

Wisconsin School Breakfast Survey Final Report

UW – Extension, Cooperative Extension
Family Living Program

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Executive Summary

Over 250 public and private school food service directors across the state of Wisconsin completed an online survey in September of 2005. The survey consisted of questions about school breakfast programs. Since the state of Wisconsin serves school breakfast to only one in four low-income students, and foregoes nearly 13 million in Federal funds, as a result, each year (Food Research and Action Center, 2004), both the state of Wisconsin Department of Public Instruction and nutritionists with the University of Wisconsin-Extension, Cooperative Extension's Family Living Program were interested in finding out why Wisconsin schools seem to be slow to implement school breakfast programs. The attached report focuses on a handful of specific research questions that look at the effects of perceived support, presence of a la carte and vending, challenges, and traditional vs. non-traditional serving models on school breakfast programs.

Food service directors were asked to rate the level of support they felt they had from a variety of school officials and parents for serving breakfast at school. Overwhelmingly, those food service directors who felt they had the support of teachers, principals, parents, and the school board were more likely to be associated with an elementary, middle, or high school that had a school breakfast program. While it is not clear which came first – the school breakfast program or the support of school personnel and parents – what is clear is that the percentage of food service directors expressing perceived support of others is much lower in schools without a school breakfast program.

Food service directors were asked to describe a la carte and vending services provided at their schools. Schools that had a la carte and/or vending tended to be more likely to also have a school breakfast program. Contrary to what had been expected, schools did not appear to be implementing a la carte or vending in place of school breakfast programs. However, the most often cited reason for offering a la carte and/or vending and not school breakfast program was “not enough time” to serve breakfast. It appears that some schools that would otherwise be supportive of school breakfast programs offer a la carte and/or vending because they are perceived to be quicker than serving school breakfast. Recommendations following the Final Report address some alternatives to a la carte and vending that could be reimbursable through the school breakfast program.

Those food service directors from schools that offered no breakfast options whatsoever (no school breakfast program, no a la carte, no vending) expressed the opinion that breakfast is not the responsibility of the school or that there was no need to offer breakfast options at their schools.

Challenges to offering a school breakfast program differed depending upon whether the school served elementary, middle, or high school aged children. For example, busing schedules were more often cited as a problem for elementary and middle schools. Student menu preferences and stigma associated with participating in a school breakfast program were cited by food service directors as being increasingly challenging from elementary to high school.

Food service directors were asked about their use of traditional and non-traditional serving models (see Table 2, page 8 for more information) for school breakfast. For the most part, the food service directors who responded to this survey made very little use of non-traditional serving models.

Based on the results of this survey, recommendations that may begin to address some of the issues surrounding low rates of school breakfast offerings in WI schools are offered on page 25.

Wisconsin School Breakfast Survey Analyses

I. Introduction

Children who eat breakfast have a healthier overall diet compared to children who do not eat breakfast (Basiotis, 1999; Dwyer 1998). Whether it is at home or at school, children who eat breakfast have higher intakes of vitamins and minerals and a lower percentage of calories from fat in their diet compared to children who do not eat breakfast (Basiotis, 1999).

Children who participate in the School Breakfast Program (SBP), compared to children who eat breakfast at home or elsewhere, are more likely to meet minimal nutritional standards for magnesium, calcium, vitamin A, vitamin D, Thiamine (vitamin B1), Riboflavin (vitamin B2) and zinc (Nicklas, 1998). Furthermore, children who eat their morning meal at school are more likely to consume milk, fruit or fruit juice, grains and protein foods at breakfast (Nicklas, 1998; Gordon, 1995). Specifically when low-income children are considered, children who eat breakfast at school compared to those who eat at home or elsewhere, have overall healthier diets, increased intakes of fruit and milk, and a greater variety of food in their diet (Basiotis, 1999).

A number of barriers are presumed to exist that prevent both schools and students from participating in the SBP. Unfortunately, little data exists as to the extent that these barriers affect students' or schools' decision to participate in the SBP. Hunger Task Force, located in Milwaukee, recently surveyed school officials regarding their attitudes towards the SBP in Wisconsin. School officials felt that hunger was an issue in their school and felt that the SBP helped to decrease hunger in addition to providing other benefits in the classroom. Unfortunately, those surveyed also noted the underutilization of the program as well as a significant number of barriers from their perspective that limit or prevent participation in the SBP. These barriers included the cost of the program, transportation issues and a lack of time for the program in the morning (Rosales, 2002).

To address this lack of information on why schools do not participate in the program, the UW-Extension, Cooperative Extension, Family Living Programs and the WI Department of Public Instruction, created a 31-item survey that was intended for food service directors to comment on how they currently offer breakfast, challenges to offering breakfast, and perceived support to offer breakfast at school. The survey was created based on current research on the barriers to participating in the SBP and was pilot tested with three food service directors in Wisconsin. The survey was made available online using Zoomerang software and services (Copyright 1999-2006 MarketTools, Inc.) to food service directors (FSD) across the state of WI. In November 2005, Bonita Westover Consulting was retained to provide data cleaning and analyses services for this pre-existing survey dataset.

II. Sample and Methods

Eight hundred ninety four (894) food service authorities across the state of WI were contacted through electronic mail to participate in an online survey. The FSD for each food service authority was asked to fill out the survey. The survey was sent out in late August 2005 and was completed during the month of September. Questions regarding the School Breakfast Program and morning nutrition focused on the preceding school year (2004-2005). Two reminder emails were sent out to each food service authority who had not yet filled out a survey. Potential respondents were asked to click on or go to a link leading them to an online survey administered by Zoomerang. The survey consisted of 31 items. Most items asked for closed-ended responses, while a handful asked for comments, clarifications, or an opportunity to share personal contact information in an open-ended format.

