

SCHOOL HEALTHY EATING PROGRAMS IN NOVA SCOTIA

Provincial Report 2022-23

Acknowledgement

This provincial report was prepared by Science and System Performance (SSP), Public Health, Nova Scotia Health in consultation with the Department of Education and Early Childhood Development (DEECD).

Special thanks to Regional Centres for Education (RCE), Conseil scolaire acadien provincial (CSAP) and public schools across the province for their participation and support in data collection.

This report was last updated on December 20, 2023.

Recommended Citation

Public Health. (2023). School healthy eating programs in Nova Scotia – Provincial report, 2022-23. Nova Scotia Health.

For more information

For more information or questions about this report, contact SSP-HC@nshealth.ca.

Table of Contents

School Healthy Eating Programs in Nova Scotia	. 1 . 1
INTRODUCTION	5
PURPOSE	6
METHODS	. 6
LIMITATIONS & CONSIDERATIONS	7
2022-23 SHEP RCE/CSAP FINANCIAL REPORTING RESULTS Proportion of SHEP Funds Spent	10 10
2022-23 SHEP SURVEY RESULTS SHEP Survey Reponse Rates Breakfast Programs Foods Available Beyond Breakfast Student Participation in School Food Programs Successes and Challenges: Breakfast Program Operation and Participation School-level Barriers or Challenges	11 11 18 20
WHAT DO THE 2022-23 SURVEY RESULTS TELL US ABOUT HOW WE CAN ENHANCE SHEP IN NOVA SCOTIA?	29 30
CONCLUSIONS	32
APPENDIX A: School Healthy Eating Program Survey Questions	33
APPENDIX B: Funding Guidelines and Criteria	38
DEEEDENCES	10

EXECUTIVE SUMMARY

School Healthy Eating Programs in Nova Scotia

School food programs (SFPs) provide students with an important point of access to nutritious and culturally appropriate food and therefore are a prerequisite to learning and are fundamental to creating a more inclusive education system in Nova Scotia. Research on SFPs nationally and internationally has clearly demonstrated their positive contributions to healthy development, nutrition knowledge, dietary intake, and academic outcomes.¹

The Province of Nova Scotia provides \$1.7 million annually in School Healthy Eating Program (SHEP) funding to support the provision of healthy food in schools, with a priority focus on breakfast. In the 2022-23 school year the province provided an additional \$3,160,135 in one-time supplementary funding to RCEs/CSAP to enhance SHEP.

The SHEP survey is part of ongoing annual monitoring that supports collective accountability on the use of provincial funding and informs continued quality improvement efforts. This provincial report provides an overview of the findings from the 2022-23 SHEP survey for the purpose of:

- reporting back to the Province of Nova Scotia on how annual SHEP funding is used to support students' access to healthy food in school.
- inform continued quality improvement by understanding school level barriers and facilitators, and the current state of breakfast, free lunch and free snack programs offered to students in school.

What We Did

Data was collected at an RCE/CSAP and school level. The 2022-23 SHEP survey was developed by Nova Scotia Health, Public Health—in partnership with Department of Education and Early Childhood Development (DEECD)— and consisted of quantitative and qualitative questions. Quantitative data was collected using multiple choice and short answer questions to gather information about breakfast programs, foods available beyond breakfast, and student participation in SFPs. Qualitative data was collected using openended questions and primarily explored the supporting factors or successes and barriers or challenges associated with school breakfast programs. A total of 309 schools completed the SHEP survey for the 2022-23 school year—representing 84% of all public schools in Nova Scotia.

An updated goal setting, planning, and budgeting form was distributed to RCEs/CSAP as part of ongoing financial reporting requirements on the use of provincial Health Promoting Schools funding, including SHEP. All RCEs/CSAP completed and submitted their planning and reporting form for the 2022-23 school year. Results on the use of SHEP funding have been thematically organized and summarized.

What We Learned

We learned the following about school healthy eating programs in Nova Scotia in 2022-23:

2022-23 SHEP Funding

- An additional \$3,160,135 in one-time supplementary funding was provided to RCEs/CSAP in 2022-23 to enhance SHEP.
- RCEs/CSAP report that 79% of their total SHEP resources were allocated to Foods and Beverages.
- Several RCEs/CSAP also report using SHEP funding to support human resources and travel, including program staff wages or honoraria for school volunteers supporting breakfast programs.

Breakfast Programs

- 99.4% of the schools surveyed are offering a breakfast program, and most (98%) are available five days per week.
- Most schools (68%) use a grab and go model of delivery for breakfast.
- The five most commonly served breakfast food items are fresh fruit, cheese, yogurt, cereal, and granola bars.
- 54% of schools named administrators and school-based staff as most commonly responsible for running and overseeing the breakfast program.
- Administrators report schools are integrating multiple universal school food practices into the operation of their school breakfast programs.
- The most common school-level factors preventing student participation in school breakfast programs were bus/school schedules and food allergies; however most administrators perceived their were no barriers at the school-level.

Foods Available Beyond Breakfast

- 85% of schools are currently offering a free snack to students during the school day.
- 84% of schools are offering students free/equity lunch meals.

Student Participation in School Food Programs

- An estimated 40,864 students access breakfast programs across the province on a typical day, representing 40% of the total student population.
- Student participation in breakfast programs varies significantly from school to school, ranging from 3% to 100% of a school's total student population.
- Approximately 5,737 students are accessing free/equity lunch meals across the province on a typical day, representing 7% of the total student population.
- The majority of schools offering free/equity lunch meals are serving a very small proportion (<5%) of their total student population.

School-level Supporting Factors or Successes

• The main themes related to school-level supporting factors and successes for breakfast programs included: universality, human resource capacity, nutrition, model of delivery, operational practices and sustainable funding.

School-level Barriers or Challenges

 The main themes related to school-level barriers or challenges for breakfast programs included: human resource capacity, funding, procurement practices, cost of food and infrastructure.

Areas of Consideration for Improving SHEP

Together, the quantitative and qualitative findings from the 2022-23 SHEP survey point to key areas of consideration for improving school healthy eating programs in Nova Scotia.

Consistent with the 2021-22 SHEP survey findings, the 2022-23 results suggest that SHEP-funded breakfast programs are highly available in public schools across the province, with 99.4% of the schools surveyed reporting they offer a breakfast program, most of which are available to students five days per week. Despite high availability, student participation in breakfast programs continues to vary greatly from school to school (ranging from 3% to 100% of a school's total student population). While the 2022-23 SHEP survey explored possible reasons for this variability further, findings suggest that most schools apply supportive practices for universal programming and name limited barriers to student participation. A notable limitation of this finding is that it reflects the perspectives of program administrators, not participants. It will be important to continue to monitor factors that may limit the accessibility and reach of breakfast programs, including working with families and students to better understand their experiences and the barriers and facilitators that may impact their participation in school healthy eating programs.

In additional to SHEP-funded breakfast programs, most schools (84%) also report offering free/equity lunch meals to students but are consistently serving a much small proportion of their student population (less than 5%). While findings from this year's survey on free/equity lunch are not directly comparable to the 2021-22 SHEP survey results due to differences in survey methods,* there is an observable increase in the number of schools that report offering free/equity lunch meals in 2022-23, as well as increase in the number of students accessing these programs. Possible explanations for this increase may include the 186% increase in provincial funding offered in 2022-23 to enhance SHEP, an increase in the numbers of students requiring access to free/equity lunch, and/or increased awareness of the importance of providing students with access to a healthy lunch in school.

^{*} See Limitations and considerations and Availability of Free/Equity Lunch Meals for further details.

This provincial report also adds to our understanding of breakfast program characteristics across the province. Overall, there are several different breakfast program models in use and administrators indicated a variety of perceived benefits and practical reasons for selecting their model of choice. Provincially, grab and go models were the most common due to perceptions of improved accessibility and reduced stigma, whereas sit-down models were primarily used in schools that had adequate space and human resource supports to provide students with an opportunity for social connection around food. The variability in models of delivery, and the perceived benefits of each demonstrate the importance of flexibility and autonomy at the school level to determine the model best suited to available supports, infrastructure, and student need. Although there were some differences in types of foods served across different models, self-reported data show that provincially funded breakfast programs are offering a variety of nutritious food options, ranging from fresh, perishable items (e.g., fruit) to non-perishable, pre-packaged items (e.g., granola bars).

In conclusion, the 2022-23 SHEP survey findings demonstrate that access and availability of SFPs continues to be variable from school to school, particularly for snacks and meals offered beyond breakfast. In addition to quality improvement at the school level, similar system-level barriers and challenges documented in 2021-22 persist demonstrating a continued need to work collaboratively and support ongoing efforts to enhance program quality and reach.

