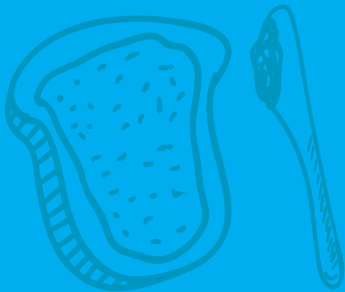


WAYS TO MAKE SCHOOL BREAKFAST THE EASY AND HEALTHY CHOICE: *Responding to the students*



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INTRODUCTION

Breakfast is widely considered the most important meal of the day, for reasons backed up by a wealth of scientific evidence demonstrating the health benefits of a nutritious morning meal. The word “breakfast” refers literally to the act of breaking the metabolic “fast” that occurs overnight while a person is sleeping. Eating a well-rounded meal shortly after waking jumpstarts a person’s metabolism and provides much-needed energy for the rest of the day. In addition, the benefits of a nutritious breakfast go beyond an individual morning—research shows that regular breakfast-eaters are more likely to maintain a healthy weight¹ and consume more nutrients² than those who eat breakfast rarely or never.

**“BREAKFAST”
REFERS LITERALLY
TO THE ACT
OF BREAKING THE
METABOLIC “FAST”**

Eating breakfast in the morning is especially important for children and adolescents, who are still growing both physically and mentally. Nutritious breakfast habits have been shown to enhance student success, both in and out of the school setting. Eating breakfast can contribute to improvements in math, reading, and standardized test scores³ and enhanced memory and focus in the classroom.⁴ Children who eat breakfast are more likely than those who do not to be physically active and have a higher fitness level.⁵ In addition, regularly eating breakfast as a child or adolescent also can help to establish this healthful habit for later in life during adulthood. Despite this, it is estimated that 14% of adolescents in the U.S. do not eat breakfast every day, with teens from lower-income and nonwhite families more likely to skip their morning meal.¹

SCHOOL BREAKFAST IS AVAILABLE AT HIGH SCHOOLS ACROSS THE STATE AT AN AFFORDABLE PRICE.

Because of the National School Breakfast Program (NSBP), breakfast at school is widely available for students at little to no cost to families throughout the United States. Participation in school breakfast benefits families in many ways, like ensuring that a child receives a healthful meal that meets federally-mandated nutrition standards and helping to cut down on stress in the morning as parents juggle multiple demands to get their children ready for the school day.

However, rates of participation in school breakfast are low both nationally and in the state of Iowa. On an average day during the 2011-2012 school year, only 12.5 million children in the U.S. participated in school breakfast—and of these children, 84% received their breakfast free or at reduced-cost.⁶ Iowa in particular has low rates of school breakfast participation, ranking 47th out of 50 states.⁶ During the 2011-2012 school year, over 80% of students did not participate in school breakfast⁷-- compared with only 21% of students in Iowa who did not eat school lunch.⁷

¹ Timlin, M., Pereira, M., Story, M., & Neumark-Sztainer, D. (2008). Breakfast eating and weight change in a 5-year prospective analysis of adolescents: Project EAT (Eating Among Teens). *Pediatrics*, 121, e638-645.

² Min, C. et al. (2011). Skipping breakfast is associated with diet quality and metabolic syndrome risk factors of adults. *Nutrition Research and Practice*, 5(5), 455-463.

³ Rampersaud, G.C., Pereira, M., Girard, P., Adams, J., Metz, J. (2005). Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal of the American Dietetic Association*, 105(5), 743-60.

⁴ Wesnes, K.A., Pincock, C., Richardson, D., Helm, G., & Hails, S. (2003). Breakfast reduces declines in attention and memory over the morning in schoolchildren. *Appetite*, 41(3), 329-331.

