



**NATIONAL SCHOOL NUTRITION
POLICY
BARBADOS**



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List of Abbreviations

B-CHOPP	-	Barbados- Childhood Obesity Prevention Program
BMI	-	Body Mass Index
GSHS	-	Global School Health Survey
HFLE	-	Health and Family Life Education
HSFB	-	Heart and Stroke Foundation of Barbados
METVT	-	Ministry of Education, Technological and Vocational Training
MOHW	-	Ministry of Health and Wellness
NNC	-	National Nutrition Centre
NCDs	-	Non-communicable diseases
OWOB	-	Overweight and obesity -
PA	-	Physical Activity
PE	-	Physical Education
PTA	-	Parent Teacher Association
SNP	-	School nutrition policy
SMD	-	School Meals Department
SSBs	-	Sugar sweetened beverages
WHO	-	World Health Organization

Executive Summary

In Barbados, the non-communicable diseases (NCDs) are identified as one of the leading causes of mortality and morbidity. They accounted for 83% of all deaths in 2016. In recognition of the threat that the growing public health burden of the NCDs poses to the country's economic and social development and in response to the government's global commitments, the Ministry of Health and Wellness (MOHW) has accorded increased priority to NCD prevention and control in the national health agenda. A national NCD Commission was appointed and coordinated efforts for the preparation of a strategic plan for the prevention and control of NCDs. Reducing the major risk factors for NCDs, including unhealthy eating and physical inactivity, and the upward trend in overweight and obesity was listed as one of the three main strategic interventions in the plan.

The rising rates of overweight and obesity in the country are of significant concern. Based on the information in the 2020 Global Nutrition Report, Barbados still experiences a malnutrition burden among its under-five population. In 2012 the national prevalence of under-five overweight, stunting and wasting were 12.2%, 7.7% and 6.8% respectively. While survey data on adolescents in 2011 found that 32% of adolescents were overweight of which 15% were obese. A 2018 Barbadian sample of a regional survey has a similar finding with 32% overweight of which 16% were obese. Changes in dietary quality with simultaneous increases in sedentary behaviours and reduction in physical activity (PA) are acknowledged as main contributors to the progression of OWOB.

These eating and activity patterns are largely established during childhood and adolescence and continue into adulthood. Therefore, prevention of risky behaviours among children and adolescents is viewed as an urgent priority in efforts to reduce the burden of NCDs in the future. The role of the school environment in shaping dietary and PA behaviours has received increasing attention worldwide. There have been calls locally for action in implementing policies and practices for creating healthier school environments. A number of factors relating to various aspects of school environments need to be addressed. These include the lack of nutritional standards regulating schools' food/beverage offerings, unregulated food vending in and around schools, evidence of a broad array of approaches for the marketing of nutrient-poor food and beverages, the lack of adequate attention to nutrition and physical education (PE) in school curricula, low levels of participation in PE classes, the lack of a conducive PA environment, and the need to increase student and parent engagement and other stakeholder involvement in efforts for improving children's eating and activity patterns.

Schools have been a popular setting for obesity prevention interventions as they offer continuous and intensive contact with children and can also act as access points for reaching parents. A national school nutrition policy (SNP) provides an operational framework for efforts aimed at creating an enabling school environment which promotes and supports the adoption of healthy eating and activity patterns. It is generally recognized that a whole-school approach and wide stakeholder involvement are critical throughout the policy process. Both are essential for strengthening the design of and fostering broad support for required policy actions.

With the technical and administrative support of the Pan American Health Organization (PAHO), the Ministry of Health and Wellness (MOHW) in collaboration with the Ministry of Education, Technological and Vocational Training (METVT) spearheaded a consultative process for the development of a national SNP for Barbados. In view of the preventive measures in response to the Covid-19 pandemic, three webinars were organized to engage with key stakeholders to identify their concerns and gather inputs on existing initiatives and proposed areas to be addressed in the development of the SNP. Stakeholders also had the opportunity to provide additional information throughout the policy development process.

The SNP, therefore, expresses a common vision of the measures required to improve nutrition and PA in the school setting. It applies to all public and private schools and educational institutions from preschool to tertiary level. The SNP is an evolving document which is expected to guide decision making and actions for improving school environments and student behaviors. The policy objectives are in line with relevant national and regional policies and plans such as the Barbados Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2015 – 2019, the National Plan of Action for Childhood Obesity Prevention and Control (2015-2018)/Barbados Childhood Obesity Prevention Program (B-CHOPP), the Barbados Food and Nutrition Security Policy 2015¹², the Regional Plan of Action for the Prevention of Obesity in Children and Adolescents approved by Ministers of Health at PAHO's 53rd Directing Council (2014), and the CARPHA 6 Point Policy for Healthier Food Environments.

The policy framework is described as follows:

Vision Statement: All preschool and school-aged children (3 - 17 years) in Barbados attain optimal health, growth and development which will enable them to achieve their full potential.

The overall goal of the SNP is to create healthy school environments that enhance student learning and are conducive to the development of healthy lifelong eating and activity behaviors through a multisectoral and integrated approach.

The objectives are:

1. To ensure that only nutritious food and beverages that enhance the health, learning and well-being of school children are sold, served and promoted in school environments.
2. To coordinate school food service with nutrition education and other school-based nutrition-promoting initiatives in an integrated approach to promote students' adoption of healthy eating behaviors.
3. To equip school children with the knowledge, skills and attitudes to facilitate their active engagement in protecting their own health through the adoption and maintenance of healthy eating and activity behaviors.
4. To increase opportunities for physical activity in the school environment to enable school children to be physically active throughout the school day.
5. To increase capacity of school personnel, parents and the wider community in supporting and reinforcing healthy eating and increased physical activity in home, school and community settings.
6. To engage and mobilize key stakeholders in supporting and monitoring policy implementation and advocating for other appropriate measures for promoting and protecting the health and nutrition of school-aged children.
7. To motivate schools to take actions to fulfil the objectives of the school nutrition policy and give visibility to their efforts.
8. To increase the availability of timely and accurate information on child and adolescent nutrition-related indicators in order to evaluate policy implementation and to inform program development and coordination.

The goal and objectives of the policy will be realized through proposed policy actions organized within a framework of six interrelated policy themes based on the WHO school policy framework. The six broad thematic areas for action are:

- Food Services Environment
- School Curriculum
- PA environment
- School Health and Nutrition Services
- Health promotion for the school community

- School recognition

Policy statements and supporting strategies in relation to each area are outlined. Proposed implementation and monitoring strategies are also described.

The policy statements are listed below:

1. **Food Services environment:** In order to ensure an enabling school food services environment which supports and facilitates the adoption of healthy eating practices, three policy measures shall be implemented: the introduction of nutrition standards for all foods and beverages available in schools; restrictions on the marketing and advertisement in schools of foods and beverages which are not consistent with the nutrition standards and healthy dietary practices; and improvements in eating environments in schools. The standards shall be disseminated in different communication formats to suit the needs of the entire school community including parents. Training and educational programmes on their importance and use shall be implemented.
2. **School Curriculum:** In order to empower students with the knowledge, attitudes and skills which are needed to make informed decisions and practice healthy eating and activity behaviours for the promotion of health and wellbeing, comprehensive nutrition education and physical education shall be made mandatory subjects in the school curriculum from preschool to secondary level. The teaching of nutrition and physical education shall be strengthened through the implementation of a national sequential curriculum framework for each subject, capacity building for effective delivery of the curricula, integration of school food service and nutrition education and program evaluation.
3. **PA environment:** A holistic comprehensive approach shall be adopted in creating a supportive and sustainable physical activity environment in schools which facilitates participation in PA throughout the school day. Safe and enjoyable activity shall be promoted for all students, including those who are not athletically gifted and /or are physically challenged. Students shall also be actively encouraged to take advantage of opportunities for PA in school and community settings.
4. **School Health and Nutrition Services:** Supportive health and nutrition services shall be integrated into efforts to enhance the health, learning and well-being of school-aged children. These services help in the prevention, timely identification and treatment of OWOB and other health and nutrition-related problems. Annual health/nutrition assessments of all school children (from preschool to tertiary level) shall be mandated health requirements for school admission and attendance. Knowledge and skills of primary health care providers in obesity prevention and management shall be upgraded to improve the delivery and quality of care. Partnerships between schools and health teams shall be strengthened

and collaborations promoted in the establishment of nutrition and physical activity surveillance procedures.

5. **Health promotion for the school community:** Educational and promotional activities shall be implemented to promote the active participation of school personnel, parents and community members in supporting efforts for improving the eating and activity behaviors of school children. Efforts shall be made to ensure that students receive consistent messages through multiple channels (e.g., home, school, community, and media) and from multiple sources (e.g., parents, peers, teachers, health workers). The National Nutrition Centre shall be the primary advisor on nutrition and health messaging. With key stakeholders such as Barbados National Council of Parent - Teacher Associations, other civil society organizations, private sector entities and the health care community supporting advocacy efforts and programme development in support of the objectives of the SNP.
6. **School recognition:** A school recognition programme shall be developed that stimulates schools to promote healthy eating and physical activity and recognizes their efforts at improvement of their school environments in compliance with the provisions of the school nutrition policy.

1. Introduction

Non-communicable diseases (NCDs) are the leading causes of preventable morbidity, related disability, and premature death globally. Four groups of these diseases - cardiovascular diseases, cancers, chronic respiratory diseases and diabetes - account for over 80% of all premature NCD deaths.¹ The 2030 Agenda for Sustainable Development recognizes NCDs as a major challenge for sustainable development.² As part of the Agenda, Heads of State and Government committed by 2030, to reduce by one-third premature mortality from NCDs through prevention and treatment, and the promotion of mental health and wellbeing (SDG target 3.4).³ This target applies to the achievement of Sustainable Development Goal (SDG) 03 of ensuring healthy lives and promoting well-being at all ages.³

In 2018, at the United Nations General Assembly Third High-level Meeting on NCD Prevention and Control, Heads of State and Government reaffirmed their commitment to put their countries on a sustainable path to attaining SDG target 3.4.⁴ In fulfillment of this commitment, countries are expected to prioritize and scale up interventions for NCD prevention and control. They also made a commitment to promoting well-coordinated multisectoral and multistakeholder collaboration and partnerships in national responses for addressing the NCDs.⁵

In Barbados, NCDs are also identified as one of the leading causes of mortality and morbidity. They accounted for 83% of all deaths in 2016.⁶ The 2015 Health of the Nation Survey revealed that 1 in 10

1 World Health Organization. Fact Sheet. Noncommunicable diseases: Key Facts. 1 June 2018.

2 World Health Organization. (2015). Health in 2015: from MDGs, Millennium Development Goals to SDGs, Sustainable Development Goals. Geneva: World Health Organization.