INTRODUCTION

Good nutrition and healthy eating patterns are essential for growth and development and have both immediate and long-term effects on health, learning and student success. There is an extensive body of research documenting how access to nutritious food helps children and youth in school—improving their cognition (e.g., alertness, attention, memory, and problem solving)^{2,3} their social skills and their academic performance^{4,5} (e.g., standardized tests scores and grade point averages). Well-nourished children have better school attendance rates and are less likely to experience emotional and behavioral problems⁶—meaning more time spent in the classroom to focus on education.

School food programs (SFPs) are a well-supported approach to improving students' access to and intake of nutritious food during the school day. While SFPs may provide temporary food relief for some students and families, it is important to note that they are not an appropriate or sustainable solution to household food insecurity[†] as they do not address its root causes—primarily, inadequate income. Recognizing these limitations, SFPs have been intentionally positioned in this report as providing students with an important point of access to nutritious and culturally appropriate food that is a prerequisite to learning and fundamental to creating a more inclusive education system in Nova Scotia.

The Province of Nova Scotia provides \$1.7 million annually in School Healthy Eating Program (SHEP) funding to support the provision of healthy food in schools, with a priority focus on breakfast. The vision for this funding is that all public schools in Nova Scotia will offer, at minimum, a universal breakfast program five days per week in alignment with the Food and Nutrition Policy for Nova Scotia Public Schools. Any remaining SHEP funds may be used to offer snacks and/or lunch meals to students under the same universal model, where possible. In 2022-23, the Province of Nova Scotia provided an additional \$3,160,135 in one-time supplementary funding to enhance SHEP. Schools may also receive variable funding for meal and snack programs through external sources such as Breakfast Clubs of Canada, President's Choice Children's Charity and/or other school-based fundraising activities.

In December 2021, the Federal Mandate Letters of the Minister of Agriculture and Agri-Food and Minister of Families, Children and Social Development named working with provinces, territories, municipalities, Indigenous partners and stakeholders to advance school food policy and a national school food program as a cross-departmental priority. Consultation on a pan-Canadian School Food Policy, which seeks to "guide the expansion of school meal programs based on common principles and objectives" and "set the foundation for greater collaboration coordination and investment" across jurisdictions, concluded in late 2022 and a report of findings from these engagement sessions was shared in November 2023.

[†] Defined as inadequate or insecure access to food due to financial constraints. Derived from: Tarasuk, V., & Mitchell, A. (2020). Household food insecurity in Canada, 2017–18. Toronto: Research to identify policy options to reduce food insecurity (<u>PROOF</u>).

[‡]For a more comprehensive review of the evidence related to SFPs, see the report <u>School healthy eating</u> <u>programs in Nova Scotia – Provincial report, 2021- 22</u>, page 6.

Building on the School Healthy Eating Programs in Nova Scotia 2021-22 Provincial Report, this 2022-23 report provides an updated review of data on SFPs in Nova Scotia that can be used to inform continued quality improvement efforts for existing programs and services and/or future planning regarding their expansion.

PURPOSE

The purpose of this report is to:

- report back to the Province of Nova Scotia on how annual SHEP funding is currently used to support students' access to healthy food in school.
- inform continued quality improvement by understanding school level barriers and facilitators, and the current state of breakfast, free lunch and free snack programs offered to students in school.

METHODS

School Healthy Eating Program (SHEP) Survey

Nova Scotia Health, Public Health—in partnership with DEECD—developed a survey to collect complementary quantitative and qualitative data.

To better understand availability and access to breakfast programs and foods available in Nova Scotia public schools beyond breakfast, an online survey was developed and distributed to all public schools in the province using REDCap—a secure web-based data collection and management platform supported and hosted through Nova Scotia Health.^{8,9} A meeting was held with representatives from each RCE and CSAP to provide details about the survey content, as well as the proposed distribution and data collection process.

The 2022-23 SHEP survey focused on collecting the following information from schools (see Appendix A):

- Availability of breakfast, estimated student participation, items served and models of delivery.
- Availability of free/equity lunch meals and estimated student participation.
- Availability of free snack programs.
- Understanding of best practices for universal school food programs and how they are applied in the breakfast program context.
- School-level supporting factors and challenges related to breakfast program operation and participation.

School administrators (e.g., principals and vice-principals) were asked to complete the survey on behalf of their school. To improve the integrity of data collected, all schools were encouraged to follow a consistent process to tally the total number of students participating in their breakfast program or free/equity lunch meals (see Appendix A). Other process improvements for the 2022-23 school year included in-survey prompts and embedded links to the data collection tool. Schools were also asked to report on the tally method used to collect student participation data.

The data collection was initially planned for the month of May 2023, but was extended to June 30th, 2023, to increase response rates.

RCE/CSAP Financial Reporting

In response to recommendations outlined in the 2022 Office of the Auditor General's Report on Healthy Eating in Schools, Nova Scotia Health, Public Health, developed and administered an updated goal setting, planning, and budgeting template for Health Promoting Schools funding, including SHEP. RCEs/CSAP were asked to submit plans and report on the results of how SHEP funds are divided between schools, key priorities, barriers, or opportunities in the implementation of SHEP and how funds are proportionally spent. Results were reviewed, thematically organized, and summarized across all RCEs/CSAP.

LIMITATIONS & CONSIDERATIONS

There are several limitations of the methods and data presented in this report that should be considered.

- The findings represent a subset of schools across the province that completed the SHEP survey. While efforts were made to support and encourage all schools to complete the SHEP survey for the 2022-23 school year, a 100% response rate was not achieved.
- Direct comparisons should not be made between the 2021-22 and 2022-23 SHEP survey data. Differences in survey questions and the additional supplementary funding provided to enhance SHEP in the 2022-23 school year limit the ability to directly compare the data and draw conclusions on changes over time. Multiple additional funding allotments, provided at various points throughout the school year, created additional challenges in financial planning and reporting at an RCE/CSAP level.
- It is unclear whether pre-primary students are accessing breakfast programs and/or
 free/equity lunch in schools. Although pre-primary programs are funded separately,
 pre-primary students may be accessing SFPs. Given that survey respondents were not
 asked to specify involvement of pre-primary students in school healthy eating programs,
 quantitative analysis has assumed access for all students and included pre-primary
 populations.

- Total numbers of students reported to be accessing breakfast and/or free/equity lunch
 in schools should be considered an estimate of true participation. Efforts were made
 to encourage consistent data collection methods for tracking student participation
 (Appendix A); however, this continues to be challenging in the school environment for
 a variety of reasons such as multiple program delivery locations and burden on staff/
 volunteers.
- Despite intended focus on free/equity lunch meals, defined as those provided on an ad-hoc basis to students when they don't have a lunch or money to purchase one, it is unclear to what extent data reflects only this type of lunch meal. Data suggest that administrators may have also reported on other types of more formalized free lunch (e.g., occasional free lunch days provided to all students).
- This was the first SHEP survey cycle to collect data on availability of free snack programs
 across the province; however, descriptions indicate that most snacks are provided in
 an ad-hoc manner and there is likely significant variability in the accessibility of these
 snacks to students. Future survey cycles should consider defining free snack programs
 and/or inquiring around eligibility criteria in place (if any).

2022-23 SHEP RCE/CSAP FINANCIAL REPORTING RESULTS

Nova Scotia Health, Public Health is responsible for administering annual SHEP funding to RCEs/CSAP using an equity-based funding formula. RCEs/CSAP in turn, administer funding to schools, using a variety of approaches. As part of ongoing accountability and monitoring processes, RCEs/CSAP complete an action planning and reporting template that provides details about how funds are spent to improve students access to healthy food in schools.

In addition to the sustained \$1.7 million provided annually by the Province of Nova Scotia for SHEP, the following one-time supplementary funds were distributed across RCEs/CSAP in the 2022-23 school year:

	Annual SHEP Funding	Enhanced SHEP Funding January 2023	Enhanced SHEP Funding March 2023	Enhanced SHEP Funding April 2023	Total Enhanced SHEP Funding 2022-23	TOTAL SHEP FUNDING for 2022-23
TOTAL AMOUNTS	\$1,700,000	\$1,959,654	\$734,870	\$465,611	\$3,160,135	\$4,860,135

Guidelines are provided to RCEs/CSAP that outline the use of SHEP funding (see **Appendix B**). SHEP funding may be used to cover the costs of foods and beverages (must adhere to the School Food & Nutrition Policy), equipment and supplies[§] (e.g., appliances and materials required to operate programs) and human resources and travel (e.g., wages for program staffing, honoraria for program volunteers, mileage reimbursement). Additional supplementary funding provided by DEECD in January 2023 was allocated to support only the food and beverage component of SHEP. The following is an overview of financial reporting results across RCEs/CSAP for the 2022-23 school year.

Proportion of SHEP Funds Spent

Most RCEs/CSAP report spending the greatest proportion of their SHEP funds on foods and beverages; this was followed human resources and travel, and equipment and supplies.

