

Educator Perspectives: Selected Barriers to Implementation of School-Level Nutrition Policies

Claudia-Santi F. Fernandes, EdD, LPC, MCHES¹; Marlene B. Schwartz, PhD²; Jeannette R. Ickovics, PhD^{3,4}; Charles E. Basch, PhD⁵

ABSTRACT

Objective: To improve understanding about selected barriers to the implementation of 2 school food policies by examining the perceptions of those responsible for implementation.

Design: Semistructured qualitative interviews were conducted.

Setting: Policies were implemented in an urban district in the northeastern US.

Participants: Participants were 67 educators, including principals, assistant principals, school wellness facilitators, teachers, and staff. The majority were female (n = 49; 73.13%) and white (n = 55; 82.09%).

Interventions: Two school nutrition policies: Food as a Reward and In-School Celebrations.

Phenomenon of Interest: This study focused on educators' responses related to barriers to implementation.

Analysis: Transcripts were uploaded to NVivo for organization and coding.

Results: The following themes emerged: student hunger and cultural norms.

Conclusions and Implications: Understanding the challenges of those who are implementing school-level policies is necessary to advancing school nutrition reform effectively. Next steps for practice and research include addressing basic needs such as a sense of belonging and food insecurity, within school-family, adapting policies to meet those needs in schools, and including local educators as equal partners in developing policies to ensure that policies are acceptable and implemented as planned. By involving educators and ensuring that basic needs are met first, educators may feel more motivated to implement classroom policies.

Key Words: child and adolescent obesity, implementation science, nutrition policies, school wellness
(*J Nutr Educ Behav.* 2019;000:1–7.)

Accepted December 21, 2018.

INTRODUCTION

In response to concerns about the rise in childhood obesity,¹ policies at the federal and local levels were created to improve the school environment. At the federal level, the 2010 Healthy Hunger-Free Kids Act required the US Department of Agriculture to strengthen the nutritional requirements

significantly for federally reimbursable school meals and all competitive foods sold in schools.² This led to meaningful improvements for foods provided by the school food service and sold through vending, school stores, or fund-raisers.^{3–5} At the local level, US school districts developed and implemented school wellness policies over the past 15 years to improve the school

nutrition environment further and increase student physical activity.^{6–10}

Although federal policies set nutrition standards for all food sold to students within and outside the federal meals programs, there are no federally defined nutrition standards for food provided to students in class. Instead, local school wellness policies are required to set their own nutrition standards for foods provided (ie, not sold) to students on campus during the school day, such as when teachers use food as a reward or when there are classroom parties.^{11,12} Research found that these in-class events contribute substantial amounts of unhealthy foods and beverages to the school environment.^{13–15} Furthermore, using food as a reward for good behavior and academic achievement is a concern because it can undermine healthy eating habits and also encourage children to eat when they are not hungry.¹⁶

¹play2PREVENT Lab, Yale School of Medicine, New Haven, CT

²Rudd Center for Food Policy and Obesity, University of Connecticut, Hartford, CT

³Social and Behavioral Sciences Department, Yale School of Public Health, New Haven, CT

⁴Department of Health & Behavior Studies, Columbia University Teachers College, New York, NY

⁵Department of Social Sciences (Public Health and Psychology), Yale-National University of Singapore College, Singapore

Conflict of Interest Disclosure: The authors have not stated any conflicts of interest.

Address for correspondence: Claudia-Santi F. Fernandes, EdD, LPC, MCHES, play2PREVENT Lab/Yale Center for Health and Learning Games, Yale University School of Medicine, 367 Cedar St, PO Box 208093, New Haven, CT 06520-8093; E-mail: cff2109@tc.columbia.edu

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<https://doi.org/10.1016/j.jneb.2018.12.011>

Research on local school wellness policies suggests that nearly all districts have written policies; however, the strength and comprehensiveness of these policies are highly variable.¹⁰ Specifically, policies about limiting sweets in the classroom are frequently framed as recommendations as opposed to requirements, potentially decreasing implementation.¹⁷ A recent national study of local school wellness policies^{18, p. 23} indicated that 25% of districts discouraged and 13% prohibited food as a reward in class. For classroom parties, 54% of districts provided some type of nutrition guidance (such as recommending healthy options), 5% had clear limits (including federal competitive food standards), and 1% prohibited food at celebrations.¹⁰ That there were few districts with strong policies to limit these 2 sources of classroom food suggests that districts may be avoiding these topics owing to perceived barriers to asking educators to implement these policies.¹⁹ Indeed, many educators believe that in-school celebrations create strong emotional connections in schools, and efforts to restrict or change such celebrations will face considerable resistance.¹⁸

