

FRAC Breakfast Matters Webinar

Improving Nutrition Quality and Increasing Participation in Your Breakfast Program



Mieka Sanderson
Child Nutrition Policy Analyst
Food Research and Action Center

Agenda

- **Overview**
 - Mieka Sanderson, Food Research and Action Center
- **Nutrition Standards for School Breakfast**
 - Roni Schwartz, Kansas Department of Education
- **Make Room for Breakfast: Healthy Menu Planning Tips**
 - Katherine Alexander, Addison Northeast Supervisory Union Food Service Cooperative
- **Breakfast After the Bell in Denver Public Schools**
 - Theresa Peña, Denver Public Schools, Colorado
 - Sandy Grady, Denver Public Schools, Colorado



47 out of 100
low income children
eligible for School
Breakfast miss out on
this meal

—FRAC School Breakfast Scorecard 2015

Benefits: Breakfast for Learning

Children who eat breakfast at school:

- Increase their math and reading scores
- Perform better on standardized tests
- Improve their speed and memory in cognitive tests

Spring 2014

FRAC Breakfast for Learning

An emerging body of research is documenting the adverse effects of skipped breakfast on various aspects of cognitive performance: alertness, attention, memory, processing of complex visual display, problem solving, and mathematics.

• Basch, 2011¹⁸

SKIPPING BREAKFAST AND EXPERIENCING HUNGER IMPAIR CHILDREN'S ABILITY TO LEARN

- Children who skip breakfast are less able to differentiate among visual images, show increased errors, and have slower memory recall.¹
- Children experiencing hunger have lower math scores and are more likely to repeat a grade.²
- Behavioral, emotional and academic problems are more prevalent among children with hunger.³
- Children experiencing hunger are more likely to be hyperactive, absent and tardy, in addition to having behavioral and attention problems more often than other children.⁴
- Children who are undernourished have poorer cognitive functioning when they miss breakfast.⁵
- Teens experiencing hunger are more likely to have been suspended from school and have difficulty getting along with other children.⁶
- Children with hunger are more likely to have repeated a grade, received special education services, or received mental health counseling, than low-income children who do not experience hunger.⁷

EATING BREAKFAST AT SCHOOL HELPS IMPROVE CHILDREN'S ACADEMIC PERFORMANCE

- Children who eat a complete breakfast, versus a partial one, make fewer mistakes and work faster in math and number checking tests.⁸
- Children who eat breakfast at school – closer to class and test-taking time – perform better on standardized tests than those who skip breakfast or eat breakfast at home.⁹
- Providing breakfast to students at school improves their concentration, alertness, comprehension, memory, and learning.^{10,11,12}
- Children who eat breakfast show improved cognitive function, attention, and memory.¹³
- Participating in school breakfast is associated with improved math grades, attendance and punctuality.^{14,15}
- Children perform better on tests of vocabulary and matching figures after eating breakfast.¹⁶
- Consuming breakfast improves children's performance on mathematical tasks, demanding mental tasks and reaction to frustration.^{17,18}

SCHOOL BREAKFAST IMPROVES STUDENT BEHAVIOR AND LEARNING ENVIRONMENTS

- Students who participate in school breakfast show improved attendance, behavior, standardized achievement test scores as well as decreased tardiness.^{19,20}
- Children who increase their school breakfast participation as a result of a school breakfast program offered free to all students show greater improvements in math scores, attendance, punctuality, depression, anxiety, and hyperactivity than children whose participation remains unchanged or decreases.²¹
- Providing students with breakfast in the classroom setting is associated with lower tardy rates and fewer disciplinary office referrals.²²

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This brief was prepared
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Benefits: Breakfast for Health

- School breakfast improves student behavior and reduces tardiness and absenteeism
- A healthy breakfast each day helps prevent obesity
- Children who eat school breakfast eat more fruits, drink more milk, and eat a wider variety of foods

Spring 2014

FRAC Breakfast for Health

We also find that subsidized meals at school or day care are beneficial for children's weight status, and we argue that expanding access to subsidized meals may be the most effective tool to use in combating obesity in poor children.
• Kimbro & Rigby, 2014²⁴

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Analyst.