Proportions of SHEP Funding Spent			
RCE /CSAP	Food & Beverages	Equipment & Supplies	Human Resources & Travel
CCRCE	99%	1%	0%
AVRCE	87%	1%	12%
SSRCE	100%	0%	0%
HRCE	98%	2%	0%
CSAP**	69%	0%	31%
TCRCE	98%	0%	2%
SRCE	95%	5%	0%
CBVRCE	87%	4%	9%
OVERALL	81%	1%	6%

Food & Beverages

In addition to supporting a universal breakfast program, a few RCEs provided specific examples of how enhanced SHEP funds were used to purchase foods and beverages for:

- Establishing/implementing snack programs.
- Initiating/expanding equity lunch programs.
- Testing salad bar options.

[§] No more than 10% of total SHEP funding can be allocated to equipment and supplies.

^{**} Response rates for CSAP were impacted by technical challenges affecting access to the French language survey.

Equipment & Supplies

The following items were identified among those that reported spending SHEP funding on equipment and supplies:

- Upgrading/replacing kitchen equipment (fridges, toasters, dishwashers, freezers, etc.).
- Menu improvements.
- Improving food procurement methods.

Human Resources & Travel

Several RCEs also reported using SHEP funding to support human resources and travel, including program staff wages or honoraria for school volunteers supporting breakfast programs.

Challenges & Recommendations

In addition to providing details of funding spent, some RCEs/CSAP also shared feedback regarding key challenges or recommendations associated with implementing SHEP programming, such as:

- Rising food costs.
- Inadequate funding to support SFPs.
 - Increases to baseline SHEP funding allotment would help support the expansion of sustainable food programming beyond breakfast.
 - It remains difficult to support growing needs without a school lunch program.
- Insufficient/aging infrastructure.

2022-23 SHEP SURVEY RESULTS

The following sections highlight the quantitative and qualitative results from the 2022-23 SHEP survey. This includes availability of breakfast programs, foods available beyond breakfast, student participation rates, and the school-level supporting factors and challenges related to breakfast program operation and participation.

SHEP Survey Reponse Rates

A total of 309 schools completed the SHEP survey for the 2022–23 school year—representing 84% of all public schools in Nova Scotia. Table 1 outlines survey completion rates in each RCE/CSAP.

Table 1: 2022–23 SHEP Survey Completion Rates by RCE/CSAP

Final Survey Response Rates			
RCE/CSAP	Completed Surveys	Total Schools	% Total Schools Responding
CCRCE	59	66	89%
AVRCE	37	42	88%
SSRCE	19	25	76%
HRCE	114	135	84%
CSAP ^{‡‡}	13	22	59%
TCRCE	20	22	91%
SRCE	10	20	50%
CBVRCE	37	38	97%
TOTAL	309	370*	84%

^{*}Based on DEECD documentation. Totals include alternate programs and adult high schools; not all regions provide healthy eating programs in these schools.

Breakfast Programs

Availability of Breakfast Programs

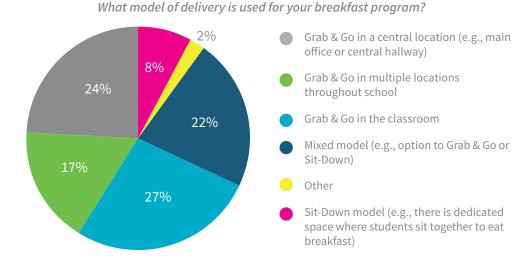
Of the 309 schools that responded to the survey, 307 (99.4%) report offering a provincially funded breakfast program to students. Of these 307 schools, 301 (98%) report their breakfast program is available to students five days per week, while the remaining six (2%) report their breakfast program is available less than five days per week (with a range of two to three days per week). Two schools indicate they do not currently offer a breakfast program to students. When asked for additional detail on why they do not offer breakfast, one school responded, "lack of space and volunteers" and the other responded, "grab and go snacks are provided at the door".

^{‡‡}Response rates for CSAP were impacted by technical challenges affecting access to the French language survey.

Breakfast Program Models of Delivery

Of the 307 schools that offered a breakfast program, 211 (68%) schools report using one of the three grab and go model options. §§ Of the three grab and go response options, *grab and go in the classroom* was most common with 84 schools (27%) reporting this as their current breakfast delivery model. *Mixed models* (e.g., the option to grab and go or sit-down) were also common and reported by 66 (22%) schools. In contrast, 23 schools (8%) report using a *sit-down* model where students have a dedicated space to sit and eat breakfast together.

Figure 1: Model of delivery for provincially funded breakfast programs in Nova Scotia Public Schools (N=307)



Reasons for Selected Breakfast Program Models of Delivery

Survey respondents were asked to describe why they use the selected model of delivery for their breakfast program. Open-ended responses have been summarized below.

Grab and Go - Central Location

This model was commonly used due to *ease of delivery* for staff and volunteers. Some administrators described the challenge of delivering breakfast to many students in a short period of time as a reason for selecting this model, particularly if lack of staff/volunteers or varying arrival times were challenges for their school. Many administrators also perceived a centralized grab and go model provided better *accessibility* for students, and *improved reach and program participation*. Related to this, some schools also indicated this model was perceived to be less stigmatizing and aligned with student preference.

^{§§} A school food program model of delivery whereby students access food from baskets or carts located in one or more accessible locations throughout the school. Food items are typically easy to transport and are often pre-packaged (except for some fresh fruit). Students may then eat the items where and when they desire.

Grab and Go - Classroom

Reasons for selecting a grab and go model based in the classroom were similar to those listed for grab and go in a central location. Ease of *delivery, accessibility to all students, reach and less stigma* were all common reasons reported for using this model. Lack of volunteers or staff for student supervision, as well as time constraints at the start of the school day were common challenges in these schools. Some different reasons for selecting the classroom model included lack of availability of a central space or cafeteria and perceptions around less disruption to the learning environment. Some administrators also indicated that they pivoted to this model during the COVID-19 pandemic and learned that it worked well for their school.

Grab and Go - Multiple Locations

Ease of delivery and accessibility were the most common reasons cited for choosing a grab and go model of delivery with multiple locations. Some administrators described that having breakfast food available in multiple locations ensured the program was "open to all" and improved program reach. As with the other grab and go models, lack of staff/volunteers and time constraints for breakfast program delivery due to arrival schedules were common challenges in these schools.

Sit-down Model

For sit-down models, administrators indicated that providing an opportunity for *social connection* around food was a significant reason for offering this model. Interestingly, although *ease of delivery* was a common theme among grab and go models, several administrators also felt that sit-down models had advantages in terms of *ease of delivery* by allowing food preparation and service to take place in one location. In contrast to grab and go breakfast models, schools offering sit-down models report that availability of space/cafeteria and staff/volunteers for food preparation and/or supervision were enabling factors. Lastly, some schools reported an *increased variety of food, less reliance on packaged items, student preference, and ability to monitor participation* as reasons for selecting this model.

Mixed Model

The main reasons reported by administrators for offering a mixed model of delivery were accessibility, flexibility, time constraints, varied arrival times, and ability to adapt the program to needs and preferences of different students. Some administrators recognized that students have different preferences; for example, some felt that a sit-down setting was preferable for younger students, whereas older students preferred the option to grab and go. Like respondents reporting sit-down models, those offering mixed models valued the social connection aspect of their breakfast programs. Lack of staff and volunteers to offer a sit-down model five days per week was also described as a reason for using a mixed model in some schools.

Other

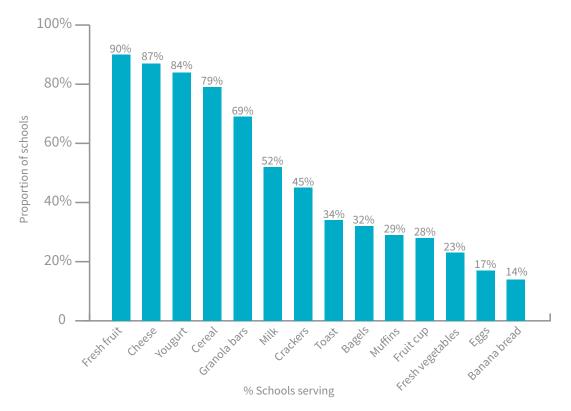
Other models of delivery included breakfast carts that are circulated to classrooms, teacherled food distribution in the classroom, or cafeteria breakfasts. Reasons for offering these models varied and were school specific.

Breakfast Programs - Foods Served

Fresh fruit (n=276, 90%), cheese (n=266, 87%), yogurt (n=258, 84%), cereal (n=244, 79%), and granola bars (n=211, 69%) were the five foods most offered in breakfast programs on a typical day. In contrast, banana bread (or similar) (n=44, 14%), eggs (n=53, 17%), fresh vegetables (n=72, 23%), fruit cups (n=87, 28%), and muffins (n=88, 29%) were the five least commonly offered foods.

