Innovative Ideas to Enrich School Meals & Drive Participation







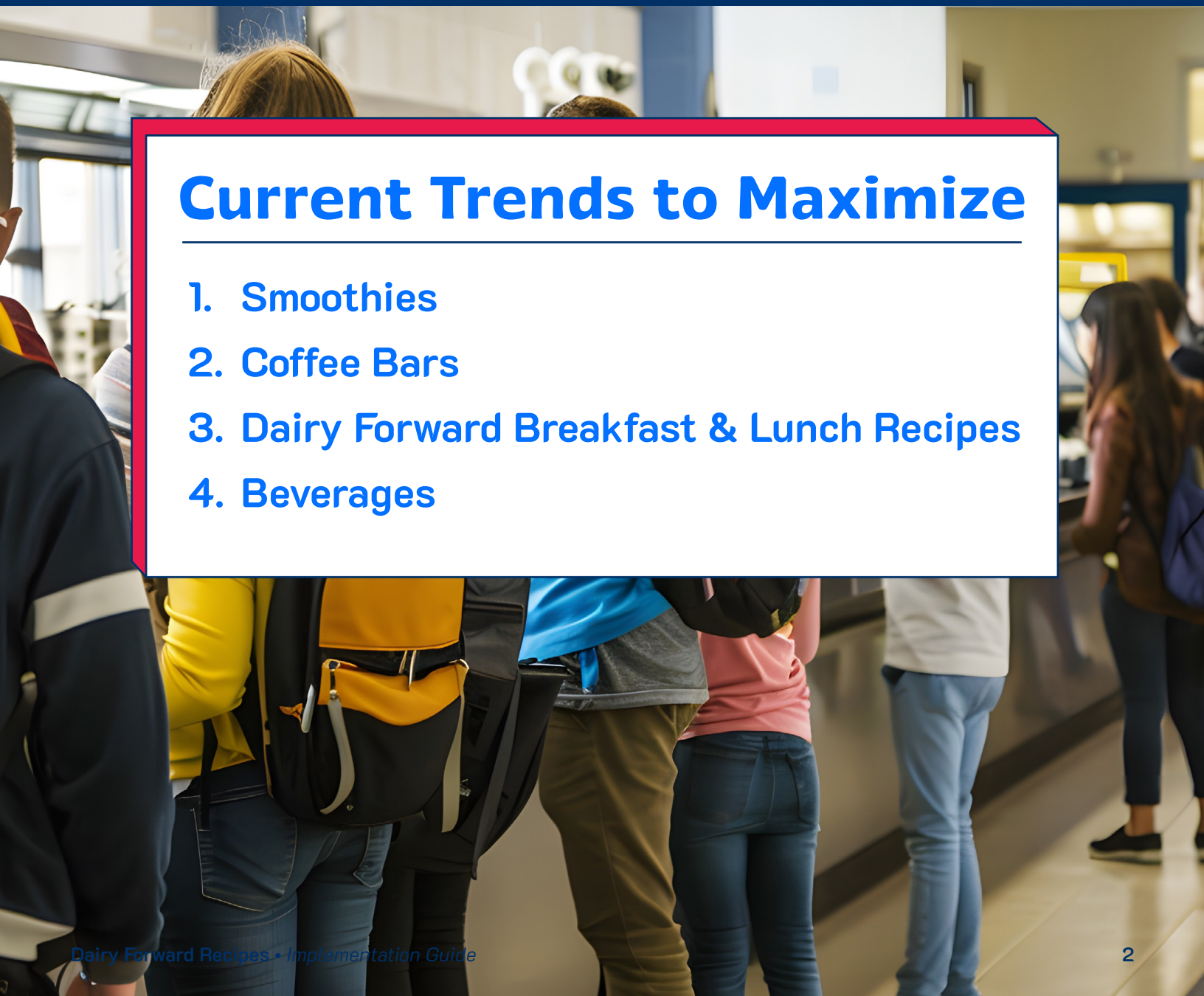


Dairy Forward Recipes
Implementation Guide

DairyMAX

Overview

School nutrition programs are continuously looking for innovative ways to increase student participation, boost school nutrition revenue, and ensure students have access to nutritious dairy foods, fruits, vegetables, whole grains, and lean proteins daily. Many successful schools have incorporated **smoothies, coffee bars, and dairy-forward meals or beverages.** This guide provides a structured approach to implementing these ideas effectively.