SCHOOL BREAKFAST PARTICIPATION IMPROVES CHILDREN'S DIETARY INTAKE

- School breakfast participants are more likely to consume diets that are adequate or exceed standards for important vitamins and minerals (e.g., vitamin C, vitamin A, calcium, phosphorus).^{12,23}
- Children and adolescents who skip breakfast tend to have poorer nutrient intakes than those who eat breakfast.¹² Eating breakfast regularly has been linked with greater intake of fiber, calcium, iron, vitamin C, and other vitamins and minerals, and lower intake of fat, cholesterol, and sodium.^{22,25}
- Children who participate in school breakfast are more likely to consume fruit and milk at breakfast.¹
- Low-income children who eat school breakfast have better overall diet quality than those who eat breakfast elsewhere or skip breakfast.¹⁸ Similarly, low-income students who eat both school breakfast and lunch have significantly better overall diet quality than low-income students who do not eat school meals.¹¹ An improvement in dietary quality also may extend to the family members of children with access to the breakfast program.¹²

SCHOOL BREAKFAST DECREASES THE RISK OF FOOD INSECURITY

- School breakfast offered to all students for free* may eliminate disparities between food secure and food insecure children in terms of eating breakfast at all.¹³
- Students with improved nutrient intake as a result of a program of school breakfast offered free to all students report decreases in symptoms of hunger.¹⁴
- Access to school breakfast decreases the risk of marginal food insecurity and breakfast skipping, especially for low-income children.^{15,16,17}
- Children are more vulnerable to food insecurity during the summer – a time when many do not have access to the good nutrition provided by the regular year school meal programs.^{18,19}

SCHOOL BREAKFAST MAY PROTECT AGAINST CHILDHOOD OBESITY

- School breakfast participation is associated with a lower body mass index (BMI, an indicator of excess body fat), lower probability of overweight, and lower probability of obesity.^{20,22}
- Food insecure girls participating in the school lunch, school breakfast, or Supplemental Nutrition Assistance (SNAP, or food stamps) programs (or all three programs combined) have a lower risk of overweight compared to food insecure girls from non-participating households.²¹
- Participation in federally-funded meals in child care, preschool, school, or summer settings is associated with a lower BMI among young, low-income children.²⁴

*Offering breakfast to all students for free is sometimes referred to as "universal breakfast" or "universal-free breakfast." The program helps remove the stigma for low-income children of participation in school breakfast and thereby increases participation among students generally, but particularly low-income students.

Solution: Breakfast in the Classroom

- Meals delivered to the classroom
- Students eat in the classroom after the morning bell



Solution: Grab 'N Go

Students pick up meals from carts or kiosks located in the....

Cafeteria

or

Hallway



Students eat breakfast in the classroom

Solution: Second Chance Breakfast

- Breakfast is provided after 1st period
- Meals are served from cafeteria or carts located in the hallway
- Target: Middle & High Schools



Alternative Breakfast Service Model Menus

- Hot and cold favorites
- Easy to eat on-the-go
- Minimal Mess
- Conform to meal pattern guidelines





Nutrition Standards for School Breakfast

Roni Schwartz
*RD Specialist, Kansas State Department of
Education*



Breakfast Components

- Food components for breakfast are foods from three required food groups:
 - Fruit
 - Milk Variety
 - Whole Grains
- Within the breakfast meal standards, each food group has a daily and weekly minimum required amounts.



Breakfast Meal Pattern



	Breakfast Meal Pattern		
	Grades K-5	Grades 6-8	Grades 9-12
Meal Pattern	Amount of Food Per Week (Minimum Per Day)		
Fruits (cups)	5 (1)	5 (1)	5 (1)
Grains (oz eq)	7 (1)	8 (1)	9 (1)
Meats/Meat Alternates (oz eq)	No Requirement	No Requirement	No Requirement
Fluid Milk (cups)	5 (1)	5 (1)	5 (1)



Breakfast Dietary Specifications



Dietary Specifications: Daily Amount Based on the Average for a 5-Day Week

Min-Max calories (kcal)	350-500	400-550	450-600
Saturated Fat (% of total calories)	< 10	< 10	< 10
Sodium (mg)	≤540	≤600	≤640
Trans fat	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.		