3 Sustainable Development Solutions Network (SDSN). Indicators and a Monitoring Framework for Sustainable Development Goals: Launching a data revolution for the SDGs. May 2015. Accessed from <https://resources.unsdsn.org/indicators-and-a-monitoring-framework-for-sustainable-development-goals-launching-a-data-revolution-for-the-sdgs>.

4 Resolution 73/2 adopted by the 73rd session of the General Assembly on 10 October 2018: Political declaration of the third high-level meeting of the General Assembly on the prevention and control of non-communicable diseases. Accessed from <https://digitallibrary.un.org/record/1648984?ln=en>.

5 In line with paragraphs 42 and 43 of resolution 73/2. Accessed http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/73/2.

6 World Health Organization, (2018) Noncommunicable Diseases (NCD) Country Profiles. Geneva: World Health Organization.

adults had a NCD, and that 80% of men and 90% of women had at least one risk factor, and up to one-third of adults were being managed for at least one NCD.⁷ In recognition of the threat the growing public health burden of the NCDs poses to the country's economic and social development and in response to the government's global commitments, the Ministry of Health and Wellness (MOHW) has accorded increased priority to NCD prevention and control in the national health agenda. A national NCD Commission was appointed and coordinated efforts for the preparation of a strategic plan for the prevention and control of NCDs.⁸ Reducing the major risk factors for NCDs including unhealthy eating and physical inactivity and the upward trend in overweight and obesity were listed as one of the three main strategic interventions in the plan.⁸

The rising rates of overweight and obesity in the country are of significant concern. This trend is fueled mainly by eating and activity patterns that are largely established during childhood and adolescence and continue into adulthood.¹¹ Therefore, prevention of risky behaviours among the children in these age groups is viewed as an urgent priority in efforts to reduce the burden of NCDs in the future. Evidence shows that behavioral changes during early years require conducive policies and programs.⁹ Hence, the settings where children live, play and study should be environments which promote, support and reinforce the adoption of healthy behavioral patterns.¹⁰ Achievement of this objective underlies one of the lines of action in the NCD strategic plan that calls for the implementation of school-based prevention initiatives within the context of the Health Promoting Schools Framework developed by the World Health Organization (WHO).⁸ Similar interventions are proposed in the Barbados National Plan of Action for Childhood Obesity Prevention and Control

7 Ministry of Health, Barbados. (2015). *The Barbados Health of the Nation Survey: core findings*. St Michael: Ministry of Health.

8 National NCD Commission/Barbados Ministry of Health. (2014). *Barbados Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2015 – 2019*. St. Michael: Ministry of Health.

9 World Health Organization. (2012). *Health Education: Theoretical concepts, effective strategies and core competencies*. Geneva: World Health Organization.

10 World Health Organization. (2011). *Global status report on non-communicable diseases, 2010*. Geneva: World Health Organization; 2011.

(2015-2019)¹¹ and the 2015 Barbados Food and Nutrition Security Policy¹². In the latter policy, recommended priority actions include the integration of PA, good nutrition and healthy lifestyle practices in school curricula and the application of nutrition guidelines in foods served and sold in schools. A civil society-led Childhood Obesity Prevention Coalition has called for the creation of healthier school food environments in Barbados.¹³ The call has been supported by activities aimed at raising public awareness of the importance of healthy school environments in combatting childhood obesity and building public support around policy development or change.

Schools have been a popular setting for obesity interventions, as they offer continuous and intensive contact with children. Evidence suggests that school policies can positively impact Body Mass Index (BMI),¹⁴ PA and dietary behaviors¹⁵ among children. During the time the students are at school, they can be given opportunities to practice healthy eating and taught skills to resist social pressures to adopt unhealthy eating practices.¹⁶ Skilled personnel are available to carry out nutrition and physical education (PE) and to provide follow-up and guidance. Schools also act as access points for engaging parents and community members in modelling, promoting and reinforcing healthy behaviours among children and adolescents.¹⁶

A national school nutrition policy (SNP) provides an operational framework for efforts aimed at creating an enabling school environment which promotes and supports the adoption of healthy eating and activity patterns. It is generally recognized that a whole-school approach and wide

11 The Government of Barbados. (2015). National Plan of Action for Childhood Obesity Prevention and Control (2015-2018) Barbados. Childhood Obesity Prevention Program (B-CHOPP). St. Michael: Ministry of Health.

12 The Government of Barbados. (2015). Barbados Food and Nutrition Security Policy 2015. (Draft). Prepared by The Government of Barbados with technical support from the Food and Agriculture Organization of the United Nations (FAO).

13 Heart and Stroke Foundation of Barbados. Advocacy for Healthier school environments in Barbados. PowerPoint presentation at National Civil Society Consultation on Childhood Obesity Prevention on July 28, 2018.

14 Williams, A.J., Henley, W.E., Williams, C.A., Hurst, A.J., Logan, S., & Wyatt, K.M. (2013) Systematic review and meta-analysis of the association between childhood overweight and obesity and primary school diet and physical activity policies. *International Journal of Behavioral Nutrition and Physical Activity*, 10:101.

15 Jaime, P.C., & Lock, K. (2009). Do school based food and nutrition policies improve diet and reduce obesity? *Preventive Medicine*. 48(1):45–53.

16 World Health Organization. (1998). WHO Information Series on School Health. Document Four. Healthy Nutrition: An Essential Element of a Health- Promoting School. Geneva: World Health Organization.

stakeholder involvement are critical throughout the policy process.¹⁷ Both are essential for strengthening the design of and fostering broad support for required policy actions.

Stakeholder engagement was a central feature of the policy process toward the development of the national school policy for Barbados. With the technical and administrative support of the Pan American Health Organization (PAHO/WHO), the MOHW in collaboration with the Ministry of Education, Technological and Vocational Training (METVT) spearheaded the consultative process. In view of the preventive measures in response to the Covid-19 pandemic, three virtual consultations were organized to engage with key stakeholders to identify their concerns and gather inputs on existing initiatives and proposed areas to be addressed in the development of the SNP.

A total of thirty-nine persons participated in the webinars. The participants included officials from the MOHW, National Nutrition Centre and METVT, representatives from schools, parent/teacher associations, Child Care Board, Barbados National Standards Institute, Barbados Heart and Stroke Foundation, University of The West Indies, Healthy Caribbean Coalition (HCC), PAHO/WHO, UNICEF and FAO. The list of participants is shown in Annex I.

The school nutrition policy, therefore, expresses a common vision of the measures required to improve nutrition and PA in the school setting. It is an evolving document which is expected to guide decision making and actions for improving school environments and student behaviors. The policy objectives are in line with relevant national and regional policies and plans such as the Barbados Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2015 – 2019⁸, the National Plan of Action for Childhood Obesity Prevention and Control (2015-2018)/Barbados Childhood Obesity Prevention Program (B-CHOPP)¹¹, the Barbados Food and Nutrition Security Policy 2015¹², the Regional Plan of Action for the Prevention of Obesity in Children and Adolescents approved by Ministers of Health at PAHO's 53rd Directing Council (2014)¹⁸, and the CARPHA 6 Point Policy for Healthier Food Environments.¹⁹

17 World Health Organization. (2008). School policy framework: implementation of the WHO global strategy on diet, physical activity and health. Geneva: World Health Organization.

18 Pan American Health Organization. (2015). Plan of Action for the Prevention of Obesity in Children and Adolescents. Washington: Pan American Health Organization.

19 CARICOM. (2017). CARPHA_6_Point_Policy_for_Healthier_Food_Environments.

Guiding principles in the development of the policy are defined. The proposed policy actions are organized within a framework of six interrelated policy themes based on the WHO school policy framework.²⁰ Policy statements and supporting strategies in relation to each thematic area are outlined. Proposed implementation and monitoring strategies are also described.

2. Situation Analysis

Overall context

Barbados is the easternmost of the Caribbean islands. It is considered to be a high-income country.²¹ Its economy is service-based with tourism, international business, and retail trade being the main drivers of economic activity. The mid-year population in 2019 was estimated at 287,000 of which approximately 17.8% are below 14 years of age.²² The literacy rate is 97%. Primary and secondary level education is mandatory and free. Primary health care services are readily accessible through nine community-based polyclinics and health care is free at the point of delivery.

The epidemiological disease profile has shifted from infectious and communicable diseases to that of the NCDs which are the leading cause of ill health in the adult population. These diseases are increasingly evident in younger age groups and are often the result of lifestyle behaviours established at the school age or during adolescence. Obesity, which is associated with an elevated risk of several of the major NCDs is a growing public health problem.⁸

Increasing disposable income, more sedentary lifestyles and acquired tastes for high fat, salty and sugary foods have contributed to rising trends in overweight and obesity and the NCDs.⁸ Changes in dietary patterns are linked to a shift in domestic food availability from locally produced food to a greater dependence on imported food, resulting in the consumption of more highly processed and refined foods.¹² Food prices continue to be high, with negative effects on dietary intakes of the poor.¹²

²⁰ World Health Organization. (2008). School policy framework : implementation of the WHO global strategy on diet, physical activity and health. Geneva: World Health Organization.

²¹ Pan American Health Organization.(2017). Health in the Americas 2017 Edition. Summary: Regional Outlook and Country Profiles. Washington, D.C.: PAHO.

²² Index Mundi.(2019).Barbados Demographics Profile 2019.

Population approaches to encourage healthy eating and activity patterns include the introduction of a 10% ad valorem tax on sugar sweetened beverages (SSBs) in 2015²³, increased to 20% in 2022 and the development and promotion of National Food-Based Dietary Guidelines²⁴ and Physical Activity Guidelines²⁵. The MOHW is also supportive of the introduction of Front of Package Labeling (FOPL) of Prepackaged Foods and has been working closely with the Barbados National Standards Institution and the private sector on the development of a Regional CARICOM Standard. There is active ongoing civil society participation in national efforts for obesity and NCD prevention with particular focus on creating healthier school environments.²³

Nutrition and PA of school aged children

Based on the information in the 2018 Global Nutrition Report²⁶, Barbados still experiences a malnutrition burden among its under-five population. In 2012, the national prevalence of under-five overweight, stunting and wasting were 12.2%, 7.7% and 6.8% respectively. The Report also indicated that there were insufficient data available to assess the country's progress in meeting the 2025 Global Nutrition Targets for low birth weight, exclusive breastfeeding in infancy and under-five overweight, stunting and wasting. Monitoring trends in early-onset overweight and obesity (OWOB), a precursor to later childhood and adult obesity, offers the potential for early preventative approaches with long-lasting benefits.