Figure 2: Proportion of schools serving food items on a typical day (N=307)





Survey respondents were also asked to list additional food items served that were not included in the list above. The most common additional items included pancakes, apple sauce, smoothies, breakfast sandwiches, and grilled cheese sandwiches. However, it is likely that in some schools the additional items requiring more preparation are not available on a typical day and instead are served on a more occasional basis.

Availability of Select Food Items by Model of Delivery

Among the top three food items served (fresh fruit, cheese, and yogurt) there was limited variation in the proportion of schools offering these items across the different models of delivery. The proportion of schools offering fresh fruit was high across all models of delivery ranging from 79% among grab and go in multiple location models to 98% of sit-down models. Similarly, the proportion of schools offering yogurt was also high across all models ranging from 78% among grab and go – central location models to 100% of sit-down models. The proportion of schools offering cheese was high and remained consistent across all models (ranging from 81 – 92%).

There was more variation in the proportion of schools offering cereal and granola bars across the different models of delivery. The proportion of schools offering cereal ranged from 64% among schools using grab and go models in a central location to 91% among schools using sit-down models of delivery. In contrast, the proportion of schools offering granola bars ranged from 30% among schools using sit-down models to 87% of schools using grab and go models.

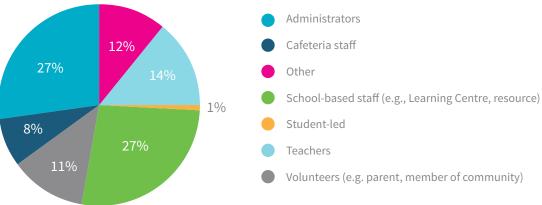
Beyond the top five most offered foods, there is also considerable variation in the proportion of schools offering milk by model of delivery, ranging from a low of 28% among schools using a grab and go model in the classroom to 100% among schools offering sit-down models. Similarly, toast and bagels were much more common among the sit-down models and mixed models compared with grab and go models (*data not shown*).

Breakfast Programs - Operational Roles

Of the 307 schools offering breakfast, *Administrator(s)* and *School-based staff* (e.g., Learning Centre, resource staff) were most commonly responsible for running and overseeing the breakfast program, with 27% (n=83) and 27% (n=82) of schools reporting these roles, respectively. *Teacher(s)*, *Others*, *and Volunteer(s)* were reported to oversee breakfast programs in 14% (n=42), 12% (n=38), and 11% (n=35) of schools, respectively. Many "other" responses represented a combination of roles in the list provided, with some respondents providing comments that their program was a "team" or "group" effort. Few schools report that cafeteria staff run their program (n=25, 8%), and fewer still report that they have a student-led program (n=2, 1%).

Figure 3: Roles responsible for operation of school breakfast programs (N=307)

Who runs and oversees the operation of your school breakfast program?

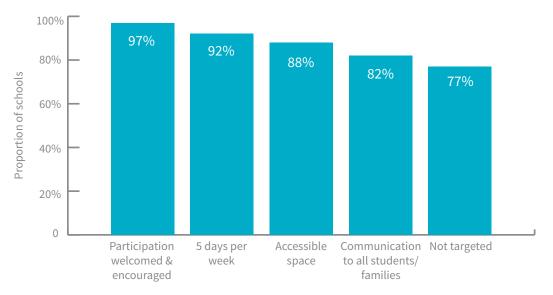


Breakfast Programs - Operational Practices

Schools were also asked to identify from a list of five best practices, which are used in the operation of their breakfast program. Of the 307 schools that responded to this question, 97% (n=299) report that all students are welcomed and encouraged to participate in the breakfast program without barriers or exception. Ninety-two percent (n=283) report that they offer their program 5 days per week.*** Eighty-eight percent (n=270) report that their program is operated in a space accessible to all students. Eighty-two percent (n=252) report that communication about the program is directed towards all students and families. Lastly, 77% (n=235) of schools' report that their breakfast program is not targeted to students based on perceived need.

Figure 4: Practices used to operate school breakfast program (N=307)





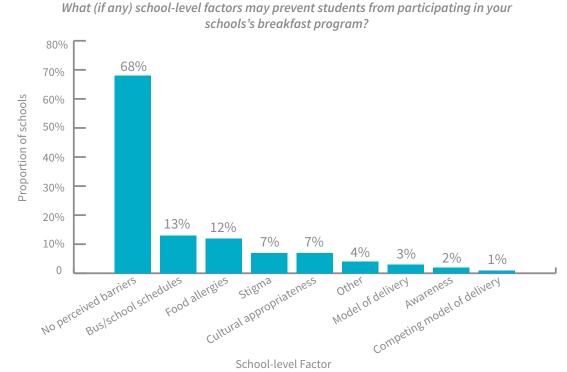
Operational Practice

^{***} Note: There is a discrepancy between the number of schools reporting they offer their program 5 days per week as an operational practice (92%, n=283), compared with the number of schools reporting they offer their program 5 days per week in question 2 of the survey (98%, n=301) (see Availability of Breakfast Programs).

Breakfast Programs - School-level Factors Preventing Participation

Of the 307 schools that responded to this survey question, 68% (n=210) report that there were no perceived barriers at the school level that impacted breakfast participation from the list provided. Thirteen percent (n=41) and 12% (n=37) of schools, respectively, report that bus/school schedules and food allergies were factors that prevented participation. All other factors listed were infrequently reported as perceived barriers impacting participation (ranging from 1-7% of schools). "Other" responses mainly represented issues around late arrivals, insufficient food or funding, and student food preferences.

Figure 5: School-level factors preventing participation in breakfast programs (N=307)



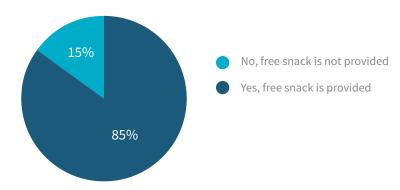
Foods Available Beyond Breakfast

Availability of Free Snacks

Of the 309 schools that responded to the survey question, 263 (85%) report currently offering a free snack to students during the school day. Forty-six (15%) schools report they do not currently offer a free snack to students, though it is not clear why this is the case. There is some variability across the province in whether free snacks are available to students in school, ranging from 68% of schools offering free snack in some RCEs/CSAP to 92% of schools in others.

Figure 6: Availability of free snacks in Nova Scotia public schools (% schools) (N=309)





Schools that offered free snack were asked to describe their offerings. The respondents' open-ended comments can be summarized under 4 key areas:^{†††}

Foods Offered

Some administrators provided descriptions of the types of foods served for snack. Most often administrators described offering a variety of perishable and non-perishable snacks, usually including fruit, cheese/cheese strings, and granola bars, and sometimes including yogurt tubes, cereal and milk. Approximately 40 schools (roughly 15% of those offering a free snack), also described foods offered as "leftover" or "extra" breakfast items. For schools offering single food items at snack, fruit was the most common, followed by granola bars and cereal.

Method of Delivery

Most schools report offering food through a snack basket- or fruit basket-type model. Other less common methods of delivery reported included snack carts, trays and pantries. In one RCE several schools report partnering with a non-profit to offer free snacks. SchoolsPlus was also a partner for some schools in delivering snack programs.

the Note: Administrators were asked to provide general comments to describe free snack delivery, if available. The four key areas described above were identified following preliminary data analysis. Some schools provided comments related to all four key areas, whereas some provided comments related to three or fewer.

Location

Classrooms and offices were the most frequent locations in schools where snacks were available. Approximately 23 schools (roughly 9% of schools offering free snack) also described making snacks available in multiple locations. Other locations for accessing snacks mentioned included school cafeterias, learning centres, lobbies/hallways, and student services.

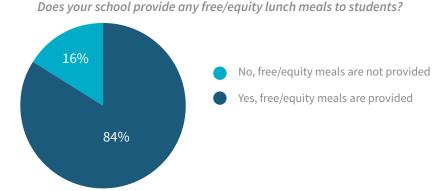
Accessibility

Most schools that provided comments on the accessibility of free snacks indicated that they were "always available" or available "throughout the day". The majority also indicated that free snacks were "available to all students", whereas fewer schools indicated that snacks were available on an "as needed" basis.

Availability of Free/Equity Lunch Meals

Of the 309 schools that responded to the survey question, 260 (84%) report currently offering free/equity lunch meals^{‡‡‡} to students during the school day, whereas 49 (16%) schools report they do not currently offer free/equity lunch meals to students.

Figure 7: Availability of free/equity lunch in Nova Scotia public schools 2022-23 (% schools) (N=309)



It is important to note that while there is an observable increase in the number of schools that report offering free/equity meals to students in 2022-23, these findings are not directly comparable to the 2021-22 SHEP survey data due to differences in survey methods and sample size. Further work is needed to determine the significance of these changes and to better understand possible contributing factors.