Fruit Planned for Breakfast

- One cup of fruit is planned into the breakfast menu for all age groups.
- Fresh, frozen canned or dried fruit may be offered:
 - Dried fruit credits at twice the volume
 - Frozen fruit with added sugar can be served
- Minimum amount that can be counted is 1/8 cup or .125 cup fruit.
- Schools may offer a single fruit type or a combination of fruits.



Fruit Juice May be Offered

- Fruit juice must be 100% juice.
- No more than $\frac{1}{2}$ of the total fruits offered over the week may be in the form of juice .
 - “Offered” is the amount of fruit a child is able to select, regardless of the number of options/variety offered
- Breakfast – 1 cup requirement:
 - $\frac{1}{2}$ cup fruit and $\frac{1}{2}$ cup juice or
 - One cup fruit 3 days per week and one cup juice 2 days per week



Vegetables May Substitute for Fruit

- Menu planners have discretion to offer vegetables as substitute for fruits.
- No limit on substitution, but first 2 cups of vegetables for the week must be from non-starchy vegetables: dark green, red/orange, beans/peas (legumes) or “other” subgroups.
- May offer various combinations of fruits and vegetables.



Vegetables May Be Offered as “Extras”

- Menu planners have discretion to offer starchy vegetables such as hash browns as “extras”.
 - Do not count toward fruits component in SBP
- Extras must fit within the limits for calories, saturated fat and sodium.
- Extras do not count toward “offer” requirement:
 - Consistent with existing policy on extra foods
 - Student must have three other food items on tray, including ½ cup fruit, to have a reimbursable meal



Smoothies for Breakfast and Lunch

- Crediting smoothies prepared in-house:
 - **Milk** may be credited if low fat or skim.
 - **Yogurt** may credit as meat/meat alternate
 - **Pureed fruit and vegetables** may credit as a juice because it is contained in a beverage
 - **Juice** may credit as fruit if 100% juice
 - **Juice/vegetable blends** may credit as fruit or vegetable if 100% juice.
- Sponsors must identify food components in smoothies



Smoothies for Breakfast and Lunch

- **Commercially prepared smoothies:**
 - May only credit toward the fruit component as a juice;
 - Must have a Product Formulation Statement indicating the fruit content.
- Smoothies (in-house and commercial) may not contain added dietary or herbal supplements.
 - Exception is the addition of fortified juice



Fluid Milk Planned for Breakfast

- One cup required for all age groups including at least two varieties:
 - Low-fat (1%) Milk, unflavored
 - Non-fat (skim)Milk, flavored or unflavored
 - Low-fat, Reduced-lactose or lactose free, unflavored Milk
 - Non-fat, Reduced-lactose or lactose free flavored or unflavored milk



Grains Planned for Breakfast

- Grain ounce equivalent content is based upon product weight or Product Formulation Statement content.
- Grains have flexibility in maximum offered for the week if dietary specifications are not exceeded.
- Grains must be whole grain or whole grain rich with new limited flexibility.
- Some grain-based desserts may be offered at breakfast.
- Meat/Meat Alternates may substitute for 2nd ounce grain equivalent offered.



Grains Weekly Maximum Flexibility

- Permanent suspension of the weekly maximums for grains.
- The maximums should still be used as a guide to help ensure that the calorie ranges are met for each grade group.

