

Training Needs of Personnel Employed in Programs Participating in the National School Lunch Program in California

Anna Marie Jones; Mandeep Punia, MS, RD; Shannan Young, RD, SNS; Carol Chase Huegeli, MS, RD; Sheri Zidenberg-Cherr, PhD

Please note that this study was published before the SY2014-15 implementation of the Smart Snacks Nutrition Standards for Competitive Food in Schools, as required by the Healthy, Hunger-Free Kids Act of 2010. As such, certain research relating to food in schools may not be relevant today.

ABSTRACT

Purpose/Objectives

The objective of this study was to determine the perceived training needs of California school nutrition personnel.

Methods

A questionnaire was developed using items from previous questionnaires administered to similar populations. New items were written based on feedback from stakeholders. Respondents were asked to rate their perceived need for each training topic, using a Likert scale ranging from *not part of my job to really needed*. Survey dissemination followed Dillman's tailored design method. A series of emails, which included a link to a web-based questionnaire, were sent to programs participating in the NSLP ($n = 1490$) over the course of several weeks. An option to complete a paper copy of the questionnaire was available.

Results

A total of 994 respondents initiated the web-based survey. Of these, 739 (74.3%) completed the survey. An additional 34 respondents completed paper questionnaires. Respondents indicated a need for training in topics related to: program management; the Healthy, Hunger-Free Kids Act of 2010; nutrition, health and wellness; planning, preparing, and serving meals; and communication and marketing. Those employed in residential child care institutions expressed a strong need for training specific to this type of program.

Applications to Child Nutrition Professionals

The survey used in this study illuminates the perceived training needs of school nutrition program directors, managers, and staff in California. The results of this research will be useful in guiding the development of training courses and strategic plans for providing trainings and resources in California. The results may also assist other states in developing training plans and resources.

INTRODUCTION

In the 2011-2012 school-year, California schools served over 578 million lunches and over 240 million breakfasts to children as part of the National School Lunch Program (NSLP) and School Breakfast Program (SBP), which reimburse sponsoring agencies a predetermined amount for each meal served (California Department of Education, 2013). To implement these complex regulations and operate a successful meal program, school nutrition personnel need training in a variety of areas, including menu planning, food preparation, budgeting, and marketing (DeMicco, Palakurthi, Sammons, & Williams, 1994; Sullivan, Harper, & West, 2002).

The childhood obesity epidemic has resulted in identification of schools as an ideal venue for nationwide initiatives to improve the health of children. Several reports, such as recent Institute of Medicine (IOM) reports, and guidelines published by the Centers for Disease Control and Prevention, have identified the availability of healthy food as a cornerstone to improving the school health environment (Centers for Disease Control and Prevention, 1996; Institute of Medicine [IOM], 2010; IOM, 2012). A joint statement by the Academy of Nutrition and Dietetics (formerly the American Dietetic Association), the School Nutrition Association (SNA), and the Society for Nutrition Education (SNE) also emphasized the role of schools in preventing obesity and promoting child health (Briggs, Mueller, & Fleischhacker, 2010).

In December 2010, President Obama signed the Healthy, Hunger-Free Kids Act of 2010 (HHFKA), which mandated numerous changes to the NSLP and SBP, with the goal of improving the healthfulness of school meals (Healthy, Hunger-Free Kids Act of 2010). These changes included several provisions to improve fiscal operations, program access, wellness through healthy school environments, and a provision to update the meal patterns and nutrition standards for the NSLP and the SBP, based on the recommendations of the Institute of Medicine.

As authorized by the HHFKA, a regulation entitled the *Nutrition Standards in the National School Lunch and School Breakfast Programs* was released by the U.S. Department of Agriculture (USDA) in January 2012. As part of this regulation, a new meal pattern was introduced with the goal of: increasing the availability of fruits, vegetables, whole grains, and fat-free and low-fat fluid milk in school meals; reducing the levels of sodium, saturated fat and trans fat in meals; and meeting the nutrition needs of school children within their calorie requirements (Nutrition Standards in the National School Lunch and School Breakfast Programs, 2012).

