

School Staff Perspectives on Universal Free Meals in the US

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Abstract

Objective: During the COVID-19 pandemic, the U.S. Department of Agriculture allowed all US schools to offer meals at no cost regardless of family income, a policy known as Universal Free Meals (UFM). Despite the recognized benefits of UFM, the policy expired in June 2022. The goal of this study was to gather perceptions of school staff in Arizona about school meals, UFM, and the discontinuation of UFM.

Design: This mixed-method study collected data using an online survey. Open-ended survey questions were analyzed using qualitative thematic analysis, and closed-ended questions were analyzed using descriptive analysis.

Setting: The survey was distributed to school staff in the two major metropolitan areas in Arizona between September and October 2022, soon after the UFM policy expired.

Participants: Survey responses were received from 1,255 school staff, including teachers, cafeteria staff, administrators, and other staff.

Results: Most school staff (93%) were supportive of UFM, and the support was consistent across all staff categories and across different political leanings. Thematic analysis demonstrated that staff felt UFM helped to meet students' basic needs, reduced stigma, and lessened the burden on teachers to use their own resources to provide food to students. Despite strong support, some staff reported concerns about food quality, program waste, and time available for lunch.

Conclusions: UFM policies were strongly supported by school staff, despite some concerns about program implementation. Understanding these views is important to the discussion of expanding UFM policies in the US and globally.

Keywords: School meals, Nutrition Policy, Universal Free Meals, Food Policy

Introduction

School meal programs subsidized by the United States (US) Department of Agriculture (USDA) are a crucial component of federal programs addressing basic needs in the US, helping to reduce food insecurity in low-income families⁽¹⁾ and providing nutritionally balanced lunches and breakfasts to millions of students each year.^(2,3) Studies have shown that school meals in the US provide better nutrient quality compared to meals from other sources, including those packed at home.^(4,5) Correspondingly, students who participate in US school meal programs consume healthier diets, including more fruits, vegetables, and whole grains, than those who do not.^(3,6) These dietary improvements may be particularly important for improving health equity as the majority of children who participate in school meal programs are from low-income households who qualify for free or reduced-price meals⁽⁷⁾ and may be at increased risk for diet-related diseases.⁽⁸⁾

The COVID-19 pandemic highlighted the significant impact of school meal programs on students' access to healthy foods and household food security. When schools across the US closed due to the pandemic, millions of students suddenly lost access to school meals, putting them at risk of food insecurity.⁽⁹⁾ In the face of this unprecedented event, the USDA issued a series of waivers allowing all students to access school meals at no cost, regardless of income. This was a departure from the typical models used in the US, which include a 3-tier payment model and the option for eligible schools to participate in the Community Eligibility Provision (CEP). In the 3-tiered payment model, families either 1) submit income applications each year to determine student eligibility for free, reduced-price, or paid meals or 2) students can be directly certified without an application based on their enrollment in other federal assistance programs⁽¹⁰⁾. Under this system, families earning less than 130% of the US federal poverty line (approximately \$40,000 for a family of 3, based on school year 2023-2024 estimates) or those who are directly certified, qualify for free meals. Families earning between 131 and 185% of the federal poverty line (up to about \$54,000 for a family of 4) qualify for reduced-price meals and pay \$0.30 for breakfast and \$0.40 for lunch. Lastly, families earning over 185% of the federal poverty line pay a district set price, averaging \$1.75 for breakfast and \$3.00 for lunch nationally in 2024, amounts that are partially subsidized by the USDA and may not reflect the full cost of producing a meal. Alternatively, since its introduction as part of the Healthy, Hunger-Free Kids

Act in 2010, CEP has enabled qualifying schools located in low-income areas to offer free meals to all students without collecting individual income applications. Prior to the COVID-19 pandemic, approximately 30,000 schools across the US adopted CEP. By SY 23-24, participation has grown to 47,766 schools⁽¹¹⁾, in part due to changes to eligibility requirements. However, despite this increase in CEP adoption, national data from the same school year show that 15% of eligible schools did not participate in CEP⁽¹¹⁾, and non-participation rates were even higher in Arizona, with 48% of eligible schools opting not to participate in the program in SY 23-24.⁽¹²⁾

While the nationwide pandemic-era waivers allowing free meals for all students were unprecedented in the US, other countries have long adopted Universal Free Meal programs (UFM). Countries such as Sweden and Finland have had national UFM policies in place since the 1940s, while others like Brazil, Estonia, India, and South Korea adopted national-level programs more recently. Countries with well-established UFM policies, like Sweden have provided evidence of long-term education, health, and earning benefits for children with access to UFM.⁽¹³⁾ Similarly, school meals in Japan (while not universally free, but universally available and free for low-income students)⁽¹⁴⁾ have also been associated with improved diet quality, especially in students from lower-income groups⁽¹⁵⁾. Despite widespread positive reactions to UFM policies in the US among families⁽¹⁶⁾ and success in other countries, the federal waivers allowing for free school meal distribution across the country ended at the end of the 2021-22 school year. Although a few states continued UFM⁽¹⁷⁾, most reverted to the 3-tiered payment system and CEP option that was in place before the waivers were implemented. Coinciding with this shift, there has been a notable decline in school meal participation, with 1.2 million fewer children eating breakfast and 1.8 million fewer eating lunches in school year 2022-2023 compared to 2021-2022, when UFM waivers were in place.⁽¹⁸⁾

