Improving Nutritional Health of the Public through Social Change: Finding Our Roles in Collective Action

KIM D. RAINE, PhD, RD, FCAHS, Centre for Health Promotion Studies, School of Public Health, University of Alberta, Edmonton, AB

ABSTRACT

Improving the nutritional health of the public continues to be a major challenge. Our mission of advancing health through food and nutrition has become increasingly complex, particularly as food environments shape the availability, affordability, and social acceptability of food and nutrition “choices”. Promoting nutritional health requires that dietitians expand our knowledge in understanding the determinants of healthy eating and of social change strategies that advocates for and acts on improving food environments. While no single strategy can solve the challenges of public health nutrition, we can each identify unique strengths and opportunities. If we practice in complementary ways, using those strengths for collective action will make us stronger together toward social change supporting improved nutritional health of the public.

(Can J Diet Pract Res. 2014;75:160–164)

(DOI: 10.3148/cjdpr-2014-017)

Published at dcjournal.ca on 15 August 2014.

RÉSUMÉ

Améliorer la santé nutritionnelle du public demeure un défi majeur. Notre mission, qui consiste à promouvoir la santé par l'alimentation et la nutrition, est de plus en plus complexe, particulièrement puisque les environnements alimentaires façonnent la disponibilité, l'abordabilité et l'acceptabilité sociale des « choix » alimentaires. Pour promouvoir la santé nutritionnelle, les diététistes doivent accroître leurs connaissances et leur compréhension des déterminants de la saine alimentation et des stratégies de changement social qui favorisent l'amélioration des environnements alimentaires. Aucune stratégie à elle seule ne peut résoudre tous les problèmes de nutrition en santé publique. Toutefois, nous pouvons tous identifier des forces et occasions uniques. En pratiquant de manière complémentaire, l'utilisation de ces forces pour la mise en œuvre d'une action collective nous rendra plus forts et nous permettra de mettre en place le changement social nécessaire pour améliorer la santé nutritionnelle du public.

(Rev can prat rech diétét. 2014;75:160–164)

(DOI: 10.3148/cjdpr-2014-017)

Publié au dcjournal.ca le 15 août 2014.

INTRODUCTION

Improving the nutritional health of the public continues to be a major challenge. Dietitians in Canada will be well aware of the public health challenges we face in daily practice. Food insecurity continues to be high, particularly among low-income, immigrant, and other vulnerable populations such as remote northern and aboriginal groups [1]. Over the past 30 years we have witnessed rapid rises in overweight and obesity rates among both children and adults [2]. Rising obesity and associated poor diets are associated with high rates of chronic diseases including diabetes, cardiovascular diseases, and cancers [3]. While dietitians have no shortage of work on interdisciplinary health care teams to treat these diseases, we also have a huge role to play in their prevention. It seems ironic that nutrition information is far more readily available today than ever before, yet wading through the sea of messages is a challenge for many. Dietitians of Canada still have lots of work to do to achieve our mission of “advancing health through food and nutrition” [4].

According to the criteria for the Ryley–Jeffs Award, the lectures should provide the stimulus to broaden the scope of the profession and challenge dietitians to practice in new ways. In that spirit, this paper explores means of broadening scope by moving beyond traditional understandings of nutrition behaviour to address the complexity of determinants of healthy eating. In challenging us to practice in new ways, I argue we become change agents toward social and environmental change to support improved nutritional health of the public. Collective action as dietitians for social change will make us stronger together in achieving our mission.

UNDERSTANDING THE COMPLEXITY OF DETERMINANTS OF HEALTHY EATING

Why do people eat what they do? What factors influence people's eating behaviours? Why do people eat less than optimal diets, despite many knowing what constitutes a healthy diet? As a young and naive dietetic intern, I learned quite quickly that nutrition knowledge was not always enough to

motivate behaviour change, even in the face of critical health challenges. I struggled with what I then termed “noncompliance” with nutrition recommendations. I wanted to learn how to improve compliance. In doing so, I sought new knowledge from the social sciences, fields like sociology, psychology, and cultural anthropology, all of which helped to broaden my understanding of nutrition behaviour and food choice. I grew to appreciate that in my own dietetic education I placed more value on the science of nutrition and health, and I paid less attention to the role and value of food in people’s lives and society in general. Yet, food is one of our most basic needs; it is not only for survival and health, but it is also for sharing, celebrating, demonstrating our caring for others, and showing devotion to our rituals. Eating is not an isolated act, but a deeply contextualized behaviour embedded in complex environments.

