

#### TERMS OF REFERENCE: SHORT TERM CONSULTANCY

# EVALUATION OF THE INTERIM GUIDELINES FOR BEVERAGES IN SCHOOLS

#### 1 BACKGROUND

Non-Communicable Diseases (NCDs) are of increasing global concern as the incidences continue to rise across regions and demographics. Globally, the rates of obesity in children and infants are predicted to continue to increase. A number of factors including easy access to processed foods with large amounts of fats, salt/sodium and sugar, as well as high intakes of sugary drinks have in large measure contributed to this situation. Additionally, advances in technology have increased the prevalence of sedentary lifestyles.

It is an established fact that a continuous net intake of calories from unbalanced dietary sources and insufficient physical activity cause obesity. The major contributors to excess calories are fats and sugars. Processed, ultra-processed and convenience foods, including fast foods, are known to be high in fats, sugar and salt, and attempts to reduce their consumption or alter their composition to healthier options are justified. The fact, however, is that less than 20% of all Jamaicans consume fast foods more than once per week. This is in contrast to the more than 75% of Jamaicans who consume more than one (1) sweetened beverage daily; a finding of the 2008 Jamaica Health and Lifestyle Survey (JHLS II, 2008).

The 2017 Global School Based Health Survey (GSHS) found that 69% of Jamaican students aged 13-17 years reported drinking carbonated drinks one or more times per day (GSHS, 2017). This had not changed significantly since 2010, indicating that this consumption pattern is well established. This is important since each additional serving of a sugary drink per day increases the odds of obesity in children by approximately 60% (Francis et. al, 2009). In addition, consuming seven (7) or more servings of sugary drinks per week can increase the risk of death from cardiovascular disease. Consuming excessive sugar in liquid form is harmful to the body primarily because it is absorbed more quickly than it can be processed resulting in it being stored as fat in the liver, contributing to liver disease and increased risk for diabetes and other NCDs (Malik & Hu, 2015).

Since 2010, there has been an overall increase in the obesity rates of adolescents in Jamaica. Recent surveys indicate that 20% of adolescent males, aged 13 – 17 years were overweight and 9% were obese. This compared with females of the same age group, of which 28% were overweight and 10% were obese (GSHS, 2017). Studies posit that excessive intake of sugars in any form (sucrose, fructose, glucose and other forms of sugar) provide only empty calories that contribute to weight gain and hormonal imbalances.

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The evidence for a link between sugar-sweetened beverages (SSBs) consumption and childhood obesity is consistent and compelling. Increased consumption of SSBs affects all ages and social groups, and is related to increased insulin resistance, which can lead to Type 2 diabetes and other illnesses. Recent systematic reviews of 28 cohort studies and 12 meta-analyses confirm the link between increased intake of free sugars, particularly in the form of SSBs and unhealthy weight gain in both children and adults (Te Morenga 2013, Malik 2013, Escobar 2013). Conversely, reducing consumption of SSBs has been shown to reduce weight gain in children, particularly those who are already overweight (Malik 2013; de Ruyter 2012, Ebbeling, 2012).

In Jamaica, the following modifiable risk factors were found to be significantly associated with overweight/obesity among children aged 6-10 years: increased consumption of sweetened beverages, limited fruit and water intake and low physical activity levels (Blake-Scarlett et al, 2013). Childhood is a critical period for growth and development, and the formation of healthy habits. The environment plays an essential role in habit formation, particularly insufficient opportunities for physical activity, and availability of unhealthy foods and beverages at low prices. Furthermore, obese children tend to become obese adults.

#### 1.1 Rationale

There is currently a strong body of research linking overweight and obesity to the development of NCDs such as Type 2 diabetes, hypertension and heart disease. Prevalence of obesity in a population can therefore be considered a forewarning to future prevalence of NCDs.

The GSHS, conducted in 2010 and 2017 show that the rates of both overweight and obesity in the school aged population were trending upwards.