⁵ Sandercock G., Voss, C., Dye, L. (2010). Associations between habitual school-day breakfast consumption, body mass index, physical activity and cardiorespiratory fitness in English schoolchildren. *Eur. J. Clin. Nutr.* 64, 1086-1092

⁶ Food Resource and Action Center. (2013). *Child nutrition fact sheet: School Breakfast Program*. Retrieved from http://frac.org/wp-content/uploads/2009/09/school_breakfast_program_fact_sheet.pdf

School meals participation in Iowa, 2011-2012⁷

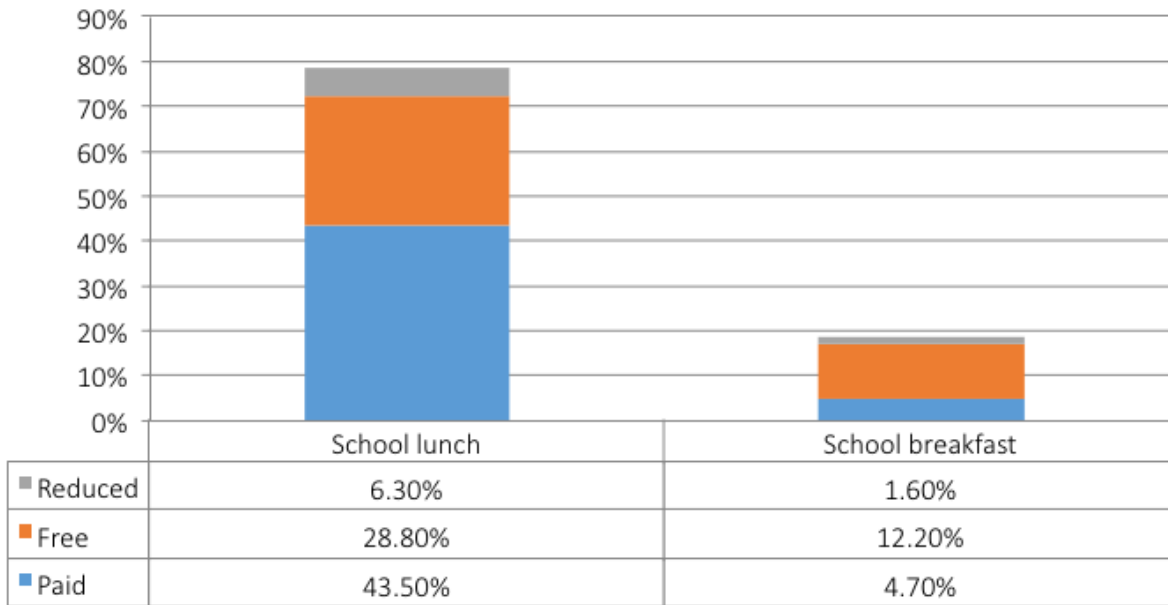
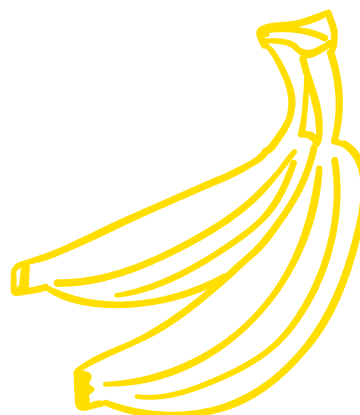


Table 1 Percentage of Iowa students participating in school lunch versus school breakfast by paid, reduced, and free participation, 2011-2012 school year school year.



⁷ School Nutrition Association Iowa. (2013, March 5). *Iowa Child Nutrition Programs Annual Report*.

METHODS

The ideas in this guidebook come from the high school students at three high schools in Iowa (Waukee, Pleasant Valley and Cedar Rapids Jefferson). Through a series of meetings and activities during the 2013-2014 school year, the students outlined the barriers to increasing school breakfast participation, identified what their peers believe are benefits to eating school breakfast, brainstormed ideas for improving breakfast participation and eventually developed a Twitter campaign promoting school breakfast. Students also learned about how school breakfast is funded, what the breakfast requirements are, and the other constraints food service programs face in delivering school breakfast.

All Iowa high schools were presented with the opportunity to participate in this project. Of the schools that expressed interest, three schools were selected based on their size, location, free and reduced-lunch percentages, and their enthusiasm for the project.