While it is ultimately a personal choice to raise a fork to one’s mouth, people do not make food choices in a vacuum but within the context of our environments. Individual determinants of healthy eating such as knowledge, attitudes, and cooking skills can help to navigate increasingly complex food environments, and dietitians have a role to play in that navigation. However, collective environmental determinants of healthy eating as the context for eating behaviour are also important targets for intervention [5].

Over the past decade, the study of food environments and their influence on food consumption and health has blossomed. Increasingly new evidence reveals how food environments shape the availability, affordability, and social acceptability of food and nutrition “choices”. Perhaps even more importantly, research is demonstrating associations between food environments and diet-related outcomes [6, 7]. The nutritional health of the public is related to their food environment! While this proclamation may seem intuitive, it may also be daunting. The concept of food environments is somewhat nebulous and, therefore, can be difficult to describe, to measure, or to change. However, a useful organizing framework broadly classifies food environments as **physical** (availability), **economic** (affordability), **socio-cultural** (norms and values), and **political** (rules and laws) [8].

Measures of the **physical** food environments include the number and type of food outlets (e.g., grocery stores, fast-food outlets, convenience stores, farmers’ markets, community gardens) as well as the types of food available within those outlets or in organizations such as schools or workplaces. Some relevant Canadian research of physical food environments includes “Charting the Foodscape” of Edmonton which used Geographic Information Systems (GIS) to map grocery stores as a proxy for healthy foods and fast-food outlets as a proxy for less healthy foods. Not only did availability of fast-food outlets far outnumber grocery stores (more than 10 fold), but also the fast-food outlets were concentrated in neighbourhoods with lower income populations such that lower income residents were exposed to 4.3 times as many fast-food outlets than their middle to higher income

counterparts [9]. In the same city, the lower the ratio of fast-food restaurants and convenience stores to grocery stores and produce vendors near people’s homes, the lower the odds of being obese [7]. More recent and nuanced research of food environments captured by the “NEWPATH” project in the Region of Waterloo revealed that a fast-food outlet or convenience store is half the distance from the average household than a supermarket. Within 1 km of the average home, there was more than 3 times the shelf space dedicated to energy-dense snack foods than fruits and vegetables. Both diet quality and obesity measures were associated with objective food environment measures [10].

The **economic** food environment has been a priority for dietitians throughout Canada for several decades. While costing a healthy food basket has been a variable priority for different levels of government for some time, the late 1980s saw a proliferation of food costing and comparison with social assistance allowances and minimum wages. Such costing helped to fuel dietitians’ interest in the growing social (and health) problem of food insecurity. As one of the first economic assessments by the Nova Scotia Nutrition Council in 1988 was named, the question became, “how do the poor afford to eat?” [11].

Several jurisdictions continue with food basket costings, such as Ontario and in the north (due to lack of research, we know little else about food environments in the north!). Dietitian-led research in participatory food costing [12] is a regular strategy used by Food ARC in Nova Scotia. FoodARC uses the participatory costing exercise as a foundation for social action and advocacy for change [13].

The **socio-cultural** food environment broadly refers to food norms and values and can include ethnic and religious influences on food choice. However, culture is much more insidious than overtly declared. The popular press has done an excellent job of critiquing the gradual but significant shift in food culture towards a reliance on highly marketed convenience and packaged “fast” foods [14]. And while we may be exposed to food through television celebrity chefs, Canadians have generally become less skilled in food preparation and more dependent upon processed foods such that over 60% of Canadian’s energy now comes from processed foods [15, 16]. Certainly, the early foundations of dietetics in home economics are barely recognizable, and home economics in schools is no longer a requirement for graduation. Perhaps dietitians, in our quest for legitimacy through nutritional science, have unwittingly contributed to a culture that under-values “real” food.

The **political** food environment broadly refers to the rules and laws in place to protect the health of Canadians. While the priority of food safety is evident in public health (one does not have to think very far back to recall *e-coli* or *listeria* scares [17]), we seem less inclined to use policy to protect us from the cumulative effects of poor nutritional choices over time. Other than individually focused policies such as nutrition labelling [18] that enable consumers to make informed choices

and general guidance such as Canada's Food Guide to Healthy Eating [19], only recently has policy been enacted throughout many Canadian jurisdictions to protect children in schools by ensuring all school foods meet "healthy" criteria [20]. One of the most innovative policies is in the province of Quebec, where marketing to children has been banned since 1980 [21]. While initially intended to protect children from the commercialization of childhood, since marketing of unhealthy foods and beverages is included in the legislation, international jurisdictions are looking to Quebec as a model. Recent research has shown that Quebec children (particularly Francophone children less likely to view media from outside of Quebec) are exposed to less food marketing [22] and their purchase and consumption of fast-foods are lower [23].