269 FSDs responded to the survey, representing 30% of the original sample. FSDs for public schools (62% of respondents) tended to work for an entire school district while FSDs for private schools (38% of respondents) tended to work for a single school. We can assume that FSDs who represented an entire district responded to survey questions based on the experiences of multiple elementary, middle, and/or high schools. A total of 18 respondents were dropped from the analyses for a variety of reasons. This included Residential Child Care Institutions (RCCIs) as they are mandated to offer breakfast to residents. This left 251 respondents, 28% of the initial sample contacted.

Public school respondents were mapped based on which county they are located in. Sixty of the 72 counties in WI were represented in the survey, with more densely populated counties having more respondents (e.g. Brown, Dane, Milwaukee and Rock). Respondents in each county ranged from a single respondent to nine. Appendix 3 contains the map of Wisconsin with respondents mapped to it.

III. New Variables

New variables were created for three survey questions; whether a school had a la carte or vending or both available for morning nutrition. What a la carte or vending options were available for morning nutrition. Finally, how breakfast was served. These results of these analyses are included with the descriptive survey analyses in Appendix 1.

IV. Results of Comparison Analyses

For all of the comparison analyses, the original dataset was divided according to responses from Elementary, Middle, and High Schools. The assumption of program staff is that there are meaningful differences in how and if different grade levels of schools would or could implement a school breakfast program. In each of the three separate datasets, those respondents without an elementary, middle, or high school were deleted from that particular dataset, reducing the sample size to Elementary n = 247; Middle n = 229; High n = 177. Detailed tables including percentages for each figure are included in Appendix 3.

Perceived Support by School Breakfast Program

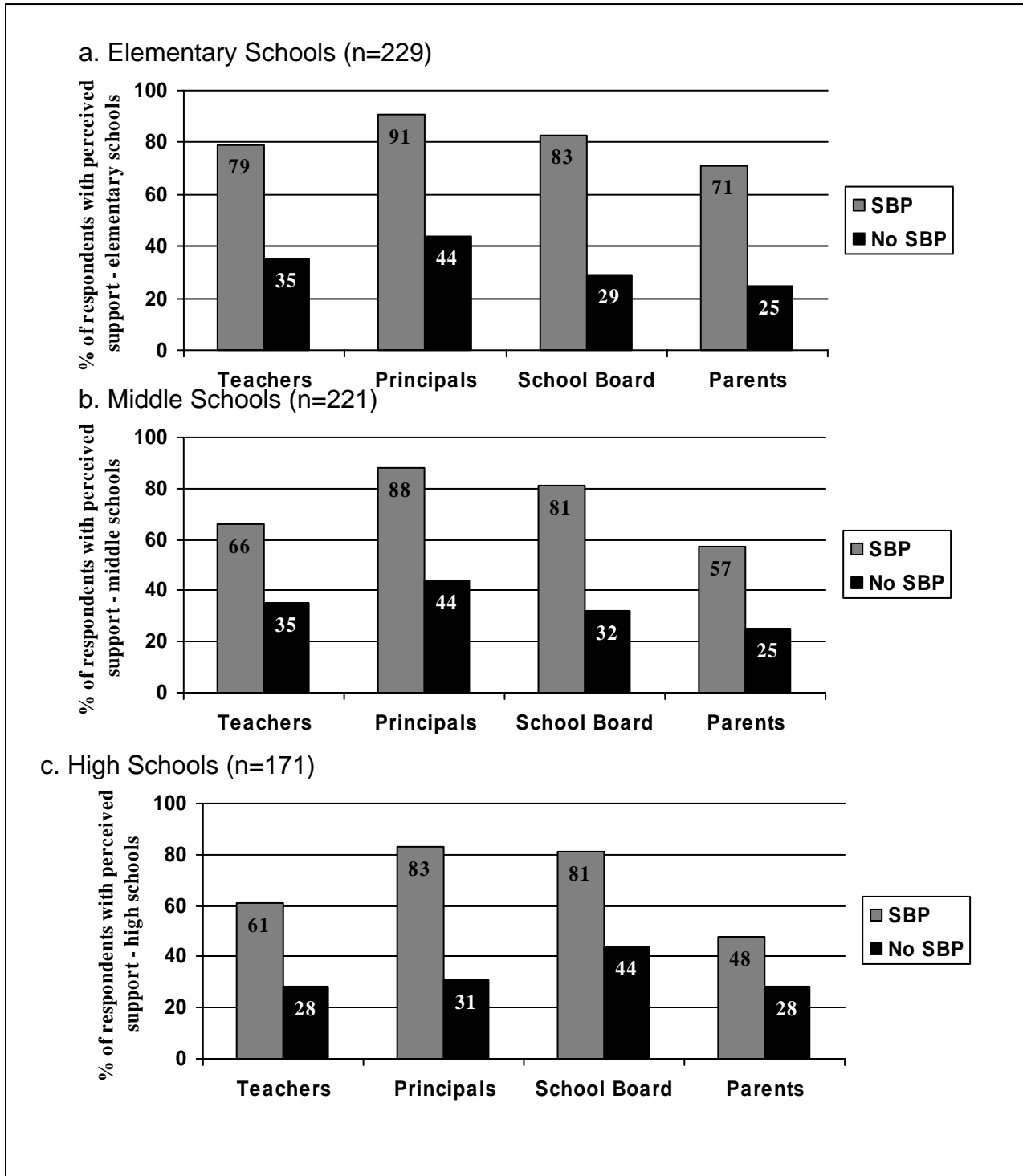
Research question – Does having the perceived support of certain individuals make it more likely for schools to have a school breakfast program?

To answer this question, the three datasets were further divided into those schools that offered a school breakfast program and those that did not. Respondents who indicated that “some” of their schools had school breakfast programs were removed from the dataset for this comparison.

Since we were interested in those individuals who were perceived to be supportive of serving breakfast in school, we focused only on those responses where the respondent chose either “strongly agree” or “agree” with the statement “In my school/agency, I feel the following people are supportive of serving breakfast at school.”

