

Food Trends of K–12 Schools Participating in the School Breakfast Program

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INTRODUCTION:

The United States Department of Agriculture's (USDA) School Breakfast Program (SBP) is a pivotal federal initiative designed to provide nutritious morning meals to school children nationwide. Currently, the SBP serves approximately fifteen million students daily, positioning it as one of the most extensive Child Nutrition Programs in the United States (USDA, 2020). The SBP meal pattern includes fruits and vegetables, whole grains or meats/meat alternates, and fluid milk, adhering to calorie, fat, and sodium limits to support children's health (School Breakfast Program Meal Pattern, 2024). The program emphasizes nutrient-rich foods, such as whole fruits instead of juice and whole grains rather than refined grains (Updates to the School Nutrition Standards, 2025).

Recent updates to the SBP aim to reduce childhood illnesses, increase access to healthy foods, improve academic outcomes, and align meal patterns and regulations more closely with the latest Dietary Guidelines for Americans (DGA) guidance (Updates to the School Nutrition Standards, 2025). These changes include reductions in added sugars and sodium and added flexibility in some areas, including meat/meat alternates, vegetables, and nuts and seeds (USDA Food and Nutrition Service, 2024).

Breakfast consumption has been shown to improve cognitive function, memory, and mood—critical elements for a productive school day (Brown et al., 2008; Lundqvist, Vogel, & Levin, 2019; Wenes et al., 2012). Research indicates that children who consume healthy breakfasts are more attentive in class, perform better on achievement and standardized tests, and experience fewer disciplinary problems (Brown et al., 2008; Imberman & Kugler, 2014; Ptomey et al., 2016). Because of this, one could conclude that hungry students are at a disadvantage as compared to their well-fed peers, making a consistent and accessible SBP a vital component in providing equal educational opportunities.

Despite its widespread acclaim, the SBP faces several challenges. Participation rates for the SBP can be lower than those of the National School Lunch Program (NSLP), even though both programs follow similar federal regulations and are operated in the same facility with the same staff (Spruance et al., 2023). One cause of lower participation in the SBP is related to parental perceptions. In a study conducted by Spruance and colleagues (2023), 62% of adult respondents to an electronic survey distributed across the state of Utah have children who have never participated in the SBP. When asked about their perceptions of school breakfast, study participants believed that a home-prepared breakfast was healthier than a school breakfast. Furthermore, there were two



primary predictors for decreased perceptions of school breakfast among study participants, which could influence student participation in the SBP: a) never participating in school breakfast and b) parental perceptions of school breakfast components, including fruit and whole grains (Spruance et al., 2023). In addition to parental perceptions, student perceptions of school breakfast, getting to school in time for breakfast service, and socioeconomical stigmas around school meal consumption can be related to low SBP participation rates (Askelson et al., 2017; Doughty et al., 2020; Lambert et al., 2007). Another criticism pertains to food waste. Although nutrition standards have improved, critics argue that student preferences and the perishability of foods like milk and fruit result in foods being discarded and not consumed by student SBP participants (Blondin et al., 2015; Folta et al., 2016; Fox et al., 2019). Schools have attempted to address these issues by implementing Grab-and-Go options, utilizing breakfast kiosks, serving breakfast in the classroom, and operating other service models to make breakfast more accessible, reducing negative connotations associated with school breakfast, and increasing student acceptability (Folta et al., 2016; Larson et al., 2019; Morris et al., 2010).

Over the past decade, key factors have influenced food trends in K–12. Policy changes, such as the Healthy, Hunger-Free Kids Act (2010) and the Final Rule – Child Nutrition Programs: Meal Patterns Consistent with the 2020–2025 Dietary Guidelines for Americans (2024), have established additional nutritional standards to improve school meal quality. Concurrently, shifting student preferences and the integration of local, regional, and traditional foods have shaped the types of foods desired or offered in school meal programs (Bastami, et al., 2019; Cohen et al., 2021; Simplot, 2023; Smith et al., 2019).