The following schools participated in this project:

Waukee High School

Location: Waukee, IA

Total enrollment: 1,475 students

Participants: Marketing Advertising Class

Pleasant Valley High School

Location: Bettendorf, IA

Total enrollment: 1,250 students

Participants: Informal student group

Jefferson High School

Location: Cedar Rapids, IA

Total enrollment: 1,610 students

Participants: DECA club*

*(organization focused on student development of marketing, finance, and entrepreneurial skills)

Four meetings were held at each school. The meetings were based on the Theory of Active Involvement (Greene, 2013), which suggests that involving adolescents in a process of active engagement and self-reflection can lead to sustained health interventions in this population.⁸ Specifically, the theory has been applied as a framework to study how guiding a group of adolescents in generating a health message can both influence peer audiences and lead to lasting and effective changes in the group itself.

Concept mapping was used as a way to gather information from the students and understand how they organize and prioritize their thoughts about school breakfast. Concept mapping requires the students to brainstorm ideas. The ideas are ranked by the students and sorted into piles that represent bigger concepts. Through statistical analysis the ideas are grouped into categories that represent how the students understand how the concepts are related to each other.

⁸ Greene, K. (2013). The theory of active involvement: Processes underlying interventions that engagement adolescents in message planning and/or production. *Health Communication*, 28(7).

Meeting 1: Introduction to the importance of breakfast, information about school breakfast, brainstorming about barriers, motivators and benefits to school breakfast, and discussion about other information needed.

Meeting 2: Ranking and pile sorting for brainstormed lists of barriers, motivators, and benefits and discussion of what channel to use to communicate more effectively with their peers.

Meeting 3: Brainstorming Twitter options, discussion of types of breakfast food students would enjoy, and discussion of ways to advertise school breakfast in the school.

Meeting 4: Responding to visuals and brainstormed list of tweets.

Each of the schools conducted activities related to school breakfast. Some students developed an online survey, others put together advertising and marketing plans, some developed their own Twitter campaigns with a pre-formed tweet for each school day, and a few students designed a video promoting school breakfast.

BEST PRACTICES

The following recommendations for ‘best practices’ were developed using student input and advice from the three high schools involved in the project, and represent the student perspective on practices related to school breakfast:

AWARENESS

- No one knows about school breakfast. The vast majority of students did not know that breakfast was offered at their school.

Recommendation: You have to find a way to tell them about school breakfast. The use of Twitter or other social media are great ways to communicate with students. The vast majority of the students have Twitter accounts and check their accounts multiple times an hour. Everyone is taking ‘selfies’—what about ‘breakfast selfies’?

- Most students do not know what is served for breakfast and are less likely to show up and eat something when it’s a mystery. They also do not know *where* they would find out what is served for breakfast, despite menus being posted online, posted in classrooms and mentioned in the daily announcements.

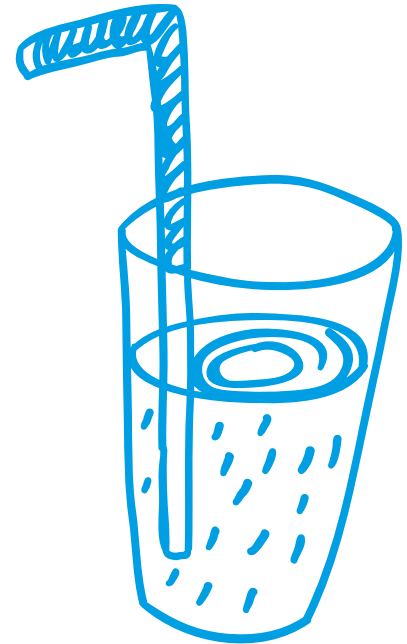
Recommendation: You have to tell students what is being served—do not leave it to them to seek out this information on their own. Use social media to tell them each day what the menu is for the next morning’s breakfast.

- Students are not paying much attention to most of the existing communication in their schools—including posters, emails, and announcements.

Recommendation: You have to get out of your comfort zone and communicate with the tools that students use to communicate—like Twitter and other social media.

- Students are a captive audience while standing in the school lunch line or in the cafeteria.

Recommendation: Consider what can be done that would draw students' attention while waiting in line for lunch. Posters will likely not be effective in this environment—students are flooded with posters throughout the school and may not pay attention. Think outside the box—try including standees, messages on food service staff t-shirts, and food samples to grab students' interest.