There continues to be variability across the province with respect to whether free/equity lunch meals are available to students in school, ranging from 68% of schools offering free/equity lunch in some RCEs/CSAP to 100% of schools in others. This is less variability than the 2021-22 school year when proportion of schools offering free/subsidized lunch ranged from 30% to 96% across RCEs/CSAP.

^{***} Free/equity lunch meals were defined as those provided to students on an ad-hoc basis to students when they don't have a lunch or money to purchase one.

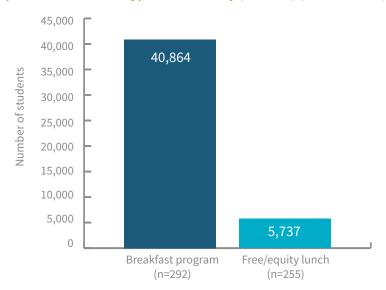
^{§§§§} In the 2021-22 survey, free/subsidized lunch meals were defined as "primarily offered in schools on an ad-hoc basis to a select number of students."

Student Participation in School Food Programs

Total Number of Students Accessing Breakfast and/or Free/Equity Lunch

A total of 292**** schools provided an estimate of the number of students accessing any foods or beverages offered as part of their breakfast program. On a typical school day, there are a total of 40,864 students accessing breakfast in these schools. Participation in free/equity lunch is more limited, with approximately 5,737 students reported to be accessing a free/equity lunch on a typical school day in the 255†††† schools that provided a response.

Figure 8: Total number of students accessing breakfast and/or free/equity lunch in Nova Scotia public schools on a typical school day (2022-23) (# of students)



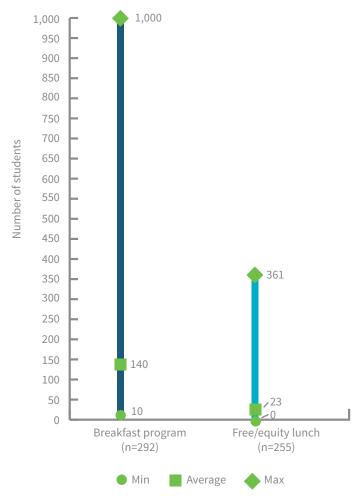
^{****} Note: Fifteen schools that report they offer breakfast programs did not report participation data or reported participation data in a manner that was unclear.

Note: Five schools that report they offer free/equity lunch did not report participation data or reported data in a manner that was unclear.

Range of Students Accessing Breakfast and/or Free/Equity Lunch Per School

The number of students accessing breakfast on a typical day per school ranges from a minimum of ten to a maximum of 1000, with an average of 140 students (standard deviation [SD] = 124.71). In comparison, the number of students accessing free/subsidized lunch on a typical day per school ranges from a minimum of zero to a maximum of 361, with an average of 23 students (SD = 37.49). ***

Figure 9: Range of students accessing breakfast and/or free/equity lunch per school (# of students)

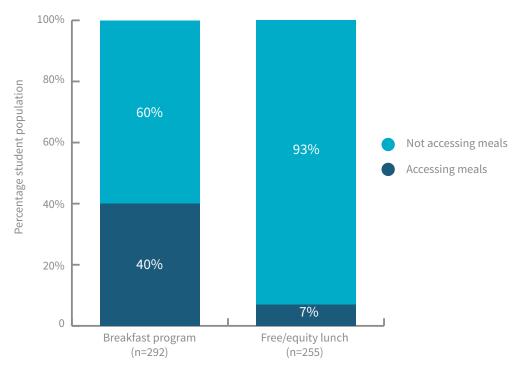


^{*****} Note: some variability may be attributed to differences in school population size—see proportion of student population accessing breakfast and/or free/subsidized lunch below.

Proportion of Students Accessing Breakfast and/or Free/Equity Lunch

The number of students accessing breakfast and/or free/equity lunch was also examined as a proportion of the total student population in Nova Scotia public schools. SSSS Of the 292 schools that provided participation rates for their breakfast programs, 40% of their summed total student population access breakfast on a typical school day. In comparison, of the 255 schools that provided participation rates for free/equity lunch, 7% of their summed total student population access free/equity lunch on a typical day.



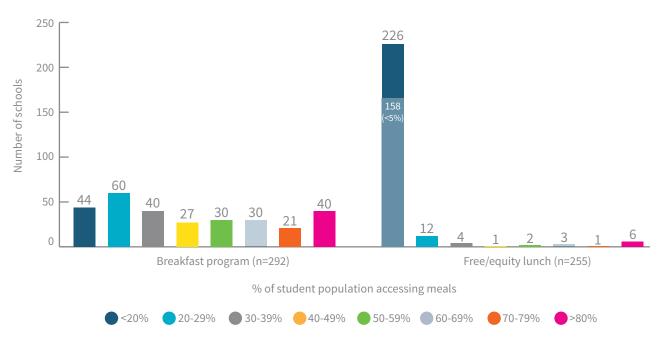


^{§§§§} Student populations are based on DEECD's 2022–23 school enrolment data available via: studentenrolmentsbyregionandschool2022-2023.xlsx (live.com)

Proportion of Student Population Accessing Breakfast and/or Free/Equity Lunch—Distribution Across Schools

Just over half of schools (N=171, 59%) report that less than 50% of their total student population access breakfast on a typical school day. There is still a relatively high number (N=121, 41%) that report 50% or more of their total student population access breakfast (5 of which indicate participation by 100% of their student population). Compared to breakfast programs, there is much less variation in the proportion of students accessing free/equity lunch in schools. Almost all schools that offer free/equity lunch to students (N=226) report that less than 20% of their student population access these meals on a typical school day, and 158 of which report access by less than 5% of their student population.

Figure 11: Proportion of student population accessing breakfast and/or free/equity lunch—distribution across schools (# of schools)



Successes and Challenges: Breakfast Program Operation and Participation

This year, qualitative data was collected using two optional open-ended questions. A total of 184 respondents shared details about the supporting factors or successes associated with their school breakfast program, and 160 respondents shared details about barriers or challenges.

School-level Supporting Factors or Successes

The main themes that emerged from the responses about facilitators or successes associated with breakfast programs included universality, volunteer/human resource capacity, operational practices, model of delivery, nutrition, and funding type.

Universality

Many respondents shared details related to the universality of their school breakfast program, often referring to the *accessibility, availability, non-stigmatizing nature of programming, and student participation*. Respondents described their breakfast programs as accessible and available to all students, sometimes beyond typical breakfast hours and for some schools, all day. Many described their breakfast program as available and offered to all students and implemented in a non-stigmatizing way.

Because the baskets are easily accessible and visible for students, it provides the opportunity for all kids to eat breakfast (or supplement their breakfast from home) together. Everyone knows they are welcome and have the opportunity for something to eat.

We talk about the importance of healthy eating and the impact on learning for all students...not about someone's need to access food. It is universally offered to all students, so it is very easy for any student to get what they require.

Human Resource Capacity

Another common supporting factor or success was human resource capacity, specifically volunteers. Most respondents identified staff members such as *administrators*, *administrative assistants*, *teachers and educational assistants* as the individuals who oversee or operate their programs. This was followed by *student volunteers* and a combination of *parents and community members*. Administrators described the success of their breakfast program as contingent on having access to staff or volunteers who support its operation.

Getting food and sorting it is very time consuming for staff and administration. We are lucky to have a supportive staff that will get these items on their own time and help outside of school hours.

Volunteer groups are vital to the successful operation of our breakfast program. The program is well used and provides a vital service.

Nutrition

The topic of nutrition was noted as a success, specifically *nutritious offerings/healthy choices*, the ability of programs to *meet specific dietary needs of students*, *and food variety*. *Nutritious offerings/healthy choices* included references to specific food items, such as "fresh fruit", as well as the general availability of healthy foods. Multiple schools shared that they *meet specific dietary needs of students*, such as food preferences or allergies/intolerances. Offering a *variety of food items* was believed to be helpful and a way to attempt to reach as many students as possible.

We are fortunate to have an amazing admin assistant and several volunteers for our breakfast program. They prepare food items that we otherwise might not be able to provide students. Students also have the opportunity to eat nutritious (fruits and vegetables) foods that they otherwise might not be able to eat. Students are also trying new things and learning about healthy eating habits.

Model of Delivery

The grab and go model of delivery was viewed as a supporting factor or success of breakfast programming. This model is offered many ways, including in the classroom or in multiple locations throughout the school, and provides students with what is believed to be an easy and stress-free way of accessing food at school.

By providing the breakfast program in bins located in the office and classrooms, all students have an opportunity to access food. The bin that is kept in the office is also filled multiple times throughout the day.

Majority of our students utilize the breakfast program. Having the program available in the classroom makes it available to everyone. It also makes it equitable without stigma.

Operational Practices

The theme of operational practices included a variety of sub-themes with the two most common being *partnerships/collaboration* and *procurement practices*. References to *partnerships/collaboration* included relationships with local organizations or food producers who provide food for school breakfast programs, or collaboration between those responsible for operating the breakfast program (e.g., volunteers and administrator). References to *procurement practices* often cited having support for food purchasing and preparation (e.g., dedicated staff) or the delivery of food.

