

Dietitians of Canada (Ontario)

Childhood Healthy Weights

Recommendations to the Healthy Kids Panel

SEPTEMBER 2012

Introduction

Dietitians of Canada is the professional association representing dietitians across the country, with almost 3000 members in Ontario. As regulated health professionals involved in all aspects of promoting healthy weights for children, we are keenly interested in involvement in the Panel's work. Registered Dietitians in Ontario are providing leadership in the prevention of overweight and obesity in their roles in public health, primary healthcare, research, food industry, and other settings.

The causes of obesity are complex and cannot be fixed by simplistic solutions. DC advocates for comprehensive, evidence-based, interprofessional, and inter-sectoral initiatives to address both prevention of overweight and obesity, and treatment for those who are already at increased health risk. Our recommendations are aligned with the Federal, Provincial and Territorial Framework for Action to Promote Healthy Weights, and with recommendations of other groups such as the Ontario Society of Nutrition Professionals in Public Health (OSNPPH) and the Ontario Collaborative Group on Healthy Eating and Physical Activity. We recognize that each recommendation on its own cannot solve the issue, but that these strategies are valuable parts of a comprehensive approach. Several initiatives already exist in Ontario to support healthy childhood growth and development, which contribute to healthy eating, physical activity, and healthy

weights. Coordination of these initiatives and strategies through a comprehensive approach that engages government, industry, schools, health professionals, and other sectors, is needed to achieve long-term goals.

Strategies must address the food environment as well as families' and individuals' knowledge and skills. Given the complex inter-relation of factors that contribute to childhood overweight and obesity, long-term sustainable population-level strategies are required. Many of the recommendations can be implemented in shorter time frames but it must be recognized that the goal of 20% reduction in childhood obesity in 5 years may not be attainable, and accurate measurement of progress toward this goal requires distinct measurable indicators.

The recommendations we provide are based on current peer-reviewed evidence, with acknowledgement that much more research is needed to examine the impact and effectiveness of prevention and treatment strategies. Our recommendations are followed by rationale and key references, many of which are based on the review and synthesis of the literature by nutrition experts through the Practice-Based Evidence in Nutrition (PEN) knowledge translation system developed by DC. References to the PEN system are incorporated in the reference lists for recommendations; in order to provide a more concise submission, the evidence sources upon which the PEN statements are based are listed separately in Appendix 1.

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General principles

All initiatives to promote health and to reduce the prevalence of unhealthy weights among Ontario children should be based on the following principles:

- Interventions to reduce overweight and obesity should not trigger unintended negative effects such as restrictive dieting or eating disorders, or encourage weight stigma among children and their caregivers
- All children should be provided with opportunities to learn the skills and acquire experiences to develop a healthy relationship with food and enjoyment of physical activity
- Policy initiatives should be evidence-informed and subject to ongoing evaluation to determine their effectiveness, including measuring potential unintended harmful consequences
- Policy initiatives and interventions should be culturally appropriate, and recognize the diversity within Ontario's population
- Policy initiatives should incorporate a life cycle approach, beginning at pre-conception and pregnancy and continuing throughout childhood and adolescence

Recommendations

1. Invest in research and evaluation to build the evidence base for effective strategies to promote healthy eating, physical activity, and healthy weights.
2. Support the development and implementation of an Ontario Food and Nutrition Strategy that sets measurable targets and monitoring mechanisms.
3. Address food insecurity through poverty reduction, including use of the Nutritious Food Basket data to set social assistance rates.
4. Support EatRight Ontario to continue providing evidence-based healthy eating and nutrition advice to parents, family members, caregivers, schools, and other health professionals.
5. Incorporate evidence-informed food literacy (access, selection), nutrition education, and food skills (food preparation, cooking, budgeting) in mandated curriculum for grades K – 12 as part of a comprehensive approach to school health.
6. Evaluate the effects of Ontario's School Food and Beverage Standards (PPM150) and establish a process to monitor compliance with standards.
7. Promote physical activity for all children that is enjoyable, developmentally-appropriate, and consistent with the recommendations of the Canadian Society for Exercise Physiology, and support consistent implementation of PPM 138 Daily Physical Activity policy in elementary schools.
8. Update the Day Nurseries Act to incorporate nutrition and healthy eating guidance consistent with current evidence.
9. Establish policies to promote healthier food options, reduce exposure to marketing of unhealthy food and beverages, and increase consumers' knowledge of nutrient content of foods.
10. Develop strategies to support public buildings, such as community centres and recreation facilities, to provide healthier food options.
11. Promote use of validated tools and guidelines related to childhood growth and nutrition, including the World Health Organization Growth Charts adapted for Canada, NutriSTEP®, and the Joint Statement with Health Canada on Nutrition for Healthy Term Infants.
12. Ensure children and families who are at risk of overweight or obesity, or have concerns with eating behaviours, have access to a Registered Dietitian. All primary care providers should have access to RDs for advice on promoting healthy eating and healthy weights.
13. Encourage health care providers to stress the importance of a healthy weight before conception and a healthy weight gain during pregnancy.