Popular foodservice companies and national associations are reporting on popular menu items and menu trends in the US. For example, foodservice companies that operate school meal programs report annually on popular menu items among the students they serve (Chartwells, n.d.; Gingerella, 2023; Simplot, 2022; Simplot, 2023). Additionally, organizations such as the National Restaurant Association conduct research with culinary industry professionals to identify top and emerging menu trends annually (National Restaurant Association, 2024). However, no research to date has exclusively assessed food trends among K–12 students participating in the National School Lunch Program (NSLP) or SBP on a national level, utilizing NSLP and SBP professionals. Understanding these evolving preferences and consumption patterns is essential for school nutrition professionals, policymakers, and industry professionals seeking to meet nutrition standards for school meals and increase student participation. Therefore, this study aimed to provide valuable insights into the current landscape of food trends in school meal programs across the country by identifying foods that are currently popular and fading in popularity, with breakfast being the focus of this article.

METHODOLOGY:

Study Design and Participants

The Institute of Child Nutrition (ICN) Applied Research Division conducted a national online survey titled "Food Trends in K–12" in April 2024. This survey aimed to assess current and emerging food trends and preferences within K–12 school nutrition programs across the United States, gathering insights from various school nutrition professionals, including directors, managers, staff, chefs, and state agency professionals. Individuals who work with the school meal program were recruited using a convenience sampling approach through social media accounts associated with the ICN, the ICN's official website, and direct email invitations. The initial sample consisted of 2,848 participants recruited via email through a national database of school nutrition professionals.

Eligibility Criteria

Eligibility to participate in this study was based on several factors: a) a self-identified knowledge of food trends in K–12 environments, b) participation in the National School Lunch and School Breakfast Programs, and c) a job title that allowed the respondent to have an active awareness of student food choices. While the NSLP and SBP are available to public and non-profit private schools, our research did not require schools to declare this specific designation. Instead, only schools that met the established research criteria were included in the study. Participants were screened based on job titles to ensure relevance to school nutrition programs. Only those identifying as "School Nutrition Director," "School Nutrition Manager/Supervisor," "School Nutrition Staff," "School Chef," or "State Agency Professional" proceeded with the survey. Respondents who selected roles outside of direct school nutrition operations, such as "School Nutrition Industry Professional," "USDA Representative," "Regional USDA Representative," or "Other," were thanked for their interest but informed they did not qualify for this survey. The eligibility question served as the first item in the survey, and participants had to respond to the question in order to proceed. Following this screening, a total of 1,691 participants met the eligibility criteria, provided job titles, and responded to at least the first survey question.

Survey Content and Data Collection

The initial phase of the study involved the recruitment of subject matter experts (SMEs) to establish foundational insight into popular food trends in K–12 settings. These experts were comprised of K–12 school foodservice directors, industry representatives, and state agency professionals with expertise in areas such as food sales data, common menu items, and menuing frequency. The insights gathered from the SMEs, current literature, and data from foodservice companies serving K–12 schools were utilized to refine and finalize the food trends survey instrument (including popular K–12 foods included in the survey). The final draft of the survey contained six sections (including a demographic section) and twenty-six questions; however, this manuscript focuses exclusively on participant demographics and the Breakfast Trends section. In the Breakfast Trends section, participants were asked to identify breakfast foods that were (1) currently popular and (2) growing in popularity in their school nutrition programs. It is important to know here that participants were not provided with pre-determined definitions for the terms "currently popular" and "growing in popularity." The

participants' interpretations of these terms were left to their personal understanding, the question block descriptions, and the broader survey context.

Response options for the Breakfast Trends section included Breakfast Smoothie, Breakfast Burrito, Breakfast Bowl, Sausage, Egg, and Cheese Biscuit, Grits, Oatmeal, Cream of Wheat, Donuts or Mini Donuts, Sausage Biscuit, Chicken Biscuit, Cereal, Breakfast Pizza, Muffins, and Yogurt Parfait. Additionally, there is an option for "Other" where respondents could specify different items not listed. Participants were allowed to select all items that applied. To present a focused analysis, the tables in this manuscript display only the top two quintiles (40%) of responses for each breakfast item category. The broader survey also included sections covering Lunch Trends, Flavors, Seasonings and Condiments, Dining Options, Assessment Methods, and Demographic Information. However, these sections will be analyzed in future publications to provide a comprehensive view of K–12 school food trends across multiple mealtimes and flavor categories.