	Grades K-5	Grades 6-8	Grades 9-12	
	Amount of Food Per Week (Minimum Per Day)			
Grains (oz eq)	7-10 (1)	8-10 (1)	9-10 (1)	
Other Specifications: Daily Amount Based on the Average for a 5-Day Week				
Min-Max calories (kcal)	350-500	400-550	450-600	



Whole Grain Rich and Flexibility

- Beginning July, 2014, all grains offered must be whole grain rich:
 - At least 50% of grain content from whole grain
 - Remaining grain content must be enriched
- New: some flexibility in the 100% whole grain requirement:
 - Each state agency approves the exemption request
 - Must still provide half of grains offered as whole grain rich



M/MA as Grains at Breakfast

- No requirement to offer M/MA at breakfast
- M/MA can be worked into the breakfast menu in two ways:
 - Offered as - 1 oz. eq. grain substitute WITH 1 oz. eq. grain
 - Does credit toward weekly grain requirement
 - Does count as an item or part of an item for offer
 - Offered as an “extra”.
 - Does not credit toward weekly grain requirement
 - Does not count as an item for offer
- All M/MA count toward weekly Dietary Specifications.



Breakfast Items

- Breakfast menus contain 4 or more items containing the 3 required components.
 - Item is a single menu serving.
- Fruit: 1 cup of fruit can be:
 - 1 item – 1 cup of fruit OR
 - 2 items
 - 2- ½ cup servings of fruit OR
 - ½ cup fruit and ½ cup juice OR
 - ½ cup fruit and ½ cup different variety of fruit
- Milk: 1 cup of milk is 1 item
- Whole Grains:
 - 1 oz. eq. grain is typically 1 item
 - 2 oz. eq. grain can be 1 or 2 items



Planning a Serve Breakfast Menu

- Students must take all menu items offered.
- The Menu Planner plans menus to provide 3 items or more consisting of at least:
 - 1 cup fruit
 - 8 oz. milk with at least two varieties
 - 1 -2 oz. eq. grains
 - 1 oz. eq. grain required daily
 - Weekly requirements must be met for each grade group



Simplifying Serve Breakfast Menus

- Because there is overlap in the breakfast meal pattern, menu planners have the option of providing one breakfast menu to K-12 using a serve program.
- Pattern:
 - 1 cup fruit
 - 2 oz. eq. grain (minimum 9 for the week)
 - 1 cup milk
- Students must take all items



Planning an “Offer” Breakfast Menu

- Students must take 3 items with one item ½ cup of fruit or vegetable substitute.
- The Menu Planner plans menus to provide 4 or more items consisting of at least:
 - 1-2 oz. eq. of grains
 - 1 oz. eq. of grains required daily
 - Weekly requirements must be met for each age group
 - 1 cup fruit
 - 8 oz. milk



Simplifying Offer Breakfast Menus

- Because there is overlap in the breakfast meal pattern, menu planners have the option of providing one breakfast menu to K-12 using an offer program.
- Pattern:
 - 1 cup fruit (1 item or 2)
 - 2 eq. grain (1 item or 2)
 - 1 cup milk
- Students must take $\frac{1}{2}$ cup fruit (1 item) plus two additional items.

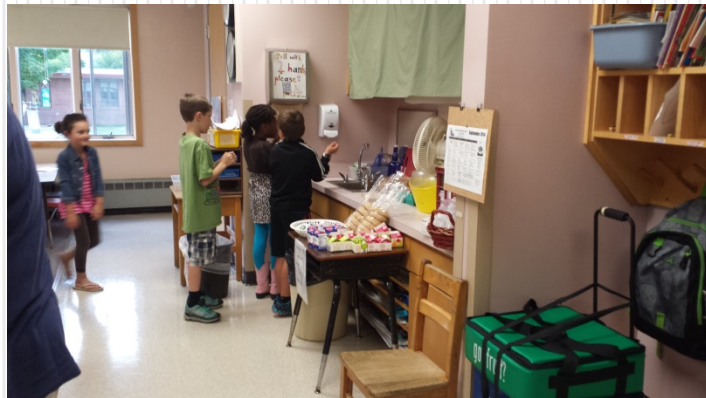


Thank You for Attending!



Make Room for Breakfast Healthy Menu Planning Tips

Katherine Alexander, Director
ANESU Food Service Cooperative



Make ROOM...

- In the **schedule**
 - Kitchen
 - School day
- In the **school**
 - Classroom
 - Cafeteria
 - Hallway
- In **education**
 - **Commitment to food access**



Every school needs to **make room** for school breakfast in these three areas in order to ensure success.