Recommendation #1

Invest in research and evaluation to build the evidence base for effective strategies to promote healthy eating, physical activity, and healthy weights.

Rationale

Although the recommendations in this report are based on the best available evidence, significant gaps remain about what strategies are most effective for maintaining healthy weights among Ontario's children.^{1,2} Well-designed studies including longitudinal tracking and surveillance, and comprehensive evaluation of programs and initiatives, should be supported. Learning from other jurisdictions should be incorporated, after being evaluated for their applicability to the Ontario context.^{3,4,5} Although this does not preclude taking action now to design and implement strategies, policies must be regularly compared with emerging evidence, and evaluation processes must be planned and resourced in conjunction with implementation of initiatives.

Where evaluation of programs includes tracking of children's growth, including measurement of height and weight, this should be done in a manner that is respectful of privacy and body image, in keeping with the general principle noted in the introduction.

The Canadian Foundation for Dietetic Research (CFDR) is one avenue to expand the knowledge base for childhood healthy weights. CFDR is a charitable foundation that provides grants for research in dietetics and nutrition, and has partnered on awards with the Canadian Institute of Health Research.⁷ The Foundation's mission to be *the catalyst for applied nutrition and dietetic practice research by funding research and disseminating new knowledge in support of evidence-based decisions* aligns with the purpose and scope of Ontario's Healthy Kids Panel.

References

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6. Dietitians of Canada. Should physiological outcomes such as Body Mass Index (BMI) be used to evaluate the impact of school nutrition interventions? 2005-11-10. Accessed July 26, 2012. Available from <http://www.pennutrition.com/KnowledgePathway.aspx?kpid=1099&pqcatid=145&pqid=1121> Access only by subscription.
7. Canadian Foundation for Dietetic Research website www.cfdrc.ca

Recommendation #2

Support the development and implementation of a comprehensive Ontario Food and Nutrition Strategy that sets measurable targets and establishes monitoring mechanisms for indicators.

Rationale

Many individual initiatives to promote healthy eating and physical activity already exist, however the province lacks a coordinated strategy with specific goals and measurable outcomes. Dietitians of Canada (Ontario) supports the development of an Ontario Food and Nutrition Strategy (OFNS) as proposed by the Ontario Collaborative Group on Healthy Eating and Physical Activity (OCGHEPA). This strategy calls for enhanced inter-sectoral and inter-ministerial communication to leverage current investments and resources.

The goals of the OFNS are:

- To promote health through healthy eating and access to healthful food for all Ontarians.
- To reduce the burden of obesity and chronic disease on Ontarians and the Ontario health care system.
- To strengthen the Ontario economy and environment through a sustainable food system.

The OFNS Design Team has identified three Strategic Directions to support attainment of these goals:

- Ontarians have access to and the means to obtain safe, healthy, local and culturally acceptable food.
- Ontarians have the information, knowledge, skills and relationships, and environments to support healthy eating and make healthy choices where they live, work, learn and play.
- Ontario has a diverse and sustainable food production system that contributes to an equitable and prosperous economy.

Indicators for a comprehensive provincial strategy should move beyond the indicator of population level BMI changes to include indicators that measure changes in more relevant population health measures such as improved eating habits, social inclusion, and self-worth, as well as indicators that track changes in the supportive environment and policy arenas. Accountability measures for all sectors and monitoring mechanisms should be built into the strategy.