The aim of the current study was to use qualitative interviews guided by the interactive systems framework²⁰ to assess how educators felt about implementing food as a reward and in-school celebrations policies. In the study school district, the food as a reward policy stated that schools should not use food or beverages as rewards for academic achievement or good behavior and the in-school celebrations policy stated that activities and celebrations involving food during the school day should be limited to ≤ 1 /class per month, and parties should include ≤ 1 food or beverage that did not meet the state nutrition standards.²¹

METHODS

To identify barriers that affect school wellness policy implementation, the lead author (CFF) conducted a series of semistructured qualitative interviews with a diverse range of school stakeholders, including principals,

assistant principals, school wellness facilitators, teachers, and staff in 12 schools. One section of the interview guide targeted the perceptions of selected barriers related to the 2 specific nutrition policies separately.

This study was part of a larger cluster randomized trial that began in 2011, to test how providing support to implement the district wellness policy influenced student health and achievement in 12 Title I elementary and middle schools in an urban school district in New Haven, CT.²² The school wellness policies were in effect throughout the school district. In this 2×2 factorial design, 3 schools were randomly assigned to 1 of 4 conditions to receive additional policy implementation support for nutrition policies, physical activity policies, both nutrition and physical activity policies, and delayed control (ie, received support for other health-related issues such as flu control and oral health). Students were observed throughout middle school, from grades 5–8. The primary finding from the randomized trial was that students in the 6 schools who received support for the nutrition policies had healthier body mass index (BMI) trajectories (ie, BMI increased $<1\%$) over 3 years than did students in the other 6 schools (ie, BMI increased 3% to 4%). In contrast, there was no difference in student BMI between those in schools with and without support for implementing the physical activity policies.²²

Interventions and parent study data collection began in 2011–2012 and concluded in 2014–2015. The current study was conducted in 2016, after the randomized trial was over and the delayed control schools received intervention materials for nutrition and physical activity. Most of the intervention materials and activities were shared with all 12 schools before data collection for the current study.

Participants

Representatives were recruited from each school; these included an administrator, school wellness facilitators (facilitators), 2 teachers who were new to the school, and 2 teachers who were identified as more or less enthusiastic about the policies. New

teachers were included to learn more about how the policies were sustained and how information about policies was relayed to new members of the school community. School wellness facilitators were asked to identify 1 more enthusiastic and 1 less enthusiastic teacher by considering how much the teacher (1) valued health promotion in the school, (2) had a strong interest in promoting school wellness policies, (3) appeared to be eager to follow school wellness policies, (4) was engaged in promoting school wellness policies, and (5) understood the purpose of school wellness policies.

Snowball sampling²³ allowed facilitators to recommend other people from their schools to participate. The purpose of selecting participants in different roles was to provide a variety of perspectives about the policies and implementation process. This strategy reduced the risk that conclusions would reflect the views of respondents in 1 type of role in the respective schools.²⁴ A total of 78 educators were contacted; 67 agreed to participate (85.9% participation rate). There were 4–7 participants for each school.

The majority of participants were female ($n = 49$; 73.13%) and white/Caucasian ($n = 55$; 82.09%). Participants included 14 facilitators, 12 administrators (7 principals and 5 assistant principals), and 41 teachers. Of the teachers, approximately one half were new teachers (with <5 years' experience in the current school), 11 were less enthusiastic about policies, and 10 were more enthusiastic. Most were middle school classroom teachers, although elementary and physical education teachers were included (Table). Each study participant received a \$30 gift card as compensation.

Data Collection

Semistructured interviews were organized around open-ended questions, with other questions and probes emerging from the dialogue.²⁵ Each study participant received a gift card at the end of the interview (on average, 60 minutes; range, 40–75 minutes). The interview guide (Supplementary Data) was aligned with selected aspects of the interactive systems framework,

Table. Participant Demographics and Characteristics of New Haven Public School Educators (n = 67)

Educators	n	%
Gender		
Female	49	73
Male	18	27
Race/ethnicity		
White	55	82
Hispanic/Latino(a)	6	9
Black	4	6
Multiracial	2	3
Age group, y		
20–29	15	22
30–39	24	36
40–49	16	24
50–59	8	12
60–69	4	6
Role in study		
New teacher ^a	19	28
School wellness facilitator	14	21
Administrator	12	18
Principal	7	10
Assistant principal	5	8
Less enthusiastic teacher	11	16
More enthusiastic teacher	10	15
Teacher, unclassified	1	1

^aNew teacher selected by facilitators had ≤ 5 years at current school.

including motivation, with questions slightly modified to correspond to respondent type. The interview guide was pilot-tested with a district-level member of the wellness committee, a teacher from a different school, and an assistant principal from another district. Modifications were made accordingly. The focus on motivation allowed for questions that addressed barriers and reasons why participants did not feel motivated to implement the policy.²⁵ At the end of the interview, each participant completed a 1-page questionnaire on demographic and occupational characteristics. Interviews were audio-recorded and professionally transcribed; transcripts along with written summaries to highlight key points were the raw data used for analysis.

