Nutrition-sensitive food systems: from rhetoric to action

Action to improve the nutrition sensitivity of food systems—and thereby increase the nutritional value of food for people around the world—offers substantial but underused opportunities. The rhetoric about such opportunities brought about by the global food crisis in 2007–08 has not resulted in much new action, for at least two reasons. First, goals other than improved nutrition are pursued by strong economic and political interests in both the agricultural sector and the post-harvest value chain. Farmers and other economic agents in food systems aim to make money subject to reasonable levels of risk, and governments pursue policies that are compatible with the interests of politically powerful stakeholder groups. Malnourished populations are rarely among these interests.

The very high value of improved nutrition to societies should be supported by alignments to create compatibility between nutrition and economic goals for farmers and processors, and political momentum has to be created to foster policy interventions that make food systems nutrition sensitive. Governments could pursue two kinds of policy action: they could either change the behaviour of farmers, consumers, food processors, and other economic agents in the system through incentives, regulations, and knowledge; or they could accept present behaviours and introduce health-specific and nutrition-specific interventions to compensate for any nutritional damage done or improvements forgone. Although changing of behaviour is likely to be more cost-effective and sustainable, the second option is the most common. For example, food-system policies and the private sector promote inexpensive calories and expensive nutrients, resulting in overweight and micronutrient deficiencies. Health and nutrition-specific interventions, such as treatment of chronic diseases and micronutrient supplementation, are introduced to remedy problems that could have been avoided.

The appropriate policy interventions to change behaviour will be context specific and might include agricultural research to increase productivity of fruit and vegetable cultivation and reduce micronutrient deficiency; taxes on sugar, sweeteners, and fat to reduce the prevalence of obesity; regulations for advertising and promotion; and education about nutrition. In high-income and rapidly growing low-income countries, the agricultural sector has become or is rapidly becoming a supplier of raw materials for the food processing industry, rather than a provider of food for direct consumption. As this transition proceeds, the potential for improvements to nutrition through nutrition-sensitive food systems moves from agriculture to the post-harvest value chain. The transition amplifies health and nutrition risks by promotion of what Monteiro and colleagues call “ultra-processed” foods, resulting in unhealthy dietary patterns. However, policy action to regulate and incentivise the food industry to avoid such negative health and nutrition effects and change consumer preferences is very scarce.

A second reason for lack of action to improve nutrition is the fixation of the health and nutrition community on randomised controlled trials (RCTs) as the only legitimate source of evidence. Unfortunately, RCTs—the gold standard in health research—are generally impossible to apply to the food system except in small, usually unimportant, projects. Health and nutrition effects resulting from agricultural and other food-system policies and programmes are very difficult to assess with RCTs, partly because treatments cannot be randomised and because the effect pathway is long. Yet the most promising opportunities for improvement of health and nutrition are undoubtedly found in such policies, and not in home gardens and other minor projects which are amenable to study within the framework of randomised trials.
Although existing evidence obtained by other approaches is deemed inconclusive and does not support policy intervention, the pathways through which food systems can affect nutrition (positively or negatively) are well known. Furthermore, key components making up these pathways, such as incomes, prices, women’s time allocation, dietary diversity, advertising and promotion, and household and individual behaviour have a substantial effect on nutrition. Thus, if pathway analysis shows that changes in the food system improve one or more of these components—eg, dietary diversity or women’s time allocation—and such improvements reduce micronutrient deficiencies, is such evidence really acceptable for policy guidance only if it is derived from RCTs? If so, the evidence will be limited to small food-systems programmes such as kitchen garden projects, whereas the really important changes for nutrition, such as prioritisation of agricultural research to enhance productivity in fruit and vegetable cultivation so as to reduce prices and improve micronutrient status, and various policies to change women’s time allocation or prices of various foods, will be ignored because they cannot be studied in RCTs.1,10

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I declare that I have no conflicts of interest.