Survey data on adolescents in Barbados reveal that OWOB are major health concerns. The 2011 WHO Global School-based Student Health Survey (GSHS), a population based cross sectional survey of 13-15 year old students in 26 schools, indicated that the prevalence of overweight was 31.9% including 14.2% who were obese.²⁷ A 2018 salt regional salt study by Rambaran and others (2021) included BMI measurements and found 31.9% overweight and 15.7% obesity. Girls were at a slightly higher rate of obesity when compared to boys. An overweight/obesity (OWOB) prevalence of 34.8% among children aged 8-11 years²⁸ and 30% among

23 A Healthy Caribbean Coalition (HCC). (2019) Barbados Rapid Assessment of the School Nutrition Policy Environment. The Global Health Advocacy Incubator (GHAi) Project. Bridgetown.

23B Consumers to pay more for sugary drinks <https://barbadostoday.bb/2022/03/15/consumers-to-pay-more-for-sugary-drinks/>

24 Ministry of Health. (2017). Food Based Dietary Guidelines for Barbados Revised Edition. Ministry of Health. Barbados.

25 Ministry of Health. (2012). Physical Activity Guidelines for Barbados. Ministry of Health. Barbados.

26 Development Initiatives. (2018) Global Nutrition Report: Shining a light to spur action on nutrition. Nutrition sub regional profile - Caribbean. Bristol, UK: Development Initiatives.

²⁷World Health Organization.(2012). Global School-based Student Health Survey. Ministry of Health. Barbados.

²⁸Fernandez, M., Kubow, S., Gray-Donald, K., Knight, J., & Gaskin, P. (2015). Drastic increases in overweight and obesity from 1981 to 2010 and related risk factors: Results from the Barbados Children's Health and Nutrition Study. *Public Health Nutrition*, 18(17), 3070-3077. doi:10.1017/S1368980015002190

children aged 9–10 years has also been reported.²⁹ Changes in dietary quality with simultaneous increases in sedentary behaviors and reduction in PA are acknowledged as main contributors to the progression of OWOB. An examination of dietary intakes of pre-adolescent (9-11 years) children attending a public primary school in Barbados provided some insights on diet composition in this age group.³⁰ Dietary information based on three 24-hour recalls revealed that while energy intakes were slightly below the Caribbean Recommended Dietary Allowances (RDAs) for the age group, the mean daily percentage of energy from total fat was at the upper end of the recommended range and intakes from saturated fat and sugar were above recommended maximum limits (less than 10% of total energy intake).³⁰ Sugar-added beverages accounted for 21% of the energy consumed and dominated the list of the top 20 most frequently consumed foods.³⁰ Some of these beverages were purchased at the school or brought from home. Beverage choice has received substantial attention as a potential obesity risk factor in children. Among modifiable individual level dietary risk factors associated with childhood weight gain and obesity in school-aged children, the most consistent evidence was for intakes of sugar sweetened beverages (SSBs).³¹

Gaskin et al (2012) also observed that the preadolescent children's dietary patterns were similar to reported intakes among adults thus signaling the influence of parents on children at this age and the importance of adult modeling for this age group.³⁰ Although more independent choices are made in adolescence, it is a period of susceptibility to a number of influences on diet. Food choices and eating behaviors in the adolescent years may have lasting effects throughout the life course. Interaction of adolescent nutrition and oral health affects the risk for prevalence of dental caries (tooth decay), periodontal (gum) disease and tooth loss. The information gleaned from the GSHS indicate dietary patterns that may predispose susceptible adolescents to OWOB. Almost three quarters (73.3%) of the students reported drinking one or more carbonated beverages per

²⁹Hall, R., St John, M.A., Knight, J., and Gaskin, P.S. (2012). Examining the relationship between blood pressure and body composition in a group of 9-10 year old Barbadian primary school students. *West Indies Medical Journal*, (Suppl 2) 61.

³⁰Gaskin, P.S., Lai, P., Guy, D., Knight, J., Jackson, M., & Nielsen, A.L. (2012). Diet, physical activity, weight status, and culture in a sample of children from the developing world. *Journal of Nutrition and Metabolism*, vol. 2012. <https://doi.org/10.1155/2012/242875>.

³¹Must, A., Barish, E. E., & Bandini, L. G. (2009). Modifiable risk factors in relation to changes in BMI and fatness: what have we learned from prospective studies of school-aged children? *International journal of obesity*, (2005), 33(7), 705–715. <https://doi.org/10.1038/ijo.2009.60>.

day, and 18.5% admitted to consuming fast food three or more times per week.²⁷ Approximately 15 % stated they had not consumed any fruit and vegetables within the last month.²⁷

Both surveys alluded to above sought information on PA patterns. Information on participation levels among the pre-adolescent group was not available. Screen time, a sedentary behavior associated with weight gain, accounted for 21% of the preadolescent children's activities.³⁰ Walking as a means of travel accounted for only 5% of reported activities.³⁰ Most of the children's active activities were self-selected and were the only active measures which correlated with BMI.³⁰ This points to the importance of the participation of children in devising strategies for increasing PA as an obesity prevention strategy. Another finding of interest was the reported minimal parental encouragement of children's participation in PA.³⁰ In view of their relatively strong influence on the behaviors of pre-adolescents, parental engagement may prove to be an essential strategy in PA promotion in this age group.

Low levels of PA among the 13-15 year age group were reported in the GSHS. Only 29.1 % of the students had achieved the WHO recommended level of PA for individuals in their age range.²⁷ Levels of participation were higher in boys compared to girls.²⁷ Only one third (33.3%) of students attended PE classes regularly during the school year.²⁷ About two-thirds (65.3%) of them reported that they usually engaged in sedentary activity for three or more hours per day.²⁷

An earlier study which was the first on PA levels of children and adolescents (8 to 18 years) in Barbados also reported gender differences in levels of participation and low participation in PE classes.³² In addition, a difference by age was noted with younger students reporting higher levels of participation than the older students.³² The observation that the majority of PA took place after school was also reported by Gaskin et al in the study of preadolescents.³⁰

Sustained participation in PA at recommended levels is important for achieving public health impact in obesity prevention. There is the need to develop effective age appropriate strategies to motivate children and adolescents to initiate and continue participation in PA and PE with a particular focus on females and older students. Parent engagement, the involvement of children in the design of interventions and increasing after-school opportunities for PA are likely to be important in increasing levels of sustained participation.

³²Prochaska, J.J., Sallis, J.F., Griffith, B. *et al.* (2002). Physical activity levels of Barbadian youth and comparison to a U.S. sample. *Internal Journal of Behavioral Medicine*, 9, 360–372. https://doi.org/10.1207/S15327558IJBM0904_05

School Environment

Schools provide a key environmental setting in which to facilitate actions that promote healthy choices as the norm. Some of the most promising intervention strategies for developing an enabling school environment which promotes and supports healthy eating and regular PA include prioritised actions in the following areas: improving the nutritional quality of foods available at schools and restricting the availability and marketing of unhealthy competitive foods; strengthening the teaching on nutrition and PE within the school curriculum; increasing PA opportunities; engagement and education of the whole school community including staff, parents and wider community; and the inclusion of school health and nutrition services.¹⁷ An analysis of the status of initiatives in the proposed areas in the local context follow.

Food Environment

According to FAO, the school food environment refers to all the spaces, infrastructure and conditions inside and around the school premises where food is available, obtained, purchased and/or consumed; also taking into account the nutritional content of these foods. The environment also includes all of the information available, promotion (marketing, advertisements, branding, food labels, packages, promotions, etc.) and the pricing of foods and food products.³³

There are multiple sources of foods/beverages in schools in Barbados. The School Meals Department (SMD) of the METVT prepares and delivers approximately 25,000 meals (lunch) daily.³⁴ The meals are prepared at four locations and distributed to 106 schools across the island. The list includes all government run nursery and primary schools, two private schools and selected students in 16 secondary schools. The Department also provides sweetened soya milk daily at morning break to all children attending primary and nursery schools. In addition to the meal service of the SMD, students are allowed to bring snacks/meals from home. In secondary schools (public and private) and private primary schools, meals, snack foods and beverages can be purchased from school canteens. Other sources of foods and beverages in schools include tuck shops, vending machines, school vendors and mobile vendors around or nearby schools, and sales by school staff.

³³FAO. Healthy food environment and school food. <http://www.fao.org/school-food/areas-work/food-environment/en/>

³⁴Personal communication

Findings of a 2019 school audit carried out in 24 schools in Barbados revealed that unhealthy foods and beverages were widely available in all the schools surveyed.³⁵ They were sold by school sources (e.g. canteen) as well as from vendors. The SSBs included sports drinks, sodas, home-made drinks, flavoured water and juice-drinks. Water was one of the few healthy beverage options available. Snacks, many with high levels of fat sodium or sugar, were available from more than 80% of school sources and vendors. Only 20% of either source offered fruits. Vegetables were only available from a school source with less than half of them offering this food item. School fundraisers also involved the sale of unhealthy foods. More than 80% of schools sold fast foods, SSBs, cakes and snacks, and 63%, sweets/candy, at fundraising events in the previous year. Policy and educational approaches, including identifying and initiating new fundraising strategies, are needed to address these concerns.

There have been calls for action in implementing policies and practices for creating healthier food environments in schools.³⁶ It also appears that the public is supporting these calls. Findings of a 2019 Childhood Obesity public opinion poll showed that the majority (92%) of Barbadians polled expressed support for national policies/ guidelines to ensure a healthy school environment.³⁷

Efforts to improve the quality of meals provided by SMD are already underway. However, the Department's efforts are hindered by financial and capacity constraints, competition from the unregulated offerings by vendors, canteens and other school-based sources; the limitations inherent in bulk food preparation and off premise catering; and, the difficulties in accessing regular supplies of fresh fruits and vegetables.

The National Nutrition Centre (NNC), MOHW, is assisting the SMD with the review of the school menus. The NNC has also prepared and disseminated nutritional guidelines for school lunches but these have not been fully implemented in schools. The guidelines stipulate the composition, approximate number of servings from each food group and the frequency of provision of specific food items for the preparation of school lunches.³⁸ Energy and selected nutrient-based standards are included but these relate only to

³⁵ Soares-Wynter, S. Barbados school environment audit. Caribbean Institute for Health Research. University of the West Indies (PowerPoint presentation).