In each level of school, having the perceived support of teachers, principals, parents, and the school board is associated with the existence of a school breakfast program in the school(s). In schools with a SBP, perceived support from principals was greatest in all three levels of schools, with support from parents the lowest. In schools without a SBP, perceived lack of support from principals was greatest in elementary and middle school and from the school board in high schools. (Figure 1)

Figure 1: Perceived support for serving breakfast at school by whether or not a SBP is present.



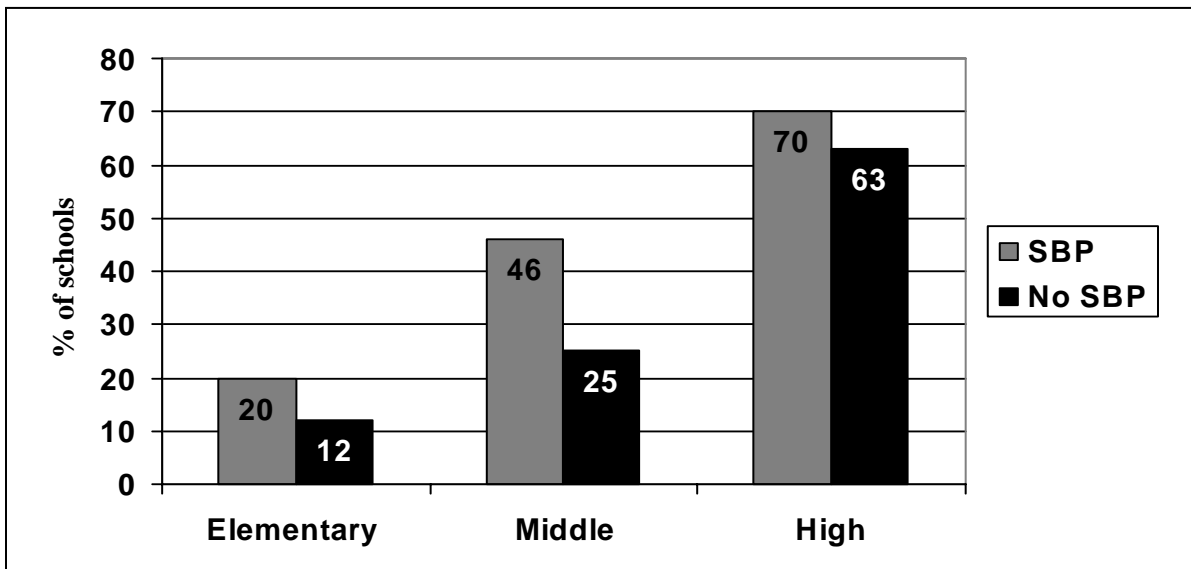
Affect of a La Carte/Vending on School Breakfast Programs

Research question – Does having a la carte or vending impact whether or not a school participates in the school breakfast program?

To answer this question, the three datasets were further divided into those schools that offered an SBP and those that did not. Respondents who indicated that “some” of their schools had school breakfast programs were removed from the dataset for this comparison.

Looking across the data for the three grade levels of schools, having a la carte and/or vending does not seem to make it less likely that a school will have a SBP, as was the expectation (Figure 2). Schools with a SBP are more likely to have a la carte or vending at all grade levels.

Figure 2: Percentage of schools with a la carte and/or vending based on having a School Breakfast Program




Reasons a School Breakfast Program Not Offered by A La Carte/Vending

Research question – Do the reasons a school does not have a school breakfast program differ if the school has a la carte or vending compared to a school with no a la carte or vending?

For this comparison, we were interested in only those respondents/districts that did not have SBPs in all of their schools. To answer this research question, respondents/districts that had SBPs in all of their schools were deleted from the three datasets. Also for this comparison, the responses to the a la carte/vending question were collapsed so that we could compare those schools that offered a la carte, vending, or both (“yes”) with those that offered neither (“no”).

This question is somewhat difficult to interpret because of the sheer number of response options. The small sample size is also problematic for all levels of schools, especially elementary schools. However, two consistent findings do emerge from this comparison:

1. “Not enough time” is one of the reasons cited by all school levels that chose to offer a la carte and/or vending but did not have an SBP.

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2. “Breakfast not responsibility of school” and “No need” were cited by all levels of schools that did not offer any food for morning nutrition (no a la carte, vending or SBP) as their reason for offering nothing.