Data Analysis

Data analysis in this manuscript focused on descriptive statistics for participant demographics and responses within the Breakfast Trends section. Responses to breakfast items were analyzed to determine the frequency and percentage of foods currently popular and emerging in popularity, with results analyzed by job title, educational setting, district size, and regional location. Due to the multiple-selection format of the questions, response percentages did not rise to 100% due to the non-exclusive nature of participants' responses. Additionally, the survey design intentionally presented the same food options for both 'currently popular' and 'growing in popular' foods. This was done to avoid any apriori distinction between these two aspects of a food's presence on a school's menu and student preferences.

Institutional Review Board Approval

The University of Southern Mississippi's Institutional Review Board approved the research activities, and participants gave written consent.

RESULTS AND DISCUSSION:

The Food Trends in K–12 survey, conducted in April 2024 by the ICN Applied Research Division, gathered responses from 1,691 school nutrition professionals across the United States, including directors, managers, staff, chefs, and state agency professionals. The analysis of breakfast items revealed that cereal (63.7%), muffins (52.7%), and donuts or mini donuts (49.7%) are the most popular items currently served. These options, known for their convenience and familiarity, cater to a range of student preferences. Additional items, such as yogurt parfaits (40.2%), breakfast pizza (39.4%), and sausage biscuits (38.5%), also rank high in popularity. These trends might reflect a balance between traditional favorites and protein-rich choices and the influence of the popular grab-and-go menu service option in schools. Growing in popularity, yogurt parfaits (30.9%) and breakfast smoothies (20.1%) suggest an increased demand for perceived healthier options, likely driven by broader trends in health-conscious eating. The idea of "healthier" options for breakfast has been identified in another research study. Doughty and colleagues (2020) conducted focus group discussions with students in



grades 1–12 on school breakfast participation and consumption habits. The results of the study indicated that the reason some students in all age groups report not participating in the SBP is related to a perception that the school food is unhealthy or junk food. When these students were asked about ways to improve school breakfast, they indicated the need for more variety in fruits, breads, and beverages, and they prioritized the need for healthier options and freshly made, real foods (Daughty et al., 2020). There may be some differences in the way different age groups approach decision making about what they select and eat. While younger students may rely more on parental influence or familiarity, older students (particularly in grades 9–12) are increasingly influenced by social norms, personal health goals, and exposure to food trends via social media (FOODBYTES, 2023; Waddingham et al., 2018). These generational and developmental differences may partially explain the rising popularity of nutrient-dense, customizable breakfast items.

Table 1. *Study Characteristics of Survey Participants*

Characteristics	Count	%
Participants Job Titles		
School nutrition manager/supervisor	707	41.80%
School nutrition director	570	33.70%
School nutrition staff	317	18.70%
School nutrition chef	71	4.20%
State agency professional	26	1.50%
Regions^a		
Mid Atlantic	107	6.3%
Midwest	230	13.6%
Mountain Plains	115	6.8%
Northeast	103	6.1%
Southeast	288	17.0%
Southwest	329	19.5%
Western	128	7.6%
Missing	391	23.1%
District Size		
Small district - < 2,500 students	974	57.6%
Medium district - 2,500 to 30,000 students	269	15.9%
Large district – more than 30,000 students	57	3.4%
Missing	392	23.2%

(Table 1 continues)

Table 1 (continued). *Study Characteristics of Survey Participants*

Characteristics	Count	%
Participants Educational Setting		
K–12 (all schools)	703	41.6%
Elementary school	401	23.7%
Middle school	236	14.0%
High school	181	10.7%
Missing	170	10.0%
Breakfast Item Popularity Trends in School Nutrition Programs		
A. Currently Popular Breakfast Items		
Cereal	1077	63.7%
Muffins	891	52.7%
Donuts or mini donuts	841	49.7%
Yogurt parfait	680	40.2%
Breakfast pizza	667	39.4%
Sausage biscuit	651	38.5%
B. Growing in Popularity Breakfast Items		
Yogurt parfait	523	30.9%
Muffins	358	21.2%
Breakfast smoothie	340	20.1%
Donuts or mini donuts	327	19.3%
Breakfast pizza	312	18.5%
Sausage, egg, and cheese biscuit	279	16.5%

Note. *The table includes participant job titles, district size, school type, and USDA regional representation.*