In summary, understanding the determinants of healthy eating requires that dietitians expand their knowledge of nutrition and health to understanding food environments and their influence on our choices and health. This expanded understanding can then challenge us to practice in new ways.

EXPANDING OUR PRACTICE: DIETITIANS FOR SOCIAL CHANGE!

Returning to my early days as a young and naive dietitian valuing the science of nutrition and health, and devaluing the role and value of food in people's lives and society in general, I recognize that my practice emphasized teaching people how to cope with environments that often promoted unhealthy eating. By focusing on individual behaviour change, interventions were decontextualized. I failed to recognize and then address the role of food environments in influencing people's choices. As I have learned more about food environments and their influence on people's nutrition behaviours and their health, I have adopted a philosophy of dietetic practice that seeks evidence and questions the determinants of nutritional health and explores potential avenues for addressing those determinants. In other words, it is essential to go beyond teaching people how to cope and to address the root causes of nutrition problems.

One of my favourite quotes that gets at the nub of my philosophy of dietetic practice actually comes from a political scientist, Dr. George Kent; "*Nutritional literacy means more than knowing the technical aspects of nutrition...teaching of nutrition should include examination of the world which generates nutrition problems*" [24, p. 194]. If the social world is indeed a source of nutrition problems, which I hope I have demonstrated through the previous section on food environments and understanding the complexity of healthy eating, then the solution lies in social change. As dietitians, we have a responsibility to exert our power and knowledge to advocate for social changes required to overcome challenges to nutritional health for the public. We, however, need not work alone; we can and should work with others with complementary skills and knowledge. While dietitians may be the experts on nutrition and health, most of us get our nutrition through food. Food transcends disciplines. Enhancing dietetic practice

means working in partnership with our multi-disciplinary colleagues for social change. Collective action will make us stronger together toward social change supporting improved nutritional health of the public.

Social change is not easy. Neither is it the domain of idealists. I'd prefer to say it is for realists with ideals! The key, however, is recognizing that social change addresses the complexity of determinants of healthy eating. Simple interventions cannot solve complex problems. Understanding the concept of complexity requires we think in terms of interrelated systems, webs of causation, and feedback loops [25] that may lead to unintended consequences. Usually it is easier to understand complexity in hindsight. For example, the history of food banks in Canada is a good illustration of interrelated systems and unintended consequences. The first food bank in Canada opened its doors in 1981, at the depth of a severe recession. Food banks were a charitable response to an acute need for food among those hardest hit by the economic crisis. They filled a gap and helped to alleviate hunger. In the late 1980s some scholars started to question the institutionalization of food banks [26, 27]; over 20 years later food banks are deeply entrenched in Canadian society. While still helping to alleviate hunger among those in dire straits, demand far exceeds capacity, governments have used their existence to justify cuts in social assistance, the public feels good about leaving a little extra after the grocery checkout (grocery stores benefit from extra sales), and food companies have an outlet (and receive a charitable donation receipt) for their unsalable products. People who need food banks are faced with the indignity of knowing they must resort to charity to meet one of their most basic human needs. While many food bank organizations have branched out into social justice work and food as a source of employment (e.g., The Stop [28]), questioning food banks' continued existence is fraught with controversy [29]. A simple solution (provision of food to those in need) did not solve a complex problem arising from market failures and inadequacies of the welfare state.

While hindsight can reveal complexity, we need to use our knowledge to have the foresight to anticipate consequences. We cannot use complexity as a justification for inaction. The United Kingdom's Obesity Foresight project [30] created maps of the determinants of obesity to illustrate the interconnectedness of the causes of the societal obesity epidemic. While unhealthy diets and physical inactivity may be at the core of the map, the determinants of unhealthy eating (and physical inactivity) act at local, community, and societal levels. Therefore, decisions made at international trade tables that dictate the prices of food are influencers of the obesity epidemic as are local decisions such as whether to adopt a healthy school food policy. Yet, none of these decisions are working in isolation, and no single decision has the ability to reverse the epidemic. "*The single most important intervention ...is to understand that there is no single most important action*" [25, p. 657].

DIETITIANS AS CHANGE AGENTS: WHERE TO BEGIN?