³⁶ Childhood Obesity Prevention Coalition Consultation - <https://www.healthycaribbean.org/childhood-obesity-prevention-coalition-consultation/>

³⁷ Heart & Stroke Foundation of Barbados Obesity Opinion Poll - <https://www.healthycaribbean.org/heart-and-stroke-foundation-of-barbados-obesity-opinion-poll/>

³⁸ National Nutrition Centre. (2015). Nutritious & Healthy Foods in Schools Nutritional & Practical Guidelines for Barbados. Ministry of Health, Barbados.

the provision of lunch. A more comprehensive set of nutrition standards need to be developed to regulate the availability and quality of foods and beverages from the different sources in and around schools. This should include the incorporation of the critical nutrients (free sugars, sodium, saturated fat, total fat, and trans-fatty acids) addressed in the PAHO Nutrient Profile Model which is based on the WHO Population Nutrient Intake Goals to Prevent Obesity and Related NCDs.

The effective implementation of the revised nutrition standards and guidelines will require a review of food procurement procedures to ensure the availability and accessibility of nutritious food especially fresh fruits and vegetables on a daily basis. Of importance also will be supportive strategies to encourage students' acceptance of healthier snack/meal options. Engaging students in menu planning and taste testing as well as the mounting of promotional materials are among strategies shown to improve preference for new menu items.³⁹ School canteens can also play a vital role in creating a school culture of healthy eating. Strategies currently used by some canteen concessionaires to facilitate healthier food choices by students should be widely promoted throughout the school system. School authorities should ensure that nutrition and food service standards are reflected in the performance conditions of contracts with school canteen concessionaires and that the actions to be taken in case of breaches to these commitments are specified.

Most schools permit the sale of foods and beverages by vendors on and near school premises. Unsanctioned vending is a problem in some areas. As mentioned above, the vendors' offerings are not always healthy options. Students' access to unhealthy competitive foods will counteract the beneficial effects of efforts for improving the quality of meals provided by the SMD and school canteen and will be a significant barrier to the establishment of healthier school environments. Consideration should be given to the regulation and control of food vending around schools by the issuing of licenses or permits which specify the types of foods and beverages, based on the nutrition standards, which they are permitted to sell to students. In addition, restriction of vending and food sales by unauthorized persons should be enforced.

Another major concern is the evidence of pervasive marketing of unhealthy foods and beverages in Reported food and beverage marketing activities include direct advertising (e.g., schools.³⁵

³⁹Fulkerson, J. A., S. A. French, M. Story, H. Nelson, and P. J. Hannan. (2004). Promotions to increase lower-fat food choices among students in secondary schools: Description and outcomes of TACOS (Trying Alternative Cafeteria Options in Schools). *Public Health Nutrition* 7(5):665–674.

advertisements placed on equipment, billboards, or posters); indirect advertising (e.g., sponsorship and donations of branded apparel and supplies for students and staff); and product sales (sugary drinks and unhealthy snacks). Exposure to the marketing of unhealthy foods and beverages is a widely acknowledged risk factor for the development of childhood obesity and NCDs. Research suggests that food marketing influences children's food attitudes, preferences and consumption patterns tracking into adulthood.⁴⁰ These findings contribute strong evidence for a need of a regulatory mechanism for the restriction of food marketing to children which should be integrated in policies for creating healthier school food environments.

Often overlooked in the creation of an enabling food environment in schools are some of the physical and social aspects of the food service/eating environment which may be important in determining the effectiveness of nutritional policies and interventions. Aspects such as the existence, size and comfort of designated dining areas and the physical location of water sources and other healthy options are known to influence dietary behaviors.⁴¹ The level of social interaction in eating environments also play a part. Food choices can be influenced through role modelling by peers and teachers, and the supportive attitudes adopted by food service/catering staff and supervisors. Improving these aspects of the food environment may be a challenge in schools without designated spaces for eating but should be addressed in school renovation and plans for new buildings.

School curriculum - Nutrition Education

At primary level, nutrition is usually taught as part of health science but there is no syllabus to guide a standardized approach to nutrition education. The degree of implementation often depends on the willingness or interest of teachers. Attainment targets are available for Health Science.

There are plans to introduce a revised Health and Family Life Education (HFLE) curriculum in primary and secondary schools which includes a module on nutrition. It has been suggested that increased emphasis should be placed on the primary school years when children are more receptive and habits are still being formed. In view of the strong parental influence on eating behaviors of young children, learning activities

⁴⁰Sadeghirad, B., Duhaney, T., Motaghipisheh, S., Campbell, N. R. C., and Johnston, B. C. (2016) Influence of unhealthy food and beverage marketing on children's dietary intake and preference: a systematic review and meta-analysis of randomized trials. *Obesity Reviews*, 17: 945– 959. doi: [10.1111/obr.12445](https://doi.org/10.1111/obr.12445).

⁴¹Moore, S.N., Murphy, S., Tapper, K., & Moore, L. (2010). The social, physical and temporal characteristics of primary school dining halls and their implications for children's eating behaviours. *Health Education*, 110(5):399– 411.

that include the involvement of parents can help to increase their awareness and the improvement of eating patterns in the home setting.

In the 1st, 2nd and 3rd year of secondary schools, nutrition is taught as part of the Home Economics curriculum. Efforts are currently being made to promote enhanced curricula approaches that give added attention to NCDs and increasing students' confidence in their ability to make healthy eating choices.

Nutrition education in schools can play a vital role in helping students to develop the knowledge, attitudes and skills needed to establish healthy eating practices. Explicit linkages and interactions between classroom learning activities and the school food environment together with family involvement help to ensure consistency and reinforcement of educational messages. Attention to adequate time allocation and intensity is also critical. It has been shown that a minimum of 40–50 hours of nutrition education in each school year are needed to effect behavior change.⁴² In view of the many demands in schools, it will be necessary to consider ways to integrate nutrition education into existing schedules.

School curriculum - PE and the PA environment.

In addition to its role in weight management and obesity prevention, regular PA has many health benefits including improved aspects of cognitive function in children and adolescents.⁴³ School PE programmes can contribute to the overall daily PA of students throughout the school years. They offer the best opportunity to teach students the skills and knowledge needed to establish and sustain an active lifestyle. Important in this regard will be the development of a positive disposition to PA that will transition into their adult life.

Given the growing concerns over the current PA levels of many school-aged children and the possible health consequences, improvements in the delivery of the PE curriculum and the promotion of PA in schools appear to be warranted. Constraints on school provision of PE include the lack of a revised syllabus for primary and post-primary levels that would facilitate a standardized approach to the delivery of PE programmes; inadequate time (80 min per week) allocated for PE in the school curriculum compounded

⁴²Institute of Medicine. (2014). *Nutrition Education in the K–12 Curriculum: The Role of National Standards: Workshop Summary*. Washington, DC: The National Academies Press

⁴³World Health Organization.(2010). *Global recommendations on physical activity for health*. Geneva: World Health Organization.

by the lack of adherence to the allocated time; and, inadequate PE facilities (e.g. space, equipment) which diminish the quality of delivery of PE programmes.

Although participation in PE is regarded as compulsory, there is low and inconsistent participation particularly in secondary schools. Contributory factors include the perceptions of teachers, children and parents that PE, as a school subject, has a lower (less serious) status compared to other subjects. Parental indifference or lack of support for children's participation in PE and in PA are also deterrents to participation. Gaining parental support and cooperation will be crucial as they can play an important role in their children's engagement in PE programmes and extracurricular opportunities for PA.

It is envisaged that PE teachers will spearhead efforts for PA promotion through expanding the range of activities in the PE programme to include nontraditional or noncompetitive activities as well as coordinating a programme of extracurricular physical activities throughout the school day. The involvement of students, other teachers and parents in the selection of appropriate and enjoyable activities will help in increasing participation rates. Building strategic partnerships with community-based and other civil society organizations and leveraging expertise and resources for strengthening school programmes should also be considered.

Increasing the number of mandatory hours for PE in the school curriculum and setting standards to ensure quality could further help students to reach age-specific national guidelines for PA and ensure the potential of schools for promoting PA among students.

Health Promotion for the school community

Some schools routinely conduct educational programmes focussing on specific health issues including the promotion of health eating and active living. These programmes may be initiated by teachers or the parent teacher associations (PTAs) or conducted jointly. Initiatives from the central level have assisted in raising public awareness of the importance of good nutrition and regular PA. The METVT promoted 'Water Wednesdays' and 'Fruit Fridays' in over 90 schools to encourage healthier lifestyles. "Barbados Moves", an initiative by the MOHW, is aimed at encouraging PA at all ages through community-based events. Civil society organizations such as the Heart and Stroke Foundation of Barbados (HSFB) have been very active in sensitising and educating the public, government and school communities about the drivers of childhood obesity and advocating for policies for creating healthier food environments in schools. As part of these efforts, the HSFB has launched a mass media campaign on childhood obesity prevention.

Targeted messages highlight the responsibility of parents/guardians and policy makers to protect children from the dangers of sugary drinks and the marketing of unhealthy foods.

At the school level, sensitization and training of all members of the school community including board members, school principals, teachers, parents, students, food service staff, vendors as well as other stakeholders will be essential in the promotion of the whole-school approach in improving the school environment. Increased attention needs to be given to on-going capacity building opportunities for staff. Adequate training and support given to teaching and food service staff will contribute to increased awareness and enhanced self-efficacy in facilitating healthy behaviors in children. Positive modelling of these behaviors will show leadership and commitment in effecting policy change and serve to motivate students and parents. The experience gained in the HSFb's Model School project will be helpful in determining appropriate implementation approaches for capacity building activities.⁴⁴

A key challenge will be the achievement of sustained parental engagement in educational strategies for improving children's eating and activity patterns. Parents are one of the most important influences on the choices children make and they need the requisite knowledge and skills to make the home food environment a healthy one which reinforces the positive messages promoted in the school setting. Strategies for parent engagement and education must be based on an understanding of the social, economic and cultural context in which decisions on food purchasing, consumption and preparation are made. Parental perceptions on healthy eating as well as income and time constraints affect these decisions which have an impact on food choices and access.

School Health and Nutrition Services

While the country continues to make significant progress towards achieving universal health coverage, possible gaps in the provision of preventative health care for children over the age of five years of age and limited availability of adolescent health services continue to be areas of concern.⁴⁵ Parents can access health care services for school-aged children from the polyclinics but there is no routine screening and growth monitoring of this age cohort. These services would allow for the early detection of nutrition problems and the identification of at risk children and adolescents for nutrition counselling and follow up.

⁴⁴<https://www.facebook.com/barbadosheartandstroke/photos/a.759919524085318/2150674038343186/?type=3&theater>

⁴⁵ Ministry of Health (Barbados). *Chief Medical Officer's report 2010–2012*. Bridgetown: Ministry of Health; 2016. <https://www.barbadosparliament.com/uploads/sittings/attachments/05530f55cc1d0cd01198dbc26b76209b.pdf>.