Data Analysis

The interview and coding guides were developed by 2 investigators (CEB and CFF) in consultation with a specialist in qualitative research methods. The interview guide was developed using the interactive systems framework.²⁶ All authors reviewed and approved it. The coding guide was adapted once

data were collected because some insights from participants did not fit well into the *a priori* categories. In consultation with the other authors, the coding schema was revised. Data were primarily coded by the lead author (CFF); however, all authors and the qualitative research specialist reviewed the initial results and made revisions. An independent transcriber was used to create a written transcript of all interviews.

Each transcript was uploaded to qualitative data analysis software (version 10, NVivo 10, QSR International, Victoria, Australia; 2014) for organization and coding. Initially, open coding was used to highlight categories that emerged. Short summaries were completed immediately after the interview. Additional notes were added after reading the transcripts before coding to keep a physical audit trail of documents that reflected decisions made in the study. After summaries were written, transcripts were coded deductively using the theoretical framework and coding sheet as a guide.

Institutional review board. The study was approved by the Yale Institutional

Review Board and the Teachers College Columbia University Delegation. All study participants were provided with an information sheet inviting them to participate, providing a description of the study and procedures, reviewing confidentiality, risks, benefits, compensation, voluntary participation, and withdrawal, and allowing questions.

RESULTS

The authors considered each school nutrition policy separately; several overarching themes emerged. Overall, food was considered a deeply personal experience, and many educators expressed concerns about student hunger and the diverse cultural needs of the community. Many noted varying degrees of incompatibility between the school mission and values (related to caring for student well-being) and food restriction, as described subsequently. Consequently, this discordance reduced some educators' motivations to implement the policies.

Student Hunger

Educators relayed concerns about student hunger, which decreased their motivation to implement the food as a reward policy. Although some understood the reasoning behind the policy, many believed that hunger was a significant challenge among their students, and therefore that any policy that limited or restricted food to students was unacceptable. Hunger was attributed to there not being enough food in students' homes (ie, food insecurity) and an early lunchtime scheduled at school.

According to an assistant principal, these policies were insensitive to the community being served. The respondent felt that children should be allowed to eat outside lunch and breakfast because they were hungry. Similarly, the language of the policy was of concern to a more enthusiastic teacher:

I don't know what the point of that message is supposed to be. . . . In an inner-city school, there should be no strings attached to food in itself, especially for a

student with food insecurity. That can create a big trigger for trauma.

There were many other examples of educators who disagreed with the policies based on students' food insecurity and hunger. Following are some illustrative quotations from an array of respondents:

I don't agree with the policy. I'll tell you why ... [for] students that are living in poverty, maybe the only meal they get is the one that they get at lunch, so that being said, we're feeding a lot of hungry kids. Everyone here qualifies for free lunch. That tells you something. Not giving any food to students at all, I think does a disservice, because some of these students are legitimately hungry.

... I have kids coming into my fourth period class at 11:30 AM saying, "I didn't have dinner last night. I haven't eaten since lunch yesterday."

... A lot of them don't eat breakfast and they won't eat the school lunch. They have nothing all day, which isn't the same as using it as a reward.

We had a kid, true story, last year when we went on a field trip. ... We stopped for a snack and lunch was provided, so everybody had food—whatever the school provided, whatever goes in their bag lunch. We sat down to eat, and some kids went to the snack bar and were buying food. One kid didn't have money to buy food, so he's filling up those little white ramekins with mayonnaise and eating it like ice cream. I'm watching this happen and I'm like, "Listen, you can't do this." ... I had a bag of chips—not the healthiest thing, but better than eating mayonnaise. "Take these. You can have this." He took the chips and started dipping the chips in the mayonnaise. I've never seen anything like it in my life. I told him, "Listen, you can't do this." He started crying. You'll see kids hoarding food. ... "Are these unhealthy eating habits or is this what they may have to eat tonight?" If they're eating 10 bags

of graham crackers and that's all they've got (which you don't know) ... You don't want to deny a kid food even if it's somewhat unhealthy because you don't know what they're going home to. I've coached. I've been to some of these kids' homes. I've seen some of where these kids come from, and it's tough.