- Students make decisions about whether to eat breakfast the night before or right after they wake up.

Recommendation: You have to communicate with them when they are ready to make the decision about eating breakfast. This may mean setting up ways to tell students what's on tap for breakfast the night before as well as early in the morning.

- Students are not familiar with school breakfast. They need an incentive to try it!

Recommendation: Offer rewards, prizes, raffles, special events, or contests to get them to try school breakfast. These prizes could range from school gear to concert tickets. Partner with vendors, parent groups and local businesses to find a mix of big and small prizes. Boys indicated that the chance to have breakfast with a local sports hero would get them to try school breakfast. Students suggested having a special parking space that students could win, or having special prime parking for those who came to eat breakfast, would motivate them to come to school breakfast. A 'get-out-of-homework' pass would also be a great incentive for trying breakfast. Work with teachers, administrators and parent groups to make these ideas a reality.

COMPETING PRIORITIES

- Lots of priorities compete with school breakfast—in particular, sleep is students’ number one priority in the morning.

Recommendation: School breakfast before school must be convenient and require no extra time. For instance, consider setting up a grab-and-go option right at the entrance that students use to come into the building on the way to class in the morning.

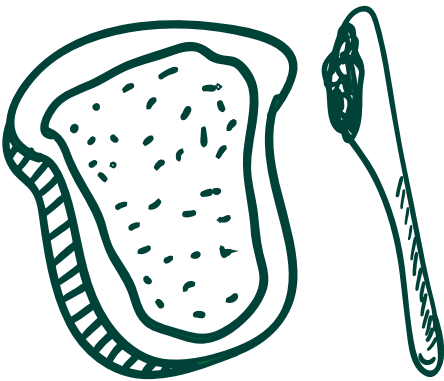
- The competition for breakfast is fierce. Popular coffee shops, fast food restaurants, and convenience stores are all trying to entice students to eat breakfast.

Recommendation: You have to provide students with something that they cannot get some place else-- great value, good nutrition, and convenience all in one! Promote the unique benefits of school breakfast as compared to less healthy or costlier options. Remind students that school breakfast comes straight out of their school meal accounts—no cash or cards needed!

TIMING

- Most students try to time their arrival to spend the least amount of time at school before the first bell.

Recommendation: School breakfast needs to be at a time when students are already at school, which is not going to be before the first bell.



- Students are not hungry right when they wake up, and most are not hungry until about 9 am. Food served before this is not going to be attractive to students. Most students indicated that they were not hungry until after 1st period. Many of them reported bringing soda, chips, bags of dry cereal and other convenience foods to eat when they got hungry in the morning. Some of the students kept these items in their backpacks and snacked between classes, in classrooms where teachers allowed food or snuck the food when teachers were not looking. Other students kept food in their lockers and would grab something as they stopped there between classes or on breaks.

Recommendation: Consider alternative times and methods for serving breakfast. Students were excited about alternative times and places for breakfast to be served. Breakfast after first period or ‘second chance breakfast’ was a popular idea. Grab-and-go breakfast made a lot of sense to students. Some students suggested breakfast in the classroom as options for days when they had homeroom or guidance.

LOCATION, LOCATION, LOCATION

- Students are not willing to walk further or out of their way to get breakfast. Location is really important. At many schools, the cafeteria is not on the way to classes. If there is no other option besides the cafeteria for school meals, let students know that the cafeteria breakfast time is not as hectic and crowded as it might be during lunch.

Recommendation: Breakfast served in the cafeteria is often not the most convenient for most students. Student liked the idea of having breakfast served as they walked into the building or at various locations around the building.

POLICIES

- Some schools do not allow students to take food out of the cafeteria. Students who want to eat breakfast but have limited time often cannot finish their food before they have to leave for their first class. Despite these rules, most students report that they smuggle food from home in their backpacks or lockers.

Recommendation: Administrators and facilities staff could be consulted about modifying these rules.

- The bus schedule may prevent some students from participating.

Recommendation: Investigate options such as changing the bus schedule. Breakfast can be offered as students leave the bus or at the entrance where the bus leaves the students.

