

Sustainability of School Wellness Policy Initiatives



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National Food Service Management Institute The University of Mississippi

Building the Future Through Child Nutrition

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PURPOSE

The purpose of NFSMI is to improve the operation of Child Nutrition Programs through research, education and training, and information dissemination. The Administrative Offices and Divisions of Technology Transfer and Education and Training are located in Oxford. The Division of Applied Research is located at The University of Southern Mississippi in Hattiesburg.

MISSION

The mission of the NFSMI is to provide information and services that promote the continuous improvement of Child Nutrition Programs.

VISION

The vision of the NFSMI is to be the leader in providing education, research, and resources to promote excellence in Child Nutrition Programs.

CONTACT INFORMATION

Headquarters

The University of Mississippi
Phone: 800-321-3054
Fax: 800-321-3061
www.nfsmi.org

Education and Training Division

Information Services Division

The University of Mississippi
6 Jeanette Phillips Drive
P.O. Drawer 188
University, MS 38677-0188

Applied Research Division

The University of Southern Mississippi
118 College Drive #5060
Hattiesburg, MS 39406-0001
Phone: 601-261-2480
Fax: 888-262-9631

Acknowledgments

WRITTEN AND DEVELOPED BY

**Jane M. Osowski, PhD, RD
Researcher**

**Mary Frances Nettles, PhD, RD
Director
Applied Research Division
The University of Southern Mississippi**

**EXECUTIVE DIRECTOR
Katie Wilson, PhD, SNS**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	8
INTRODUCTION	12
Research Goals and Objectives	
METHOD	16
Research Plan	
Phase I	
Expert Panel	
Phase II	
Survey Development	
Review Panel	
Sample and Survey Distribution	
Informed Consent	
Data Analysis	
RESULTS AND DISCUSSION	21
Phase I: Expert Panel Discussion	
Phase II: Survey	
Personal and Program Characteristics	
Characteristics Describing the District Local Wellness Policy	
Communication	
Leadership	
Monitoring and Evaluation	
Sustaining Local Wellness Policy Initiatives	
CONCLUSIONS AND RECOMMENDATIONS:	47
Limitations to the Research Study	
Research Study Conclusions	
Education and Training	
Research Implications	

REFERENCES51

LIST OF TABLES

Table 1: Program and Personal Characteristics of School Nutrition Directors	22
Table 2: School Nutrition Directors' Opinions on Characteristics of the District Local Wellness Policy	26
Table 3: Communication of Local Wellness Policy Goals, Programs and Activities, Accomplishments and Obstacles.....	28
Table 4: Communication Frequency and the Importance of Communication.....	29
Table 5: Local Wellness Policy Implementation Leadership	30
Table 6: Monitoring and Evaluation of Local Wellness Policy Components.....	32
Table 7: Percentage Participation in General Local Wellness Policy Activities among Schools in the District.....	33
Table 8: Percentage Participation in Local Wellness Policy Activities Among Elementary Schools in the District	37
Table 9: Percentage Participation in Local Wellness Policy Activities Among Middle/High Schools in the District.....	39
Table 10: Monitoring and Evaluation of Local Wellness Policy at the District and School Levels.....	41
Table 11: School Nutrition Directors' Plans for the Sustainability of Local Wellness Policy Implementation	44
Table 12: Training and Resources Needed to Effectively Sustain Local Wellness Policy Initiatives	46

SUSTAINABILITY OF SCHOOL WELLNESS POLICY INITIATIVES

EXECUTIVE SUMMARY

In 2004, federal legislation reauthorizing the National School Lunch Program required that participating school districts establish a local wellness policy (LWP) by the beginning of the 2006-2007 academic year (Public Law 108-265). The district-level policies are required to include goals for nutrition education, physical activity; nutrition guidelines for all foods available on school campus during the school day; a plan for measuring implementation of the LWP; and community involvement in the development of the school wellness policy, including parents, students and representatives of the school food authority, the school board, school administrators, and the public (Peterson, 2007).

To sustain wellness practices, a supportive infrastructure is necessary, and should include employing qualified teachers, providing ongoing professional development, and using a standards-based curriculum (CDC - Healthy Youth, 2009). Effective LWP programs need to involve the parents and families and communities to be sustainable (CDC - Healthy Youth, 2009). Due to the many challenges facing schools when implementing a LWP, it is important to investigate how some school districts can successfully sustain a LWP. The purpose of this study is to explore successful strategies to sustaining school wellness, as well as the monitoring activities and evaluation practices used for measuring progress, with the following research objectives in mind:

- Identify strategies and practices used to sustain LWP initiatives;
- Describe monitoring activities and evaluation practices for measuring progress of LWP initiatives; and

- Identify measures that are used to determine sustainability of LWP initiatives.

A two-phase research design was utilized. In Phase I of the study, state agency child nutrition directors were asked to recommend state agency representatives and school nutrition (SN) directors to serve on an expert panel. From this pool, SN professionals were invited to discuss what strategies were utilized by SN directors and other administrators to implement and sustain school wellness initiatives. Expert panel members established that most school districts have implemented a mandated LWP, but there was a lack of funding for implementation, and a lack of tools for proper monitoring and evaluation of the initiatives. Once the expert panel session ended, responses were grouped into emerging themes and integrated into the quantitative survey instrument.

In Phase II the qualitative data gained from the expert panel discussions were then used to develop a quantitative survey instrument that would explore successful strategies that lead to the sustainability of school wellness policy initiatives. This survey, *Sustainability of Local Wellness Policy Initiatives*, would also investigate monitoring activities and evaluation practices that were utilized for measuring progress of these initiatives. The sample for the survey consisted of SN directors in public school districts. The random sample of 700 school districts was stratified by USDA region, and used 100 school districts from each USDA region. A total of 225 surveys were returned for a return rate of 32%.

The majority of the SN directors reported that they had sole leadership in school meal assurances (91.9%), followed by guidelines for competitive foods that are sold (57.2%), and guidelines for competitive foods that are offered (55.0%). When asked what other district, school staff, or community members play leadership roles in implementing the LWP components, the most common response was the district school nurse (51.4%), followed by school administrative

staff (46.8%), and district-level wellness committee (45.5%). School nutrition directors reported that they play a role in monitoring and/or analyzing data for meeting school meal regulations (84.5%). The LWP components where SN directors indicated that they do not often have a role in monitoring were physical activity/physical education (4.5%), other school-based wellness activities (13.2%), and nutrition education (18.6%). Respondents were asked to indicate which student outcomes were measured to assess LWP implementation. The most frequently cited outcome was healthier selections by students of items from reimbursable school meals (37.8%). Survey participants were asked additional questions regarding the monitoring, analysis and the use of the results from evaluating LWP components. The most common components of the LWP that are monitored at the district level included school meal assurances (75.1%); followed by guidelines for competitive foods that are sold (52.2%); and guidelines for competitive foods that are offered (50.2%). When asked how LWP activities are monitored at the school level, respondents indicated most often that they did not know (39.6%) or that monitoring is not in place (32.9%). Participants were asked how their school district plans to sustain the implementation of the LWP. School nutrition directors stated the “the wellness committee has been maintained by the school district” (69.0%), or that “a wellness coordinator is in place or will be assigned” (39.0%).