How ANESU Makes Room Different Models

ANESU – 6 schools / 3 Models

Who drives the model?

Students ⇨ Child Nutrition Department ⇨ Administration ⇨
Teachers ⇨ Parents

What are the results?

MODEL	Universal Meals Free for everyone	NSBP Free, Red, or Paid (\$1.25)
In the Cafeteria	40% (1)	15% (1)
In the Classroom	85% (1)	30% (2)
After the Bell (H.S)		22% to 31% with new mobile cart

??What will we serve??

It has to be.....

- **Easy, Fast, and Neat**

- To prepare
- To serve
- To eat

- **Healthy**

- Minimal processing, packaging

- **Appealing**

- To students
- To parents
- To teachers



EASY, FAST and NEAT



	EASY	FAST	NEAT
To Prepare	<ul style="list-style-type: none">• Prepped or baked ahead on site• Frozen and thawed	<ul style="list-style-type: none">• Packaged	
To Serve	<ul style="list-style-type: none">• Wrapped• Single item	<ul style="list-style-type: none">• Individual Container with all items	<ul style="list-style-type: none">• No Syrup• Less crumb
To Eat	<ul style="list-style-type: none">• Fist food		

Tips



1 - Prepare a day ahead

Make mornings about Quick ASSEMBLY

GRAIN:

- Homemade baked goods – muffins, breakfast bars
 - Fully prepped
 - Prep dry and wet – bake in the a.m.
- Bagel w/ Cream Cheese – Dippers
- Bagel w/ Cheddar Cheese
- Granola Cup
- Wrap & Roll – PB(or sunbutter) and Apple; Ham and Cheese; PB & Granola; Cream Cheese & Granola.....



FRUIT - Keep it Fresh

- Wash and portion (whole fruits, cut fruit, raisins)

Tips - 2

2- Add Minimally Processed and Packaged Foods so students have plenty of opportunities to satisfy the meal pattern.

GRAINS

Cereal Bowls

Baked bread – frozen minimal preservatives and no label

FRUIT

Applesauce/Fruit cups

Add ADDITIONAL PROTEIN

Cheese sticks

Yogurt



Sample Menu

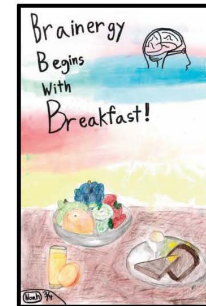
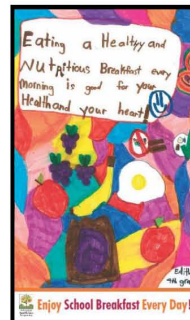
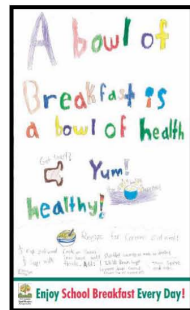
Breakfast in the Cafeteria

SMART START Breakfast at ANESU Schools

Robinson Elementary School

Served in the cafeteria from 8:00 – 8:15 a.m. Complimentary.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Cheesey Scrambled Eggs Whole Grain Toast 1 oz. Cereal Fruit 8 oz. Milk	Yogurt & Homemade Granola Fruit 1 oz. Cereal 8 oz. Milk	Hot Oatmeal w/ Assorted Fruit Toppings 1 oz. Cereal 100% Juice or Fruit 8 oz. Milk	Chef's Choice Whole Grain Baked Good 1 oz. Cereal Fruit 8 oz. Milk	Ham, Egg & Cheese Breakfast Sandwich 1 oz. Cereal 100% Juice or Fruit 8 oz. Milk



Sample Menu

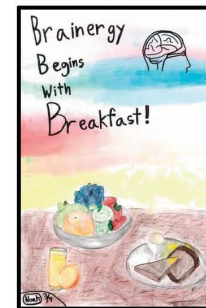
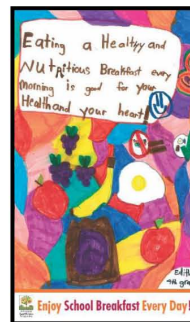
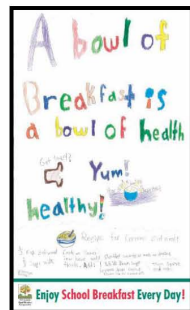
Breakfast in the Classroom

SMART START Breakfast at ANESU Schools

Bristol Elementary School

Brought to classrooms every day! Complimentary.

