

Measuring the Healthiness of Children's Food Environments:

WP2 – Food Provision



Evaluate the nutritional quality of foods and beverages sold or provided to children

MEALS4NCDs Project Launch

Mary L'Abbe, CM, PhD

Chair Project Advisory Board



Nutritional Sciences
UNIVERSITY OF TORONTO



WHO Collaborating Centre on
Nutrition Policy for
Chronic Disease Prevention

INFORMAS module structure

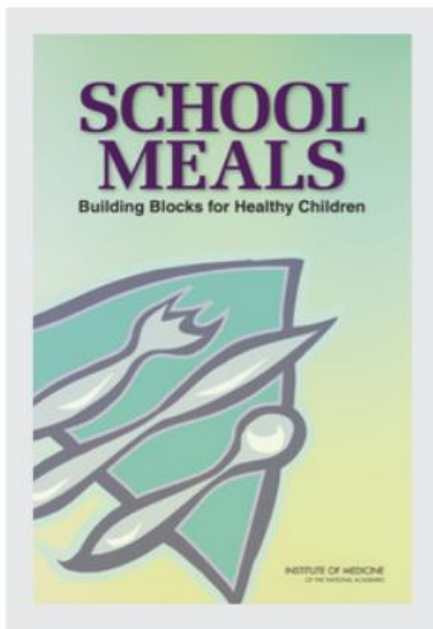
ORGANISATIONS	PROCESSES	Public sector policies and actions				Private sector policies and actions		
		How much progress have (international, national, state and local) governments made towards good practice in improving food environments and implementing obesity/NCDs prevention policies and actions? <i>(University of Auckland)</i>				How are private sector organisations affecting food environments and influencing obesity/NCDs prevention efforts? <i>(Deakin University)</i>		
FOOD ENVIRONMENTS	IMPACTS	Food composition	Food labelling	Food marketing	Food provision	Food retail	Food prices	Food trade & investment
		What is the nutrient composition of foods and non-alcoholic beverages? <i>(The George Institute)</i>	What health-related labelling is present on foods and non-alcoholic beverages? <i>(University of Oxford)</i>	What is the exposure and power of promotion of unhealthy foods and non-alcoholic beverages to different population groups? <i>(University of Wollongong)</i>	What is the nutritional quality of foods and non-alcoholic beverages provided in different settings (eg. schools, hospitals, workplaces)? <i>(University of Toronto)</i>	What is the availability of healthy and unhealthy foods and non-alcoholic beverages in communities and within retail outlets? <i>(University of Auckland)</i>	What is the relative price and affordability of 'less healthy' compared with 'healthy' diets, meals & foods? <i>(University of Queensland)</i>	What are the impacts of trade and investment agreements on the healthiness of food environments? <i>(Australian National University)</i>
POPULATIONS	OUTCOMES	Population diet		Physiological & metabolic risk factors		Health outcomes		
		What is the quality of the diet of different population groups? <i>(University of Sao Paulo)</i>		What are the burdens of obesity and other risk factors? <i>(WHO)</i>		What are burdens of NCD morbidity and mortality? <i>(WHO)</i>		

OBJECTIVE: FOOD PROVISION WP

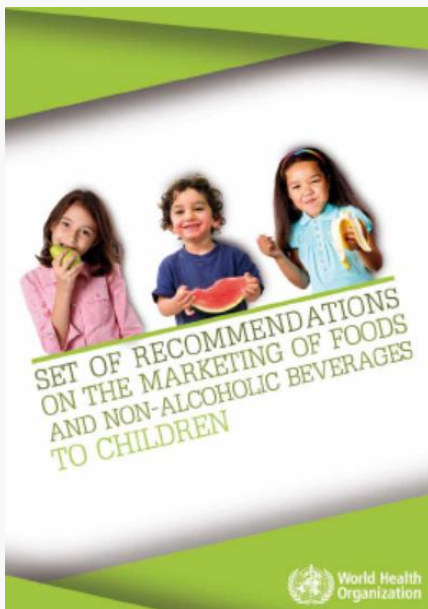
To evaluate the nutritional quality of foods and beverages sold or provided to children in school cafeterias or canteens



**SCHOOL FOOD
PROGRAMS ARE
IMPORTANT TO THE
HEALTH OF CHILDREN**



“Building Blocks for Healthy Children”



“a wide range of techniques are used to market these products, reaching children in schools ... and in many other settings.”

