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Editorial

Optimizing child-focused nutrition policies: considerations and controversies

Unhealthy dietary behaviours and obesity among children are among the most pressing public health issues worldwide, given their high prevalence and association with negative health outcomes[1]. Governments internationally are grappling with how to approach these issues from a policy perspective, ideally seeking solutions grounded in science. By enacting policy, it is anticipated that governments may be able to effectively and equitably address underlying nutrition and obesity-related risk factors at a population level, with limited effort on the part of individuals. Compared with individually targeted dietary interventions, population-level nutrition policies can offer larger and more sustained benefits for population health and at a lower cost to society[2,3]. Policy is also enduring because it codifies change and survives transitions in leadership[4]. As such, it can become incorporated into social norms.

Schools have become a focal point for policy development as it pertains to children's nutrition, given strong consensus that school food provision should support and not undermine child health. However, the impact of current school nutrition policies on children's dietary behaviours and body weights has been mixed[5–7], suggesting a need for more comprehensive policies that engage with additional aspects of school food environments and that also extend beyond schools. Controversies inevitably arise during policy development, however, and several papers in this issue of *Public Health Nutrition* tackle some of the more contentious issues pertaining to child nutrition policies, such as the need for, content, format and potential unintended negative consequences of policy.

The need for nutrition policy

One of the more polarizing debates in the nutrition policy literature, both scientific and lay, relates to personal *v.* collective responsibility for health. That is, do governments have the right and responsibility to intervene in the food-related decisions of private citizens to support public health? Although evidence of an identified need is not sufficient to justify government intervention in this area, it is nevertheless necessary. In this respect, evidence of accelerated weight gain[8–10] among children during the summer months and speculation that this may be related to dietary intake prompted Tilley *et al.*[11] to systematically document the contents of home-packed lunches brought by children and staff to four large-scale summer day camps. Their findings, that few lunches contained fruits and vegetables while many contained unhealthy snacks, provide empirical verification that children's diets during the summer months may indeed be nutritionally poor and support extension of nutrition policies to out-of-school settings. Such policies could bolster the impact of school nutrition policies by ensuring that school-based policies do not simply displace unhealthy dietary behaviours from school to community settings.

The content of nutrition policy

Tilley *et al.*'s[11] analysis addresses a second controversy within policy circles. Having established that a need for nutrition policies exists, the question then arises as to what the content of those policies should be. A particular tension pertains to regulation of home-packed meals. Although nutrition standards for institutionally provided meals are common, rarely have governments ventured to regulate the content of home-packed meals and snacks, despite evidence that they may be nutritionally poor[12,13]. By highlighting the nutritional shortcomings of home-packed meals brought to summer day camps, Tilley *et al.*'s[11] findings suggest that failure to at minimum disseminate voluntary guidelines constitutes a missed opportunity to support child health.

While nutrition policies commonly stipulate standards regarding the nutritional content of meals, they less often concern more peripheral environmental features that may also influence food choice. On the basis of data collected during the 2005/06 Health Behaviour in School-aged Children Study in the UK, Townsend[14] demonstrates that shorter lunch breaks are independently associated with less healthy dietary behaviours among adolescents, suggesting that providing adequate time to eat may be an important area for policy development. Blondin *et al.*'s[15] qualitative analysis echoes these findings, as inadequate time to eat, food accessibility, taste preferences, and other policy-, child- and food-related factors led children to discard, rather than to eat, healthy foods provided through a universal free school breakfast programme. Overall, these three studies suggest that consideration be given to broadening the reach of child-directed nutrition policies beyond institutionally provided meals and expanding their scope such that they engage with the myriad of individual, social and environmental factors that influence children's dietary behaviours within an overall ecological approach[16].

The format of nutrition policy

Governments have a variety of policy options available to them, ranging from relatively less (i.e. voluntary guidelines) to more coercive measures (i.e. mandated policies). More coercive measures are more intrusive and accordingly require more justification[17]. For this reason, governments commonly prefer to enact the least coercive measures[17]. Voluntary guidelines may lack the potency of mandatory policies, however, and are therefore often decried as ineffective[18]. Morin *et al.*'s[19] analysis lends support to this notion, as shortly following dissemination of a voluntary Framework Policy to support healthy eating in schools in the Canadian province of Quebec, just 5·1 % and 42·2 % of primary- and secondary-school cafeterias, respectively, provided foods from all four recommended food groups in adequate serving sizes. In addition, the vast majority of secondary schools offered unhealthy foods and beverages that were specifically recommended for elimination by the policy.