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
2 oz. Oatmeal Breakfast Round Fresh Fruit 8 oz. Milk	2 oz. Whole Grain Bagel w/ Cream Cheese 100% Juice 8 oz. Milk	1 oz. Cereal Bowl 1 oz. Cheese Stick Fruit 8 oz. Milk	2 oz. Sweet Bread or Muffin 100% Juice 8 oz. Milk	2 oz. Whole Grain Pretzel w/ Cinnamon Fruit 8 oz. Milk



Breakfast GOALS

SMART STARTS

- High Participation
- Access for all students
- Healthful (low sugar, low fat)
- Easy to prepare, eat, serve
- Appealing to students and adults
- As fresh as we can
- Minimal preservatives and packaging





Breakfast After the Bell In Denver Public Schools 2014-15

Theresa Peña

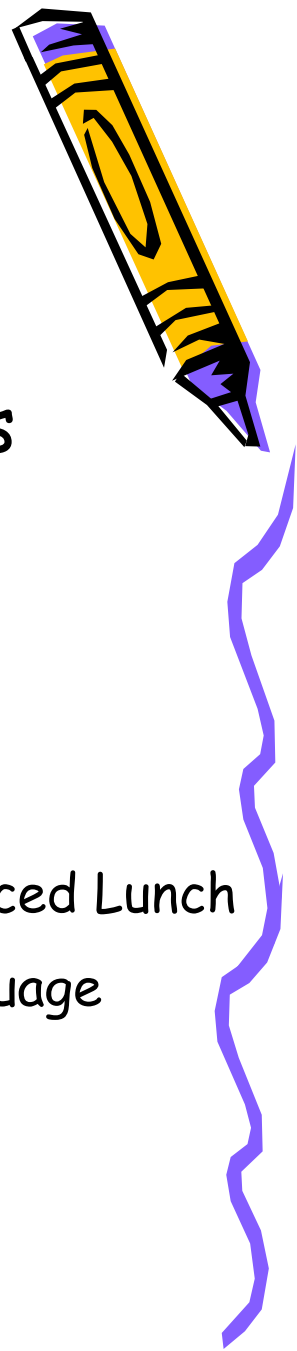
*Enterprise Management Department's Regional Coordinator
for Outreach and Engagement, Denver Public Schools*

Sandy Grady

*Area Supervisor, Food and Nutrition Services, Denver Public
Schools*



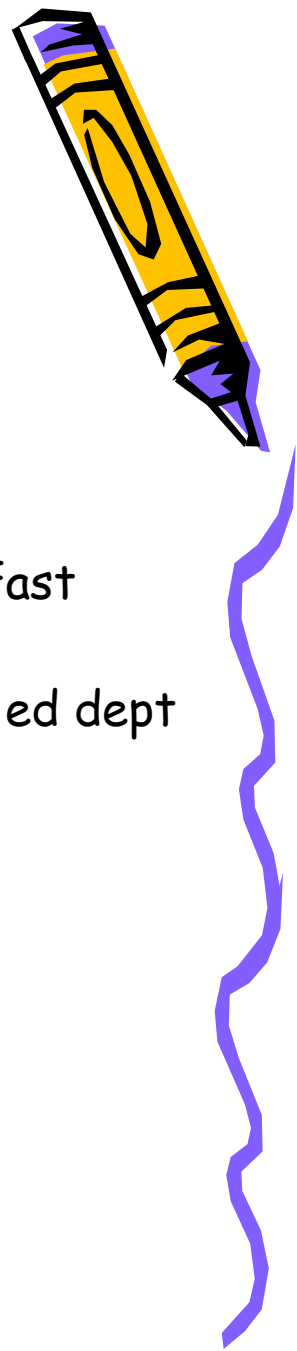
Denver Public Schools Numbers



- 185 schools
 - (86) elementary
 - (20) E8
 - (22) middle
 - (19) 6-12
 - (31) high
- 90,150 students
 - 57% Latino
 - 14% Black
 - 22% White
 - 3% Asian
 - 70% Free & Reduced Lunch
 - 39% English Language Learners