At the same time, the food insecurity rate among Arizona's children was 14% compared to the national rate of 12.8%.⁽¹⁹⁾ Local community groups, including parent-led coalitions and anti-hunger advocates, worried that ending UFM at the national level might further exacerbate this issue and, therefore, sought to explore options to maintain access to school meals in Arizona. As policymakers and school meal advocates seek to gain support for UFM not only in Arizona but in other states and across the globe⁽²⁰⁾, it is important to understand the perspectives of key school stakeholders following the transition from free meal policies back to a tiered payment

system. This understanding will highlight some of the benefits of UFM and reveal challenges to address when considering such policies. The objective of this mixed-methods study was to examine the opinions and perspectives of school professionals, teachers, administrators, and other school staff regarding UFM policies following their implementation and subsequent de-implementation in Arizona.

Methods

This study used a convergent parallel mixed-methods design to capture school personnel's opinions about UFM in Arizona.⁽²¹⁾ Specifically, we used a survey instrument that included both closed-ended questions and one open-ended question. This approach allowed us to capture overall response trends using quantitative methods, while also gaining deeper insights into staff opinions about UFM programs through qualitative analysis of responses to the open-ended question.

Survey Instrument

A 32-item survey was developed to gather opinions and perspectives regarding UFM from school staff members and caregivers of students attending Arizona public schools. This manuscript focuses on data from respondents who self-identified as school staff. Data from students' parents are presented elsewhere⁽¹⁶⁾. School staff were asked to select the job title that best described their role from the following options: classroom teacher, cafeteria staff/manager, school/district administrator, other school/district support staff. Respondents answered questions about their views on school meals, their level of agreement with various statements related to school meals, their level of support for the federal policy that allowed free meals during the COVID-19 pandemic, and for a potential future extension of such policy in the state of Arizona. Additionally, they provided demographic information (e.g., race and ethnicity, annual family income, and education level) and their political leanings by answering, "In terms of your views on political issues, how would you describe yourself? [Very or somewhat conservative, middle of the road, very or somewhat liberal, or not sure]". This question was included given the potential variation in support for UFM programs across different political leanings.⁽²²⁾ Finally, an open-ended item, "Please provide any additional thoughts, opinions, or experiences you may have about offering school meals at no charge to all Arizona students regardless of family income,"

was included at the end of the survey. Survey questions were adapted from previously developed surveys used in similar studies in other states, which relied on questions from studies conducted by the USDA about school meals and as well as questions developed by the research team in partnership with nutrition/school policy advocacy organizations. Questions were pilot tested with school nutrition professionals prior to survey implementation ^(23–27). The full set of survey questions and answer options are presented in Appendix A.

Data Collection

The anonymous survey was open for completion between September and October 2022, following the conclusion of federal waivers that allowed all students to receive free meals without income applications. The survey was distributed via the Qualtrics (Qualtrics International Inc., Seattle, WA) online platform. Recruitment was conducted using multiple channels. First, the survey was distributed to a convenience sample of 6 large urban public school districts located in the two major metropolitan areas in Arizona, home to approximately 80% of the state's population. Distribution methods varied slightly according to district policies, with the most common distribution methods being emails to school community members and posts on school-managed social media platforms. To supplement distribution to specific school districts, the Arizona School Nutrition Association shared the survey link with its members via email, and the study team further extended the survey reach by sharing it on social media platforms (e.g., X (formerly Twitter), Instagram). Respondents consented to participation before answering survey questions and had the option to provide their email address at the end of the survey to enter a drawing for one of five \$100 gift cards. The survey took an average of 13 minutes to complete. All procedures were approved by the BLINDED Institutional Review Board (STUDY00016016).

A total of 5,431 responses were collected. To ensure data quality and integrity, responses from locations that were outside of Arizona were identified using geographic information systems (GIS) software, based on the latitude and longitude data for each response provided by Qualtrics, and then removed. This was done to remove instances of bot completions (n=1,534). Next, the median completion time was calculated, and surveys completed in less than half the median time were removed from the sample (n=212). Of the remaining 3,685 respondents, 1,255 self-identified as school staff and were included in quantitative descriptive analyses. Of these, 518

provided comments in the open-ended question and were also included in qualitative analyses (Figure 1).

Data Analysis

Descriptive analyses (i.e., frequency distributions) were conducted for closed-ended questions using Stata software version 16 (StataCorp LLC, College Station, TX). Responses to the open-ended questions asking respondents to provide additional thoughts, opinions, or experiences regarding free school meals to all students were reviewed and analyzed to develop thematic codes by two researchers trained in qualitative methods (SM and EMM). At the time of analysis, both researchers were experienced in conducting research focused on school food service and SM had experience in school food service as a school nutrition professional. To minimize interpretive bias, both authors actively worked to set aside preexisting assumptions and perspectives during the analysis process.