Results of this study suggest the following findings:

- Communication is vital for sustaining LWP goals, activities, and accomplishments and should be provided to all school district stakeholders.
- Leadership roles of the majority of SN directors involve implementing, monitoring, and evaluating LWP components related to school meal regulations and competitive foods (offered and sold) guidelines. Other school personnel including school nurses, school administrative staff, district-level wellness committees, and district administrative staff have leadership roles in implementing LWP components.
- Limited student outcomes are being measured to assess LWP implementation. The outcome measure used to assess the implementation of the LWP initiative most often was healthier selections of items from reimbursable school meals. Almost as many reported that “no measures were used” or that they “did not know” what measures were used.
- Survey results suggest that either monitoring is not taking place or SN directors are not directly involved in the monitoring and evaluation aspects of the LWP initiatives.
- Initial efforts have been made by school districts to sustain LWP initiatives but more systems could be put in place to support sustainability. As school districts seek to sustain LWP initiatives, consideration should be given to develop systems, policies, and procedures related to leadership, communication, monitoring, and funding.
- School nutrition directors need training and resources to assist with LWP implementation, monitoring LWP activities, and communicating results to stakeholders.

INTRODUCTION

Obesity rates among the nation's children and adolescents continue to remain high. According to the most recent data from the National Health and Examination Survey (2003-2006), the prevalence of obesity, defined as a body mass index (BMI) \geq 95th percentile of the Centers for Disease Control (CDC) Body Mass Index (BMI) for age-growth charts was 17.0% for children 6 to 11-years old, and 17.6% for adolescents 12 to 19-years old. The prevalence of overweight, defined as a BMI \geq 85th Percentile of the CDC BMI-for-age growth charts was 33.3% for children 6- to 11-years old, and 34.1% for adolescents 12- to 19-years old (Ogden, 2008). It has been acknowledged that the school setting is an obvious site to implement programs to prevent and control childhood obesity (Katz, 2005; Story, 2006). Because schools are a good environment to promote healthy lifestyles and obesity prevention, federal legislation reauthorized the National School Lunch Program in 2004 to require that participating school districts establish a local school wellness policy (LWP) by the beginning of the 2006-2007 academic year (Public Law 108-265). The district-level policies are required to include goals for nutrition education, physical activity; nutrition guidelines for all foods available on school campus during the school day; a plan for measuring implementation of the LWP; and community involvement in the development of the school wellness policy, including parents, students and representatives of the school food authority, the school board, school administrators and the public (Peterson, 2007).

The requirements for LWPs are complex and can be difficult to implement. The LWPs that have been put into practice are "first generation" interventions (Story, 2004). Confusion about nutrition standards, concerns about loss of revenue, and existing vendor contracts can be barriers to interpreting LWP guidelines (University of Washington, 2009). The policies'

effectiveness is challenged by limited funding for program implementation (Moag-Stahlberg, 2008). A review of wellness policies conducted by the Robert Wood Johnson Foundation discovered that school districts were setting general goals and wording the policies in such a way that the schools were not required to take any action (Belansky, Chriqui, & Schwartz, 2009).

Research has shown that to sustain wellness practices, there needs to be a supportive infrastructure that involves employing qualified teachers, providing ongoing professional development, and using a standards-based curriculum. Effective LWP programs need to involve the parents and families and communities to be sustainable (CDC - Healthy Youth, 2009). Schwartz et al. (2012) reviewed school wellness policies from 151 Connecticut school districts. Using a coding tool to determine each district's policy strength and comprehensiveness, the researchers found that specific written policies were more likely to be implemented at the school level.

A study conducted for the California School Boards Association indicated strong support for LWP by state and local school board members, wellness advocates, and public health nutrition directors. Lack of adequate funding was acknowledged as the major barrier to maintaining an effective LWP. However, there was significant disagreement among the groups for adequate communication and awareness-building tools (Agron, Behrends, Ellis, & Gonzales, 2010). A national survey of high school administrators had similar results to Agron et al. (2010). Evaluation and communication/promotion of wellness policy were less likely to be implemented, most likely due broad interpretation of guidelines and cost to implement (Budd, Schwarz, Yount, & Haire-Joshu, 2012).

The USDA Team Nutrition Local Wellness Policy Demonstration Project (LWPDP) documented the development and early implementation phases of LWP in three states (Wood, Cody & Nettles, 2010). The findings of that project included the following:

- School administrators, staff and their attributes (i.e., their leadership, personal commitment, and personal perspective) were critical assets in developing, implementing and sustaining the LWP.
- Communication is vital to successful implementation and sustainability of a LWP.
- Districts and schools reported efforts to ensure sustainability, including ongoing communication, maintaining active wellness committees, and having processes for policy revision. Frequently cited impediments to sustainability include changes in leadership and lack of funding.
- Technical assistance is essential to help districts and schools monitor progress and report change.

The National Food Service Management Institute, Applied Research Division (NFSMI, ARD) followed up the LWPDP with a descriptive case study of school nutrition directors at four districts to explore LWP sustainability strategies for middle schools (Osowski & Nettles, 2013). The following findings can be drawn from examining those four school districts:

- Successful strategies for sustaining wellness initiatives included firm commitment and support from the districts' senior administration.
- Strong leadership on an active wellness committee and communication of the LWP to staff and stakeholders is also essential.

- Barriers to the implementation and sustainability of the LWP included resistance from teachers and parents to follow guidelines, and lack of accountability for implementation and proper evaluation of the LWP program.
- Student input in menu planning promoted student acceptance of the LWP guidelines, which helps lead to sustainability.

Research has indicated that people begin to acquire and establish patterns of health-related behaviors during childhood and adolescence (Kelder, 1994). Therefore, it is important that the implemented LWP is effective. Behaviors adopted through the LWP should continue through adulthood to be considered effective. Due to the many challenges facing schools when implementing a LWP, it is important to investigate how some school districts can be successful in LWP sustainability. The purpose of this study is to build on the Wood, Cody, and Nettles (2010) and the Osowski and Nettles (2013) studies to explore successful strategies to sustaining school wellness as well as the monitoring activities and evaluation practices used for measuring progress.

Research Goals and Objectives

The research objectives for this study were:

- Identify strategies and practices used to sustain LWP initiatives;
- Describe monitoring activities and evaluation practices for measuring progress of LWP initiatives; and
- Identify measures that are used to determine sustainability of LWP initiatives.

METHOD

Research Plan

The purpose of this research was to identify successful strategies and practices to sustain local wellness policy initiatives, and to describe monitoring activities and evaluation practices used to measure progress of local wellness policy (LWP) initiatives. The study also sought to identify measures that are used to determine sustainability of LWP initiatives.

In order to explore successful strategies and practices to sustain LWP initiatives and describe monitoring and evaluation practices of LWP, a two-phase research design was employed. In the first phase of the study, an expert panel discussion consisting of school nutrition (SN) personnel was conducted, transcribed, and analyzed for themes. The qualitative data gained from the expert panel discussions were then used to develop a quantitative survey instrument that would explore successful strategies that lead to the sustainability of school wellness policy initiatives. This survey would also investigate monitoring activities and evaluation practices that were utilized for measuring progress of these initiatives. The survey was reviewed by a panel of SN professionals and revised based on their comments. The final survey was mailed to a national sample of 700 SN directors from school districts representing the seven USDA regions.