These changes significantly impact the training, resource, and technical assistance needs of school nutrition personnel who provide meals through the NSLP and SBP. To address these changing needs, the Nutrition Services Division (NSD), California Department of Education, launched the Training and Education Needs Assessment (TENA) project. The focus of the TENA project was the development, implementation, and analysis of a statewide needs assessment regarding training and resource needs. As part of this project, NSD staff convened a committee composed of representatives of small, medium, and large school districts, a residential child care institution (RCCI), charter school associations, the state agency after-school program office, and many other organizations considered stakeholders in California USDA meal programs.

As part of the TENA project, the University of California, Davis, Center for Nutrition in Schools collaborated with NSD to develop and implement a needs assessment survey to gather data directly from school nutrition directors and personnel. The objective of the survey was to determine training, resource, and professional development needs of nutrition program personnel in schools, after-school programs, and RCCIs. In addition, respondents were surveyed about preferences for training format and delivery modes. This paper will discuss the design and results of this needs assessment survey.

METHODOLOGY

Questionnaire Development

A questionnaire was developed to survey perceived training needs of school nutrition personnel in schools, after-school programs, and RCCIs. First, items from previous questionnaires on this topic and administered to similar populations were reviewed. With this background, questions were selected and updated, and new questions were added based on current trends. A draft version of the questionnaire was developed and reviewed by NSD staff for completeness, clarity, and content validity. This version of the questionnaire was then reviewed by the TENA committee and appropriate revisions were completed. Next, NSD staff completed a final review. Necessary revisions were made and the questionnaire was finalized.

The completed questionnaire was designed to be used at different levels of the school nutrition career ladder, including: kitchen and line staff; managers and supervisors; and directors. In order to

reduce respondent burden and increase response rate, skip logic was used to direct respondents to questions that would be relevant to them.

A smaller sample size was anticipated for kitchen and line staff, as the contact person for the NSLP at the site or district was responsible for distributing the questionnaire to others in the child nutrition program. For this reason, directors and managers were surveyed on their staff's training needs. An additional questionnaire section for directors and managers provided further questions regarding supervisors' perceptions regarding training needs of their staff.

Procedures

The survey followed Dillman's tailored design methodology for survey implementation (Dillman, Smyth, & Christian, 2009). The survey was conducted in November and December of 2012. The UCD Institutional Review Board (IRB) approved the project before the survey began.

All programs in California that were participating in the NSLP at the time of the survey received an email inviting personnel to complete the questionnaire. This email provided a link to the web-based questionnaire and a printable flyer, which could be posted or distributed to staff. One week later, a second email was sent to thank those who had completed the questionnaire, and to serve as a reminder for non-respondents. Within a short time period after the second email was sent, all programs received a packet by mail containing a cover letter inviting directors and their staff to participate and an informational flyer about the study. This packet was intended to be received before the initial email was sent, but was not mailed in time for this to occur. The mailed packet was sent in addition to emails in order to reach the largest number of NSLP-participating programs possible. A combination of email and postal mail ensured that both those who respond better to mailed letters and those who respond better to email were reached. A final, combination reminder and thank you email was sent two weeks later.

The survey was also publicized at the California School Nutrition Association (CSNA) conference, where a link was available to the web survey on computers available for use by conference attendees. Those unable to complete the questionnaire using these computers were able to request a paper copy of the questionnaire to complete.

The web survey utilized SurveyMonkey™ software. Data was imported into SPSS Statistics Version 20 (IBM Corp., Armonk, NY, 2011) for analysis. Analyses consisted of descriptive statistics and Chi-square analysis.

RESULTS AND DISCUSSION

The survey was sent to all of the 1,490 participating NSLP sponsors in California. A total of 994 respondents initiated the web-based questionnaire. Of these, 739 (74.3%) completed the web-based questionnaire. In addition to the web-based questionnaire, respondents were offered the option of completing a paper copy of the questionnaire, resulting in an additional 34 completed questionnaires. All counties in California were represented in the survey.

Respondent Characteristics

Demographic characteristics: Table 1 contains the demographic distribution of respondents. The majority of respondents were female (85.4%), between the ages of 50 and 59 years (44.2%), held the title of director (43.6%), had at least some college education (31.2%), and self-identified as White or Caucasian (68.2%).