Thematic analysis of responses was conducted using an iterative constant comparative methodology.⁽²⁸⁾ The lead author (SM) first reviewed a subset of responses and developed an initial codebook based on a priori categories, including (a) reasons to support UFM and (b) concerns about UFM. The two researchers then independently read and coded a selection of 5% of total responses using the initial codes. After independent coding, they met to resolve discrepancies, discuss potential new codes needed to capture provided thoughts, and finalize the codebook with names and definitions for agreed-upon codes. Using this refined codebook, both researchers independently coded an additional selection of 50 open-ended responses (approximately 10% of total responses) and again met to discuss any discrepancies in assigned codes to confirm consistency in code application. The remaining 75% of responses were reviewed and coded by one researcher. After all coding was completed, the team met to identify and define final themes based on applied codes.

Results

Sample Characteristics

Among the 1,255 survey respondents who identified as school staff, 449 were teachers, 84 were cafeteria staff/managers, 106 were school administrators, and 616 were other school staff. As shown in Table 1, about half of the respondents were non-Hispanic White (52.1%), and 37.5%

were Hispanic. Educational attainment varied, with approximately 25% of the sample reporting some college education, 28.1% holding a 4-year college degree, and 40.2% possessing a professional or advanced degree. Almost 20% of respondents reported an annual income of less than \$34,999, 34.7% reported an income between \$35,000 and \$64,999, 26.6% reported an income between \$65,000 and \$99,999, and 19.5% reported an income of \$100,000 or greater. Finally, most respondents reported their political affiliation as either “middle of the road” (31.1%) or “liberal” (42.2%), while 18.5% reported their affiliation as “conservative” and 8.3% were “not sure” of their political preferences. Most responses came from staff at public schools (95%). Compared to the state, our sample had a similar proportion of respondents who identified as non-Hispanic White and Hispanic, with 53.4% identifying as non-Hispanic White at the state level compared to 52.1% in our sample and 31.6% identifying as Hispanic at the state level compared to 37.5% in our sample.(29)

Closed-ended Survey Question Results

Table 2 presents a summary of key quantitative survey results. An overwhelming majority of school staff expressed support for free meals during the COVID-19 pandemic (93%) and for continuing to offer free meals in Arizona in the future (88%). The majority of respondents in this sample (70%) selected UFM as the best approach for providing school meals in the future, followed by changing eligibility criteria to include more children (22%). Respondents also highlighted several benefits of making school meals available at no charge to all students regardless of family income. Across all groups (teachers, cafeteria staff, school/district administrators and other school staff), the top two benefits cited were “reduces childhood hunger” and “removes major cost for low-income families”. Cafeteria staff were specifically asked to reflect on the benefits and concerns of offering free meals to all students related to school meal program implementation. Key benefits selected include increased food service revenues due to increased student participation (49%) and less time tracking and collecting school meal debt (48%), while key concerns included staffing challenges (30%) and lack of time for staff training (27%) (Figure 2). A comprehensive summary of the quantitative survey results is available in Appendix A.

Open-ended Survey Question Results

Arizona school staff perceptions and opinions of UFM were classified into 6 overarching themes based on the thematic analysis of open-ended survey responses. These themes and relevant quotes are described below and reported in two tables; the first presents themes related to reasons to support UFM (Table 3), while the second presents themes related to concerns about UFM (Table 4). Each quote represents a unique respondent.

Reported Reasons to Support UFM

Reduces stigma. An identified theme raised by school staff was the feeling of embarrassment or shame experienced by students and families participating in school meals under the 3-tiered system. For example, one teacher shared, *“The stigma regarding being a child who receives free or reduced lunch is significant. It is important for no child to feel discriminated against for any reason in a public school.”* School staff also expressed concern that the stigma of applying for free school meals extends to parents and may prevent families from applying even when needed: *“Some families don't apply for free meals because of pride but the child suffers. Others are embarrassed to get the lunch so go hungry”* (Other school staff). When waivers allowing all students to eat for free were in place, school staff felt that feelings of shame were reduced. Notably, quotes from school staff often addressed both the role of stigma in school meals and the role school meals play in meeting students' basic needs.

Improves students' wellbeing and readiness to learn. Another important theme was the role of school meals in improving students' wellbeing, including meeting basic nutritional needs. For example, one teacher shared, *“My students often would not eat either breakfast or lunch without this program [UFM] and it allows them to get their basic needs met so we can focus on academics.”* School staff noted that UFM policies reduced student stress related to school meal debt, *“During the period of time when food was free, you did not see the students stress while in the lines to see if they would walk away with food or not. They were happy! They were able to enjoy time with their classmates and the food they received.”* (Teacher). School staff were also concerned with the impact access to school meals had on academic achievement, especially for their more at-risk students: *“We serve a great many students who come from food insecure*

homes. We have definitely seen a spike in classroom behavior and inability to focus among our students since the end of the free lunch program” (Teacher).

Streamlines school meal process A key factor in school meal administration is collecting annual income applications from families and verifying student meal eligibility status at each meal. School staff acknowledged the reduced burden on staff when all students eat for free, for example, *“Since offering free lunch to all students the outcomes have been positive. The time it saves lunch staff in not having to collect money or guilt children who do not have money.”* The 3-tiered system can create barriers for families to complete the application: *“We have students not getting lunch because parents have not started or completed paperwork,”* (Other school staff) making the implementation of UFM policies a benefit.