Phase I

Expert Panel Discussion

In Phase I of the study, an expert panel discussion was conducted with SN professionals to explore successful strategies and practices to sustain LWP initiatives and describe monitoring and evaluation practices of an LWP. State agency child nutrition directors representing the seven USDA regions were asked to provide names and contact information for state agency

representatives and SN directors to serve on an expert panel. From this pool, eight SN professionals were invited to attend a day-and-a-half meeting to discuss what strategies were utilized by SN directors and other administrators to implement and sustain school wellness initiatives. The invitation explained the project and the purpose of the expert panel meeting, in addition to providing the researchers' contact information for questions and concerns. Informed consent further outlining the details of study participation was also included with the e-mail invitation. For expert panel members who agreed to participate, confirmation letters were mailed with additional information regarding the upcoming panel meeting and travel arrangements.

The expert panel meeting was facilitated by a researcher with an assistant moderator capturing participants' comments on a laptop computer. The agenda for the expert panel meeting was planned to address issues related to the research objectives so that the discussion supported the development of a survey for Phase II of this research project. Discussion topics included the practices that support the implementation of the LWP, sustainability of the LWP, leadership in implementing the LWP components, communication of the LWP standards, funding the LWP initiatives, and monitoring and evaluation of the LWP initiatives. Additionally, researchers asked panel members to indicate what training and resources would assist LWP sustainability, how they felt their LWP was sustainable and what information they had to offer to other SN directors for successful LWP sustainability.

Throughout the session, the researcher used a structured approach to keep the discussion focused on specific topics. After the session, the assistant moderator summarized responses, and the researchers thematically coded the responses into meaningful categories. The responses and themes were used to develop statements that were integrated into the quantitative survey instrument.

Phase II

Survey Development

The survey instrument for Phase II of the research project was created from qualitative data obtained from the expert panel discussion. The survey, *Sustainability of Local Wellness Policy Initiatives*, consisted of seven sections. Section one listed wellness policy characteristics that described LWP initiatives. Sections two and three consisted of questions associated with communication of LWP initiatives and questions concerning leadership roles in the implementation of individual components of an LWP at the school and district level. Questions in sections four and five dealt with monitoring and evaluation of LWP activities and how districts planned to sustain the implementation of the LWP. Issues related to the types of training and/or resources needed to effectively sustain LWP initiatives were addressed in section six. The final section of the survey collected information related to personal and program characteristics.

Review Panel

Twenty-two SN directors were invited via e-mail to participate as members of a review panel to evaluate the draft survey instrument. Once they agreed to participate in the pilot study, the participants were e-mailed a cover letter, the draft survey and an evaluation form. Participants were asked to complete an evaluation form containing questions to assess the survey instrument. The evaluation form was designed to assess the clarity of the survey directions and survey content. Additional space on the evaluation form was provided for recommended modifications to the survey instrument. Participants were instructed to return their completed evaluation forms electronically. Eleven of 22 evaluation forms were returned. Based on the

recommendations provided by review panel participants, minor changes in wording were made in parts of the survey.

Sample and Survey Distribution

The sample for the survey phase of the research study consisted of SN directors in public school districts. A listing of states within each of the seven USDA regions was provided to Market Data Retrieval, a national school marketing company. The resulting random sample of 700 school districts was stratified by USDA region using 100 school districts from each USDA region. This resulting list included the mailing address for the district SN directors.

A pre-notice letter was mailed to the 700 SN directors one week before the surveys were mailed. The pre-notice letter informed SN directors that they would be receiving a survey packet within the next week, and asked for their participation in the research study. One week later, survey packets, which contained an instructional cover letter, the survey instrument and a self-addressed, postage-paid envelope for returning the completed survey were then mailed to the 700 SN directors. The cover letter informed recipients of the purpose of the study, requested their participation, assured them of confidentiality of their responses, and provided researchers' contact information for questions or concerns. No identifying codes were placed on the survey instruments, thus preserving the anonymity of all respondents. Participants were asked to return the completed surveys within a three-week time period. A follow-up postcard was sent to all SN directors two weeks after the surveys were mailed.

Informed Consent

The protocol for Phase I and Phase II of the study was reviewed and approved by the Institutional Review Board at The University of Southern Mississippi.

Data Analysis

Survey data were analyzed using the statistical package SPSS Version 17.0 for Windows. The data were analyzed with descriptive statistics which included multiple responses including percent of cases for all sections that included a “select all that apply” option. For all sections that did not have that option, frequencies of total responses including percent of responses were computed.

RESULTS AND DISCUSSION

Phase I: Expert Panel

An expert panel session was conducted to explore what strategies were utilized by school nutrition (SN) directors and other administrators to implement and sustain local wellness policy (LWP) initiatives in schools. Seven SN professionals participated in the expert panel session. The expert panel members represented the four of the seven regions as classified by the United States Department of Agriculture (USDA). All panel members participated in the discussion (100%). The expert panel session was conducted using a systemic approach by asking semi-structured, open-ended questions to ensure the discussion focused on the research objectives. The key discussion points were recorded and summarized by researchers. Expert panel members established that most SN professionals have implemented mandated LWPs, but there was a lack of funding for implementation and a lack of tools for proper monitoring and evaluation of the initiatives. Once the expert panel session ended, responses were grouped into emerging themes and integrated into the quantitative survey instrument.

Phase II: Survey

A total of 700 surveys were mailed to school nutrition (SN) directors in all United States Department of Agriculture (USDA) regions. Each director was asked to complete a survey and return it in a stamped self-addressed envelope. A total of 225 surveys were returned for a return rate of 32%.

Personal and Program Characteristics

Program and personal characteristics of SN directors and their school districts are provided in Table 1. The majority (71.6%) of SN directors responded that their state has laws and regulations governing the competitive foods that can be offered in schools. Over half of the

respondents (54.7%) indicated that there were no penalties or consequences for not following the Local Wellness Policy (LWP). The largest percentage of participants reported working in their current position one to five years (29.8%) followed by more than 20 years (19.6%) and in school districts with an enrollment of 2,799 or less (48.4%). In terms of certification status, the largest percentage of SN directors reported that they were School Nutrition Association (SNA) certified (38.8%), followed by those reporting no certification (31.8%). When asked the sources of funds used to implement wellness initiatives in their district, almost half (48.9%) of directors indicated that no extra funds were used. The SN directors reported that the district wellness committee or school health council was meeting at least once a quarter (24.9%) or at least once a year (24.4%).

Table 1

Program and Personal Characteristics of School Nutrition Directors (N=225)

Item	Frequency	%
State laws or regulations governing the competitive foods offered		
Yes	161	71.6
No	31	13.8
I don't know	29	12.9
State curriculum requirements for nutrition education		
Yes	87	38.7
No	34	15.1
I don't know	99	44.0
State curriculum requirements for physical education		
Yes	140	62.2
No	9	4.0
I don't know	72	32.0

^aPercentages for these items total more than 100%, as participants could select multiple responses.