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Nutritional Status	2010	2017	
Overweight	21.7	25.6	
Obese	6	10.1	

The Pan American Health Organization (PAHO) Plan of Action for Preventing Obesity in Children and Adolescents 2014-2019 highlighted scientific research which established that school based interventions can be effective at changing eating behaviours and preventing overweight and obesity (Lobelo et al, 2013; Verstraeten et al, 2012). This may be achieved by the provision of nutrient dense foods and limiting the marketing and sale of energy dense foods with poor nutrient profiles including sweetened beverages (WHO, 2010).

Given the urgent need to address the increasing rates of overweight and obesity in Jamaica, particularly the adolescent population, the Government of Jamaica approved the Interim Guidelines for Beverages in Schools (IGBS) pending the completion of the National School Nutrition Policy, which includes the

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National School Nutrition Standards. The IGBS became effective on January 1, 2019 and are attached for further information.

The specific objectives of the Interim Guidelines were developed to help create a supportive environment for healthy choices in schools. They have been categorised for implementation over the short and long term as follows:

- Short Term (1 5 years)
  - o Reduce exposure to SSBs;
  - o Reduce consumption of SSBs;
  - o Increase consumption of water;
  - o Implement complete nutrition standards in schools.
- Long Term (5 years and beyond)
  - o Reduce obesity rates in the school-aged population.

# 2 AIM AND OBJECTIVES OF THE CONSULTANCY

To conduct appropriate process and outcome evaluation of the IGBS by:

- 1. Evaluating the implementation process
- 2. Evaluating the short term objectives of the IGBS
- 3. Providing recommendations to strengthen the implementation of the IGBS
- 4. Providing recommendations to achieve the intended objectives of the IGBS
- 5. Providing recommendations to assist the success of future school nutrition policies

#### 3 SCOPE OF WORK

The consultant is expected to:

- Meet with MOHW and maintain satisfactory/efficient communication with the focal points during the consultancy
- Collect, review and analyse information provided by the MOHW on the approved Interim Guidelines for Beverages in Schools and any other relevant documents
- Compile a stakeholder list and engage stakeholders as appropriate
- Collect and analyse relevant data
- Prepare and submit a comprehensive evaluation report

#### 4 DELIVERABLES

Based on the execution of the Scope of Work, the Consultant will be required to provide the following deliverables:

- Proposal
  - This should outline the evaluation approach, methodology and details of field visits, among other elements. This proposal will be submitted for ethical approval.
- PowerPoint Presentation of preliminary findings.

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The findings should be based on the ToR and a study of the documentation, outlining the understanding of the task and an initial assessment of the relevant issues for discussion and comments.

• Draft Evaluation Report,

This report should be prepared and submitted after ethical approval of the proposal and completion of all agreed field work.

Final Evaluation Report
 This report should be prepared and submitted based on MOHW feedback on the draft report.

#### 5 DURATION OF CONSULTANCY

The Consultancy is expected to be begin upon signing of the contract and be completed within <u>two</u> <u>months</u> of receiving ethical approval if necessary.

No cost extension may be granted only where justified.

#### 6 SELECTION CRITERIA

# 6.1 Academic and Professional Qualifications

Education: Advanced degree (Masters or above) in Public Health, Epidemiology or related

discipline

Experience: Minimum ten (10) years in Public Health or Epidemiology with a minimum of three

(3) years in Monitoring & Evaluation

## 6.2 Key Competencies

• Proficiency in quantitative and qualitative data analysis

- Proficiency with Microsoft Office (Word, Excel, PowerPoint)
- Strong written and verbal communication skills with diverse stakeholders
- Excellent analytical skills
- Knowledge of Government policies and procedures

#### 7 REPORTING RELATIONSHIP

The Consultant is ultimately responsible to the Director, Health Promotion and Protection Branch in the Ministry of Health & Wellness but will report on a day-to-day basis to the Director, Nutrition Unit or designate. The Consultant will also work closely with the professional staff of the Ministry of Health & Wellness.

