiding Principles

## Potential Indicators

<table>
<thead>
<tr>
<th>Nutrition*</th>
<th>Environment</th>
<th>Equity</th>
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| - Contributes positive food group(s)  
  - **FOR SNACKS:** 8g whole grains; 1/4 cup equivalent of fruits, vegetables or dairy; 1/4 oz of nuts  
| - Contributes under-consumed nutrient(s)  
  - **FOR SNACKS:** 10% DV potassium, fiber, vitamin D, calcium, iron, vitamin E, magnesium, etc.  
| - Includes whole food ingredients  
  - **FOR SNACKS:**  
    - First ingredient is a whole food AND  
    - Most ingredients (>50% by wt.) are whole foods  
| - **SOURCING**  
  - Is “made with organic” or contains ingredients sourced in a way that ...  
    - Limits GHG emissions, moving to net zero  
    - Limits synthetic chemicals/pesticides  
    - Supports downstream water quality  
    - Supports soil quality  
    - Promotes biodiversity  
| - **MANUFACTURING/SOURCING**  
  - Made while ensuring fair and healthy working conditions across the supply chain:  
    - Living wage and income  
    - Safe working environment  
    - No forced or child labor  
    - Freedom of association  
| - **MANUFACTURING**  
  - Leverages zero waste practices  
    - Made in a facility following zero waste standards  
| - **PRODUCT/PROMOTION**  
  - Delivers consumer-relevant value  
| - Limits saturated fat  
  - **FOR SNACKS:** <10% of calories  
| - **USES eco-friendly packaging**  
  - Packaging is recyclable, reusable or compostable  
  - It’s accompanied by simple/visible consumer education  
| - **LIMITS GHG EMISSIONS**  
  - Made using renewable energy  
| - Limits sodium  
  - **FOR SNACKS:** Meets FDA voluntary sodium reduction targets (by category)  
| - **PRODUCT/PROMOTION**  
  - Has a desirable taste, texture and appearance  
| - **PRODUCT/PROMOTION**  
  - Meets consumers’ diverse lifestyle demands  
  - Examples: portable, time saving, easy to prepare at all skill levels to help make healthy, sustainable eating achievable  
| - Clearly conveys product attributes and benefits with accessible marketing and labeling  

*Performance foods are exempt

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**FIGURE 2** Proposed guiding principles for the definition of sustainable, nutritious packaged foods (SNPFs), including specific nutrition criteria for snacks, exclusive of performance foods. DV, recommended daily intake; GHG, greenhouse gas; NSSRI, National Salt and Sugar Reduction Initiative.

6:nzac136 or [https://doi.org/10.1093/cdn/nzac136](https://doi.org/10.1093/cdn/nzac136)
• Discussion
Sectors of a Food System

There are five sectors of a food system: Production, Processing, Distribution & Marketing, Consumption & Food Access, and Resource Management.

https://foodsystems.unl.edu/newsletters

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