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Letter to the Editor

A lack of credible evidence for a relationship between socio-economic status and dietary patterns: a response to 'Associations between socio-economic status and dietary patterns in US black and white adults'

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Dear Editor,

I read with interest the recent paper by Kell *et al.*⁽¹⁾ Nevertheless, I was surprised that these authors failed to address the well-established fact that the memory-based dietary assessment methods they used produce data that are frequently physiologically implausible (i.e. lack credibility or validity) and are often incompatible with life^(2–4).

Given the ubiquity of implausible dietary data⁽²⁻⁴⁾ and the existence of validated cut-off points to ascertain the credibility of dietary reports⁽⁵⁾, I question why Kell *et al.*⁽¹⁾ failed to use the accepted empirical approach. This error is particularly problematic, given that these authors were examining patterns of diet. The well-established differential misreporting of particular foods and beverages suggests that dietary patterns (i.e. macronutrient and micronutrient consumption) are differentially and unpredictably misreported when total energy intake is physiologically implausible. This non-uniformity leads to non-quantifiable nutrient-specific errors.

Stated simply, implausible dietary data cannot be used to examine patterns of dietary consumption because it is impossible to ascertain what percentage of the reported foods and beverages are completely false memories^(6,7), intentional misreporting (i.e. lies⁽⁸⁾), grossly inaccurate estimates⁽⁴⁾ or somewhat congruent with actual consumption⁽²⁾. Despite the intuitive appeal of Kell *et al.*'s⁽¹⁾ conclusions, it does not appear that they are supported by credible scientific evidence.

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