We have created a relationship with a local bakery to provide us bread for our program, which is made with no preservatives. The cost is also decreased, as we purchase day old bread and freeze it for future use.

We have many using the breakfast program, relies heavily on Principal for ordering, cleaning, organizing and putting away. Educational Assistant supports me as well.

Ability to have delivery from [wholesale grocers] and a community market.

Funding Type

Most respondents indicated that SHEP funding, and support beyond SHEP in the form of grants and community donors, contribute to the success of their breakfast program.

We have a variety of funds supporting food for students in our school. We have built a very successful program that offers a variety of choices for students.

We are fortunate to have several community organizations that donate and help to subsidize our breakfast program in addition to the funding we already receive.

Other

In addition to the themes outlined above, respondents noted other supporting factors and successes including the recognition that breakfast programs are enjoyed by students and provide them with the opportunity to socialize. Furthermore, breakfast programs provide students with a foundation for learning and the opportunity to learn about healthy food choices and helping others. Lastly, program success was believed to be a result, in part, due to both monetary and non-monetary donations from the community.

Our program supports our students' nutritional needs as well as social emotional needs. Many students sit together to eat and socialize. They are learning about healthy food choices, making positive connections with peers and adults, and recognizing the value in helping others as many take turns cleaning up and serving drinks. The program would not be possible without monetary donations we receive through this grant and contributions from our community. We also have dedicated volunteers- who make it possible.

School-level Barriers or Challenges

The main themes that emerged from the responses about barriers or challenges associated with breakfast programming were human resource capacity, funding, procurement practices, cost of food, and infrastructure.

Human Resource Capacity

The most common barrier/challenge shared by respondents was human resource capacity, which touched on many different aspects of volunteerism. *Lack of volunteers or limited volunteers* was the most frequently cited barrier or challenge in the implementation of breakfast programs. This was followed by challenges related to *obtaining volunteers* and the *need for more volunteers* to support programming. It was evident that breakfast programs (including models and types of food served) are influenced by the capacity of administrators to secure volunteers, both from the school (e.g., staff) and the community.

Currently, the model we are using is limited by the amount of time people are able to dedicate to securing and preparing food.

This program requires a significant time commitment. We are fortunate to have one volunteer who comes every day to prepare the breakfast bins; however, it is difficult to find others.

Funding

Some respondents simply shared that funding or finances were a challenge, while others specifically shared that funding is inadequate or insufficient. Additionally, many cited budgetary limitations or constraints as a barrier to being able to meet the needs of students, especially given the rising cost of food and increasing levels of student participation. Others shared that the budget they receive is not enough to respond to the demand, which often results in some schools seeking additional funds to supplement their breakfast program.

Finances are sometimes a barrier in keeping with level of support we are trying to provide. Fresh fruit and veggies, in particular, are expensive. We are always looking for other funding sources including donations.

Procurement Practices

Respondents shared details about the *inefficiencies* of breakfast programming, specifically challenges with providing a cost-effective program. The budgeting and purchasing of items, specifically fresh fruit, is challenging especially when a *limited number of staff* are responsible for food purchasing and preparation. Some schools also shared that they experience challenges with their *foodservice provider*, including limited or inconsistent food availability, having to adhere to order deadlines, cost, and food waste due to high order volumes. As mentioned above, limited human resource capacity and the time required to plan and purchase also creates challenges for procurement as many breakfast programs depend on one person, or a small group of people, to complete all food purchasing.

Although funding is available to provide the food for the Breakfast Program, no funding is provided to hire someone to manage it. The cafeteria coordinator is busy accepting lunch orders and collecting money. We only have one cafeteria staff member. Currently, a volunteer parent does the grocery shopping, picks up supplies and delivers them for the program. She shops at the discount grocery store to save money. A teacher organizes the breakfast foods each morning. If we didn't have these people agreeing to do this, we would not be able to offer the Breakfast Program. There needs to be some funding to provide the human resources to support this program.

Cost of Food

Most respondents identified the *cost of food* as a barrier or challenge associated with their school breakfast program. Some elaborated on the cost of specific foods, such as fruits and vegetables. Others shared that cost is prohibitive to their ability to offer food to all students, and that the cost of food limits selection or prevents expanding food options available to students. Beyond general comments about the cost of food, there were several respondents who commented specifically about the *rising cost of food*, which can affect a school's ability to provide the best version of its program. For one school, the rising cost of food resulted in needing to obtain sponsors and donations to serve healthy options.

With the rising cost of food, we are doing our best to obtain sponsors and get donations so we can offer as many healthy options to students.

Food costs are becoming a concern and I worry it is going to limit the items we can serve. Rising food costs not only impacts our budget, but also has created a greater number of students who are accessing it.

Infrastructure

There were some challenges and barriers associated with different aspects of infrastructure. Some schools report *not having kitchen space or cafeteria space*. This limits access to food preparation facilities, which in turn, limits the model of program delivery and the types of food items offered. Schools without the appropriate food preparation space are unable to offer hot breakfast and typically offer a grab and go model of delivery. Other common challenges related to infrastructure included having *enough space for food storage*, inadequate preparation space or having to share kitchen space with cafeteria staff, and not having space for students to have sit-down meals.

We do not have a kitchen space so offering something other than grab and go is difficult.

The ordering of fresh fruit needs to be in large quantities. Therefore, storing it and using it before it's spoiled is a challenge.

Other

There were a variety of other barriers or challenges shared by survey respondents, including the need for more resources (e.g., time, money, supplies), late student arrivals (largely due to bus schedules), food variety, special dietary needs, and misconceptions families have about breakfast programs.

I would like support in providing more variety however, I find budget and time are big limits. It would be great if there were easy central ordering that we don't have to organize. I would love healthier options but with the ease of the grab and go.

Many of our bus students arrive very close to the bell, this might impact use on certain days.

Some families do not wish for their child to participate. They think that the food should be for those students who need it. They don't want to take it away from them.

WHAT DO THE 2022-23 SURVEY RESULTS TELL US ABOUT HOW WE CAN ENHANCE SHEP IN NOVA SCOTIA?

Availability and Participation in Breakfast Programs

Consistent with the 2021-22 Provincial SHEP Report, SHEP-funded breakfast programs continue to be highly available across the province, with 99.4% of schools offering a breakfast program that is available to students 5 days per week. Despite high availability, there continues to be variability in the proportion of students accessing breakfast programs from school to school (ranging from 3% to 100% of a school's total population). The 2022-23 SHEP survey explored possible reasons for this variability further, including the extent to which supportive practices for universal programming are applied and potential school-level barriers to breakfast program participation from the perspective of program administrators.

Universal Practices

Overall, schools report applying operational practices that would support universality in their breakfast programs. Almost all school respondents indicated that *all students* are welcomed and encouraged to participate in their breakfast program without barriers or exception, that their program is operated in a space accessible to all students and that communication about their program is directed towards all students and families. There was, however, a much smaller proportion of schools that reported their breakfast program is not targeted to students based on perceived need. This finding is important, given that research has demonstrated the potential harms associated with targeted practices and their impact on participation for intended populations. While qualitative findings suggest that many administrators view universality and accessibility as key contributors to program success, they also name system and operational barriers, such as human resource capacity, funding and procurement challenges, and lack of appropriate infrastructure as impacting their ability to provide healthy food for all students. It will be important to continue to monitor factors that may limit the accessibility and reach of breakfast programs including those that may lead to targeted approaches.

School-Level Barriers

When asked to name school-level barriers that may impact student participation in breakfast programs, most administrators reported no perceived barriers from the list provided. Some schools did indicate that bus/school schedules and food allergies may impact student participation; however, administrators also spoke about the potential of grab and go and mixed models to accommodate the needs of a variety of students and ensure students who arrive late still have access to food.

Interestingly, the finding that there are no perceived school-level barriers to student participation in breakfast programs is not consistent with quantitative findings, which shows a high degree of variability in rates of student participation reported from school to school. The fact that student participation in breakfast continues to range from 3% to 100% of a school population suggests there are factors that impact the extent to which students access and use these programs. It may be that students and families hold a different perception or understanding of the intention of breakfast programs or face barriers that are unknown to program administrators.

In addition to addressing system level barriers to program implementation, working with students, families, and school communities to better understand their perspectives and experiences, including barriers and facilitators that impact their decision to participate in school food programs may be an important next step to improve participation and access.

Breakfast Program Characteristics and Models of Delivery

Other areas explored in the 2022-23 SHEP survey included breakfast program characteristics, such as operational roles and types of foods served.