Dubuisson *et al.*'s[20] findings also support the notion that voluntary school nutrition guidelines, in this case those issued by the French national government, may have limited effectiveness. More specifically, their analysis showed that foods consumed by French schoolchildren from school canteens differed qualitatively from those consumed in other locations. Some of these nutritional differences reflected more favourable dietary patterns that were in accordance with the national school food recommendations, whereas others were negative, pointing to deficiencies in guideline formulation, uptake or implementation. The authors propose that mandatory national policies, such as those that were introduced in France following their study, have the potential to yield more favourable dietary outcomes for students. However, it is important to note that if policies are not monitored, or when there are no penalties for non-compliance, adherence to even mandated policies may be suboptimal[21].

Farmer *et al.*[22], however, show that voluntary government nutrition guidelines can succeed and describe organizational characteristics and processes that supported voluntary adoption of provincial nutrition guidelines in two child-care facilities in Alberta, Canada. Notably, although the organizational structures of the child-care centres diverged, they nevertheless both voluntarily adopted the nutrition standards. These divergent organizational structures did, however, impact the availability of resources and capacity to implement guidelines, such that implementation in one facility was greater than in the other. By contrast, common organizational processes supported adoption of the guidelines in both cases. These processes included strong leadership, a supportive culture and strong communication networks. Given the importance of early adopters in instigating and perpetuating processes of policy diffusion[23], this analysis can help to identify receptive contexts in which to pioneer novel legislative solutions and catalyse policy diffusion.

Finally, Bell *et al.*[24] demonstrate the importance of capacity-building initiatives to improve implementation of voluntary nutrition policies within centre-based child-care services. Findings from a controlled implementation intervention in 240 child-care centres in Australia showed that supported centres were more likely to offer healthier foods and beverages, to engage parents in policies and programmes, and to have nutrition policies on home-packed food. Thus, policy-related outcomes may be improved through provision of resources and support. It may be particularly important to tailor resources and support to identified barriers and to offer them early on, when resistance to policy may be higher.

Potential unintended negative consequences of nutrition policy

An important caveat in policy-related deliberations is that the impact of nutrition policies – be they voluntary or mandatory – may not be uniformly positive. Three articles in this issue of *Public Health Nutrition* describe potential unintended negative consequences that even the most well-intentioned policies can engender. Blondin *et al.*[15] find that certain policy provisions exacerbated the problem of food waste within a school breakfast programme; for instance, policies required children to have certain healthy items on their trays regardless of whether they intended to eat them. Policies regarding the time allotted for eating were also problematic in this respect, as children had 10 minutes to eat and were then often directed to discard uneaten items. Townsend's[14] analysis similarly points to the negative nutritional consequences of providing inadequate time to eat. These findings underscore the need to thoroughly investigate the potential impacts of policies prior to scale-up and widespread implementation.

One of the chief advantages of mandated policies is their broad reach, as they apply to all individuals regardless of their socio-economic circumstances. By contrast, a potential unintended consequence of voluntary policy-based approaches is that they may widen inequalities if organizations that are better resourced adopt more and/or stronger policies. Morin *et al.*[19], however, show that although some aspects of school food environments were more favourable in larger and more advantaged schools, there were few disparities in the availability of healthy and unhealthy foods in Quebec schools. This is an important finding, as the study was conducted in the context of a voluntary province-wide nutrition policy initiative. Given that disparities were observed in other areas (e.g. menus designed by Registered Dietitians, food assistance programmes) and availability of healthy foods was low overall, it is, however, essential to remain mindful of the limitations of voluntary policies in particular.

Conclusion

The papers presented in this issue of *Public Health Nutrition* suggest new avenues worthy of investigation related to the need for, content, format and potential unintended negative consequences of child-focused nutrition policies prior to their implementation. Scientific evidence is only one type of evidence considered by policy makers during their deliberations, however, and therefore other types of evidence must also inform policy making in this area. In particular, many of the issues raised in this Editorial invoke value judgements that require consideration of social, ethical and other concerns. Finally, although policy is an important tool in addressing unhealthy dietary behaviours and body weights among children, it is not a panacea. A constellation of mutually reinforcing approaches spanning all levels of the ecological model will be essential to optimize children's dietary patterns.

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