Table 1. *Participant Demographics*

Characteristic	<i>n</i>	%
Gender		
Female	663	85.4

Characteristic	n	%
Male	99	12.8
Prefer not to answer	14	1.8
Age (years)		
18-29	31	4.0
30-39	95	12.2
40-49	189	24.4
50-59	343	44.2
60-69	82	10.6
70+	6	0.8
Prefer not to answer	30	3.9
Title		
Director	435	43.6
Manager or Supervisor	271	27.2
Staff	81	8.1
Administrators, business staff, etc.	168	16.9
Nutrition specialist	11	1.1
Miscellaneous	31	3.1
Education		
Less than high school	6	0.8
High school diploma or equivalent	128	16.5
Some college	242	31.2
Associate's degree or equivalent	121	15.6
Bachelor's degree	167	21.5
Advanced degree	81	10.4
Other	7	0.9

Characteristic	n	%
Not sure	1	0.1
Prefer not to answer	23	3.0
Race and Ethnicity (participants could choose more than one response)		
African American	43	5.6
Asian or Pacific Islander	36	4.7
Latino or Hispanic	124	16.2
Native American or Alaska Native	12	1.6
White or Caucasian	523	68.2
Other	10	1.3
Not sure	2	0.3
Prefer not to answer	60	7.8

Employment and professional characteristics: Most participants were in their current position for at least one year, with 33.4% employed for 1–5 years, 23.7% for 6–10 years, 13.4% for 11–15 years, and 20.9% for more than 15 years. A much smaller proportion (8.1%) were in their current position for less than a year, and 0.5% chose not to provide a response. Most participants had no plans to retire in the near future. Almost half (42.1%) did not plan to retire for at least 10 years, while 21.3% planned to retire between 6 and 10 years from now, 19.5% between 1 and 5 years from now, and 3.1% within the next year. Of the remaining respondents, 11.2% were not sure, and 2.8% chose not to respond.

Over a third of respondents (36%) were members of the CSNA. School Nutrition Association Certification was fairly rare among respondents, with 1.5%, 0.5%, 2.2% certified at Level 1, 2, or 3, respectively. School Nutrition Specialist (SNS) credentials were also uncommon; 2.7% of respondents indicated they had an SNS credential. However, most respondents were certified in food safety (68.5%) and 4.0% indicated they were registered dietitians.

School, district, or program characteristics: Almost half of respondents (46.2%) indicated they were employed at a school site, while 31.7% were employed at the district level. Of the remaining respondents, 8.3% worked at RCCIs, 6.5% worked at a central production site, 7.0% chose “other,” and 0.2% were not sure of the type of site where they were employed. The vast majority of respondents were employed in schools, districts, or programs with students in elementary or middle schools (Figure 1).

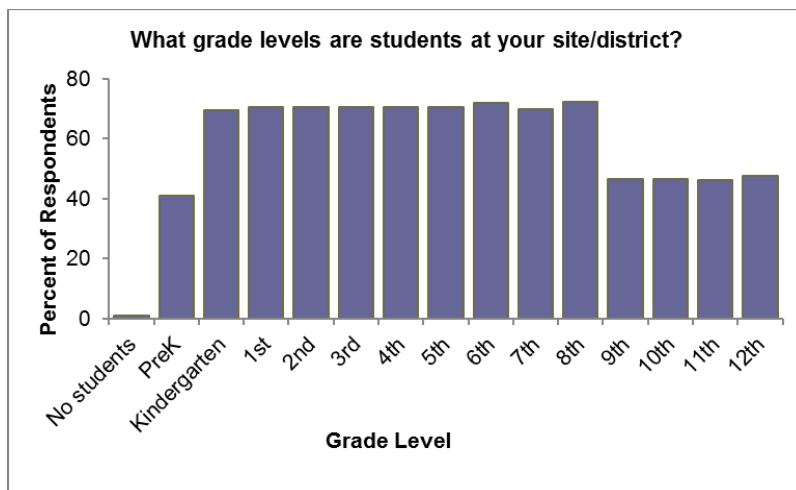


Figure 1. Grade levels reported by respondent sites or districts.

In addition to the above questions, directors were asked to provide additional information about their districts. When asked about the number of students enrolled in their district, 47.3% indicated that fewer than 2,500 students attended, while 25.8% indicated they work in medium-sized districts (2,500-9,999 students), 21.7% in large districts (10,000-39,999 students) and 3.1% in very large school districts (= 40,000 students).