Current Trends to Maximize

1. Smoothies
2. Coffee Bars
3. Dairy Forward Breakfast & Lunch Recipes
4. Beverages

Smoothies

Overview

Smoothies are an eye-catching, trendy, student-friendly, versatile menu option that can increase student participation. Depending on the recipe's ingredients, they can credit toward multiple food components and be used in all meals: breakfast, lunch, snack, or supper service or may be sold as an a la carte option.





Benefits

Increased Child Nutrition Revenue

Schools that added smoothies to their menus increased breakfast ADP by 7% on average and lunch ADP by 5% on average. This is primarily achieved by repeat customers returning to purchase smoothies and other food items.

Increased Fruit/Vegetable Consumption

Smoothies could increase the number of students eating a full serving of fruit. Consuming fruits and vegetables is associated with reduced risk for cardiovascular disease, type 2 diabetes, some cancers, and obesity. Healthy dietary habits established during adolescence might continue into adulthood. However, few U.S. high-school students eat enough fruits and vegetables to meet U.S. Department of Agriculture recommendations.

Lange SJ, Moore LV, Harris DM, et al. Percentage of Adolescents Meeting Federal Fruit and Vegetable Intake Recommendations — Youth Risk Behavior Surveillance System, United States, 2017. MMWR Morb Mortal Wkly Rep 2021;70:69–74. DOI: http://dx.doiorg/10.15585/mmwr.mm7003a1.

Enhanced Program Image

Smoothies align with Gen Z and Gen Alpha preferences for healthy, fresh, high-protein, convenient, and customizable options. Focus on eco-friendly, sustainable packaging including compostable cups and lids.

https://www.kaso.ai/posts/how-to-stay-ahead-with-2025s-top-food-trends

1. Smoothies

Implementation Considerations

Service Models

- Mobile Cart/Kiosk – truly versatile, bringing food to where students are
  - Breakfast in the Classroom (BIC)
  - Breakfast in the Hallway (BIH)
  - Curbside or courtyard
  - Gym or fieldhouse
  - 2nd Chance Breakfast – best location for each school
- Serving Line – traditionally in the cafeteria
- Snack Bar – alternate serving station
- Supper or snack program







1. Smoothies

Implementation Considerations

Meal Contribution

(Depending on the Recipe)

- 8oz fluid milk
- ½ cup fruit and/or vegetable
- 1 oz meat/meat alternate – 4 oz yogurt
  - Yogurt is the only creditable M/MA that can be used in smoothies
  - Smoothies Offered in the USDA Child Nutrition Programs
  - Offering Smoothies as Part of Reimbursable School Meals







1. Smoothies

Implementation Considerations

Menus & Recipes

- Dairy MAX recipes
- Pairing Suggestions: Granola, graham crackers, side salad
- Menu Example Courtesy of Denver Public Schools: Elementary

Peaches and Cream Smoothie



19.77 g
Protein

362 Calories	69.16 g Carbs	1.19 g Total Fat
1 oz Meat / Meat Alternative	1 cup Fruit	8 oz Milk

Prep Time
55 min

Ingredients

4 Servings
- 1 pound bananas, frozen, Edible Portion (EP)
- 1 quart milk, fat-free
- 2 cups yogurt, Greek, vanilla, fat-free
- 1 pound and 8 ounces peaches, canned, sliced, drained

24 Servings
- 6 pounds bananas, frozen, EP
- 1 gallon and 2 quarts milk, fat-free
- 3 quarts yogurt, Greek, vanilla, fat-free
- 9 pounds peaches, canned, sliced, drained

Instructions

Critical Control Point (CCP): No bare-hand contact with ready-to-eat food.

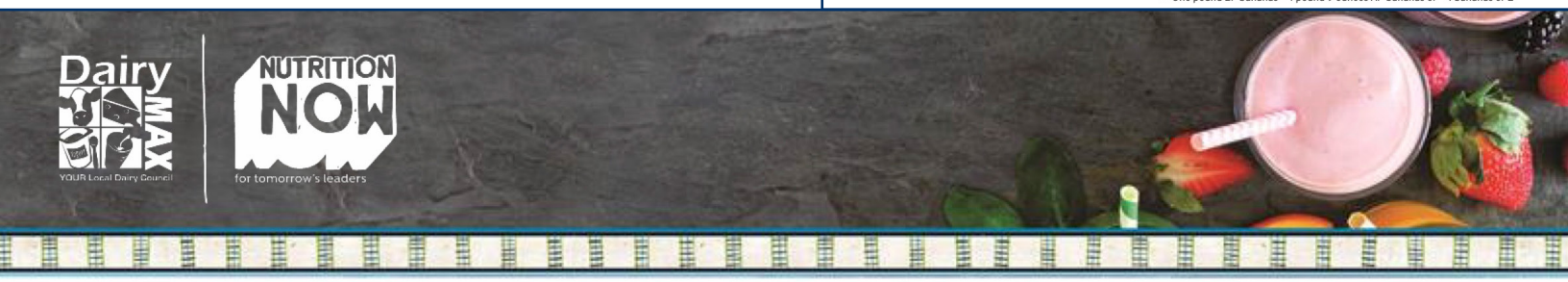
1. Freeze the bananas at least one day prior to service. Peel the bananas and lay them on a sheet pan prepared with pan liners. Ensure they are not overlapping or piled together. Immediately cover and place in the freezer overnight. Once frozen, the bananas can be stored together.
2. In a 5-gallon bucket, combine the frozen bananas, milk, Greek yogurt and canned peaches. . Blend the mixture using an immersion blender until pureed and smooth.