(Table 1 continues)

*(Table 1 continued)**Program and Personal Characteristics of School Nutrition Directors (N=225)*

Item	Frequency	%
School district penalties for not following the LWP		
Yes	23	10.2
No	123	54.7
I don't know	73	32.4
School nutrition director certification/credentialed status ^a		
SNA certified	83	38.8
Not certified	68	31.8
State agency certified	47	22.0
SNS (formerly SFNS) credentialed	30	14.0
Registered Dietitian	30	14.0
Licensed Dietitian/Nutritionist	15	0.7
Dietetic Technician Registered	2	0.9
American Culinary Federation certification	2	0.9
Years worked in current position		
Less than one year	12	5.3
1 – 5 years	67	29.8
6 – 10 years	43	19.1
11 – 15 years	32	14.2
16 – 20 years	23	10.2
Greater than 20 years	44	19.6
USDA Region		
Mountain Plains	47	20.9
Southeast	38	16.9
Southwest	30	13.3
Midwest	30	13.3
Northeast	28	12.4
Mid-Atlantic	26	11.6
Western	21	9.3

^aPercentages for these items total more than 100%, as participants could select multiple responses.

(Table 1 continues)

(Table 1 continued)

Program and Personal Characteristics of School Nutrition Directors (N=225)

Item	Frequency	%
School district enrollment		
2,799 or less	109	48.4
2,800 – 9,999	78	34.7
10,000 – 19,000	21	9.3
20,000 – 44,999	7	3.1
45,000 – 64,999	2	0.9
65,000 or greater	3	1.3
Percentage of students receiving free and reduced priced lunches		
20% or less	27	12.0
21% to 40%	50	22.2
41% to 60%	79	35.1
61% to 80%	54	24.0
81% or greater	9	4.0
Average grades K-8 daily lunch participation rates		
20% or less	1	0.4
21% to 40%	6	2.7
41% to 60%	35	15.6
61% to 80%	98	43.6
81% or greater	68	30.2
Average grades 9-12 daily lunch participation rates in your school		
20% or less	5	2.2
21% to 40%	29	12.9
41% to 60%	69	30.7
61% to 80%	72	32.0
81% or greater	31	13.8
Sources of funds for LWP implementation^a		
No extra funds were used to implement wellness initiatives	108	48.9
I don't know	45	20.4
District/school supported	37	16.7
Grants	31	14.0
School Nutrition budget	29	13.1
Industry	1	0.5

^aPercentages for these items total more than 100%, as participants could select multiple responses.

(Table 1 continues)

*Table 1 continued**Program and Personal Characteristics of School Nutrition Directors (N=225)*

Item	Frequency	%
Frequency of meetings this school year for district Wellness Committee or School Health Council		
Once monthly	14	6.2
At least once a quarter	56	24.9
At least once a year	55	24.4
They did not meet this year	63	28.0
I don't know	33	14.7

^aPercentages for these items total more than 100%, as participants could select multiple responses.

Characteristics Describing the District Local Wellness Policy

SN directors were provided a list of characteristics that describe LWP initiatives, and they were asked to choose the characteristics that they felt described their LWP initiatives. Table 2 represents the SN directors' opinion of characteristics of the district LWP initiatives listed in descending order according to the frequency the term was chosen and the percentage of respondents endorsing the item.

Table 2

School Nutrition Directors' Opinions on Characteristics of the District Local Wellness Policy (LWP) (N=225)^a

Item	Frequency	%
Healthy	106	48.4
Worthwhile	101	46.1
Student-oriented	79	36.1
Unfunded	76	34.7
Unsuccessful	57	26.0
Sustainable	52	23.7
Time-consuming	43	19.6
Successful	38	17.4
Enriching	31	14.2
Culture-changing	28	12.8
Community building	27	12.3
Waste of time	27	12.3
Temporary	17	7.8
Engaging	16	7.3
Family oriented	15	6.8
Institutionalized	12	5.5
Unnecessary	9	4.1
Inventive	7	3.2
Funded	3	1.4
Unhealthy	2	0.9

^aPercentages for this item total more than 100%, as participants could select multiple responses.

The characteristic chosen most frequently was “healthy” (48.4%) followed by the term “worthwhile” (46.1%). Those terms were followed by “student oriented” (36.1%), “unfunded” (34.7%), “unsuccessful” (26.0%) and “sustainable” (23.7%). On the other end of the spectrum, the terms chosen least frequently were “unnecessary” (4.1%), “inventive” (3.2%), “funded” (1.4%) and “unhealthy” (0.9%).

Communication

SN directors were asked to indicate which audiences the school district or individual schools communicate LWP goals, programs and activities, accomplishments and obstacles (Table 3). The SN directors stated the LWP goals were most often communicated internally to teachers and support staff (64.9%), school administration staff (63.6%) and the school board (56.9%). Approximately half of the respondents (50.7%) communicated the LWP goals to the students. Similar results were shown for LWP programs and activities with most respondents communicating first to school staff (56.5%) and school administrative staff (52.9%). With regards to LWP accomplishments, communication was most often to the school board (50.9%) followed by school administrative staff (48.7%). The LWP obstacles are most often reported to the school administration staff (51.8%), followed by the school staff (37.1%) and the school board (27.7%).

Table 3

Communication of Local Wellness Policy Goals, Programs and Activities, Accomplishments and Obstacles (N=225)

Item	Frequency	%
Audiences school district or individual schools communicate LWP goals? ^a		
School staff, such as teachers and support staff	146	64.9
School administrative staff such as principals	143	63.6
School Board	128	56.9
Students	114	50.7
Parents	97	43.1
Community	70	31.1
None of the above	20	8.9
I don't know	17	7.6
Audiences school district or individual schools communicate LWP programs and activities? ^a		
School staff, such as teachers and support staff	126	56.5
School administrative staff such as principals	118	52.9
Students	115	51.6
Parents	95	42.6
School Board	92	41.3
Community	56	25.1
None of the above	29	13.0
I don't know	27	12.1
Audiences school district or individual schools communicate LWP accomplishments? ^a		
School Board	114	50.9
School administrative staff such as principals	109	48.7
School staff, such as teachers and support staff	92	41.1
Parents	70	31.3
Students	67	29.9
Community	55	24.6
None of the above	41	18.3
I don't know	35	15.6
Audiences school district or individual schools communicate obstacles encountered to reaching LWP goals? ^a		
School administrative staff such as principals	116	51.8
School staff, such as teachers and support staff	83	37.1
School Board	62	27.7
I don't know	42	18.8
None of the above	41	18.3
Parents	34	15.2
Students	27	12.1
Community	17	7.6

^aPercentages for this item total more than 100%, as participants could select multiple responses.

Table 4 reflects the frequency that the district communicates information about the LWP goals and/or accomplishments to the school board and the schools. The SN directors reported that the goals and accomplishments were communicated one to two times per year to the school board (48.9%) and the school (36.4%). Approximately one quarter of respondents did not know whether goals and accomplishments were communicated to the school board (24.4%) or to the schools (24.9%).

