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Consumer Preferences for Food and Beverages in Algoma's Recreational Facilities



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For

Healthy Communities
Partnership Algoma
and
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Executive summary

Providing healthier food and beverages in recreational settings can influence the behaviour of people and improve their health by making it easier for them to access healthier choices. Food and beverage concession owners and operators located in recreational facilities have a role to create healthier food environments. There is a need to better understand the food environment in local recreation facilities to help determine ways to increase the availability of healthier food and beverages.

The purpose of this study was to conduct a consumer survey with residents who visit recreation facilities in the Algoma District. Survey questions focused on identifying:

- Demographic characteristics and food purchasing behaviours of patrons in recreational facilities in the Algoma District
- Patrons' level of satisfaction with the food choices available at various recreational facilities
- Patron's demand for healthy food choices offered at recreational facilities

This survey was conducted by Algoma Public Health, on behalf of the Healthy Communities Partnership Algoma. The author of this report was hired to analyze the findings and recommend strategic actions.

The overall results show an interest by the majority of respondents for healthier food and beverages offered at recreational settings across the Algoma District.

This level of consumer interest fits well with readiness expressed by many local concession owners and operators to receive information and support regarding changes to their snack bars or concessions stands that would make healthier food and beverage options available. A major concern expressed by concession owners and operators is uncertainty about consumer demand to purchase healthier items.

Results from this survey can help to alleviate concern about consumer demand. The results also provide information from respondents about the types of items they purchase on site or bring with them from home or other venues and why they do or do not purchase food and beverages on site. The findings could be used to inform strategies to increase overall sales and attract more customers in recreational settings.

Based on findings from the consumer survey, this report describes actions that could be considered as part of a strategy to support local concession owners and operators who are interested in increasing healthier food options at their recreation facilities. The suggested actions to consider include:

- A communication strategy aimed at patrons of recreation facilities designed to increase knowledge and change attitudes about the importance of making healthier food choices. This could be tied to promotion of any changes in food and beverage offers that concession owners and operators may decide to make.
- Promotion of findings from this study as part of ongoing communication with owners and operators so they are aware of consumer demand for healthier food and beverages and the types of items patrons would like to see offered

- Promotion to concession owners and operators about how safe food handling training for staff and volunteers may help to build consumer confidence in the safety and quality of the food and beverages provided in their facilities
- A trial conducted with a variety of recreational facilities in the Algoma District to help demonstrate if indeed patrons in Algoma will purchase healthier food and beverages. This trial should build in a tracking process to collect baseline data prior to implementing any changes and to monitor which items are most popular, the ideal price point for consumers and which items bring the best profit returns to concession owners and operators.
- A list of healthier food and beverages for concession owners and operators to consider offering. The results from this study can help inform popular items to consider for the list. Discussions with interested concession owners and operators could help identify where they purchase their food to ensure the suggested healthier items are available at those locations. Other concerns to consider are cost, storage needs and food spoilage.

To continue a movement towards increasing healthier food and beverage options in recreational settings in the Algoma District, all concession owners and operators could be sent key messages from the findings of this consumer survey. This communication will reinforce the commitment of Algoma Public Health and the Healthy Communities Partnership Algoma to help address a question asked often by facility contacts i.e., do patrons want healthier food choices offered at recreational settings and if so, what options would appeal to them?

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Introduction

In May 2015, Algoma Public Health, on behalf of the Healthy Communities Partnership Algoma, invited residents who use recreational facilities such as arenas and community centres in the Algoma District to participate in an online survey. The purpose of the consumer survey was to better understand the food environment at 32 identified recreational facilities by looking at:

- Demographic characteristics and food purchasing behaviours of patrons in recreational facilities in the Algoma District
- Patrons' level of satisfaction with the food choices available at various recreational facilities
- Patron's demand for healthy food choices offered at recreational facilities

This report summarizes the combined responses to the survey; individual respondents are not identified.

Background

The Healthy Communities Partnership Algoma is a district-wide community-based program that aims to help people lead healthy and active lives.

In 2011, the partnership developed a Community Picture Report (Healthy Communities Partnership Algoma, 2011). The report provides a detailed overview of the Algoma District's community health status and presents healthy eating as one of three top priorities identified consistently across all municipalities.

Based on recommendations by provincial groups such as the Ontario Chronic Disease Prevention Alliance (2010) and Ontario's Healthy Kids Panel (2014) to improve food environments in recreational settings and the identification of healthy eating as a local priority, the Healthy Communities Partnership Algoma and Algoma Public Health agreed to work together to increase the access to healthy food choices at municipal parks and recreational facilities. This work aligns with Algoma Public Health's mandate to work with municipalities to support policies and environments that encourage healthy eating in recreational settings (Ontario Public Health Standards, 2008, p. 29) and aligns with the policy outcome to increase access to healthy foods in the Community Picture Report.

In March 2015, the Healthy Communities Partnership Algoma and Algoma Public Health conducted a survey with concession owners and operators from recreational facilities in the Algoma District. The purpose of the survey was to better understand healthier food choice policies and practices in recreational facilities, barriers to developing healthy food policies or guidelines and how to help recreation providers develop healthy food choices in recreational facilities. Findings from the survey suggested that concession owners and operators at many recreational facilities in the Algoma District are willing to explore the possibility of providing healthier food and beverages; some already provide these items in their vending machines or have begun to consider offering items such as yogurt smoothies. Respondents expressed some barriers to making healthy food choices available such as storage and preservation of food. The biggest concern that concession owners and operators expressed was the fear of financial loss. They wanted to know if patrons want healthier food choices offered (Gallant, 2015).

To further understand the food environment at recreational facilities and respond to concession owner and operator concerns about consumer demand for healthier food and beverage choices, the health unit and partnership conducted a consumer survey.

Methodology

A dietitian and public health nurse at Algoma Public Health prepared an online survey with input from members of the Healthy Communities Partnership Algoma (Appendix 1). They selected the survey questions based on the following sources:

- Healthy Foods In and Out of Schools; Recreation Setting Consumer Survey Summary (Renfrew County and District Health Unit, 2013)
- Tilbury Arena Consumer Survey (Chatham-Kent Public Health Unit, 2010)
- Results from the 2012-2013 HLN Arena Survey, Fuelling Healthy Bodies (Niagara Region Public Health & Healthy Living Niagara, 2013)

Health unit staff posted the survey on the health unit's web site and promoted the survey through two online community news outlets, Wawa-news.com and SooToday.com. A copy of the promotion is in Appendix 2.

Invitations to participate in the survey were sent by email to health unit staff, partners of the Healthy Communities Partnership Algoma, and members of the health unit's workplace contact list. Recipients were encouraged to forward the invitation to their contacts, especially people who frequent recreational facilities in the Algoma District (Appendix 3).

Respondents were offered an incentive of having their name entered into a random draw for a \$250 gift card to a grocery store of their choice.

Data was collected using Survey Monkey. It was transferred into excel for analysis and theming.

Results and interpretation

Description of respondents

A total of 347 people in the Algoma District responded to the consumer survey. The majority of respondents were women (81.3 per cent). Most respondents were aged 50-59 (27.5 per cent) followed by ages 30-39 (23.4 per cent) and ages 40-49 (20.5 per cent). These last two groups (ages 30-49) typically represent the age group with children living at home. When combined, they represent over half (50.9 per cent) of respondents.

When asked how often they visit recreational facilities in Algoma, 30 per cent of respondents indicated they visit recreational facilities only for tournaments or special events. This was followed by one or two times per week (26.5 per cent), less than once per week (24.4 per cent) and three or more times per week (21.8 per cent). Twenty-one respondents (4.1 per cent) selected “other” to this question. These respondents specified that they only visit recreational facilities seasonally or for specific activities such as skiing or swimming (n = 9), seldom (n = 4), never (n = 3) or they indicated that the frequency of their visits varies depending whether or not tournaments are happening (n = 2).

The majority of those who responded to the survey visit a recreational facility in the evening between 5-10 p.m. (80.8 per cent), whereas 34 per cent of respondents visit from noon-5 p.m.

The primary reason respondents gave for visiting a recreational facility was to be a spectator i.e., a family, friend or supporter who watches practices or games (79.2 per cent) followed by a sport or recreation participant (46 per cent). Other reasons that four respondents gave for visiting a recreational facility included as a guest at an activity such as meetings (n = 3) or as health staff (n = 1).

About half of respondents bought most of their food and beverages at snack bars (52.2 per cent) rather than on-site restaurants (22.6 per cent) or vending machines (17.9 per cent).