FOOD PREFERENCES

Students have some very strong opinions about what they want to eat for breakfast. Popular foods or suggestions include:



- In general, boys and girls want different breakfast foods. Girls expressed more concerns about nutrition and calories, citing smoothies and fruit as their favorite options. Boys were more likely to want bacon. Many students were also in favor of more self-service options or portable items, and pre-packaged meals that they could take to go. Students also suggested that food service change up at least one item a day to keep it interesting.

Recommendation: The more options, the better. Change the menu up frequently, while keeping certain staples or popular items constant. Check in with your student body to see what they would eat and what will go to waste.

- Athletes also have strong opinions about what breakfast food they want to eat.

Recommendation: Talk to athletes and coaches. Find out what’s important for them to see offered at school breakfast.

- Students want to see name brands they are familiar with. For instance, they want to see yogurt brands that are in their refrigerators at home. They also want the food to look familiar to them. For instance- pancake on a stick is not something they would have seen before. Consider what menu options are popular for high schoolers at local food establishments.

Recommendation: Where possible, try to imitate the style or branding of popular or recognizable breakfast options—like setting up the breakfast area to look like continental breakfast at a hotel, for instance. Meet your competition.

MISCONCEPTIONS

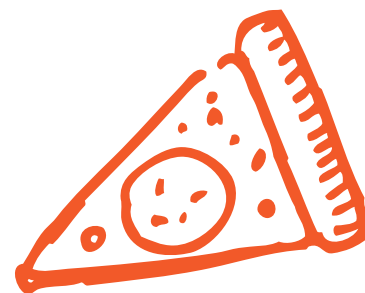
- Nutrition information is very important to most girls. They believe that the food served at school is high calorie, high fat with no nutritional value.

Recommendation: Provide easy-to-understand nutritional informational on breakfast food. Emphasize that school food service programs must follow federal nutritional guidelines. Be especially careful with foods that resemble popular fast food items—like breakfast pizza or hash brown sticks. Make sure that students understand the difference between what they are getting at school breakfast versus what they would get from a convenience store or fast food restaurant. Use calorie comparisons to highlight the advantage of school breakfast-- but sparingly, so the emphasis is not on calorie counting.

- Students do not know what school breakfast tastes like and they do not want to buy something that does not taste good. Students have a preconceived idea that breakfast at school does not taste good.

Recommendation: Students have to taste the food before they are willing to buy breakfast. Taste testing during lunch is an option. Students could test in line or after they have their meal. Students thought that taste testing during certain classes such as health, PE or family and consumer science would be good ideas.

The taste testing can be combined with rating the items in order to get feedback in an organized and fair way on what students like best. Math or marketing classes could help with the basic data entry and statistical work. Student also suggested serving breakfast items for lunch occasionally to highlight items found at breakfast.



- Students associate ‘school breakfast’ with unhealthy, unappealing food.

Recommendation: You can work against this misperception by having them taste the food and providing them with easy-to-understand nutrition information.

- Students do not have a realistic idea of what food costs. They often do not pay for food in restaurants or convenience stores. Many believe that food at popular coffee shops and breakfast at school cost the same amount.

Recommendation: Provide students with cost and nutrition comparisons for school breakfast and local popular establishments that serve breakfast.

- Some students who are athletes have a misperception about whether eating before or after working out or lifting is healthy.

Recommendation: Work with your coaches to communicate a clear message about healthy breakfast. Students reported that their coaches were constantly telling them to eat a healthy breakfast. Talk to the coaching staff about how you can work together to present a consistent message to student-athletes.

PROMOTING SCHOOL BREAKFAST

- Students have a lot to say. It is important to engage them and get their input. They are your target audience, after all!

Recommendation: There are many ways to engage students, such as forming a subcommittee on student council that works with food service, taste testings, or surveys. Try using some of the new polling technology to give students the chance to vote on possible breakfast items. Some student input can be negative, but after students have had the opportunity to voice their negative opinions, they may have many great ideas and are eager to be heard and to help.

- Students like the idea of competitions.

Recommendation: Competitions between schools and between grades are good ways to encourage participation for eating breakfast. Or consider a “punch-card” system, where students can be entered into a raffle upon participating in school breakfast a certain number of times. Prizes could include items ranging from school gear to iPads to gift cards.*

* Keep in mind that some prize items suggested may not be feasible from the school nutrition budget; however, funding may be possible through the general fund.