A component of a comprehensive OFNS would include a commitment to review all government policies for their potential impact on health. Some jurisdictions have adopted a “Health in All Policies” approach, or a “Health Impact Assessment” requirement and have been successful in reducing health inequities and improving population health. Using this approach to critically appraise draft policies may assist in preventing overweight and obesity as unintended consequences of government action.^{2,3} This requires a whole-of-government approach and sufficient expertise to determine potential health consequences of policies, including effects on risk for poor nutrition and/or increased

weight. Creation of an OFNS has been supported by Cancer Care Ontario and Public Health Ontario as an important strategy to support healthy eating.⁴

References

1. Detailed information and draft OFNS strategy can be found at <http://sustainontario.com/initiatives/ontario-food-and-nutrition-strategy>
2. Centre for Research on Inner City Health. Report to the Ministry of Health and Long-Term Care (Ontario) Health in All Policies: A Snapshot for Ontario. Results of a Realist-Informed Scoping Review of the Literature. February 2011. Available from <http://www.stmichaelshospital.com/knowledgeinstitute/search/details.php?id=18218&page=1>
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Recommendation #3

Poverty, as the root cause of individual and household food insecurity, must be effectively eliminated through improvements to the social safety net. Nutritious Food Basket data should be used to assist in determining appropriate social assistance rates that will allow recipients sufficient income to purchase a healthy diet in their local areas.

Rationale

Food insecurity has been linked to increased incidence of childhood overweight in the recent Canadian Medical Association Report Card on Health¹. In this survey, 22% of parents in low income families reported having overweight children, compared to 9% in families with higher incomes. Food insecurity is associated with lower overall health status, and people with low incomes and/or living in rural or remote areas face significant barriers to healthy eating. Among households with children, almost one tenth are “food insecure as a result of financial challenges faced in accessing adequate food.”² In the last national nutrition survey, six in ten households relying on social assistance experienced food insecurity, as did three in ten households relying on workers compensation or employment insurance.³ Many Ontarians, an estimated 60% of those on social assistance, and over 8% of the total population, suffer from food insecurity.⁵ These individuals and families are at higher risk of developing chronic health conditions, including obesity, diabetes, cardiovascular disease, and mental health issues.^{5,6,7}

In the DC (Ontario) submission to the Social Assistance Review Commission 2011, we recommended action to improve food security for all Ontarians by using Nutritious Food Basket data as part of the assessment of basic expenses and the starting point for setting social assistance rates. This data is collected annually by health units across the province as required in the Ontario Public Health Standards.⁸ The food and beverage items included in the Nutritious Food Basket costing protocol are determined by Health Canada based on Canada’s Food Guide to Healthy Eating and consumer eating patterns reflected in the Canadian Community Health Survey 2.2. The use of a defined protocol, and the consistency with which it is carried out throughout the province, makes the Nutritious Food Basket a valuable tool for assessing the basic cost of healthy eating for an individual or family, specific to the food costs in the local area.

References

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Recommendation #4

Support EatRight Ontario to continue providing evidence-based healthy eating and nutrition advice to parents, family members, caregivers, schools, and other health professionals.

Rationale

EatRight Ontario (ERO) connects people with the advice of a Registered Dietitian through toll-free phone line, email, or website. Evaluation of the service noted high user satisfaction, and a substantial impact on behavior change.¹ Approximately 20% of ERO's calls are related to feeding children, making this an important avenue for impacting this population. Children's health is also impacted by the contacts from parents and caregivers seeking to change their own eating habits, making the potential reach far greater. ERO also provides access to educational material to support healthy eating, and a community referral database that can link callers who need more detailed follow up. Resources are available in multiple languages to support Ontario's diverse population. Targeted promotion to at-risk communities may increase impact on the populations most at need for support. Rising call volumes from health intermediaries point to ERO's effectiveness in providing expert nutrition advice to other health professionals, thus extending the reach to those professionals' clients.