Reduces burden on teachers. A common theme among teachers was the reduced need for them to provide meals and snacks to hungry students. After the COVID-19 era waivers, teachers reported a growing need to provide snacks to students, for example, *“Since the free lunch program has ended I have seen an increase in hungry students in school. I regularly buy food for hungry students in my room so they have something to eat”* (Teacher). At the same time, teachers reported frustration and challenges in carrying this extra responsibility: *“Students often come to my class hungry as they cannot afford school lunch or home lunch. I, as a teacher, do not have the means to keep supplying snacks to them.”* (Teacher).

Concerns about UFM

Program Implementation Challenges. The key concerns about UFM expressed by school staff were related to program implementation challenges, including food quality, increased food and materials waste, and insufficient time allocated for lunch periods. Concerns about food quality were mostly associated with a perceived overreliance on processed foods and high amounts of salt, sugar, or fat: *“Every student should have the opportunity to eat a decent meal. The meals though should be more appetizing than a frozen heated meal.”* (Other school staff). Another common theme focused on both food and packaging waste associated with school meals and the potential increase in participation in those meals. For example, *“I love the idea that every kid who comes to school gets a lunch, however, the major increase in plastic packaging for every item is incredibly wasteful. I also hate the styrofoam trays and all other packaging that can't*

recycle.” (Other school staff). The length of the lunch period was also a concern, as many staff members felt students need more time to eat: *“Schools also need to make sure kids have enough time to eat and not tell them they have to leave after a short period of time--especially young children.”* (Teacher). Despite these logistical concerns, staff continued to support expanded access to school meals, as exemplified by this quote from a school staff member: *“There are ways to combat food waste and logistical problems. None of these issues are reason to scrap the program before funding it again.”* (Other school staff).

Unfair burden for taxpayers. Some school staff did express concerns about the cost of feeding all students: *“I believe that children should not suffer because of lack of parental responsibility; however, I am not certain taxpayers should incur the burden that more affluent people can manage themselves.”* (Teacher). At the same time, school staff who mentioned the taxpayer burden still supported changing income requirements so that more families could qualify for the program: *“Although I don't believe all students should be provided free meals, I do think we can do better by reviewing and improving the qualification used to determine eligibility.”* (Other school staff). Even when concerns over taxpayer cost were mentioned, there was a desire to increase access to school meals beyond the current 3-tiered system.

Discussion

Using a mixed-method approach, this study examined the perceived benefits and concerns related to UFM policies from school employees in Arizona. Both open-ended and closed-ended responses indicated strong support for UFM policies among school staff. A variety of reasons to support UFM were provided, including reducing the stigma associated with income-based school meal access, improving students' overall well-being and readiness to learn, and alleviating the need for teachers to personally address students' nutritional needs. Key concerns were primarily related to the implementation of school meal programs and to the cost to taxpayers.

As described in a prior publication, Arizona parents who completed this same survey cited similar benefits and concerns of UFM as school staff.⁽¹⁶⁾ Most parents (97.4% of the 2,347 parents included in the analytical sample) supported UFM in AZ schools. Similar to school staff, the key benefits of UFM cited by parents were reduced stigma associated with participating in school meals and improved readiness to learn. Not surprisingly, additional benefits cited by

parents that were not mentioned by school staff included reduced financial and application burdens and reduced stress for families. Parents' concerns about UFM were also similar to those of the school staff, with both groups worried about program implementation challenges, such as food quality and waste, and taxpayer burden.

One key finding from this study is the stress that school staff experience when they perceive students to be food insecure. School staff and teachers reported buying food to keep in their classrooms and helping students to cover meal costs when UFM policies were not available. While staff and teachers felt compelled to provide this support to their students, some also mentioned feelings of resentment and financial burden. This is concerning given the comparatively high levels of burnout among teachers⁽³⁰⁾, as this additional burden may exacerbate feelings of overwhelm. Indeed, access to resources is a key factor in determining a teacher's desire to leave the profession.^(31,32) In addition to the burden of feeding students, teachers also noted classroom challenges when students are hungry and are not prepared to learn. The connection between student hunger, behavior issues, and academic achievement is well documented.^(33,34) Recent findings highlight the positive impact of UFM on student behavior and academic outcomes^(35–38). For instance, students in schools that provided free meals to all had a lower probability of suspension⁽³⁸⁾ and were more likely to have positive academic outcomes^(36,39). The potential spillover effects of UFM policies on teacher well-being may be an additional benefit of these policies.

Whereas in other countries, school mealtimes are considered an integral part of the school day, in the US, meals are often perceived as a distraction from classroom instruction.⁽⁴⁰⁾ This oftentimes results in school food programs with short meal periods and, accordingly, chaotic lunchroom environments. The perception of mealtimes as a distraction from classroom instruction in the US may contribute to key concerns reported by respondents, long lines and insufficient length of lunch periods. These concerns related to students not having enough time to eat echo findings from previous research conducted among school staff before the implementation of UFM waivers in the US.⁽⁴¹⁾ Importantly, short lunch periods impact students' overall nutrient consumption during lunch^(42,43) and the shortened service times contribute to challenges with preparing and serving scratch-cooked meals. In contrast, countries like Japan integrate school meals into the wider school community, involving parents, teachers, and students (in addition to

the food service staff) in the design and delivery of meals. Students participate in serving and cleaning up after meals, and food is an important part of the curriculum.⁽⁴⁰⁾ UFM policies may present a pathway to address these concerns by (a) fostering a more inclusive environment where all students have access to meals and (b) making space for school meals to be better integrated into the school day, which would likely include longer lunch periods. In addition to UFM policies, to more specifically address concerns over the time allotted for school meals, increased coordination between school administrators, who are responsible for setting school schedules and allotted times for lunch, and food service staff is warranted.