The NNC plays a leading role in the provision of nutrition services and has responsibility for informing policy. Community Nutrition Officers of the NNC provide nutritional care services to clients including school-aged children who are referred to them by physicians or nurses at the polyclinics. NNC personnel are also involved in implementing health promotion activities within the clinic and in communities served by the particular health facility. In addition, they provide technical support to other programmes of the Ministry of Health and those of other Ministries and NGOs.

There is no nutrition information management and surveillance system for monitoring trends in the nutritional status of under-five and school-aged children. The school setting provides an opportunity to monitor a nationally representative cohort of students. Findings from nutritional screening and information collection on specific aspects of dietary intakes and participation in PA can form the basis of a nutrition surveillance programme which can be developed with support from locally based academic institutions. The availability of up-to-date information on nutrition and other-related indicators will be needed to evaluate progress in achieving global targets and assessing the effectiveness of policy interventions.

3. Policy Framework

Vision Statement: All preschool and school-aged children (3 - 17 years) in Barbados attain optimal health, growth and development which will enable them to achieve their full potential.

Goal: To create healthy school environments that enhance student learning and are conducive to the development of healthy lifelong eating and activity behaviors through a multisectoral and integrated approach.

Objectives:

1. To ensure that only nutritious food and beverages that enhance the health, learning and well-being of school children are sold, served or promoted in school environments.
2. To coordinate school food service with nutrition education and other school-based nutrition-promoting initiatives in an integrated approach to promote students' adoption of healthy eating behaviors.

3. To equip school children with the knowledge, skills, and attitudes to facilitate their active engagement in protecting their own health through the adoption and maintenance of healthy eating and activity behaviors.
4. To increase opportunities for physical activity in the school environment to enable school children to be physically active throughout the school day.
5. To increase capacity of school personnel, parents and the wider community in supporting and reinforcing healthy eating and increased physical activity in home, school and community settings.
6. To engage and mobilize key stakeholders in supporting and monitoring policy implementation and advocating for other appropriate measures for promoting and protecting the health and nutrition of school-aged children.
7. To motivate schools to take actions to fulfil the objectives of the school nutrition policy and give visibility to their efforts.
8. To increase the availability of timely and accurate information on child and adolescent nutrition-related indicators in order to evaluate policy implementation and to inform program development and coordination.

Expected outcomes:

By 2028:

- At least 80% of preschool children (36-59 months) will be taking healthy snacks to schools.
- No increase (relative to the 2012 level) in overweight/obesity in children aged under 5 years.
- A 10% decrease (relative to the 2015 level) in overweight/obesity in children aged 5 - 9 years.
- A 15% increase (relative to the 2015 level) in frequency of fruit and vegetable consumption in children aged 5 - 9 years.
- A 10% decrease (relative to the 2011 level) in overweight/obesity in children aged 13 - 15 years.
- A 15% increase (relative to the 2011 level) in frequency of fruit and vegetable consumption in children aged 13 - 15 years.

- A 15% decrease (relative to 2011 level) in % of students who usually drink carbonated soft drinks one or more times per day during the past 30 days.
- 15% increase (relative to the 2011 Level) in % of students who participate in physical education (PE) class on three or more days each week during the school year.
- A 20% decrease (relative to the 2011 level) in % of students (13-15 years) who spend three or more hours during a typical or usual day doing sitting activities.
- A 15% increase (relative to the 2011 level) in % of students aged 13 - 15 years who were physically active for a total of at least 60 minutes per day on five or more days during the past seven days

Scope of the policy:

The policy includes measures relating to food service and marketing in the school environment, school curricula, health and nutrition services, capacity building in the school community, health promotion in support of healthy eating and physical activity and parent/community engagement and education.

All public and private schools and educational institutions from preschool to tertiary level are required to abide by the provisions of the policy. Adherence to all provisions of the policy shall be mandatory. The policy measures are directed to:

- School principals, preschool operators, teachers, teaching assistants, students, parents, canteen concessionaires, food service workers, vendors (in and around schools) and ancillary personnel in schools and other educational institutions (public and private).
- Personnel of the METVT with responsibility for curriculum review, school supervision and assessment.
- Personnel of the MOHW with responsibility for providing health and nutritional care services to pre-school/school-aged children.
- Programme/project personnel involved in implementing school-based interventions.
- Importers, manufacturers, bottlers, distributors (and agents) and marketers of food and beverages intended for children.
- Personnel in the public, private and non-governmental sectors involved in policy or programme development targeting preschool/school-aged children.

- Visitors to schools.

Guiding Principles:

The development and implementation of the national SNP are based on the following guiding principles:

- *Rights-based:* Children have the right to adequate nutrition and access to safe and nutritious food, and both are essential for fulfilling their right to the highest attainable standard of health. Governments, as the primary duty-bearers of children's rights, should therefore prioritize efforts to address the root causes of poor health among children, and should ensure, among other things, the availability of and access to adequate nutritious food and a healthy and safe environment.
- *Equity considerations:* Ensuring that the needs of vulnerable children and families are assessed and they receive special attention and practical support to be able to feed their children adequately.
- *Evidence-based:* The application of scientifically based recommendations and guidelines while taking local needs into account.
- *Life course approach:* The recognition of opportunities to prevent and control diseases at key stages of life including childhood and adolescence through to adulthood.
- *Empowerment:* Children, adolescents and families are empowered and engaged in supporting actions which will provide them with greater control in attaining healthy eating and physical activity habits that are sustainable.
- *Building Alliances:* Building of strategic partnerships with relevant public and private sector entities and civil society organizations in creating healthier school food environments.
- *Policy Coherence:* Aligning the objectives and the provisions of the SNP with the priorities in relevant national policies and plans. Policy provisions will also contribute to the attainment of the relevant regional and international policy commitments of the Government of Barbados.

4. Policy Statements

This comprehensive national school nutrition policy for Barbados is intended to help children and adolescents attain full educational potential and good health by providing them with the skills, social support, and environmental reinforcement they need to adopt and maintain healthy eating and activity behaviours.

The policy seeks to develop a healthy school environment in preschools, primary and secondary schools, and tertiary institutions which goes beyond the classroom, involves the full participation of students and staff, and targets parents and the wider community. The policy will provide a framework for the review of existing school-based programs and the incorporation of new complementary initiatives, thus ensuring the reinforcement of messages and strategies which support the attainment of lifestyle choices conducive to academic success and good health.

The goal and objectives of the policy will be realized through recommended strategies in the following six broad areas for action:

- Food Services Environment
- School Curriculum
- PA environment
- School Health and Nutrition Services
- Health promotion for the school community
- School recognition

4.1 Food services environment

The school food services environment encompasses food service operations in school feeding programmes and school cafeterias and canteens, food and beverage choices in vending machines, types of foods and beverages brought to schools by students and teachers, types of foods/beverages sold by school personnel including those sold at fund-raisers or served in celebration events/parties in schools, or on field trips, and the types of foods/beverages sold by vendors inside and around schools. Increasing the availability of healthy foods in the school food environment while decreasing access to less nutritious foods have been shown to positively impact students' food choices and overall diet quality.

Policy Statement:

In order to ensure an enabling school food services environment which supports and facilitates the adoption of healthy eating practices, three policy measures shall be implemented: the introduction of nutrition standards for all foods and beverages available in schools; restrictions on the marketing and advertisement of foods and beverages in schools which are not consistent with the nutrition standards; and improvements in eating environments in schools. The standards shall be disseminated in different

communication formats to suit the needs of the entire school community including parents. Training and educational programmes on their importance and use shall be implemented.

Strategies:

Implementation of Nutrition standards for school meals and foods and beverages served or sold in schools

- i. Lunches served or sold in schools through the school meals programs, cafeterias/canteens or by vendors shall provide one third of the recommended daily requirements for energy, protein, vitamin C, iron and calcium for the targeted age group. These values are shown in Table 1 for male and female students in the age groups 4-8 years, 9-13 years and 14-18 years.

Table 1: One Third of Recommended Energy and Nutrient Intakes for Children 4 to 18 Years Old

Age group (yrs.)	Energy (kcal)	Protein (g)	Vitamin C (mg)	Iron (mg)	Calcium (mg)
4-8 (M)	515	6.6	10	2.1	217
4-8 (F)	515	6.6	10	2.1	217
9-13 (M)	740	14.0	13	4.9	433
9-13 (F)	615	13.6	13	4.6	433
14-18 (M)	918	18.3	13	6.3	433
14-18 (F)	703	15.0	13	10.9	433

Source:⁴⁶

- ii. The energy value of the meal shall be distributed between the energy-providing nutrients, carbohydrates (45 -65 % of total energy), proteins (10-30 % of total energy) and fats (25 – 35 % of total energy).⁴⁷ Meals shall provide a nutritious diet based on a variety of foods from the six food

⁴⁶Pan American Health Organization. (2020). Recommended Nutrient Intakes and Population Nutrient Intake Goals for the Caribbean. Washington, D.C: PAHO. License: CC BY-NC-SA 3.0 IGO.

⁴⁷AMD Institute of Medicine (2005). Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids

groups listed in the national FBDGs. Examples of meal plans showing portions from each food group for the 4-8, 9-13 and 14-18 year-old age groups are shown in Annex II.

- iii. A 4- week cycle menu based on the meal standards and incorporating the food standards shown in Table 2 shall be used in planning school lunches. The menu shall be approved by the NNC and shall be prominently displayed in the meal preparation and dining areas. School authorities shall also ensure that food and menu lists submitted by canteen concessionaires comply with the nutrition standards
- iv. The portion sizes of food items offered to students and staff shall reflect and support healthy eating behaviours. Appropriate portions for each age group shall be determined in planning meals to ensure that nutrition standards are met. Examples of standard serving portions by age group are listed in Annex III.
- v. Peas/beans, vegetables, fruits and starchy fruits, roots and tubers and/or whole grain cereals shall be part of daily lunch menus. Frozen vegetables can be used to increase variety when fresh choices are unavailable but shall be served no more than twice per week. Fresh or canned fish shall be served at least twice per week.
- vi. The total fat intake of meals shall be reduced by: the use of low-fat or skimmed milk, when required, in food preparation; the use of low fat animal products; removal of visible fat from meats and poultry; and, avoiding the use of fried foods.
- vii. The sodium content of meals shall be reduced by the avoidance of food products such as processed meats (smoked, pickled and cured products), canned soups, and condiments such as bouillon cubes or broths, soy sauce and seasoning blends containing salt. Processed meats include bacon, ham, salami, sausage, hot dogs, corn beef, deli and luncheon meats. These foods are high in fat and salt, and may also contain sodium nitrate as a preservative, which further boosts the sodium content.
- viii. The amount of salt added during food preparation shall be reduced and replaced by the use of onions, garlic, herbs, spices, citrus juices, vinegar and salt-free seasoning blends to add flavor. Frozen vegetables (because of their lower sodium content) shall be used instead of canned vegetables when supplies of fresh vegetables are limited. Canned peas/beans shall be served no more than once per week, and should be drained and rinsed thoroughly in running water before use to reduce the sodium content.
- ix. Water shall be served with meals. Drinking water shall be provided free of charge at all times on school premises.