EatRight Ontario has provided implementation support to schools for the Ontario School Food and Beverage Standards (PPM 150) through dedicated School Nutrition Project Specialists, and to the Ontario Diabetes Strategy; the learnings from these projects could be used to develop ERO's capacity to support other policy initiatives related to childhood healthy weights.

The United Nations Report of the Secretary-General on Prevention and Control of Non-Communicable Diseases refers to promoting public awareness about diet and physical activity through education and consumer information, as a "best buy" in reducing major risk factors for non-communicable diseases.² EatRight Ontario's role in connecting consumers and health intermediaries to expert nutrition advice promotes this awareness and can play an important part in supporting healthy weights for children.

References

1. EatRight Ontario Dietitian Advisory Service evaluation: Report on a survey of callers to the ERO telephone service. Haresign, H, Kerr, H, Legare, J. Dietitians of Canada; 2010.
2. United Nations General Assembly. Report of the Secretary General: Prevention and control of non-communicable diseases. May 2011. Available from http://www.un.org/ga/search/view_doc.asp?symbol=A/66/83&referer=/english/&Lang=E

Recommendation #5

Incorporate evidence-informed food literacy (access, selection), nutrition education, and food skills (food preparation, cooking, budgeting) in mandated curriculum for grades K – 12 as part of a comprehensive approach to school health.

Rationale

Development of food skills has been identified as a strategy to support healthy eating, which may lead to greater proportions of the population attaining and maintaining healthy weights.^{1,2} Regularly consuming meals together as a family, which is supported by adequate food skills, is linked with improved dietary intake and decreased risk of overweight and obesity.³ In a recent survey, 18% of respondents stated they didn't know how to prepare healthy food.⁴ Many children have not had regular opportunities to learn food skills in the home environment. Providing such opportunities for all Ontario children to develop these fundamental life skills through the education system will support healthy eating, potentially increasing overall diet quality and promoting healthy weights. Work is ongoing in other jurisdictions on "food competencies", which could be used to inform further development of this recommendation.^{5,6} Cancer Care Ontario and Public Health Ontario recommend compulsory food skills in curricula, and the Ontario Public Health Standards require that Boards of Health provide opportunities for skill development in the areas of food skills and healthy eating practices for priority populations.^{7,8}

The Public Health Agency of Canada recommends "comprehensive policies, which address the availability of healthy and less healthy foods and beverages in all aspects of the school environment, as well as other components such as nutrition education, coordination of nutrition education and food services, restricted advertising of less healthy foods, healthy fundraising and parent involvement" as the foundation for healthy school nutrition policies. In conjunction with curricula requirements and the School Food and Beverage Standards (PPM150) in Ontario, school foodservice providers should be involved in a comprehensive approach to school nutrition policies. Consideration may be needed for incentives to providing healthy foods in schools where the traditional business model has been deemed no longer viable. Both school health and financial results must be taken into account for school foodservices.

It is important that healthy eating messages be based on best evidence and consistent with current nutrition guidance. DC (Ontario) provided input to the Ministry of Education's Grades 1 – 8 curriculum revisions, and the Healthy Eating Lessons support materials. As we stated in our feedback at that time, it is important that nutrition education materials be based on the most current knowledge, and that materials be written and/or reviewed by a Registered Dietitian to ensure consistency with evidence-based nutrition messages. Public health dietitians support schools in their local areas with curriculum support and alignment of policies to create a supportive environment for health promotion, as required by the Ontario Public Health Standards.⁸ Sufficient capacity must be available within the public health unit nutrition professional workforce to consistently support comprehensive school health.

References

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Recommendation #6

Evaluate the effects of Ontario's School Food and Beverage Standards (PPM150) and establish a process to monitor compliance with standards.