Despite the strong support for UFM policies, school staff members did express concerns about costs for taxpayers and meal program implementation. State-level UFM programs would, in fact, require significant investment of taxpayer funds, which may pose financial challenges for many states. For instance, the state of Colorado, an early adopter of UFM post-COVID-19, is currently facing a budget shortfall due to participation rates that were higher than projected.⁽⁴⁴⁾ In Arizona, multiple cost estimates were developed in 2023 to explore options for expanding access to school meals.⁽⁴⁵⁾ As a result, the state covered the reduced-price co-pay for qualifying families starting in January of 2023.⁽⁴⁶⁾ However, this funding has yet to become a permanent part of the state budget. Staff members also had concerns related to high levels of food and packaging waste, and relatively low levels of freshly prepared foods. Concerns about food quality align with previous findings from studies conducted with parents of students.^(16,47,48)

While overall levels of support for the continuation of policies allowing all students to obtain meals at no cost were high, support was slightly lower among cafeteria staff. As evidence, 80% of cafeteria staff supported continued policies to provide all students free meals, compared to close to 90% among other school staff. It may be that cafeteria staff are more acutely attuned to logistical challenges related to school meal distribution, since these staff are responsible for school meal program implementation. Concerns cited by cafeteria staff in the present study such as finding enough staff to successfully run the program, limited time available to train staff, and inadequate storage space to accommodate increased participation, may all contribute to their slightly lower approval of expanded meal programs. Similar concerns related to program implementation were shared by cafeteria staff in California, leading up to the implementation of a permanent UFM policy in that state.⁽²⁷⁾ One notable benefit of UFM programs for cafeteria

staff is the elimination of time-consuming paperwork required to determine school meal eligibility. This change can free up cafeteria staff time and resources and allow them to increase focus on other priorities such as staff training and meal quality concerns.⁽⁴⁹⁾ Further, corresponding policies should include increased funding for staff salaries and training. Notably, voters in the US state of Colorado approved UFM initiative which included language allowing participating schools to receive additional funding to directly support staff wages.⁽⁵⁰⁾ This and similar provisions that boost school cafeteria staff salaries and provide additional funding for staff training could address some of the logistical issues cited by respondents.

Strengths and Limitations

This study summarizes the views on UFM from a large sample of Arizona school staff, with more than 1200 responses. Respondents also came from various educational, political, and economic backgrounds. In addition, the survey was fielded at a critical point, just after the end of the federal UFM program and the readoption of the 3-tiered system, making the recall of UFM period more salient for respondents. However, the school staff were largely recruited by email request from a research team member from a convenience sample of large public school districts in Arizona with whom the research team had established relationships and therefore may not necessarily represent the views of all school staff in the state. To help address this, we conducted additional recruitment through the School Nutrition Association network and via social media channels to broaden the sample scope. Still, the majority of responses came from school staff in urban areas within southwest Arizona. Therefore, the perspectives of school staff in less-represented areas, specifically rural and tribal areas in the state, may not be adequately represented in this manuscript. As with all survey research, those who chose to complete the survey might hold different opinions from those who did not.

Conclusion

These findings underscore the strong support for UFM policies shared among school staff in Arizona and highlight the important role that UFM can play for both students and staff. Understanding the views and opinions from key stakeholders on campus is critical to the ongoing discussion of expanding access to school meals in the US and globally. While UFM policies were broadly favored, schools and policymakers should also consider ways to address concerns

expressed by school staff. Future research examining models of UFM programs globally, as well as in those states in the US that have maintained UFM after the pandemic, and how these programs have impacted all relevant school stakeholders, may provide important lessons for expanding UFM policies in other areas.

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Table 1. AZ School Community Perspectives Survey sample demographics for teachers and other school staff (N=1,225)

| | Teachers | | Cafeteria Staff | | School Administrators | | Other School Staff | | All | |
|---------------------------------|----------|--------|-----------------|--------|-----------------------|--------|--------------------|--------|-------|---------|
| | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| <i>N</i> | 449 | (35.8) | 84 | (6.7) | 106 | (8.7) | 616 | (50.3) | 1,255 | (100.0) |
| Race/Ethnicity | | | | | | | | | | |
| Hispanic | 124 | (28.0) | 41 | (48.8) | 42 | (40.0) | 257 | (42.4) | 464 | (37.5) |
| Non-Hispanic White | 273 | (61.6) | 39 | (46.4) | 54 | (51.4) | 280 | (46.1) | 646 | (52.1) |
| Non-Hispanic Black | 7 | (1.6) | 0 | (0.0) | 3 | (2.9) | 24 | (4.0) | 34 | (2.7) |
| Non-Hispanic AI/ANs | 8 | (1.8) | 1 | (1.2) | 1 | (1.0) | 11 | (1.8) | 21 | (1.7) |
| Non-Hispanic Other/Multiple | 31 | (7.0) | 3 | (3.6) | 5 | (4.8) | 35 | (5.8) | 74 | (6.0) |
| Education | | | | | | | | | | |
| High school diploma or less | 3 | (0.7) | 28 | (33.7) | 0 | (0.0) | 56 | (9.1) | 87 | (6.9) |
| Some college/Associate's degree | 20 | (4.5) | 39 | (47.0) | 21 | (19.8) | 230 | (37.3) | 310 | (24.7) |
| 4-year college degree | 173 | (38.6) | 8 | (9.6) | 20 | (18.9) | 151 | (24.5) | 352 | (28.1) |
| Professional/PhD | 252 | (56.3) | 8 | (9.6) | 65 | (61.3) | 179 | (29.1) | 504 | (40.2) |