   Note: A 5-gallon bucket can hold 24 servings.
3. Pour 22 ounces of smoothie into 24-ounce cups evenly and top with a lid.

   CCP: Hold and serve at 41° F or below.

   CCP: No bare-hand contact with ready-to-eat food.

Tips
- One pound EP bananas = 1 pound 9 ounces AP bananas or ~4 bananas or 2



Mighty Strawberry Banana

Recipe Type: Breakfast
Meal Components: 2 oz M/MA, 1/2 cup fruit, 1 cup milk
Preparation TIme: 50 minutes

Ingredients	4 Servings		24 Servings		96 Servings		Directions
	Weight	Measure	Weight	Measure	Weight	Measure	
							CCP: No bare hand contact with ready to eat food.
Yogurt, Greek, vanilla, fat free		1 qt		1 gal + 2 qt		6 gal	1. Place yogurt, milk, frozen strawberries, and frozen bananas in 5-gallon bucket. Blend using immersion blender until pureed and smooth. **Note: A 5-gallon bucket can hold 24 servings.**
Milk, fat free		1 qt		1 gal + 2 qt		6 gal	
Strawberries, whole or sliced, frozen	9 oz		3 lb 6 oz		13 lb 8 oz		
Banana, frozen, EP	8 oz		3 lb		12 lb		
							2. Pour 22 oz smoothies into 24 oz cups evenly and top with lid.
							CCP: Hold and serve at 41° F or below. ***CCP: No bare hand contact with ready to eat food.***

Notes:
8 oz EP bananas = 12.5 oz AP bananas or ~2 bananas or 1 cup puree.
9 oz frozen strawberries = 1 cup puree.
Fruit (puree) in smoothies credits as fruit juice. Fruit puree was weighed and measured without the addition of water or other ingredients.
1 smoothie can credit as a reimbursable 6-12 lunch (3 items) or breakfast (3 items).

Serving:
1 serving provides 2 oz meat/meat alternate, 1/2 cup fruit, and 1 cup milk.

1. Smoothies

Menu Example

Monday	Tuesday	Wednesday	Thursday	Friday
Strawberry Yogurt Parfait Breakfast Pizza 100% Fruit Juice Box Fresh Peach Choice of Milk	Strawberry Banana Smoothie Lemon Loaf Pancakes & Scrambled Eggs w/ Strawberry Sauce or Syrup Orange Wedges Spiced Peaches Choice of Milk	Tropical Smoothie Breakfast Quesadilla Honey Zucchini Muffin 100% Fruit Juice Box Cantaloupe Choice of Milk	Blueberry Banana Smoothie Pumpkin Loaf Hot Breakfast Egg & Cheese Croissant Sandwich Zucchini Muffin Orange Wedges Strawberry Applesauce Choice of Milk	Peach Yogurt Parfait Huevos Rancheros Zucchini Muffin Cinnamon Apple Slices Fresh Plum Choice of Milk



1. Smoothies

Staffing Considerations

- Adjust staffing levels as needed.
- Schedule prep shifts earlier to accommodate smoothie preparation.
- Utilize substitute staff for pre-preparation the day before serving.