While becoming change agents may seem a daunting task, we each have a sphere of influence. We need to embrace our inner activist and exert that influence!

What food environments can you influence? It may be as simple as starting at home, where you can help your family and your clients create positive household food environments. At work, dietitians have had historical roles in creating health-promoting workplaces, health centres, and hospitals by providing predominantly healthy options. Over the past few decades those roles have been overshadowed by the need for profit. Franchises have made their way into hospital food services, with the unintended consequences of placing revenues above nutrition in decision making. The public has questioned our credibility. It takes great dedication and hard work to overcome the consequences of the mistakes of my generation of dietitians. While now most health care food services can boast of removing deep fryers, letting contracts with franchises lapse, and creating their own healthy brands (e.g., Healthy Trendz [31]), dietitians have had to be courageous and vigilant to see their mission of “advancing health through food and nutrition” realized.

Dietitians’ influence extends deep into our local communities, and we can influence school food environments and recreation facilities [32] in justifying and then guiding the move toward healthier options for our children and youth. One of the most innovative and inspiring examples I’ve seen of dietitian as change agent in a local community was Hope Blooms [33]. Featured on CBC’s *Dragon’s Den* [34], Jesse Jollymore, a community dietitian in inner city Halifax worked with a group of youth to turn an abandoned lot into a community garden. The youth not only learned how to grow food, they learned to turn the herbs they grew into gourmet salad dressings, and were unable to keep up with the demand for the dressings. They pitched to the Dragons who invested \$40 000 for Hope Blooms to build a greenhouse so they could extend the growing season and increase production and sales. Part of the sales goes into a scholarship fund for the local youth. Hope Blooms created a food environment that enhanced the lives and health of the local community in ways that stretched far beyond nutrition. This is social change through social enterprise!

Dietitians can have strong roles in changing cultural values around food and eating. Taking cues from the tobacco control movement, dietitians can be advocates for denormalizing the culture of convenience with fast, heavily processed and packaged products and normalizing healthy eating. This may require dietitians to be more radical in our approaches to food. Perhaps while in the past we have been happy to nudge change, sometimes a shove may be more effective. Wanting to overcome a reputation of being finger-wagging food police, we have contributed to campaigns such as “all foods can fit”. Perhaps in today’s social context we need to rethink the implications of that message. While theoretically all foods can be part

of a healthy diet, we live in a social world where billions of dollars are spent in marketing products that should only comprise a very small portion of our diets, if at all. As such, these foods (or I prefer to say nonfoods as many contribute no nutritional value or pathogenic foods as if they are consumed as intended have negative health outcomes [35]) comprise a much larger portion of our diets than is optimal for health. The case of sugar-sweetened beverages is an illustrative example. While contributing nothing but sugar to our diets, sugar-sweetened beverages are consumed, on average, by all Canadians aged 2–95, more than the World Health Organization’s recommendation of less than 5% of caloric intake [36]. As some Canadians don’t consume any of these beverages, the consumption among some population groups such as adolescent boys is alarming. Have dietitians’ messages of “all foods can fit” unwittingly contributed to a suboptimal food culture? Have we been co-opted by industry, who can use our message to rationalize continued promotion of their products as “part of a healthy diet” (“part” being undefined)? Has aligning ourselves with some aspects of food industry (for example, accepting sponsorship) placed us in conflict of interest [37], almost imperceptibly eroding our legitimacy with the public? I don’t know the definitive answers to these questions, but I do know that it is time for dietitians to critically examine our roles and responsibilities with respect to industry collaboration.

ENVISIONING OUR FUTURE: SOCIAL CHANGE IS HAPPENING!

Change is happening. Dietitians are part of it, but we are not alone. I am inspired by reports such as Ontario’s *No Time to Wait: The Healthy Kids Strategy* [38]. The Strategy includes 10 recommendations to change the food environment! These recommendations include some policy initiatives previously discussed in this paper, such as banning marketing of high-calorie, low-nutrient foods, beverages, and snacks to children; banning point-of-sale promotions of high-calorie, low-nutrient foods and beverages; and establishing a universal school nutrition program. Recently, on an international scale, recommendations toward a global convention to protect and promote healthy diets have been proposed [39], modelled upon the very powerful Framework Convention on Tobacco Control. To quote Dr. Margaret Chan, Director-General of the World Health Organization, “... *It is not just Big Tobacco anymore. Public health must also contend with Big Food, Big Soda, and Big Alcohol.... Let me remind you. Not one single country has managed to turn around its obesity epidemic in all age groups. This is not a failure of individual will-power. This is a failure of political will to take on big business*” [40].