In the last year, the majority of respondents indicated that they ate snacks at recreation facilities (84.2 per cent) rather than meals. Some respondents reported that they did not eat at recreational facilities (7 per cent).

Most patrons who purchased food at recreational facilities bought it for themselves (84.4 per cent) followed by for their children (57.1 per cent). Seven people (3.5 per cent) selected “other” in this question. These people reported buying food for a spouse (n = 4) or grandchild (n = 2). One person clarified that they purchase beverages not food.

Table 1 summarizes the description of the respondents.

Table 1. Description of respondents

Descriptive item	Percent
Gender	
Female	81.3
Male	18.7
Age	
60 +	10.5
50 – 59	27.5
40 – 49	20.5
30 – 39	23.4
20 – 29	15.5
13 – 19	2.6
Frequency of visits to recreational facilities	
Tournaments/special events only	30.0
Less than once/ week	24.4
1-2 times/ week	26.5
3 or more times/ week	21.8
Other	4.1
Time of visits	
Morning (6 a.m. - noon)	19.8
Afternoon (noon -5 p.m.)	34.0
Evening (5-10 p.m.)	80.8
Late evening (after 10 p.m.)	3.0
Reason for visits	
Spectator	79.2
Sport or recreation participant	46.0
Coach/teacher/trainer	8.0
Employee of a recreational facility	3.6
Other	1.2
Where food or beverages are purchased	
Snack bar	52.2
Restaurant	22.6
Vending machine	17.9
All of the above	15.8
None of the above	26.7
Meals eaten	
Snacks	84.2
Supper	29.5
Lunch	20.1
Breakfast	4.7
None	7.3
For whom food is purchased	
Self	84.4
Children	57.1
Friends	13.4
Parents	5.6
Other	3.5

The top three facilities that survey respondents reported visiting in the past year were Essar Centre (62.4 per cent), followed by John Rhodes Centre (60.3 per cent) and Bellevue Park (55.2 per cent) (Table 2).

Table 2. Recreational facilities that respondents visited in the last year

Name of facility	Percent of respondents who visited the facility
Essar Centre	62.4
John Rhodes Centre	60.3
Bellevue Park	55.2
Roberta Bondar Pavillion	40.6
YMCA	26.7
Soo Pee Wee Arena	23.3
Straithclair	20.6
Northcrest Bowling Lanes	18.2
Rankin Arena	17.6
West End Community Centre	15.8
George Leach Center	10.9
SSM Gymnastics Club	10.6
Curling Club SSM	9.7
Michipicoten Memorial Community Centre	9.1
Garden River Education/Recreation Centre	8.8
Rocky Dipetro Field/Track	8.2
Sault College Athletic Dept.	7.0
Tarentorus Sports Club	4.2
North St. Field	3.9
Elliot Lake Arena	3.3
Elliot Lake Pool	3.3
Thessalon Memorial Community Arena	3.3
Desbarats Arena	2.7
Blind River Community Centre Arena	2.4
Dubreuilville Arena	1.8
Peter G. Manzo Pool	1.5
Echo Bay Sportsplex Arena	1.5
Mississauga First Nation Sport & Community Complex	1.2
Thessalon Curling Club	1.2
Central Algoma Centennial Centre	0.9
Iron Bridge Arena	0.6
White River Recreation Centre	0.3
Other	6.4%

About six per cent of respondents named other recreational settings. Most of these were community centres, arenas or curling clubs (n = 10). Other locations included private venues such as ski hills or clubs, private gyms, outdoor settings such as parks or trails, shopping areas and school gyms. For a list of other named venues see Appendix 4.

Type of food purchased

When asked how frequently they buy food or beverages from the snack bar, most respondents reported occasionally (52.6 per cent) or most visits (25.2 per cent). When asked how frequently they buy food or beverages from the vending machine, most respondents reported occasionally (47.6 per cent) or not at all (29.4 per cent). About sixteen per cent reported buying food or beverages from the vending machine only during prolonged stays such as all day tournaments (Table 3).

Table 3. How frequently food or beverages are purchased

Snack bar	Per cent
Occasionally	52.6
Most visits	25.2
Each visit	11.1
Only during prolonged stays (e.g. all day tournaments)	11.1
Not at all	2.6
Vending machine	Per cent
Occasionally	47.6
Most visits	4.3
Each visit	2.2
Only during prolonged stays (e.g. all day tournaments)	16.5
Not at all	29.4

The six respondents who said they never purchase food or beverages from the snack bar provided several reasons including that the snack bar is never open ($n = 2$), the selection is not healthy or appealing ($n = 2$), they prefer to eat at home or bring food ($n = 2$), items are too expensive ($n = 1$) and the location of the snack bar is too far from the fields ($n = 1$).

Most respondents who said they never purchase food or beverages from the vending machine noted that they did not like the selection ($n = 22$). Specifically, eight people indicated the food was not healthy and three people indicated that it was not fresh. Another reason often cited for not purchasing food at the vending machine was the cost of the items ($n = 11$).

The full list of reasons for not purchasing items at recreational facilities is in Appendix 5.

The most frequently purchased food and beverages from snack bars included popcorn, water, coffee, French fries and diet pop. The most frequently purchased food and beverages from vending machines included water, sports drinks, chips, chocolate bars, juice and diet pop. Table 4 lists the food and beverage items that respondents purchase from snack bars and vending machines.

Table 4. Food and beverages purchased

Snack bar	Per cent
Popcorn	68.9
Water	54.8
Coffee	46.1
French fries	43.4
Pop	36.0
Hot chocolate	26.8
Chips	25.4
Juice	22.8
Hot dogs	22.4
Energy drinks	18.0
Tea	15.8
Pizza	15.4
Nachos & cheese	15.4
Candy	14.9
Chocolate bars	14.5
Slushies	13.2
Chocolate milk	13.2
Hamburgers	8.8
White milk	7.5
Fresh fruit	5.7
Vegetables	5.3
Other	3.5
Vending machine	Per cent
Water	54.8
Sports drink	31.6
Chips	29.9
Chocolate bar	28.8
Juice	27.7
Pop (diet or zero calorie)	27.1
Pop (regular)	19.2
Nuts/trail mix	18.1
Candy	9.6
Gum	7.9
Energy drink	5.1
Other	2.8

Eight respondents (3.5 per cent) identified other items that they purchase at snack bars. The most popular item mentioned was ice cream (n = 6). Five respondents (2.8 per cent) named other items that they purchase from the vending machine. The most popular item was power or energy bars (n = 3). A full list of other items purchased at snack bars and vending machines is in Appendix 6.

Reasons for choosing food at recreational facilities

Convenience was the most common reason respondents chose to buy food at recreational facilities (72.9 per cent). This was followed by “special treat” (38.9 per cent), “there are few

restaurants or coffee shops in the area of the recreational facility” (18.3 per cent) and “the food choices are portable” (13.1 per cent) (Table 5).

Table 5. Reasons for choosing food at recreational facilities

Responses	Per cent
Convenience	72.9
Special treat	38.9
Few restaurants/coffee shops in the area of the recreational facility	18.3
The food choices are portable	13.1
Low cost	5.2
Healthy	3.9
Large portion size	2.6
Food quality/freshness	2.2
Good snack bar hours	1.3
Other	3.5

Other reasons respondents gave for choosing food at recreational facilities included being hungry or thirsty (n = 8) and because people are not allowed to bring food into the arena (n = 3).

Foods or beverages brought into recreational facilities

Almost half of the respondents (49.6 per cent) indicated that they bring food or beverages from home or from other food vendors to the recreational facility.

The top eight items respondents brought included water (n = 45), coffee (n = 44), fruit (n = 41), snacks (n = 20), bars (n = 17), tea (n = 16), juice (n = 14) and vegetables (n = 12) (Table 6).