Cost & Equipment Considerations

- Immersion handheld blender (~$500-$800)
- Commercial grade blender (~500-$1,000+)
- Paper/plastic cup with dome lid (with separated granola tray) (~.30-.50 ea)
- Customizable sticker labels
- Ingredients: milk, yogurt, fruit, etc.
- Transportation equipment for carts/kiosk service
- Cart/Kiosk







1. Smoothies

Equipment Examples

Immersion Blender



High Volume 'Grab & Go' Kiosk



COLD-SELL® Barrel, 4-Crate



Cambro GoBox Beverage Holder



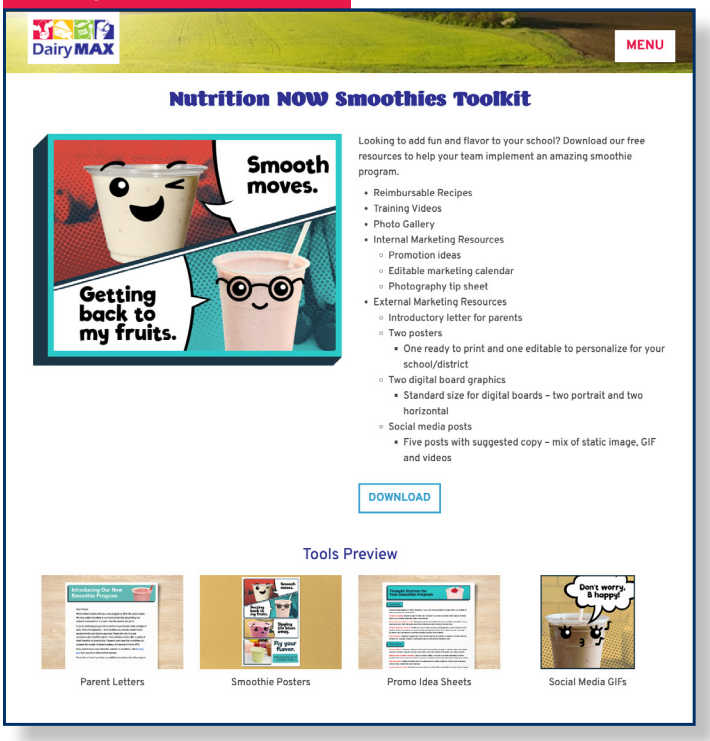
Smoothie Kit



1. Smoothies

Marketing Promotion

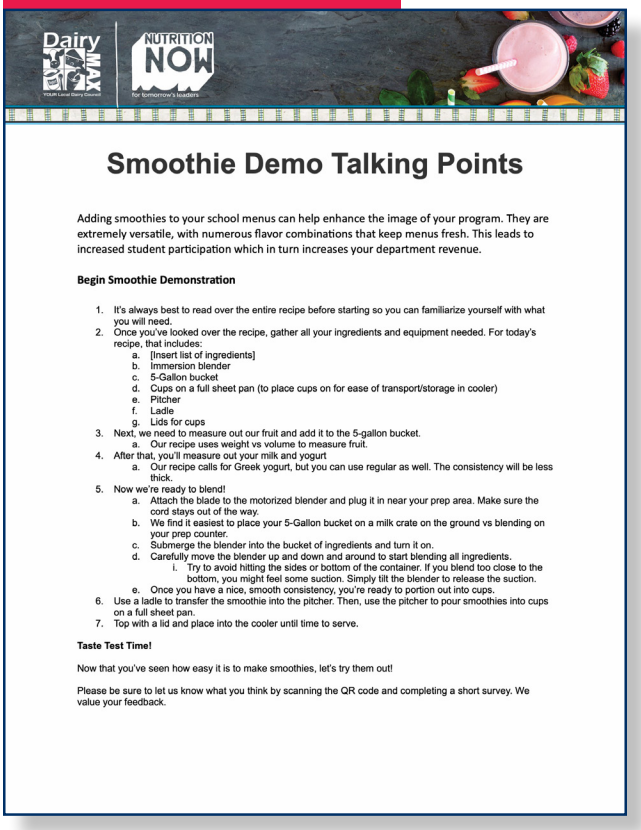
Dairy MAX Toolkit



Smoothie Resources One Pager



Taste Test Resources





Coffee Bars

Overview

Coffee shops have become a normal part of life for many teenagers. If students are already stopping by coffee shops before and after school, why not bring this environment inside the school building?



Benefits

Increased Student Participation

Some schools saw up to an 8% ADP increase after implementing a coffee bar.

Average ADP increases seen by schools in the Dairy MAX territory who implemented smoothies using a Dairy MAX grant between 2014-2019.

Increased Revenue

Coffee bars can boost your revenue through increased ADP and a la carte sales.

Enhances Image the Image of Your Nutrition Program

You can market your coffee beverages as more nutritious than off-campus coffee shops while still offering trendy flavor combos students love.