The total number of staff employed by the school nutrition programs was less than 5 in 23% of cases, between 6 and 10 in 13.8%, between 11 and 25 in 18.5%, between 26 and 50 in 15.7%, between 51-100 in 14.3%, between 101 and 250 in 9.7% and more than 250 staff were employed in 3.8% of cases. A small percentage (1.2%) of respondents were not sure how many staff were employed.

Overall Needs

Training topics were grouped into general themes, with responses summarized below. The detailed distribution of training topics selected is reported in Table 2.

Table 2. *Training Topics Selected as Really Needed or Somewhat Needed by at Least 50% of Survey Respondents*

Training Topics	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Already Well-Trained (%)	Not Needed for My Job (%)
<i>Program Management</i>					
Disaster plan development and implementation	69.8	20.2	49.6	22	8.1
Grant writing	62.9	34.5	28.4	26.2	11.0
Staff productivity analysis	60.5	16.6	43.9	25.5	13.9
Writing specifications for fruits and vegetables	58.9	16.0	42.9	20.3	20.9

Training Topics	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Already Well-Trained (%)	Not Needed for My Job (%)
Team building	58.0	13.0	45.0	37.7	4.4
Managing stressful situations at work	56.6	9.3	47.3	39.9	3.5
Work simplification	56.0	12.0	44.0	38.8	5.2
Policy development	55.7	21.0	34.7	32.6	11.7
Leadership	54.5	12.2	42.0	41.8	3.7
Communicating effectively with workers	54.2	17.0	37.0	42.8	2.9
Indirect costs	52.4	15.8	36.6	26.3	21.2
Training employees	51.9	9.7	42.2	43.9	4.2
Writing bids for procurement	51.5	18.3	33.2	32.8	15.6
Procurement of regional produce	51.3	9.1	42.2	28.4	20.3
Evaluating on-the-job performance of workers	51.0	11.8	39.2	42.7	6.3
Waste management	50.4	8.4	42.0	39.7	9.9
<i>The Healthy, Hunger-Free Kids Act of 2010</i>					
Menu planning to meet the new meal requirements	62.0	23.7	38.3	17.3	20.6
Cost-effective menus that meet new requirements	58.5	20.7	37.8	18.4	23.1

Training Topics	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Already Well-Trained (%)	Not Needed for My Job (%)
Reducing sodium in meals while maintaining flavor	55.7	21.4	34.3	22.9	21.3
Offer vs. Serve in new meal pattern	52.8	18.7	34.1	28.3	18.9
Meeting calorie, fat limits	52.1	18.2	33.9	24.4	23.6
Increasing dark green & orange vegetables	51.6	16.9	34.7	28.3	20.2
Increasing dry beans and peas in school menus	50.7	15.4	35.3	27.9	21.4
<i>Nutrition, Health and Wellness</i>					
Type 2 diabetes	64.9	17.4	47.5	20.4	14.8
Food allergies or intolerances in children	61.6	13.6	48.0	26.7	11.7
Special dietary needs	60.9	12.7	48.2	24.4	14.7
Childhood obesity	57.0	12.2	44.8	28.8	14.1
Current nutrition issues	56.6	14.3	42.3	31.5	11.8
Vegetarianism	56.5	10.4	46.1	26.2	17.3
Teaching nutrition to students	55.7	12.3	43.4	18.7	25.6
Coordinating meal programs with classroom study	55.6	17.1	38.5	13.7	30.6
Role of meal program in	55.5	16.4	39.1	26.5	17.9

Training Topics	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Already Well-Trained (%)	Not Needed for My Job (%)
coordinated school health					
Identifying relationship between wellness policy & meals	55.5	15.0	40.5	29.6	15.0
Developing a strong wellness policy	55.2	13.9	41.3	30.9	13.8
Farm-to-School programs	54.9	10.4	44.1	14.6	30.5
Promoting a healthy school environment	54.5	15.0	39.5	29.0	16.5
Employee wellness	53.6	13.3	40.3	31.5	14.9
Child nutrition	51.2	8.3	42.9	36.9	11.9
Marketing healthy meal choices	50.6	16.3	34.3	24.7	24.7
Preparing food for students with special dietary needs	50.2	14.5	35.7	29.7	20.1

Program Management

Directors and managers were asked several questions about school nutrition program management. In most cases, at least 50% of participants responded with *really needed* or *somewhat needed*. The training topic with the highest percentage of *really needed* and *somewhat needed* responses was “disaster plan development and implementation” (69.8%).