... As a teacher, it's hard to get kids excited about things that are not food; especially in this district, there are definitely kids who go home and they're not fed (I don't want to say properly, because I feel like that has a negative connotation). ... There are kids who go home and they're definitely hungry when they come back. A student would be like, "Hey, I would just rather have food because I'm hungry." I would say most of our kids—I shouldn't say most—there are a decent amount of kids that I can point out right off the bat in my class that I would say, that kid is always hungry, because I'm pretty sure they're not getting enough food at home.

I use food when I know that a student is hungry or I know a student is falling asleep. I ask them why they are sleepy and they tell me they are hungry.

Culture

Many educators were less motivated to implement the in-school celebrations policy owing to incompatibility with local culture. Themes were (1) student cultural norms, (2) cultural experiences, and (3) family norms.

Student cultural norms. Several participants noted that the Hispanic community, the largest within this district, used food to connect and increase parental engagement, an especially important initiative because many schools noted difficulty engaging their families. For this reason, some of the educators thought that there was a clash in how these policies fit with their schools:

... We do have a culture where our families like to celebrate, so it is sometimes a little bit of a clash.

I think that the Hispanic culture is very centered around food ... it's a good way of showing love.

To a certain extent, you can't fight culture. Culture is so powerful and you want the kids to embrace it, and also, it brings in parents, so some of our largest events that bring the parents in involve food or food that they've made that they can contribute. Some of our parents don't speak the language, but they can make something that they can share and be like, "Look, I care and I'm here and this is what I can contribute." It means so much to them to be a part of the community.

... Speaking as a social studies teacher, culturally, food has implications and it's hard to remove that from this idea that it's a reward. In some ways, it's sharing. I think that's why many times you want to sort of override that strict policy.

Food is personal and it can offend people when you attack their food.

Cultural experiences. Another concern among educators was how the policy affected the cultural experiences of low-income urban children. One principal noted that this respondent understood the in-school celebrations policy, but the policies also "broke my heart":

I think the other piece that you were discussing is, you were asking about parties in classrooms. I think that one is even harder, simply because I think it's a cultural thing within our community. When you're talking about a very poor community, maybe the only time they'll even get a chance to celebrate their birthday, in my personal opinion from what I've seen, might be here with their friends in school, where that's the only thing their parents can afford. Maybe afford some cupcakes to bring in for all the kids, or a goody bag ... We just don't allow people to do it ... I personally am struggling with that.

It's kind of like negating these cultures that do exist. I think food is a big part of a lot of cultures ...

Family norms. With a focus on building community within schools, many found it difficult to do so and not involve food. A more enthusiastic teacher shared:

I think it's very difficult because you have parents that want to celebrate birthdays. You have successes to celebrate. ... You want to bring in the parents. Our parents here are the best cooks ever, so for their end of the year barbecues or their picnics, or whatever they do, the parents bring food. It's something where we celebrate families and we celebrate breaking bread, in a sense, of a community. People feel welcomed with food, or they feel like bringing food is an appropriate cultural response to gathering. ... We've had parents: "I want to bring cupcakes for the kids" ... We try to see if there's another way we can celebrate the birthday besides the cupcakes. Stickers or something like that ... Parents look at us like, "Are you serious?" It threatens their cultural beliefs. I think that's the wrong message to send parents and children.

Overall, many believed the food as a reward policy and the in-school celebrations policy conflicted with local needs and cultural norms. Celebrating student culture and birthdays, building community, and improving parental involvement were reported as school needs throughout interviews.

DISCUSSION

Findings from this study can be used to guide future efforts to support successful implementation of classroom food policies in low-income school districts. It is important to understand better how to support implementation of wellness policies that pertain to in-class food because all district wellness policies are required to include standards for all foods and beverages provided, but not sold, to students (eg, classroom parties and food as a reward).¹² To assist educators, the Centers for Disease and Control and Prevention's *Healthy Schools*²⁷ recently released a variety of professional development resources and trainings for schools to support the implementation of policies;

however, resources are useful only when there is motivation to implement the policies. The resistance to implementing classroom food policies in this study mirrors research in this field across the nation.²⁸ Given this point, the current study may inform other urban schools about how to approach policy implementation better by addressing the basic needs of the school and district first, and then adapting and aligning the policies accordingly.

Food is a physiological need and the most fundamental one.²⁹ Findings from the study suggest that some educators viewed food in the classroom as a way to provide additional food to students they viewed as vulnerable. Whereas organizations, including the Centers for Disease and Control and Prevention's *Healthy Schools*,²⁷ encourage non-food reward items and healthy celebrations, food insecurity remains a pervasive problem in the US, and asking educators to restrict food in this environment may appear dismissive of this serious concern. In the city where this study took place, >20% of residents experience food insecurity;^{30,31} nationally, 1 in 6 US children live in a food-insecure home.³² This insight suggests that policies designed to limit food as a reward in the classroom are more likely to succeed if teachers are first confident that children are receiving adequate nutrition.