Rationale

The Ontario School Food and Beverage Standards have been in place since September 2011, establishing nutrition standards for items offered for sale that are consistent with healthy eating guidelines. At present, schools attest to adherence with the standards, but there is no monitoring program to ensure compliance. Supports for implementation have been developed, including online training and dedicated School Project Specialists at EatRight Ontario (until August 2012). It is essential that a comprehensive evaluation of the actual effects of this policy be undertaken. Areas to be investigated should include students' food and beverage intake, attitudes toward and awareness of healthy eating messages, barriers and supports to implementation, and schools' need for further support to comply with the policy. There is some evidence that the implementation of school nutrition guidelines/policies are associated with lower rates of childhood overweight/obesity, however additional research is needed to determine the most effective implementation strategies and effectiveness for specific groups.^{1,2}

The Federal Provincial Territorial Group on Nutrition, which includes representatives from Health Ministries across the country, is working toward harmonized school nutrition standards. DC Ontario recommends that Ontario continue to engage in this process and to use the results of PPM 150 evaluation to inform ongoing work.

References

1. Dietitians of Canada. Are school nutrition intervention programs effective in reducing the rates of overweight and obesity in youth? In: Practice-based Evidence in Nutrition [PEN]. 2008-06-23. Accessed July 26, 2012. Available from <http://www.pennutrition.com/KnowledgePathway.aspx?kpid=1099&pqcatid=146&pqid=1159>
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Access only by subscription.

Recommendation #7

Promote physical activity for all children that is enjoyable, developmentally-appropriate, and consistent with the recommendations of the Canadian Society for Exercise Physiology, and support consistent implementation of PPM 138 Daily Physical Activity policy in elementary schools.

Rationale

Physical activity is essential to healthy growth and development. Children who enjoy physical activity are more likely to maintain an active lifestyle that promotes healthy weights.¹ Activities that fit with the child's age and family's lifestyle should be encouraged, and barriers to physical activity identified so that strategies can be developed to address them. Guidelines for physical activity and reduction in sedentary activities are available and should be promoted to health professionals, caregivers, parents, and children.² Supportive environments that enable safe enjoyable physical activity are needed, and equitable access to recreation programs for all families regardless of income and geographic location.

The Ontario Ministry of Education has required 20 minutes of daily physical activity for children in grades 1 - 8, since 2005.³ Additional supports for schools and teachers, and monitoring, may be required to ensure that this policy is being consistently followed across the province, as there are anecdotal reports of schools and classes where physical activity is not provided on a daily basis.

References

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Recommendation #8

Update the Day Nurseries Act to incorporate nutrition and healthy eating guidance consistent with current evidence.

Rationale

The Day Nurseries Act provides an opportunity to mandate nutrition standards that will support healthy childhood growth and development, as well as provide guidance on eating environments and food skills to lay the foundation for lifelong healthy eating habits. Dietitians of Canada (Ontario) has provided recommendations to the Ministry of Education in response to the discussion paper *Modernizing Child Care in Ontario*; policies and guidelines are suggested for menu planning, education of childcare providers, infant feeding practices, and modeling of eating behaviours (Appendix 2). In areas where childcare is integrated into school settings, it will be important to align requirements while meeting the unique needs of younger children and preschoolers.

Childcare settings, including licensed daycares, full day kindergarten programs, and before- and after-school programs, are important contributors' to children's nutrient intake and development of eating habits.^{1,2} Early childhood is an opportune time for initiating strategies for prevention of childhood overweight and obesity.³

References

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Recommendation # 9

Establish policies to promote healthier foods and reduce exposure to marketing of unhealthy food and beverages, and increase consumers' knowledge of nutrient content of foods.

Rationale

Availability, accessibility, and marketing of foods and beverages impacts type, quality, and quantities consumed, and can impact weight status. Dietitians of Canada's position paper on advertising of food and beverages to children recommends an integrated, multi-sectoral approach to reduce the negative impact of food and beverage advertising on children based on consistent, science-based standards for criteria of healthy and less healthy foods and beverages. The industry self-regulatory framework based on these standards may need to be supplemented with mandated advertising controls that specify enforcement mechanisms and a monitoring system to ensure compliance if there is not significant progress made to comply with the voluntary standards.¹ Participating organizations have reformulated products and modified advertising practices to comply with the standards agreed to in the Canadian Food and Beverage Advertising Initiative.² Consistent national standards for defining "healthy" foods and beverages are needed to support requirements, however these definitions are not yet developed.^{3,4} Ongoing work at the federal, provincial, and territorial level is needed to develop standards with input from all stakeholders, that can be applied in all jurisdictions.