Table 4

Communication Frequency and the Importance of Communication (N=225)

Item	Frequency	%
Frequency the school district communicates information about the LWP goals and/or accomplishments to the school board?		
1-2 times a year	110	48.9
3-4 times a year	14	6.2
More than 4 times a year	5	2.2
Never	38	16.9
I don't know	55	24.4
No response	3	1.3
Frequency the school district communicates information on LWP goals and/or accomplishments to schools?		
1-2 times a year	82	36.4
3-4 times a year	32	14.2
More than 4 times a year	14	6.2
Never	36	16.0
I don't know	56	24.9
No response	5	2.2
Importance of communication in sustaining your LWP goals and/or accomplishments?		
Very important	96	42.7
Important	96	42.7
Not important	14	6.2
No response	19	8.4

Leadership

Information regarding which LWP components the SN directors have sole or shared leadership implementing is described in Table 5. The majority of the SN directors reported that they had sole leadership in school meal assurances (91.9%), followed by guidelines for competitive foods that are sold (57.2%), and guidelines for competitive foods that are offered (55.0%). Very few reported they had sole responsibility in implementing nutrition education (12.6%) and other school-based wellness activities (6.3%). The SN directors reported that they have shared leadership in implementing nutrition education (43.8%), school meal assurances (37.9%), implementing guidelines for competitive foods offered (37.0%), guidelines for competitive foods that are sold (33.8%) and other school-based wellness activities (31.1%).

When asked what other district, school staff or community members play leadership roles in implementing the LWP components, the most common response was the district school nurse (51.4%), followed by school administrative staff (46.8%), and district-level wellness committee (45.5%).

Table 5

Local Wellness Policy Implementation Leadership (N=225)

Item	Frequency	%
LWP components the SN director has the sole leadership in implementation ^a		
School meal assurances	204	91.9
Guidelines for competitive foods that are sold	127	57.2
Guidelines for competitive foods that are offered	122	55.0
Nutrition education	28	12.6
None of the above	15	6.8
Other school based wellness activities	14	6.3
Physical activity/physical education	3	1.4
I don't know	1	0.5

^aPercentages for this item total more than 100%, as participants could select multiple responses.
(Table 5 continues)

(Table 5 continued)

Local Wellness Policy Implementation Leadership (N=225)

Item	Frequency	%
LWP components the SN director has shared leadership in implementation ^a		
Nutrition education	96	43.8
School meal assurances	83	37.9
Guidelines for competitive foods that are offered	81	37.0
Guidelines for competitive foods that are sold	74	33.8
Other school-based wellness activities	68	31.1
None of the above	45	20.5
Physical activity/physical education	20	9.1
I don't know	4	1.8
Other district, school staff or community members play leadership roles in implementing the LWP components? ^a		
District/school nurses	114	51.4
School administrative staff, such as principals	104	46.8
District-level wellness committee	101	45.5
District administration staff, such as superintendent or curriculum directors	95	42.8
School staff, such as teachers and support staff	84	37.8
School-level wellness committees	78	35.1
Parents	65	29.3
School Board	55	24.8
Community	35	15.8
I don't know	24	10.8
None of the above	12	5.4

^aPercentages for this item total more than 100%, as participants could select multiple responses.

Monitoring and Evaluation

When asked which LWP components did they, as SN directors, believe play a role in monitoring and/or analyzing data, the majority (84.5%) responded “meeting school meal regulations” (Table 6). The LWP components where SN directors indicated that they do not often have a role in monitoring were “physical activity/physical education” (4.5%), “other school-based wellness activities” (13.2%), and “nutrition education” (18.6%). Respondents also

were asked to indicate which student outcomes were measured to assess LWP implementation. The most frequent selection was “healthier selections by students of items from reimbursable school meals” (37.8%). The outcomes identified as being measured the least were “test scores” (3.2%), “other measures” (3.6%), and “fitness values” (11.7%).

Table 6

Monitoring and Evaluation of Local Wellness Policy Components (N=225)

Item	Frequency	%
Local wellness policy components the SN director plays a role in monitoring and analyzing data on the implementation progress ^a		
Meeting school meal regulations	186	84.5
Guidelines for competitive foods that are sold	117	53.2
Guidelines for competitive foods that are offered	114	51.8
Nutrition education	41	18.6
Other school-based wellness activities	29	13.2
None of the above	16	7.3
Physical activity/physical education	10	4.5
I don't know	8	3.6
Which student outcomes are measured to assess LWP implementation? ^a		
Healthier selections by students of items from reimbursable school meals	84	37.8
No measures	68	30.6
Healthier selections by students of items from competitive foods	61	27.5
I don't know	50	22.5
Weight or BMI ^b measures	31	14.0
Fitness values	26	11.7
Other measures	8	3.6
Test scores	7	3.2

^aPercentages for this item total more than 100%, as participants could select multiple responses.

^bBody Mass Index: a relationship between weight and height that is associated with body fat and health risk.

Participants were provided three lists of possible LWP activities that could be performed at all schools, elementary schools, and middle/high schools. Respondents were asked to indicate the approximate percentage of schools in their district that participated in the general LWP

activities that could be performed at all schools (Table 7). Respondents reported that 51% or greater of the schools in their districts participated in the following activities:

- “Offers the use of the gymnasium or playground/track facilities outside of school hours” (57.8%);
- “Offers students daily physical education for the entire year” (43.1%);
- “Have enlisted student input on school menu items” (38.7%);
- “Holds in-service training for orientation of school nutrition staff on the importance of the wellness policies (38.7%)”; and
- “Does not allow the withholding of physical activity as a form of punishment (38.6%).

The “I don’t know” responses ranged from 2.2% for “have enlisted student input on school menu items” to 37.3% for “does not allow the withholding of physical activity as a form of punishment.”

Table 7

Percentage Participation in General Local Wellness Policy Activities Among Schools in the District (N=225)

Item	Frequency	%
Hold in-service training for orientation of teachers and school staff on the importance of the wellness policies?		
0-25%	106	47.1
26-50%	12	5.3
51-75%	5	2.2
76-100%	19	8.4
I don’t know	57	25.3
No response	26	11.6
Have enlisted student input on school menu items		
0-25%	69	30.7
26-50%	44	19.6
51-75%	38	16.9
76-100%	49	21.8
I don’t know	5	2.2
No response	20	8.9

(Table 7 continues)

*(Table 7 continued)**Percentage Participation in General Local Wellness Policy Activities Among Schools in the District (N=225)*

Item	Frequency	%
Have adopted marketing techniques to promote healthful choices		
0-25%	71	31.6
26-50%	37	16.4
51-75%	39	17.3
76-100%	44	19.6
I don't know	14	6.2
No response	20	8.9
Engage students and parents in identifying new healthful and appealing food choices		
0-25%	85	37.8
26-50%	37	16.4
51-75%	40	17.8
76-100%	26	11.6
I don't know	18	8.0
No response	19	8.4
Offer students daily physical education (PE) for the entire year		
0-25%	54	24.0
26-50%	16	7.1
51-75%	22	9.8
76-100%	75	33.3
I don't know	48	21.3
No response	10	4.4
Hold assemblies for students to promote healthful food choices		
0-25%	132	58.7
26-50%	17	7.6
51-75%	6	2.7
76-100%	2	0.9
I don't know	52	23.1
No response	16	7.1
Hold assemblies for students to promote physical activity		
0-25%	87	38.7
26-50%	30	13.3
51-75%	15	6.2
76-100%	10	4.4
I don't know	68	30.2
No response	16	7.1