- Students need to *want* to spend extra time in the school cafeteria if school breakfast is served traditionally before the bell.

Recommendation: Think about what you can do to make the school cafeteria a place where students will want to spend extra time and hang out. Monitors with movies or TV and music are a start. Other options might be video games, pin ball machines, or decorations for holidays, homecoming/prom, and other special events. Alternatively, think about ways you can nudge students to use and grow familiar with the space—such as holding academic advising meetings there, or before-school tutoring. Offer the space up for clubs to reserve for before school meetings.

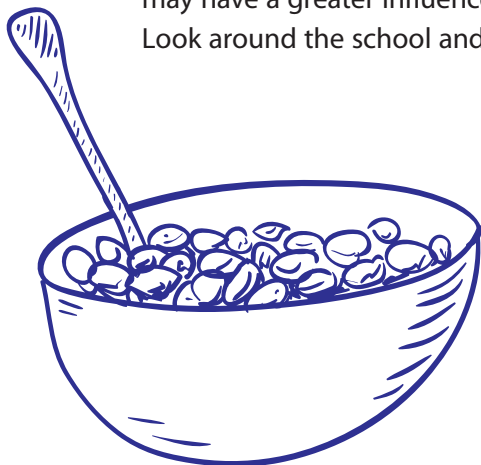
- Some school activities or classes are held before the regular school day starts. These students are a perfect group to try school breakfast.

Recommendation: Work with the teachers and activity leaders to coordinate breakfast for these students. Offer up the cafeteria as a meeting space for these activities or classes.

OTHER INFLUENCES

- Parents are not that important in the decision-making of high school students about breakfast. Most students report their parents do not know if they eat breakfast or not.

Recommendation: Parents are not as important in this decision as you might assume. Other adults may have a greater influence over whether students eat breakfast or not, such as coaches or teachers. Look around the school and see who you think might have sway over the students.



- As students transition from elementary school to middle school to high school, they are working on developing their autonomy. Making autonomous decisions about what they eat for breakfast is part of their development process.

Recommendation: You need to respect this autonomy and use it to your advantage. Treat them more like adults to help them make more autonomous decisions. Gain student input when possible, and avoid being condescending or talking down to students.

BENEFITS OF BREAKFAST

Students do not necessarily view the benefits of breakfast the same way the adults might. Some of these benefits from their perspective include having a chance to socialize with friends, having more energy, maintaining a healthy weight, and benefits to their athletic ability. Here is the list of benefits to eating breakfast at school according to the students involved in this project. Think about how you can use these benefits to your advantage.

BENEFIT(S)	BEST PRACTICE	SAMPLE TWEET(S)
<ul style="list-style-type: none"> • Academic • Improved focus/concentration • Having more energy • Getting better grades • Doing better on tests • Stimulating your brain 	<p>Consider promoting school breakfast more heavily during times when students have tests/finals, or when big games or sporting events are coming up.</p>	<p>There's a reason they call it "brain food" #finalsweek</p> <p>A big game starts with a big breakfast #schoolbreakfast</p> <p>The best way to stay focused in school is with school breakfast. Remember to get yours this morning!</p>
<ul style="list-style-type: none"> • Lack of hunger • Not starving later in the day • Feeling fuller for longer 	<p>Remind students of how awful they feel in class at 10:30 AM when they have not eaten anything for breakfast.</p>	<p>Beat those Monday morning blues with #schoolbreakfast at 7 AM!</p> <p>You're not the only one who can hear your tummy rumble in first period Spanish #eatschoolbreakfast</p>
<ul style="list-style-type: none"> • Feeling better overall 	<p>Remind students that there are all kinds of ways they can take care of themselves. Breakfast is one of them.</p>	<p>Healthy breakfast, healthy self. #schoolbreakfast</p>
<ul style="list-style-type: none"> • Socializing • Being social with friends • More time to talk with friends before classes start for the day 	<p>Students need time to be with their friends. Provide them with a welcoming space to do that. Find ways to make the breakfast area inviting and conducive to group conversation.</p>	<p>Grab a bite to eat before class! A breakfast sandwich is easy to carry and catch up with friends #schoolbreakfast</p> <p>Relive your weekend over #schoolbreakfast</p>
<ul style="list-style-type: none"> • Fun with food • Some breakfast foods can be fun (e.g., smoothies, eggs, cereal, waffles) • Make-it-yourself bars • Holiday or seasonal items 	<p>Not just elementary school students like their food to be fun to eat. Surprise them with 'fun' food. Incorporate seasonal treats (e.g., heart-shaped pancakes around Valentine's Day). Students may also have fun with buffet or do-it-yourself style set-ups, like a yogurt parfait</p>	<p>90-degrees and sunny? Sounds like smoothie weather to us!</p> <p>Treat your prom date to a romantic #schoolbreakfast!</p>