Table 6. Top eight food or beverages brought into recreational facilities

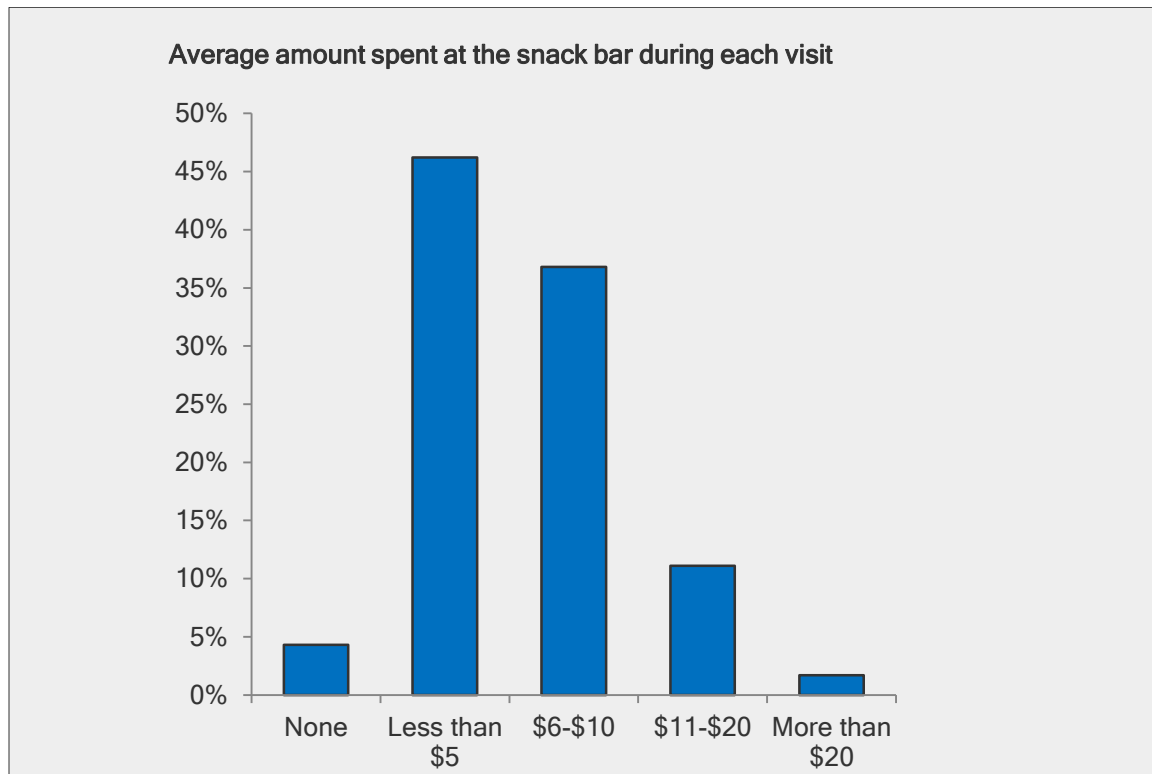
Responses	Number
Water	45
Coffee	44
Fruit	41
Snacks	20
Bars	17
Tea	16
Juice	14
Vegetables	12

A full list of food and beverages respondents listed is in Appendix 7.

Spending preferences

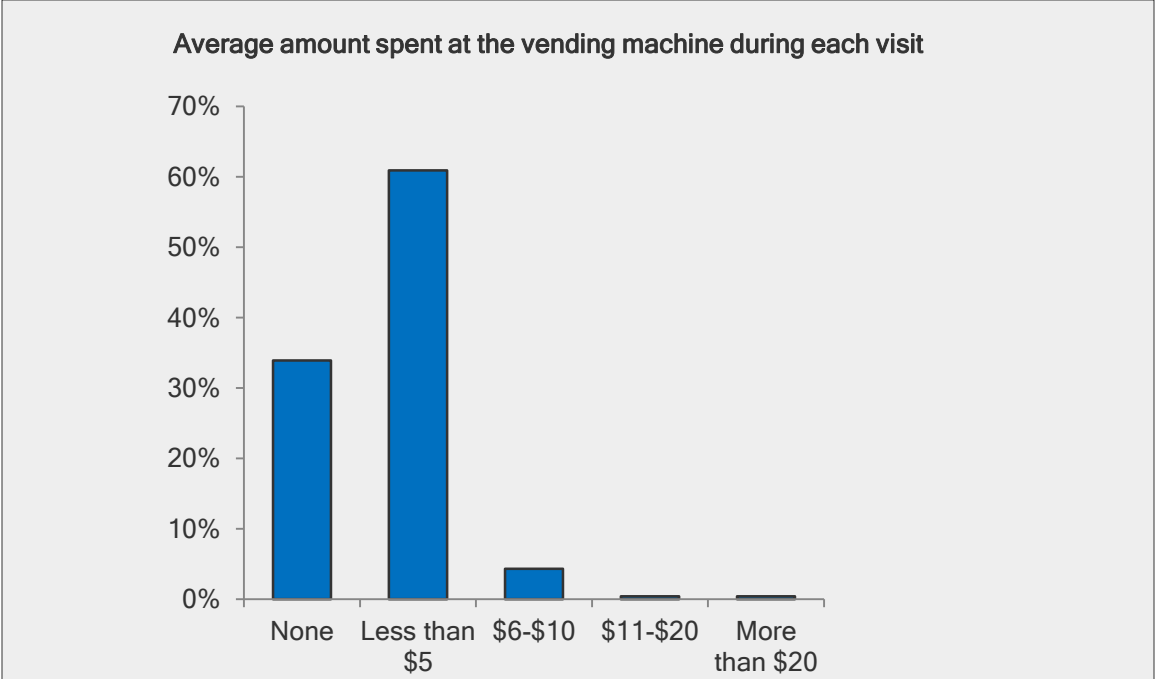
When it comes to spending money on food or beverages at snack bars, 46.2 per cent of respondents usually spend less than five dollars followed by 36.8 per cent who spend between six to ten dollars (Figure 1).

Figure 1. Average amount spent at the snack bar during each visit



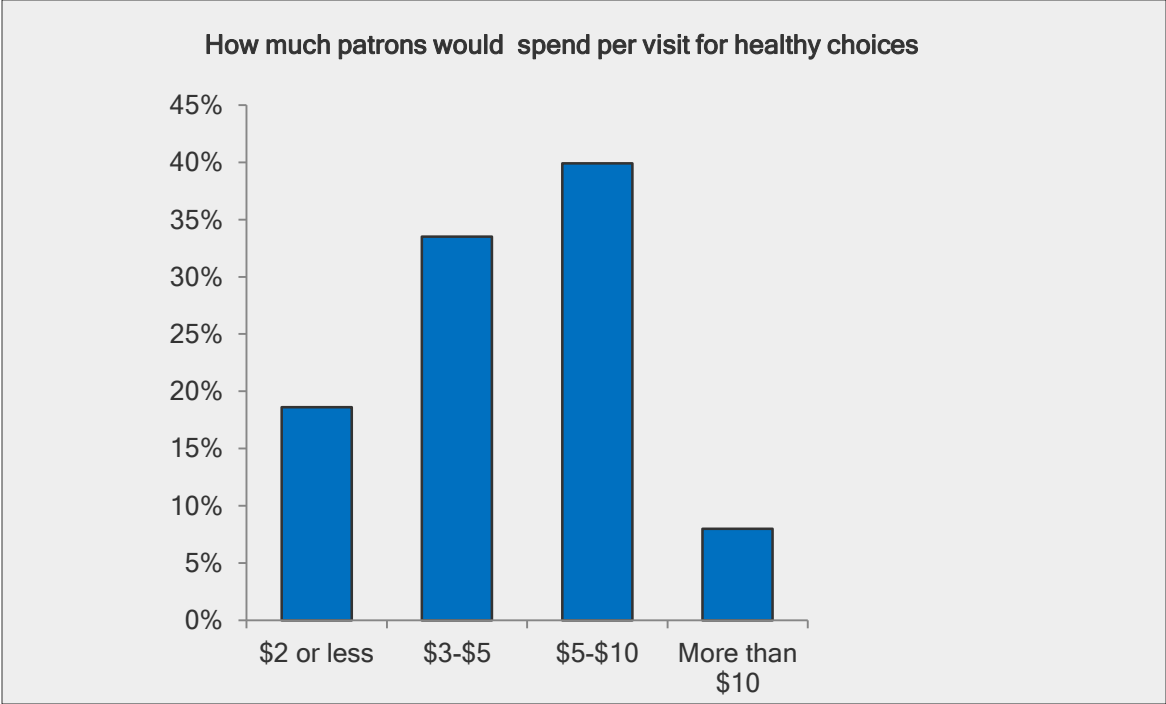
The majority of respondents spend less than five dollars at the vending machine during each visit (60.9 per cent). About one third (33.9 per cent) of respondents do not purchase items at the vending machine (Figure 2).

Figure 2. Average amount spent at the vending machine during each visit



The majority of respondents indicated they would be willing to pay more for healthy choices at the snack bar (73.6 per cent). Of these respondents, 39.9 per cent would be willing to spend five to 10 dollars for healthy choices and 33.5 per cent would spend three to five dollars (Figure 3).

Figure 3. How much patrons would spend per visit for healthier choices



Healthier food and beverage preferences

Most respondents (83.3 per cent) would like to see more healthy food choices offered at recreational facilities. About 15.4 per cent indicated that it doesn't matter if more healthy food choices are offered. A small percentage of people (1.3 percent) said they would not like to see more healthy food choices offered.