DPS Food & Nutrition Service Participation



Meals served in 2013-14

- Breakfast: 29,541 per day
 - 34% daily participation rate
- Lunches: 47,947 per day
 - 57% daily participation rate
- Snacks: 6,733 per day
- 70% menu items made from scratch

- 133 schools serving breakfast after the bell
 - (95) required by state ed dept
- By delivery type
 - 59% BIC
 - 24% cafeteria
 - 9% office
 - 4% cart and GNG



DPS Service Methods

- **BIC** (Breakfast in the classroom)
- **Grab & Go** (Breakfast at the front door)
- **First Class Hospitality Carts** (Carts located throughout the school & students grab a bag and go)
- **Second Chance Breakfast** (Breakfast is offered before and after the bell in the cafeteria; after the bell students grab a breakfast and go to class)
- **Breakfast After 1st period** (all students go to the cafeteria after 1st period for breakfast)
- **Breakfast in the Front Office** (breakfast available for tardy students)
- **The "Works"** (Breakfast served before the bell)



Menus

The "Works", Breakfast After 1st Period and Second Chance

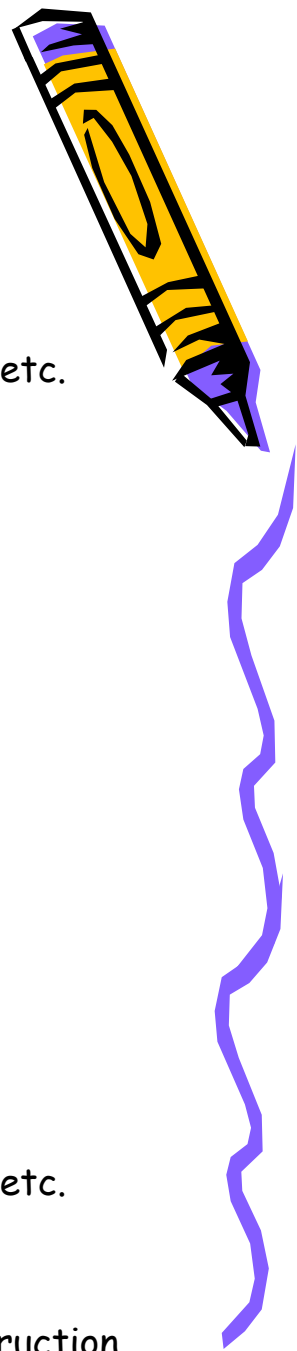
- 1 week cycle menu
- Variety of choices
- Greater opportunity to scratch cook items like cinnamon rolls, muffins etc.
- Does not require more staffing
- Participation not maximized with "the Works" and Second Chance
- Participation maximized Breakfast After 1st Period
- Does not require teacher accommodations to incorporate meals and instruction

BIC, Grab & Go, Breakfast in the Front Office

- 2 week cycle menu
- Limited choices due to industry and quality of products available
- Lesser opportunity to scratch cook items
- Does require more staffing
- Participation maximized
- Meal accountability for BIC requires teacher responsibility

First Class Hospitality Carts

- 2 week cycle menu with flexibility to add additional items
- Greater opportunity to scratch cook items like cinnamon rolls, muffins etc.
- Requires more staffing
- Participation maximized
- Does not require teacher accommodation to incorporate meals and instruction



Breakfast Prep & Presentation

Menu Items

- Scratch cooking limited for most breakfast delivery types
- Balance what students will eat versus adult perceptions, e.g. cereal, fruit, raisins
- Change cycle menus more often, so students do not get bored with choices
- Don't be afraid to move outside the box to expand your menu e.g. Bean & Cheese Burrito, Grilled Cheese Sandwich, PBJ, Chicken Biscuit (non traditional breakfast items)
- Easier to capture 2 components in 1 item (less packing)
- Assembling items such as breakfast sandwiches and burritos, very time consuming but received by students very well
- Items that do not require utensils to eat with
- Fresh whole fruit and shelf stable juice

