

Industrial Food Processing Overlooked when most Sustainable Diet Indices

Researchers synthesized 57 peer-reviewed publications and analyzed the tools used therein to evaluate how they measure [sustainable diets](#). Review findings revealed that while nearly every assessed tool accounted for agricultural production and final consumption in its operational methodology, ~65% of them completely ignored the contributions of food processing.

It further elucidates that these tools often sideline key sustainability dimensions, such as social equity and economic accessibility, in favor of environmental and health metrics. The review concludes that current methods for assessing diet sustainability may be overlooking the energy-intensive, waste-generating nature of [ultra-processed foods](#) (UPFs) and may require more comprehensive analytical frameworks to better reflect today's food context.



Study

The present scoping review aimed to address this [knowledge](#) gap by auditing the current landscape of diet sustainability tools. The review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-SCR) guidelines.

The review first identified peer-reviewed publications from several major online scientific repositories (including PubMed, Scopus, [Web of Science](#), and SciELO) without publication date restrictions. The resultant publication set was screened only to include articles that either developed or applied specific indices to assess sustainable diets.

For each included study (n = 57), reviewers extracted detailed study data focusing on [food production](#), storage, processing methodology, retail, and overall waste generation.

They further evaluated the dimensions of sustainability considered in each included study: environmental (e.g., carbon footprint), [health](#) (e.g., nutritional quality), economic (e.g., affordability), and sociocultural (e.g., tradition and acceptability).

Studies were categorized into "direct" assessments, which explicitly used processing metrics, and "indirect" assessments, which examined [industrialized foods](#) without an explicitly stated processing framework.

Finally, the review documented whether the included studies incorporated the NOVA classification system, which is currently considered the global “[gold standard](#)” for categorizing food by its level of industrial processing.

Results

The scoping review highlights that, while all 57 included peer-reviewed publications provided extensive details on their assessments of the [dietary production](#) (farming) and consumption (dietary intake) stages, more than half (64.9%) did not report or account for industrial processing and its associated impacts.

Alarming, only 19.3% of included studies developed or analysed tools explicitly designed to directly incorporate food processing metrics or classify foods according to their degree of processing. Even more alarming was that only 8.8% even used the term “ultra-processed” in their evaluations or incorporated the [NOVA classification](#) system into their analyses.

The review highlighted this methodological discrepancy by revealing that, while almost all (98.2%) of the studies explicitly tracked [fruit consumption](#), only 17.5% applied the same tracking framework to discretionary or UPFs.

Conclusion

The present scoping review highlights that while today’s food sustainability analysis tools are excellent at differentiating between the impacts of cows (meat sources) versus carrots ([plant-based foods](#)), they are critically incapable of distinguishing between the impacts of a raw potato and an industrially processed potato chip.

It thereby underscores critical oversights in prevalent definitions and measurements of sustainable foods, primarily that they fail to account for the [environmental](#) and social costs embedded in the industrial processing sector.

Moving forward, the researchers call for integrating the NOVA classification into sustainability indices and [Life Cycle Assessments](#) (LCAs), without which future sustainability assessments risk promoting diets that may look green on paper but support an industrial system that is anything but.

Source:

<https://www.news-medical.net/news/20260304/Study-finds-most-sustainable-diet-indices-overlook-industrial-food-processing.aspx>