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# 8 PAYMENT SCHEDULE

The Consultant will be compensated, based on the submission of approved deliverables and invoice in keeping with approved payment plan as follows:

Conditions for payment	Timeline	Payment
Upon submission of Proposal and an admissible invoice	Within 10 days of contract signing	20%
Upon submission of PowerPoint Presentation of preliminary findings	Within 10 days of submission of proposal	30%
Upon submission of Draft Evaluation Report as well as an admissible invoice. Report to include:  Methodology  Results and Key findings  Analysis  Conclusion and recommendations	Within 10 days of completion of field work	20%
Upon submission of Final Evaluation Report incorporating comments, feedback and recommendations as well as an admissible invoice	Within 5 days of receipt of MOHW feedback on draft report	30%

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# 9 SELECTION FRAMEWORK

# 9.1 Evaluation Criteria

The criteria and weighting system to be used in evaluating proposals are as follows:

Evaluation	Weight (%)
Qualification & Experience	
Education- Master's degree or higher in Public Health, Epidemiology or related discipline	10
Experience in Public Health or Epidemiology- 10 or more years= 10%	10
5-9 years= 5%	
1-5 years= 1%	
3 or more years' experience in Monitoring & Evaluation in Public Health or Epidemiology	10
Competencies	5
Subtotal	35
Technical Approach & Methodology	
Understanding of assignment and expected outputs	20
Appropriateness of techniques for the data collection and evaluation	20
Subtotal	40
Work plan	
Specification and sequencing of activities	15
Timeline for completion of tasks	10
Subtotal	25
Total	100

# 9.2 Pass Mark

• Consultant(s) proposal must obtain a minimum mark of 70% of total marks;

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# INTERIM GUIDELINES FOR BEVERAGES IN SCHOOLS

# APPENDIX I

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# Interim Guidelines for Beverages in Schools

## Preamble

The Government of Jamaica (GOJ), through the Ministry of Education, Youth and Information (MOEYI), is currently finalizing the National School Nutrition Policy (NSNP). The overall goal of this Policy is 'to create a school environment that promotes and facilitates healthy eating habits and a physically active lifestyle among students in Jamaica' (Draft National School Nutrition Policy, October 2018).

The National School Nutrition Standards (NSNS) being developed by the Ministry of Health (MOH) will support the **implementation** of nutrition related aspects of the NSNP. It will outline the recommended nutrient standards for meals, non-meal items (e.g. snack foods) and beverages. The NSNS will eventually be incorporated into the existing National School Feeding Programme (NSFP).

The Interim Guidelines for Beverages in Schools precedes the completion of the NSNP and the NSNS. It will apply to all schools up to and including the secondary level, which are under the remit of the MOEYI.

The standards and interim guidelines are based on current evidence and will be updated as new and relevant information becomes available.

# Introduction & Background

Non-Communicable diseases (NCDs) are of increasing global concern as the incidences continue to rise across regions and demographics. Globally, the rates of obesity in children and infants for example are predicted to continue to increase. A number of factors including easy access to processed foods with large amounts of fats, salt/sodium and sugar, as well as high intakes of sugary drinks have in large measure contributed to this situation. Advances in technology have also increased sedentary lifestyles.

It is an established fact that a continuous net intake of calories from unbalanced dietary sources and insufficient physical activity cause obesity. The major contributors to excess calories are fats and sugars. Processed, ultra-processed and convenience foods, including fast foods, are known to be loaded with fats and attempts to reduce their consumption or alter their composition to healthier options are clearly justified. The fact, however, is that less than 20% of all Jamaicans consume fast foods more than once per week. This is in contrast to the more than 75% of Jamaicans who

consume more than one (1) sweetened beverage every day; a finding of the 2008 Jamaica Health and Lifestyle Survey (JHLS II, 2008).