^aRegions are based on USDA Food and Nutrition Service designations (USDA FNS, 2024). Mid-Atlantic = Delaware, District of Columbia, Maryland, New Jersey, Pennsylvania, Virginia, and West Virginia; Midwest = Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin; Mountain Plains = Colorado, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming; Northeast = Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont; Southeast = Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee; Southwest = Arizona, Arkansas, Louisiana, New Mexico, Oklahoma, Texas, and Utah; Western = Alaska, California, Hawaii, Idaho, Nevada, Oregon, Washington, Guam, Northern Mariana Islands, and American Samoa

Regional variations in breakfast preferences reveal interesting patterns, which show the importance of tailoring menu items to meet local demands. For example, while cereal maintains broad appeal, it is most popular in the Southwest (20.5%) and Southeast (17.1%). This pattern might suggest a stronger preference for traditional breakfast foods in these regions. Sausage biscuits, a Southern staple, were most popular in the Southeast (32.4%) and Southwest (24.4%). At the same time, yogurt parfaits, indicative of a health trend, demonstrated robust growth in popularity in both the Midwest (15.7%) and the Southeast (18.7%). This highlights the potential benefit of regional menu customization to optimize satisfaction and participation in school nutrition programs. (See Table 2.)

Table 2. *Regional Variations in Breakfast Item Popularity*

	Mid Atlantic		Midwest		Mountain Plains		Northeast		Southeast		Southwest		Western	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A. Currently Popular Breakfast Items														
Cereal	75	7.0%	146	13.6%	57	5.3%	67	6.2%	184	17.1%	221	20.5%	90	8.4%
Muffins	61	6.8%	135	15.2%	61	6.8%	72	8.1%	127	14.3%	167	18.7%	76	8.5%
Donuts or mini donuts	57	6.8%	147	17.5%	62	7.4%	58	6.9%	148	17.6%	164	19.5%	47	5.6%
Yogurt parfait	34	5.0%	105	15.4%	48	7.1%	59	8.7%	102	15.0%	126	18.5%	75	11.0%
Breakfast pizza	36	5.4%	98	14.7%	57	8.5%	32	4.8%	112	16.8%	166	24.9%	40	6.0%
Sausage biscuit	25	3.8%	48	7.4%	35	5.4%	12	1.8%	211	32.4%	159	24.4%	32	4.9%

B. Growing in Popularity Breakfast Items														
Yogurt parfait	31	5.9%	82	15.7%	31	5.9%	32	6.1%	98	18.7%	98	18.7%	42	8.0%
Muffins	22	6.1%	55	15.4%	25	7.0%	23	6.4%	62	17.3%	69	19.3%	30	8.4%
Breakfast smoothie	29	8.5%	57	16.8%	14	4.1%	31	9.1%	41	12.1%	67	19.7%	35	10.3%
Donuts or mini donuts	20	6.1%	45	13.8%	22	6.7%	15	4.6%	71	21.7%	70	21.4%	19	5.8%
Breakfast pizza	12	3.8%	43	13.8%	25	8.0%	19	6.1%	54	17.3%	84	26.9%	19	6.1%
Sausage, egg, and cheese biscuit	13	4.7%	45	16.1%	17	6.1%	19	6.8%	57	20.4%	45	16.1%	29	10.4%

Note. The table shows frequency and percentage of currently popular and emerging breakfast items across USDA regions.

Breakfast item preferences also varied based on participants' job roles, school type, and district size, pointing to a specific perspective of student needs and trends within these demographics. School nutrition managers and directors, who directly oversee menu planning, nutrition compliance, and school cafeteria management, indicated traditional options like cereal (42.4%) and muffins (41.9%) as most popular among students. School chefs, however, indicated an identified student interest in newer options, with 5.2% favoring yogurt parfaits and 5.3% showing a preference for breakfast smoothies, aligning with a trend toward fresher, nutrient-dense choices. (See Tables 3 and 4.)