| | | | | | | | | | | | |
|-----------------------|-----|--------|----|--------|----|--------|-----|--------|------|--------|--|
| Income | | | | | | | | | | | |
| Less than \$34,999K | 33 | (7.6) | 25 | (30.9) | 12 | (11.4) | 164 | (27.4) | 234 | (19.2) | |
| \$35K - \$64,999K | 189 | (43.8) | 34 | (42.0) | 18 | (17.1) | 181 | (30.3) | 422 | (34.7) | |
| \$65K-\$99,999K | 132 | (30.6) | 13 | (16.1) | 34 | (32.4) | 144 | (24.1) | 323 | (26.6) | |
| More than \$100K | 78 | (18.1) | 9 | (11.1) | 41 | (39.1) | 109 | (18.2) | 237 | (19.5) | |
| Political Affiliation | | | | | | | | | | | |
| Conservative | 156 | (19.6) | 22 | (26.5) | 22 | (21.0) | 112 | (18.4) | 229 | (18.5) | |
| Middle of the road | 254 | (31.9) | 29 | (34.9) | 43 | (41.0) | 182 | (29.9) | 385 | (31.1) | |
| Liberal | 315 | (39.5) | 26 | (31.3) | 32 | (30.5) | 257 | (42.2) | 523 | (42.2) | |
| Not sure | 72 | (9.0) | 6 | (7.2) | 8 | (7.6) | 58 | (9.5) | 103 | (8.3) | |
| School Type | | | | | | | | | | | |
| Public | 419 | (93.3) | 75 | (89.3) | 95 | (89.6) | 603 | (97.9) | 1192 | (95.0) | |
| Charter | 14 | (3.1) | 3 | (3.6) | 5 | (4.7) | 7 | (1.1) | 29 | (2.3) | |
| Private | 5 | (1.1) | 5 | (6.0) | 2 | (1.9) | 2 | (0.3) | 14 | (1.1) | |
| Other | 7 | (1.6) | 1 | (1.2) | 4 | (3.8) | 3 | (0.5) | 15 | (1.2) | |

*AIAN's - American Indians and Alaska Natives

Table 2. Summary of key survey results by respondent group

| | Teachers | Cafeteria Staff | School Administrat or | Other School Staff | All |
|---|--|--------------------|-----------------------------|--------------------------|---------------|
| Sample composition N(%) | 449(37) | 84(7) | 106(9) | 616(50) | 1,225(100) |
| How do you feel about the policy put into place during the COVID-19 pandemic that allowed public schools to serve meals at no charge to all students? | N(% that selected “support” or “strongly support”) | | | | |
| | 415(92) | 65(77) | 95(90) | 588(95) | 1163(93) |
| Would you support or oppose passing legislation in Arizona to permanently offer school meals at no charge to all students regardless of income? | N(% that selected “support” or “strongly support”) | | | | |
| | 398(89) | 67(80) | 95(90) | 550(89) | 1110(88) |
| In your opinion, which of the following are the most important benefits of making school meals available at no charge to all students regardless of family income? Choose up to three | N(% selected as top choice) | | | | |
| Top 6 most selected benefits of offering school meals to all students at no cost: | | | | | |
| Reduced child hunger | 382(85) | 55(65) | 79(75) | 537(87) | 1,054(8 4) |

| | | | | | |
|---|---------|--------|--------|---------|---------|
| Removes major cost for low-income families | 236(53) | 41(49) | 48(45) | 347(56) | 672(54) |
| Improves academic achievement | 210(47) | 29(35) | 46(43) | 284(46) | 569(45) |
| Reduces shame and stigma | 146(33) | 32(38) | 48(45) | 241(39) | 467(37) |
| Improve classroom behavior and attendance | 124(28) | 23(27) | 31(29) | 196(32) | 374(30) |
| Removed meal debt | 140(31) | 29(35) | 31(29) | 167(27) | 367(29) |
| Which of the following do you think would be the best approach to providing school meals in the future? | | | | | |
| N(% selected as top choice) | | | | | |
| Top 3 selected approaches to providing school meals in the future: | | | | | |
| Offer meals to all students at no charge regardless of income | 316(70) | 52(62) | 69(65) | 441(72) | 878(70) |
| Raise household income threshold so more families can qualify | 96(21) | 15(18) | 25(24) | 138(22) | 274(22) |
| Continue current income limits | 27(6) | 11(13) | 6(6) | 29(5) | 73(6) |

Full question and responses can be found in the appendix

Table 3. Identified themes related to reasons to support UFM reported by school staff in public schools in Arizona (n = 518).