Challenges by School Level

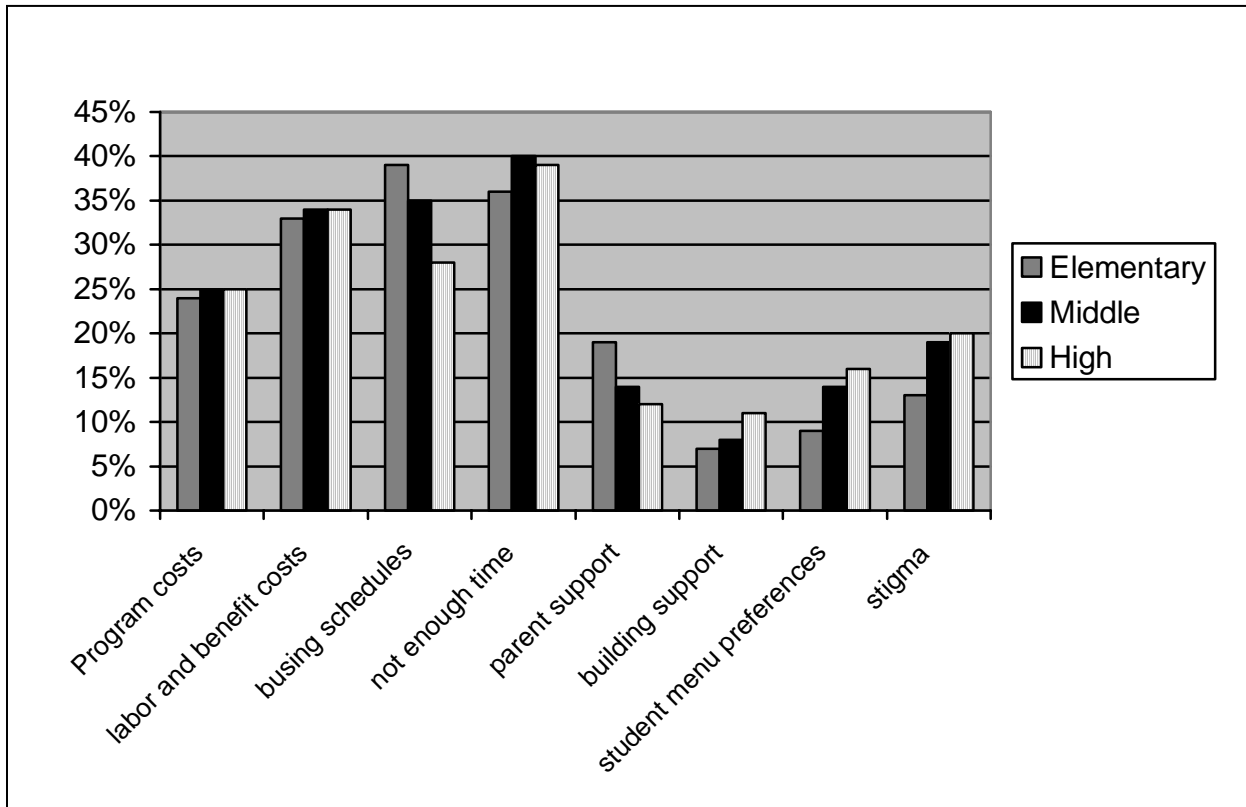
Research question – Are the challenges to offering a SBP at elementary, middle, and high schools different from each other?

While the main challenges indicated by respondents from elementary, middle, and high schools were the same, there were small differences in the percentage of respondents who indicated certain challenges. The following small differences existed between elementary, middle, and high school respondents (Figure 3):

- Elementary and middle school respondents expressed slightly more often that “Busing schedules” were a challenge compared to high school responses. In fact, it appears there may be a trend toward busing being less often cited as a challenge when comparing elementary to middle to high school responses.
- Middle and high school respondents expressed slightly more often that “Not enough time” was a challenge for them compared to elementary school respondents.
- Elementary school respondents were slightly more likely to indicate “parent support” as a challenge compared to middle and high school respondents.
- High school respondents were slightly more likely to indicate “building support” as a challenge compared to middle and elementary school respondents.
- The percentage of respondents indicating “Student menu preferences” as a challenge increased slightly from elementary to middle to high school.
- Similarly, the percentage of respondents indicating “Stigma” as a challenge increased slightly from elementary to middle to high school.

While the differences in the challenges expressed by elementary, middle, and high school respondents may not be statistically significant, they do point to trends that could be helpful when tailoring breakfast programs to specific grade levels.

Figure 3: Challenges faced by respondents to serving school breakfast by level of school



Traditional/Non-traditional Serving Models used by School Level

Research question – Are certain levels of schools (i.e., elementary, middle, or high school) more likely to use non-traditional serving models to serve school breakfast than other grade levels?

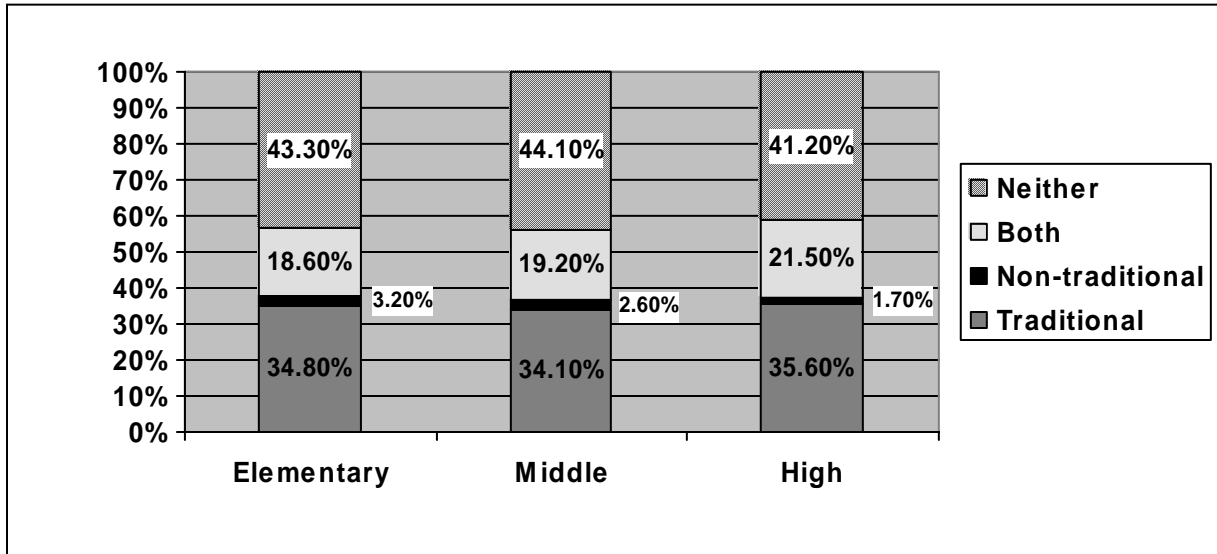
Respondents were asked to identify all serving models used in their schools. Serving models were categorized according to whether they were traditional or non-traditional models. Table 1 lists traditional and non-traditional serving models.

Table 1: Traditional and Non-traditional serving models

Traditional
Breakfast before school
Breakfast in Cafeteria
Non-Traditional
Breakfast in Classroom
Universal Free Breakfast
Elimination of Reduced Price meals
Grab and Go breakfast/Breakfast in a Bag
Mid-morning Nutrition Break (serving a reimbursable breakfast)
Breakfast Cart
Breakfast on bus
Offering choice and “bundling” reimbursable meals

There appears to be little difference in the serving models offered in elementary, middle and high schools (Figure 4). For each grade level of school, approximately one-third used traditional serving models. Approximately 1 in 5 schools at each grade level used a combination of traditional and non-traditional serving methods. Very few schools at any grade level used solely non-traditional serving models.