Table 7 features the top 12 items respondents indicated they would purchase from snack bars or vending machines if priced appropriately. Eleven (3.6 per cent) of respondents indicated they would not purchase any of the items identified in the survey.

Table 7. Top 12 items respondents would purchase from snack bars or vending machines if priced appropriately.

Responses	Per cent
Fruit smoothies	57.3
Fresh vegetables and dip	57.0
Fresh fruit	56.4
Sandwiches or wraps	47.9
Cheese and crackers	47.6
Yogurt cups/tubes	45.0
Nuts and/or seeds (e.g., pumpkin or sunflower)	43.6
Crispy/soft granola bars, cereal bars, trail mix bars	43.0
Trail mix	41.0
Soup	38.8
Low fat muffins	35.5
White/chocolate milk	34.5

Appendix 8 shows the full list of items respondents indicated they would purchase.

Satisfaction with food choices

When asked how satisfied patrons were with the food choices available in the recreational facilities they visit, 59.5 per cent answered somewhat. Almost one third (30.5 per cent) indicated they were not satisfied with available food choices.

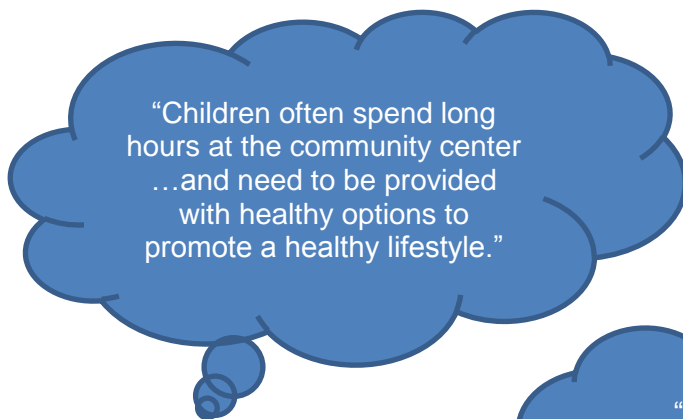
Respondents who indicated they were not satisfied with available food choices, were asked why. Most respondents (n = 72) indicated the food was not healthy (Table 8).

Table 8. Reasons for dissatisfaction with food choices

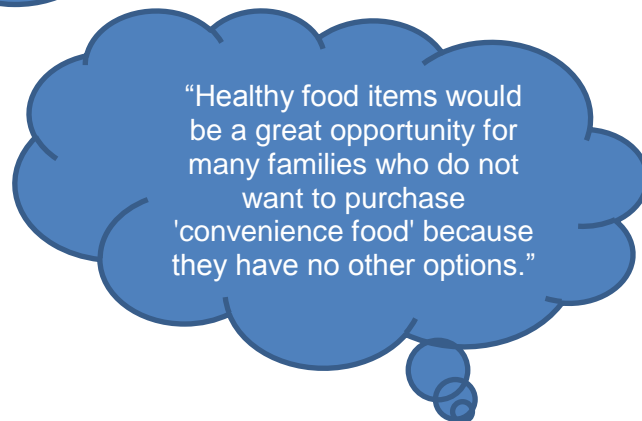
Responses	Number
Not healthy	72
Little variety	9
Too expensive	9
No vegan or vegetarian options	3
Not open	3
No foods available that I eat	2
No gluten-free options	1
Allergies	1
Bland	1
Concerned about food safety	1
Not fresh	1
Not high quality	1
Poor eating environment	1

Additional comments

Respondents were invited to offer additional comments. The majority of the comments were about the desire for healthier food and beverage options (n = 26). Ten comments focused on the cost of the items. Five comments indicated that respondents might not eat at recreational facilities or choose healthier options even if they were offered. Five comments were about the survey itself and expressed thanks to the survey providers. Three comments outlined suggestions to enhance healthy food options such as using a loyalty card, providing nutritional information and creating nice patio areas. All comments are included in Appendix 9.



“Children often spend long hours at the community center ...and need to be provided with healthy options to promote a healthy lifestyle.”



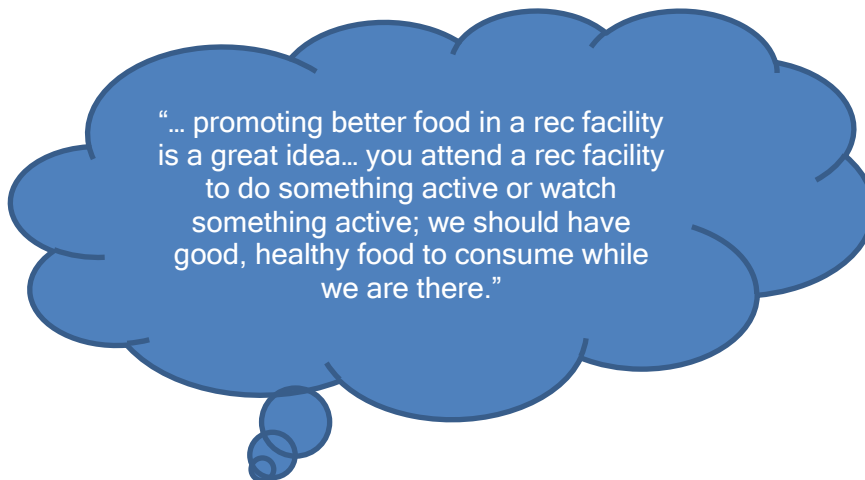
“Healthy food items would be a great opportunity for many families who do not want to purchase 'convenience food' because they have no other options.”

Limitations

As with all research, this project had some limitations which should be considered when looking at the results. Given the use of email to distribute the survey through health unit contacts, respondent bias may affect the results, as survey participants may have been highly motivated to participate. The advertisement for the survey that was placed in the two online community news outlets featured the message, “Choose Smart, Play Strong!” This message in itself may have attracted a more health conscious group to the survey.

Considerations for next steps

The results of this survey indicate an overall interest by most respondents to see healthier food choices offered at recreational facilities in Algoma (83.3 per cent).



About half of patrons purchase items occasionally from snack bars and vending machines at recreational facilities. About a quarter of the respondents purchase items from the snack bar for most visits. Close to 30 per cent of respondents noted that they never purchase items from the vending machine, mainly because of the selection or cost. Almost half of the respondents indicated that they bring food or beverages such as water, coffee or tea, fruit or vegetables, bars and juice from home or from other food vendors to the recreation facility. These items are for the most part healthier than what is available at recreational facilities or less expensive to purchase from other places. The majority of respondents indicated that they ate snacks at recreation facilities (84.2 per cent) rather than meals.

These findings could indicate a fairly significant market share that concession owners and operators could access. Considering selection, including healthier food items, and price could be a way for concession owners and operators to attract more customers.

Based on the findings of this study, a number of actions could be considered to inform a strategy to increase healthier food and beverage options at recreational facilities in Algoma. The recommendations align well with ones proposed following the recent survey conducted by Algoma Public Health with concession owners and operators (Gallant, 2015, p. 12-15).

Elements to consider as part of a strategy to increase healthier food and beverages:

- Communication with patrons
- Communication with owners and operators
- Training for staff and volunteers
- Trial
- Tracking sales
- Popular food and beverages
- Pricing strategies
- Sharing results

Communication with patrons

A small percentage of patrons said they would not like to see healthier food choices offered at recreational facilities (1.3 per cent). Some of these respondents indicated that they would continue to select unhealthy choices regardless of the introduction of a healthier selection of food and beverages.

These respondents may represent a group of people who may not be willing to change their behaviour regardless of food and beverage offers. Diffusion of Innovations theory describes these types of people as “laggards”; people who are typically adverse to change. These individuals may never change their behaviour or only do so when required by policy or social norm (Rogers, 1983).

According to Stages of Change theory, some of these respondents may be described as “precontemplators”; individuals who are not planning to change their behavior in the foreseeable future and can be unaware that their behaviour is problematic (Prochaska &, DiClemente, 1983). These individuals may benefit from interventions designed to increase knowledge and change attitudes about the importance of healthier food and beverages. This might include the importance of healthy foods for athletic performance or overall education about the role that nutrition plays in health.

Communication with owners and operators

Concession owners and operators of recreational facilities, who participated in Algoma Public Health’s 2015 survey, were interested in learning about consumer demand for healthier food and beverages. It is important to share results of the consumer survey with concession owners and operators. This can be done by email and perhaps followed by a meeting or webinar with concession owners and operators who are interested in learning more. At some point it will be important to address additional issues that concession owners and operators identified in their survey such as the preservation of preferred consumer foods and price point.