2. Coffee Bars

Implementation Considerations



Service Models

- Designated coffee bar outside of cafeteria (library or other location)
- Coffee Cart/Kiosk
- Service Line(s) program

Counting/Claiming

- A la carte
- Reimbursable: Students take a milk and add it to their coffee after point of service





2. Coffee Bars

Implementation Considerations

Menu & Staffing

Depending on student preference, you can offer hot coffee, iced, or both!

Students at Aurora Public Schools in Colorado can even enjoy a hot coffee at their innovative drive-thru and walk up service located in the student parking lot.







2. Coffee Bars

Implementation Considerations

Menu & Staffing

- **Menu Items**
  - Cold Brew + sugar-free syrup
  - Instant Coffee + sugar-free syrup
  - Dairy Max recipes for a la carte
  - Corpus Christi ISD Cold Brew Recipe

- **Additional Items to Consider for**
  - Smoothies, parfaits, pastries, and other a la carte or reimbursable options

- **Staffing Needs**
  - Kiosks/designated coffee bars may require 1-2 staff depending on volume of students and number of items served





Cold Brew Coffee with Flavored Sugar-Free Syrup from Corpus Christi ISD

Recipe Type: Coffee Bar
Meal Components: None

Ingredients	3 - Gallon		Directions
Water	3-gallon		1. Place 3 gallons of cold water in beverage dispenser 2. Place 12 filters of coffee in basket 3. Let steep overnight in the refrigerator
Sugar=Free Syrup	12-ounce		
Folgers Coffee (16 PKG/CS)	1-package		
			4. Add 1.5 cups of sugar-free syrup to beverage dispenser and stir ***5. Serve 4 oz. of coffee over ice in 12 oz plastic cup***
Notes:			***CCP: Hold and serve at 41° F or below.***
Make sure container is clean and airtight.			***CCP: No bare hand contact with ready to eat food.***

Nutrient Analysis

Portion Size	Calories	Total Fat	Saturated Fat	Cholesterol	Sodium	Carbohydrates	Dietary Fiber	Sugars	Protein
100 gm	0.0	0.00 g	0.00 g	0.00 mg	0.284 mg	.171 g	0.00 g	0.0 g	0.00 g

Nutrient analysis does not include milk and coffee as these are allowable beverages and do not need to be included in the smart snack beverage evaluation. The calories from sweeteners noted above must be included in the evaluation under "other beverages" and are limited to 60 calories per 12 fluid oz. Please see FNS Q&A question 15 and 16.

Nutrients generated with NUTRIKIDS® Menu Planning and Nutritional Analysis software and should not be used medical conditions or food allergies.

Pumpkin Spice Latte



8.43 g
Protein

132 Calories	24.42 g Carbs	0.24 g Total Fat
8 oz Milk		

Prep Time
15 min

Cook Time
20 min

Total Time
35 min min

Ingredients

1 Serving
- 8 ounces milk, fat-free
- 1 ½ tablespoons pumpkin spice simple syrup
- 1 teaspoon instant coffee

16 Servings
- 1 gallon milk, fat-free
- 12 ounces pumpkin spice simple syrup
- ¼ cup and 1 tablespoon and 1 teaspoon instant coffee

96 Servings
- 6 gallons milk, fat-free
- 2 quarts and 1 cup pumpkin spice simple syrup
- 2 cups instant coffee

Nutrition Facts

per serving

Calories: 132
Protein: 8.43 g
Carbohydrate: 24.42 g
Dietary Fiber: 0.14 g
Total Fat: 0.24 g
Saturated Fat: 0.16 g
Cholesterol: 4.90 mg
Sodium: 104.15 mg

Instructions

Gallon directions

Critical Control Point (CCP): No bare-hand contact with ready-to-eat food.

1. Place the milk, pumpkin spice simple syrup and instant coffee in a large pitcher. Whisk the ingredients together and store in a cooler overnight.

   CCP: Hold and serve at 41° F or below.
2. To heat in bulk, pour the latte into a stockpot and stir. Make sure the syrup is evenly dispersed and the coffee granules have dissolved in the milk. Warm over medium-low heat until tiny bubbles start to form around the edges. Stir occasionally to prevent a skin from forming. Warm until the temperature reaches 150° F-160° F.
3. Transfer the heated latte to an insulated beverage dispenser and dispense 9 ounces into a 12-ounce cup.

   CCP: Hold for hot service at 135° F or higher.

   CCP: No bare-hand contact with ready-to-eat food.

Single serving directions

CCP: No bare-hand contact with ready-to-eat food.