Operational Roles for Breakfast Program Implementation

Quantitative findings indicate administrators and other school-based staff are most often responsible for overseeing breakfast programs; however, the qualitative data indicates that many schools rely on volunteerism, from both staff and community members, for day-to-day operation of programs. Consistent with findings from the 2021-22 Provincial SHEP Report, human resource capacity continues to be a challenge for program operation and was the most common challenge mentioned in the administrators' comments.

Types of Foods Served in Breakfast Programs

Administrators report that provincially funded breakfast programs are offering a variety of nutritious food options ranging from fresh, perishable items (e.g., fruit) to non-perishable, pre-packaged items (e.g., granola bars). This was further supported by qualitative findings in which administrators described offering nutritious foods as an important success of their programs. Future quality improvement efforts at the school or regional level could consider an assessment of whether the types of foods offered meet the needs of all students and reflect the diversity of the school community. This work is particularly important to ensure SFPs support inclusive food environments, which can enhance students' learning, sense of belonging, social connection, and enjoyment of eating. 12,13

Models of Delivery of Breakfast Programs

Findings related to breakfast program models of delivery showed that grab and go models were the most used provincially and were widely viewed as a preferred model to increase program accessibility and reach among students. This was also reported in the qualitative data where administrators indicated that the grab and go model was a key factor in their program's success. This finding is supported by recent research in the US which indicates that strategies for breakfast program delivery, including grab and go, second chance breakfast and breakfast in the classroom are associated with increased breakfast program participation.¹⁴

Although less common, sit-down models and mixed models were perceived to have their own advantages, in particular social connection, and flexibility, respectively. As anticipated, there were some differences in the types of food served across the different models of delivery.

While grab and go models were able to offer many healthy options, there was a higher proportion of grab and go programs offering granola bars and lower proportion offering yogurt, cereal, milk, toast, and bagels on a typical school day. These findings confirm common assumptions regarding the limitations of foods that can be offered through a grab and go model. In comparison, survey findings suggests that sit-down and mixed models may be able to provide more variety, and fresh, perishable items requiring cold storage and preparation. Some administrators also indicated a desire to move towards a sit-down or mixed model of delivery but were unable to do so due to human resource constraints.

Foods Offered Beyond Breakfast

Free/Equity Lunches in Schools

With respect to foods offered beyond breakfast, access to a free/equity lunch is variable and in some schools is not provided. While findings from this year's survey on free/equity lunch are not directly comparable to the 2021-22 SHEP survey results due to differences in survey methods,***** there is an observable increase in the number of schools that report offering free/equity lunch meals, as well as the number of students accessing these programs. Possible explanations for the high proportion of schools offering free/equity lunches to students in 2022-23 may include the one-time 186% increase in provincial funding, an increase in the numbers of students requiring access to free/equity lunch, and/or increased awareness of the importance of providing students with access to a healthy lunch in school. It is important to note that while a high number of schools report offering these meals in 2022-23, most schools are only serving a small proportion of their total student population (less than 5%). This is consistent with 2021-22 SHEP survey findings, indicating that free/equity lunch meals remain primarily ad-hoc in nature, offered to a select number of students. While drawing comparisons was not a primary objective of this year's survey, future quality improvement efforts should consider survey design to effectively monitor changes in program availability and participation.

Free Snacks in Schools

A new finding that 85% of schools are offering a free snack shows that students in many schools across the province may have an additional point of access to healthy food during the school day. While administrators were asked to report on availability of free snack programs, descriptions of snacks offered indicate they are mainly offered in an ad-hoc manner and there is considerable variability in the quality and quantity of foods offered, the location and method of delivery within the school environment, and which students within the school community have access. Future surveys could further define free snack programs and explore elements such as student participation, accessibility, and funding sources in more detail.

^{*****} See Limitations and considerations and Availability of Free/Equity Lunch Meals for further details.

CONCLUSIONS

Students in Nova Scotia public schools continue to have good access to provincially funded breakfast programs, with more limited access to free/equity lunch meals and free snacks. Based on self-reported data from school administrators, this year's SHEP survey provides a more in-depth understanding of breakfast program characteristics, including that most schools report applying universal practices and are offering healthy food options. The variability in models of delivery, and the perceived benefits of each demonstrate the importance of flexibility and autonomy at the school level to determine the model best suited to available supports, infrastructure, and student needs. While administrators report valuing and applying practices that support universal, accessible breakfast programming, there continues to be variability in student participation across the province, suggesting there are factors that impact students and families access and use of SFPs.

Consistent with the 2021-22 SHEP Provincial report, administrators described system-level barriers, including human resource capacity, funding and procurement challenges, and lack of appropriate infrastructure as impacting the success of their breakfast programs. These findings provide further weight and credibility to key informant interviews conducted in 2021-22 and point to the need to work collaboratively to ensure the necessary human resource capacity and infrastructure are in place to support ongoing efforts to enhance program quality and reach. Future investment in breakfast programs should also consider establishing benchmarks¹⁵ for student participation or other program components. Not only would participation benchmarks provide an important target for quality improvement, but they could also help to support continued efforts towards universal participation.

APPENDIX A: School Healthy Eating Program Survey Questions

Section 1) General Information

Please provide the following contact information as the representative completing this survey on behalf of your school.

This information will only be used for future survey distribution purposes and/or to contact you to confirm or clarify the responses provided.

- School name
- Select your RCE/CSAP
- First name
- Last name
- Administrative Role (for example, principal or vice principal)
- Email address

Section 2) Breakfast Programs

The following section is intended to collect information on your provincially funded school breakfast program.

- 1. Is your school offering a breakfast program this school year (2022-2023)?
 - No
 - Yes

If no, please explain why.

- 2. On average, how many days per week is your school breakfast program available to students?
- 3. What model of delivery do you use for your breakfast program?
 - a. Grab and Go in a central location (e.g., main office or central hallway)
 - b. Grab and Go in multiple locations throughout the school
 - c. Grab and Go in the classroom
 - d. Sit-down Model (e.g., there is dedicated space where students sit together to eat breakfast)
 - e. Mixed model (i.e., option to Grab and Go or Sit-down)
 - f. Students ask staff to access breakfast program
 - g. Other
 - a. If other, please describe: _____
- 4. Why does your school use this model of delivery? (i.e., logistical reasons, perceived benefits)
- 5. Who runs and oversees the operation of your school breakfast program?
 - a. Administrator(s)
 - b. Teacher(s)
 - c. School-based staff (e.g., Learning Centre, resource)
 - d. Cafeteria staff
 - e. Volunteers (e.g., parent, member of community)
 - f. Student-led
 - g. Other
 - If other, please describe: _____

- 6. On a typical day, what types of items are served at your breakfast program?
 - Vegetables and Fruits
 - Fresh fruits
 - Fresh vegetables
 - Fruit cup

Protein

- Milk
- Yogurt
- Cheese
- Eggs

Grain

- Cereal
- Toast
- Bagel
- Crackers

Other

- Muffins
- Banana Bread (or similar)
- Granola bars

Please list any additional items here:

- 7. Please identify the practices that your school uses to operate its breakfast program? Select all that apply.
 - a. Communication about the breakfast program is directed towards all students and families
 - b. All students are welcome and encouraged to participate without barriers or exceptions
 - c. Program is not targeted to students based on perceived need
 - d. Operates five days per week
 - e. Operates in a space accessible to all students (e.g., main office or hallway, classroom)
- 8. What (if any) school-level factors may prevent students from participating in your school's breakfast program? Select all that apply.
 - a. Current model of delivery
 - b. Competing model of delivery (e.g., fee-based breakfast option)
 - c. Bus/school schedules
 - d. Stigma/perceptions of students/families that the breakfast program is only for students experiencing food insecurity
 - e. Students/families are not aware of the program and/or that is open to all students
 - f. Food allergies/dietary requirements
 - g. Cultural appropriateness of foods offered
 - h. No perceived barriers
 - i. Other

If other	please describe:	
n ouner.	blease describe.	

- 9. Please use this space to include anything you want to share/want us to know about the supporting factors or successes associated with your breakfast program.
- 10. Please use this space to include anything you want to share/want us to know about barriers or challenges associated with your breakfast program.

Section 3) Foods Available Beyond Breakfast

- 11. Do you offer a free snack program during the instructional day?
 - a. Yes
 - b. No

If yes, please describe (e.g., basket(s) of fruit always readily available):

- 12. Does your school provide any free/equity lunch meals** to students?
 - a. Yes
 - b. No

Section 4) Student Participation in School Food Programs

- 13. Select one typical day to report on the total number of students accessing any items offered as part of your breakfast program.
- 14. Which tally method did you use to collect this number?
 - a. Pen and paper
 - b. Clicker (hand-held or smart phone app)
 - c. Other

If other, please identify the method used.

- 15. Select one typical day to report on the total number of students that are provided with free/equity lunch meals?
- 16. Which tally method did you use to collect this number?
 - a. Pen and paper
 - b. Clicker (hand-held or smart phone app)
 - c. Other

If other, please identify the method used.