There was some discrepancy between the vendor and consumer survey. Consumer’s main concern was a lack of healthy options. Some concession owners and operators indicated that some healthier food choices such as whole grain products and healthier beverage options were available at least for special events.

As part of communication with concession owners and operators, it may be useful to look into perceptions of what healthier food options include. A public health dietitian could consult with

concession owners and operators to help identify healthy choices to sell and discuss strategies to help consumers understand which items are healthy choices.

According to Olstad, Goonewardene, McCargar and Raine (2014) taste testing might help to nudge the purchase of healthier food items (p 10). This approach to altering food and beverage purchases requires more research and may be an interesting component to add to a trial.

Research from Naylor, Olstad and Therrien (2015) found that capacity building was an important component to improving food environments, including policies, in recreational settings (when nutrition guidelines were in place). The researchers emphasize that, “guidelines and implementation supports in the form of training, resources, and technical support are a high priority...” (p. 373).

Training for staff and volunteers

In the study with concession owners, one recommendation was to increase the availability and accessibility of safe food handling for staff and volunteers in recreation facilities with snack bars and concession stands.

Although safe food handling was not specifically explored in the consumer survey, one respondent did indicate their concern about the safety of food handling. This observation may further reinforce the recognition that some patrons would value the practice of safer food handling skills by staff and volunteers.

Trial

Insights from this consumer study could be used to inform a trial that introduces healthier food and beverages in recreational facilities. As noted in the report about the vendor survey, there seems to be willingness amongst some concession owners and operators to participate in a trial to gain more information and confidence about the profitability of selling healthier items.

Research by Olstad, Goonewardene, McCargar and Raine (2015) suggests that, “when a variety of healthy options were made available, healthy items sold in proportion to their availability, with no adverse effects on revenues” (p. 160).

Phorson (2015) expressed the need for more research to identify ways to improve the sale of healthier foods in recreational settings. She noted that two communities in Quebec had to reverse their junk food ban in hockey arenas due to negative feedback and sales. This finding points to the need to test strategies that have shown promise in other areas to build confidence in the demand for healthier food and beverages in Algoma’s recreational settings.

A trial could help to demonstrate if indeed patrons in Algoma will purchase healthier food and beverages, which items are most popular and which items bring the best profit returns to concession owners and operators. Ultimately this information will help to address vendor concerns about the profitability of selling healthier food items versus existing food items.

A trial would need to allow for some experimentation of what products result in a reasonable combination of profit margin and consumer demand. The trial could also build in flexibility to accommodate for increased demand when patrons indicated they most often frequent recreational facilities, especially during tournaments and in the evenings.

After identifying a list of healthier choices that do well in a trial, consideration could be made about the value of all concession owners and operators offering these recommended items to increase patron anticipation of what will be available across Algoma. This could help to remove patron uncertainty about what types of healthier food and beverage options may be available when they travel to recreational facilities across Algoma. A strong business case would be needed to outline the benefits of this type of suggested change.

Tracking sales

As part of the proposed trial, a well thought out tracking system should be considered to provide data to demonstrate how the sale of healthier food and beverages affect profitability. This tracking will need to include the availability of good baseline data prior to implementing any changes as part of a trial.

An evaluation conducted by FHG Foodservice & Franchise Consultants (2015) suggests using a point-of-sales system (POS) programmed to track the sales of all participating concession owners and operators. This would provide reliable data to determine the effect of selling healthier food and beverages on vendor profitability. Alternatively, an excel tracking approach could be used. Concession owners and operators would need to be willing to share their sales data with Algoma Public Health during the trial. Ideally this would include all food and beverages to determine if the introduction of any items replaces the sale of existing food and beverages (p 21-22).

Popular food and beverages

Respondents of the consumer survey identified many food and beverage options that they would consider purchasing from recreational facilities.

The cost and availability of these items should be examined to identify those that concession owners and operators would most likely make a profit on. It will be important to understand where concession owners and operators purchase their food and beverages and if these locations offer a selection of healthier items. Final selection of items to include in a trial should take into consideration storage needs and the likelihood of spoilage as well. Furthermore, it would be helpful for a public health dietitian to provide input and support to help concession owners and operators select more nutritious items.

It would be ideal to identify a short list of items that match the criteria identified above e.g., popularity, reasonable cost, available storage space and low spoilage. These items could be reviewed with a mix of concession owners and operators representing arenas and community centres across Algoma. Those operators may have further insights as to additional options their patrons may be interested in purchasing. For example, patrons who go to a facility such as a community centre to be physically active may be more interested in purchasing healthier food and beverages than those who go to a facility such as an arena to watch a hockey game. Since most patrons reported eating snacks at recreational facilities rather than meals, it may be best to focus mainly on snack foods in the trial. However, it may be worth exploring if there are any healthier meal items that may sell well to patrons as part of the trial. This may be particularly popular with patrons who are at facilities for long periods of times such as during tournaments.

Comparisons could also be made to healthier food items tested in other health unit areas, looking for commonalities for preferences identified by consumers in Algoma, to learn from existing research. For example, a study in Niagara identified five items that performed well in

sales and profit margins, namely chocolate milk, fresh fruit, white milk, instant oatmeal, smoothies and juice (FHG Foodservice & Franchise Consultants, 2015, p. 18). Five of these items are on the list of the most popular ones named by patrons in Algoma.

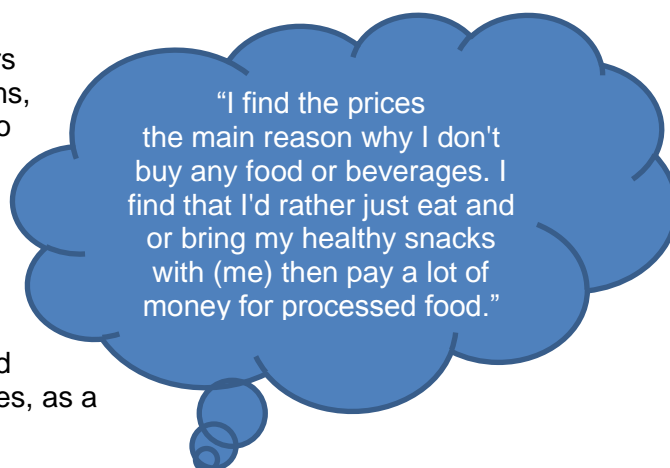
Once a list of food and beverage items that appear to have the best possibility of meeting vendor and patron needs is identified, these items could be tested as part of a trial.

Pricing strategies

Almost half of patrons (46.2 per cent) report spending less than five dollars at each visit at the snack bar. More than one-third (36.8 per cent) spend between six to ten dollars. Just over half of the patrons (60.9 per cent) report spending less than five dollars at the vending machine during each visit. The majority of respondents indicated that they would be willing to pay more for healthy choices at the snack bar (73.6 per cent).

This suggests that concession owners and operators could consider charging more for healthier food items, particularly at the snack bar. It would be important to test any increase in price range to find if indeed patrons would pay more for healthier food and beverages and how much more.

Any increased charge should be done with caution as many respondents who reported that they do not purchase items at recreational facilities indicated the price of items, especially at the vending machines, as a reason.



According to French (2005), healthier items should be offered at the same price range as other food and beverages to further promote the healthier options. French further suggests that any additional cost of healthier food items could be subsidized by increasing the cost of other food items (p. 912).

This price matching or reduction strategy may be worth exploring as part of a trial. It is important to consider research by Olstad et al. (2014) which suggests that price reductions in recreational settings are ineffectual. The researchers did note however that this finding may have resulted from their study sample consisting of a population with a higher socioeconomic status. They further indicated that price reductions may have worked with a different selection of healthy items and if promotion of the potential savings had been posted more clearly (p. 10).

It may be worth considering a funding option during the trial as a way to compensate participating concession owners and operators for any potential profit losses they may experience while they attempt to further demonstrate if it is feasible to increase healthier food and beverage options in recreational settings.

Sharing results

As noted in the vendor report, many health units across Ontario are exploring ways to increase healthier food and beverage options in recreational settings. Sharing the results of Algoma's vendor and consumer surveys will add to the body of evidence to inform further work. Some health units may be interested in working together on further research such as a trial.

Conclusion

Availability of healthier food and beverages in recreational settings can influence what individuals purchase. Results from this research show a desire by many patrons of recreational settings across Algoma to be able to purchase healthier food and beverages.

Suggestions are made by survey respondents for types of foods and beverages they would be most interested in purchasing and approximately how much they would be willing to pay for these items.

Input from this survey can help to further inform suggestions to increase healthier food and beverage options in recreational settings while addressing concerns about profitability identified in a survey completed by Algoma Public Health with concession owners and operators in Algoma.