- x. Safe food practices shall be followed in the preparation of meals. School principals shall ensure that all persons handling food, including those working in school canteens/cafeterias, hold a Food Handler’s certificate and have the appropriate knowledge to carry out their duties without compromising food safety standards. Food service personnel shall also receive adequate supervision and in-service training in food safety to ensure standards are maintained.
- xi. Particular attention shall be given to children with food allergies, those with special dietary requirements or those who may require assistance with eating. Parents shall inform the school principal about the child’s individual requirements and any guidelines received about their nutritional management.

Table 2: Nutrition standards for foods and beverages served or sold in schools

Food category	Standard
Pre-packaged processed ^a and ultra-processed ^b foods including snack items ⁴⁸ :	Allowed if: (Per serving as packaged or served): <1 mg sodium /kcal; < 10% total energy from free sugars; < 30% of total energy from total fat; <10% of total energy from saturated fat; <1% of total energy from trans fat.
Starchy roots, fruits and tubers:	Allowed if: ○ Boiled, roasted; ○ No salt added in preparation.
Cereal/grains (minimally processed e.g. oats, brown and parboiled rice, whole wheat, whole grain cornmeal and products):	Allowed if: ○ No added salt, fat or sugar in cooking; ○ Products have 50% or more whole grains by weight, or have whole grains as the first ingredient.
Legumes, tree and ground nuts and edible seeds (fresh, dried, canned)	Allowed if: ○ Boiled or stewed; ○ Unsalted nuts, seeds without added sugar; ○ Low sodium/no salt added Nut/Seed butter; ○ Canned low sodium/no salt added.
Dark green, yellow and other vegetables (fresh, frozen, canned):	Allowed if ○ Can be eaten raw or – ○ Cooked without added sugar or fat; ○ Served with low-fat or calorie dressing; ○ Packaged/frozen vegetables with no added sugars, salt and fat; ○ Canned low sodium/no salt added.

⁴⁸Pan American Health Organization (PAHO). (2016) Nutrient Profile Model

Food category	Standard
Fruits (fresh, dried, canned, frozen):	Allowed if: <ul style="list-style-type: none"> ○ No added syrup/sugar and salt; ○ Canned/packed in 100% juice with no added sugar or sweetener.
Animal foods (fresh, frozen):	Allowed if: <ul style="list-style-type: none"> ○ Lean cuts of meat; skinless chicken; ○ Baked, poached, roasted, grilled; ○ Eggs with no added fat; ○ Low fat cheese.
Fats and Substitutes	Allowed if: <ul style="list-style-type: none"> ○ Vegetable oil; ○ Trans fat free margarine/ butter and/or mayonnaise; ○ Avocado pear with no added fat. ○ Low/no fat salad dressing with no added sugar
Combination foods (as side dish or a la carte item):	Allowed if: <ul style="list-style-type: none"> ○ Is a combination of allowed items; ○ As served (250 g): - ○ ≤450 calories per item (250 g) ○ Total Fat: ≤10 g; Saturated fat: ≤ 5 g; Sodium: ≤ 450 mg; added sugar: < 8%.⁴⁹
Beverages:	Allowed if: <ul style="list-style-type: none"> ○ Plain water or plain carbonated water (no size limit) with no flavouring, added sugar, artificial sweeteners or additives; ○ Coconut water with no flavouring or added sugar (8 floz); ○ 100% fruit juice (4 floz) vegetable juice (≤8 floz) with no added sugar or sweetener; ○ 100% fruit/vegetable juice diluted with water containing at least 50% juice, with no added sugar or sweeteners (≤8 floz); ○ Low or nonfat milk, no added sugar(≤8 floz); ○ Plain yogurt, no added sugar (4 floz) ○ Plant-based milk alternative, no added sugar – e.g. soy, almond, rice, coconut (4 floz).

*Sodas/Soft drinks and other sweetened beverages, sport drinks and alcoholic drinks are NOT allowed and shall not be sold or served in schools or taken into schools.

*Candy and local confectionery are NOT allowed because of their high energy content and low nutrient density and shall not be sold or served in schools or taken into schools.

⁴⁹CARPHA. PAHO. (n.d.) Technical recommendations for the development of nutrition standards for Caribbean schools(unpublished)

Source:

a includes smoked, or cured meat or fish; cheeses; breads and baked products (in general).⁴⁸

b includes sweet or salty packaged snacks, biscuits (cookies), ice cream, cereal bars; sweetened breakfast cereals; sweetened and flavored yogurts and dairy drinks, burgers, hot dogs, sausages, poultry and fish "nuggets" and "sticks", and other products made from animal byproducts.⁴⁸

Application of the Nutrition Standards

- xii. School principals, teachers, parents, food service and other school personnel shall be encouraged to model healthy eating practices consistent with the nutrition standards and other provisions of the policy.
- xiii. Copies of the nutritional standards shall be disseminated in different communication formats to school personnel, canteen operators, parents, vendors and students. Orientation programs in the application of these standards shall be conducted by the METVT in collaboration with the NNC.
- xiv. Training shall be carried out for persons involved in preparing and serving meals. The training shall cover basic nutrition principles, safe food handling practices, the use of the menus and recipes, and portion control appropriate to the different age groups. Supervisory staff at the SMD and canteen operators shall be responsible for the training of their respective employees.
- xv. The NNC shall revise the publication, *Nutritious and Healthy Foods in Schools: Nutritional and Practical Guidelines for Barbados*, based on the proposed nutrition standards for use as a guide for use by persons or entities providing food to schools, e.g. SMD, caterers, vendors, canteen operators and staff, cooks, tuck shop staff.
- xvi. The SMD and canteen operators in all schools shall design menus and promote food and beverage choices to support the health and wellbeing of students and school personnel. They shall endeavor through their services and procedures to reinforce healthy nutrition principles and support the implementation of the school nutrition policy.
- xvii. School authorities shall ensure that nutrition and food service standards are reflected in the performance conditions of contracts with school canteen concessionaires and that the actions to be taken in case of breaches to these commitments are specified.
- xviii. The regulation and control of food vending in and around schools: Persons wishing to sell foods and beverages in or around school compounds shall first apply for a license/permit from the METVT. Appropriate directives shall be issued to provide guidance to vendors regarding the allowed location of vending sites (prohibited within 300' of property line of schools), the times at which selling will be allowed (to be determined by each school), the mandatory adherence to the

nutrition standards and other provisions of the SNP, and the importance of compliance with established monitoring procedures for food vending. Licenses shall be renewed yearly on payment of an annual fee. Unauthorized persons shall be prohibited from stopping or parking adjacent to any school for the purpose of food vending.

- xix. The METVT in collaboration with MOHW, the national Vendors' Association and other interested stake holders shall convene a special forum for vendors to discuss their role in the implementation of the SNP and to request their cooperation.

Establishment and maintenance of conducive eating environments/food service areas.

- xx. Students shall be provided adequate time to eat lunch, at least 10 minutes for breakfast and 20 minutes for lunch, from the time the student is seated.
- xxi. School personnel and canteen concessionaires shall ensure that food service and dining areas in schools are kept clean, have an appropriate number of serving areas and have enough space for seating all students comfortably.
- xxii. School principals shall ensure that there are adequate supplies of appropriate food preparation and service equipment to include standardized plates, bowls, cups and cutlery in school kitchens and other food preparation areas.
- xxiii. Facilities for hand washing shall be provided; students shall be encouraged to wash their hands before meals to prevent spread of germs and reduce the risk of illness.
- xxiv. Food shall not be used as a reward or a punishment for student behaviors.
- xxv. Food shall be provided in a non-stigmatizing manner to students participating in free or subsidized feeding programmes.

Regulation of food and beverage marketing in the school environment.

- xxvi. Food and beverage marketing activities are prohibited in or around all schools and tertiary level educational institutions and in their vicinity. These activities include (but are not limited to) direct advertising (e.g., advertisements placed inside or outside school buildings or on perimeter fencing or walls, billboards, or distribution of promotional materials etc.); indirect advertising (e.g., corporate sponsored events, competitions, equipment, sportswear etc.); product sales; and market research (e.g., surveys, taste-tests etc.).

- xxvii. School fundraisers involving the sale of foods and beverages that do not meet the nutritional standards shall not be allowed as this practice contradicts nutrition education messages and undermines parents' and school efforts to promote healthy food choices.
- xxviii. Schools shall be encouraged and supported in identifying alternative fund-raising approaches to supplement school activities.

4.2 School Curriculum

Policy Statement:

In order to empower students with the knowledge, attitudes and skills which are needed to make informed decisions and practice healthy eating and activity behaviours for the promotion of health and wellbeing, comprehensive nutrition education and physical education shall be made mandatory subjects in the school curriculum from preschool to secondary level. The teaching of nutrition and physical education shall be strengthened through the implementation of a national sequential curriculum framework for each subject, capacity building for effective delivery of the curricula, integration of school food service and nutrition education and increased attention to evaluation of curriculum delivery.

Strategies

Improving the effectiveness of nutrition education in schools.