Also in the program management category, “grant writing” (62.9%), was the only training topic in which a larger percentage of respondents chose *really needed* than those who chose *somewhat needed*. Respondents who reported not obtaining outside funding for their programs were more likely to express need for grant-writing training than those did report outside funding ($\chi^2 = 28.33$, $df = 8$, $p < 0.001$; Not sure responses were included in this analysis). These results suggest that a lack of training in grant writing may be a barrier to obtaining outside funding.

Data indicated a need for training relating to other management topics, particularly those related to communication and evaluating employees. These included “staff productivity analysis” (60.5%),

“managing stressful situations at work” (56.6%), “work simplification” (56.0%), “policy development” (55.7%), “indirect costs” (52.4%), and “waste management” (50.4%). Topics related to procurement were also rated as needed.

The Healthy, Hunger-Free Kids Act of 2010

The highest-needed training topic related to the HHFKA was “Menu planning to meet the new requirements,” with 62.0% of respondents choosing *really needed* or *somewhat needed*. Many of the training topics that were needed were related to modifying menus to meet the new requirements. More than half of respondents reported that training is needed in: “reducing sodium in meals while maintaining flavor” (55.7%); “meeting calorie limits, reducing saturated fat, and eliminating *trans* fats in menus” (52.1%); and increasing servings of the required vegetable subgroups, “dark green and orange vegetables” (51.6%) and “dry beans and peas” (50.7%).

Nutrition, Health, and Wellness

Forty topics were rated as *really needed* or *somewhat needed* by 50% or more of respondents; 16 of these 40 topics are in the health and wellness category. Training on child health topics was needed, particularly “type 2 diabetes” (64.9%) and “food allergies or intolerances in children” (61.6%), among others. However, many of these training topics are quite broad and focus groups should be considered in order to fully illuminate detailed training needs in these areas.

The results indicated that respondents were interested in training on the relationship between the school meal program and the overall health and wellness within the school environment. Several needed training topics were related to this theme, including: “identifying the role of the school meal program in coordinated school health” (55.5%); taking an active role in school wellness, such as “teaching nutrition to students” (55.7%); “developing a strong wellness policy” (55.2%); and “coordinating the school meal programs with classroom study themes” (55.6%). The training need of “marketing healthy meal choices” (50.6%) reflected the importance of promoting healthful choices to encourage students to choose and eat healthier menu options.

Training Specific to Residential Child Care Institutions

Overall, the proportion of respondents who indicated a need for training specific to RCCIs was low (20.5%). However, the number of respondents from RCCIs represented a small proportion of the sample (n = 83, 8.3%). When the data was analyzed for target groups, the percentage of respondents within the RCCI group who indicated a need for RCCI-specific training was 72.2%.

Director and Manager Perceptions of Staff Needs

Perceptions of training needs for staff by supervisors are presented in Table 3. The sample of staff who responded to the survey was less than 10% of the respondents and over 50% of staff respondents were from 13 different school districts or programs. Only director and manager perceptions of staff needs are presented. Training topics were grouped into general themes, with responses summarized below.

Table 3. *Training Topics for Staff: Really needed or, Somewhat Needed Selected by 50% of Directors and Managers*

Topic	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Not Part of Staff Responsibilities (%)	Already Well-Trained (%)
<i>Healthy, Hunger-Free Kids Act of 2010</i>					
Offer versus Serve crediting to meet the new	61.8	28.8	33.0	20.4	17.8

Topic	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Not Part of Staff Responsibilities (%)	Already Well-Trained (%)
<i>meal pattern requirements</i>					
Menu planning to meet the new meal patterns	60.7	29.4	31.3	28.5	10.7
Reducing sodium (salt) in meals while maintaining flavor	60.2	25.1	35.1	25.7	14.1
Increasing dark green and orange vegetables in school menus	58.6	26.3	32.3	23.8	17.6
Increasing dry beans and peas in school menus	58.2	24.1	34.1	25.4	16.4
Implementing food-based approach in menu planning	55.5	24.4	31.1	27	17.5
Meeting calorie limits, reducing saturated fat, and eliminating trans fat in school menus	53.1	23.3	29.8	33.4	13.5
Increasing whole grains in school menus	52.6	23.3	29.3	25.0	22.4
<i>Nutrition, Health, and Wellness</i>					
Current nutrition issues	76.8	25.4	51.4	6.5	16.8