Dietitians have a role to play in changing policy, which changes the environment. Let’s be part of the solution. Where do you have influence? How can you be a dietitian for social change? Margaret Mead has been quoted as saying, “*Never doubt that a small group of committed citizens can change the world: Indeed it is the only thing that ever has*” [41]. Where

do you have influence in changing the world? Think of the possibilities. **We are stronger together!**

Acknowledgements

Dr. Raine acknowledges career funding support from 2008–2013 from the Canadian Institutes for Health Research (CIHR) and the Heart and Stroke Foundation as part of the Applied Public Health Chairs program. The author has no conflict of interests to declare.

References

1. Tarasuk V, Mitchell A, Dachner N. Household Food Insecurity in Canada, 2012. Research to Identify Policy Options to Reduce Food Insecurity (PROOF). Toronto; 2014.
2. Public Health Agency of Canada. Obesity in Canada: A Joint Report from the Public Health Agency of Canada and the Canadian Institute for Health Information. 2011.
3. Public Health Agency of Canada. Chronic Disease Risk Factors; 2012 [cited 2014 Jul 7]. Available from: http://www.phac-aspc.gc.ca/cd-mc/risk_factors-facteurs_risque-eng.php.
4. Dietitians of Canada. About us; 2014 [cited 2014 Jul 7]. Available from: <http://www.dietitians.ca/About-Us.aspx>.
5. Raine KD. Determinants of healthy eating in Canada: an overview and synthesis. *Can J Public Health*. 2005;S8–S14. PMID: 16042158.
6. Health Canada. Measuring the Food Environment in Canada; 2013 [cited 2014 Jun]. Available from: <http://www.hc-sc.gc.ca/fn-an/nutrition/pol/som-ex-sum-environ-eng.php>.
7. Spence JC, Cutumisu N, Edwards J, Raine KD, Smoyer-Tomic K. Relation between local food environments and obesity among adults. *BMC Public Health*. 2009;9(1):192. PMID: 19538709. doi: 10.1186/1471-2458-9-192.
8. Swinburn B, Egger G, Raza F. Dissecting obesogenic environments: the development and application of a framework for identifying and prioritizing environmental interventions for obesity. *Prev Med*. 1999;29:563–70. PMID: 10600438. doi: 10.1006/pmed.1999.0585.
9. Hemphill E, Raine K, Spence JC, Smoyer-Tomic KE. Exploring obesogenic food environments in Edmonton, Canada: the association between socioeconomic factors and fast-food outlet access. *Am J Health Promot*. 2008;22(6):426–32. PMID: 18677883. doi: 10.4278/ajhp.22.6.426.
10. Minaker LM, Raine KD, Wild TC, Nykiforuk CI, Thompson ME, Frank LD. Objective food environments and health outcomes. *Am J Prev Med*. 2013;45(3):289–96. PMID: 23953355. doi: 10.1016/j.amepre.2013.05.008.
11. Nova Scotia Nutrition Council. How Do the Poor Afford to Eat? An Examination of Social Assistance Food Rates in Nova Scotia. Halifax; 1988.
12. Williams P, Amero M, Anderson B, Gillis D, Green-Lapierre R, Johnson C, et al. A participatory Food Costing Model in Nova Scotia. *Can J Diet Pract Res*. 2012;73(4):181–8. PMID: 23217445. doi: 10.3148/73.4.2012.181.
13. FoodARC. About us; [cited 2014 Jul 7]. Available from: <http://foodarc.ca/about>.
14. Schlosser E. Fast Food Nation: The Dark Side of the All-American Meal. 1st ed. New York, NY: Perennial; 2002.
15. Moubarac J-C, Batal M, Martins APB, Claro R, Levy RB, Cannon G, et al. Processed and ultra-processed food products: consumption trends in Canada from 1938 to 2011. *Can J Diet Pract Res*. 2014;75(1):15–21. doi: 10.3148/75.1.2014.15.
16. Chenhall C. Improving Cooking and Food Preparation Skills. Ottawa: Health Canada; 2010.
17. Public Health Agency of Canada. Food Safety; 2014 [cited 2014 Jul 7]. Available from: <http://www.phac-aspc.gc.ca/fs-sa/index-eng.php>.
18. Health Canada. Nutrition Labelling; 2014 [cited 2014 Jul 7]. Available from: <http://www.hc-sc.gc.ca/fn-an/label-etiquet/nutrition/index-eng.php>.