(Table 7 continues)

*(Table 7 continued)**Percentage Participation in General Local Wellness Policy Activities Among Schools in the District (N=225)*

Item	Frequency	%
Have school health councils		
0-25%	99	44.0
26-50%	16	7.1
51-75%	11	4.9
76-100%	19	8.4
I don't know	65	28.9
No response	15	6.7
Measure students' heights and weights to calculate Body Mass Index (BMI) as a health indicator		
0-25%	54	24.0
26-50%	18	8.0
51-75%	16	7.1
76-100%	50	22.2
I don't know	73	32.4
No response	14	6.2
Restricts use of food rewards in the classrooms		
0-25%	68	30.2
26-50%	19	8.4
51-75%	21	9.3
76-100%	57	25.3
I don't know	51	22.7
No response	9	4.0
Restricts food fundraisers		
0-25%	98	43.6
26-50%	16	7.1
51-75%	16	7.1
76-100%	45	20.0
I don't know	39	17.3
No response	11	4.9

(Table 7 continues)

*(Table 7 continued)**Percentage Participation in General Local Wellness Policy Activities Among Schools in the District (N=225)*

Item	Frequency	%
Does not allow the withholding of physical activity as a form of punishment		
0-25%	38	16.9
26-50%	6	2.7
51-75%	10	4.4
76-100%	77	34.2
I don't know	84	37.3
No response	10	4.4
Has policies on lunches/snacks brought from home		
0-25%	130	57.8
26-50%	6	2.7
51-75%	11	4.9
76-100%	31	13.8
I don't know	36	16.0
No response	11	4.9
Offers the use of the gymnasium or playground/track facilities outside of school hours		
0-25%	29	12.9
26-50%	12	5.3
51-75%	33	14.7
76-100%	97	43.1
I don't know	45	20.0
No response	9	4.0
Holds in-service training for orientation of school nutrition staff on the importance of the wellness policies		
0-25%	85	37.8
26-50%	16	7.1
51-75%	8	3.6
76-100%	79	35.1
I don't know	27	12.0
No response	10	4.4

Table 8 contains information regarding the approximate percentage of schools in respondents' districts that participated in LWP activities in elementary schools. Respondents reported that 51% or greater of the elementary schools in their districts participated in the following activities:

- “Offer recess daily” (82.2%),
- “Requires daily PE for the entire school year for every student” (39.5%), and
- “Restricts the types of foods that can be used in classroom celebrations” (34.2%).

The “I don't know” responses for this series of questions ranged from 5.8% for “offer recess daily” to 45.3% for “provides short physical activity breaks between lessons or classes”.

Table 8

Percentage Participation in Local Wellness Policy Activities among Elementary Schools in the District (N=225)

Item	Frequency	%
What approximate percentage of elementary schools in your district		
Offer recess daily		
0-25%	8	3.6
26-50%	8	3.6
51-75%	16	7.1
76-100%	169	75.1
I don't know	13	5.8
No response	11	4.9
Offers an afterschool program that provides physical activity		
0-25%	65	28.9
26-50%	21	9.3
51-75%	24	10.7
76-100%	44	19.6
I don't know	64	28.4
No response	7	3.1

(Table 8 continues)

*(Table 8 continued)**Percentage Participation in Local Wellness Policy Activities among Elementary Schools in the District (N=225)*

Item	Frequency	%
Requires daily PE for the entire school year for every student		
0-25%	68	30.2
26-50%	11	4.9
51-75%	23	10.2
76-100%	66	29.3
I don't know	45	20.0
No response	12	5.3
Provides short physical activity breaks between lessons or classes		
0-25%	60	26.7
26-50%	20	8.9
51-75%	8	3.6
76-100%	22	9.8
I don't know	102	45.3
No response	13	5.8
Restricts the types of foods that can be used in classroom celebrations		
0-25%	73	32.4
26-50%	15	6.7
51-75%	23	10.2
76-100%	54	24.0
I don't know	53	23.6
No response	7	3.1
Limits birthday parties or other individual celebrations that involve food		
0-25%	70	31.1
26-50%	12	5.3
51-75%	20	8.9
76-100%	45	20.0
I don't know	63	28.0
No response	15	6.7

Table 9 contains information regarding the approximate percentage of schools in respondents' districts that participated in LWP activities in middle/high schools. Respondents

reported that 51% or greater of the middle/high schools in their districts participated in the following activities:

- “Has closed campuses” (72.0%) and
- “Has restricted vending machines beyond lunch hour restrictions” (55.5%).

The “I don’t know” responses for this series of questions ranged from 3.6% for “has closed campuses” to 34.7% for “have informal physical activity options before, during, or after school”.

Table 9

Percentage Participation in Local Wellness Policy Activities among Middle/High Schools in the District (N=225)

Item	Frequency	%
Has restricted vending machines beyond lunch hour restrictions		
0-25%	54	24.0
26-50%	10	4.4
51-75%	10	4.4
76-100%	115	51.1
I don’t know	22	9.8
No response	14	6.2
Has informal physical activity options before, during, or after school hours		
0-25%	49	21.8
26-50%	20	8.9
51-75%	13	5.8
76-100%	51	22.7
I don’t know	78	34.7
No response	14	6.2
Requires daily PE for the entire school year for every student		
0-25%	76	33.8
26-50%	20	8.9
51-75%	13	5.8
76-100%	42	18.7
I don’t know	60	26.7
No response	14	6.2

(Table 9 continues)

(Table 9 continued)

Percentage Participation in Local Wellness Policy Activities among Middle/High Schools in the District (N=225)

Item	Frequency	%
Has closed campuses (i.e., students are NOT allowed to leave campus during lunch)		
0-25%	34	15.1
26-50%	15	6.7
51-75%	19	8.4
76-100%	143	63.6
I don't know	8	3.6
No response	6	2.7

Survey participants were asked additional questions regarding the monitoring, analysis and the use of the results from evaluating LWP components (Table 10). The most common components of the LWP that are monitored at the district level included school meal assurances (75.1%) followed by guidelines for competitive foods that are sold (52.2%) and guidelines for competitive foods that are offered (50.2%). When asked how LWP activities are monitored at the school level, respondents indicated most often that they did not know (39.6%) or that monitoring is not in place (32.9%). Small percentages of participants stated that “individual teachers report on classroom wellness activities” (12.6%), “student health data are tracked,” (10.4%), and “measures for fitness are included in student assessments” (10.4%). In regard to who monitors LWP implementation, the respondents indicated most often that monitoring was not in place (34.1%) or they did not know (30.0%). A smaller percentage indicated that a district monitor (17.7%) or each school (13.6%) has a monitor that accomplishes this task along with their regular duties. Almost half (49.8%) of respondents stated that they were not aware how often the LWP monitoring data was collected from schools and then reviewed at the district level. Many directors were also unaware of who reviews the results from monitoring the LWP activities at the

district level (42.4%). However; the next most common response was the district-level wellness committee (23.0%). When asked who at the district level analyzes the results from monitoring LWP activities, the most frequent response was “I don’t know” (46.1%). In addition, over half of the respondents (56.1%) reported that they did not know how the results from the evaluation of the LWP were used.