Topic	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Not Part of Staff Responsibilities (%)	Already Well-Trained (%)
Special dietary needs	76.0	27.8	48.2	8.4	15.7
Type 2 diabetes	75.6	29.0	46.6	12.4	12
Food allergies or intolerances in children	74.8	27.6	47.2	7.5	17.7
Child nutrition	72.6	24	48.6	6.9	20.5
Childhood obesity	72.2	25.4	46.8	12.6	15.3
Vegetarianism	71.6	22.9	48.7	10.9	17.5
Basic nutrition principles	71.1	22.5	48.6	6.5	22.3
Preparing food for students with special dietary needs	68.1	27.4	40.7	11.4	20.5
Promoting a healthy school environment	63.8	19.4	44.4	19.0	17.2
Employee wellness	62.2	19.9	42.3	20.1	17.7
Identifying the relationship between school wellness policy and school meals	57.4	18.2	39.2	28.8	13.7
Identifying the role of the school meal program in coordinated school health	55.2	17.1	38.1	32.1	12.7

Topic	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Not Part of Staff Responsibilities (%)	Already Well-Trained (%)
<i>Planning, Preparing, and Serving Meals</i>					
Culinary skills	68.6	23.4	45.2	10.7	20.8
Hazard Analysis Critical Control Point (HACCP) plan	64.7	16.4	48.3	3.6	31.7
Planning for just-in-time food preparation	62.2	20.3	41.9	14.6	23.3
Cooking/food preparation	59.5	16.5	43.0	7.4	33.1
Scratch cooking (including speed scratch or quick scratch)	58.8	21.4	37.4	19.1	22.1
Forecasting food production needs	57.8	19.4	38.4	15.4	26.9
Controlling portion sizes	57.7	15.5	42.2	6.5	35.7
Standardizing recipes	56.7	18.9	37.8	21.9	21.5
Adjusting standardized recipes for quantities needed	56.3	16.2	40.1	19	24.7
Preparing plant-based meals	56.3	15.3	41.0	25.5	18.1
Incorporating cultural foods into school meals	56.3	15.1	41.2	26.5	17.2

Topic	Combination of Really Needed and Somewhat Needed Responses (%)	Really Needed (%)	Somewhat Needed (%)	Not Part of Staff Responsibilities (%)	Already Well-Trained (%)
Evaluating new food products	56.2	11.8	44.4	22.6	21.2
Offering food or meal choices	55.6	12.1	43.5	13.9	30.4
Menu planning options	55.1	15.7	39.4	24.9	20.1
Food safety	54.7	11.8	42.9	2.6	42.7
<i>Communication and Marketing</i>					
Working effectively with school administrators and teachers	62.1	19.3	42.8	14.7	23.2
Customer service	60.8	18.9	41.9	12.7	26.5
Marketing healthy meal choices	52.6	19.6	33.0	32.1	15.4
Communicating with parent organizations	50.3	16.1	34.2	29.2	20.5

The Healthy, Hunger-Free Kids Act of 2010

Many training topics related to the HHFKA were highly ranked for both personal training needs and for staff. Many of the HHFKA training topics reported as needed related to changing menus to meet the new requirements: increasing whole grains (52.6%); dark green and orange vegetables (58.6%); reducing sodium (60.2%); and meeting calorie limits (53.1%). “Offer versus Serve crediting to meet the new meal pattern requirements” was also highly rated (61.8%).

Nutrition, Health, and Wellness

Managers and directors clearly felt it was important for their staff to be trained in child health and wellness. Of the 40 training topics with greater than 50% of *really needed* plus *somewhat needed* responses, 14 topics were related to health and wellness. Training was found to be needed in general topics, such as “current nutrition issues” (76.8%) and “basic nutrition principles” (71.1%), but also more specific topics, including “type 2 diabetes” (75.6%).