19. Health Canada. Eating Well with Canada's Food Guide. Ottawa: The Government of Canada; 2011.
20. Legislative Assembly of Ontario. Bill 8, Healthy Food for Healthy Schools Act, 2008; 2008 [cited 2014 Jul 7]. Available from: http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=1925.
21. Media Awareness Network. Regulations under the Quebec Consumer Protection Act Concerning Advertising Directed to Children; 2010 [updated 2010; cited 2011 28 Jul]. Available from: http://www.media-awareness.ca/english/resources/legislation/canadian_law/provincial/quebec/consumer_protection_actqc.cfm.
22. Potvin Kent M, Dubois L, Wanless A. A nutritional comparison of foods and beverages marketed to children in two advertising policy environments. *Obesity*. 2012;20(9):1829–37. PMID: 21720425. doi: 10.1038/oby.2011.161.
23. Dhar T, Baylis K. Fast-food consumption and the ban on advertising targeting children: the Québec experience. *J Marketing Res*. 2011;48:799–813. doi: 10.1509/jmkr.48.5.799.
24. Kent G. Nutrition education as an instrument of empowerment. *J Nutr Educ*. 1988;20(4):193–5. doi: 10.1016/S0022-3182(88)80132-8.
25. Rutter H. The single most important intervention to tackle obesity. *Int J Public Health*. 2012;57:657–8. PMID: 22752266. doi: 10.1007/s00038-012-0385-6.
26. Riches G. Food Banks and the Welfare Crisis. Ottawa: Canadian Council on Social Development; 1986.
27. Tarasuk V, Maclean H. The food problems of low-income single mothers: an ethnographic study. *Can Home Econ J*. 1990;40(2):76–82.
28. The Stop Community Food Centre. About Us; 2014 [cited 2014 Jul 7]. Available from: <http://www.thestop.org/mission>.
29. Power E. It's Time to Close Canada's Food Banks: Globe and Mail; 2011 [cited 2014 Jul 7]. Available from: <http://www.theglobeandmail.com/globe-debate/its-time-to-close-canadas-food-banks/article587889/>.
30. Foresight. Tackling Obesities: Future Choices – Building the Obesity System Map. London: Government Office for Science; 2007.
31. Alberta Health Services. Healthy Trendz Cafe; 2014 [cited 2014 Jul 7]. Available from: <http://www.albertahealthservices.ca/facilities/page6356.asp>.
32. Olstad DL, Lieffers JR, Raine KD, McCargar LJ. Implementing the alberta nutrition guidelines for children and youth in a recreational facility. *Can J Diet Pract Res*. 2011;72(4):e212–e20. PMID: 22146115. doi: 10.3148/72.4.2011.e212.
33. Hope Blooms. Home; 2013 [cited 2014 Jul 7]. Available from: <http://hopeblooms.ca/>.
34. Canadian Broadcasting Corporation. Dragon's Den; 2014 [cited 2014 Jul 7]. Available from: <http://www.cbc.ca/dragonsden/>.
35. Campbell N, Raine KD, McLaren L. "Junk foods," "treats," or "pathogenic foods"? A call for changing nomenclature to fit the risk of today's diets. *Can J Cardiol*. 2012;28(4):403–4. PMID: 22326710. doi: 10.1016/j.cjca.2011.11.019.
36. World Health Organization. WHO Opens Public Consultation on Draft Sugars Guideline; 2014 [cited 2014 Jul 8]. Available from: <http://www.who.int/mediacentre/news/notes/2014/consultation-sugar-guideline/en/>.
37. Conflicts of Interest Coalition. n.d. [cited 2014 Jul 7]. Available from: <http://coicoalition.blogspot.ca/>.
38. Healthy Kids Panel. No Time to Wait: the Healthy Kids Strategy. Ontario: Queen's Printer for Ontario; 2013.
39. Consumers International and World Obesity Foundation. Recommendations towards a Global Convention to Protect and Promote Healthy Diets. London; 2014.
40. Chan M. Opening Address by the Director-General of the World Health Organization, 8th Global Conference on Health Promotion, Helsinki, Finland; Geneva WHO; 2013 [cited 2014 Jul 7]. Available from: http://www.who.int/dg/speeches/2013/health_promotion_20130610/en/.
41. Mead M. Margaret Mead Quotes: Brainyquote.com; 2014 [cited 2014 Jul 7]. Available from: http://www.brainyquote.com/quotes/authors/m/margaret_mead.html.