Product Packaging and Delivery Packing

- Appeal of packaged items for breakfast, if an item sits too long in insulated bags steam and stacking compromise quality
- Adult perception is not favorable of foods heated in plastic packaging
- Prepare a day in advance, pack cold and non perishable foods the day before, store cold foods in milk coolers
- Heat hot foods as close to delivery time as possible to avoid a poor quality product due to stacking and steam
- Quality control depends on delivery type



Continuous Improvement Ideas



Process to introduce new items

- Survey parents & students to identify desirable items
- Pilot testing of breakfast options
- Introduce popular items in individually wrapped, convenient breakfast format, e.g. breakfast pizza, PBJ sandwiches
- Work with suppliers to increase breakfast inventory options and portion sizes

Timing

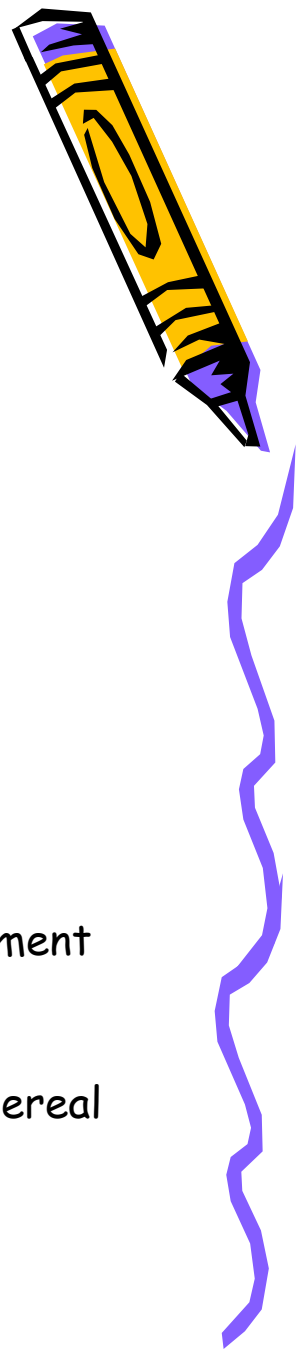
- 1 to 2 times a year

Examples of:

- Good new ideas:
 - change menu items every two months
 - introduce "non-traditional" but popular items for breakfast, e.g. grilled cheese, bean and cheese burrito



Lessons Learned



BIC

- Most popular selection amongst schools
- Reduces opportunity for scratch cooking
- Vary menu items periodically to eliminate food boredom
- Need to audit & track waste and accurate counts

Standardized breakfast menu

- Facilitates district ordering and bulk savings
- Need to be flexible to needs of local community to customize & substitute "approved" menu items
- Menu for any "bagged" delivery type simplifies inventory management and kitchen prep
- Students like the consistency of knowing when their favorite breakfast item will be on the menu e.g. sausage bagel sandwich, cereal

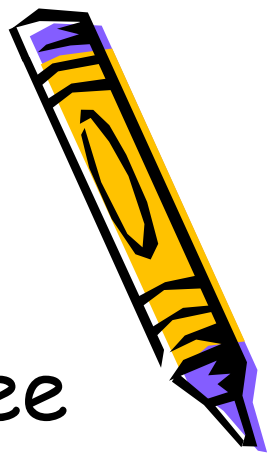


Questions

If you have questions please feel free to contact:

Sandy Grady at (720) 423-5622 or by email at Sandy_Grady@dpsk12.org

Theresa Peña at (720) 423-5657 or by email at Theresa_Pena@dpsk12.org



Questions?

Webinar Resources

- Check your mail for the following resources:
 - What are Students Eating for School Breakfast?
 - Buying Groups: Helping School Districts Purchase Healthy Food
- Download More School Breakfast Resources at:
 - www.frac.org/breakfast
- Lingering questions?
Feel free to send it to Mieka Sanderson:
msanderson@frac.org