The educators also communicated that food and culture are closely linked, and food-based celebrations contribute to a sense of belonging among the school's families. According to Maslow,²⁹ a sense of belonging is another foundational level in the hierarchy of needs. Findings from this study suggest that food-based classroom celebrations create a welcoming school environment that celebrates students and invites families to join by sharing a meal. This suggests that efforts to limit food-based celebrations in class must first ensure that there are adequate other opportunities to promote belongingness, celebrate students, and invite families to school. Some ideas to consider include inviting families to events where the dining service prepares favorite recipes that reflect different cultures at the school, and hosting a

wide array of events (eg, concerts, plays, art shows, games) where parents can join their children at school for celebrations.³³ Another approach is to include language in the policy that addresses culture and identifies opportunities for families to share their traditions.³⁴

This district in particular made strides in positioning health and wellness as a priority. In fact, a recent study of students in this district found that after school meals were improved nutritionally to include more whole grains, fruits, and vegetables, overall consumption increased and there was no increase in the proportion of plate waste.³⁵ Resources gathered from the school district, community, and local institutions set up commendable structures, and the district indeed made student health and wellness a priority. Even with strong district-level support, this study enhanced understanding of 2 policies intended to improve student health and highlighted some of the many challenges in policy implementation in a diverse district with a significant percentage of families living at or below poverty.

The sampling frame of this study was limited to 1 school district and 12 public schools. The sample within these schools was not necessarily representative; thus, the findings were not meant to be generalizable. Although it is difficult to generalize the findings without replication and further study, in many ways, the sample is similar to many other urban schools. For example, the district studied included a student population characterized by a high minority population, many low-income culturally and ethnically diverse families, high rates of poverty and obesity, and considerable turnover with teachers, staff, and school leaders. The intent was to improve understanding about selected barriers to implementing 2 nutrition policies and why they might not be implemented as planned. For this reason, the results might highlight more negative views from participants. The design was cross-sectional and data were collected by 1 individual using a single method; therefore, no causal inferences can be drawn.

IMPLICATIONS FOR RESEARCH AND PRACTICE

Understanding the challenges of frontline professionals is important to advancing school nutrition reform effectively. Schools with a significant number of students and families who live at or below poverty face considerable challenges in meeting the basic needs of human development. More work is needed to address food insecurity and to promote belongingness among families, students, and schools. For this reason, policy makers would benefit from considering approaches to meet students' basic needs focusing on nutritious food options throughout the day and opportunities to welcome and share joyous experiences with diverse families through the *National School Food Program* and other celebrations.

Ensuring basic needs, such as a sense of belonging and food insecurity, is addressed among school–family partnerships before limiting food in schools.

To that end, a number of ideas warrant exploration, such as having the food service providing free access to fruit and vegetable snacks for students to eat throughout the day,³⁶ allowing students to bring the school breakfast into the classroom to eat,³⁷ and making it easier for students to bring extra food from school home to their families.³⁸ By directly addressing student food insecurity first, district administrators can reassure educators that student nutritional needs are being met. This may alleviate the concern that food in the classroom is necessary to feed hungry children.

Focusing first on the basic needs of these communities is an important prerequisite to implementing policies related to classroom food. Another recommendation for both researchers and practitioners is to conduct baseline assessments before implementing a new policy about classroom food.

Specifically, these findings imply that it is important to assess whether educators are concerned about food insecurity and family engagement in their schools, and if so, how they view the role of classroom food in addressing these concerns. If there are substantive concerns, a strategy to address these student, family, and community needs must come first; including local educators as equal partners in developing policies will ensure that policies are acceptable and implemented as planned. Only then will the school nutrition policies designed to promote nutrition and address the epidemic of pediatric obesity have the opportunity to produce the desired impact.

Involving local educators as equal partners in developing policies will ensure that policies are acceptable and implemented as planned.

ACKNOWLEDGMENTS

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: They appreciate the support of the National Institutes for Health for funding this study (Grant NICHD 1R01 HD070740 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development).

The authors would like to thank all district- and school-level educators of New Haven Public Schools who participated in this study and who continue to support the health and well-being of the students in their schools. In addition, they would like to acknowledge Yuka Asada, PhD, who provided input on qualitative methods in the development of the interview, coding guides, and analyses.

SUPPLEMENTARY DATA

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jneb.2018.12.011>.

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