ENDING CHILDHOOD OBESITY



World Health Organization



IMPLEMENT COMPREHENSIVE PROGRAMMES THAT PROMOTE HEALTHY SCHOOL ENVIRONMENTS, HEALTH AND NUTRITION LITERACY AND PHYSICAL ACTIVITY AMONG SCHOOL-AGE CHILDREN AND ADOLESCENTS.

5.1

Establish standards for meals provided in schools, or foods and beverages sold in schools, that meet healthy nutrition guidelines.

5.2

Eliminate the provision or sale of unhealthy foods, such as sugar-sweetened beverages and energy-dense, nutrient-poor foods, in the school environment.



RESEARCH ARTICLE

Effectiveness of school food environment policies on children's dietary behaviors: A systematic review and meta-analysis

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91 interventions – (55 Can/USA; 36 EU/NZ; none – Asia/Africa/SA)

↑ Fruits; ↑ Fruit and Vegetable consumption
 ↓ Sugar Sweetened Beverage consumption
 ↓ unhealthy snacks
 ↓ Total fat; ↓ saturated fat and sodium; but
 not total calories





Food and Agriculture Organization
of the United Nations

Nutrition guidelines and standards for school meals

A report from 33 low and middle-income countries



- ❑ Poverty eradication, health, education, food security and nutrition continue to be the essential priorities and targets for sustainable development (United Nations General Assembly, 2015).
- ❑ Schools can make a sizeable, long-lasting impact on these determinants(Bundy et al., 2009; Faber et al., 2013; WFP, 2013; GLOPAN, 2015).
- ❑ One such entry point is the (regular) **provision of nutritious meals through school-based programmes**. This can improve vulnerable children's attendance levels, attention capability and parent motivation, potentially affecting academic performance and future enrolment, particularly for girls (Bundy et al., 2009; WFP, 2013; World Bank, WFP and PCD, 2016).

What's the Research Approach

- Schools can lead the way towards healthier diets
- “Using tools to evaluate and compare the school food environment in Ghana
- Steps
 - **Phase I:** Describe, compile and evaluate the nutrition policies/programs in schools
 - **Phase II:** Evaluate the nutritional quality of foods and beverages in a number of schools (representative of different regions, SES, grade levels)
 - **Measurement indicators:**
 - Nutritional quality of what is sold and/or served
 - Healthy beverages, vending machines
 - Food marketing within schools

Some lessons learned from review of previous monitoring programs

- Paucity of data evaluating the nutritional quality of foods, particularly in Africa
- Many programs set up without monitoring or evaluation frameworks, plans or funds/people to evaluate them
- Many have reported “*implementation*” of healthy food standards, but NOT “*compliance*” with them
 - Actual compliance can be lower than self report data
- Very little data about the broader food environment in schools

Research Data can provide valuable data for stakeholders in a variety of formats



The School Food Environment Review and Support Tool (School-FERST) national study was conducted between 3rd March 2016 until September 3rd 2016. Data was collected via an online survey and invitation was extended to all schools in New Zealand. Below is a brief snapshot of the preliminary feedback from School-FERST.

The total number of contributing and full primary schools that participated in this survey was 618. The percentage of schools participating by decile is as follows: **Decile 1-3: 30%, Decile 4-7: 40%, Decile 8-10: 30%**

School Food and Nutrition Policy



40% of primary schools report having a written food and nutrition policy

Policy analysis was conducted on policies submitted by primary schools to the School-FERST study (n = 111).

A policy scorecard for New Zealand Schools was developed using guidance from the School Wellness Policy Evaluation Tool (WellSAT 2.0).

The average scores for primary schools were:

Comprehensiveness of policy: 14/100
Strength of policy: 2/100

Resources for policy development and implementation:
Developing a food and nutrition policy framework (Te Kete Ipurangi) - <http://health.tki.org.nz/Key-collections/Healthy-lifestyles/Food-and-nutrition-for-healthy-confident-kids#Developing>

Steps to creating a school nutrition policy (Alberta Health Services, Canada) - click on title to open external link

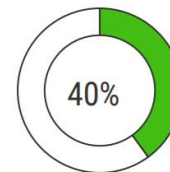
Why is a food and nutrition policy important?

Research from USA suggests a strong association between school food policy and decreased consumption of sugar sweetened beverages at school. Additionally evidence shows a strong, positive association between school food policy in middle (intermediate) schools and the increase in consumption of milk, fruits and vegetables. Moreover policies prove to be a cost-effective method in having a large-scale impact on improving the well-being, especially mental health, of students and staff alike.