Advertising campaigns focused on healthy eating habits may also be successful in promoting consumption of healthier foods such as vegetables and fruit.⁵ These efforts could be combined with standards for marketing and advertising of less healthy choices to lead to overall improvements in dietary quality for children.

In addition, pricing incentives that favour the purchase of healthy foods have shown some evidence of success, and should be investigated further.^{6,7,8} This could include higher pricing of "less healthy" options (e.g. through taxes), or decreasing the prices of healthier foods (e.g. subsidies) in retail and foodservice settings.

Accessibility of information on nutrient content of food, including calories, is important to make informed decisions for parents, caregivers, and older children. Availability of nutrition information for foods and beverages can support healthier choices; Dietitians of Canada's [EaTracker](#) and [EatWise](#) programs, and EatRight Ontario's resources provide easy-to-use information. The Canadian Restaurant and Foodservice Association has promoted national adoption of BC's Informed Dining program to communicate nutrition information in restaurants; this program is still in early stages, and evaluation is needed to determine overall effectiveness.⁹ The report by the provincial and territorial governments on reducing sodium intake identified consistent provision of nutrition information as an opportunity for action to reduce sodium intake; this approach is also relevant to healthy weights.¹⁰ Although mandated calorie posting on menus has been proposed by several groups^{11,12}, evaluation of this approach has shown mixed effects on calories purchased by consumers.¹³ Some observational studies did detect decreases in the amount of calories purchased per

transaction after the menu labeling regulations were implemented, particularly among women, among those who indicated they noticed the information and were likely to use it and among those who typically ordered higher calorie items. Long term effects of this approach on weight status or overall dietary quality are unknown.

DC Ontario supports efforts to develop consistent requirements across the country for provision of nutrition information to consumers that will support healthy eating. Standards should be developed in consultation with all stakeholders and rigorous evaluation of nutrition information programs considered in developing a Canadian or Ontario-specific policy. Nutrition information provided to consumers must be made easily understandable so that they are able to apply the information to their eating habits (for example, calorie information alone does not provide consumers with context as to the daily number of calories normally required, or other nutrients that have positive or negative effects on health).

References:

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Recommendation #10

Develop strategies to support public buildings such as community centres and recreation facilities to provide healthier food options.

Rationale

Public buildings such as recreation facilities and community centres contribute to children's food intake, and present an opportunity to encourage health-promoting behaviours including healthy eating and active living. Increasing the proportion of healthier food options available, and providing incentives to purchase such as pricing lower than less healthy options, attractively presenting, and other marketing efforts, can increase consumption of healthier food options.¹ This strategy has been recommended by other organizations including Ontario Chronic Disease Prevention Alliance¹, Cancer Care Ontario and Public Health Ontario², and the U.S. Centers for Disease Control and Prevention.³

A possible model for implementation of this recommendation is the EatSmart program for recreation centres, which sets standards for nutrition and food safety; the program is currently coordinated by the provincially-supported Nutrition Resource Centre. Evaluation of the program noted barriers and supports for implementation that can be used to further expand and promote the program.⁴ Provincial support is important to assist municipalities and local public health units in the implementation of such initiatives; consistent policies and implementation guidance based on evaluation of existing programs can increase the likelihood of success. Experiences in other jurisdictions such as Alberta can also inform policy initiatives.⁵ Registered Dietitians working in public health units can assist local facilities to implement healthy food policies.

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Recommendation #11

Increase awareness and use of validated screening tools and authoritative guidelines that support healthy growth and development, including the World Health Organization Growth Charts adapted for Canada and [NutriSTEP®](#), and the Joint Statement on Nutrition for Healthy Term Infants.

Rationale

Monitoring the growth of infants and children allows early identification and intervention of health issues.¹ Dietitians of Canada has led the national adoption of the World Health Organization's (WHO) growth charts, including education for health professionals and implementation resources. The charts are based on normal growth of breast-fed infants and are considered to be the "gold standard" for assessing children's growth. Exclusive breastfeeding for at least six months has been associated with reduced risk of obesity in observational studies. Support and promotion of breastfeeding, including the Baby Friendly Hospital Initiative, and local public health interventions, is recommended. DC recommends continued promotion of the use of the growth charts, and education of health professionals for strategies when growth does not follow the optimal trajectory. The charts can alert health professionals to unexpected changes in children's growth can signal excessive weight gain; early intervention may be able to prevent development of future obesity.