Many inexpensive short-term actions such as ongoing communication with concession owners and operators as well as more intensive and expensive actions such as a trial of healthier food and beverages offered in recreational facilities can be taken by Algoma Public Health and other partners of the Healthy Communities Partnership Algoma. These actions can further support concession owners and operators who are interested in making changes to their food and beverage offers to increase access to healthier items.

References

- Chatham-Kent Public Health Unit (2010). *Tilbury Arena Consumer Survey*. Chatham, ON: Author.
- FHG Foodservice & Franchise Consultants (2015) *Study to Evaluate Fuelling Healthy Bodies*. Healthy Living Niagara, 1-36.
- French S. (2005). Public health strategies for dietary change: schools and workplaces. *Journal of Nutrition*, 135(4), 910-912.
- Gallant, L. (2015). *Healthy Eating in Recreational Facilities: A review of the food environment in Algoma*. Healthy Communities Partnership Algoma and Algoma Public Health 1-29.
- Healthy Communities Partnership Algoma. (2011). *Community Picture Report – Algoma District*. Algoma District, ON: Author.
- Ministry of Health and Long-term Care (2008). *Ontario Public Health Standards*. Retrieved from http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/cdp.aspx
- Naylor P.J., Olstad D.L., Therrien S. (2015). An Intervention To Enhance the Food Environment in Public Recreation and Sport Settings: A Natural Experiment in British Columbia, Canada. *Childhood Obesity*, 11 (4), 364-374.
- Niagara Region Public Health & Healthy Living Niagara (2013). *Results from the 2012-2013 HLN Arena Survey, Fuelling Healthy Bodies*. Thorold, ON: Author.
- Olstad D.L., Goonewardene L.A., McCargar L.J., & Raine K.D. (2014). Choosing healthier foods in recreational sports settings: a mixed methods investigation of the impact of nudging and an economic incentive. *International Journal of Behavioral Nutrition and Physical Activity*, 11 (6), 1-14.
- Olstad D.L., Goonewardene L.A., McCargar L.J., & Raine K.D. (2015). If we offer it, will children buy it? Sales of healthy foods mirrored their availability in a community sport, commercial setting in Alberta, Canada. *Childhood Obesity*, 11 (2), 156-164.
- Ontario Chronic Disease Prevention Alliance (2010). *Evidence-Informed Messages: Healthy Eating*. Toronto, ON: Author. Retrieved from http://www.ocdpa.on.ca/sites/default/files/publications/OCDPA_EM_HealthyEating_Full_Package.pdf
- Ontario's Healthy Kids Panel (2014). *No Time to Wait: The Healthy Kids Strategy*. Retrieved from http://www.health.gov.on.ca/en/common/ministry/publications/reports/healthy_kids/healthy_kids.pdf
- Phorson J. (2015) Community Recreation Centres: Is it time to make the healthier choices the only choices? (blog, September 1). Retrieved from <http://opha.on.ca/Nutrition-Resource-Centre/News/Nutrition-Resource-Centre-Blog/September-2015/Community-Recreation-Centres-Is-it-time-to-make-th.aspx>

Prochaska J., & DiClemente C. (1983). Stages of processes of self-change of smoking: toward an integrative model of change. *Journal of consulting and Clinical Psychology*, 51, 390-395.

Renfrew County and District Health Unit (2013). *Healthy Foods In and Out of Schools; Recreation Setting Consumer Survey Summary* Renfrew County and District, ON: Author)

Rogers E. (1983) *Diffusion of innovations*, 3rd ed. New York: Free Press.

Appendix 1. Survey questions

Note: Algoma Public Health provided this survey in English and French.

Healthy Food and Beverage Choices in Recreational Settings- Consumer

Community recreation facilities are gathering places for people of all ages. They provide safe, public spaces for physical activity and create a social environment that can strengthen a sense of community. The availability of healthy food options at these facilities can have a positive impact on the health of residents in the community.

Algoma Public Health, a member of Healthy Communities Partnership Committee invites you to participate in a survey to help us better understand the current food environment at recreation facilities including:

1. Description of the demographic characteristics and food purchasing (snack bar and vending machine) behaviours of patrons in recreational places in Algoma;
2. Identification of patrons' level of satisfaction with the food choices currently available at various recreational areas; and
3. Determining if patrons want more healthy food choices offered at recreational areas, and if so, what options would be most appealing.

The survey should take no more than 15 minutes to complete and your participation is voluntary. The information will be themed and summarized, no individual information or responses will not be identified. The report will be used to assess consumer demand for healthier food choices in recreational areas, to determine readiness for change and develop an understanding for the types of healthier items consumers would like to see available in snack bars and/or vending machines.

All completed surveys will be eligible to be entered into a random draw for a \$250 grocery gift card to a store of your choice.

The deadline to complete the survey is by 4:30 p.m. on May 29th, 2015.

We appreciate your participation in this survey! Your feedback is important. If you have any questions about this project please contact Alison Dutkiewicz – adutkiewicz@algomapublichealth.com or 705-942-4646 ext.3048

1. What is your age?

13 - 19

20 - 29

30 - 39

40 - 49

50 - 59

60+

2. What is your gender?

Male

Female

3. Please check all arenas or recreation facilities that you have visited regularly in the last year.

- | | |
|---|---|
| <input type="checkbox"/> Bellevue Park | <input type="checkbox"/> Elliot Lake Arena |
| <input type="checkbox"/> Essar Centre | <input type="checkbox"/> Elliot Lake Pool |
| <input type="checkbox"/> Curling Club SSM | <input type="checkbox"/> Central Algoma Centennial Centre |
| <input type="checkbox"/> George Leach Center | <input type="checkbox"/> Desbarats Arena |
| <input type="checkbox"/> John Rhodes Centre | <input type="checkbox"/> Echo Bay Sportsplex Arena |
| <input type="checkbox"/> North St. Field | <input type="checkbox"/> Garden River Education/Recreation Centre |
| <input type="checkbox"/> Northcrest Bowling Lanes | <input type="checkbox"/> Rankin Arena |
| <input type="checkbox"/> Peter G. Manzo Pool | <input type="checkbox"/> Iron Bridge Arena |
| <input type="checkbox"/> Roberta Bondar Pavillion | <input type="checkbox"/> Blind River Community centre Arena |
| <input type="checkbox"/> Rocky Dipetro Field/Track | <input type="checkbox"/> Mississauga First Nation Sport & Community Complex |
| <input type="checkbox"/> Sault College Athletic Dept. | <input type="checkbox"/> Thessalon Curling Club |
| <input type="checkbox"/> Soo Pee Wee Arena | <input type="checkbox"/> Thessalon Memorial Community Arena |
| <input type="checkbox"/> SSM Gymnastics Club | <input type="checkbox"/> Michipicoten Memorial Community Centre |
| <input type="checkbox"/> Straithclair | <input type="checkbox"/> White River Recreation Centre |
| <input type="checkbox"/> Tarentorus Sports Club | <input type="checkbox"/> Dubreuilville Arena |
| <input type="checkbox"/> West End Community Centre | <input type="checkbox"/> Other |
| <input type="checkbox"/> YMCA | |

Other (please specify)

4. How often do you visit recreation facilities?

- Tournaments/special events ONLY
- Less than once/ week
- 1-2 times/ week
- 3 or more times/ week
- Other

Other (please specify)

5. What times of day are you most often visiting the recreational facility? (Check all that apply)

- Morning (6 a.m. - 12 noon)
- Afternoon (12 noon -5 p.m.)
- Evening (5-10 p.m.)
- Late evening (after 10 p.m.)