BENEFIT(S)**BEST PRACTICE****SAMPLE TWEET(S)**

- **Nutritional value**

- School breakfast meets federal nutritional standards

Students need to know how nutritious the food is. They think they can tell how healthy it is by how it looks—so let them know the facts about that breakfast pizza. Don't leave it to them to guess.

Did you know that school breakfast is healthy by LAW?? Get the facts at [insert website].

- **Mood**

- Starting the day off right with a solid meal can help to stabilize and improve mood

High school students would love to be less emotional, less negative and happier overall. School breakfast is an easy way to start the day off happy.

Good breakfast = good mood!
Come get yours at #schoolbreakfast and start the day off right.

- **Portion control**

- Many students pay attention to how much they're eating

School breakfast provides the 'right amount' of food. Athletes want to make sure they're getting enough to eat, while other students may be concerned about eating too much.

School breakfast is just the right size.

- **Steady hunger levels**

- Not overeating at lunch or later in the day because of breakfast

Some students reported overeating at lunch because they were starving. Let students know that if you eat something in the morning, they will not feel like gorging at lunch.

Eat #schoolbreakfast. Your stomach will thank you later.

- **Getting a healthy meal**

- Students can rely on the school to make sure their breakfast is healthy

Students like the idea that breakfast could be an easy healthy meal that they do not have to think about. Let them know that school breakfast options are all healthy options.

#schoolbreakfast is a no-brainer.
Low-sodium, low-fat—low stress!

- **Ready-made**

- School breakfast is ready and waiting when students get to school

For some students it is appealing to have someone else do the cooking and clean up the mess. Remind students of how convenient this arrangement is for them!

All you have to do is show up and eat.
#schoolbreakfast #readymade

- **A warm meal**

Breakfast at home or on-the-go is not usually warm. Students liked the idea of getting a warm meal. Promote a warm breakfast during the cold winter.

It's negative WHAT outside?! Come warm up in the cafeteria with a nice, hot #schoolbreakfast

BENEFIT(S)**BEST PRACTICE****SAMPLE TWEET(S)**

- **Better options**
- Having better options at school for breakfast than at home

Some students said they did not have many breakfast options at home regularly and other said that sometimes if no one had been to the store recently, their options at home were limited. Remind students that there are always options at school.

Omelets, bagels, and pizza—oh, my! #schoolbreakfast #thechoicesareendless

- **Better health**

Students believed that breakfast was good for them and made them healthier. Promote school breakfast as an option to improve their health.

Enjoy the taste of healthy eating—guaranteed at #schoolbreakfast

- **Convenience**

Students who were running late thought breakfast at school could be very convenient. Think about how much more convenient school breakfast is for students than making it at home or buying it on the way to school.

Running late today? #schoolbreakfast can help. Grab a bagel before class.

- **Back-up plan**

- Having an option if they forget to eat at home

Some students are regular breakfast eaters at home—but sometimes the morning is too crazy and they do not get breakfast. These students need to be reminded that school breakfast is there to help them out.

#schoolbreakfast: it'll always be here for you (at least from 7-8 AM every day, that is)

- **Weight management**

- Breakfast speeds up metabolism

Weight control was important to students. Make sure health, PE and biology teachers are covering the effect of breakfast on students' metabolism.

Kickstart your metabolism with #schoolbreakfast this morning at 7 AM