1. Place the milk, pumpkin spice simple syrup and instant coffee in a 12-ounce cup. Whisk the ingredients together.
2. Using a frothing wand or microwave, heat the beverage to 140° F. Microwaving times will vary, but the average time is 1 minute 40 seconds.
3. Stir before serving. Make sure all coffee granules have dissolved in the milk.

   CCP: Hold for hot service at 135° F or higher.

   CCP: No bare-hand contact with ready-to-eat food.

Tip

- The amount of instant coffee needed will vary by brand. Adjust quantity to provide 9 ounces of coffee per latte according to package instructions. Store latte in cooler up to one week or until expiration date of milk, depending on which one comes first.

2. Coffee Bars

Cost Considerations

Prep & Service Area

Due to the alternate locations for some coffee bars, preparation is sometimes done in the cafeteria and food is transported to the coffee station.

Comfortable Seating

A key to successful coffee bars are their inviting environments with comfortable and modern seating for students.

Kiosk and/or Merchandiser

The way food items are displayed encourages students to consider selecting additional food items, such as snacks, granola bars, fruit, pastries, panini, or wraps for example. A flavor station may also be added for a sprinkle of cinnamon, cardamom, nutmeg, or calorie-free flavors.





2. Coffee Bars

Coffee Equipment

Some vendors will provide brewing equipment if their product is purchased.