| Theme | Quotes representative of key themes |
|--|---|
| | “Children get really humiliated when reminded that they need money in there [sic] school lunch accounts, they shouldn't have to worry about bringing money to school. For most students the only meals they can count on for the day are at school, they should be able to know they can receive a meal without feeling ashamed or anything but secure.” – <i>Other School Staff</i> |
| Reduces stigma | “I have heard from my own middle school students that they are embarrassed about receiving free lunches because that means they are poor. If food was provided for all children they will not hear in the lunch room about who paid for lunch and who didn't. Many of my students avoid eating at school because they do not want to have others hear it is free for them. They do not bring food to school since they do not have any at home.” – <i>Teacher</i> |
| Improves student well-being and academic success | “I am BEYOND grateful for the school lunch program, for my own kids, as well as for my homeless, refugee, and mainstream class students. The positive impact this program has on the daily lives of the students is immeasurable - on their behavior, their outlook on themselves, their community, and their trust in what can and cannot be in their future. For all students to receive what is often their only solid meal of the day would be an incredible achievement.” – <i>Teacher</i> |
| Sub-theme: Meets students basic needs | “As a public school employee of 19 years, hunger and food insecurity has always been a hurdle for many students. This puts them at another disadvantage when they are already living below means. When we experienced free lunch through COVID19 funding, it was wonderful to see ALL students get to eat on campus and not have to worry about food. Food is brain fuel!” – <i>Other School Staff</i> |
| Sub-theme: Reduces student stress | “I believe all schools should offer free lunches to all students. Students cannot focus in the classroom when they are hungry or worried about where their next meal comes from. Food is a basic necessity that unfortunately, many of our students do not have.” – <i>Other School Staff</i> |
| | “Food should not be a stress for children. That alone is reason to support free meals.” – <i>Teacher</i> |
| Sub-theme: Improves student ability | All kids should get free lunch regardless of income... it's NOT the kid's fault if food is scarce at home. Hungry kids don't learn. They will sit in class with a belly that is hungry”. – <i>Other School Staff</i> |

| | |
|---|--|
| to learn | “Working at schools that serve many low-income students, there is a big difference when all students have access to school meals. I have been working at these schools for fifteen years, and it really hurts student performance and confidence when kids are hungry.” – <i>Other School Staff</i> |
| Streamlines school meal processes | <p>“Offering meals at no charge eliminates a large amount of administrative processes for school meal operators. Therefore many existing food service staff positions and staff time can be dedicated to expanding meal services and other operational benefits to district meal programs such as school garden and nutrition education support.” – <i>School Administrator</i></p> <p>“It makes the process for serving meals faster and more efficient, it makes data easier to track, and most importantly it gets food to kids.” – <i>Other School Staff</i></p> |
| Reduces burden on teachers to ensure students are fed | <p>“I started buying extra groceries for the classroom so all kids could have lunch, regardless of their situation. Last year was fantastic!! All kids could eat without worry and everyone in my classroom was happier and more on task.” – <i>Teacher</i></p> <p>“I have had to buy snacks to stop my students' hunger in the past, so the free meals have been nice for me (spending my own money felt necessary but it made me resentful, too, as I don't have much disposable ioncome [sic]).” – <i>Teacher</i></p> |

Table 4. Identified themes related to concerns about UFM reported by school staff in public schools in Arizona (n = 518).

| Theme | Quotes representative of key themes |
|--|---|
| Program Implementation Challenges | |
| Subtheme: Food quality | <p>“Children benefit from eating at school. It does help with concentration. However, I feel the school lunches are becoming more packaged, processed and contain more sugar. Especially the milk.” – <i>Teacher</i></p> <p>“school meals need to be more appealing, tasty, and nutritious to all inclusive of students and staff. Meals need to be more representative of meals they would receive at home for breakfast and lunch.” – <i>Other School Staff</i></p> |
| Subtheme: Not enough time allocated for lunch | <p>“I believe we need to make meals available to all children and we need to make more time to allow them to eat. Most children do not eat because there is a long line and they do not have enough time.” – <i>Other School Staff</i></p> <p>“Students often have only 15 minutes to pick up their food and eat leading to a lot of waste. Students should be given extra time in order to consume as much food as they desire.” – <i>Other School Staff</i></p> |
| Subtheme: Food/Packaging waste | <p>“My major concern is the waste. I watched students throw away so much food.” – <i>Other School Staff</i></p> <p>“I strongly support free meals at school for all students. However, waste is indeed an issue. At my district, every single food item is heavily packaged in plastic and/or styrofoam. It is so sad that wasteful behavior is normalized because of the single use/disposable packaging for their food.” – <i>Teacher</i></p> |
| Unfair costs to taxpayers | <p>“I believe the \$30,000 income limit [to qualify for free meals as a family of four] could be raised somewhat but offering free lunch to families who can afford it is just wasteful spending of the taxpayers dollars.” – <i>Other School Staff</i></p> <p>“I support free food at school for all children from families who truly cannot easily afford to feed them. I do not support free food at school for the "convenience" of families who can easily afford to feed their children. Taxpayers, especially those who are who are low earners, should not buy food for people who can easily afford it.” – <i>Other School Staff</i></p> <p>Perhaps we don't give free meals to all students regardless of income and instead, significantly raise the qualification to include all middle class/upper middle class families whom actually struggle the most in many ways. – <i>Other School Staff</i></p> |