Table 10

Monitoring and Evaluation of Local Wellness Policy at the District and School Levels
(N=225)

Item	Frequency	%
Which of the following are monitored at the district level for your LWP? ^a		
School meal assurances	157	75.1
Guidelines for competitive foods that are sold	109	52.2
Guidelines for competitive foods that are offered	105	50.2
Physical activity/physical education	71	34.0
Nutrition education	55	26.3
Other school-based wellness activities	48	23.0
I don’t know	27	12.9
None of the above	17	8.1
How are LWP activities monitored at the school level?^a		
I don’t know	88	39.6
Monitoring is not in place	73	32.9
Individual teachers report on classroom wellness activities	28	12.6
Student health data are tracked	23	10.4
Measures for fitness, such as Fitnessgram [®] , are included in student assessments	23	10.4
A checklist is used by an assigned monitor to record activities	13	5.9
Measures for health knowledge are included in student assessments	12	5.4
Surveys are completed by individual students, teachers, administrators, and/or staff to record activities	11	5.0
A checklist is used by individual students, teachers, administrators, and/or staff to record activities	10	4.5
A survey is completed by an assigned monitor to record activities	8	3.6

(Table 10 continues)

(Table 10 continued)

Monitoring and Evaluation of Local Wellness Policy at the District and School Levels (N=225)

Item	Frequency	%
Who monitors LWP implementation^a		
Monitoring is not in place	75	34.1
I don't know	66	30.0
A district monitor accomplishes this task as part of his/her work load	39	17.7
Each school has an assigned monitor who accomplishes this task as part of his/her work load	30	13.6
Monitoring is shared by a school monitor and a district monitor	21	9.5
Monitors are assigned to several schools by the district, and monitoring is their primary activity	3	1.4
A district monitor accomplishes this task, and monitoring is his/her primary activity	3	1.4
How often are the LWP monitoring data collected from schools reviewed at the district level?		
I don't know	112	49.8
Once a year	47	20.9
Other	31	13.8
Two times a year	15	6.7
Once a quarter/semester	8	3.6
No response	7	3.1
Once a month	5	2.2
At the district level, who reviews the results from monitoring LWP activities (n=259)^a		
I don't know	92	42.4
District-level wellness committee	50	23.0
SN director	33	15.2
Other	29	13.4
Other district-level administrator, such as the superintendent	24	11.1
District-level nurse	20	9.2
District-level curriculum director	11	5.1

^aPercentages for this item total more than 100%, as participants could select multiple responses.

(Table 10 continues)

(Table 10 continued)

Monitoring and Evaluation of Local Wellness Policy at the District and School Levels (N=225)

Item	Frequency	%
At the district level, who analyzes the results from monitoring LWP activities ^a		
I don't know	100	46.1
District-level wellness committee	46	21.2
SN director	30	13.8
Other	30	13.8
Other district-level administrator, such as the superintendent	23	10.6
District-level nurse	19	8.8
District-level curriculum director	10	4.6
How are results from evaluating LWP activities at the district level used? ^a		
I don't know	122	56.5
Report progress on LWP goals	38	17.6
Monitor progress toward LWP goals	37	17.1
Assess effectiveness of LWP activities	35	16.2
Revise activities to meet LWP goals	34	15.7
Revise the LWP	31	14.4
Other	25	11.6

Sustaining Local Wellness Policy Initiatives

Participants were asked how their school district plans to sustain the implementation of the LWP (Table 11). School nutrition directors stated, “the wellness committee has been maintained by the school district” (69.0%), or that “a wellness coordinator is in place or will be assigned” (39.0%). Several respondents indicated the LWP is integrated with other school health initiatives (31.0%) and that wellness activities are reviewed and revised as needed (31.0%).

Table 11

School Nutrition Directors' Plans for the Sustainability of Local Wellness Policy Implementation (N=225)^a

Item	Frequency	%^a
The wellness committee has been maintained by the school district	129	69.0
A wellness coordinator is in place/will be assigned	73	39.0
The LWP is integrated with other school health initiatives	58	31.0
Wellness activities are reviewed and revised, if needed	58	31.0
Communication channels between schools and district administration have been established	52	27.8
Partnerships have been established with other agencies/organizations	48	25.7
The LWP is reviewed and updated regularly	47	25.1
Barriers are identified	35	18.7
Leadership for LWP implementation has been identified	30	16.0
The LWP is incorporated into the district strategic plan	27	14.4
Solutions are developed to overcome barriers	26	13.9
Leadership for LWP monitoring and evaluation has been identified	23	12.3
Communication channels between schools and communities have been established	20	10.7
A succession plan for leadership of the LWP implementation has been developed	14	7.5
Protocols for measuring student outcomes have been developed	11	5.9
Sources of funding for LWP implementation have been identified	9	4.8
Sources of funding for LWP monitoring and evaluation have been identified	6	3.2
Funds for LWP implementation have been budgeted	4	2.1
Funds for LWP monitoring and evaluation have been budgeted	3	1.6

^aPercentages total more than 100%, as participants could select multiple responses.

School nutrition directors were asked to indicate the training and resources needed to effectively sustain LWP initiatives (Table 12). Ideas for implementing nutrition education activities was the most common response (61.9%), followed by ideas for non-food rewards and fundraising (56.3%), and strategies to monitor and evaluate the LWP activities (54.8%). School nutrition directors also reported ideas for incorporating physical activities within the school day (48.7%) and strategies for revising the LWP (48.7%) were needed. Tools such as a checklist to monitor progress or observe activities related to the LWP (47.7%) and presentation templates for orientations and reporting to stakeholders were also preferred (47.2%).

Table 12

Training and Resources Needed to Effectively Sustain Local Wellness Policy Initiatives (N=225)^a

Item	Frequency	%^a
Ideas for implementing nutrition education activities	122	61.9
Ideas for non-food rewards and fundraising	111	56.3
Strategies to monitor and evaluate the LWP activities	108	54.8
Ideas for incorporating physical activities within the school day	96	48.7
Strategies for revising the LWP	96	48.7
Checklist to monitor progress or observe activities related to the LWP	94	47.7
Presentation template for orientation of teachers and school staff	93	47.2
Presentation templates for stakeholders, such as School Board, parent and community organizations, and student assemblies	93	47.2
Professional development/training module on LWP monitoring and evaluation	82	41.6
Strategies for reporting results to the School Board, media, community	74	37.6
Selection of appropriate outcome measures	67	34.0
Development of protocols for measuring student outcomes	65	33.0
Tool for data analysis and report development	65	33.0
Modules on identifying grant opportunities and writing grant proposals	46	23.4
Module on maintaining confidentiality of student outcome measures	33	16.8

^aPercentages total more than 100%, as participants could select multiple responses.

CONCLUSIONS AND RECOMMENDATIONS

Limitations to the Research Study

The main limitation to this research study was the response rate to the mailed survey instrument. At 32%, the response rate was lower than desired, which may cause concern for the generalizability of the results. However, although the response rate for the survey was low, all seven USDA regions were represented in the group of participants.