The 2017 Global School Based Health Surveys (GSHS) found that, 69% of Jamaican students aged 13-17 years reported drinking carbonated drinks one or more times per day (GSHS, 2017). This has not changed significantly over the past seven (7) years, indicating that this consumption pattern is well established. It is an important point to note since each additional serving of a sugary drink per day increases the odds of obesity in children by approximately 60% (Francis et. al, 2009). In addition, consuming seven (7) or more servings of sugary drinks per week can increase the risk of death from cardiovascular disease. Consuming excessive sugar in liquid form is harmful to the body primarily because it is absorbed more quickly than it can be processed resulting in it being stored as fat in the liver, contributing to liver disease and increased risk for diabetes and other NCDs (Malik & Hu. 2015).

Since 2010, there has been an overall increase in the obesity rates of adolescents. Recent surveys indicate that 20% of adolescent males, aged 13 – 17 years were overweight and 9% were obese. This compared with females of the same age group, of which 28% were overweight and 10% were obese (GSHS, 2017). Studies posit that excessive intake of sugars in any form (sucrose, fructose, glucose and other forms of sugar) provide only empty calories that contribute to weight gain and hormonal imbalances.

The evidence for a link between sugar-sweetened beverages (SSBs) consumption and childhood obesity is consistent and compelling. Increased consumption of SSBs affects all ages and social groups, and is related to increased insulin resistance, which can lead to Type 2 diabetes and other illnesses. Recent systematic reviews of 28 cohort studies and 12 meta-analyses confirm the link between increased intake of free sugars, particularly in the form of SSBs and unhealthy weight gain in both children and adults (Te Morenga 2013, Malik 2013, Escobar 2013). Conversely, reducing consumption of SSBs has been shown to reduce weight gain in children, particularly those who are already overweight (Malik 2013; de Ruyter 2012, Ebbeling, 2012).

In Jamaica, the following modifiable risk factors were found to be significantly associated with overweight/obesity among children aged 6-10 years: increased consumption of sweetened beverages, limited fruit and water intake and low physical activity levels (Blake-Scarlett et al, 2013). Childhood is a critical period for growth and development, and the formation of healthy habits. The environment plays an essential role in habit formation, particularly insufficient opportunities for physical activity, and

availability of unhealthy foods and beverages at low prices. Furthermore, obese children tend to become obese adults.

## Rationale

There is currently a strong body of research linking overweight and obesity to the development of NCDs such as Type 2 diabetes, hypertension and heart disease. Prevalence of obesity in a population can therefore be considered a forewarning to future prevalence of NCDs.

The GSHS, conducted in 2010 and 2017 shows that the rates of both overweight and obesity in the school aged population are trending upwards.

Table 1: Prevalence of Overweight and Obesity in students ages 13-15 years old

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The Pan American Health Organization (PAHO) Plan of Action for Preventing Obesity in Children and Adolescents 2014-2019 highlighted scientific research which established that school based interventions can be effective at changing eating behaviours and preventing overweight and obesity (Lobelo et al, 2013; Verstraeten et al, 2012). This can be achieved by the provision of nutrient dense foods and limiting the marketing and sale of energy dense foods with poor nutrient profiles including sweetened beverages (WHO, 2010).

Given the urgent need to address the increasing rates of overweight and obesity in Jamaica, and particularly the adolescent population, the GOJ has taken the decision to introduce the Interim Guidelines for Beverages in Schools pending the completion of the NSNP and the NSNS.

# 3. Scope

Children's total energy intake should be met by consuming approximately:

- 10% of calories from protein
- 25-35% of calories from fat
- 55-65% of calories from carbohydrate (less than 10% from added sugars)

It is recommended that a limit should be placed on sweetened beverages sold and served in all public educational institutions, which serve age groups from 0 to 18 years. These include:

- Early Childhood Institutions (ECIs)
- Primary level institutions
- Secondary level institutions

It should also apply to all persons, companies or groups involved in the provision of beverages to the **abovementioned** categories of institutions, including but not limited to:

- canteens
- concessionaires
- vendors
- teachers
- school administration
- students

It is also recommended that the limits on sweetened beverages be applicable in and around the institution, and during regular school hours and special school activities.

# Recommendation for beverages in schools

## Prohibited

 Sugar-sweetened beverages- E.g. carbonated beverages (such as regular soda), fruit drinks, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages that are above the maximum sugar concentration as set out in the implementation schedule below.