The NutriSTEP® parent education and skill building program contains two validated and reliable nutrition screening tools available in English and French (Preschool tool is available in 6 other languages), that can identify feeding, activity, weight and nutrition concerns in children ages 18 months to age 5 years.^{2,3,4} It can be used in a variety of settings, and an online parent version will be available in 2013. Continued promotion and integration of NutriSTEP® into existing provincial programs is a cost-effective way healthcare and community professionals can assist in early identification of issues, allowing interventions to prevent childhood obesity.

Dietitians of Canada has endorsed the Canadian Clinical Practice Guidelines issued by Obesity Canada, and recommends their continued promotion to healthcare professionals.⁵ DC is also one of three member organizations in the Infant Feeding Joint Working Group that collaborated with Health Canada to update Nutrition for Healthy Term Infants.⁶ The statement for feeding infants 0-6 months provides guidance for all health professionals in Canada. Promoting uptake of these guidelines to Ontario health professionals is a step to improving health and potentially preventing overweight and obesity in children. Registered Dietitians working in public health and primary health care settings can assist in promoting these guidelines to the interprofessional teams and to use this guidance to inform counseling with their clients.

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Recommendation #12

Encourage health care providers to stress the importance of a healthy weight before conception and appropriate weight gain during pregnancy.

Rationale

According to the Canadian Community Health Survey in 2010, 36% of Ontario women ages 20-44 are either overweight or obese.¹ A 2008 systematic review, based on observational evidence, found high pre-pregnancy body mass index and excess pregnancy weight gain to be associated with large for gestational age babies, caesarian sections, and preterm births.² The Public Health Agency of Canada's Maternity Experiences Survey found that most Ontario women gained weight in excess of the Canadian Gestational Weight Gain Recommendations, and the proportion of women gaining excess pregnancy weight was greater for women who were overweight or obese prior to pregnancy.^{3,4} Health Canada's Gestational Weight Gain Recommendations are based on those of the Institute of Medicine, which has endorsed the importance of achieving a healthy preconception weight and pregnancy weight gain for the prevention of childhood obesity.^{5,6,7}

Dietitians working in primary health care and public health support healthy pregnancies and encourage appropriate weight gain. Health Canada's Prenatal Nutrition Guidelines for Health Professionals recommends counseling on healthy eating and physical activity for women before conception and during pregnancy, including referral to a Registered Dietitian for women who need assistance with healthy eating, and for those who are underweight prior to pregnancy.⁸

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Recommendation #13

Children and families who are at risk of overweight or obesity, or have concerns with eating behaviours, should be referred to a Registered Dietitian. All primary care providers should have access to RDs for advice on promoting healthy eating.

Rationale

In Canada, Registered Dietitians play an important role in primary health care as integral members of the interprofessional team, providing leadership for teams to support the nutritional health of the population through health promotion, disease prevention, treatment, support and rehabilitation.¹ Evidence supports the use of interprofessional teams for treatment of pediatric obesity.² Taking early action including nutrition counseling for weight-related comorbidities such as increased blood pressure, blood glucose, or lipids, can improve the health of children while also contributing to appropriate weight targets. Registered Dietitians have the expertise to individualize education on dietary approaches so that they are culturally and personally acceptable to the child and family. Dietitians employ behavioural counseling techniques and education strategies suitable for the knowledge, skills, and abilities of the child and family, to achieve success in healthy eating and promotion of healthy weights.³

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Appendix 1

Practice-Based Evidence in Nutrition (PEN) References

Recommendation 1

Dietitians of Canada. Should physiological outcomes such as Body Mass Index (BMI) be used to evaluate the impact of school nutrition interventions?