Brewers



Espresso Machines



Cold Brew Dispenser



ColdSell



Hubert Coffee Kit



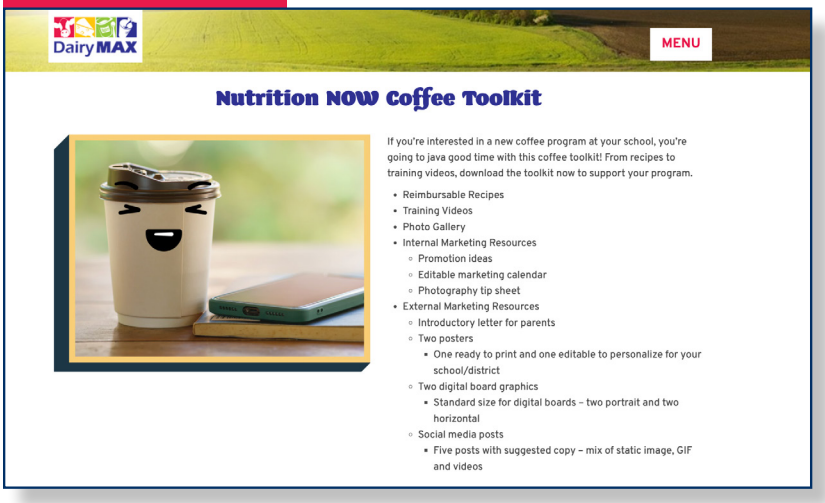
LTI Coffee Bars



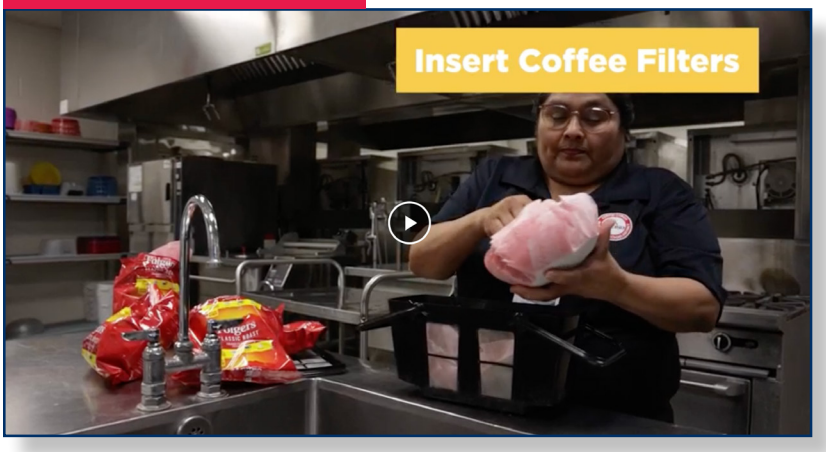
2. Coffee Bars

Dairy Max Resources

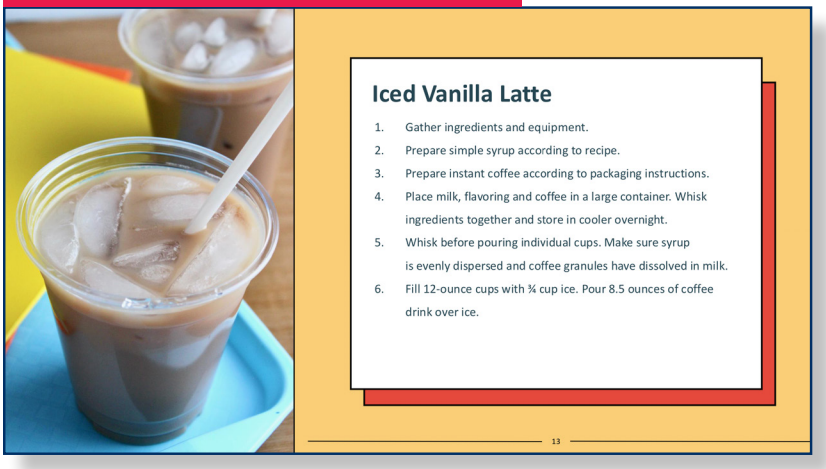
Coffee Toolkit



Coffee Steps Video



Coffee Taste Test Resources



2. Coffee Bars

What Are School Disricts Saying?

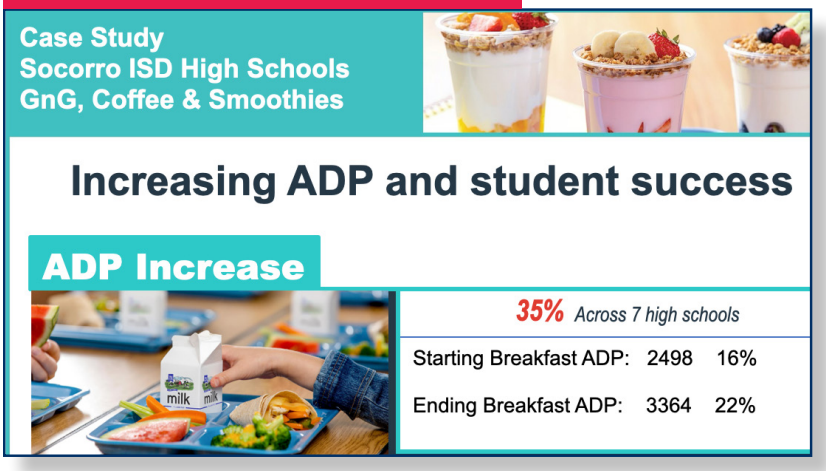
Aurora Public Schools Drive-Thru Video



Corpus Christi ISD Video



Case Study



Dairy-Forward Breakfast & Lunch Recipes

Overview

Incorporating dairy (including milk and dairy ingredients) in school recipes enhances flavor, nutrition, and student satisfaction. From protein-packed breakfast options to flavorful lunch entrees, dairy-based meals can be served as reimbursable meals or as a la carte options.

Benefits

Supports Nutrient-Rich Diets

Dairy provides essential vitamins and minerals, including calcium and vitamin D, which are otherwise low in students' overall diets.

Encourages Meal Participation

Culturally diverse recipes drive student interest in school meals. Dairy foods also increase the satisfaction and satiety (feeling full longer) when added to a meal, this will encourage students to select these food items repeatedly.

Versatile & Cost-Effective

Dairy-based meals work well with existing kitchen equipment, procurement/purchasing procedures, and budgets.

- Increasing the consumption of protein-rich foods is a current focus of consumers, and dairy-rich foods make that goal easy to achieve by adding milk, cheese, or cream cheese to homestyle soups, casseroles, sandwiches, or classic student favorites, such as: pizza, cheeseburgers and tacos.





3. Dairy-Forward Breakfast & Lunch Recipes

Implementation Considerations

Service Models

Traditional: Homestyle Cafeteria Favorites

- Consider various steamtable pan sizes and shapes to increase interest

Grab & Go/Second Chance

- Consider mascot-themed wrappers or containers for packaging these items

A la Carte

- Prepackage dairy based condiments in individual containers and place on ice, such as siracha sour cream, creamy salsa verde, homemade buttermilk ranch, shredded cheese cups variety (cheddar, mozzarella, pepperjack, etc.)

Counting/Claiming

Reimbursable

- Ensure minimum and maximum meal components are selected for each meal

A la Carte

- Follow Smart Snacks guidance for foods sold to students





3. Dairy-Forward Breakfast & Lunch Recipes

Implementation Considerations

Menus & Recipes

Click the links below for Dairy MAX k-12 Standardized Recipes

Breakfast Recipes

- From sweet to savory, these student-approved scratch and fast-scratch recipes are perfect no matter where you serve breakfast.