Figure 4: Percentage of respondents serving breakfast via traditional and non-traditional serving methods by school level



Perceived Support and Challenges for Serving Breakfast at School by Traditional/Non-traditional Serving Models

Research questions -

Are schools that use non-traditional serving models more likely to have perceived support of certain individuals than those schools using traditional serving models?

Do schools that serve breakfast in non-traditional ways express different challenges than schools that serve breakfast using traditional methods?

To answer this question, the overall dataset was divided into separate elementary, middle, and high school datasets. Further, the three datasets were divided into those elementary, middle, and high schools that used traditional and non-traditional serving models. For all types of schools, the number of schools that used non-traditional serving models was very low. Since the number of respondent schools using non-traditional serving models is very small, analysis of these questions was problematic and resulted in findings that are not likely representative of WI schools or WI schools using non-traditional serving models.

V. Limitations

- *Response rate*
28% of persons initially contacted provided useable data, which is a reasonable response rate for this survey format. While respondents had geographic representation across the state, their responses must be taken with this response rate in mind and may reflect some response bias.
- *Elementary, Middle and High School Designation*
No response options were offered for those districts that did not serve a particular age group of students. Thus, respondents dealt differently with questions that did not apply to them. Some respondents skipped these questions; however, this was not a uniform response. Similarly, some items offered 'no need' as a response option – some respondents who did not serve a particular age group selected 'no need' to address this lack of age group.
- *“Challenges” items*
Survey items addressing challenges with respect to serving school breakfast to students were answered by both schools with and without a breakfast program, instead of only those schools with a program, as intended in the survey design.
- *“Some” responses to items addressing the availability of School Breakfast Programs, a la carte, and vending in district schools*
Respondents who indicated “some” of their elementary, middle schools or high schools had an SBP, a la carte, or vending were not given the opportunity to indicate exactly how many or what percentage of schools in their districts offered these options. Thus, there is no way to gauge the magnitude of a “some” response (i.e., Does it mean most or only one school in the district offered a la carte?) Thus, respondents who answered having a SBP in “some” of their elementary, middle or high schools (18, 8 and 6, respectively) were deleted from the analyses.

VI. Conclusions

- Having the perceived support of teachers, principals, parents, and the school board is associated with the existence of a school breakfast program in elementary, middle, and high schools.
- Having a la carte and/or vending in a school does not appear to be associated with a lack of an SBP. In fact, schools that have an SBP were more likely to also have a la carte and/or vending.
- The most consistent reason given for a school offering a la carte and/or vending but not an SBP was that there was “not enough time” for a school breakfast program.
- Schools that offered no SBP, no a la carte, and no vending for morning nutrition more often stated (compared to those schools that offered some kind of breakfast option) that “breakfast [was] not [the] responsibility of [the] school” and there was “no need” to offer any of these food options.
- There are some differences in challenges to offering SBPs in elementary, middle, and high school.
- Few schools used non-traditional serving models to serve breakfast.

VII. Recommendations

- It is imperative to promote the idea of a school breakfast program to teachers, principals, parents, and the school board no matter what level of school you are operating in. The success of a SBP can be contingent upon the support (or even perceived support) of these stakeholders.
- Schools could explore alternatives to the traditional sit down, cafeteria school breakfast program. Options such as a prepared grab and go bag could address the issue of lack of time for a SBP while still ensuring that students got a nutritionally-balanced and reimbursable school breakfast.
 - Since schools in this survey seem to offer SBP and a la carte concurrently, it may be the case that some schools are currently offering a la carte as an alternative to an SBP. These schools may be in a good position to experiment with grab and go. A problem with offering a la carte and/or vending in place of a SBP is that a la carte and vending are not necessarily accessible to those students from low-income families who most need to receive a nutritionally-balanced meal to support their performance in the classroom.
- Different marketing and problem-solving strategies must be used at different grade levels to increase SBP participation in those schools.
 - Involve the parents of elementary school-aged children in the planning and decision-making of a SBP.
 - Focus on addressing the busing schedule challenges for elementary and middle school-aged children. If changes to busing schedules are impossible, consider offering breakfast in the classroom.
 - As children get older, it is more important to focus on reducing or obliterating any stigma of participating in a SBP. Offering universal free breakfast is one solution to reducing stigma.
 - As children get older, there should be greater focus on their menu preferences in a SBP. Involving older students in the menu selection may help to increase their buy-in and participation in a school breakfast program.
- Schools should be encouraged to explore the use of non-traditional serving models to increase SBP participation. Data from this survey point to several very promising non-traditional serving models which schools could begin to implement:
 - Breakfast in classroom (addresses busing schedules challenges)
 - Grab and go (addresses lack of time challenges)
 - Universal free breakfast (addresses stigma challenges)



VIII. References

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IX. GLOSSARY OF ACRONYMS

FSD – Food Service Directors

RCCI – Residential Childcare Institution

SBP – School Breakfast Program

Appendix 1: Food Service Directors Survey Descriptive Statistics

N = 251 unless otherwise noted

Not all columns will equal 100% due to rounding

Did you offer the School Breakfast program at the schools in your school agency?

When only respondents with a particular level of school are considered, approximately 50% of schools have a school breakfast program in all of their schools. There is little difference between access in elementary, middle and high schools. A small percentage of districts only offer the SBP in some of their schools.

	Elementary	Middle	High
All	48%	47%	38%
Some	7%	3%	2%
None	43%	41%	30%
No school of that level	2%	9%	30%
Total	100%	100%	100%

What are some reasons that the School Breakfast Program was not offered at every school in your school agency

The major three reasons that schools do not offer a school breakfast program, across all school levels are busing schedules, labor and benefits costs and not enough time. Program costs are also factor at all three levels.