Table 3. *Breakfast Item Popularity by Participant Job Role*

	School Nutrition Chef		School Nutrition Director		School Nutrition Manager/Supervisor		School Nutrition Staff		State Agency Professional	
	Count	%	Count	%	Count	%	Count	%	Count	%
A. Currently Popular Breakfast Items										
Cereal	42	3.9%	378	35.1%	457	42.4%	182	16.9%	18	1.7%
Muffins	36	4.0%	331	37.1%	373	41.9%	139	15.6%	12	1.3%
Donuts or mini donuts	25	3.0%	332	39.5%	337	40.1%	135	16.1%	12	1.4%
Yogurt parfait	28	4.1%	292	42.9%	260	38.2%	89	13.1%	11	1.6%
Breakfast pizza	22	3.3%	271	40.6%	257	38.5%	103	15.4%	14	2.1%
Sausage biscuit	24	3.7%	242	37.2%	278	42.7%	97	14.9%	10	1.5%
B. Growing in Popularity Breakfast Items										
Yogurt parfait	27	5.2%	197	37.7%	204	39.0%	82	15.7%	13	2.5%
Muffins	16	4.5%	80	22.3%	175	48.9%	83	23.2%	4	1.1%
Breakfast smoothie	18	5.3%	146	42.9%	116	34.1%	52	15.3%	8	2.4%
Donuts or mini donuts	14	4.3%	89	27.2%	154	47.1%	67	20.5%	3	0.9%
Breakfast pizza	14	4.5%	93	29.8%	132	42.3%	66	21.2%	7	2.2%
Sausage, egg, and cheese biscuit	10	3.6%	109	39.1%	108	38.7%	49	17.6%	3	1.1%

Note. The table compares responses for currently popular and growing breakfast items across school nutrition roles

Table 4. *Breakfast Item Popularity by School Type*

	Elementary School		Middle School		High School		K–12 (All Schools)	
	Count	%	Count	%	Count	%	Count	%
A. Currently Popular Breakfast Items								
Cereal	278	25.8%	144	13.4%	96	8.9%	463	43.0%
Muffins	194	21.8%	127	14.3%	83	9.3%	411	46.1%
Donuts or mini donuts	195	23.2%	121	14.4%	96	11.4%	378	44.9%
Yogurt parfait	136	20.0%	90	13.2%	83	12.2%	330	48.5%
Breakfast pizza	142	21.3%	87	13.0%	79	11.8%	338	50.7%
Sausage biscuit	153	23.5%	93	14.3%	77	11.8%	297	45.6%
B. Growing in Popularity Breakfast Items								
Yogurt parfait	109	20.8%	73	14.0%	65	12.4%	242	46.3%
Muffins	111	31.0%	63	17.6%	39	10.9%	136	38.0%
Breakfast smoothie	58	17.1%	30	8.8%	41	12.1%	178	52.4%
Donuts or mini donuts	75	22.9%	53	16.2%	42	12.8%	129	39.4%
Breakfast pizza	90	28.8%	49	15.7%	36	11.5%	139	44.6%
Sausage, egg, and cheese biscuit	55	19.7%	34	12.2%	41	14.7%	137	49.1%

Note. The table breaks down food trends by elementary, middle, high school, and K–12 settings.

In analyzing the popularity of breakfast items among school districts of varying sizes (not shown in the table), distinct patterns emerge based on district size. District sizes in this study were categorized as small (under 2,500 students), medium (2,500 – 30,000 students), and large (over 30,000 students). For the currently popular breakfast items, in small districts, traditional and ready-to-serve items dominated. Cereal was the most popular choice, selected by 624 participants, representing 74.3% of the total responses for this item across all district sizes. This is followed by muffins, which were chosen by 515 participants (making up 73.7%), donuts or mini donuts (498; 72.9%), and breakfast pizza (406; 75.0%). Other common options included sausage biscuit (372; 71.3%) and yogurt parfait (380; 69.2%). This may involve underlying factors, including (a) traditional breakfast options are more feasible and widely accepted in smaller settings, (b) some school kitchens may lack the necessary equipment to prepare more complex dishes, and (c) the skill levels of kitchen staff may be limited.

In medium districts, although only comprising 15.9% of total participants, a diverse set of preferences emerged. Donuts or mini donuts were selected by (159;23.3%) participants. This indicates a continued selection of these items but with slightly different preferences compared to smaller districts. Sausage biscuits were also popular, selected by 121 participants (23.2%), while cereal remained a stable choice with 173 participants (20.6%). Muffins and breakfast pizzas received 155 (22.2%) and 114 (21.1%) selections, respectively.

