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Comment on Luiten *et al.*'s paper: 'Ultra-processed foods have the worst nutrient profile, yet they are the most available packaged products in a sample of New Zealand supermarkets'

Madam

Luiten *et al.* divided foods available in New Zealand supermarkets into three groups⁽¹⁾. They sought to compare the healthiness of the groups using a modification of the Nutrient Profiling Scoring Criterion (NPSC) adapted by Food Standards Australia New Zealand (FSANZ) from a British model.

In the Australia New Zealand Food Standards Code (the Code), the prescribed NPSC is used to determine whether a food is eligible or ineligible to carry a health claim⁽²⁾. The NPSC algorithm has several phases. The first phase generates a score based on seven components. The component scores are capped differently for different foods. The saturated fat component score, for example, is capped at 10 points (for >10 g) for foods such as chocolate, but at 30 points for a cheese or oil which contains >30 g saturated fat. The component scores are compiled into a final score according to the rule for the category into which the food falls. For example, beverages cannot score for fibre. The final score is then dichotomized: if the final score is <1 for beverages, <28for cheeses, oils and yellow spreads that meet certain definitions or <4 for the remainder of the food supply, then the product is eligible to carry a health claim. It is evident that the numerical score is an interim phase and the interpretation of any particular numerical value depends on which category the food is in.

The authors state two alterations to the NPSC. First they have deleted two of the seven scoring components: fibre and % fruit/vegetable/nut/legume. Second, they have treated their final score as comparable across the entire food supply and ignored the variation in component score capping that leads to different scales within the three NPSC categories. They do not state if the rules given in Standard 1.2.7 about whether foods are to be scored in their 'as purchased' or 'as consumed' form⁽²⁾ have been applied.

For health claims purposes, the final score generated in the NPSC only has to be good enough to generate the dichotomy of eligible or ineligible. Although it appears to be a continuous scale, there is no need for the final score to generate accurate relative ranking of foods within the eligible/ineligible dichotomy. FSANZ did not examine any aspect of the NSPC except the dichotomous performance during the development of the NPSC for health claims purposes. The authors' underlying assumption is that their final score performs well along the whole continuum but they have not validated this assumption. An indication that this assumption might not be valid is the modification to the NPSC scoring algorithm (to the component scoring caps and number of categories) made to generate a tenlevel classification for the Health Star Rating System recently introduced for front-of-pack labelling⁽³⁾.

In their paper, the authors refer to their method as 'NPSC' and refer once to the model prescribed in the Code as 'true NSPC'⁽¹⁾. FSANZ believes that the authors should have referred to their calculation as 'modified NPSC'. The term 'NSPC' should refer only to the method prescribed in the Code⁽²⁾.

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