	Elementary n=127	Middle n=111	High n=82
Program costs	33%	29%	38%
Labor and benefits costs	51%	43%	46%
Busing schedules	53%	50%	37%
Not enough time	44%	44%	45%
Lack of space	9%	7%	6%
Lack of equipment	14%	7%	15%
Lack of parent support	28%	20%	11%
Lack of instructional support	12%	7%	5%
Lack of school Admin support	17%	15%	13%
Lack of school Board support	4%	5%	5%
Lack of building support	14%	13%	16%
Breakfast not responsibility of school	19%	16%	9%
No need	31%	23%	20%
Other, Please Specify	16%	18%	22%

Was a la carte available for morning nutrition at the schools in your school agency?

The majority of elementary and middle schools do not have a la carte available for morning nutrition in their schools. Over 50% of respondents with a high school have a la carte available for morning nutrition in at least some of their high schools.

	Elementary	Middle	High
All	9%	20%	33%
Some	5%	7%	6%
None	85%	64%	31%
No school of that level	2%	9%	30%
Total	100%	100%	100%

What a la carte was available for morning nutrition at the school level? Check all that apply.

Almost every school with a la carte offers healthy drinks, mostly because milk was sold a la carte in the morning. Most schools also sell healthy foods a la carte. Few schools have less healthy drinks available a la carte; however this did increase with students' age. A significant number of elementary schools and the majority of middle and high schools have less healthy snacks available during the morning for purchase a la carte.

	Elementary n=35	Middle n=68	High n=99
Healthy drinks ¹	94%	99%	99%
Less healthy drinks ²	11%	18%	39%
Healthy foods ³	80%	93%	94%
Less healthy foods ⁴	40%	65%	77%

¹ Healthy drinks – milk, 100% juice, water

² Less healthy drinks – soft drinks, sports drinks or fruit drinks, not 100%

³ Healthy foods – yogurt or cheese, grain products, low-fat baked goods, hot entrees

⁴ Less healthy foods – salty snacks not low fat, salty snacks low fat, chocolate candy, other kinds of candy

Was vending available for morning nutrition at the schools in your school agency?

Almost no elementary schools have vending available to the students for morning nutrition; however, as with a la carte, this tends to increase with students' age. Almost half of respondents with a high school, had vending available for morning nutrition.

	Elementary	Middle	High
All	0%	10%	23%
Some	3%	8%	7%
None	95%	74%	40%
No school at that level	2%	9%	30%
Grand Total	100%	100%	100%

What vending was available for morning nutrition at the school level? Check all that apply.

Across all school levels, healthier options are less available from vending machines for morning nutrition, although most schools do have healthy drinks available through vending for students.

	Elementary n=8	Middle n=44	High n=76
Healthy drinks ¹	63%	86%	95%
Less healthy drinks ²	38%	64%	79%
Healthy foods ³	38%	52%	53%
Less healthy foods ⁴	38%	59%	74%

¹ Healthy drinks – milk, 100% juice, water

² Less healthy drinks – soft drinks, sports drinks or fruit drinks, not 100%

³ Healthy foods – yogurt or cheese, grain products, low-fat baked goods, hot entrees

⁴ Less healthy foods – salty snacks not low fat, salty snacks low fat, chocolate candy, other kinds of candy

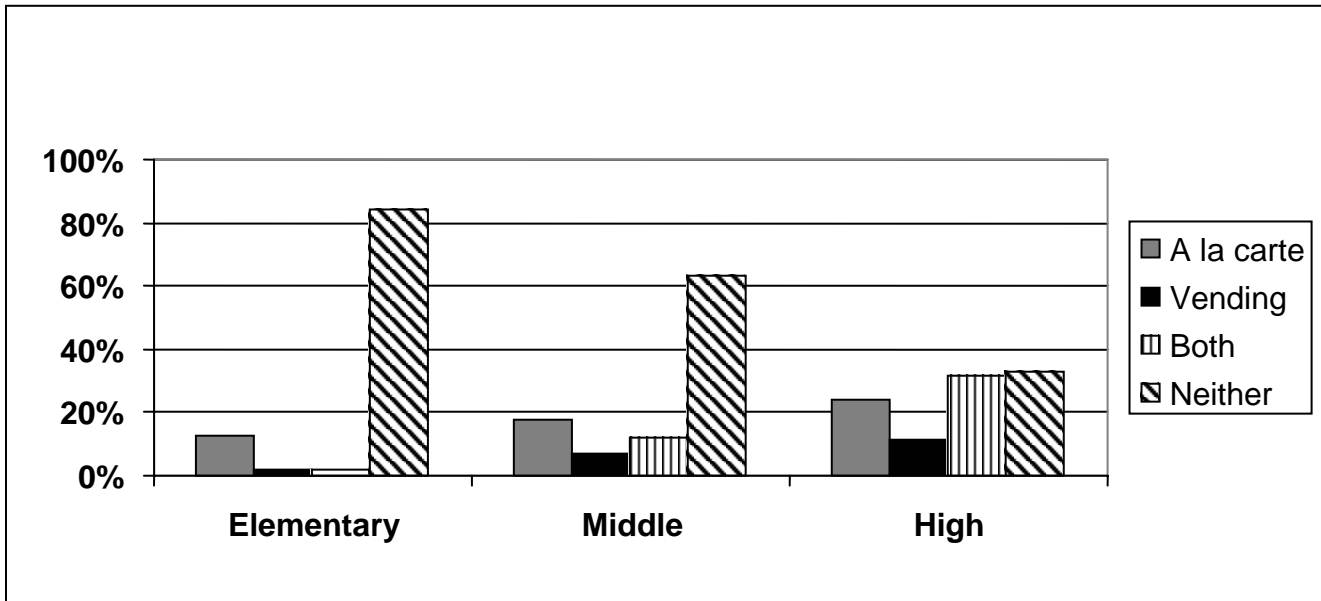
Was a la carte or vending available for morning nutrition at your school?

