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No Suitable Diet Quality Index for Food System Research in Low and Middle Income Countries?

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Abstract

Food systems research increasingly focuses on improving diet quality in low and middle income countries (LMIC), where the risks for negative health consequences of both under- and over-nutrition, are rapidly increasing. This focus goes along with the need for sound metrics to assess diet quality. This systematic literature review aimed to describe existing diet quality indices for general populations and highlights recommendations for developing such indices for food system research in LMIC. Three electronic databases, Scopus, CAB-abstracts and MEDLINE, were searched for papers published between January 2008 and December 2017. Eighty-one indices were identified, over two third were based on national dietary guidelines from high-income countries. Of the three key diet quality dimensions, ‘diversity’ was included in all 18 indices developed for LMIC, ‘moderation’ was captured by most, and ‘nutrient adequacy’ was included four times. It is needed to develop indices that include all dimensions, foods and/or food groups rather than nutrients, a minimum, maximum or optimal range cut-off for the individual components in the score and express the intake of healthy and unhealthy components separately. Country specific food based dietary guidelines (FBDG) are tailored to a countries’ specific disease profile and food habits and are therefore important indicators for within country comparison, whereas a globally applicable diet quality index would allow for comparing the diet quality of various countries, which is often an important prerequisite of such a metric in food system research. There is an urgent need for the development of both country specific FBDG based indices in LMIC and a global diet quality index. Any diet quality index will have to be extensively evaluated before widely applied in research.

Keywords: Diet quality, dietary index, food systems, low and middle income countries