6. When you visit recreation areas, you are a(n): (Check all that applies)

- Spectator (family, friend or supporter who watch practices and/or games)
- Sport or recreation participant
- Employee of a recreational facility
- Coach/teacher/trainer
- Other

Other (please specify)

7. Where have you bought food or drinks at recreation facilities?

- Snack bar
- Vending machine
- Restaurant
- All of the above
- I do not buy food or drinks at recreational facilities

8. What meals in the past year, if any, have you eaten at recreation facilities? (Check all that apply)

- Breakfast
- Lunch
- Supper
- Snacks
- None

9. Who are you usually purchasing food for when at the recreation facility? (Check all that apply)

- Self
- Children
- Friends
- Parents
- Other

Other (please specify)

10. How frequently do you buy food/beverages from the snack bar?

- Each visit
- Most visits
- Occasionally
- Only during prolonged stays (e.g. all day tournaments)
- Not at all

11. If you answered "Not at All" to Question 10, why not?

12. If you do buy from the snack bar, what do you usually buy? (Check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Hot dogs | <input type="checkbox"/> Pop |
| <input type="checkbox"/> Chips | <input type="checkbox"/> Water |
| <input type="checkbox"/> French fries | <input type="checkbox"/> Juice |
| <input type="checkbox"/> Pizza | <input type="checkbox"/> Hot chocolate |
| <input type="checkbox"/> Hamburgers | <input type="checkbox"/> Tea |
| <input type="checkbox"/> Nachos & cheese | <input type="checkbox"/> Coffee |
| <input type="checkbox"/> Candy | <input type="checkbox"/> Slushies |
| <input type="checkbox"/> Chocolate bars | <input type="checkbox"/> Energy drinks |
| <input type="checkbox"/> Popcorn | <input type="checkbox"/> White milk |
| <input type="checkbox"/> Fresh fruit | <input type="checkbox"/> Chocolate milk |
| <input type="checkbox"/> Vegetables | <input type="checkbox"/> Other |

Other (please specify)

13. How frequently do you buy food/beverages from the vending machine?

- Each visit
- Most visits
- Occasionally
- Only during prolonged stays (e.g. all day tournaments)
- Not at all

14. If you answered "Not at All" to Question 13, why not?

15. If you do buy from the vending machines, what do you usually buy? (Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Chocolate bar | <input type="checkbox"/> Pop (diet or zero calorie) |
| <input type="checkbox"/> Candy | <input type="checkbox"/> Juice |
| <input type="checkbox"/> Gum | <input type="checkbox"/> Water |
| <input type="checkbox"/> Chips | <input type="checkbox"/> Sports drink |
| <input type="checkbox"/> Nuts/trail mix | <input type="checkbox"/> Energy drink |
| <input type="checkbox"/> Pop (regular) | <input type="checkbox"/> Other |

Other (please specify)

16. Please check the reasons you choose food at recreation facilities [Check all that apply]

- | | |
|---|--|
| <input type="checkbox"/> Low cost | <input type="checkbox"/> Good snack bar hours |
| <input type="checkbox"/> Large portion size | <input type="checkbox"/> Few restaurants/coffee shops in the area of the recreational facility |
| <input type="checkbox"/> Convenience | <input type="checkbox"/> Food quality/freshness |
| <input type="checkbox"/> Healthy | <input type="checkbox"/> The food choices are portable |
| <input type="checkbox"/> Special treat | <input type="checkbox"/> Other |

Other (please specify)

17. Do you bring foods or beverages from home or from other food vendors (e.g. pizza, coffee) to the recreational facility?

- Yes
- No

18. If yes, what kinds of foods or beverages do you bring from home?

19. On average, how much do you usually spend at the snack bar during each visit to the recreational facility?

- None
- Less than \$5
- \$6-\$10
- \$11-\$20
- More than \$20

20. On average, how much do you usually spend at the vending machine during each visit to the recreational facility?

- None
- Less than \$5
- \$6-\$10
- \$11-\$20
- More than \$20

Appendix 2. Survey promotion – online news



Recreational facilities are places where people gather to play and be active with sports and recreation. All these facilities have a direct influence on food choices that you make. Give your voice to healthier food choices that could be available at concession stands and vending machines in Algoma. Go to <link> to complete the 10 minute survey.

English

<https://www.surveymonkey.com/s/J26825N>

French

<https://www.surveymonkey.com/s/TN89YCW>

Appendix 3. Survey promotion -- emails

Workplace email message:

Each of us makes about 200 food decisions every day. Whether it is the candy dish on a co-workers desk, cookies and donuts at a meeting, a fundraising bake sale or snacks at the kids hockey practice, food is always around.

Community recreation facilities are gathering places for people of all ages. They provide safe, public spaces for physical activity and create a social environment that can strengthen a sense of community. The availability of healthy food options at these facilities can have a positive impact on the health of residents in the community. Algoma Public Health as a partner of Healthy Communities Partnership Algoma invites you to participate in an online survey to help us better understand the current food environment at recreation facilities including:

1. Description of the demographic characteristics and food purchasing (snack bar and vending machine) behaviours of patrons in recreational places in Algoma;
2. Identification of patrons' level of satisfaction with the food choices currently available at various recreational areas; and
3. Determining if patrons want more healthy food choices offered at recreational areas, and if so, what options would be most appealing.

This survey will be anonymous and should take no more than 10 minutes to complete and is available until May 29th, 2015. The survey is available in both English and French, the links are listed below.

Visit:

English

<https://www.surveymonkey.com/s/J26825N>

French

<https://www.surveymonkey.com/s/TN89YCW>

We appreciate your participation in this survey! Your feedback will help the Partnership increase the body of knowledge we need to make our community even healthier. Please pass this survey on to others who you may think would be interested.

Partners email message:

Each of us makes about 200 food decisions every day. Whether it is the candy dish on a co-workers desk, cookies and donuts at a meeting, a fundraising bake sale or snacks at the kids hockey practice, food is always around.

Community recreation facilities are gathering places for people of all ages. They provide safe, public spaces for physical activity and create a social environment that can strengthen a sense of community. The availability of healthy food options at these facilities can have a positive impact on the health of residents in the community. Algoma Public Health as a partner of

Healthy Communities Partnership Algoma invites you to participate in an online survey to help us better understand the current food environment at recreation facilities including:

1. Description of the demographic characteristics and food purchasing (snack bar and vending machine) behaviours of patrons in recreational places in Algoma;
2. Identification of patrons' level of satisfaction with the food choices currently available at various recreational areas; and
3. Determining if patrons want more healthy food choices offered at recreational areas, and if so, what options would be most appealing.

This survey will be anonymous and should take no more than 10 minutes to complete and is available until May 29th, 2015. The survey is available in both English and French, the links are listed below. We are also offering an incentive to participate of a \$250 grocery gift card for completing the survey.

Visit:

English

<https://www.surveymonkey.com/s/J26825N>

French

<https://www.surveymonkey.com/s/TN89YCW>

We appreciate your participation in this survey! Your feedback will help the Partnership increase the body of knowledge we need to make our community even healthier. ***Please pass this survey on to others who you may think would be interested.***

Appendix 4. Other recreational venues identified by survey respondents

Descriptive item	Number
Community Centres or Arenas	10
Blind River Curling Club Blind River Library Captain Tilley Community Centre-Goulais River Dan Pine Healing Lodge, Garden River Hiawatha Kincenter McMeeken Arena (3)	
Private venues	8
Crimson Ridge, Sault Ste Marie Golf Club Elliot Lake karate club Elliot lake ski hill Elliot Lake Tennis Courts Hiawatha Highlands Laird Raceway Sault College Tennis and Boat club (former RYTAC) Sault North archery club	
Private gyms	8
Achieve Fitness APH workout room Club cabana at Algoma's water tower inn Goodlife fitness (2) Gym at Algoma University Jade Wellness Private gym	
Outdoor areas	7
Fort Creek Conservation Area Hub Trail Ojibway Park in Garden River Point Charles in Garden River Provincial parks St. Joseph Island playgrounds Walking in neighbourhoods Woods, rivers and areas around garden river	
Shopping areas	2
Malls Mill Market	
School gyms	1

Appendix 5. Reasons for not purchasing food and beverages

Snack bar	Number
Snack bar is not open	2
Selection -- not healthy or appealing	2
Prefer to eat at home or bring food	2
Too expensive	1
Location -- snack bar is too far from the fields	1
Vending machine	Number
Don't like the selection	22
Too expensive	11
Don't carry money or correct change	7
Prefer the snack bar / restaurant	7
Prefer to bring my own items	5
Machine not available	5
Prefer contact with people	4
Machine not working	3
Not sure if the machine is clean	1
Not necessary	1
Don't like vending machines	1
Don't drink pop or sports drinks	1

Appendix 6. Other items purchased at recreational facilities

Snack bar	Number
Ice cream	6
Alcohol or beer	3
Salad	3
Bar (protein/sport, granola or gluten-free)	3
Freezies	2
Gatorade G2 specifically noted	2
Soup	2
Muffins	2
Diet pop	1
Yogurt	1
Indian tacos	1
Nut mix	1
Chicken fingers	1
Jalapeno cheese stuffed pretzels	1
Vending machine	Number
Power or energy bars	3
Juice	1
Coffee	1