# Permitted

- Plain water
- Unsweetened flavoured and infused water
- Unsweetened juices
- Unsweetened coconut water
- Unsweetened milk or milk products
- Unsweetened milk substitutes and milk substitute products

 Sweetened beverages (including flavoured and infused water) at or below the maximum sugar concentration as set out in the implementation schedule below.

# Cautionary notes:

- It is recommended that caffeine content be less than 10mg per serving.
- The use of artificial sweeteners is discouraged; their use should be guided by the Food and Drug Regulations, 1975 and its relevant amendments as well as the list of approved sweeteners published by the US Food and Drug Administration, which the Ministry of Health has adopted.
- It is recommended that the package size for all beverages except water, sold or served to children (i.e. less than 18 years old), should be less than 12 ounces.

implementation schedule

The Permanent Secretary of the MOEYI has approved the Interim Guidelines for Beverages in Schools. The directive to schools to implement these guidelines will be issued by the Ministry once approved by Cabinet.

Sweetened beverages will be deemed as being in excess of the sugar limit, and therefore prohibited from being sold or served in schools as per Section 3, if the total sugar concentration exceeds the following:

Maximum 6g/100ml - effective January 1, 2019
Maximum 5g/100ml - effective January 1, 2020
Maximum 4g/100ml - effective January 1, 2021
Maximum 2.5g/100ml - effective January 1, 2023

Monitoring will occur with the assistance of Parish Nutritionists and Dietitians. This will take the form of:

- 1. School Nutrition and Physical Activity Audit to be carried out at baseline (December 2018), after six (6) months and after one (1) year.
- 2. Activities geared towards supporting schools in implementing the Interim Guidelines for Beverages in Schools, included in the work plans of Parish Nutritionists and Dietitians.

Added sugars

Excessive sugar

Free sugars

Infused Water

Intrinsic Sugar

Other sweeteners

School hours

Sugar- Sweetened Beverages

Sweetened Beverages Total sugars Free sugars added to foods and beverages during manufacturing or home preparation (PAHO, 2016).

Excessive in free sugars, if in any given quantity of the product, the amount of energy (kcal) from free sugars (g of free sugars x 4 kcal) is equal to or higher than 10% of the total energy (kcal) (PAHO, 2016).

Monosaccharides and disaccharides added to foods and beverages by the manufacturer, cook, and/or consumer plus sugars that are naturally present in honey, syrups and juices. (PAHO, 2016).

Water into which flavours and other water-soluble compounds have been extracted from parts of plants (e.g. fruits, leaves), by suspending the plant material in the water over time.

Sugars forming an integral part of certain unprocessed foodstuffs enclosed in the cell, the most important being whole fruits and vegetables.

Food additives that impart a sweet taste to a food, including artificial non-caloric sweeteners (e.g., aspartame, sucralose, saccharin, and acesulfame potassium); natural non-caloric sweeteners (e.g., stevia); and caloric sweeteners such as polyols (e.g., sorbitol, mannitol, lactitol, and isomalt). This category does not include fruit juices, honey, or other food ingredients that can be used as a sweetener (PAHO, 2016).

Active class sessions or once the school gate is opened to allow for interaction with students for the purposes of transfer of knowledge in teaching.

Liquids that are sweetened with various forms of added sugars. These beverages include, but are not limited to, soda (regular, not sugar-free), fruitades, fruit flavoured juice drinks, sports drinks, energy drinks, sweetened waters, and coffee and tea beverages with added sugars. Also called calorically sweetened beverages (USDA, 2015)

Liquids for consumption, with any type of free sugar or other sweetener added during preparation

All sugars from all sources in a food, defined as "all monosaccharides and disaccharides other than polyols." This concept is used for labeling purposes (PAHO, 2016).

Ministry of Health / Ministry of Education Youth & Information

November 2018

**Unprocessed Foods** 

Foods obtained directly from plants or animals that do not undergo any alteration between their removal from nature and their culinary preparation or consumption.

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