Tips for improving your food and nutrition policy

- Use strong (prohibit, restrict) rather than suggestive (encourage, recommend) language
- Involve parents and students in feedback and consultation
- Allocate a staff member operational responsibility to ensure the policy is implemented, monitored, evaluated and communicated across the school
- Ensure that your policy is reviewed annually

School Food and Nutrition Policy



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Food and Beverages Sold in Primary Schools

Food and Beverages Sold to students during the school day



66% of primary schools report selling food and beverages to students during the school day



69% of primary schools report being a milk (low fat or full fat) and/or water only school



Only 3 schools have 1 or more vending machines on school grounds

Food and Beverages used for fundraising



82% of primary schools report using foods and beverages for fundraising activities

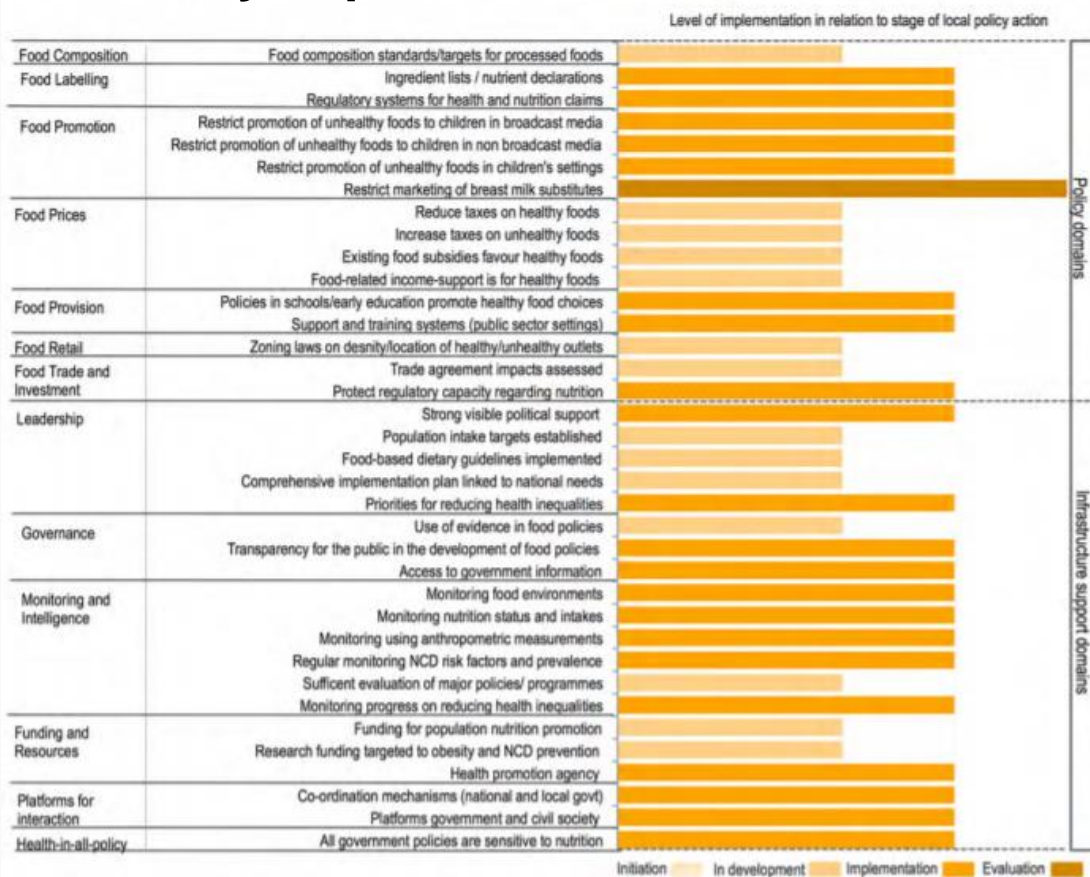


90% of these schools report using 'Occasional' or unhealthy foods and beverages for fundraising

New Zealand Preliminary Reports Available at:
[https://auckland.figshare.com/articles/School-FERST - Preliminary results for primary schools/5673469/1](https://auckland.figshare.com/articles/School-FERST_-_Preliminary_results_for_primary_schools/5673469/1)

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Example Food-EPI Ghana: Level of Food Policy Implementation in Ghana



[https://auckland.figshare.com/articles/Benchmarking Ghana s Policies for Creating Healthy Food Environments /8188763](https://auckland.figshare.com/articles/Benchmarking_Ghana_s_Policies_for_Creating_Healthy_Food_Environments_/8188763)