In large districts that comprised 3.4% of participants, sausage biscuits were the most popular, chosen by 29 participants (5.6%), showing the highest percentage for this district size. Cereal was selected by 43 participants (5.1%), maintaining a consistent presence. Yogurt parfait followed with 27 selections (4.9%). Muffins, donuts or mini donuts, and breakfast pizza showed the least preference, with 29 (4.1%), 26 (3.8%), and 21 (3.9%) selections, respectively.

In the analysis of items growing in popularity across school districts, distinct trends emerge that suggest a shift towards trendy healthy foods and more varied breakfast options. In small districts, which housed most participants, yogurt parfait was popular, selected by 293 participants (70.8%), indicating a shift towards trendy, healthy food choices. Muffins also continued to rise in preference, with 243 participants representing an 85.0% preference rate, the highest among emerging items. Donuts or mini donuts and breakfast pizza maintain their appeal, with 208 (79.4%) and 203 (79.3%) participants, respectively, showing continuous interest. Sausage, egg, and cheese biscuits, and breakfast smoothies also showed growing preference, with 174 (77.3%) and 173 (63.1%) participants choosing them, respectively. In medium-sized districts, Breakfast Smoothies were chosen by 82 participants (29.9%), reflecting a trend towards diverse and nutritious options. Yogurt parfaits remained a strong choice, with 95 selections (22.9%), while muffins and donuts showed moderate growth. In the largest districts, despite the smaller participant pool, breakfast smoothies and yogurt parfaits were popular, with 19 (6.9%) and 26 (6.3%) participants opting for these, pointing to an emerging preference for trendy, healthier breakfast alternatives.

These findings of breakfast preferences across job roles, school types, and district sizes can guide tailored menu development. The study findings are important as they help direct resources to ensure that school nutrition programs are responsive to diverse stakeholder needs and regional demands.

The patterns observed in the Food Trends in K–12 survey conducted by the Institute of Child Nutrition Applied Research Division offer a unique perspective on regional and demographic variations. According to a study by Long et al. (2004), convenience remains a crucial factor for breakfast selection in schools, which aligns with the high popularity of cereals and muffins noted in our survey (Long et al., 2004). The popularity of traditional breakfast items such as cereal and muffins in our survey is supported by findings from Frisvold (2015), who studied the effects of serving breakfast in classrooms and noted that easily served and eaten foods like cereal are more likely to be adopted (Frisvold, 2015). The growing preference for healthier breakfast options observed in this study, such as yogurt parfaits and breakfast smoothies, aligns with USDA findings. A 2019 USDA report examined how updated nutrition standards have shaped school breakfast offerings, and another USDA publication (n.d.) further supports the increasing inclusion of nutrient-dense items in school menus.



There is limited academic research available to assess food trends in school meal programs like the SBP. Private companies, such as K–12 food management companies, food and agriculture companies, and market research companies, have provided a glimpse into food trends in school-aged children through corporate research. This data from these organizations provides a look at food trends among kids and students in K–12 settings from two perspectives – food sales and customer preferences.

Results of corporate research indicate that one of the primary factors influencing student food choices is associated with exposure to a variety of food options by their parents (Datassentials, n.d.-a; FOODBYTES, 2023). FOODBYTES (2023), a publication of an online marketing research group, surveyed parents of children born between 2010 and 2024 (which would include children between the ages of 5 and 15) and determined that 68% of the parents of children in this age group took their kids out to eat up to two times per week. Over half (52%) of this same group of parents acknowledge allowing their children to select their meals when visiting restaurants (FOODBYTES, 2023). Additionally, 56% of the parents of children born between 2010 and 2025 indicated that they purchase food seen on television or online for their children to consume (Datassentials, n.d.-a). Because of this, some students currently served in school foodservice settings are savvy eaters.

Another factor influencing student food choices is access to social media. It has been established in academic research that food advertising influences eating behaviors in children, and the Internet is a primary platform for marketing (Buchanan et al., 2018; Coates et al., 2019; World Health Organization, 2016). FOODBYTES (2023) identified that 79% of people born between 1997 and 2012 (which would include those between the ages of 13–18 years) tried food or flavors based on recipes they have seen on social media, and more than 20% of parents for children born between 2010 and 2024 (which would include children between the ages of 5 and 15 years) indicated that they allow their children to use social media platforms such as Instagram, Facebook, and TikTok. The experiences and exposure to new food trends through lived experiences and social media can expand students' expectations of meals served at home, in local restaurants, and at the local school meals program. This provides a perfect opportunity for school foodservice directors and menu planners to leverage the information on what is popular on social media and in local and chain restaurants, and the findings of the current research to build menus that would encourage participation in the SBP.