Research Study Conclusions

- Communication is vital for sustaining Local Wellness Policy (LWP) goals, activities, and accomplishments, and should be provided to all school district stakeholders. The expert panel members emphasized the importance of communication of LWP goals to sustainability. Overwhelmingly, survey respondents indicated that communication was important or very important in sustaining the LWP goals and/or accomplishments (85.4%). Information regarding LWP goals, activities, and accomplishments was communicated within the school administrative units and school board; however, few school nutrition (SN) directors reported communicating with students, parents, and the community.
- The majority of SN directors responding to this survey only have leadership roles in implementing, monitoring, and evaluating LWP components related to school meal regulations and competitive foods (offered and sold) guidelines. Respondents indicated that school nurses, school administrative staff, district-level wellness committees, and district administrative staff all have leadership roles in implementing LWP components. This finding was evident with the expert panel members and confirmed by the survey respondents.

- Limited student outcomes are being measured to assess LWP implementation. The SN directors reported that the outcome measure used to assess the implementation of the LWP initiative was most often the healthier selections of items from reimbursable school meals, however only a little over one-third of the SN directors chose this response. Almost as many reported that “no measures were used” or that they “did not know” what measures were used.
- Survey results suggest that either monitoring is not taking place, or SN directors are not directly involved in the monitoring and evaluation aspects of the LWP initiatives. Most respondents did not know: how LWP activities are monitored at the school level (I don’t know 39.6%; monitoring is not in place 32.9%); who monitors LWP implementation (monitoring is not in place 34.1%; I don’t know 3.0%); who, at the district level, analyses the monitoring results (I don’t know 46.1%); and how the evaluation results are being used (I don’t know 56.5%).
- Initial efforts have been made by school districts to sustain LWP initiatives, but more systems could be put in place to support sustainability. School nutrition directors reported a variety of measures are being used to sustain LWP initiatives. The responses selected most often were “the wellness committee has been maintained by the school district,” and “a wellness coordinator is in place/will be assigned.” Responses selected less often were related to leadership for LWP implementation, monitoring, and evaluation; barriers identified and solutions developed; protocols for measuring student outcomes; and identifying and budgeting sources of funds for implementation, monitoring, and evaluation. As school districts seek to sustain LWP initiatives, consideration should be

given to develop systems, policies, and procedures related to leadership, communication, monitoring, and funding.

- School nutrition directors need training and resources to assist with LWP implementation, monitoring LWP activities, and communicating results to stakeholders. Survey participants indicated that ideas for implementing nutrition education activities, non-food rewards and fundraising, and incorporating physical activity were desired. They also desired assistance with strategies to monitor and evaluate the LWP activities and revising LWP.

Education and Training

Findings from this research suggest the following implications for education and training:

- Education materials are needed to help school districts monitor and evaluate LWP initiatives and using the results of the evaluation to revise the LWP.
- Resources are needed to assist schools in communicating LWP goals, programs, activities, obstacles and accomplishments that target the entire school community including school administrators, teachers, the school board, parents and students.
- Additional resources are needed to assist schools with ideas for implementing LWP initiatives such as nutrition education, physical activity and non-food ideas for fundraisers and behavior rewards.
- School districts need assistance to identify sources of grant funding to support LWP activities and resources on how to successfully apply for grants.

Research Implications

Findings from this study suggest the need for additional research in the following areas:

- Additional data from large school districts is needed, as larger districts may have more resources available for monitoring and evaluating LWP initiatives.
- The request of having tools provided to help districts monitor and evaluate LWP initiatives needs further study. Once tools have been developed, additional research is needed to evaluate the tools with the users.
- Further research should be conducted by identifying best practices for successfully monitoring and evaluating their LWP initiatives. This best practice resource could be used as a guide or tool for school districts monitoring and evaluating their LWP initiatives.

REFERENCES

- Agron, P., Behrends, V., Ellis, K., & Gonzales, M. (2010). School wellness polices: perceptions, barriers, and needs among school leaders and wellness advocates. *Journal of School Health, 80*(11), 527-535.
- Belansky, E., Chriqui, J. F., & Schwartz, M. B. (June, 2009). *Local school wellness policies: How are schools implementing the Congressional mandate?* Robert Wood Johnson Foundation Research Brief.
- Budd, E. L., Schwarz, C., Yount, B., & Haire-Joshu, D. (2012). Factors influencing the implementation of wellness policies in the United States, 2009. *Prevention of Chronic Disease, 9*:110296.
- Centers for Disease Control and Prevention, Division of Adolescent and School Health. *Healthy Youth! Coordinated School Health Program*. Retrieved January 21, 2009, from <http://www.cdc.gov/HealthyYouth/>.
- Katz, D., O'Connell, M., Yeh, M. C., Nawaz, H., Njike, V., Anderson, L. M., Cory, S., & Dietz, W. (2005). Public Health Strategies for Preventing and Controlling Overweight and Obesity in School and Worksite Settings: A Report on the Recommendations for the Task Force on Community Preventative Services. *Morbidity and Mortality Weekly Report 54, RR10*, 1-12.
- Kelder, S. H., Perry, C. L., Klepp, K. I., & Lytle L. L.(1994). Longitudinal tracking of adolescent smoking, physical activity, and food choice behaviors. *American Journal of Public Health, 84*(7), 1121-1126.

- Moag-Stahlberg, A., Howley, N., & Luscri, L. (2008). A national snapshot of local school wellness policies. *Journal of School Health, 78*(10), 562-568.
- Ogden, C. L., Carroll, M. D., & Flegal, K. M. (2008). High body mass index for age among U.S. children and adolescents. 2003-2006. *Journal of the American Medical Association, 299*(20), 2401-2405.
- Osowski, J. M., Nettles, M. F. (2013). *Exploring the Role of the School Nutrition Program in the Sustainability of School Wellness Policy Initiatives in the Middle School Setting*. University, MS: National Food Service Management Institute.
- Peterson, K. E., & Fox, M. K. (2007). Addressing the epidemic of childhood obesity through school-based interventions: What has been done and where do we go from here? *Journal of Law and Medicine, 35*(10), 113-130.
- Public Law 108-265 (The Child Nutrition and WIC Reauthorization Act of 2004), Section 204.
- Schwartz, M. B., Henderson, K. E., Fable, J., Novak, S. A., Wharton, C. M., Long, M. W., O'Connell, M. L., & Fiore, S. S. (2012). Strength and comprehensiveness of district school wellness policies predict policy implementation at the school level. *Journal of School Health, 82*(6):262-267.
- Story, M. School-based obesity prevention studies in perspective. Presentation made July 12, 2004. Retrieved January, 2009, from <http://www.ahc.umn.edu/opc/rescenter/presentations/home.html>
- Story, M., Kaphingst, K. M., & French, S. (2006). The role of schools in obesity prevention. *The Future of Children, 16*(1), 109-142.

University of Washington Center for Public Health Nutrition. (2009). Barriers to school wellness policy implementation, Brief VI.

Wood, Y., Cody, M. M., Nettles, M. F. (2010). *Team Nutrition Local Wellness Demonstration Project Report*. University, MS: National Food Service Management Institute.



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The University of Mississippi

P. O. Drawer 188

University, MS 38677-0188

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