Lunch Recipes

- Review menus at least annually to identify items with the lowest acceptance. Replace those with a new trend or student suggested menu items.
- Review and update current recipes that need a makeover, considering a dairy-twist to improve the flavor and nutrition profile.
- Identify sodium and added sugar levels for all menu items. Incorporate menu items with lower sodium and low or no added sugars to balance out higher favorite menu items.
- Follow food trends in retail and commercial markets to adjust your menus to mirror or mimic what students see outside of school (with healthier versions).

Smart Snacks In Schools

- A la carte Beverages
- Entrees sold a la carte
- A la carte snacks





3. Dairy-Forward Breakfast & Lunch Recipes

Staffing Considerations

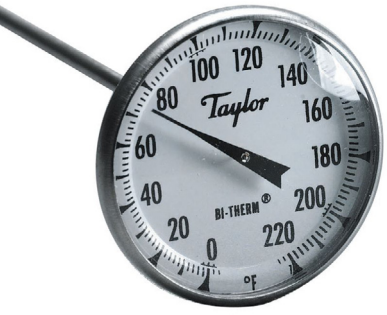
- Pre-prepped ingredients can streamline production. Consider fast-scratch concepts, combining pre-prepared ingredients with less prep items.
- Provide training in dairy storage and handling food safety and optimal freshness.

Cost Considerations

- Utilizing commodity dairy products can help offset costs. Proper inventory control can ensure perishable dairy foods do not expire before they can be used.

Equipment Examples

- Temperature control
- Probe thermometers – for food checks
- Internal cold storage thermometers
- Milk boxes
- Reach in coolers







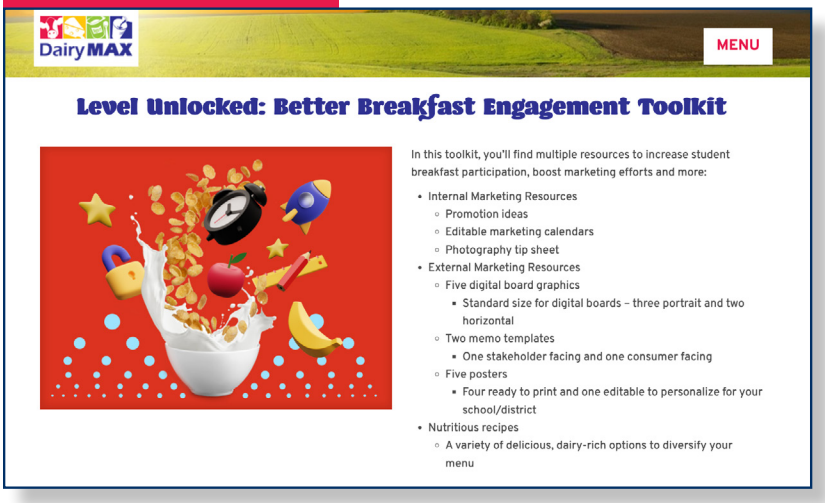




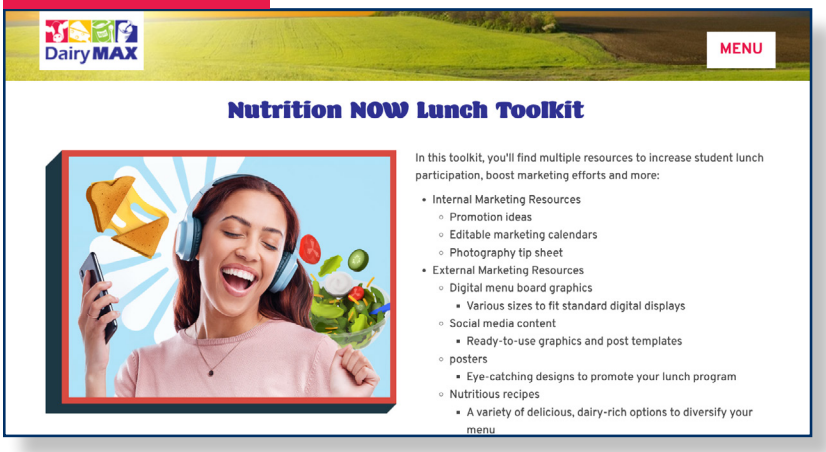
3. Dairy-Forward Breakfast & Lunch Recipes

Dairy Max Resources

Breakfast Toolkit



Lunch Toolkit



School Nutrition Social Media Kit