A new combined variable indicating whether or not a respondent had one, both, or neither a la carte or vending was created. Respondents who indicated that ‘some’ of their schools had a la carte or vending were counted as having a la carte or vending for this combined variable, even though not all of the schools in the respondent’s district may have had these options.

Presence of a la carte and vending increased from elementary to middle to high school. While the majority of elementary schools (84%) did not have a la carte or vending, only 1/3 of high schools did not have either available. A la carte was more prevalent at all three school levels than vending.

	Elementary n=247	Middle n=229	High n=177
A la carte	13%	18%	24%
Vending	2%	7%	11%
Both	2%	12%	32%
Neither	84%	63%	33%

Figure 1: Percentage of respondents with a la carte and or vending for morning nutrition by school level.



Please select any of the following models for serving school breakfast that were used in schools in your school agency last school year (2004-05). Check all that apply.

The majority of schools at all three levels serve breakfast before school and in the cafeteria. Some schools serve healthier items and have made the cafeteria more inviting, but few use alternative serving methods such as breakfast in the classroom, mid-morning nutrition break or grab and go breakfasts.

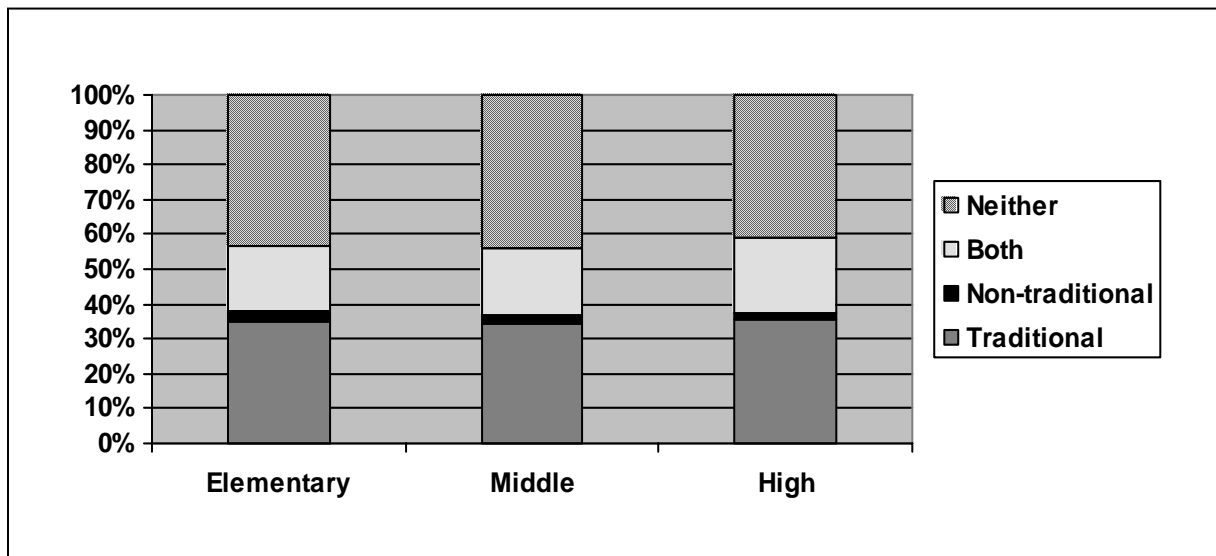
	Elementary n=247	Middle n=229	High n=177
Breakfast not offered	43%	40%	38%
Breakfast before school	47%	46%	51%
Breakfast in Cafeteria	47%	47%	50%
Breakfast in Classroom	10%	6%	1%
Universal Free Breakfast	4%	3%	2%
Elimination of Reduced Price meals	4%	4%	3%
Grab and Go breakfast/Breakfast in a Bag	8%	10%	10%
Mid-morning Nutrition Break (serving a reimbursable breakfast)	3%	3%	5%
Breakfast Cart	1%	3%	2%
Serving healthier items	17%	19%	23%
Making cafeteria/lunchroom inviting	15%	14%	16%
Breakfast on bus	0%	0%	0%
Offering choice and "bundling" reimbursable meals	4%	5%	10%
Other, Please Specify	3%	5%	7%

Was breakfast served with a traditional or non-traditional model?

Respondents were asked to identify all serving models used in their schools. Serving models were categorized according to whether they were traditional or non-traditional models. Traditional models included breakfast in the cafeteria and breakfast before school. All other models were considered non-traditional.

	Elementary n=247	Middle n=229	High n=177
Traditional	35%	34%	36%
Non-traditional	3%	3%	2%
Both	19%	19%	21%
Neither	43%	44%	41%

Figure 2: Percentage of respondents serving breakfast via traditional and non-traditional serving methods by school level



What challenges, if any, do you face with respect to serving school breakfast to students at the school level? Check all that apply.

The challenges that schools face to serving breakfast, are similar to the reasons that schools do not offer breakfast. The three main challenges to serving breakfast are similar across the three school levels. They are not enough time, busing schedules and labor and benefits costs.

	Elementary n=247	Middle n=229	High n=177
School breakfast not offered	38%	38%	31%
I don't face any challenges	9%	7%	9%
Program costs	24%	24%	24%
Labor and benefits costs	33%	33%	33%
Busing schedules	39%	35%	28%
Not enough time	35%	39%	38%
Lack of space	4%	4%	5%
Lack of equipment	6%	6%	8%
Parent support	19%	14%	12%
Instructional support	10%	8%	7%
School Admin support	9%	8%	10%
School Board support	3%	3%	3%
Building support	7%	8%	11%
Student menu preferences	9%	14%	16%
Stigma	13%	18%	20%
Other, Please Specify	9%	6%	10%

Would you be interested in trying any of the following strategies with respect to serving breakfast at school? Check all that apply.