- i. A sequential nutrition education curriculum (from preschool to third form of secondary schools) shall be developed for integration into the HFLE curriculum. Emphasis shall be given to the following elements which are known to contribute to the effectiveness of nutrition education in schools:
 - o Learning activities with a behavioral focus which strengthen skills, influence attitudes and enhance behavioral capability including the reading of nutrition labels and the use of the information in decision-making on food choices;
 - o The development of healthy life skills specific to nutrition and obesity prevention;
 - o The use of interactive methods and strategies that are developmentally appropriate and evidence-based including family involvement particularly for younger children, and incorporation of self-assessment and feedback in older age groups;

- The establishment of linkages and continuity between nutrition education in class and school food service, school gardens and community nutrition programmes where they exist.
- ii. To achieve optimal effects, a **minimum** of 60 hours in the school year (or approximately 2 hours per week) shall be allocated for nutrition education lessons/activities in the school curriculum at the primary and secondary levels.
- iii. Teachers in primary schools shall be encouraged to integrate relevant nutrition education concepts into the lesson plans of other school subjects to facilitate full coverage of curriculum areas and for reinforcement. In secondary schools, at the lower levels, consideration shall be given to separating Integrated Science from Home Economics to allow sufficient time for the full coverage of the nutrition education curriculum.
- iv. Preservice as well as in-service training shall be conducted for primary school teachers and specialist teachers at secondary level to increase their knowledge/skills and enhance their self-efficacy in relation to delivering the nutrition education curriculum. Training programmes shall also be designed to help teachers to assess and improve their own eating practices and make them aware of the behavioral messages they give as role models.
- v. School principals shall be encouraged and supported to strengthen partnerships with relevant government agencies and private institutions to renew and mobilize interest in the establishment of school gardens with particular emphasis on organic farming. Linkages and continuity between nutrition education, agricultural instruction and school food service shall be formed in the school setting.
- vi. A system for monitoring and evaluating the quality and effectiveness of nutrition education at the pre/primary and secondary levels shall be implemented by METVT in collaboration with MOHW and civil society organizations involved in nutrition promotion.

Improving the effectiveness of PE in schools.

- vii. A sequential PE curriculum for each level of the educational system (from preschool to secondary level) shall be adopted. Content areas, teaching/learning and evaluation methodologies shall give emphasis to:
 - The relationship between physical activity and health and learning outcomes;
 - Building confidence and skills for the enjoyment of lifelong health and fitness through physical activity;

- Creating a positive atmosphere for all students to participate in a variety of developmentally and age-appropriate physical activity suited to the varied interests of students instead of an exclusive focus on athletics and sports;
 - Reinforcing the importance of combining regular PA with sound nutrition as part of an overall healthy lifestyle for promoting health and obesity prevention.
- viii. A minimum of 3 hours weekly shall be allocated for PE in the school curriculum at primary level and a minimum of 2 hours at the secondary level.
 - ix. Theory and practical sessions shall be incorporated into the PE programme. Student assessments shall be carried out to measure and validate student learning in relation to learning targets defined in the curriculum. The assessments will help to underscore the importance of PE. The grades shall be included in students' reports and in the calculation of overall end of term and end of year averages in primary schools and the junior levels of secondary schools.
 - x. Efforts shall be made to incorporate non-competitive activities into the PE programme to motivate and help students to develop and implement personal physical activity plans which can be sustained,. Examples of these activities include the teaching of aerobics, yoga, strength training, bike riding and other similar exercise routines.
 - xi. The METVT in collaboration with MOHW and other interested stake holders shall convene a special forum for school principals and administrators to discuss the importance of PE and PA promotion and to identify strategies for increasing student participation in PE classes and increasing PA opportunities in the school setting.
 - xii. In an effort to increase participation in PE, school principals shall involve students, parents and teachers in identifying barriers to participation and solicit their views on possible solutions to overcome these barriers.
 - xiii. The METVT, in consultations with PE teachers and other resource persons, shall identify the challenges to widening the scope of PE provision in schools and provide guidance on strategies for addressing these challenges
 - xiv. All pre/primary school teachers and selected specialist teachers at secondary level shall be trained to teach the PE curriculum. There shall be an increased focus on the teaching of PE in preservice training programmes, as well as increased opportunities for inservice training and continuing professional development in the subject area.

- xv. A system for monitoring and evaluating the quality and effectiveness of PE at the pre/primary and secondary levels shall be implemented by METVT in collaboration with MOHW and civil society organizations involved in PA promotion.

4.3 PA environment

Policy Statement

A holistic comprehensive approach shall be adopted in creating a supportive and sustainable physical activity environment in schools which facilitates participation in PA throughout the school day. Safe and enjoyable activity shall be promoted for all students, including those who are not athletically gifted and /or are physically challenged. Students shall also be actively encouraged to take advantage of opportunities for PA in school and community settings.

Strategies:

- i. The WHO recommendation of 60 minutes of moderate to vigorous PA per day shall be promoted for all primary, secondary and tertiary level students to ensure improved learning, health and overall well-being. The method by which the 60 minutes are incorporated into the school day shall be the responsibility of the school and shall include the PA in PE sessions on the days offered and extracurricular PA.
- ii. To this end, school principals shall ensure that a comprehensive schedule/programme of extra-curricular physical activities across the school day is planned, documented and implemented to supplement the PA obtained in formal PE classes. (Extracurricular activities include any form of activity provided by schools other than formal classes). The following considerations shall apply:-
 - o Students and teachers should be allowed to participate in selection of activities and to assume responsibility by promoting and leading some activities.
 - o Examples of extracurricular activities include school events such as conducting morning drills, incorporating movement into content delivery where feasible (in classes other than PE) to break up long sitting periods, integrating active breaks between school lessons throughout the school day, and scheduling field trips as part of the school programme.
 - o The promotion of parental/community involvement in program implementation.

- iii. The formation of health clubs and similar groups in schools shall be promoted to encourage increased participation in PA.
- iv. All pre/primary and secondary school teachers shall receive training on health-enhancing physical activity in order to build capacity in promoting physical activity throughout the school day.
- v. Schools shall develop a directory of resource persons that can assist with carrying out PE demonstrations and enhancing extracurricular PA.
- vi. In plans for the upgrading of schools, consideration shall be given to increasing space and the provision of appropriate equipment to meet the requirements of the approved physical education curriculum and the programme of extra-curricular PA.
- vii. Schools shall be encouraged and supported to establish partnerships with communities and relevant organizations to gain access to existing community recreation and sporting facilities.
- viii. Safety rules shall be enforced in PE, extracurricular PA programs, and community recreation programs.
- ix. Preschool operators and staff shall ensure that preschoolers are given opportunities to participate in a range of developmentally-appropriate, safe, enjoyable play-based physical activities in preschool settings. They shall ensure that the following WHO recommendations for PA for this age group (3 -5 years) are incorporated in early childhood care and education routines and parent education: They should spend at least 180 minutes in a variety of types of physical activities at any intensity, of which at least 60 minutes is moderate- to vigorous intensity physical activity, spread throughout the day. They should not be restrained for more than 1 hour at a time or sit for extended periods of time. Sedentary screen time should be no more than 1 hour; less is better. When sedentary, engaging in reading and storytelling with a caregiver should be encouraged. Nap time should be included as part of daily programmes.

4.4 School Health and Nutrition Services

Policy Statement

Supportive health and nutrition services shall be integrated into efforts to enhance the health, learning and well-being of school-aged children. These services help in the prevention, timely identification and treatment of OWOB and other health and nutrition-related problems. Annual health/nutrition assessments of all school children (from preschool to tertiary level) shall be mandated health

requirements for school admission and attendance. Knowledge and skills of primary health care providers in obesity prevention and management shall be upgraded to improve the delivery and quality of care. Partnerships between schools and health teams shall be strengthened and collaborations promoted in the establishment of nutrition and physical activity surveillance procedures.

Strategies:

- i. In the absence of school-based health services, parents shall be required to take preschool and primary school aged children to polyclinic/health care provider for a health/nutrition assessment at least once per year. During the visit, the following services shall be provided: assessment/plotting of BMI status; assessment of eating and physical activity behaviors; counselling and setting of targets for improvement and appropriate referrals, where indicated. A Health Passport or Wellness Diary shall be created to record the consultation notes in order to track the student's progress and to encourage self-monitoring. The Health Passport/ Diary shall be submitted to school personnel at the beginning of each school year to prove that the annual assessment had been completed.
- ii. The MOHW shall accelerate efforts for the establishment of adolescent-friendly clinics and strategies to facilitate the annual health/nutrition assessments of adolescents. All aspects of adolescent health including nutrition, PA, sexual/reproductive health, and mental health shall be assessed at annual visits. In this respect, referral links between school-based guidance counsellors and health personnel in clinics shall be established. Service provision shall be based on WHO global standards for quality of care in health-care services for adolescents.
- iii. Appropriate arrangements shall be made for the assignment of medical and nursing students to help polyclinic staff in organizing and carrying out the annual assessments of children and adolescents.
- iv. The MOHW shall conduct inservice training to upgrade the knowledge and skills of primary health care providers in obesity prevention and management. Areas of training shall be based on biennial competency-based assessments.
- v. The NNC with the support of relevant partners shall develop and implement a nutrition surveillance programme to monitor trends in undernutrition, OWOB, selected dietary practices and physical activity patterns among school-aged children. The data generated shall be used in policy evaluation.

- vi. The collaboration between health teams at polyclinics and school personnel in respective catchment areas shall be strengthened and the assistance of health personnel sought in the planning and implementation of inservice training programmes related to nutrition and health for school staff and health and nutrition education programmes for parents/community.

4.5 Health promotion for the school community

Policy Statement

Educational and promotional activities shall be implemented to promote the active participation of school personnel, parents and community members in supporting efforts for improving the eating and activity behaviors of school children. Efforts shall be made to ensure that students receive consistent messages through multiple channels (e.g., home, school, community, and media) and from multiple sources (e.g., parents, peers, teachers, health workers). Key stakeholders such as the Barbados National Council of Parent - Teacher Associations, other civil society organizations, private sector entities and the health care community shall be mobilized to play a leadership role in advocacy efforts and programme development in support of the objectives of the SNP.

Strategies:

- i. Simplified versions of the SNP shall be disseminated using appropriate proactive methods to suit the needs of the various target audiences (students, teachers, vendors, parents/families, community members) in the school community.
- ii. In collaboration with civil society organizations, support shall be given to PTAs in promoting parent/family engagement in policy implementation. A strategy to maintain, build and support parent/family engagement shall be developed. Parents/families shall be sensitized on the importance of the policy, the practical aspects of policy implementation and their roles in promoting and supporting positive changes in the school environment.
- iii. PTAs shall also be encouraged to advocate for healthier food products for children and improvement in food labelling formats, and to boost public support for positive changes in the school environment. The adoption of the HIGH/EXCESSIVE" labelling systems, also known as nutritional warnings, which are considered the best fit for the purpose of the front-of-package

labeling will make it easier for consumers to make healthy choices and will facilitate the implementation and enforcement of the nutrition standards in the SNP.