Appendix 7. Food and beverages brought into recreational facilities

Responses	Number
Water	45
Coffee	44
Fruit	41
Snacks	20
Bars	17
Tea	16
Juice	14
Vegetables	12
Sandwich/Wrap/Sub	9
Crackers	9
Cheese	9
Beverages	7
Nuts / trail mix	7
Sport or energy drink	7
Trail mix	6
Pop	5
Yogurt	2
Muffins	2
Hummus	2
Popcorn	2
Candy	2
Hot chocolate	2
Protein shake or smoothie	2
PB	1
Chicken	1
Salad	1
Whole grain items	1
Cookies	1
Rice Crispy Squares	1
Marshmallows	1
Chocolate chips	1
Gluten free crackers	1
Lunch meat	1
Apple sauce	1
Dried fruit	1
Take out/ Fast food	1
Something suitable for person with diabetes	1
Something suitable for person with allergies	1

Appendix 8. Foods and beverages respondents would purchase from snack bars or vending machines if priced appropriately

Responses	Per cent
Fruit smoothies	57.3
Fresh vegetables and dip	57.0
Fresh fruit	56.4
Sandwiches or wraps	47.9
Cheese and crackers	47.6
Yogurt cups/tubes	45.0
Nuts and/or seeds (e.g., pumpkin or sunflower)	43.6
Crispy/soft granola bars, cereal bars, trail mix bars	43.0
Trail mix	41.0
Soup	38.8
Low fat muffins	35.5
White/chocolate milk	34.5
Multigrain chips	32.6
Crackers, pita chips	29.6
Dried fruit	28.7
Mixed fruit cups	26.7
Whole wheat pizza	25.7
Chili	25.4
Applesauce (tubes/cups)	18.6
Turkey hotdogs	14.7
Hot oatmeal	12.7
Cold cereal with milk	7.2
None of the above	3.6
Other	1.0

Other responses	Number
Gluten-free options	4
Dairy-free options	2
Hummus	2
Veggie burger with whole grain bun	1
Salads	1
Vegan food	1
Food without preservatives	1
Homemade soup or stew	1
Decaf coffee	1

Appendix 9. Additional comments provided by survey respondents

Type of comment	Number
Selection	26
<ul style="list-style-type: none"> • “Do not think fountain beverages should be available” • “I would like energy drinks removed” • “Stop purchasing candy to sell at the counter, have only popcorn or a healthier option than candy. I know they make the rec centre a lot of money, but if it is not available parents will begin to buy the popcorn and chocolate milk rather than candy and pop. This is just one suggestion, as parents we have to decide what to buy but some parents fall into that trap of buying unhealthy options because of their child's behaviour” • “Places like the Pee Wee and John Rhodes, where a lot of parents are there with small children, and sometimes for long periods of time, should have more variety and healthier choices, but still be portable. (cheese & crackers, trail mix, granola bars, yogurt etc.) People wouldn't mind paying slightly more for healthy fresh choices” • “It would be nice to have healthier options as families are on the go convenience” • “I would like more choices in the products available” • “Bring in real food!” • “Children often spend long hours at the community center in Wawa and need to be provided with healthy options to promote a healthy lifestyle” • “It would be great to see some healthier options available, especially at ESSAR” • “Healthy food items would be a great opportunity for many families who do not want to purchase 'convenience food' because they have no other options” • “It would be great to have healthy choices for myself and my kids. We spend a lot of time at rinks and the YMCA. Other cities have we visit for tournaments often have a few vendors to choose from and I would love to see a fruit, veggie, soup chili place” • “Most often I have already eaten before attending the recreational facility, so food is not of importance to me, but if i was to eat i would prefer healthy treats or snacks” • “It would be nice if there was a change. thank you if you are getting this started” • “Healthier Change at the recreational facilities has to be a change and get out the old food that's making young children at an early stage of obesity!!” • “I hope that you receive a lot of positive feedback by doing this survey. Hopefully it will allow for more healthy snack choices at the recreational facilities at a reasonable cost” • “Salads or yogurt granola bowls would be a great option” • “I think promoting better food in a rec facility is a great idea due to the fact that you attend a rec facility to do something active or watch something active; we should have good, healthy food to consume while we are there” • “Very difficult to get "healthy" food these days. Even seemingly healthy foods are loaded with sugars and artificial flavors, colors and chemicals. The main reason I purchase food from the snack bar is because it is convenient and it is there. If there were nothing but healthy alternatives, chances are that is what I would be eating. In my case, I bowl around the supper hour and if we are rushed getting there, we tend to snack more while we are there. Part of it is better planning on our part. In my mind the more important question is what are we eating at home...” • “As a grandparent I like to buy my grandchildren a treat after a game or activity and I would be happy to see some better choices health wise” • “Having a wider variety of healthier snacks would be beneficial” • “Provide wholesome food...not junk” 	

<ul style="list-style-type: none"> • If you go to the city track meet at John Rhodes check out what they are serving the kids” • “Do not buy food because there isn't any healthy foods” • “More choice is great for families who spend a large amount of time at rec centres” • “I don't buy food from there so I'm not sure if they have good choices, but I did see other people with food from those sources and they didn't look like healthy options. Could just be the people picked unhealthy options” • “Don't go there. If I did the food choices are not appealing” 	
Cost	10
<ul style="list-style-type: none"> • “I'd maybe buy more if the prices weren't so high. In particular, the bottled water (the healthiest choice) is ridiculously over-priced” • “If you have numerous children to buy for costs for family has to be reasonable” • “A large barrier to making healthy choices (especially for low-income families) is the high cost - therefore, healthy choices need to be available at par with the unhealthy choices” • “Oftentimes, healthy food choices are available but are offered at an inflated price” • “I generally find prices are too high so I tend to bring my own food and then I can control what I eat also” • “I find the prices expensive, and that's the main reason why I don't buy any food or beverages. I find that I'd rather just eat and or bring my healthy snacks with then pay a lot of money for processed food” • “We do not attend a lot of arena events because of higher prices, so we opt to spend time outdoors” • “Lower the prices” • “The prices seem to be pretty high for what you get” • “It's great to see people younger than me eating healthy, but as a fresh college grad I can't imagine spending money on expensive snacks at these facilities when I can go home and grab a piece of fruit or snack there instead! I don't know how people can continually justify buying 4\$ protein bars; as much as I'd love to!” 	
Unlikely to change behaviour	6
<ul style="list-style-type: none"> • “If outdoor park type settings I usually bring my own snacks & hydration. I will purchase food on occasion at tournament type events” • “Usually go to watch sports so not there to chow down, have eaten at home” • “I seldom see adults eating & if they are it is often popcorn or chips. I'm not personally inclined to eat in the stands” • “When me and my husband go to a Greyhound game, he's fine with getting a sausage or hotdog. I'd prefer to eat before and purchase only a hot chocolate. If there were healthier choices I wouldn't hesitate to buy something along with him” • “If I was concerned with eating healthy I would bring healthy options from home rather than spending money” • “I appreciate when there are some healthy choices but also like when there are treats available as well. All depends on the circumstance of what makes sense for my family” 	
About the survey and initiative	5
<ul style="list-style-type: none"> • “Thank you for doing this” • “Great survey, looking forward to the outcomes!” • “Good survey” • “Very good survey!! Thank You” • “Very glad there is an initiative to improve food choices at community centers” 	

Suggestions	3
<ul style="list-style-type: none"> • “Why not offer some sort of loyalty card. Like buy 10 beverages, get 1 free or something?” • “If the goal for this is to not only make healthy food choices more accessible at these facilities, but also to encourage more people to make healthier choices, there will need to be a perceived advantage of buying healthier food. This could be done by providing nutritional information for all menu items (not just the healthy ones), or pricing the healthier items competitively” • “...Other towns have areas where you could buy BBQ foods, nice patio areas, with all choices, many with alcohol permits etc. Sault doesn't have anything like this at all” 	
Food safety	1
<ul style="list-style-type: none"> • “Kids at canteens do not know the importance of food handling. Also who is keeping the equipment cleaned/ who is checking? all I see is people getting sick. No accountability. Old popcorn reheated under lamp but what about the mice in the building coming for their treats. Refer here to earlier report and reference to safe food handling courses. Need adults who are trained in food handling on staff working with students” 	
Freshness of food	1
<ul style="list-style-type: none"> • “I would be concerned about the freshness of the ‘healthy’ choices” 	
Environment	1
<ul style="list-style-type: none"> • “I also don't approve of all the plastic and Styrofoam that these snack bars serve liquid in. Take health a step further and consider the health of our planet” 	
Food allergies	1
<ul style="list-style-type: none"> • “My child has a nut allergy so I am very cautious purchasing items when I am not sure of contamination” 	
Other	3
<ul style="list-style-type: none"> • “Hire more staff” • “For food at the recreation centre, it is usually catered” • “It has been some time since I had kids in recreational sports so only can report on memory” 	