The limited academic research on food trends among children, particularly those in the SBP, highlights a gap in understanding this segment of school nutrition. Most existing data focuses on lunch rather than breakfast menus. When breakfast options were addressed, prevailing trends emerged, including mini-sized pancakes and waffles, smoothies and smoothie bowls, breakfast sandwiches, and egg dishes (Chartwells, 2024; Simplot, 2022; Simplot, 2023). The current study identified similar preferences among the survey population, with smoothies and sausage biscuit breakfast sandwiches emerging as popular choices. These results reflect broader trends observed in the foodservice industry, suggesting an increasing demand for convenient, flavorful, and familiar breakfast options. This alignment with industry trends underscores the potential for evolving breakfast menus in schools.

CONCLUSIONS AND APPLICATION:

This research marks a pioneering effort to identify food trends in K–12 schools by engaging school nutrition professionals responsible for the operation and administration of school meal programs. The insights gathered through this study have far-reaching implications for designing targeted school breakfast menus that could potentially enhance student participation in the SBP, promote menu items that align with student preferences, and mitigate food waste by offering menu options that are more appealing to students.

Increasing Participation in the School Breakfast Program

Social Acceptability

A critical factor influencing children's food choices is social acceptability, which includes peer influence and the popularity of specific foods. Studies have long shown that children's food preferences are shaped by taste and the perceived popularity of food items among their peers (Bazillier et al., 2011; Bevelander et al., 2013; Waddingham et al., 2018). Waddingham et al. (2018) conducted research highlighting the role of social acceptability in food selection among children. In this context, social acceptability refers to food choices perceived as popular among peers. In their study, children indicated that their menu selections were often influenced by what was "popular and everyone likes" (Waddingham et al., 2018), underscoring the importance of peer influence in shaping food choices. While social acceptability is not the sole determinant of food choices, it is an influential factor that can be leveraged to engage students in the SBP. Leveraging the concept of social acceptability could prove pivotal in designing breakfast menus that appeal to students and increase participation in the SBP. Given that children are exposed to a wide range of food offerings outside of school, including restaurant menus and social media trends (FOODBYTES, 2023), schools could consider aligning their menus with food items that reflect current trends while meeting nutritional guidelines. The current study's findings suggest that when students are presented with menu options that resonate with their tastes and are popular among peer groups, they may be more inclined to participate in the program.

A practical approach to aligning school breakfast menus with more popular food items could include conducting regular surveys or focus groups involving students to identify emerging trends and preferences. By actively involving students in the menu development process, school nutrition professionals can tailor their offerings to reflect the interests of their student body.

Addressing Student Preferences

Student preferences play a significant role in determining the success of school meal programs, particularly regarding breakfast options. While student preference can also resemble social acceptability from peers, research shows that children's food preferences are influenced by a combination of factors, including taste, texture, appearance, and familiarity with the item (Murimi M.S. et al., 2016; Neumark-Sztainer et al., 1999; Waddingham et al., 2018). Waddingham et al. (2018) and Murimi et al. (2016) identified that satisfaction and enjoyment are centered around taste preference among children of all ages. Student in the Murimi et al. (2016) study indicated that an important deciding factor for choosing a food was based on its taste. Doughty and

colleagues (2020) found that students in grades one through twelve preferred breakfast foods that were of “high quality”, cooked, and freshly made.

The present study identifies breakfast items students favor, including smoothies and sausage biscuit breakfast sandwiches. These foods are consistent with broader foodservice industry trends emphasizing convenience, flavor, and portability (Simplot, 2023). Such foods have gained popularity in the restaurant industry due to the growing demand for breakfast-on-the-go options (Simplot, 2022).

In the evolving present, children’s exposure to food trends, particularly through social media platforms, shapes their familiarity with various foods and fosters a desire for visually appealing, trendy options (FOODBYTES, 2023). A perfect example of this would be the smoothie bowls, which have gained traction in the social media food culture. The smoothie bowl is a prime example of a food trend that can be incorporated into school breakfast menus.