The majority of respondents indicated that “promoting a healthy school environment” is a highly needed training topic (63.8%), as well as “identifying the relationship between school wellness policy and school meals” (57.4%), and “identifying the role of the school meal program in coordinated school health” (55.2%). Directors and managers also expressed a need for staff training in “employee wellness” (62.2%).

Planning, Preparing, and Serving Meals

The primary goal of the meal programs is to prepare and serve meals to children, and this is reflected in director and manager perceptions of staff training needs related to planning, preparing, and serving meals. “Culinary skills” (68.6%) was the highest ranked topic under this theme. As millions of children are served every day, preventing food-borne illness is crucial; the importance of this is highlighted in the training topics “Hazard Analysis Critical Control Point (HACCP) plan” (64.7%), and “food safety” (54.7%).

Training needs relating to planning meals, included “planning for just-in-time food preparation” (62.2%), and “forecasting food production needs” (57.8%). In addition, training in consistency, such as “standardizing recipes” (57.8%) and “controlling portion sizes” (57.7%) was needed.

Communication and Marketing

The communication skill that directors and managers indicated their staff needed the most was “working effectively with school administrators and teachers” (62.1%). This was followed by “customer service” (60.8%). Other communication and marketing training topics were “marketing healthy meal choices” (52.6%), and “communicating with parent organizations” (50.3%).

Limitations and Strengths

There are some limitations to this study. While the survey team attempted to be as clear as possible, not all questions may have been interpreted as intended. Furthermore, while the survey was reviewed by multiple experts in school nutrition programs, it was not tested for reliability or validity beyond content validity.

As the survey was sent to the contact person on record for the NSLP sponsor, it was then up to this person to disseminate the survey to all personnel in the school nutrition program. As a result, the sample of staff that responded to the survey was quite small and unlikely to be representative, and the survey team instead used director and manager perceptions to determine staff needs, rather than data from staff directly.

In addition, respondents to the survey may have been more likely to be highly motivated and interested in training, compared to those that did not respond. Despite this, the survey has several strengths. The sample size was quite large and included respondents from every county in California. In addition to techniques designed to raise response rate, both email and standard mail were used to recruit participants, to appeal to both those that respond better to email and to those that respond better to standard mail.

CONCLUSIONS AND APPLICATION

California’s school nutrition programs serve millions of meals every day to children and youth, while following numerous, complex state and federal regulations. As part of a statewide needs assessment, this survey illuminates the perceived needs of school nutrition program directors, managers, and staff, and provides valuable information in guiding the development of training courses and the overall plan for providing trainings and resources. The perceived training areas that are most needed fall into the following general categories:

- Program management (directors and managers)
- The Healthy, Hunger-Free Kids Act of 2010 (all respondents)
- Nutrition, health, and wellness (all respondents)
- Planning, preparing, and serving meals (staff)
- Communication and marketing (staff)

Over the last several years, there has been an increasing focus on the school environment as a vehicle for attenuating the rise in childhood obesity. The resulting HHFKA changes to meal patterns and nutrition standards were anticipated as one of the top training areas. As these changes are implemented, the changes in requirements for a reimbursable meal will require extensive training programs. Similarly, nutrition, health, and wellness training needs also rated highly as a perceived need.

The results of this survey are consistent with previously conducted training needs surveys. Surveys that were conducted in 1994 and 1999 both found that management skills were highly needed for directors or managers, consistent with our findings (DeMicco et al., 1994; Sullivan et al., 2002). Results demonstrating a need for training nutrition program staff in planning, preparing, and serving meals were consistent in the 1994 survey and the present study.

Overall, the survey team is confident that the findings of this survey will be of use in developing training programs that meet the needs of school nutrition programs in California.

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BIOGRAPHY

Jones is a PhD Candidate, Center for Nutrition in Schools, Department of Nutrition University of California, Davis. **Punia** is Nutrition Education Consultant Education and Nutrition Policy Unit, Nutrition Services Division, California Department of Education. **Young** is Senior Project Manager, Dairy Council of California and was formerly Nutrition Education Consultant with the Education and Nutrition Policy Unit, Nutrition Services Division, California Department of Education at the time of this study. **Huegli** is Associate Director, Nutrition Services Division, California Department of Education. **Zidenberg-Cherr** is Nutrition Science Specialist and Co-Director at the Center for Nutrition in Schools, Department of Nutrition, University of California, Davis.