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Recommendation 5

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Recommendation 6

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Recommendation 9

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Recommendation 13

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Appendix 2

Dietitians of Canada (Ontario) Recommendations to the Ministry of Education Discussion Paper *Modernizing Child Care*

Dietitians of Canada, as the professional association for Registered Dietitians in Ontario, is pleased to provide input to the discussion on the childcare system, specifically as it relates to food, nutrition and healthy eating. Childcare settings, including licensed daycares, full day kindergarten programs, and before- and after-school programs, are important contributors' to children's nutrient intake and development of eating habits.^{1,2,3} The Day Nurseries Act provides an opportunity to mandate nutrition standards that will support healthy childhood growth and development, as well as provide guidance on eating environments and food skills to lay the foundation for lifelong healthy eating habits. We have outlined general recommendations for several areas, including menu planning, education of childcare providers, infant feeding practices, and modeling of eating behaviours. We look forward to working with other groups including the Ontario Society of Nutrition Professionals in Public Health (OSNPPH) and utilizing the expertise of our members in developing more detailed requirements and supports for childcare providers. Dietitians of Canada has been closely involved in development of childcare nutrition guidelines and standards in other jurisdictions in Canada, and we can bring experiences from those projects to the Ontario setting.

We support the Guiding Principles that are set out in *Modernizing Child Care*, and all are relevant to food service and healthy eating recommendations put forth below. In areas where childcare is integrated into school settings, it will be important to align requirements while meeting the unique needs of younger children and preschoolers. For example, different portion sizes for younger children, and use of whole milk for children under 2 years of age would be unique.

Operating Funding Formula

We support the development of a transparent funding formula, which will allow childcare providers to offer high quality programming and reliable care for families, while also giving childcare professionals appropriate compensation and adequate resources for infrastructure.

Specific to the delivery of food services in childcare settings, we encourage:

- Specific funding for food purchases, to allow providers adequate resources for high quality food and beverages that meet nutrition needs of children and set the foundation for healthy eating and food skills development. This funding may need to be aligned with food costs in different regions of the province, for example to account for higher costs in Northern and remote areas.
- Funding to provide resources for menu review, training, and ongoing support for cooks and other staff.

Capital Funding Priorities

- Adequate space and equipment to enable food storage, preparation, and service in a safe manner, and support production of high quality meals and snacks.
- For childcare centres in shared accommodation, adequate space and equipment to provide for specific foods and beverages for infants and toddlers.

Quality Programs

Provincial program guidelines should be based on the best available evidence for child development, and able to be updated on a regular basis to keep guidelines aligned with emerging evidence. Positioning these guidelines outside of legislation and regulations will allow regular updating. As stated in our introduction, Dietitians of Canada (Ontario) members with expertise in infant and child feeding practices can assist in development of detailed guidelines and requirements. The list below sets out preliminary suggestions for areas that the guidelines should cover; this is not an exhaustive list.

Menu Planning

- Use of current Canada's Food Guide to Healthy Eating, including directional statements
- Review of menu by Registered Dietitian using consistent evidence-based criteria
- Standards/goals for nutritional quality of menu
- Portion sizes
- Foods to serve most often, less often, and not allowed

Eating environment

- Space and furnishings appropriate to encourage healthy eating and appropriate for developmental stage
- Modeling of eating behavior by staff
- Policies related to meal and snack time behavior, for example trying new foods, non-use of food as reward/punishment, "clean your plate" statements, etc
- Allergy/intolerance awareness and safe practices
- Availability of water at all times for older children
- Food and nutrition education activities built into programming for children

Infant feeding practices

- Support for breastfeeding mothers including storage and feeding of breastmilk
- Appropriate bottle-feeding techniques
- Introduction of complementary foods
- Individualized feeding plans

Safe food handling practices

- Purchasing, receiving, and storage guidelines
- Food safety training for all staff
- Handwashing instruction and supervision for children

Record-keeping

- Food safety and nutrition training by all staff
- Menus as served
- Menu review forms (completed)
- Standardized recipes
- Inspection/licensing reports
- Communication/family education on healthy eating

Accountability and Capacity-Building

Compliance with standards, including nutrition and food environment standards, should be linked with license renewal for childcare centres. Stakeholder input should inform development of standards, compliance assessment tools, and training/capacity-building tools. Training and supports to enable providers to consistently apply requirements are needed.

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