To ensure that school menus are aligned with student preferences, school nutrition professionals could use this food trends study to incorporate popular food items on breakfast menus. Given the influence of external food trends on student preferences, school nutrition programs should maintain flexibility in their menus to accommodate these evolving tastes.

Decreasing Food Waste

Food waste is a significant challenge in many school meal programs, and it represents both an economic and environmental concern. According to the School Nutrition and Meal Cost Study (Fox et al., 2019), a substantial amount of food is discarded in the SBP, with milk, fruits, and 100% fruit juice being the most wasted items. Reducing food waste should be a priority in efforts to improve the sustainability of school meal programs, and part of the solution may lie in offering menu options that better align with students' preferences.

The current study suggests that certain breakfast items are particularly popular among students, and these preferences appear to vary based on the USDA Food and Nutrition Service region and students’ age or grade level; offering these favored items in the SBP may help reduce food waste. By introducing more popular, trendy menu items, schools may encourage greater participation and reduce the likelihood that food will be discarded. For instance, offering smoothies or yogurt parfaits made with fruits students prefer or incorporating familiar breakfast sandwiches could increase the likelihood that students will finish their meals, ensuring more meals are eaten and not discarded.

Limitations of the Study and Future Research

While this research provides valuable insights into food trends within the context of the SBP, several limitations should be considered. The study primarily focuses on the perspectives of school nutrition personnel, and as such, the findings reflect their understanding of student preferences rather than the actual preferences of students themselves. While school nutrition professionals may have insights into popular food items, the researchers did not collect point-of-sale data or data on student food preferences or consumption patterns



directly from the students. Secondly, the survey questions allowed participants to select multiple responses for each item, resulting in non-mutually exclusive data. This response format limited the applicability of advanced statistical analyses, such as regression modeling, which typically require mutually exclusive outcome categories or continuous variables. Therefore, descriptive statistics were appropriate for the exploratory goals and structure of the dataset. However, future research might explore inferential methods using point-of-sale or consumption data to validate these perceived trends. This data could provide more accurate insights into the relationship between student preferences and food purchases, enabling nutrition professionals to fine-tune their offerings and reduce waste. It is also important to recognize that the study does not collect data on plate waste, leaving a gap in our understanding of the relationship between perceived popularity and actual consumption.

In conclusion, the findings of this study provide important insights into the food trends and preferences of students participating in the SBP based on the perceptions of school nutrition professionals. These trends align with those observed in the broader foodservice industry, underscoring the need for schools to adapt their menus to meet evolving student preferences. By incorporating popular menu items, leveraging social acceptability, and offering meals that reflect current food trends, school meal programs can potentially increase participation, reduce food waste, and better serve the needs of students. However, further research is needed to understand better the relationship between student preferences, food purchases, and food waste, as well as the impact of these trends on the overall effectiveness of the SBP.

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ABSTRACT

PURPOSE/OBJECTIVES

This study aimed to identify foods currently popular and growing in popularity in K–12 schools participating in the School Breakfast Program (SBP).

METHODS

The study utilized a national online survey conducted in April 2024 by the Institute of Child Nutrition Applied Research Division. School nutrition professionals across the U.S. were recruited via social media and direct email invitations. The survey focused on food trends and asked participants to identify popular and emerging food items in their school nutrition programs. Data analysis included descriptive statistics to assess the frequency and popularity of breakfast items by various demographics, including job title, school type, district size, and region.

RESULTS

The survey identified several key trends in school breakfast menus. The most popular menu items currently served in schools include cereal (63.7%), muffins (52.7%), and donuts (49.7%), while yogurt parfaits (40.2%) and breakfast pizza (39.4%) also ranked high. The top emerging trends in school food preferences included yogurt parfaits (30.9%) and breakfast smoothies (20.1%), indicating a shift toward trendy nutrient-dense options. Regional variations were noted, with certain foods, such as sausage biscuits, showing higher popularity in the Southeast and Southwest.

APPLICATIONS FOR CHILD NUTRITION PROFESSIONALS

The findings highlight the importance of understanding evolving student preferences in school meal programs. By aligning breakfast menus with popular and emerging food trends, school nutrition professionals can potentially increase participation in the SBP, reduce food waste, and better meet student needs. Further research is needed to collect point-of-sale data to better understand the correlation between perceived popularity and actual food purchases, which could result in improved menu offerings and minimize waste in school nutrition programs.

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