Interest in alternative serving methods for breakfast is high, with at least a quarter of respondents interested in strategies such as universal free breakfast, grab and go breakfast and mid-morning nutrition break. A similar percentage are interested in creative marketing, healthier food and changing the cafeteria environment.

	Freq	Percentage
Breakfast in Classroom	41	16%
Universal Free Breakfast	65	26%
Elimination of Reduced Price meals	55	22%
Grab and Go breakfast/Breakfast in a Bag	76	30%
Mid-morning Nutrition Break	64	26%
Breakfast Cart	48	19%
Serving healthier items	60	24%
Creative Marketing	67	27%

Making cafeteria/lunchroom inviting	62	25%
Breakfast on bus	3	1%
Offering choice and “bundling” reimbursable meals	35	14%
Other, Please Specify	25	10%

Please indicate your level of agreement with this statement. “In my school agency, I feel the following people are supportive of serving breakfast at school.”

Overwhelmingly, it appears that food service directors perceive that teachers, principals, parents and school boards are supportive of serving breakfast at school. As students age, it appears that respondents are less aware of how supportive these individuals are and opt for the neither agree nor disagree option. There appears to be a slight decrease in perceived support of teachers, principals and parents towards high school, but this is mainly do to more respondents choosing the middle category, meaning they are probably unaware of these individuals support at this school level.

School teachers	Elementary n=229	Middle n=214	High n=165
Strongly agree	26%	22%	20%
Agree	33%	30%	27%
Neither Agree nor Disagree	26%	33%	41%
Disagree	11%	10%	6%
Strongly Disagree	4%	5%	6%

School principles	Elementary n=224	Middle n=205	High n=165
Strongly agree	37%	35%	30%
Agree	32%	32%	35%
Neither Agree nor Disagree	21%	22%	25%
Disagree	7%	7%	7%
Strongly Disagree	4%	4%	4%

Parents	Elementary n=216	Middle n=206	High n=162
Strongly agree	17%	13%	13%
Agree	34%	30%	27%
Neither Agree nor Disagree	38%	45%	49%
Disagree	9%	9%	8%
Strongly Disagree	3%	3%	3%

School boards	Percentage n=211
Strongly agree	29%
Agree	30%
Neither Agree nor Disagree	33%
Disagree	6%
Strongly Disagree	2%

What would help you in your efforts to increase school breakfast participation? Check all that apply.

Respondents feel that promotional resources as well as marketing tools and strategies would be most helpful to increasing their SBP participation. Half are also feel that menu ideas would help to increase participation in their program.

	Percentage n=203
Technical assistance materials (in print)	22%
Technical assistance (in person)	11%
Training on starting or improving an SBP	25%
Promotional resources for parents and students	50%
Outreach/educational resources	25%
Talking with SBP food service directors	30%
Menu ideas	50%
Help marketing SBP	44%
Student surveys on SBP	40%
Other, Please Specify	19 %

Appendix 2 – Map of Respondents



This map represents the number of public school district respondents in each county.

Appendix 3 – Tabular Results for Comparison Analyses

Table 1a: Perceived support for serving breakfast at school by whether or not they have a SBP – Elementary Schools (n= 229)

		School Breakfast Program			
		Yes	n	No	n
“Strongly agree” or “Agree” that these persons are perceived to be supportive	Teachers	79%	119	35%	94
	Principals	91%	114	44%	94
	Parents	71%	113	25%	87
	School Board	83%	111	29%	80

Table 1b: Perceived support for serving breakfast at school by whether or not they have a SBP – Middle Schools (n = 221)

		School Breakfast Program			
		Yes	n	No	n
“Strongly agree” or “Agree” that these persons are perceived to be supportive	Teachers	66%	117	35%	91
	Principals	88%	112	44%	87
	Parents	57%	115	25%	85
	School Board	81%	111	32%	79

Table 1c: Perceived support for serving breakfast at school by whether or not they have a SBP – High Schools (n = 171)

		School Breakfast Program			
		Yes	n	No	n
“Strongly agree” or “Agree” that these persons are perceived to be supportive	Teachers	61%	92	28%	69
	Principals	83%	92	31%	69
	Parents	48%	90	28%	68
	School Board	81%	91	44%	68

Tables 2a-c show the percentages of respondents reported to have a la carte, vending, or both in their schools by whether or not their schools had a school breakfast program.

Table 2a: A La Carte/Vending by SBP – Elementary Schools (n=229)

		School Breakfast Program n=120		No School Breakfast Program n=109	
A la carte AND/OR vending	A la carte	15%	Combined 20%	9%	Combined 12%
	Vending	2%		2%	
	Both	3%		1%	
	Neither	80%	88%		

Table 2b: A La Carte/Vending by SBP – Middle Schools (n=221)

		School Breakfast Program n=118		No School Breakfast Program n=103	
A la carte AND/OR vending	A la carte	25%	Combined 46%	8%	Combined 25%
	Vending	5%		10%	
	Both	16%		8%	
	Neither	54%	75%		

Table 2c: A La Carte/Vending by SBP – High Schools (n=171)

		School Breakfast Program n=95		No School Breakfast Program n=76	
A la carte AND/OR vending	A la carte	33%	Combined 70%	14%	Combined 63%
	Vending	3%		21%	
	Both	34%		28%	
	Neither	30%	37%		

Table 3: The percentage of respondents indicating specific challenges related to serving school breakfast by school level. (Only those challenges with > 10% of respondents in at least one school level are included.)

		School Level		
		Elementary n=244	Middle n=224	High n=173
Challenges to serving school breakfast	Program costs	24%	25%	25%
	Labor and benefits costs	33%	34%	34%
	Busing schedules	39%	35%	28%
	Not enough time	36%	40%	39%
	Parent support	19%	14%	12%
	Building support	7%	8%	11%
	Student menu preferences	9%	14%	16%
	Stigma	13%	19%	20%