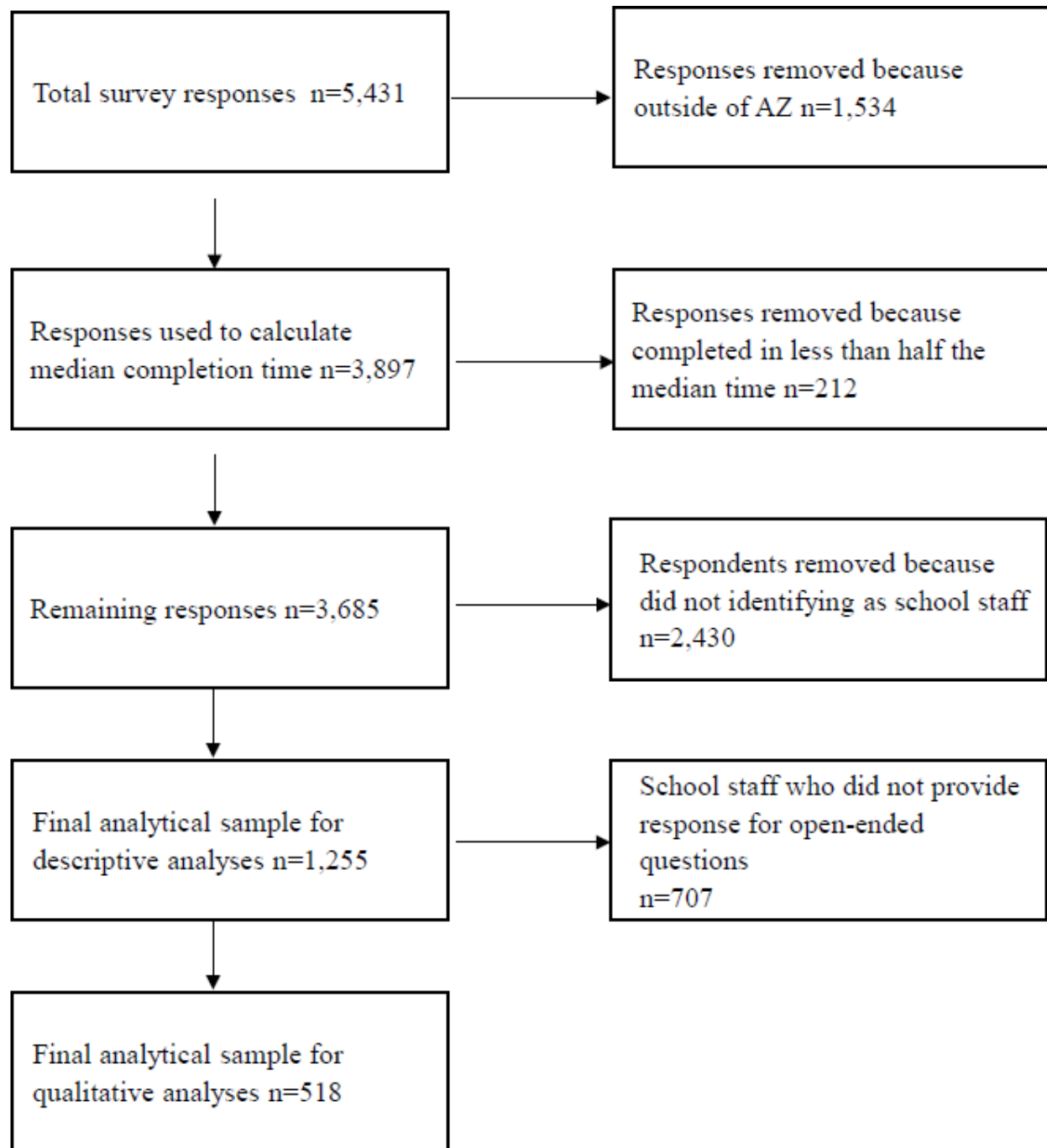


Figure 1 Description of study sample

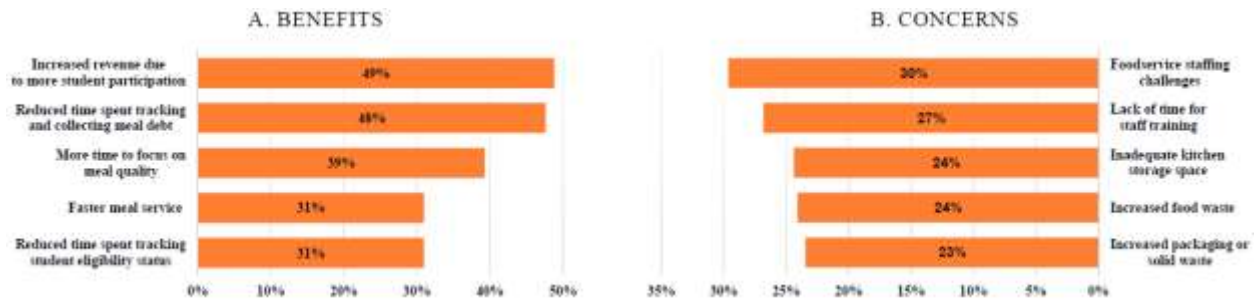


Figure 2 Top benefits and concerns to Universal Free Meals selected by cafeteria staff