- iv. Careful attention shall be given to the development of appropriate marketing strategies and supporting educational messages and impactful promotional materials for nutrition and PA promotion in the school environment. The MOHW, in a collaborative effort involving METVT/SMD, canteen operators and other key stakeholders, shall spearhead the process of strategy and message/material development based on agreed themes.
- v. School personnel, students and parents, with support from local health teams and other stakeholders, shall be encouraged to conduct a range of educational activities within and outside the school setting to promote and reinforce the selected messages. All forms of social media shall be utilized in message dissemination. Some examples of activities include morning announcements of a nutrition/PA message of the week/month reinforced through different media; posters and artwork; student competitions; practical demonstrations; and, community outreach programmes including informational resources on healthy meal planning.
- vi. Themes such as the relative importance or influence of various factors including teacher/parental modeling and support on children's eating and activity patterns, impact of marketing of food/beverages on food choices, coping strategies by working parents in relation to meeting family's nutritional needs shall be explored in informal discussions and research activities with parents and students. The findings shall inform the development of educational messages and strategies.
- vii. Efforts shall be made to ensure the sustainability and support of school health promotion strategies through the adoption of a whole-school approach in the planning and implementation of programmes. This shall include the training of students and community members as peer educators and trainers and the engagement of other government sectors and civil society including community-based organizations to increase outreach and ensure sustainability of initiatives.

4.6 School recognition

Policy Statement

A school recognition programme shall be developed that stimulates schools to promote healthy eating and physical activity and recognizes their efforts at improvement of their school environments in compliance with the provisions of the school nutrition policy.

Strategy:

- i. The METVT shall appoint a committee comprising representatives from MOHW, civil society, PAHO, FAO and other interested agencies to draft the administrative procedures for implementation of the recognition programme. These procedures shall include the identification of criteria based on specific and measurable process indicators for promoting healthy eating and physical activity in accordance with the proposed strategies under the 5 components of the SNP. The experience gained in the HSF Model School programme shall be used as a guide in designing the programme.
- ii. The programme committee shall also devise strategies for mobilizing schools to participate in the school recognition programme.

5. Policy implementation, monitoring and evaluation

The METVT shall have overall responsibility for the implementation of the SNP with technical support from the MOHW. The MOHW shall also be directly responsible for the delivery and coordination of the school health and nutrition services component.

The METVT shall appoint a multistakeholder coordinating team to provide leadership in the implementation of the policy. The team shall comprise representatives of the main stakeholder groups to facilitate coordinated actions and sustained commitment and support for policy implementation. They will be tasked with the responsibility of developing a detailed implementation plan assigning priority to the most urgent, appropriate and feasible options according to needs and available resources.

Communication and dissemination strategies to reach different target audiences at national and school/community levels shall be a key component of the plan. Among these strategies shall be the strengthening of partnerships with the media to increase public awareness of the provisions of the policy and the rationale for its introduction. The involvement of the media will also be important in highlighting successful initiatives in schools in support of policy implementation.

A framework for policy evaluation shall be developed. Appropriate indicators and procedures for monitoring and evaluating policy implementation shall be outlined in the national implementation plan. These procedures shall include baseline data collection on each component of the policy and process, output and outcome monitoring and evaluation procedures.

Implementation plans shall also be developed at the school level based on the priorities identified in the national plan but schools shall be allowed flexibility in implementation approaches. School principals shall be encouraged to use a participatory approach in planning with the involvement of students, staff, parents, health teams and community representatives in order to create a sense of ownership and shared accountability.

At the school level, responsibility for policy compliance should ideally lie with the school community itself. Students, staff, parents and community members shall be allowed to participate in monitoring and evaluating progress in policy implementation and determining if adjustments are needed. On-site compliance monitoring shall also be conducted by members of the national coordinating committee, in collaboration with the Planning Unit, METVT, to periodically review the process of policy implementation using the selected indicators. Findings and recommendations on corrective actions will be documented and discussed at national level and with school boards and principals.

The national committee shall have the mandate to advise the METVT of schools in which there are continued violations of the policy despite discussions of corrective actions. The METVT shall then be responsible for taking further necessary actions to improve the situation.

Throughout the policy development process it has been clear there is a dearth of nationally representative anthropometric, food consumption and physical activity data. Though small studies have been done by the University of the West Indies and researchers within the NGO community, limited national data has been collected. This is not only in children, but extends across all demographics and population groups. The last National Food Consumption and Anthropometric Survey, facilitated by the Food and Agricultural Organization, was by the National Nutrition Centre in the year 2000. This lack of current data makes it challenging to develop nutrition policies and public health interventions. This needs to be systematically addressed by collaboration among various Ministries, with technical expertise from the UN group of organizations.

ANNEXES

ANNEX I – List of Participants at Stakeholders’ Consultations for the development of a national School Nutrition Policy for Barbados.

Organization	Name	Post
Ministry of Health and Wellness	June Chandler	Permanent Secretary
	Dr. Kenneth George	Chief Medical Officer
	Dr. Arthur Phillips	Senior Medical Officer of Health
	Glencill Taylor	Nutrition Officer
	Brian Payne	Assistant Nutrition Officer
	Carla Ramsay	Community Nutrition Officer
	Andrea Griffith	Community Nutrition Officer
	Leanda Hurdle	Community Nutrition Officer
	Sandra Goring-Jones	Community Nutrition Officer
	Marriane Burnham	Community Nutrition Officer
	Donna Barker	Health Promotion Officer
	Ingrid Cumberbatch	Senior Medical Officer of Health
	Stacia Whittaker	Community Nutrition Officer (HIV/AIDS Food Bank)
	Karen Grannum	
	Estaletta Taitt	Senior Health Sister
	Reeshemah Cheltenham Niles	Senior Health Planner
	Akanni McDowall	Health Planner
	Dietitian, Queen Elizabeth Hospital	
Esther Selman	Dietitian, Psychiatric Hospital	
Ministry of Education, Technology and Vocational Training	Joy Adamson	Chief Education Officer
	Hedda Phillips-Boyce	Education Officer: Nutrition
	Dawn Browne	School Meals Officer
	Gail Bailey	School Meals Officer

Organization	Name	Post
	Jarvis Marshall	Physical Education Teacher
	Jamar Browne	Physical Education Teacher
	Andrew Franklyn	Canteen Concessionaire
	Davis Ifill	Canteen Concessionaire
University of The West Indies	Dr. Pamela Gaskin	Lecturer
	Rachel Harris	Research Nutritionist
	Dr. Natasha Sobers	Lecturer, Epidemiology and Public Health
Child Care Board	Joan Crawford	Director
Barbados National Standards Institute (BNSI)	Cheryl M. Lewis	Technical Officer
Heart and Stroke Foundation Barbados (HSFB)	Francine Charles	Programme Manager, Childhood Obesity Prevention Campaign
	Michelle Daniel	Chief Executive Officer
	Prof. Anne St. John	Medical Director, Youth Programmes
	Abigail James	Youth Advocate, Childhood Obesity Prevention Team
Healthy Caribbean Coalition (HCC)	Sir Trevor Hassel	President
	Maisha Hutton	Executive Director
PAHO/WHO	Dr. Patrice Lawrence-Williams	Advisor, Non-Communicable Disease and Mental Health
	Dr. Audrey Morris	Regional Advisor, Nutrition
	Paula Trotter	Consultant/Nutritionist

ANNEX II – Examples of meal plans showing portions from each food group for the 4-8, 9-13 and 14-18 year-old age groups

Lunch Meal Plan, 4-8-Year Olds

Food Groups	Food Exchanges	Carbohydrates (g)	Protein (g)	Fat (g)	Energy (kcal)
Staples	2	30	4	-	140
Legumes	1	14	4	-	73
Fruit	2	20	-	-	80
Vegetables	1	7	2	-	36
Foods from animals	1	-	7	5	75
Fats & Oils	2	-	-	10	90
Sugars	2	5	-	-	40
Totals (g)		76	17	15	
Energy (Kcal)		304	68	135	507
% Energy		60	13.4	26.6	100

*Calculated to provide approximately 25-30% total caloric needs per meal
Free vegetables can also be added to the lunch meal*

Lunch Meal Plan, 9-13- Year Olds

Food Groups	Food Exchanges	Carbohydrates (g)	Protein (g)	Fat (g)	Energy (kcal)
Staples	2	30	4	-	140
Legumes	1	14	4	-	73
Fruit	2	20	-	-	80
Vegetables	1	7	2	-	36
Foods from animals	2	-	14	10	75
Fats & Oils	2	-	-	10	112.5
Sugars	2	10	-	-	40
Totals (g)		81	24	20	
Energy (Kcal)		324	96	180	600
% Energy		54.0	16	30	100

*Calculated to provide approximately 25-30% total caloric needs per meal
Free vegetables can also be added to the lunch meal*

Lunch Meal Plan, 14-18- Year Olds

Food Groups	Food Exchanges	Carbohydrates (g)	Protein (g)	Fat (g)	Energy (kcal)
Staples	2.5	37.5	5	-	175
Legumes	1	14	4	-	73
Fruit	2	20	-	-	80
Vegetables	1	7	2	-	36
Foods from animals	2	-	14	10	150
Fats & Oils	2	-	-	10	90
Sugars	2	10	-	-	40
Totals (g)		88.5	25	20	
Energy (Kcal)		354	100	180	634
% Energy		55.8	15.8	28.4	100

Calculated to provide approximately 25-30% total caloric needs per meal Free vegetables can also be added to the lunch meal

Source: ⁴⁹

ANNEX III - Examples of standard serving portions by age group

Some Examples of Standard Serving Portions by Age Group

Age Group	Food Exchanges	Serving Portions (Approximated)
4-8-year olds		
Staples	2	4 oz rice & 60 g/2 oz sweet potatoes
Legumes	1	2 oz lentil peas
Meat	1	1 oz chicken (e.g. 1 chicken wing)
Vegetables	1	2½ oz / ½ cup cooked vegetables
Fruits	2	1 medium banana
Sugar	1	4 oz fruit juice
Fat	2	2 tsp of vegetable oil to be used during cooking
9-13-year olds		
Staples	2	4 oz rice & 60 g/2 oz sweet potatoes
Legumes	1	2 oz lentil peas
Meat	2	2 oz chicken (e.g. 1 medium leg)
Vegetables	1	2½ oz / ½ cup cooked vegetables
Fruits	2	1 medium banana
Sugar	2	6½ oz/ 200 ml fruit juice
Fat	2	2 tsp of vegetable oil to be used during cooking
14-18-year olds		
Staples	2.5	6 oz rice & 80 g/3.2 oz sweet potatoes
Legumes	1	2 oz lentil peas
Meat	2	2 oz chicken (e.g. 1 medium leg)
Vegetables	1	5 oz/ 1 cup cooked vegetables
Fruits	2	1 medium banana
Sugar	2	6½ oz/200 ml fruit juice
Fat	2	2 tsp of vegetable oil to be used during cooking

Source:⁴⁹