SCHOOL HEALTHY EATING PROGRAM SURVEY 2022-2023 STUDENT PARTICIPATION TRACKING FORM

Please assign a staff member(s)/volunteer(s) to track student participation in your school breakfast program and the delivery of any free/equity lunch meals (if applicable). If your school offers breakfast programming in the classroom, have each teacher complete this form and report the "total number of students served" for their classroom before calculating the sum for your school. The total sum for the entire school should be entered into the online survey.

To calculate total participation in your provincially funded breakfast program:

- 1. Select one typical school day to count students.
- 2. Have one staff member/volunteer (per classroom, if applicable) keep track of students as they are served.

oTracking should be completed using a tally method (e.g., handheld counter, phone app counter, pen and paper).

- 3. Count each student only once if they are served any foods or beverages offered for breakfast
- 4. Using the box below, record the final tally in the "total number of students served" and the tally method used to conduct your count. All counts done for the school should be completed by first break.
- 5. Once complete, submit this form to your school Administrator.

Use this space as needed to keep count of your school's provincially funded bre	t of students who are served any foods or beverages offered as part eakfast program.
Total number of students served:	
Tally method used:	

To calculate total participation in free/equity lunch meals:

- 1. Select one typical school day to count students.
- 2. Have one staff member (per classroom, if applicable) keep track of students as they are served.
 - Tracking should be completed using a tally method (e.g., handheld counter, phone app counter, pen and paper).
 - For free/equity meals, is important to ensure this information is captured discretely to protect privacy and avoid any potential stigma.
- 3. Count each student only once if they are served any foods or beverages associated with free/equity lunch meals.
- 4. Using the box below, record the final tally in the "total number of students served" and the tally method used to conduct your count. All counts done for the school should be completed after lunch break.
- 5. Once complete, submit this form to your school Administrator.

Use this space as needed to keep count with free/equity lunch meals.	t of students who are served any foods or beverages associated
Total number of students served:	
Tally method used:	

APPENDIX B: Funding Guidelines and Criteria

HEALTH PROMOTING SCHOOLS

FUNDING GUIDELINES AND CRITERIA

2023 – 2024

Working together to foster healthy, inclusive, and vibrant school communities where the climate and culture, policies, practices, opportunities, and physical design enable everyone to learn, grow, thrive and succeed.

Background

The <u>Health Promoting Schools (HPS) Provincial Guiding Document</u> (2015) provides a common direction and proven elements of the HPS approach towards holistic health and learning. These elements help ensure the approach continues in a strategic, coordinated, evidence-informed manner while providing flexibility and decision-making at the local level.

HPS funding is intended to contribute to this approach by supporting collaboration and upstream action. Proactive action promotes the flourishing of the entire school population while simultaneously reducing the need for intensive interventions that focus on the behavior change and treatment of individuals. HPS strategies and actions supported through this funding are to focus on changing the context of the school environment to foster health, wellbeing and student success. HPS funding is an opportunity to think big and collectively address systemic barriers.

HPS funding has been provided in Nova Scotia since 2005 and is coordinated by the provincial Science and System Performance Unit within Public Health at Nova Scotia Health. The HPS funding model functions as an umbrella and includes the supplementary healthy food environment funding envelopes of **School Food and Nutrition Policy (SFNP) Funding** and School Healthy Eating Program (SHEP) Funding provided by the Province of Nova Scotia.

Guidelines and Criteria for Eligible Expenses

Health Promoting Schools (HPS) Funding

HPS funding is provided annually to support the advancement of evidence-based planning and action to enhance aspects of school communities that strongly impact health and learning, as well as to support collaborative processes that have – and continue to be – fundamental to the success and sustainability of this work.

HPS funding is intended for:

- collaborative planning and implementation of strategic initiatives that result in changes to
 environments, opportunities, practices and policies at the RCE/Board level and/or individual
 school level (including elementary, junior and senior high);
- human resources needed to facilitate the work; and
- development of HPS leadership and partnerships across health and education systems.

Eligible expenses for HPS funds may include professional training opportunities to build capacity for Health Promoting Schools and upstream action; planning and partnership development; resources and grants to schools, support for workshops/meetings, human resources and honoraria that support broader system change. HPS funding is not intended to be used for service delivery or individual supports for children and youth. Promotional and marketing materials are also ineligible.

SUPPLEMENTARY FUNDING

School Food and Nutrition Policy (SFNP) Funding

SFNP funding was introduced to support the 2006 <u>Food and Nutrition Policy for Nova Scotia Public Schools</u>. Funding has continued to be offered to **build leadership and support** and to **help remove barriers** to full policy implementation and adherence.

Eligible expenses include capacity building related expenses, professional development/ training, equipment related to school food, resources, grants, workshops, contracts for human resources and honoraria.

School Healthy Eating Program (SHEP) Funding

This funding is for healthy school food programs in the school environment, with a priority focus on breakfast programs. The vision is that all schools in Nova Scotia will offer healthy, universal breakfast programs five days per week, where every student has equal opportunity to access a healthy meal or snack in a non-stigmatizing way. This funding is **not** intended to support food banks, food pantries and gift cards. Programs must follow the Food and Nutrition Policy and the <u>Provincial Breakfast Program Standards</u>.

The specific spending criteria are as follows:

- food and beverages (only those that adhere to the Food and Nutrition Policy)
- supplies and equipment (no more than 10% of the total SHEP funding)
- wages for program staff, honoraria for program volunteers and mileage reimbursement

Once a school can demonstrate that every student has access to a nutritious breakfast every school day, the school can distribute any remaining SHEP funds to other school-based healthy eating programs that support implementation of the *Food and Nutrition Policy*.

REFERENCES

- 1 Wyonch, R., & Sullivan, A. (2019). *Health and grades: Nutrition programs for kids in Canada.* C.D. Howe Institute Commentary, 532.
- 2 Hoyland, A., Dye, L., & Lawton, C. L. (2009). A systematic review of the effect of breakfast on the cognitive performance of children and adolescents. *Nutrition Research Reviews*, *22*(02), 220–243.
- Adolphus, K., Lawton, C. L., Champ, C. L., & Dye, L. (2016). The effects of breakfast and breakfast composition on cognition in children and adolescents: A systematic review. *Advances in Nutrition*, **7**(3), 590S–612S.
- 4 Pucher, K. K, Boot, N. M. W. M., & De Vries, N. K. (2013). Systematic review: School health promotion interventions targeting physical activity and nutrition can improve academic performance in primary- and middle school children. *Health Education*, *113*(5), 372–391.
- 5 Shankar, P., Chung, R., & Frank, D. A. (2017). Association of food insecurity with children's behavioral, emotional, and academic outcomes: A systematic review. *Journal of Developmental & Behavioral Pediatrics*, *38*(2), 135–150.
- Bradley, B., & Green, A. C. (2013). Do health and education agencies in the United States share responsibility for academic achievement and health? A review of 25 years of evidence about the relationship of adolescents' academic achievement and health behaviors. *Journal of Adolescent Health*, *52*(5), 523–532.
- Men, F., Urquia, M. L., & Tarasuk, V. (2021). The role of provincial social policies and economic environments in shaping food insecurity among Canadian families with children. *Preventive medicine*, *148*, 106558.
- 8 Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data capture (REDCap) A metadata-driven methodology and workflow process for providing translational research informatics support. *Journal of Biomedical Informatics*, 42(2), 377–81.
- 9 Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., Duda, S. N., & REDCap Consortium (2019). The REDCap consortium: Building an international community of software partners. *Journal of Biomedical Informatics*, *95*, 103208. https://doi.org/10.1016/j.jbi.2019.103208
- Loopstra, R., & Tarasuk, V. (2015). Food bank usage is a poor indicator of food insecurity: Insights from Canada. Social Policy and Society, 14(3), 443–455.
- Pineau, C., Williams, P., Brady, J., Waddington, M., & Frank, L. (2021). Exploring experiences of food insecurity, stigma, social exclusion, and shame among women in high-income countries: A narrative review.
- NS Department of Education and Early Childhood Development. (2023). Inclusive Education. Retrieved from: Inclusive Education | Education and Early Childhood Development (ednet.ns.ca)
- Wilson, T., & Shukla, S. (2020). Pathways to the revitalization of Indigenous food systems: Decolonizing diets through Indigenous-focused food guides. Journal of Agriculture, Food Systems, and Community Development, 9(4), 201–208. https://doi.org/10.5304/jafscd.2020.094.003
- Hecht, A.A., Olarte, D.A., McLoughlin, G.M. & Cohen, J.F.W. (2023). Strategies to increase student participation in school meals in the US. *Journal of the Academy of Nutrition and Dietetics*, *123*(7), 1075-1096.
- Ruetz, A. T., & McKenna, M. L. (2021). Characteristics of Canadian school food programs funded by provinces and territories. Canadian Food Studies / La Revue canadienne des études sur l'alimentation, 8(3).

