Comment

What's in a Diet? Conceptual and Methodological Challenges in Classifying Dietary Groups

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Despite longstanding calls for scientific consensus on the definitions and categorisation of animal-restrictive dietary groups (Ruby, 2012; Rosenfeld, 2018), significant discrepancies remain. Urgency to address this issue is only growing, as dietary diversity increases. Without a shared conceptual and methodological framework, the field risks hindering theoretical integration and meta-analytic work. In this commentary, we highlight two key considerations in dietary group categorisation, calling for greater clarity, consistency and collaboration to strengthen cumulative progress in the field.

Behaviour vs. Identity

First, we consider the distinction between behavioural (which foods you eat and how often) and identity-based classifications of diet. Operationalising diet as behavioural provides a clearly defined system of categorisation that reflects the traditional understanding of diet as purely food based. However, societal shifts have increasingly framed animal-restrictive diets as identities with group-based ideologies and attitudes. For example, a 2020 British court ruling recognised veganism as a protected philosophical belief (McKeown & Dunn, 2021), which surpasses a purely behavioural classification.

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However, some individuals diverge further to prioritise ideological motives over strict behavioural adherence (for example, allowing the consumption of animal products going to waste). Hence, we see that these two methods of operationalising diet can produce different results, as individuals vary in the importance assigned to the behavioural and identity-based components of diet.

While the ideological component appears central among those subscribing to ethical veganism, identity also influences self-categorisation for those following meat-reducing (e.g., "flexitarian") and meat-eating diets. For example, some meat-eaters identify more strongly with the attitudinal ("meat lover") than the behavioural descriptor ("omnivore"), regardless of both holding true behaviourally. Therefore, we can see that on both ends of the dietary spectrum, measuring purely by behaviour does not capture the full picture. One might assume that simply removing attitudinal or affective terms from dietary labels would resolve this issue. However, even using current empirically supported labels cannot eliminate the fact that dietary identities, complete with ideological, attitudinal, and social components, are becoming more widespread and are here to stay.

Yet, the ability to hold an identity or a belief system around the diet is predicated on some level of foundational dietary behaviours. Without any behavioural adherence, the identity becomes largely symbolic and may lack the intended impact. Additionally, food frequency measures are in line with how other diet types are understood in health and biological sciences, and inconsistencies in the operationalisation of diet can limit cross-field integration.

Neither measurement approach alone is reflective of the full picture, and little research investigates this discrepancy in categorisation, or the extent to which food behaviours are concealed on self-reports to maintain group membership. First, we suggest that researchers could adopt a dual-measurement approach where feasible, reporting the discrepancy statistics between behavioural and identity-based classifications of diet (see Amato et al., 2022). This would allow us to better understand how much discrepancy exists. Second, the field would benefit from greater discussion of how much behavioural deviation from a diet is permissible within a given dietary identity, as well as the reasons for deviation.

Collapsed vs. Granular

Our second consideration concerns the level of specificity with which dietary groups are defined and measured in research. Some researchers reduce dietary groups to a simple dichotomy, comparing meat-eaters to meat-avoiders (often labelled "veg*ns"). By contrast, others adopt a more differentiated approach, for instance distinguishing between vegans and vegetarians, or even between attitudinal subcategories of vegans. While the level of specificity will inevitably vary depending on the research question; this decision must be theoretically informed and avoid both overgeneralisation and over-

differentiation otherwise we risk drawing misinformed conclusions and undermining our ability to integrate our findings.

The collapsing of groups in research is often motivated by practical constraints such as recruitment difficulties and the preservation of statistical power. However, dichotomising meat-eaters and meat-avoiders assumes that dietary groups form a nested structure, for instance, vegans and vegetarians are treated as subcategories of a broader group. This obscures group differences as vegans and vegetarians differ not only in their diet but also in their motives, social support, and perceived barriers to following a plant-based diet (Dhont & Ioannidou, 2024). Collapsing groups also risks diluting and misattributing findings, especially in samples with unequal distributions of subgroups (e.g., differing proportions of flexitarians, pescetarians, omnivores within the meat-eating group could obscure differences in, for example, ideology; Ioannidou et al., 2026). Furthermore, research frequently assumes that meat-eaters are a homogenous group despite forming the largest category and varying in their attitudes, identity, and behaviour. While there has been a greater focus on group differences within meat-avoiders, little attention has been paid to meat-eating subgroups which, again, risks conflating distinct groups.

The use of fine-grained dietary categories can reveal important differences between meaningful subgroups; however, it can also fragment the literature when categories lack theoretical clarity (e.g., the concept of "flexitarian" lacks specific criteria for membership) or conflate diet with other variables. For instance, motivation and diet are often conflated under a single label despite being conceptually independent (e.g., "health vegan" or "ethical vegan"). Motivations for following a particular diet are not mutually exclusive and individuals frequently endorse multiple motives (Hopwood et al., 2020). Conflating diet with motivation under a single label therefore risks misrepresenting psychological processes and could mislead interpretations.

The field may therefore benefit from refining dietary categories, ensuring they are theoretically grounded and conceptually valid. For instance, working towards a clear definition of group membership and empirically assessing independence from other dietary groups. This would help to avoid both overgeneralisation as well as over-differentiation. However, it would still allow methodological flexibility, allowing researchers to adapt their design to their research question and to separately measure conceptually distinct constructs, such as motivation. When collapsing groups together is unavoidable due to practical constraints, recording non-collapsed categories would still allow contribution to collective endeavours such as meta-analysis. These recommendations balance practical constraints with the need for greater conceptual clarity and comparability across the field.

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Conclusion

Inconsistent definitions and measurements of dietary group membership pose significant challenges for research in this area. These inconsistencies risk theoretical misalignment, hinder comparability across studies, and complicate synthesis of findings. We recommend a number of possible steps that could be taken to address these issues, including greater transparency in operationalisation, the use of multidimensional classification approaches, and greater attention to conceptual validity. We also encourage open dialogue within the research community about how best to conceptualise and categorise dietary groups. Through such collective discussion, the field can move toward greater coherence, facilitating theoretical integration and comparability.

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